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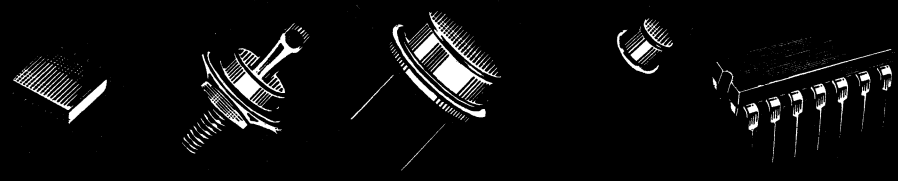

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Features some of the most comprehensive listings, most-often-asked-for specifications on complete lines from these leading manufacturers: RCA, Texas Instruments, Collins, Fairchild, Litronics, Solitron, Transitron and Sprague. Complete specifications begin on page 65.

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Be sure to specify the manufacturer's complete Type Number. Most integrated circuits include Case Type and Operating Temperature in the type number. Example: Fairchild U6A-7749-393—(6A) is Case Type, (7749) is Device Function, (393) is operating Temperature: (39) and Quality Process (3). Texas Instruments SN-7400N—(74) designates Operating Temperature, (00) Function, (N) Case Style. Where Allied Stock Number appears, it should be given when ordering.

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ALLIED

INTEGRATED CIRCUIT DIRECTORY

INTEGRATED CIRCUITS

The Integrated Circuit directory contains descriptive information on both functional characteristics and mechanical dimensions of each device. It is intended as quick selection guide. Integrated circuits are available in several different cases and operating temperature ranges. Most of this information is contained in the manufacturer's part number for each device. The second and third numerals and/or letter of Fairchild's number selects the case. The first letter designates a broad family category; fourth through seventh numerals indicate type and function; eighth and ninth select the operating temperature range; and the tenth numeral may designate a degree of quality or may be an X. —See Table A—

Texas Instruments and Sprague part numbers for the same device in the TTL family are very similar. SN7400N is Texas Instruments' part number. "SN" designates a broad family of bipolar devices, both digital and linear. "TMS" designates a family of metal oxide semiconductors "MOS". Number seven indicates that it operates in the commercial 0° to 70°C temperature range. Five would indicate that it operates in the military temperature range of —55° to —125°C. Four places this device in the TTL digital group. 00 selects a particular function and N designates a plastic dual inline package of 14 or more pins. See Table B.

Sprague's part number is US7400A. It is similar to Texas Instruments' part number. "A" is equivalent to "N" and US to SN.

CA prefixes are used on RCA's linear and functional Integrated Circuit devices; the digital devices are prefixed by CD. No suffix and K suffix designates a flat pack; D, a dual inline ceramic package; and E, a plastic dual inline package. The E suffix devices operate in the commercial temperature range, −40°C to 85°C. The remainder of the digital devices operate in the military temperature range: —55° to —125°C.

The Collins MOS integrated circuits listed are cased in dual inline ceramic packages and operate in the commercial temperature range.

NOTICE:

The information presented here has been thoroughly checked for its accuracy; however, Allied Electronics will not be liable for any inaccuracies, should they occur.

TABLE A

A full range RTμL 9900 in a TO-99 package is designated by code number U5D990021X.

Breakdown of the code is as follows:

U	5D	9900	21	X
A	B	C	D	E

A. Generic Device Type—U for microcircuits, H for hybrids, A for MOS/IC, and Bipolar Arrays and Memories.

B. PACKAGE CODE

Flat Packages

Size	No. of Leads	Name	Code
¼x¼	14	Cerpak	3B
¼x¼	10	Cerpak	3F
¼x¼	14	Cerpak	3I
¼x⅜	24	Flat Pak	3M
½x1	36	Cerpak	3N
.255x.400	16	Cerpak	3Q
.380x.620	24	Cerpak	3R
.460x.980	36	Cerpak	3V
¼x⅜	16	Cerpak	4L
⅜x⅝	24	Cerpak	4M

Dual In-Line Packages

Size	No. of Leads	Name	Code
.271x.785	14	Ceramic	6A
.271x.785	16	Ceramic	6B
.525x.858	16	Ceramic	6D
.525x1.86	36	Ceramic	6H
.575x1.29	24	Ceramic	6N
.590x1.89	36	Ceramic	6P
.271x.700	14	Ceramic	6V
.275x.735	14	Metal	6W
.275x.700	16	Metal	6Y
.291x.785	14	Ceramic	7A
.291x.785	16	Ceramic	7B
.560x1.300	24	Metal	7C
.271x.785	14	Ceramic	7F
.525x1.270	24	Ceramic	7G
.271x.785	16	Ceramic	7H
.295x.765	16	Ceramic	7K
.260x.760	14	Silicone	9A
.260x.760	16	Silicone	9B
.260x.760	14	Silicone	9C
.260x.760	16	Silicone	9D
.256x.393	8	Plastic	9T
.260x1.110	20	Silicone	9Y
.360x1.000	20	Plastic	9Z

Modular

Size	No. of Leads	Name	Code
1.000x1.000	36	Square Line	1B
1.390x1.390	51	Plug In	1G

Cylindrical

To-Type	No. of Leads	Leads Connected To Case	Code
100	10	None	5A
99	8	4	5B
99	6	4	5C
99	6	4	5D
100	10	None	5E
100	10	5	5F
101	12	None	5G
96	10	5	5R
100	8	None	5T
100	10	None	5U
78	6	None	5Z
Epoxy—	8	——	8A

C. Four or five digits are used for general product groups.

0000-0099 = Kits and kit parts
1000-1999 = Custom integrated circuits
3000-3999 = MOS integrated circuits
5000-5999 = Second source integrated circuits
7000-7999 = Linear integrated circuits
9000-9999 = Digital integrated circuits

D. Two digits are used to indicate process and temperature range respectively.

11 = (−55°C to +125°C) MOS/Full Range Military
14 = (−55°C to +85°C) MOS/Intermediate Range
19 = (0°C to +70°C) MOS/Industrial Range
21 = (−55°C to +125°C) Full Range Military Equipment
22 = (0°C to +100°C) Military Grouped Support Equipment
28 = (+15°C to +55°C) Commercial Equipment
29 = (0°C to +70°C) Industrial Equipment
31 = (−55°C to +125°C) Full Range Military Equipment (LIC)
32 = (0°C to +85°C) Industrial Equipment (LIC)
33 = (−20°C to +85°C) Industrial Equipment (LIC)
34 = (−40°C to +60°C) Telephone Equipment (LIC)
39 = (0°C to +70°C) Industrial Equipment (LIC)
51 = (−55°C to +125°C) Full Range Military Equipment
56 = (−20°C to +100°C) Intermediate Range
59 = (0°C to +75°C) Industrial equipment (DLμL and CμL)
59 = (+15°C to +55°C) Commercial Equipment (CTμL)
79 = (+15°C to +55°C) Commercial Equipment (CTμL) Clamped
79 = (0°C to +75°C) Counting Family (CμL)

E. This digit is used by LIC to indicate electrical class.

X = Spec class not specified
1 = Prime Military
2 = Standard Military
3 = Commercial
4 = Consumer

This digit used by MOS/IC to indicate electrical class.

2 = +5.0 volt analog input
3 = 0 to 5.0 volt analog input

TABLE B

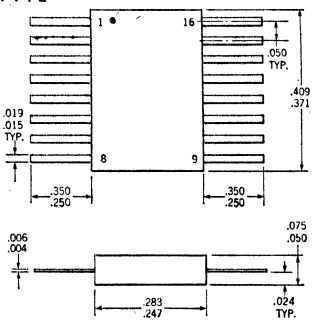
INTEGRATED CIRCUITS DEVICE DESIGNATIONS

Each time you order an integrated circuit, the designation must contain three parts.
1. Prefix 2. Unique Device Description 3. Package EXAMPLE: SNR 54H72 F

PREFIX Must Contain Two or Three Letters	UNIQUE DEVICE DESCRIPTION Must Contain 3 Or More Characters	PACKAGE Must Contain A Single Letter Only—F Through Z
SN Standard Prefix	Examples: 15930	F Flat Package Kovar 10 or 14 Leads Std.
SNR Hi-Rel Processing Without Group B and C	74H72	T Flat Package Kovar 10 or 14 Leads Long
SNT Hi-Rel Processing With Group B and C	510B	L TO-5 Type 8 or 10 Leads
SNX Preliminary Device Prefix	777	N Dual In Line Plastic 14 or 16 Leads
	52709	J Dual In Line Ceramic 14 or 16 Leads
	5473	S Flat Package Kovar 10 or 14 Leads Std.
	521A	
	5161B	

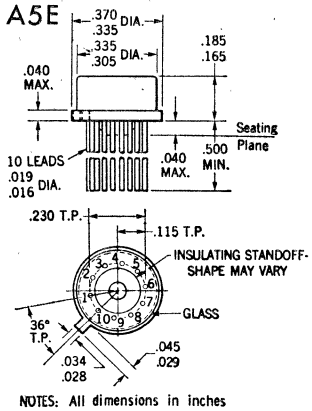
Integrated Circuit Mechanical Dimensions

A4L



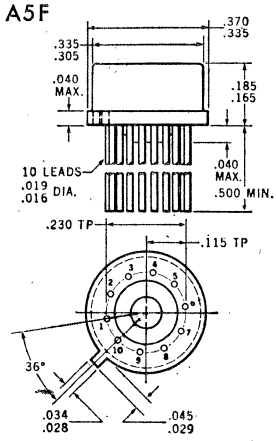
NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 0.4 gram
Hermetically sealed beryllia package
Cavity size is .140 x .200 x .008

A5E



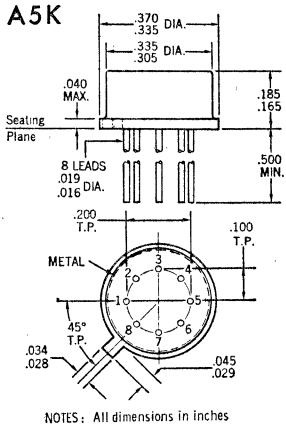
NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 1.32 gram
No leads shorted to case

A5F



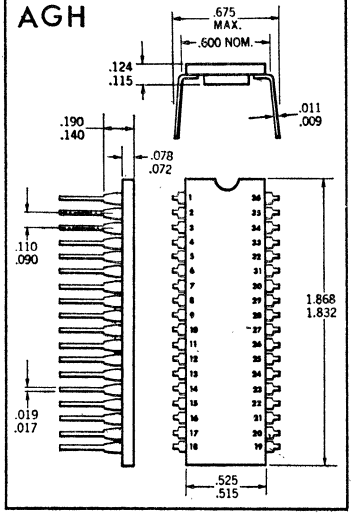
NOTES: All dimensions in inches
Leads are gold-plated Kovar
Package weight is 1.02 grams

A5K

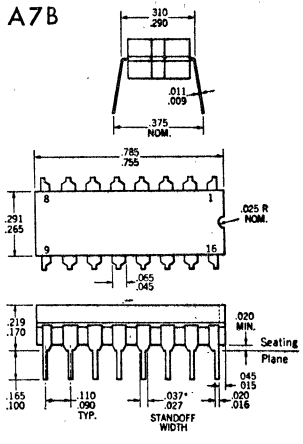


NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 0.95 gram
No leads shorted to case

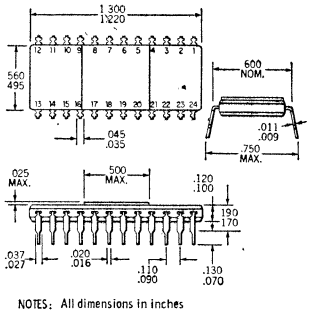
AGH



A7B

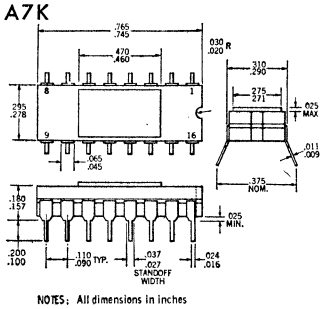


A7C



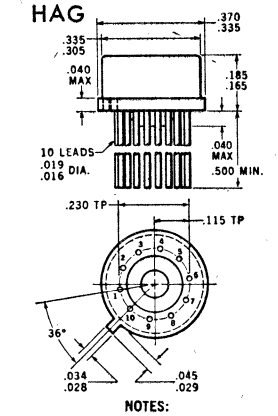
NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .600 centers. They are purposely shipped with "positive" misalignment to facilitate insertion
Base, cap and leads are gold-plated kovar
Cavity size is .250 sq.

A7K



NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers. They are purposely shipped with "positive" misalignment to facilitate insertion
Board-drilling dimensions should equal your practice for .020 inch diameter lead
Leads are gold-plated kovar
Package material is alumina
Low temperature seal
Cavity size is .150 x .220 x .020

HAG

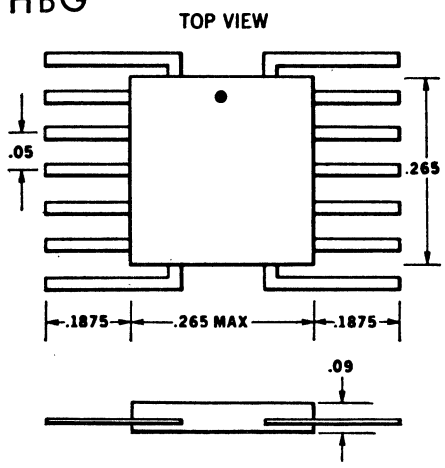


NOTES:
All dimensions in inches
Leads are gold-plated Kovar
Package weight is 1.02 grams

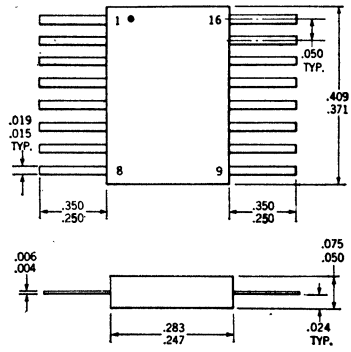
See Page 7 for Explanation of IC Abbreviations and Symbols

Integrated Circuit Mechanical Dimensions

HBG

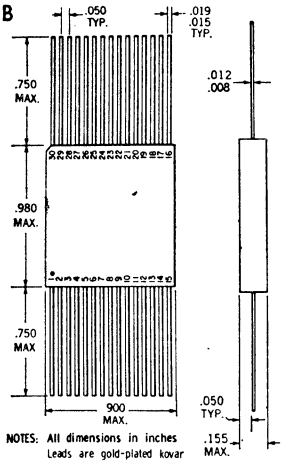


U4L



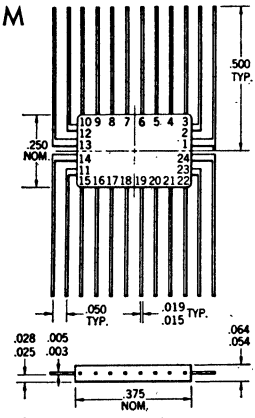
NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 0.4 gram
Hermetically sealed beryllia package
Cavity size is .140 x .200 x .008

H2B



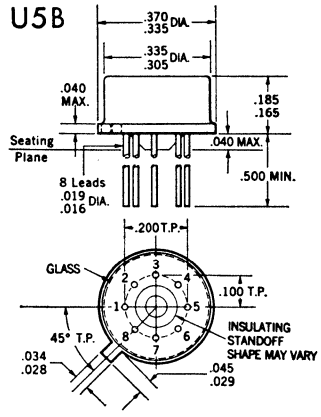
NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 5.0 grams
Cavity size .800 x .795 x .030
Package material is alumina

U3M



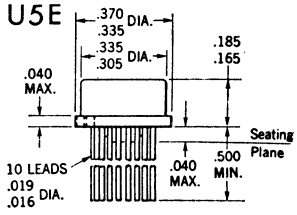
NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 0.8 gram
Package material is kovar
Cavity size is .110 x .235 x .015

U5B

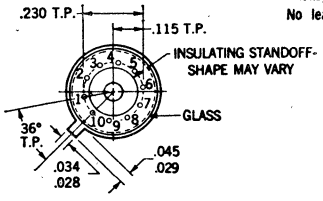


NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 1.22 gram
Lead No. 4 is connected to case

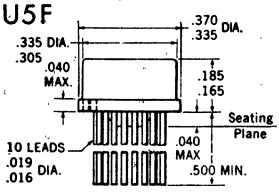
U5E



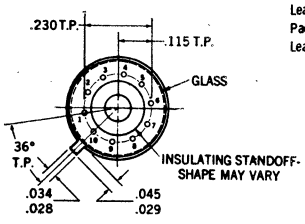
NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 1.32 gram
No leads shorted to case



U5F



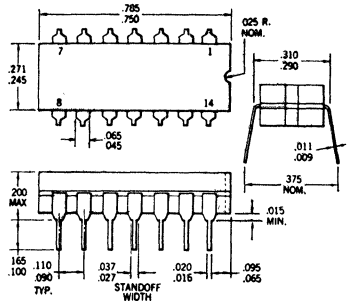
NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 1.32 gram
Lead No. 5 is connected to case



See Page 7 for Explanation of IC Abbreviations and Symbols

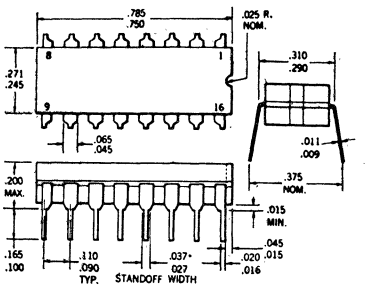
Integrated Circuit Mechanical Dimensions

U6A



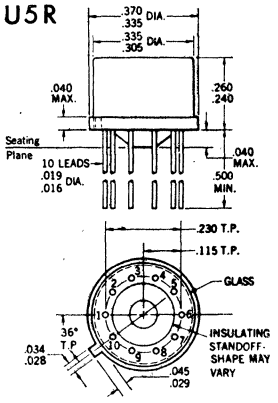
NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Board-drilling dimensions should equal your practice for .020 inch diameter lead
Hermetically sealed alumina package
Leads are tin-plated kovar
Cavity size is .110 x .140
Package weight is 2.0 grams

U6B



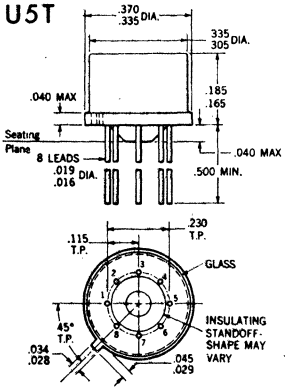
NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers.
They are purposely shipped with "positive" misalignment to facilitate insertion
Board-drilling dimensions should equal your practice for .020 inch diameter lead
Leads are tin-plated kovar
Package weight is 2.0 grams
Hermetically sealed alumina package
Cavity size is .110 x .140
* The .037/.027 dimension does not apply to the corner leads

U5R



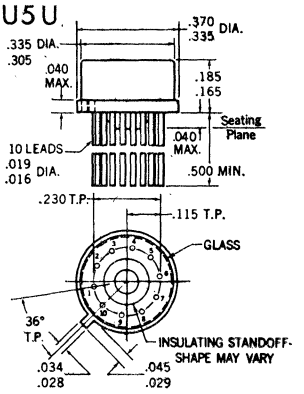
NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 1.32 gram
Lead No. 5 is connected to case
*Dimensions similar to JEDEC TO-96 except for stand off

U5T



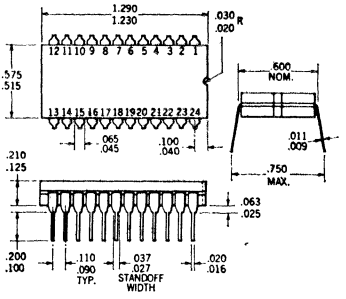
NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 1.22 gram
* Dimensions similar to JEDEC TO-100 except for 8 leads spaced 45° apart
No leads shorted to case

U5U



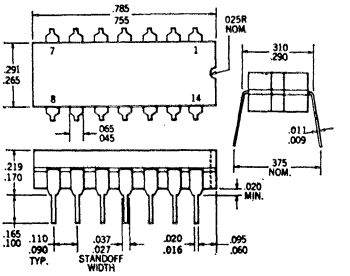
NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 1.32 gram
High R1H package
No leads shorted to case

U6N



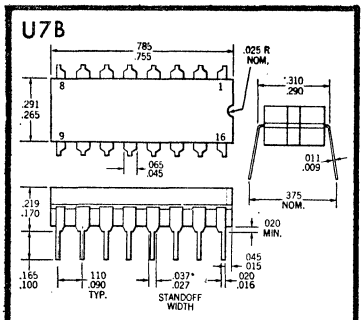
NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .600 centers. They are purposely shipped with "positive" misalignment to facilitate insertion
Leads are tin-plated kovar
Package weight is 6.5 grams
Package material is alumina
Cavity size is .233 X .233

U7A

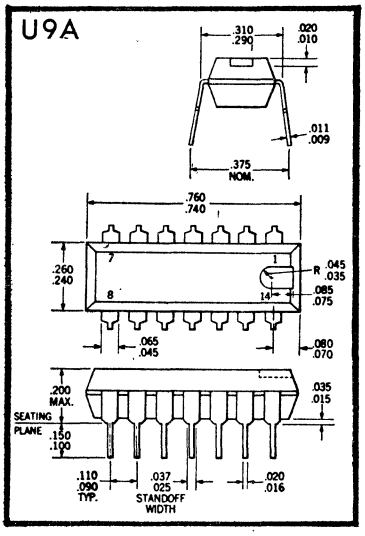


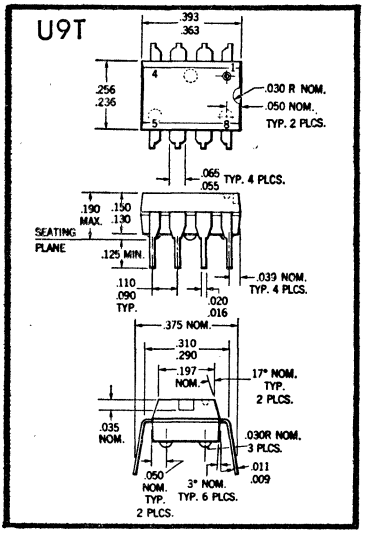
NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers.
They are purposely shipped with "positive" misalignment to facilitate insertion.
Board-drilling dimensions should equal your practice for a conventional .020 inch diameter lead
Hermetically sealed alumina package
Leads are tin-plated kovar
Package weight is 2.2 grams
Cavity size is .130 x .230
*Similar to JEDEC TO-116 except for package width

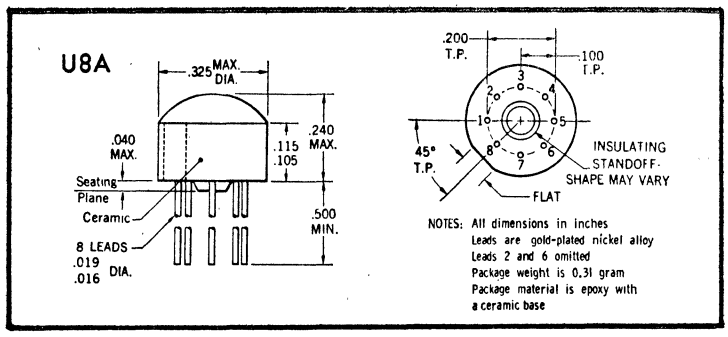
See Page 7 for Explanation of IC Abbreviations and Symbols



NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Board-drilling dimensions should equal your practice for .020 inch diameter lead
Hermetically sealed alumina package
Leads are tin-plated kovar
Package weight is 2.2 grams
Cavity size is .130 x .230
*The .027 dimension does not apply to the corner leads

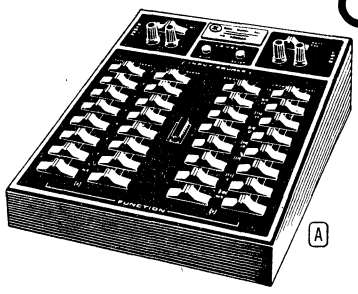


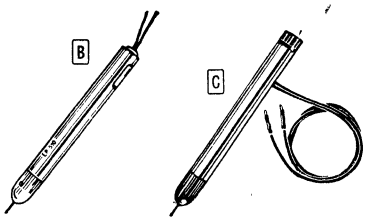




NOTES: All dimensions in inches
Leads are gold-plated nickel alloy
Leads 2 and 6 omitted
Package weight is 0.31 gram
Package material is epoxy with a ceramic base

Kurz-Kasch Integrated Circuit Testers





MODEL IC590 TESTER

A Battery-powered tester for static and dynamic logic levels in a range of 5 and 15-volt families (TTL and DTL). For all 14 and 16 pin dual in-line devices. Adapts to all flatpacks. Simulates operating conditions. Color-coded readout for static logic test to each pin position; white for logic "0", red for logic "1". For all industrial uses. Ideal for teaching truth table logic relationships. Size, 13½x10x4".
838-1650. Shpg. wt. 4 lbs.....**184.95**

SPECIFICATIONS

Internal Power Requirements: operates on 12 VDC (uses 6 "C" cell batteries). **Voltage:** for all 5-volt logic systems from 4.75 to VC. **Logic Level Response:** 0-1 VDC—logic "0" readout color-coded white; 1-2.2 VDC—no readout; 2.2 VDC-Vc—logic "1" readout color-coded red. **Pulse Detection Response:** low range, 2 pps; high range, 20k pps (or push-button single pulse generation). **Input and Output Terminations:** 5-way binding posts. **External Loading:** may be applied to any IC under test.

MODEL LP-510, 520 AND 530 PROBES

B All probes feature input overload protection +50 VDC continuous, −20 VDC intermittent. All probes compatible with DTL, TTL, RTL and similar families, featuring an input impedance of greater than 150,000 ohms for logic level "1".

Model LP-510 logic level reponse: 0-1 VDC, logic "0" readout white; 1-2.2 VDC, no readout; 2.2-Vc, logic "1" readout red; infinity, no readout.

Model LP-520 logic level response: 0-1 VDC, logic "0" readout white; 1-2.2 VDC, no readout; 2.2 VDC-Vc, logic "1" readout red; infinity, no readout.

Model LP-530 logic level response: 0-15 VDC, logic "0" readout white; 1.5-10 VDC, no readout; 10 VDC-Vc, logic "1" readout red; infinity, no readout (as in case of missing pin or disconnected lead). All units have 26¾" leads, pin-type terminals. Size, 6" long, 9/16" diameter.
838-2250. Model LP-510. Wt. 1 lb....**54.50**
838-2255. Model LP-520. Wt. 1 lb....**79.95**
838-2260. Model LP-530. Wt. 1 lb....**54.50**

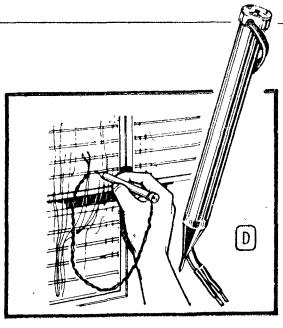
MODEL LG-580 DELUXE TEST PROBE

C Features switch-selected 10 Hz, 100 Hz, 1 kHz and 10 kHz signals, or single pulse generator. Takes power from equipment under test (4.5-6.5 VDC). Tests all logic systems from 4.75 VDC-Vc. Compatible with DTL, TTL, RTL and similar families. Polarity protected. Output: greater than 2.5 V at 600 ohms. Frequency stability better than 5% over a 4.5-6.5 VDC variance. Size, 6½x9/16" dia. 26¾" dual leads. Shpg. wt. 1 lb.
838-2270.....**119.95**

MODEL LP-500 LOGIC PROBE

- **Powered by Unit Under Test —Leads Attach to Logic Board**
- **Perfect for Use in High-Density Packaging Areas**

D Checks all logic system voltage levels from 3.75 to 6.5 VDC (compatible with DTL, TTL and similar families). Input impedance greater than 150k for logic "1" level. Logic Level Response: 0-1 VDC, logic "0" window illumination; 1-2 VDC, no illumination; 2-6.5 VDC, logic "1" window illumination; Infinity, no illumination. Shirt-pocket size: 5¼" long, 9/16" dia. 26¾" leads. Shpg. wt. ½ lb.
838-2245.....**44.50**



 SEE PAGE 41 FOR SEMICONDUCTORS

FAIRCHILD MOS/LSI INT. CKTS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-24	25 Up
570-1000	A7K310014X	Dual 5 Input Gate	13.50	9.00	9.00
570-1020	A7K310114X	Dual JK Flipflop	18.00	12.00	12.00
570-1040	A5F3102XXX	3 Input Gate	9.00	6.00	6.00
570-1060	A7K325019X	CRT Numeric Character Gen.	54.00	48.00	36.00
570-1080	A7K325519X	5x7x16 Character Generator	22.50	15.00	12.50
570-1100	A7K325619X	5x7x16 Character Generator	22.50	15.00	12.50
570-1120	A7C325719X	5x7x64 Character Generator	37.50	25.00	20.00
570-1140	A5F330019X	25 Bit Static Shift Register	9.00	6.00	4.80
570-1160	A5F330319X	Dual 25 Bit Dynamic Shift Reg.	9.00	6.00	4.80
570-1180	A5F330419X	Dual 16 Bit Static Shift Reg.	9.00	6.00	4.80
570-1200	A7K330514X	4x16 Bit 10 Static Shift Reg.	18.00	12.00	9.60
570-1220	A5K330614X	64 Bit 10 Static Shift Reg.	11.30	7.50	6.00
570-1240	A5F3307192	Dual 100 Bit Static Shift Reg.	9.00	6.00	4.50
570-1260	A5E332619X	3x66 Bit 20 Dynamic Shift Reg.	12.40	7.10	5.70
570-1280	A5F332919X	512 Bit Dynamic Shift Reg.	11.00	7.35	5.85
570-1300	A5F333019X	480 Bit 20 Dynamic Shift Reg.	11.00	7.35	5.85
570-1320	A5F333119X	500 Bit Dynamic Shift Reg.	11.00	7.35	5.85
570-1340	A7K333319X	3x48/64 Bit Dynamic Shift Reg.	22.50	15.00	12.00
570-1360	A5F338319X	256 Bit 20 Dynamic Shift Reg.	10.40	6.90	5.50
570-1380	A4L3700193	4 Channel Multiplex Switch	14.90	12.00	9.32
570-1400	A4L370119X	6 Channel Multiplex Switch	14.90	12.00	9.30
570-1420	A7K3705193	8 Channel Multiplex Switch	22.50	15.00	12.50
570-1440	A7K3708193	8 Channel Multiplex Switch	29.30	19.50	15.60
570-1460	A6H375019X	10 Bit D/A Converter	56.50	33.00	29.00
570-1480	A6H375119X	12 Bit A/D Converter	62.00	36.50	30.00
570-1500	A6H380019X	8 Bit Parallel Accumulator	70.00	41.00	37.00
570-1520	A6H380119X	10 Bit Ser/Par.-Par/Ser. Converter	49.60	30.00	27.00
570-1540	A7B410059X	256 Bit Random Access Memory	33.90	25.00	20.00
570-1560	A7B410159X	Decoder Driver For 4100	13.50	15.00	9.00
570-1580	A7B440359X	64 Bit Random Access Memory	56.50	40.00	32.00
570-1600	A4L410359X	64 Bit Random Access Memory	61.75	44.00	35.00

RCA LINEAR INTEGRATED CIRCUITS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
897-1000	CA3000	Differential Amp. 32 DB Voltage Gain 3 DB Band With .65 MHz	4.75	3.80	2.76	2.30
897-1003	CA3001	Differential Amp. 19DB VGain 3DB Band Width 29MHz	6.95	5.55	4.00	3.35
897-1006	CA3002	Differential Amp. 24 DB Volt Gain 3DB Band Width 11MHz	4.66	3.71	2.70	2.25
897-1009	CA3004	Differential Amp. 17DB Volt Gain 3DB Band Width 18MHz	4.66	3.71	2.70	2.25
897-1012	CA3005	Differential Amp. 20DB Volt Gain 3DB Band Width 18 MHz	3.10	2.48	1.80	1.50
897-1015	CA3006	Differential Amp. 20DB Volt Gain 3DB Band Width 18 MHz	7.26	5.80	4.20	3.50
897-1018	CA3007	Differential Amp. 22DB Volt Gain 3DB Band Width .01 MHz	6.73	5.35	3.90	3.25
897-1021	CA3008	Operational Amp. 57DB Open Loop Voltage Gain	4.37	3.47	2.52	2.10
897-1024	CA3008A	Operational Amp. 57DB Open Loop Voltage Gain	7.04	5.00	4.08	3.40
897-1027	CA3010	Operational Amp. 57DB Open Loop Voltage Gain	3.27	2.61	1.90	1.58
897-1030	CA3010A	Operational Amp. 57DB Open Loop Voltage Gain	6.02	4.79	3.48	2.90
897-1033	CA3011	If Amplifier 61DB Voltage Gain @10.7MHz	1.82	1.47	1.07	.89
897-1036	CA3012	If Amplifier 61DB Voltage Gain @10.7 MHz	2.27	1.82	1.32	1.10
897-1039	CA3013	Wide Band Amplifier/Limiter FM Deteltor	2.67	2.15	1.56	1.30
897-1042	CA3014	Wide Band Amplifier/Limiter FM Detector	3.09	2.48	1.80	1.50
897-1045	CA3015	Operational Amplifier 66DB Open Loop Voltage Gain	4.97	3.96	2.88	2.40
897-1048	CA3015A	Operational Amplifier 66DB Open Loop Voltage Gain	8.09	6.44	4.68	3.90
897-1052	CA3016	Operational Amplifier 66DB Open Loop Gain	6.02	4.79	3.48	2.90
897-1055	CA3016A	Operational Amplifier 66DB Open Loop Gain	9.12	7.25	5.30	4.40
897-1058	CA3018	Transistor Array Darlington + 2 Diodes	2.02	1.62	1.18	.98
897-1061	CA3018A	Transistor Array Darlington + 2 Diodes	2.78	2.22	1.62	1.35
897-1064	CA3019	Diode Arrays Quad + 2 Diodes	2.02	1.62	1.18	.98
897-1067	CA3020	Audio Amp. .55 Watts 75 DB Gain	3.21	2.56	1.86	1.55
897-1070	CA3020A	Audio Amp. 1.0 Watts 75 DB Gain	4.10	3.26	2.37	1.98
897-1073	CA3021	Wide Band and Video Amp DC to 6MHz 56DB Gain	3.92	3.14	2.28	1.90
897-1076	CA3022	Wide Band and Video Amp DC to 6 MHz 56DB Gain	3.30	2.64	1.92	1.60
897-1079	CA3023	Wide Band and Video Amp DC to 40 MHz 44DB Gain	3.21	2.56	1.86	1.55
897-1082	CA3026	Differential Amp. Pair Hfe 110 ft 550 MHz	2.58	2.06	1.50	1.25
89751088	CA3028A	Differential Amp. 42 DB Gain 3DB Bandwith 8 MHz	1.82	1.47	1.07	.89
897-1088	CA3028B	Differential Amp. 42DB Gain 3DB Bandwith 8 MHz	2.58	2.06	1.50	1.25
897-1091	CA3029	Operational Amplifier 57DB Open Loop Voltage Gain	2.02	1.62	1.18	.91
897-1094	CA3029A	Operational Amplifier 57DB Open Loop Voltage Gain	3.94	3.14	2.28	1.90
897-1097	CA3030	Operational Amplifier 66DB Open Loop Voltage Gain	3.27	2.61	1.90	1.58
897-1100	CA3030A	Operational Amplifier 66DB Open Loop Voltage Gain	6.02	4.79	3.48	2.90
897-1109	CA3033	Operational Amplifier 84DB Open Loop Voltage Gain	6.02	4.79	3.48	2.90
897-1112	CA3033A	Operational Amplifier 90DB Open Loop Voltage Gain	10.16	8.09	5.88	4.90
897-1115	CA3034	T.V. Automatic Fine Tuning	3.09	2.89	2.10	1.75
897-1117	CA3034V1	T.V. Automatic Fine Tuning (formed lead)	3.09	2.89	2.10	1.75
897-1120	CA3035	Three Amplifier Array 42DB Gain Each	3.09	2.48	1.80	1.50
897-1123	CA3035V1	Three Amplifier Array 42DB Gain Each (formed lead)	3.09	2.48	1.80	1.50
897-1126	CA3036	2 Low Noise Amplifiers Power Gain 47DB @1KHz	1.82	1.47	1.07	.89
897-1129	CA3037	Operational Amplifier Open Loop Voltage Gain 57DB	3.94	3.14	2.28	1.98
897-1132	CA3037A	Operational Amplifier Open Loop Voltage Gain 57DB	6.02	4.79	3.48	2.90
897-1135	CA3038	Operational Amplifier Open Loop Voltage Gain 66DB	6.02	4.79	3.48	2.90
897-1138	CA3038A	Operational Amplifier Open Loop Voltage Gain 66DB	8.09	6.44	4.68	3.90
897-1141	CA3039	6 Discrete Diodes	2.02	1.61	1.17	.98
897-1144	CA3040	Video and Wide Band DG to 200MHz 37DB Gain @1MHz	6.11	4.87	3.54	2.95

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
897-1147	CA3041	Wide Band Amplifier/Limiter/FM Detector/Audio Driver	2.58	2.06	1.50	1.25
897-1150	CA3042	Wide Band Amplifier/Limiter/FM Detector/Audio Driver	2.58	2.06	1.50	1.25
897-1153	CA3043	FM if Amplifier/Limiter/FM Detector/Audio Driver	3.52	2.81	2.04	1.70
897-1156	CA3044	Wide Band Amplifier/Phase Detector/Output Amplifier	2.89	2.31	1.68	1.40
897-1159	CA3044V1	Wide Band Amplifier/Phase Detector/Output Amplifier (formed lead)	2.89	2.31	1.68	1.40
897-1162	CA3045	Differential Amplifier + 3 Diodes	3.09	2.47	1.80	1.50
897-1165	CA3046	Differential Amplifier + 3 Diodes	2.02	1.61	1.17	.98
897-1168	CA3047	Operational Amplifier 84DB Open Loop Voltage Gain	3.27	2.61	1.90	1.58
897-1171	CA3047A	Operational Amplifier 84DB Open Loop Voltage Gain	6.02	4.79	3.48	2.90
897-1174	CA3048	4 Amplifier Array Aol 58DB NF 1.1DB@10KHz	5.06	4.04	2.94	2.45
897-1177	CA3049	Differential Amplifier Pair Power Gain 23DB 200MHz	4.03	3.22	2.34	1.95
897-1180	CA3050	Dual Differential Amplifier and Diode	4.66	3.71	2.70	2.25
897-1183	CA3051	Dual Differential Amplifier and Diode	3.41	3.72	1.98	1.65
897-1186	CA3052	Stereo Preamplifier Aol 58DB @10KHz	3.94	3.72	1.98	1.65
897-1189	CA3053	Differential Cascade Amplifier	1.00	.81	.59	.49
897-1190	CA3054	Constant Current Source	2.58	2.06	1.50	1.25
897-1192	CA3055	Voltage Regulator 7.5 to 40V 100Ma Max	3.52	2.80	2.04	1.70
897-1193	CA3056/741C	Operational Amplifier 86DB Open Loop Voltage Gain	3.07	2.44	1.78	1.48
897-1194	CA3056A/741	Operational Amplifier 94DB Open Loop Voltage Gain	8.18	6.50	4.74	3.95
897-1195	CA3059	Zero Voltage Switch	4.03	3.20	2.35	1.95
897-1208	CA3060	Operational Transconductance Amplifiers	12.37	9.82	7.14	5.95
897-1214	CA3062	Photo Detector and Power Amplifier	6.11	4.86	3.54	2.95
897-1215	CA3064	T.V. Automatic Fine Tuning (formed lead)	2.89	2.31	1.68	1.40
897-1217	CA3065	If Amp/Limiter/FM Dector/AF Pre Amp/Driver	2.89	2.31	1.68	1.40
897-1219	CA3066	Chroma Signal Processor	5.39	4.29	3.12	2.60
897-1221	CA3067	Chroma Demodulator	5.57	4.46	3.24	2.70
897-1224	CA3068	Television Video I.F. System	6.22	4.95	3.60	3.00
897-1226	CA3070	Chroma Signal Processor	4.34	3.47	2.52	2.10
897-1229	CA3071	Chroma Amplifier	4.14	3.30	2.40	2.00
897-1232	CA3072	Chroma Demodulator	4.25	3.38	2.46	2.05
897-1235	CA3075	FM I.F. Amp/Limiter/Detector/Audio Preamp.	2.89	2.31	1.68	1.40
897-1238	CA3076	High Gain (80DB) Wide Band If ampilier-Limiter	3.32	2.64	1.92	1.60
897-1242	CA3078	Operational Amplifier 86DB Open Loop Gain	8.18	6.50	4.74	3.95
897-1248	CA3080	(formed lead)	2.00	1.58	1.15	.96
897-1250	CA3080A	(formed lead)	8.18	6.50	4.74	3.95
897-1254	CA3081	(formed lead)	3.92	3.12	2.27	1.89
897-1258	CA3082	(formed lead)	3.92	3.12	2.27	1.89
897-1262	CA3083	(formed lead)	3.96	2.74	2.03	1.69
897-1266	CA3084	(formed lead)	4.19	2.95	2.15	1.79
897-1270	CA3086	(formed lead)	1.15	.81	.59	.49

RCA LOW POWER DTL LOGIC

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
897-2006	CD2150	Dual 4 Input. OR/NOR/Gate	5.75	3.96	2.88	2.40
897-2009	CD2151	Dual 4 Input Wired OR Gate	5.57	3.96	2.88	2.40
897-2012	CD2152	8 Input Wired OR Gate	5.57	3.96	2.88	2.40
897-2015	CD2153	Quad 2 Input Wired OR Gate	7.32	5.20	3.80	3.15
897-2016	CD2154	Quad 2 Input Wired OR Gate	7.32	5.20	3.80	3.15
897-2017	CD2155D	16 Bit Non Destruct Read Out Read Write Memory	37.25	23.20	19.20	16.00
897-2018	CD2200	Dual Four Input Nand Gate	15.12	10.72	7.80	6.50
897-2021	CD2200D	Dual Four Input Nand Gate	15.12	10.72	7.80	6.50
897-2024	CD2201	Quad 2 Input Nand Gate	15.12	10.72	7.80	6.50
897-2028	CD2201D	Quad 2 Input Nand Gate	15.12	10.72	7.80	6.50
897-2032	CD2202	Expandable Dual 4 Inpt Nand & Buffer	15.12	10.72	7.80	6.50
897-2035	CD2202D	Expandable Dual 4 Inpt Nand & Buffer	15.12	10.72	7.80	6.50
897-2038	CD2203	Jk Flip Flop	19.75	12.33	10.20	8.50
897-2041	CD2203D	Jk Flip Flop	19.75	12.33	10.20	8.50
897-2044	CD2204	Dual 4 Input Gate Expander	9.30	6.60	4.80	4.00
897-2047	CD2204D	Dual 4 Input Gate Expander	9.30	6.60	4.80	4.00
897-2050	CD2205	Expandable Dual 3 Input AND/OR/NOT Gates	15.12	10.72	7.80	6.50
897-2053	CD2205D	Expandable Dual 3 Input AND/OR/NOT Gates	15.12	10.72	7.80	6.50
897-2371	CD2500E	B.C.D to Seven Segment	10.47	7.45	5.40	4.50
897-2374	CD2501E	Decoder Driver 30 Ma.	10.47	7.45	5.40	4.50
897-2377	CD2502E	Decoder Driver 30 Ma.	12.75	9.10	6.60	5.50
897-2380	CD2503E	Decoder Driver 80 Ma	12.75	9.10	6.60	5.50

RCA COS/MOS INT. CKTS.

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
897-2400	CD4000	Dual 3 Input NOR + Inverter	7.20	5.55	4.50	3.70
897-2401	CD4000AE	Dual 3 Input NOR + Inverter	2.00	1.75	1.39	1.15
897-2402	CD4001AE	Quad 2 Input NOR Gate	2.05	1.77	1.42	1.18
897-2403	CD4000D	Dual 3 Input NOR + Inverter	6.05	4.68	3.77	3.10
897-2406	CD4001	Quad 2 In Put NOR Gate	7.65	5.95	4.79	3.95
897-2407	CD4001AD	Quad 2 In Put NOR Gate				
897-2409	CD4001D	Quad 2 In Put NOR Gate	6.40	4.95	3.99	3.30
897-2412	CD4002	Dual 4 Input NOR Gate	7.90	6.10	4.93	4.05
897-2413	CD4002AE	Dual 4 Input NOR Gate	2.14	1.85	1.48	1.22
897-2415	CD4002D	Dual 4 Input NOR Gate	6.62	5.10	4.13	3.40
897-2424	CD4004	Dual 4 Input NOR Gate	15.22	12.40	9.50	7.85
897-2426	CD4004AE	7 Stage Ripple Counter/Divider	7.02	6.00	4.86	4.02

See Page 7 for Explanation of Abbreviations and Symbols

 SEE PAGE 41 FOR SEMICONDUCTORS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
897-2427	CD4004D	7 Stage Ripple Counter/Divider	13.95	10.80	8.70	7.20
897-2430	CD4005	16 Bit Non Destruct Memory	18.60	14.40	11.60	9.60
897-2433	CD4005D	16 Bit Non Destruct Memory	17.55	13.60	10.95	9.05
897-2436	CD4006	18 Stage Static Shift Register	18.60	14.40	11.60	9.60
897-2437	CD4006AE	18 Stage Static Shift Register	9.74	8.40	6.74	5.60
897-2439	CD4006D	18 Stage Static Shift Register	17.67	13.70	11.02	9.10
897-2441	CD4007AE	Dual Compl Pair + Inverter	2.05	1.77	1.42	1.18
897-2442	CD4007	Dual Compl Pair + Inverter	6.27	4.85	3.92	3.25
897-2445	CD4007D	Dual Compl Pair + Inverter	5.12	3.95	3.19	2.65
897-2446	CD4008	4 Bit Full Adder with Parallel Carry	21.05	16.30	13.12	10.90
897-2447	CD4009D	Hex Inverter	10.22	7.90	6.38	5.25
897-2448	CD4008AE	4 Bit Full Adder with Parallel Carry	9.43	8.10	6.53	5.40
897-2449	CD4009AE	Hex Inverter	4.50	3.90	3.12	2.60
897-2450	CD4010D	Hex Buffer	10.22	7.40	6.38	5.25
897-2451	CD4010AE	Hex Buffer	4.50	3.90	3.12	2.60
897-2452	CD4008D	4 Bit Full Adder with Parallel Carry	19.65	15.20	12.25	10.15
897-2455	CD4011	Quad 2 Input NAND Gate	7.55	5.85	4.71	3.90
897-2457	CD4011AE	Quad 2 Input NAND Gate	2.05	1.77	1.42	1.18
897-2458	CD4011D	Quad 2 Input NAND Gate	6.40	4.95	3.99	3.30
897-2461	CD4012	Dual 4 Input NAND Gate	7.90	6.10	4.93	4.05
897-2463	CD4012AE	Dual 4 Input NAND Gate	2.14	1.85	1.48	1.22
897-2464	CD4012D	Dual 4 Input NAND Gate	6.70	5.20	4.18	3.45
897-2467	CD4013	Dual D FlipFlop with Set Reset	10.47	8.10	6.53	5.40
897-2469	CD4013AE	Dual D FlipFlop with Set Reset	4.14	3.60	2.87	2.40
897-2470	CD4013D	Dual D FlipFlop with Set Reset	9.17	7.10	5.73	4.75
897-2475	CD4014AE	B Stage Shift Reg Synchronous Parallel in Serial Out	9.74	8.40	6.74	5.60
897-2476	CD4014D	B Stage Shift Reg Synchronous Parallel in Serial Out	19.65	15.20	12.25	10.15
897-2479	CD4015	Dual 4 Stage Shift Reg Serial in Parallel Out	20.57	15.95	12.83	10.65
897-2481	CD4015AE	Dual 4 Stage Shift Reg Serial In Parallel Out	9.74	8.40	6.74	5.60
897-2482	CD4015D	Dual 4 Stage Shift Reg Serial in Parallel Out	19.65	15.20	12.25	10.15
897-2485	CD4016	Quad Bilateral Switch	11.15	8.65	6.96	5.75
897-2487	CD4016AE	Quad Bilateral Switch	4.14	3.60	2.87	2.40
897-2488	CD4016D	Quad Bilateral Switch	10.00	7.75	6.24	5.15
897-2493	CD4017AE	Decade Counter/Divider	10.14	8.65	6.96	5.75
897-2494	CD4017D	Decade Counter/Divider	20.45	15.90	12.76	10.60
897-2499	CD4018AE	Presetable Divide by (N) Counter	8.80	7.55	6.09	5.05
897-2500	CD4018D	Presetable Divide by (N) Counter	17.90	13.90	11.17	9.25
897-2501	CD4019D	Quad and/or Select Gate	9.77	7.55	6.09	5.05
897-2502	CD4019AE	Quad and/or Select Gate	4.07	3.15	2.54	2.10
897-2507	CD4020AE	14 Stages Ripple Carry Binary Counter/	13.25	10.25	8.27	6.85
897-2509	CD4021AE	8 Stages Shift	9.11	7.85	6.31	5.20
897-2511	CD4022AE	Div By 8 Counter	8.89	7.65	6.16	5.18
897-2512	CD4023AE	Triple 3 In Hand	2.14	1.85	1.48	1.22
897-2513	CD4025AE	Triple 3 In NOR	2.14	1.85	1.48	1.22

COLLINS MOS/LSI INTEGRATED CIRCUITS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-24	100-Up
539-1601	CRC2001-1-3	16-Channel Multiplexer	32.00	19.95	15.00
539-1951	CRC9501-1-2	8-Bit P(*LUS Sign A/D Converter	53.60	33.40	25.10
539-1952	CRC9502-1-2	8-Bit P(*LUS Sign D/A Converter	54.80	33.60	25.25
539-1953	CRC9502-1-2	R!Adder	42.50	26.55	19.95
539-1954	CRC9504-1-2	Quad Serial Summer	43.30	26.40	19.85
539-1955	CRC9505-1-2	Analog Switch	15.30	9.50	7.15
539-1703	CRC3003-1-3	1024-Bit 128-Word ROM (sine lookup)	23.30	14.55	10.95
539-1702	CRC3002-1-3	2048-Bit 256 and 512 Word ROM (cust.)†	31.60	19.70	14.80
539-1704	CRC3004-1-3	2048-Bit 256-Word ROM(4x4 Multipl.)	31.60	19.70	14.80
539-1741	CRC3501-1-2	2560-Bit 256 and 512 Word ROM (cust.)†	53.30	33.40	25.10
539-1752	CRC3502-1-2	2560-Bit 256-Word ROM ASCII/EBCIDIC Conv.	53.30	33.40	25.10
539-1760	CRC3503-1-2	2560-Bit 256-Word ROM EBCDIC/ASCII Converter	53.30	33.40	25.10
539-1770	CRC3504-1-2	2560-Bit 512 Word ROM Row Character Generator ASCII Upper Case	53.30	33.40	25.10
539-1780	CRC3505-1-2	2560-Bit 512 Word ROM Row Character Generator ASCII LC and Spec. Character.	53.30	33.40	25.10
539-1801	CRC4001-1-3	64-Bit (16 x 4) RAM	21.30	13.25	9.95
539-1802	CRC4002-1-3	128-Bit (64 x 2) RAM	32.30	20.15	15.15
539-1803	CRC4003-1-3	256-Bit (64 x 4) RAM	51.20	31.90	24.00

TEXAS INSTRUMENTS EMITTER COUPLED LOGIC

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-24	25-99	100-Up
952-0300	ECL2500N	Dual 4-Input OR/NOR Gate (16-pin)	12.00	6.14	4.87	4.18
952-0303	ECL2501N	9-Input OR/NOR Gate (16-pin)	12.00	6.14	4.87	4.18
952-0306	ECL2502N	Triple 2-Input NOR Gate (16-pin)	16.80	8.48	6.72	5.76
952-0309	ECL2503N	Quad 2-Input NOR Gate (16-pin)	16.80	8.48	6.72	5.76
952-0310	ECL2504N	Quad Delay/Inverter (16-pin)	16.80	8.48	6.72	5.76
952-0312	ECL2505N	Triple 3-Input NOR Gate (16-pin)	14.70	7.42	5.88	5.04
952-0315	ECL2506N	4-Wide 3-Input NOR/OR Gate (16-pin)	23.10	11.66	9.24	7.92
952-0318	ECL2507N	5-Wide 2-Input NOR/OR Gate (16-pin)	21.80	10.81	8.57	7.34
952-0321	ECL2508N	6-Wide 2-Input NOR/OR Gate (16-pin)	26.00	13.14	10.42	8.93
952-0324	ECL2509N	4-Wide 2-Input OR-AND/NOR-OR Gate (16-pin)	19.30	9.75	7.73	6.62
952-0327	ECL2510N	4-Wide 3-3-3-2 Input OR/AND (16-pin)	23.10	11.66	9.24	7.92
952-0330	ECL2511N	Quad 2-Input OR (Common Base) (16-pin)	16.20	8.16	6.47	5.54
952-0333	ECL2512N	Dual 3-Wide 2-Input (Common Base) NOR/OR Gate (16-pin)	31.80	16.11	12.77	10.94
952-0336	ECL2513N	Dual 2-Wide 2-Input (Common Base) OR-AND NOR-OR Gate (16-pin)	19.30	9.75	7.73	6.62

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-24	25-99	100-Up
952-0358	ECL2520N	Dual 2-Input (3 OR Output Gate) OR/NOR (16-pin)	14.10	7.10	5.63	4.82
952-0361	ECL2521N	Dual 3-Input 3 OR (16-pin)	15.10	7.63	6.05	5.18
952-0364	ECL2522N	Dual 4-Input (2 NOR Output Gates) NOR (16-pin)	15.10	7.63	6.05	5.18
952-0367	ECL2523N	Dual 3-Input (3 NOR Output Gates) NOR (16-pin)	15.10	7.63	6.05	5.18
952-0388	ECL2530N	Dual Differential Amplifier Receiver (16-pin)	12.00	6.14	4.87	4.18
952-0391	ECL2531N	Dual Line Driver (16-pin)	12.60	6.36	5.04	4.32
952-0406	ECL2536N	Dual HLL/ECL OR/NOR (16-pin)	16.20	8.16	6.47	5.54
952-0409	ECL2537N	Dual ECL/HLL OR/NOR (16-pin)	16.20	8.16	6.47	5.54
952-0418	ECL2540N	Dual 'D" Latches (16-pin)	16.20	8.16	6.47	5.54

RCA INTEGRATED CIRCUIT PROJECT KITS

Stock No.	Type	Circuit Function	EACH
897-3003	KC4000	Mike Preamplifier	9.50
897-3006	KC4001	2-Channel Mixer	10.25
897-3009	KC4002	Audio Oscillator	7.88
897-3010	KC4003	Audio Oscillator or Amplifier	14.13
897-3012	KC4004	9-Volt Regulated Power Supply	15.88
897-3015	KC4005	Intruder Alarm	11.88
897-3018	KC4006	Fire Alarm	18.98
897-3021	KC4007	Aircraft Band Converter	16.88
897-3024	KC4008	Ham Space Research Converter	16.88
897-3027	KC4009	Maritime, Mobile, Fire, Police Con.	16.88
897-3030	KC4010	Police and Fire Converter	16.88
897-3100	KC4500	Kit Enclosure and Hardware	7.63
897-3500	KD2105	Experimentors' Kit	16.88
897-3503	KD2106	Light Sensor Kit	4.38
897-3523	KD2117	Integrated Circuit Variety Pack	7.38

TEXAS INSTRUMENTS TTL LOGIC CIRCUITS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-24	25-99	100-Up
952-0501	SN54H10S	Triple 3-Input NAND Gate	7.60	5.63	4.48	3.82
952-0507	SN54H20S	Dual 4-Input NAND Gate	7.60	5.63	4.48	3.82
952-0513	SN54H30S	8-Input NAND Gate	7.60	5.63	4.48	3.82
952-0516	SN54H40S	Dual 4-Input NAND Buffer	7.60	5.63	4.48	3.82
952-0519	SN54H50S	Expandable Dual 2-Wide 2-Input AND/OR Invert Gate	8.90	6.64	5.28	4.50
952-0528	SN54H55S	Expandable 2-Wide 4-Input AND/OR Invert Gate	8.90	6.64	5.28	4.50
952-0531	SN54H60S	Dual 4-Input Expander	6.67	4.97	3.96	3.37
952-0534	SN54H61S	Triple 3-Input Expander	6.67	4.97	3.96	3.37
952-0537	SN54H62S	3-2-2-3 Input AND/OR Expand.	6.67	4.97	3.96	3.37
952-0540	SN54H71S	J-K Flip-Flop AND/OR Inputs	14.20	10.61	8.44	7.20
952-0543	SN54H72S	J-K Master/Slave Flip-Flop	14.20	10.61	8.44	7.20
952-1001	SN54L00T	Quad 2-Input NAND Gate	10.15	7.01	5.69	4.82
952-1004	SN54L20T	Dual 4-Input NAND Gate	10.15	7.01	5.69	4.82
952-1007	SN54L71T	J-K Flip-Flop AND/OR Inputs	14.15	10.55	8.40	7.05
952-1010	SN54L72T	J-K Master/Slave Flip-Flop	14.15	10.55	8.40	7.05
952-1012	SN74H00N	Quad 2-Input Pos. NAND Gate	.96	.76	.59	.54
952-1015	SN74H01N	Quad 2-Input Pos. NAND Gate with Open Collector Output	.96	.76	.59	.54
952-1018	SN74H04N	Hex Inverter	1.09	.87	.67	.61
952-1021	SN74H05N	Hex Inv. w/Open Collector	1.09	.87	.67	.61
952-1025	SN74H10N	Triple 3-Input Pos. NAND Gt.	.96	.76	.59	.54
952-1026	SN74H10S	Triple 3-Input Pos. NAND Gt.	6.50	4.86	3.87	3.30
952-1029	SN74H11N	Triple 3-Input Pos. AND Gate	.96	.76	.59	.54
952-1030	SN74H11S	Triple 3-Input Pos. AND Gate	6.50	4.86	3.87	3.30
952-1033	SN74H20N	Dual 4-Input Pos. NAND Gate	.96	.76	.59	.54
952-1034	SN74H20S	Dual 4-Input Pos. NAND Gate	5.05	3.75	2.99	2.55
952-1037	SN74H21N	Dual 4-Input Pos. AND Gate	.96	.76	.59	.54
952-1038	SN74H21S	Dual 4-Input Pos. AND Gate	6.50	4.86	3.87	3.30
952-1040	SN74H22N	Dual 4-Input Pos. NAND Gate with Open Collector Output	.96	.76	.59	.54
952-1044	SN74H30N	8-Input Positive NAND Gate	.96	.76	.59	.54
952-1045	SN74H30S	8-Input Positive NAND Gate	5.05	3.75	2.99	2.55
952-1048	SN74H40N	Dual 4-In. Pos. NAND Buffer	.96	.76	.59	.54
952-1049	SN74H40S	Dual 4-In. Pos. NAND Buffer	6.50	4.86	3.87	3.30
952-1052	SN74H50N	Expandable Dual 2-Wide 2-Input AND-OR-INVERT Gate	.96	.76	.59	.54
952-1053	SN74H50S	Expandable Dual 2-Wide 2-Input AND-OR-INVERT Gate	5.92	4.42	3.52	3.00
952-1055	SN74H51N	Dual 2-Wide 2-In. AND-OR	.96	.76	.59	.54
952-1059	SN74H52N	Expandable 4-Wide 2-2-2-3 Input AND-OR Gate	.96	.76	.59	.54
952-1062	SN74H53N	Expandable 4-Wide 2-2-2-3 Input AND-OR-INVERT Gate	.96	.76	.59	.54
952-1063	SN74H53S	Expandable 4-Wide 2-2-2-3 Input AND-OR-INVERT Gate	5.92	4.42	3.52	3.00
952-1065	SN74H54N	4-Wide 2-Input AND-OR-INVERT Gate	.96	.76	.59	.54
952-1069	SN74H55N	Expandable 2-Wide 4-Input AND-OR-INVERT Gate	.96	.76	.59	.54
952-1070	SN74H55S	Expandable 2-Wide 4-Input AND-OR-INVERT Gate	5.92	4.42	3.52	3.00
952-1073	SN74H60N	Dual 4-Input Expander	.96	.76	.59	.54
952-1074	SN74H60S	Dual 4-Input Expander	4.45	3.32	2.64	2.55
952-1077	SN74H61N	Triple 3-Input Expander	.96	.76	.59	.54
952-1078	SN74H61S	Triple 3-Input Expander	4.45	3.32	2.64	2.55
952-1081	SN74H62N	3-2-2-3 In. AND-OR Expander	.96	.76	.59	.54
952-1082	SN74H62S	3-2-2-2 In. AND-OR Expander	4.45	3.32	2.64	2.55
952-1085	SN74H71N	J-K Flip-Flop w/AND-OR Inp.	1.46	1.16	.90	.82
952-1086	SN74H71S	J-K Flip-Flop w/AND-OR Inp.	9.50	7.07	5.63	4.80
952-1089	SN74H72N	J-K Master/Slave Flip-Flop	1.27	1.01	.78	.71
952-1090	SN74H72S	J-K Master/Slave Flip-Flop	9.50	7.07	5.63	4.80

See Page 7 for Explanation of Abbreviations and Symbols

 SEE PAGE 41 FOR SEMICONDUCTORS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-24	25-99	100-Up
952-1092	SN74H73N	Dual J-K M/S Flip-Flop	2.09	1.67	1.29	1.17
952-1095	SN74H74N	Dual D-Type Edge-Triggered Flip-Flop	2.09	1.67	1.29	1.17
952-1098	SN74H76N	Dual J-K M/S Flip-Flop (16-pin)	2.27	1.81	1.40	1.27
952-1101	SN74H78N	Dual J-K M/S Flip-Flop	2.27	1.81	1.40	1.27
952-1104	SN74H101N	J-K Neg. Edge Triggered Flip-Flop w/AND-OR In. (50 MHz)	1.36	1.09	.84	.76
952-1107	SN74H102N	J-K Neg. Edge Triggered Flip-Flop w/AND Inputs (50 MHz)	1.36	1.09	.84	.76
952-1110	SN74H103N	Dual J-K Neg. Edge Triggered Flip-Flop (90 MHz)	2.14	1.70	1.32	1.20
952-1113	SN74H106N	Dual J-K Neg. Edge Trig. F-F w/Indiv. Preset & Clear (16-pin)	1.87	1.48	1.15	1.05
952-1116	SN74H108N	Dual J-K Neg. Edge Trig. F-F w/Common Clock (50 MHz)	2.05	1.63	1.26	1.15
952-1118	SN74H183N	Dual Carry-Save Full Adder	6.10	4.87	3.78	3.45
952-2000	SN74L00N	Quad 2-In. Pos. NAND Gate	1.13	.93	.75	.64
952-2008	SN74L02N	Quad 2-In. Pos. NOR Gate	1.25	1.04	.84	.71
952-2009	SN74L003N	Quad 2-In. pos. NAND Gate	1.13	.93	.84	.71
952-2002	SN74L04N	Hex Inverter	1.25	1.04	.84	.71
952-2003	SN74L10N	Triple 3-In. Pos. NAND Gate	1.13	.93	.75	.64
952-2004	SN74L20T	Dual 4-Input NAND Gate	3.35	2.00	1.62	1.37
952-2005	SN74L20N	Dual 4-In. Pos. NAND Gate	1.13	.93	.75	.64
952-2006	SN74L30N	8-Input Positive NAND Gate	1.13	.93	.75	.64
952-2009	SN74L42N	BCD To Decimal Decoder (16-pin)	6.15	5.10	4.15	3.15
952-2012	SN74L47N	BCD To 7 Segment Decoder/Dr. (16-pin)	6.15	5.10	4.15	3.15
952-2015	SN74L51N	Dual 2-Wide 2-Input AND-OR-INVERT Gate	1.13	.93	.75	.64
952-2019	SN74L54N	Expandable 4-Wide 2-2-2-3 Input AND-OR-INVERT Gate	1.13	.93	.75	.64
952-2024	SN74L55N	Expandable 4-Wide 4-Input AND-OR-INVERT Gate	1.13	.93	.75	.64
952-2030	SN74L71N	R-S Master/Slave Flip-Flop	1.58	1.31	1.07	.90
952-2036	SN74L72N	J-K Master/Slave Flip-Flop	1.58	1.31	1.07	.90
952-2042	SN74L73N	Dual J-K M/S Flip-Flop	2.70	2.24	1.82	1.54
952-2043	SN74L74N	Dual 'D" Edge Trig. Flip-Flop	2.25	1.87	1.52	1.29
952-2048	SN74L78N	Dual J-K M/S Flip-Flop	2.70	2.24	1.82	1.54
952-2050	SN74L83N	4 Bit Binary Fill Adoer (16-pin)	6.15	5.10	4.15	3.15
952-2055	SN74L85N	4-Bit Magnitude Comparator (16-pin)	8.20	6.82	5.54	4.69
952-2060	SN74L86N	Quad 2-In. Exclusive OR Gate	2.88	2.38	1.94	1.64
952-2063	SN74L90N	8-Bit Shift Register .	6.15	5.10	4.15	3.51
952-2071	SN74L93N	4-Bit Binary Counter	6.15	5.10	4.15	3.51
952-2077	SN74L95N	4-Bit Right Shift/Left Shift Register (Parallel In/Out)	6.15	5.10	4.15	3.51
952-2082	SN74L98N	4-Bit Data Selector Storage Register	6.15	5.10	4.15	3.51
952-2088	SN74L99N	4-Bit Right Shift/Left Shift Register with J-K and D-D	6.15	5.10	4.15	3.51
952-2095	SN74L121N	Mono Stable Multiplexer w/Strobe	2.70	2.24	1.82	1.54
952-2096	SN74L122N	Retriggerable One Shot Multivib.	2.70	2.24	1.82	1.54
952-2120	SN74L153N	Dual 4 Line To 1 Multiplexer (16-pin)	6.15	5.10	4.15	3.51
952-2132	SN74L164N	8 Bit Series In-Parallel Out Shift Reg.	8.20	6.82	5.54	4.69
952-2160	SN74L192N	Sync Up/DownDecade Counter (16-pin)	10.98	9.12	7.41	6.27
952-2163	SN74L193N	Sync Up/Down 4 Bit Binary Counter (16-pin)	10.98	9.12	7.41	6.27
952-2250	SN74S00N	S Quad 2-Input NAND	5.23	3.89	3.10	2.64
952-2255	SN74S03N	S Quad 2-Input NAND O.C.	5.23	3.89	3.10	2.64
952-2260	SN74S04N	S Hex Inverter	6.28	4.67	3.72	3.17
952-2266	SN74S05N	Hex Inverter O.C.	6.28	4.67	3.72	3.17
952-2272	SN74S10N	Triple 3-Input NAND	5.23	3.89	3.10	2.64
952-2277	SN74S11N	Triple 3-Input AND	5.23	3.89	3.10	2.64
952-2280	SN74S15N	Triple 3-Input AND/O.C.	5.23	3.89	3.10	2.64
952-2285	SN74S20N	S Dual 4-Input NAND	5.23	3.89	3.10	2.64
952-2292	SN74S22N	S Dual 4-Input NAND/O.C.	5.23	3.89	3.10	2.64
952-2300	SN74S40N	Dual 4 NAND Buffer	5.70	4.29	3.42	2.91
952-2320	SN74S64N	4-2-2-3 AOI	5.23	3.89	3.10	2.64
952-2321	SN74S65N	4-2-2-3 AOI O.C.	5.23	3.89	3.10	2.64
952-2325	SN74S74N	Dual D Flip-Flop	8.98	7.16	6.10	5.55
952-2330	SN74S112N	S Dual J-K Flip-Flop	14.13	10.53	8.38	7.15
952-2335	SN74S140N	Dual 4 NAND Drive	8.65	6.44	5.13	4.37
952-3346	SN5482S	2 Bit Binary Full Adder	21.58	17.98	14.31	12.20
952-3348	SN5490S	Decade Counter	26.14	21.78	17.35	14.79
952-3601	SN7400N	Quad 2-In. Pos. NAND Gate	.77	.62	.48	.43
952-3602	SN7400S	Quad 2-In. Pos. NAND Gate	4.75	3.54	2.82	2.40
952-3604	SN7401N	Quad 2-In. Pos. NAND Gate w/Open Collector Output	.77	.62	.48	.43
952-3605	SN7402N	Quad 2-In. Pos. NOR Gate	.77	.62	.48	.43
952-3607	SN7403N	Quad 2-In. Pos. NAND Gate	.77	.62	.48	.43
952-3609	SN7404N	Hex Inverter	.96	.76	.59	.54
952-3611	SN7405N	Hex Inverter with Open Collector Output	.96	.76	.59	.54
952-3608	SN7406N	Hex Inverter Buffer/Driver w/30 V Open Coll. Output	3.50	2.79	2.21	2.01
952-3610	SN7407N	Hex Buffer	3.50	2.79	2.21	2.01
952-3612	SN7408N	Quad 2-In. Pos. AND Gate	1.09	.87	.67	.61
952-3613	SN7409N	Quad 2-In. Pos. AND Gate w/Open Collector Output	1.09	.87	.67	.61
952-3614	SN7410N	Triple 3-In. Pos. NAND Gate	.77	.62	.48	.43
952-3616	SN7410S	Tripoe 3-Input NAND Gate	4.75	3.54	2.82	2.40
952-3622	SN7412N	Triple 3 NAND, OR Gate	.77	.66	.48	.43
952-3615	SN7413N	Dual Schmitt Trigger 4-Input NAND Gate	2.43	1.93	1.62	1.48
952-3617	SN7416N	Hex Inverter Buffer/Driver w/15 V Open Coll. Output	2.92	2.32	1.85	1.68
952-3618	SN7417N	Hex Buffer/Driver with 15 V Open Collector Output	2.92	2.32	1.85	1.68
952-3619	SN7420N	Dual 4-In. Pos. NAND Gate	.77	.62	.48	.43
952-3620	SN7420S	Dual 4-In. Pos. NAND Gate	4.00	2.99	2.38	2.03
952-3629	SN7423N	Dual 4 NOR Str. Exp. (16-pin)	1.18	.94	.73	.66
952-3631	SN7425N	Dual 4 NOR Strobe	1.18	.94	.73	.66
952-3621	SN7426N	Quad 2-Input High Voltage (MOS) Interface NAND Gate	1.09	.87	.67	.61
952-3634	SN7427N	Triple 3 NOR	1.18	.94	.73	.66
952-3623	SN7430N	8-Input Positive NAND Gate	.77	.66	.48	.43
952-3624	SN7430S	8-Input Positive NAND Gate	4.00	2.99	2.38	2.03
952-3636	SN7432N	Quad 2-Input OR	1.18	.94	.73	.66
952-3625	SN7437N	Quad 2-In. Pos. NAND Buffer	1.27	1.01	.78	.71
952-3626	SN7438N	Quad 2-In. Positive NAND Buffer w/Open Collector	1.27	1.01	.78	.71

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-24	25-99	100-Up
952-3627	SN7440N	Dual 4-In. Pos. NAND Buffer	.77	.66	.48	.43
952-3628	SN7440S	Dual 4-In. Pos. NAND Buffer	5.45	4.06	3.23	2.76
952-3633	SN7442N	BCD to Decimal Decoder (16-pin)	3.39	2.71	2.10	1.31
952-3635	SN7443N	Excess 3 to Decimal Decoder (16-pin)	4.78	3.81	2.95	1.84
952-3637	SN7444N	Excess 3 Gray to Decimal Decoder (16-pin)	4.78	3.81	2.95	1.84
952-3639	SN7445N	BCD to Decimal Decoder/Driver (30 V Outputs)	6.70	5.97	4.76	3.69
952-3642	SN7446AN	BCD To 7 Segment Decoder/Dr. (16-pin)	5.50	5.10	4.00	3.15

TEXAS INSTRUMENTS TTL INT. CKT. LOGIC

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-24	25-99	100-Up
952-3644	SN7447AN	BCD to 7 Segment Decoder/Diver (16-pin)	5.30	4.78	3.81	2.95
952-3645	SN7448N	BCD to 7 Segment Decoder/Drive	5.67	4.52	3.51	3.20
952-3648	SN7450N	Expandable Dual Z wide Z input and or Invert Gate	.77	.62	.48	.43
952-3649	SN7450S	Expandable Dual Z wide Z input and or Invert Gate	4.75	3.54	2.82	2.40
952-3652	SN7451N	Dual 2 Wide 2 Input and or Invert Gate	.77	.62	.48	.43
952-3653	SN7451S	Dual 2 Wide 2 Input and or Invert Gate	4.75	3.54	2.82	2.40
952-3656	SN7453N	Expandable 4 Wide 2 Input and or Invert Gate	.77	.62	.48	.43
952-3657	SN7453S	Expandable 4 Wide 2 Input and or Invert Gate	4.75	3.54	2.82	2.40
952-3660	SN7454N	4 Wide 2 Input and or Invert Gate	.77	.62	.48	.43
952-3661	SN7460N	Dual 4 Input Expander	.77	.62	.48	.43
952-3664	SN7460S	Dual 4 Input Expander	3.55	2.65	2.11	1.80
952-3667	SN7470N	J-K Flip-Flop	1.27	1.01	.78	.71
952-3668	SN7470S	J-K Flip-Flop	7.10	5.31	4.23	3.60
952-3671	SN7472N	J-K Master Slave Flip-Flop	1.18	.94	.73	.66
952-3672	SN7472S	J-K Master Slave Flip-Flop	6.65	4.95	3.94	3.36
952-3675	SN7473N	Dual J-K Master Slave Flip-Flop	1.68	1.34	.98	.94
952-3677	SN7473S	Dual J-K Master Slave Flip-Flop	10.90	8.14	6.48	5.53
952-3681	SN7474N	Dual D Type Edge-Triggered Flip-Flop	1.68	1.34	.98	.94
952-3683	SN7474S	Dual D Type Edge-Triggered Flip-Flop	9.50	7.07	5.63	4.80
952-3685	SN7475N	Quadruple Bistable Latch	2.75	2.91	1.70	1.07
952-3687	SN7476N	Dual J-K Master Slave Flip-Flop	1.87	1.48	1.15	1.05
952-3691	SN7480N	Gated Full Adder	2.13	1.70	1.32	1.82
952-3692	SN7481N	16 Bit Active-Element Memory	5.09	4.06	3.15	2.87
952-3693	SN7482N	2 Bit Binary Full Adder	5.03	4.01	3.11	2.84
952-3695	SN7483N	4 Bit Binary Full Adder	3.43	2.74	2.12	1.94
952-3697	SN7484N	16 Bit Active-Element Memory (Gated Write Inputs)	5.53	4.41	3.42	3.12
952-3698	SN7486N	Quad 2 Input Exclusive or Gate	1.45	1.16	.90	.82
952-3699	SN7485N	16 Bit Active Element Memory	6.98	5.57	4.32	3.74
952-3702	SN7489N	64 Bit Ram	10.68	8.50	7.20	6.56
952-3700	SN7490F	Decade Counter	20.20	14.53	11.57	9.86
952-3701	SN7490N	Decade Counter	3.07	2.45	1.90	1.20
952-3710	SN7491AN	8 Bit Shift Register	4.36	3.48	2.70	1.69
952-3715	SN7492N	Divide-by 12 Counter	3.07	2.45	1.90	1.20
952-3716	SN7491	8 Bit Shift Register	21.80	14.17	11.28	9.62
952-3720	SN7493N	4 Bit Binary Counter	3.07	2.45	1.90	1.20
952-3740	SN7494N	4 Bit Shift Register (Parallel-In. Serial Out)	5.59	4.45	3.46	3.15
952-3750	SN7495N	4 Bit Right Shift/Left Shift Reg. Parallel-In Parallel-Out	3.48	2.77	2.15	1.34
952-3751	SN7496N	5 Bit Shift Reg. Dual Par. In And Out	6.69	5.34	4.14	3.77
952-4116	SN7497N	B1 Rate Multiple	6.98	5.57	4.32	3.94
952-4900	SN74100N	8 Bit Bistable Latch	5.59	4.45	3.46	3.15
952-4902	SN74104N	Gated J-K Master Slave Flip Flop	2.32	1.85	1.43	1.30
952-4903	SN74105N	Gated J-KK Master Slave Flip Flop	2.32	1.85	1.43	1.30
952-4904	SN74107N	Dual J-K Master Slave Flip Flop	1.68	1.34	.98	.94
952-4906	SN74110N	Var Skew J-K Flip Flop	2.17	1.73	1.47	1.34
952-4907	SN74111N	Dual 74110	3.47	2.76	2.36	2.14
952-4908	SN74121N	Monostable Multivibrator (One Shot)	1.68	1.68	1.34	1.04
952-4909	SN74122N	Retrig One Shot	2.14	1.70	1.32	1.20
952-4911	SN74123N	Dual 74122	4.78	3.80	2.94	2.68
952-4910	SN74141N	BCD-To Decimal Decoder/Driver	4.36	3.48	2.70	1.56
952-4912	SN74145N	BCD-To Decimal Decoder/Driver (15 V Output)	4.71	3.76	2.92	2.66
952-4919	SN74150N	16 Bit Data Selector/Multiplexer	6.98	5.57	4.32	3.94
952-4920	SN74151N	8 Bit Data Selector/Multiplexer w/Strobe	5.85	5.12	4.08	3.44
952-4921	SN74153N	Dual 4 Line to 1 Line Data Selector/Multiplexer	5.33	4.67	3.72	3.13
952-4922	SN74154N	4 Line to 16 Line (Left 16) Decoder/Demultiplexer	5.76	5.76	4.59	3.56
952-4923	SN74155N	Dual 2 Line to 4 Line Decoder/Demultiplexer	5.08	4.45	3.55	2.99
952-4968	SN74156N	Dual Z-4 Decoder	5.08	4.45	3.55	2.99
952-4925	SN74157N	Quad 2-1 Multiplexer	3.12	2.49	2.11	1.92
952-4926	SN74160N	Syn BCD Counter	3.55	2.83	2.20	2.00
952-4927	SN74161N	Syn B Counter	3.55	2.83	2.20	2.00
952-4928	SN74162N	74160 + Syn Clr	3.55	2.83	2.20	2.00
952-4929	SN74163N	74161 + Syn Clr	3.55	2.83	2.20	2.00
952-4930	SN74164N	8 Bit Sipe Sr	6.55	5.22	4.05	3.69
952-4931	SN74165N	8 Bit Pisco Sr	6.55	5.22	4.05	3.69
952-4932	SN74166N	Syn 8 Bit Pisco Sr (16-pin)	6.55	5.22	4.05	3.69
952-4933	SN74167N	Dec Rate Multiplexer (16-pin)	6.41	5.10	4.32	3.94
952-4935	SN74170N	4 By 4 Regi F/E (16-pin)	8.70	6.93	5.87	5.35
952-4936	SN74174N	Hex D-Type F/FS	4.73	3.76	3.19	2.90
952-4937	SN74175N	Quad D-Type F/FS	4.00	3.19	2.70	2.46
952-4938	SN74176N	4 Bit BCD Counter	3.06	2.44	1.89	1.72
952-4939	SN74177N	4 Bit BI Counter	3.06	2.44	1.89	1.72
952-4924	SN74180N	8 Bit Odd Evan Parity Gene/Checker	6.25	4.95	4.18	3.80
952-3769	SN74181N	Bit Arithmetic Logic Unit and Function Generator (24-pin)	23.72	18.91	14.67	13.37

See Page 7 for Explanation of Abbreviations and Symbols

 SEE PAGE 41 FOR SEMICONDUCTORS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-24	25-99	100-Up
952-3773	SN74182N	Look Ahead Carry Generator for (alw) (16-pin)	5.21	4.15	3.22	2.94
952-3777	SN74184N	BCP To Binary Converter (16-pin)	3.77	3.47	2.76	2.34
952-3781	SN74185AN	N Binary to BCD Converter (16-pin)	3.77	3.47	2.76	2.34
952-3785	SN74190N	Up/Down Dec. Cntr (16-pin)	8.15	7.13	5.68	4.41
952-3789	SN74191N	Up/Ddown Binary Counter (16-pin)	8.15	7.13	5.68	4.41
952-4980	SN74192N	Synchronous Up/Down Decade Counter (16-pin)	10.00	8.00	6.38	4.95
952-4985	SN74194N	4 Bit Univ Sr. (16-pin)	3.55	2.83	2.20	2.00
952-4986	SN74195N	4 Bit Pipo Sr (16-pin)	2.62	2.09	1.62	1.48
952-4987	SN74196N	4 Bit BCD Counter	3.06	2.44	1.89	1.72
952-4988	SN74197N	4 Bit Bi Counter	3.06	2.44	1.89	1.72
952-4989	SN74198N	8 Bit Pipo Lr Sr (16-pin)	7.71	6.15	4.77	4.35
952-4990	SN74199N	8 Bit Pipo Sr (24-pin)	7.71	6.15	4.77	4.35

TEXAS INSTRUMENTS DTL INT. CKTS.

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
952-4320	SN15830N	Dual 4 Input Expandable Nand	.90	.90	.75	.75
952-4325	SN15831F	J-K FlipFlop	5.95	3.22	2.46	2.15
952-4330	SN15831N	J-K FlipFlop	1.15	1.15	1.02	.80
952-4335	SN15832N	Dual 4 Input Expandable + Buffer	.90	.90	.75	.58
952-4340	SN15833F	Dual 4 Input Gate	4.10	3.00	2.29	2.00
952-4345	SN15833N	Dual 4 Input Gate	.90	.90	.75	.58
952-4350	SN15834N	Hex Inverter	.98	.98	.85	.64
952-4355	SN15835N	Hex Inverter	.98	.98	.85	.64
952-4360	SN15836N	Hex Inverter	.98	.98	.85	.64
952-4365	SN15837N	Hex Inverter	.98	.98	.85	.64
952-4370	SN15838N	Hex Inverter	.98	.98	.85	.64
952-4375	SN15844N	Dual 4 Input Expandable Nand	.90	.90	.75	.58
952-4385	SN15845N	JK/RS FlipFlop	1.15	1.15	1.02	.80
952-4395	SN15846N	Quad 2 Input Nand	.90	.90	.75	.58
952-4405	SN15848N	JK/RS FlipFlop	1.15	1.15	1.02	.80
952-4410	SN15849N	Quad 2 Input Nand	.90	.90	.75	.58
952-4420	SN15850N	A-C FlipFlop	3.75	3.75	3.50	2.55
952-4430	SN15851N	One Shot Multivibrator	3.75	3.75	3.50	2.55
952-4440	SN15857N	Quad 2 Input and Buffer	.90	.90	.75	.58
952-4445	SN15858N	Quad 2 Input Nand Gate	.90	.90	.75	.58
952-4450	SN15861N	Dual 4 Input Nand Gate	.90	.90	.75	.58
952-4460	SN15862N	Triple 3 Input Nand Gate	.90	.90	.75	.58
952-4470	SN15863N	Triple 3 Input Nand Gate	.90	.90	.75	.58
952-5510	SN151800N	Dual 5 Input Nand Gate	.90	.90	.75	.58
952-5514	SN151801N	Dual 5 Input Nand Gate	.90	.90	.75	.58
952-5518	SN151802N	8 Input Expandable Nand Gate	.90	.90	.75	.58
952-5522	SN151803N	8 Input Expandable Nand Gate	.90	.90	.75	.58
952-5526	SN151804N	10 Input Nand Gate	.90	.90	.75	.58
952-5530	SN151805N	10 Input Nand Gate	.90	.90	.75	.58
952-5544	SN151810N	Quad 2 Input Nor Gate	.90	.90	.75	.58
952-5548	SN151811N	Quad 2 Input Nor Gate	.90	.90	.75	.58
952-5508	SN158093F	Quad 2 Input Nor Gate	8.50	6.43	4.91	4.29
952-5610	SN158093N	Dual 845 FlipFlop	1.56	1.56	1.36	.93
952-5612	SN158094F	Dual 848 FlipFlop	8.50	6.43	4.91	4.29
952-5614	SN158094N	Dual 848 FlipFlop	1.56	1.56	1.36	.93
952-5628	SN158097F	Dual 845 FlipFlop Common Clock	8.50	6.43	4.91	4.29
952-5630	SN158097N	Dual 845 FlipFlop Common Clock	1.56	1.56	1.36	.93
952-5638	SN158099N	Dual 848 FlipFlop Common Clock	1.56	1.56	1.36	.93

TEXAS INSTRUMENTS LINEAR INT. CKTS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
952-4754	SN72301AN	Operational Amplifier	1.95	1.95	1.29	1.16
952-4758	SN72301AP	Operational Amplifier (8-pin)	1.90	1.90	1.26	1.14
952-4766	SN72307N	Operational Amplifier	1.95	1.95	1.29	1.16
952-4770	SN72307P	Operational Amplifier (8-pin)	1.90	1.90	1.26	1.14
952-4790	SN72558P	Dual Operational Amp (8-pin)	2.98	1.86	1.86	1.68
952-4821	SN72709N	Operational Amplifier	1.10	1.00	1.00	.90
952-4822	SN72709P	Operational Amplifier (8-pin)	1.05	.97	.97	.88
952-4824	SN72710F	Voltage Comparator (10-pin)	5.95	5.95	5.95	4.46
952-4828	SN72710L	Voltage Comparator	1.60	1.06	1.06	.96
952-4829	SN72710N	Voltage Comparator	1.50	1.00	1.00	.90
952-4838	SN72711N	Voltage Comparator	1.38	1.08	1.08	.97
952-4841	SN72720N	Voltage Comparator	2.25	1.66	1.66	1.50
952-4842	SN72733N	Video Amplifier	2.49	3.75	2.49	2.24
952-4843	SN72741J	High Performance Operational Amp.	5.90	2.80	2.80	2.43
952-4844	SN72741N	High Performance Operational Amp.	1.25	1.06	1.06	.96
952-4847	SN72741P	High Performance Operational Amp. (8-pin)	1.20	1.04	1.04	.94
952-4850	SN72747N	Dual Operational Amplifier	2.13	1.92	1.92	1.73
952-4860	SN72748N	High Performance Operational	1.10	1.06	1.06	.96
952-4865	SN72748P	High Performance Oper. Amp. (8-pin)	1.55	1.04	1.04	.94
952-4870	SN72770N	Super Beta Operational Amp.	13.52	9.14	9.14	8.24
952-4873	SN72770P	Super Beta Operational Amp. (8-pin)	12.48	8.31	8.31	7.50
952-4120	SN7510L	Video Amplifier	6.00	4.39	4.39	3.96
952-4124	SN7520N	Sense Amplifier (16-pin)	7.00	4.65	4.65	3.50

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
952-4128	SN7521N	Sense Amplifier (16-pin)	4.25	2.82	2.82	2.54
952-4132	SN7522N	Sense Amplifier (16-pin)	6.50	4.32	4.32	3.90
952-4138	SN7523N	Sense Amplifier (16-pin)	4.13	2.74	2.74	2.06
952-4142	SN7524N	Sense Amplifier (16-pin)	6.50	4.32	4.32	3.90
952-4146	SN7525N	Sense Amplifier (16-pin)	4.13	2.74	2.74	2.06
952-4150	SN7526N	Sense Amplifier (16-pin)	7.50	4.99	4.99	4.50
952-4154	SN7527N	Sense Amplifier (16-pin)	5.00	3.32	3.32	3.00
952-4155	SN7528N	Sense Amplifier (16-pin)	6.60	4.39	4.39	3.96
952-4156	SN7529N	Sense Amplifier (16-pin)	4.25	2.82	2.82	2.54
952-5020	SN75107N	Line Receiver	4.50	2.99	2.99	2.70
952-5024	SN75108N	Line Receiver	4.50	2.99	2.99	2.70
952-5029	SN75109N	Line Driver	4.75	3.15	3.15	2.84
952-5033	SN75110N	Line Driver	4.75	3.15	3.15	2.84
952-5034	SN75303N	Memory Driver	3.08	2.58	2.58	1.94
952-5057	SN75324N	Memory Driver	7.00	4.65	4.65	4.20
952-5090	SN75450N	Dual Periphery Driver	1.75	1.46	1.46	1.32
952-5125	SN75451P	Dual Periphery Driver (16-pin)	1.50	1.13	1.13	1.02

FAIRCHILD LINEAR INT. CKT.

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
569-1150	U5G7018312	Two Isolated Transistors Darlington Corrected	1.95	1.31	1.21	1.05
569-1160	U5G7026312	Dual Independent Differential Amplifiers	2.58	1.74	1.60	1.39
569-1170	U5F7036312	Dual Darlington Array	1.83	1.25	1.15	.99
569-1200	U6A7045312	1K Array: 3 Transistors & 1 Diff. Pair	1.95	1.31	1.21	1.05
569-1208	U6A7049312	Array: 3 Transistors & 1 Diff. Pair	1.95	1.31	1.21	1.05
569-1210	U6A7054312	Array: Dual Diff. Amp.	1.95	1.31	1.21	1.05
569-1215	U5E7064394	TV Automatic Fine Tuning Circuit	1.95	1.31	1.21	1.05
569-1216	U5A7064394	TV Automatic Fine Tuning Circuit	2.18	1.46	1.35	1.17
569-1218	U6A7065394	TV/FM Sound System	2.05	1.38	1.26	1.10
569-1220	U7F7065394	TV/FM Sound System	2.28	1.51	1.39	1.21
569-1234	U5B7101311	Gen. Purp. Op Amp	5.50	4.10	3.80	3.25
569-1236	U5B7101333	Gen. Purp. Op Amp	5.14	3.85	3.50	3.05
569-1238	U5B7101392	Gen. Purp. Op Amp	1.88	1.40	1.30	1.10
569-1240	U6A7101311	Gen. Purp. Op Amp	5.52	4.10	3.80	3.25
569-1242	U6A7101392	Gen. Purp. Op Amp	2.02	1.40	1.30	1.10
569-1246	U6A7101333	Gen. Purp. Op Amp	5.14	3.85	3.50	3.05
569-1254	U9T7101392	Gen. Purp. Op Amp	1.95	1.30	1.20	1.05
569-1252	U9T7101393	Gen. Purp. Op Amp	1.95	1.30	1.20	1.05
569-1260	U5B7108311	High Precision Op Amp	31.25	31.25	28.75	25.00
569-1262	U5B7108312	High Precision Op Amp	18.75	18.75	17.25	15.00
569-1264	U5B7108332	High Precision Op Amp	25.00	25.00	22.50	20.00
569-1268	U5B7108333	High Precision Op Amp	12.50	12.50	11.50	10.00
569-1270	U5B7108392	High Precision Op Amp	12.50	12.50	11.50	10.00
569-1272	U5B7108382	High Precision Op Amp	6.25	6.25	5.75	5.00
569-1274	UGJ7109312	5V. Regulator (2A)	18.70	13.90	12.80	10.95
569-1278	UGJ7109393	5V. Regulator (2A)	4.27	3.15	2.90	2.50
569-1280	UBN7109312	5V. Regulator (200mA)	18.70	13.90	12.80	10.95
569-1282	UBN7109333	5V. Regulator (200mA)	7.38	5.50	5.05	4.90
569-1284	UBN7109393	5V. Regulator (200mA)	4.27	3.15	2.90	2.50
569-1296	U7B7424393	Hi-Perf. Op.Amp	0.00	0.00	0.00	0.00
569-1298	U7B7524392	Two Chan. Sense Amp	9.26	7.35	5.88	4.90
569-1300	U7B7525393	Two Chan. Sense Amp	5.00	3.98	3.18	2.65
569-1320	U6A755059X	Dual Lamp Relay Driver	2.05	1.65	1.20	1.10
569-1325	U9T755159X	Memory Driver	1.81	1.40	1.11	.97
569-1460	U5B7702312	DC Wideband Amp	12.25	10.50	8.40	7.00
569-1465	U5B7702393	DC Wideband Amp	3.75	3.38	2.70	2.25
569-1470	U6A7702312	DC Wideband Amp	13.13	11.25	9.00	7.50
569-1490	U6A7702393	DC Wideband Amp	5.63	4.50	3.60	3.00
569-1500	U5B7703394	DC Wideband Amp	1.25	1.05	.90	.85
569-1505	U5F7703312	RF/IF Limiting Amp	1.85	1.50	1.20	1.00
569-1514	U5B7709311	Gen. Purp. Op Amp	28.13	22.50	18.00	15.00
569-1520	U5B7709312	Gen. Purp. Op Amp	3.13	2.93	2.34	1.95
569-1540	U5B7709393	Gen. Purp. Op Amp	1.38	1.10	1.05	.90
569-1560	U6A7709312	Gen. Purp. Op Amp	3.38	3.38	2.70	2.25
569-1580	U6A7709393	Gen. Purp. Op Amp	1.38	1.10	1.05	.90
569-1600	U5B7710312	Hi-Speed Comparator	3.14	2.93	2.34	1.95
569-1620	U5B7710393	Hi-Speed Comparator	1.38	1.10	1.05	.90
569-1640	U6A7710312	Hi-Speed Comparator	3.75	3.38	2.70	2.25
569-1660	U6A7710393	Hi-Speed Comparator	1.38	1.10	1.05	.90
569-1680	U5F7711312	Dual Comparator	3.75	3.38	2.70	2.25
569-1700	U5F7711393	Dual Comparator	1.38	1.10	1.05	.90
569-1705	U6A7711312	Dual Comparator	3.75	3.38	2.70	2.25
569-1710	U6A7711393	Dual Comparator	1.38	1.10	1.05	.90
569-1712	U5F7715312	Hi-Speed Op Amp	35.00	30.00	27.00	22.50
569-1720	U5F7715393	Hi-Speed Op Amp	8.90	7.43	5.94	4.95
569-1724	U6A7715312	Hi-Speed Op Amp	40.00	33.75	27.00	22.50
569-1728	U6A7715393	Hi-Speed Op Amp	10.38	8.25	6.60	5.50
569-1736	U3M7722333	D/A Current Source	70.50	56.25	45.00	37.50
569-1738	U3M7722334	D/A Current Source	27.00	22.50	18.00	15.00
569-1740	U5R7723312	Voltage Regulator	7.38	5.93	4.74	3.95
569-1760	U5R7723393	Voltage Regulator	3.13	2.93	2.34	1.95
569-1762	U6A7723312	Voltage Regulator	8.00	6.38	5.10	4.25
569-1800	U6A7723393	Voltage Regulator	3.13	2.93	2.34	1.95

See Page 7 for Explanation of Abbreviations and Symbols

SEE PAGE 41 FOR SEMICONDUCTORS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
569-1820	U5T7725312	Instrumentation Op Amp	45.00	37.50	30.00	25.00
569-1822	U5T7725333	Instrumentation Op Amp	27.00	22.50	18.00	15.00
569-1840	U5T7725393	Instrumentation Op Amp	13.50	11.25	9.60	7.50
569-1842	U5U7726312	TSS Transistor Pair	56.25	45.00	36.00	30.88
569-1844	U5U7726323	TSS Transistor Pair	14.00	11.25	9.00	7.50
569-1846	U5U7727312	Temp. Controlled Preamp	86.63	71.25	57.00	47.50
569-1860	U5U7727333	Temp. Controlled Preamp	22.89	16.88	13.50	11.25
569-1862	U6A7729394	FM Stereo MPX Decoder	2.80	1.88	1.72	1.50
569-1874	U6A7732394	FM Stereo MPX Decoder	2.50	1.66	1.53	1.33
569-1878	U5F7733312	Video Amplifier	11.25	8.93	7.14	5.95
569-1880	U5F7733393	Video Amplifier	5.50	4.43	3.54	2.95
569-1882	U6A7733312	Video Amplifier	12.25	9.75	7.80	6.50
569-2000	U6A7733393	Video Amplifier	6.13	4.88	3.90	3.25
569-2001	U6A7734312	Hi-Precision Comparator	11.04	11.04	10.16	8.83
569-2002	U6A7734393	Hi-Precision Comparator	4.10	4.10	3.77	3.28
569-2020	U5B7735393	Micropower Op Amp	11.75	10.43	8.34	6.95
569-2030	U6A7739312	Dual Low-Noise Op Amp	11.25	8.93	7.14	5.95
569-2040	U6A7739393	Dual Low-Noise Op Amp	3.75	3.38	2.70	2.25
569-2050	U5B7740312	FET Op Amp	67.50	56.25	45.00	37.50
569-2060	U5B7740393	FET Op Amp	18.00	14.93	11.94	9.95
569-2075	U5B7741312	Freq. Compensated Op Amp	7.38	5.93	4.74	3.95
569-2100	U5B7741393	Freq. Compensated Op Amp	2.38	1.50	1.40	1.25
569-2140	U6A7741312	Freq. Compensated Op Amp	8.00	6.38	5.10	4.25
569-2145	U6A7741393	Freq. Compensated Op Amp	2.38	1.50	1.40	1.25
569-2160	U9T7741393	Freq. Compensated Op Amp	1.80	1.30	1.20	1.05
569-2162	U6A7742312	Zero Crossing AC Trigger	14.00	11.25	9.00	7.50
569-2164	U6A7742393	Zero Crossing AC Trigger	4.43	4.43	3.54	2.95
569-2168	U5E7746394	Color TV Chroma Demod.	3.13	2.04	1.83	1.67
569-2170	U6A7746394	Color TV Chroma Demod.	3.13	2.04	1.83	1.67
569-2180	U5F7747312	Dual Freq. Comp. Op Amp	18.63	14.93	11.94	9.95
569-2200	U5F7747393	Dual Freq. Comp. Op Amp	7.38	5.93	4.74	3.95
569-2230	U7A7747312	Dual Freq. Comp. Op Amp	23.50	18.75	15.00	12.50
569-2235	U7A7747393	Dual Freq. Comp. Op Amp	8.50	6.75	5.40	4.50
569-2280	U5B7748312	Hi-Performance Op Amp	7.00	5.93	4.74	3.95
569-2300	U5B7748393	Hi-Performance Op Amp	1.88	1.30	1.20	1.10
569-2305	U6A7748312	Hi-Performance Op Amp	7.95	6.38	5.10	4.00
569-2310	U6A7748393	Hi-Performance Op Amp	2.00	1.30	1.20	1.05
569-2315	U9T7748393	Hi-Performance Op Amp	1.80	1.30	1.20	1.05
569-2340	U5B7749394	Dual Amplifier	2.50	2.10	1.68	1.40
569-2360	U6A7749312	Dual Amplifier	9.25	7.43	5.94	4.95
569-2380	U6A7749393	Dual Amplifier	3.13	2.85	2.28	1.90
569-2385	U6A7750312	Dual Power Comparator	6.88	6.88	6.33	5.50
569-2390	U6A7750393	Dual Power Comparator	2.71	2.71	2.49	2.17
569-2400	U5E7754393	TV/FM Sound System	1.85	1.24	1.14	.99
569-2420	U6A7754394	TV/FM Sound System	1.85	1.24	1.14	.99
569-2430	U6A7757312	AGC IF Amplifier	6.10	4.08	3.76	3.27
569-2440	U6A7757393	AGC IF Amplifier	2.63	1.74	1.60	1.39
569-2442	U6A7760312	High Speed Comparator	11.00	11.00	10.20	8.83
569-2443	U6A7760393	High Speed Comparator	4.92	4.92	3.76	3.28
569-2450	U7B7761392	Two Chan. Sense Amplifier	8.88	7.13	5.70	4.75
569-2460	U7B7761393	Two Chan. Sense Amplifier	4.75	3.75	3.00	2.50
569-2480	U6A7767394	FM Stereo MPX Decoder	1.95	1.31	1.21	1.05
569-2482	U5B7776312	Programmable Op Amp	11.04	11.04	10.16	8.83
569-2483	U5B7776393	Programmable Op Amp	4.10	4.10	3.77	3.28
569-2484	U6A7776312	Programmable Op Amp	11.04	11.04	10.16	8.83
569-2485	U6A7776393	Programmable Op Amp	4.10	4.10	3.77	3.28
569-2486	U9T7776393	Programmable Op Amp	4.10	4.10	3.77	3.28
569-2495	U5B7777312	Precision Op Amp	10.50	8.95	7.15	5.95
569-2500	U5B7777393	Precision Op Amp	4.13	3.55	2.85	2.35
569-2510	U6A7777312	Precision Op Amp	10.50	7.45	6.85	5.95
569-2520	U6A7777393	Precision Op Amp	4.13	2.95	2.70	2.35
569-2540	U9T7777393	Precision Op Amp	3.75	2.45	2.25	1.95
569-2550	U6B7780394	Phase Locked Loop	3.13	2.04	1.82	1.67
569-2555	U6A7781394	Gain Controlled IF Amplifier	3.13	2.04	1.82	1.67
569-2560	U6A7784394	TV/FM Sound System	1.95	1.31	1.21	1.05
569-2580	U6B7785394	TV/Signal Processing Circuit	3.13	2.08	1.92	1.67
569-2600	U6A7786394	PAL TV Chroma Demodulator	2.50	1.66	1.53	1.33
569-2615	UXX7791312	Power Op Amp	22.50	18.00	16.55	14.40
569-2616	UXX7791393	Power Op Amp	8.60	6.88	6.33	5.50
569-2640	U6A7795393	Four Quadrant Multiplier	12.13	8.93	7.14	5.95
569-2650	U5E7796312	Doubly Bal. Mod/Demod.	5.10	3.40	3.12	2.72

FAIRCHILD HYBRID CIRCUITS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
569-2660	U5E7796393	Doubly Bal. Mod/Demod.	1.98	1.33	1.22	1.06
570-0500	HAG20011XXM	Hi-Volt, Hi-Current Driver	25.75	20.60	16.50	13.40
570-0505	HBG20011XXM	Hi-Volt, Hi-Current Driver	25.75	20.60	16.50	13.40
570-0510	HAG20019XXI	Hi-Volt, Hi-Current Driver	12.88	10.30	8.25	6.67
570-0515	HBG20019XXI	Hi-Volt, Hi-Current Driver	12.88	10.30	8.25	6.67
570-0520	HAG20021XXM	Hi-Current, Hi-Volt Driver	20.38	16.30	13.04	10.92
570-0525	HBG20021XXM	Hi-Current, Hi-Volt Driver	20.38	16.30	13.04	10.92
570-0530	HAG20029XXI	Hi-Current, Hi-Volt Driver	9.88	7.90	6.32	5.27
570-0535	HBG20029XXI	Hi-Current, Hi-Volt Driver	9.88	7.90	6.32	5.27

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
570-0540	H9F20029XXI	Hi-Current, Hi-Volt Driver	6.38	5.10	4.10	3.40
570-0550	H9F22009XXI	Hi-Volt, Hi-Current Driver	7.06	5.65	4.52	3.75
570-0555	HAG22001XXM	Hi-Volt, Hi-Current Driver	22.41	17.93	14.34	12.02
570-0560	HAG22009XXI	Hi-Volt, Hi-Current Driver	10.88	8.70	7.05	5.80
570-0565	HBG22001XXM	Hi-Volt, Hi-Current Driver	22.41	17.93	14.34	12.02
570-0570	HBG22009XXI	Hi-Volt, Hi-Current Driver	10.88	8.70	7.05	5.80
570-0600	H2B80903XXI	10-Bit D/A Converter	122.50	98.00	75.00	68.37
570-0605	H2B80951XXM	Prescaler	150.00	120.00	110.00	100.00
570-0610	H2B80959XXI	Prescaler	75.00	60.00	55.00	50.00
570-0615	H2B80961XXM	Program Divide	125.00	100.00	92.00	84.00
570-0620	H2B80969XXI	Program Divide	62.50	50.00	46.00	42.00
570-0630	H2B80971XXM	VCD Tuner	143.75	115.00	105.00	95.00
570-0635	H2B80979XXI	VCD Tuner	93.75	75.00	66.00	60.00
570-0640	H2B80981XXM	Reference Divide	107.50	86.00	76.00	70.00
570-0645	H2B80989XXI	Reference Divide	53.75	43.00	38.00	35.00

FAIRCHILD MSI DIGITAL INT. CKTS.

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
570-0900	93400	Random Access 256Wx1B (partially decoded)	28.50	22.80	19.30	19.00
570-0910	93400B	Random Access 256Wx1B (partially decoded)	18.90	15.00	13.10	12.50
570-0920	93401	Random Access 3 of 6 Decoder for 93400	5.60	4.55	4.00	3.80
570-0930	93403	Random Access 16Wx4B (fully decoded)	10.50	8.40	7.35	7.00
570-0940	93407/93433	Random Access 16Wx1B (coincident select)	7.20	5.75	5.05	4.80
570-0960	93435	Random Access 16Wx4B (linear select)	43.50	35.00	30.00	29.00
570-0970	93434	Read Only 32Wx8B (fully decoded)	18.00	14.40	12.60	12.00
570-0980	93402	Content Addressable 4Wx4B (linear select)	37.50	30.00	26.20	25.00

FAIRCHILD TTL DIGITAL INT. CKTS.

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
570-1840	U6A74H0059X	Quad 2 Gate	.75	.60	.48	.42
570-1860	U6A74H0159X	Quad 2 Gate/Open Collector	.75	.60	.48	.42
570-1845	U9A74H0059X	Quad 2 Gate	.60	.60	.48	.40
570-1862	U9A74H0159X	Quad 2 Gate/Open Collector	.60	.60	.48	.40
570-1864	U6A74H0459X	Des. Hex Inverter	.75	.75	.60	.50
570-1865	U9A74H0459X	Hex Inverter	.75	.75	.60	.50
570-1866	U6A74H0559X	Des. Hex Inverter DC	.75	.75	.60	.50
570-1867	U9A74H0559X	Hex Inverter/Open Collector	.75	.75	.60	.50
570-1870	U6A74H0859X	Des. and Gate	.75	.75	.60	.50
570-1871	U9A74H0859X	Quad 2 and Gate	.78	.78	.63	.52
570-1872	U6A74H1059X	Des. Triple 3 Input and Gate	.75	.75	.60	.50
570-1873	U9A74H1059X	Triple 3 Gate	.60	.60	.48	.40
570-1874	U6A74H1159X	Des. Triple 3 Input and Gate	.75	.75	.60	.50
570-1875	U9A74H1159X	Triple 3 and Gate	.78	.78	.63	.52
570-1876	U6A74H2059X	Des. Dual 4 Input and Gate	.75	.75	.60	.50
570-1877	U9A74H2059X	Dual 4 Gate	.60	.60	.48	.40
570-1878	U6A74H2159X	Des. Dual 4 Input and Gate	.98	.98	.78	.65
570-1879	U9A74H2159X	Des. Dual 4 Input Nand DC	.75	.75	.60	.50
570-1880	U9A74H2259X	Des. Dual 4 Input Nand DC	.75	.75	.60	.50
570-1881	U9A74H3059X	Single 8 Gate	.75	.75	.60	.50
570-1905	U9A74H4059X	Dual 4 Buffer	.60	.60	.48	.40
570-1925	U9A74H5059X	Dual 2 Wide, 2 Input and/or Invert/Exp.	.60	.60	.48	.40
570-1932	U9A74H5159X	Dual 2 Wide, 2 Input and/or Invert/Exp.	.60	.60	.48	.40
570-1935	U6A74H5259X	Expandable 2-2-2-3 And-Or	.75	.75	.60	.50
570-1936	U9A74H5259X	Expandable 2-2-2-3 And-Or	.75	.75	.60	.50
570-1940	U6A74H5359X	Expandable 2-2-2-3 AOI	.75	.75	.60	.50
570-1941	U9A74H5359X	4 Wide, 2 Input and/or Invert	.60	.60	.48	.40
570-1942	U6A74H5459X	4 Wide, 2-Input AOI	.75	.75	.60	.50
570-1943	U9A7H5459X	4 Wide, 2-Input and/or Invert	.75	.75	.60	.50
570-1885	U6A74H3059X	Single 8 Gate	.75	.60	.48	.42
570-1900	U6A74H4059X	Dual 4 Buffer	.75	.60	.48	.42
570-1920	U6A74H5059X	Dual 2 Wide/2 Input AOI/EXP	.75	.60	.48	.42
570-1930	U6A74H5159X	Dual 2 Wide/2 Input AOI	.75	.60	.48	.42
570-1944	U6A74H5559X	Expandable 2 Wide 4 Input AOI	.75	.75	.60	.50
570-1947	U6A74H6059X	Dual 4 Input Expander	.75	.75	.60	.50
570-1948	U9A74H6059X	Dual 4 Input Expander	.60	.60	.48	.40
570-1949	U6A74H6159X	Triple 3 Input Expander	.75	.75	.60	.50
570-1950	U9A74H6159X	Triple 3 Input Expander	.75	.75	.60	.50
570-1951	U6A74H6259X	3-2-2-3 Input and/or Expander	.75	.75	.60	.50
570-1952	U9A74H6259X	3-2-2-3 Input and/or Expander	.75	.75	.60	.50
570-1956	U6A74H7159X	JK Master Slave Flip-Flop (and/or)	1.15	1.15	.92	.77
570-1957	U9A74H7159X	JK Master Slave Flip-Flop (and/or)	1.00	1.00	.80	.67
570-1958	U6A74H7259X	JK Master Slave Flip-Flop (AND)	1.15	1.15	.92	.77
570-1959	U9A74H7259X	JK Master Slave Flip-Flop (AND)	.93	.93	.74	.62
570-1960	U6A74H7359X	Dual Master Slave Flip-Flop	1.95	1.95	1.55	1.30
570-1961	U9A74H7359X	Dual JK Master Slave Flip-Flop	1.50	1.50	1.20	.98
570-1962	U6A74H7459X	Dual D-Type F F	1.65	1.65	1.30	1.10
570-1963	U9A74H7459X	Dual D-Type F F	1.35	1.35	1.10	.90
570-1964	U6B74H7659X	Dual JK Master Slave Flip-Flop	1.75	1.75	1.40	1.40
570-1965	U9A74H7659X	Dual JK Master Slave Flip-Flop	1.75	1.75	1.40	1.40
570-1968	U6A74H7859X	Dual JK Master Slave Flip-Flop	1.25	1.25	1.00	.84

See Page 7 for Explanation of Abbreviations and Symbols

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Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
570-1969	U9A74H7859X	Dual JK Master Slave Flip-Flop	1.50	1.50	1.20	.98
570-1970	U6A74H10159X	JK Edge Triggered F F (AND/OR)	1.25	1.25	1.00	.84
570-1971	U9A74H10159X	JK Edge Triggered F F (AND/OR)	1.50	1.50	1.20	.98
570-1972	U6A74H10259X	JK Edge Triggered F F (AND)	1.25	1.25	1.00	.84
570-1973	U9A74H10259X	JK Edge Triggered F F (AND)	1.00	1.00	.86	.67
570-1980	U6A740059X	Quad 2 Gate	.75	.75	.60	.50
570-2000	U9A740059X	Quad 2 Gate	.60	.60	.48	.40
570-2020	U6A740159X	Quad 2 Gate/Open Coll.	.75	.75	.60	.50
570-2040	U9A740159X	Quad 2 Gate/Open Coll.	.60	.60	.48	.40
570-2060	U6A740259X	Quad 2 Nor Gate	.75	.75	.60	.50
570-2080	U9A740259X	Quad 2 Nor Gate	.60	.60	.48	.40
570-2100	U6A740359X	Quad 2 Gate/Open Coll.	.75	.75	.60	.50
570-2120	U9A740359X	Quad 2 Gate/Open Coll.	.60	.60	.48	.40
570-2140	U6A740459X	Hex Inverter	.93	.93	.74	.62
570-2160	U9A740459X	Hex Inverter	.75	.75	.60	.50
570-2180	U6A740559X	Hex Inverter/Open Coll.	.93	.93	.74	.62
570-2200	U9A740559X	Hex Inverter/Open Coll.	.75	.75	.60	.50
570-2220	U6A740859X	Quad 2 And Gate	.98	.98	.78	.65
570-2240	U9A740859X	Quad 2 And Gate	.78	.78	.63	.52
570-2260	U6A740959X	Quad 2 And Gate/Open Coll.	.78	.78	.63	.52
570-2280	U6A741059X	Triple 3 Gate	.75	.75	.60	.50
570-2285	U9A741059X	Triple 3 Gate	.60	.60	.48	.40
570-2290	U6A741159X	Triple 3 And Gate	.98	.98	.78	.65
570-2295	U9A741159X	Triple 3 And Gate	.78	.78	.63	.52
570-2300	U6A742059X	Dual 4 Gate	.75	.75	.60	.50
570-2305	U9A742059X	Dual 4 Gate	.60	.60	.48	.40
570-2310	U6A743059X	Single 8 Gate	.75	.75	.60	.50
570-2315	U9A743059X	Single 8 Gate	.60	.60	.48	.40
570-2320	U6A744059X	Dual 4 Buffer	.75	.75	.60	.50
570-2325	U9A744059X	Dual 4 Buffer	.60	.60	.48	.40
570-2330	U6B744159X	BCD-Dec Decoder/Driver	6.05	6.05	5.60	5.10
570-2335	U6B744259X	1 of 10 Decoder	5.15	5.15	4.15	3.60
570-2340	U6B744359X	Excess 3 to Decimal Decoder	8.05	8.05	6.40	5.60
570-2345	U6B744459X	Excess 3 Gray to Decimal Decoder	8.05	8.05	6.40	5.60
570-2350	U6B744659X	BCD-to-7 Seg Decoder	9.75	9.75	7.80	6.85
570-2352	U7B744659X	BCD-to-7 Seg Driver	9.75	9.75	7.80	6.85
570-2355	U6B744759X	BCD-to-7 Seg Decoder	9.75	9.75	7.80	6.85
570-2357	U7B744759X	BCD-to-7 Seg Decoder	9.75	8.90	7.15	5.95
570-2360	U6B744859X	BCD-to-7 Seg Decoder	7.90	7.90	6.30	5.50
570-2363	U7B744859X	BCD-to-7 Seg Decoder	7.90	7.90	6.30	5.50
570-2365	U6A745059X	Dual 2 Wide, 2 Input and/or Invert/Exp	.75	.75	.60	.50
570-2370	U9A745059X	Dual 2 Wide, 2 Input and/or Invert/Exp	.60	.60	.48	.40
570-2375	U6A745159X	Dual 2 Wide, 2 Input and/or Invert Exp.	.75	.75	.60	.50
570-2380	U9A745159X	Dual 2 Wide, 2 Input and/or Invert Exp.	.60	.60	.48	.40
570-2385	U6A745359X	4 Wide, 2 Input and/or Invert. Exp.	.75	.75	.60	.50
570-2390	U9A745359X	4 Wide, 2 Input and/or Invert. Exp.	.60	.60	.48	.40
570-2395	U6A745459X	4 Wide, 2 Input and/or Invert.	.75	.75	.60	.50
570-2400	U9A745459X	4 Wide, 2 Input and/or Invert.	.60	.60	.48	.40
570-3040	U6A746059X	Dual 4 Expander	.75	.75	.60	.50
570-3060	U9A746059X	Dual 4 Expander	.60	.60	.48	.40
570-3080	U6A747059X	J-K Flip-Flop	1.25	1.25	1.00	.84
570-3100	U9A747059X	J-K Flip-Flop	1.00	1.00	.80	.67
570-3120	U6A747259X	J-K M-S FF (and inputs)	1.15	1.15	.92	.77
570-3140	U9A747259X	J-K M-S FF (and inputs)	.93	.93	.74	.62
570-3160	U6A747359X	Dual J-K M-S FF	1.95	1.95	1.55	1.30
570-3180	U9A747359X	Dual J-K M-S FF	1.50	1.50	1.20	.98
570-3200	U6A747459X	Dual D-type FF	1.65	1.65	1.30	1.10
570-3220	U9A747459X	Dual D-type FF	1.35	1.35	1.10	.90
570-3240	U6B747559X	Quad Latch	3.70	3.70	2.95	2.55
570-3260	U6B747659X	Dual J-K M-S/Preset and Clear	1.75	1.75	1.40	1.23
570-3280	U6A748059X	Gated Full Adder	3.20	3.20	2.60	2.26
570-3300	U6A748259X	2-Bit Binary Full Adder	4.80	4.80	3.85	3.35
570-3320	U6B748359X	4-Bit Binary Full Adder	7.60	7.60	6.05	5.30
570-3340	U6A748659X	Quad Exclusive OR	1.10	1.10	.86	.76
570-3360	U6A749059X	Decade Counter	3.70	3.70	2.95	2.55
570-3380	U6A749159X	8-Bit Shift Reg.	6.70	6.70	5.35	4.65
570-3400	U6A749259X	Divide by Twelve Ctr.	3.70	3.70	2.95	2.55
570-3420	U6A749359X	4-Bit Binary Ctr.	3.70	3.70	2.95	2.55
570-3440	U6B749459X	4-Bit Shift Register	5.75	5.75	4.60	4.05
570-3460	U6A749559X	4-Bit Right/Left Shift Reg.	5.75	5.75	4.60	4.05
570-3480	U7B749659X	5-Bit Shift Register	8.10	8.10	6.50	5.40
570-3485	U6A7410459X	J-K Master Slave Flip-Flop	(Price on Application)			
570-3490	U6A74105	JKK Master Slave Flip-Flop	.75	.75	.60	.50
570-3500	U6A7410759X	Dual J-K M-S FF	1.95	1.95	1.55	1.30
570-3505	U9A7410759X	Dual J-K M-S FF	1.50	1.50	1.20	.98
570-3510	U6A7412159X	1-Shot Multivibrator	4.50	4.50	3.60	3.00
570-3512	U9A7412159X	1-Shot Multivibrator	6.05	6.05	5.60	4.85
570-3520	U6N7415459X	1-of-16 Decoder	6.05	6.05	5.60	4.85
570-3525	U7B7415759X	Quad 2-Input Multiplexer	3.10	3.10	2.80	2.45
570-3530	U7B7416059X	Decade Counter	7.50	7.50	6.90	6.00
570-3535	U7B7416159	Binary Counter	7.50	7.50	6.90	6.00
570-3550	U6N7418159X	4-Bit Arithmetic Logic Unit	12.63	9.70	8.95	7.77
570-3560	U7B7418259X	Carry Lookahead	3.60	2.78	2.56	2.22
570-3565	U4L7418259X	Carry Lookahead	6.00	3.35	3.05	2.66
570-3570	U7B7419259X	Up/Down Decade Counter	9.12	7.50	6.90	6.30
570-3575	U7B7419359X	Up/Down Binary Counter	9.12	7.50	6.90	6.30
570-3580	U7B7419559X	4-Bit Shift Register	4.30	4.30	3.95	3.45

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
570-3583	U7B7524392	2-Chan. Core Memory Sense Amp	7.35	7.35	5.88	4.90
570-3584	U7B7524393	2-Chan. Core Memory Sense Amp	3.98	3.98	3.18	2.65
570-3585	U6A755059X	Dual Lamp Relay Driver	1.89	1.65	1.26	1.10
570-3587	U9T75559X	Memory Driver	1.66	1.46	1.11	.97
570-4670	U6N93L0859X	Low Power 8-Bit Latch	8.63	6.05	5.60	4.85
570-4675	U6B93L0959X	Low Power Dual 4-Input Multi.	4.38	3.10	2.80	2.45
570-4678	U7B93L1059X	Low Power BCD Decade Counter	11.25	7.50	6.90	6.00
570-4684	U6N93L1159X	Low Power 1-of-16 Digital Decoder	8.63	6.05	5.60	4.85
570-4688	U7B93L1259X	Low Power 8-Input Digital Multi.	4.38	3.10	2.80	2.45
570-4690	U7B93L1451X	Low Power Quad Latch	4.38	3.10	2.80	2.45
570-4693	U7B93L1659X	Low Power 4-Bit Binary Counter	11.25	7.50	6.90	6.00
570-4697	U7B93L1859X	Low Power 8-1/P Priority Encoder	11.25	7.50	6.90	6.00
570-4702	U7B93L2159X	Low Power Dual 1/4 Decoder	8.00	5.75	5.30	4.60
570-4709	U7B93L2259X	Low Power Quad 2-Input Multi.	4.38	3.10	2.80	2.45
570-4710	U7B93L2459X	Low Power 5-Bit Comparator	10.38	7.35	6.80	5.90
570-4717	U7B93L2859X	Low Power 8-Bit Shift Register	13.13	9.30	8.55	7.45
570-4718	U6N93L4059X	Low Power 4-Bit Arith. Logic Unit	24.50	17.50	16.10	14.00
570-3700	U6A900059X	JK Flip-Flop Multi-Input	2.78	1.95	1.56	1.37
570-3720	U6A900159X	JK Flip-Flop	3.00	2.10	1.68	1.47
570-3740	U6A900259X	Quad 2 Gate	1.80	1.27	1.01	.89
570-3760	U6A900359X	Triple 3 Gate	1.80	1.27	1.01	.89
570-3780	U6A900459X	Dual 4 Gate	1.80	1.27	1.01	.89
570-3800	U6A900559X	Dual Exclusive OR	1.80	1.27	1.01	.89
570-3820	U6A900659X	Dual 4 Extender	1.80	1.27	1.01	.89
570-3840	U6A900759X	Single 8 Gate	1.80	1.27	1.01	.89
570-3860	U6A900859X	AND NOR Gate	1.80	1.27	1.01	.89
570-3880	U6A900959X	Dual Buffer	2.08	1.45	1.16	1.02
570-3900	U6A901259X	Quad 2-Input NAND Gates Open Coll.	3.80	3.80	3.05	2.65
570-3920	U6B901459X	Quad Exclusive OR	3.40	2.40	1.95	1.70
570-3940	U6B901559X	Quad NOR	2.08	1.45	1.16	1.02
570-3960	U6A901659X	Hex Inverter	2.28	1.60	1.28	1.12
570-3980	U6A901759X	Hex Inverter Open Collector	2.28	1.60	1.28	1.12
570-4000	U7B902059X	Dual JKK Flip-Flop	4.58	3.20	2.56	2.24
570-4020	U7B902259X	Dual Flip-Flop	4.88	3.40	2.72	2.32
570-4060	U6A909359X	Dual JK Flip-Flop	1.65	1.65	1.32	1.15
570-4080	U9A909359X	Dual JK Flip-Flop	1.30	1.30	1.05	.93
570-4100	U6A909459X	Dual JK Flip-Flop	1.65	1.65	1.32	1.15
570-4120	U9A909459X	Dual JK Flip-Flop	1.30	1.30	1.05	.93
570-4140	U6A909759X	Dual JK Flip-Flop	1.65	1.65	1.32	1.15
570-4160	U9A909759X	Dual JK Flip-Flop	1.30	1.30	1.05	.93
570-4180	U6A909959X	Dual JK Flip-Flop	1.65	1.65	1.32	1.15
570-4185	U9A909959X	Dual JK Flip-Flop	1.30	1.30	1.05	.93
570-4187	U6A910959X	TTuL HLL Hex Inverter	7.20	5.40	4.30	3.80
570-4190	U6A911059X	High Level Logic Hex Invertr.	7.20	5.40	4.30	3.60
570-4195	U6A911159X	Parallel Gated Clocked Flip-Flop	5.13	4.10	4.30	2.75
570-4199	U6A911259X	TTuL/HLL Hex Inverter	6.75	5.40	4.30	3.60
570-4200	U6A9L0059X	Low Power Quad 2 Gate	.75	.50	.46	.40
570-4205	U6A9L0459X	Low Power Hex Inverter	.95	.63	.58	.50
570-4210	U7B9L2459X	Low Power JK Flip-Flop	1.98	1.32	1.20	1.05
570-4215	U6A9L5459X	Low Power and NOR Gate	.75	.50	.46	.40
570-4220	U6A9L8659X	Quad EX-OR	1.35	.90	.83	.72
570-4230	U7B930059X	4-Bit Shift Register	5.63	4.30	3.95	3.45
570-4235	U7B930159X	1-of-10 Decoder	6.00	4.30	3.95	3.45
570-4240	U6B930459X	Dual Full Adder	16.00	9.35	8.60	7.50
570-4242	U7A930559X	Variable Modul. Counter	6.00	4.30	3.95	3.45
570-4250	U6N930659X	BCD Up/Down Counter	28.13	16.55	15.20	13.25
570-4260	U6B930759X	7-Segment Decoder	9.13	6.55	6.05	5.25
570-4265	U6N930859X	Eight Bit Latch	8.63	6.05	5.60	4.85
570-4270	U6B930959X	Dual 4-Input Multiplexer	4.38	3.10	2.80	2.45
570-4275	U7B931059X	BCD Decade Counter	11.25	7.50	6.90	6.00
570-4280	U6N931159X	1-of-16 Digital Decoder	8.63	6.05	5.60	4.85
570-4290	U7B931259X	8-Input Digital Multiplexer	4.38	3.10	2.80	2.45
570-4300	U7B931359X	3-Input Digital Multi./Open Coil	3.15	2.45	2.25	1.95
570-4310	U7B931459X	Quad Latch	4.38	3.10	2.80	2.45
570-4350	U6B931559X	1-of-10 Decoder Driver	6.05	6.05	5.60	4.85
570-4360	U7B931659X	Binary Hexadecimal Counter	11.25	7.50	6.90	6.00
570-4365	U7B9317591	7-Segment Decoder Driver	17.50	12.50	11.55	10.00
570-4370	U7B9317592	7-Segment Decoder Driver	16.25	11.55	10.65	9.25
570-4375	U7B9317593	7-Segment Decoder Driver	11.38	7.50	6.90	6.50
570-4380	U7B9317594	7-Segment Decoder Driver	10.38	7.45	6.85	5.95
570-4400	U7B931859X	8-Input Priority Encoder	12.38	7.50	6.90	6.00
570-4420	U7B932159X	Quad 1/4 Decoder	8.00	5.75	5.30	4.60
570-4440	U7B932259X	Quad 2-Input Digital Multiplexer	4.38	3.10	2.80	2.45
570-4460	U7B932459X	5-Bit Comparator	10.38	7.35	6.80	5.90
570-4479	U7B9327591	7-Segment Decoder Driver	16.63	11.85	10.90	9.50
570-4480	U7B9327592	7-Segment Decoder Driver	14.00	10.00	9.20	8.00
570-4500	U7B932859X	Dual 8-Bit Shift Register	13.13	9.30	8.55	7.45
570-4520	U7B933459X	8-Bit Addressable Latch	8.63	6.05	5.60	4.85
570-4540	U7B933759X	7-Segment Decoder/Driver	7.88	5.60	5.20	4.50
570-4560	U7B933859X	8-Bit Multiple Port Reg.	10.38	7.35	6.80	5.90
570-4570	U6N934059X	4-Bit Arithmetic Logic Unit	24.50	17.50	16.10	14.00
570-4580	U6N934159X	4-Bit Arithmetic Logic Unit	12.63	9.70	8.95	7.77
570-4590	U7B934259X	Carry Lookahead	3.60	2.78	2.56	2.22
570-4600	U7B934859X	12-Bit Parity Gen./Checker	6.88	4.95	4.55	3.95
570-4620	U7A935059X	Decade Counter	3.10	3.10	2.80	2.45
570-4625	U6B935259X	1-of-10 Decoder	5.63	5.15	4.15	3.45
570-4630	U6B935359X	Excess 3 to Decimal Decoder	8.05	8.05	6.40	5.35

See Page 7 for Explanation of Abbreviations and Symbols

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Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
570-4635	U6B935459X	Excess 3 Gray to Decimal Decoder	8.05	8.05	6.40	5.35
570-4640	U7A935659X	Binary Counter	3.10	3.10	2.80	2.45
570-4641	U6B9357591	BCD-to-7 Seg. Decoder	9.75	9.75	7.80	6.50
570-4642	U6B9357592	BCD-to-7 Seg. Decoder	8.90	8.90	7.15	5.95
570-4643	U6B935859X	BCD-to-7 Seg. Decoder	7.90	7.90	6.30	5.25
570-4644	U7B936059X	Up/Down Decade Counter	9.13	7.50	6.90	6.00
570-4645	U7B936659X	Up/Down Binary Counter	9.13	7.50	6.90	6.00
570-4646	U6B937559X	Quad Latch	3.70	3.70	2.95	2.45
570-4647	U6A938059X	Gated Full Adder	3.20	3.20	2.60	2.15
570-4648	U6A938259X	2-Bit Binary Full Adder	4.80	4.80	3.85	3.20
570-4649	U6B938359X	4-Bit Binary Full Adder	7.60	7.60	6.05	5.05
570-4650	U6A939059X	Decade Counter	3.70	3.70	2.95	2.45
570-4651	U6A939159X	8-Bit Shift Reg.	6.70	6.70	5.35	4.45
570-4652	U6A939259X	Divide By Twelve Ctr.	3.70	3.70	2.95	2.45
570-4653	U6A939359X	4-Bit Binary Ctr.	3.70	3.70	2.95	2.45
570-4654	U6B939459X	4-Bit Shift Register	5.75	5.75	4.60	3.85
570-4656	U6A939559X	4-Bit Right/Left Shift Reg.	5.75	5.75	4.60	3.85
570-4660	U7B93L0059X	Low Power 4-Bit Shift Reg.	5.63	4.30	3.95	3.45
570-4655	U7B93L0159X	Low Power 1-of-10 Decoder	5.63	4.30	3.95	3.45
570-4670	U8A991428X	Gate, Dual 2-Input	1.05	1.05	1.05	.70
570-4680	U5F991529X	Gate, Dual 3-Input	6.37	4.55	3.65	3.20
570-4700	U8A992328X	Binary	1.95	1.95	1.95	1.30
570-4720	U5F992629X	Flip-Flop, JK	8.13	5.70	4.60	4.05
570-4740	U5F992729X	Quad Inverter	6.38	4.55	3.65	3.20
570-4915	U6A993059X	Dual 4-Input Gate	.69	.69	.54	.45
570-4920	U9A993059X	Dual 4-Input Gate	.60	.60	.48	.42
570-4940	U6A993159X	Clocked Flip-Flop	6.38	4.50	3.60	3.15
570-4995	U6A993259X	Dual Buffer	.82	.82	.66	.55
570-5000	U9A993259X	Dual Buffer	.75	.75	.60	.53
570-4657	U7B939659X	5-Bit Shift Reg.	8.10	8.10	6.50	5.40
570-4760	U6B950259X	Dual 4 Input OR/NOR Gate	3.50	2.50	2.10	2.00
570-4780	U6B950359X	Triple 2 Input OR/NOR Gate	3.50	2.50	2.10	2.00
570-4800	U6B950459X	Quad 2 Input NOR Gate	3.50	2.50	2.10	2.00
570-4805	U6B950559X	Quad 2 Input NOR Gate	3.94	3.15	2.90	2.75
570-4820	U6B952859X	Dual "D" Type Flip Flop	10.38	7.35	6.80	6.20
570-4925	U6A953459X	Quad D/S Latch with Input/Output Enables	8.80	5.80	5.35	5.00
570-4840	U6B953859X	1 of 8 Decoder	14.38	10.95	9.40	8.60
570-4900	U6B958159X	1 of 8 Multiplexer	14.38	10.05	9.40	8.60
570-4901	U6A958259X	Triple Line Receiver-Schmitt Trigger	3.94	3.15	2.90	2.75
570-4905	U6B959559X	Dual ECL-TTL Converter	3.94	3.15	2.90	2.75
570-4910	U6A95H0259X	Dual 4-Input OR/NOR with Enable	3.94	3.15	2.90	2.75
570-4911	U6A95H0359X	Triple 2-Input OR/NOR with Enable	3.94	3.15	2.90	2.75
570-4912	U6A95H0459X	Quad 2-Input NOR with Enable	3.94	3.15	2.90	2.75
570-4913	U6A95H2959X	220 MHz J-K Flip Flop	5.81	4.65	4.25	4.00
570-4915	U6B95H9059X	320 MHz $^{10}/_{11}$ Prescaler	20.00	16.00	14.50	13.60
570-4916	U6A95L2259X	Dual 4-Input OR/NOR with Enable	3.44	2.50	2.30	2.00
570-4917	U6A95L2359X	Triple 2-Input OR/NOR with Enable	3.44	2.50	2.30	2.00
570-4918	U6A95L2459X	Quad 2-Input NOR with Enable	3.44	2.50	2.30	2.00
570-6060	U6A960059X	Retriggerable One Shot	5.65	5.65	5.20	4.70
570-6080	U6A960159X	Retriggerable One Shot	5.65	5.65	5.20	4.70
570-6100	U6B960259X	Dual Retriggerable One Shot	8.88	7.15	6.60	6.05
570-6105	U6A960359X	One Shot Multivibrator	5.25	4.50	3.60	3.00
570-6106	U9A960359X	One Shot Multivibrator	1.65	1.65	1.30	1.10
570-6110	U7B961451X	Dual Differential Line Driver	34.20	22.80	18.20	15.20
570-6120	U7B961459X	Dual Differential Line Driver	16.88	11.40	9.10	7.50
570-6135	U7B961551X	Dual Differential Line Recvr.	43.20	28.60	22.80	19.20
570-6140	U7B961559X	Dual Differential Line Recvr.	21.48	14.30	11.40	9.55
570-6145	U7B961659X	Dual Differential Line Recvr.	8.25	5.62	5.18	4.50
570-6147	U7B961759X	Dual Differential Line Recvr.	8.25	5.62	5.18	4.50
570-6150	U6A962051X	Dual Differential Line Recvr.	15.63	10.40	8.40	7.00
570-6160	U6A962059X	Dual Differential Line Recvr.	8.88	5.90	4.70	3.95
570-6175	U6A962151X	Dual Line Driver	12.75	8.45	6.75	5.65
570-6180	U6A962159X	Dual Line Driver	7.25	4.75	3.80	3.20
570-6235	U6A962251X	Dual Line Receiver	17.38	11.50	9.25	7.70
570-6240	U6A962259X	Dual Line Receiver	9.38	6.20	4.95	4.15
570-6255	U6A962451X	Dual TTuL to MOS Interface Element	8.50	5.60	4.50	3.75
570-6260	U6A962459X	Dual TTuL to MOS Interface Element	6.25	4.10	3.25	2.75
570-6275	U6A962551X	Dual MOS to TTuL Interface Element	6.50	4.30	3.45	2.90
570-6280	U6A962559X	Dual MOS to TTuL Interface Element	4.95	3.30	2.65	2.20
570-6285	U6A962759X	Dual Line Receiver	12.50	12.50	11.50	10.00

FAIRCHILD DTL DIGITAL INT. CKTS.

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
570-5015	U6A993359X	Dual 4-Extender	.68	.60	.54	.45
570-5020	U9A993359X	Dual 4-Extender	.60	.60	.48	.42
570-5035	U6A993559X	Hex Inverter W/O Input Diodes	.82	.82	.66	.55
570-5040	U9A993559X	Hex Inverter W/O Input Diodes	.75	.75	.60	.53
570-6055	U6A993659X	Hex Inverter Gate	.82	.82	.66	.55
570-5060	U9A993659X	Hex Inverter Gate	.75	.75	.60	.53
570-5075	U6A993759X	Hex Inverter Gate	.82	.82	.66	.55
570-5080	U9A993759X	Hex Inverter Gate	.75	.75	.60	.53
570-5100	U6A994159X	One Shot Monostable	10.25	7.25	5.80	5.05
570-5115	U6A994459X	Gate Dual Power	.82	.82	.66	.55

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
570-5120	U9A994459X	Gate Dual Power	.75	.75	.60	.53
570-5135	U6A994559X	RS Clocked, Flip-Flop	1.12	1.12	.90	.75
570-5140	U9A994559X	RS Clocked, Flip-Flop	.93	.93	.75	.65
570-5155	U6A994659X	Quad 2-Input Gate	.75	.75	.60	.50
570-5160	U9A994659X	Quad 2-Input Gate	.66	.66	.54	.46
570-5175	U6A994859X	Clocked Flip-Flop	1.12	1.12	.90	.75
570-5180	U9A994859X	Clocked Flip-Flop	.93	.93	.75	.65
570-5185	U6A994959X	Quad 2-Input Gate	.75	.75	.60	.50
570-5200	U9A994959X	Quad 2-Input Gate	.66	.66	.54	.46
570-5235	U6A995059X	Binary	7.25	7.25	5.80	4.85
570-5240	U9A995059X	Binary	6.50	6.50	5.20	4.55
570-5255	U6A995159X	Multivibration, One Shot	7.25	7.25	5.80	4.95
570-5260	U9A995159X	Multivibration, One Shot	6.50	6.50	5.20	4.55
570-5280	U6A995879X	Decade Counter	15.88	11.20	9.00	7.85
570-5285	U6B995979X	Buffer Decoder	14.38	10.05	8.00	6.75
570-5290	U6B996079X	Decade Decoder Display Drive	22.25	15.70	12.55	10.50
570-5315	U6A996159X	Dual 4-Input W/Expander	.75	.75	.60	.50
570-5320	U9A996159X	Dual 4-Input W/Expander	.66	.66	.54	.46
570-5340	U6A996259X	Triple 3-Input Gate	.75	.75	.60	.50
570-5342	U9A996259X	Triple 3-Input Gate	.66	.66	.54	.46
570-5350	U6A996359X	Triple 3-Input Gate	.94	.75	.60	.50
570-5360	U9A996359X	2-2-1 Input Gate	.66	.66	.54	.46
570-6300	U7B964459X	Dual Hi-Voltage, Hi-Current Driver	11.13	7.40	5.90	5.20
570-6305	U7B964451X	Dual Hi-Voltage, Hi-Current Driver	22.25	14.80	11.80	9.90
570-6310	U6A965051X	4 Bit Current Source	12.50	8.70	8.00	6.95
570-6320	U8A990028X	Buffer	1.05	1.05	1.05	.70
570-6340	U5B990122X	Counter Adapter	66.75	47.00	37.50	32.75
570-6360	U5B990229X	Flip-Flop	4.15	3.25	2.60	2.30
570-6380	U5B990329X	Gate, 3-Input	6.38	4.55	3.65	3.20
570-6400	U5B990429X	Half Adder	5.53	3.90	3.10	2.75
570-6420	U5B990529X	Half Shift	8.25	6.45	5.15	4.50
570-6440	U5B990629X	Half Shift W/O Inverter	6.75	5.15	4.25	3.70
570-6460	U5B990729X	Gate, 4-Input	4.15	3.25	2.60	2.30
570-6480	U5B990829X	Adder	5.63	4.55	3.65	3.20
570-6500	U5B991029X	Gate, Dual 2-Input	4.15	3.25	2.60	2.30

SPRAGUE HYBRID CIRCUITS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
924-2000	UHC001	4 Bit Ladder Switch	115.00	55.28	55.28	....
924-2010	UHC024	4 Bit Buffer	99.75	47.80	47.80	....
924-2020	UHC036	5 Bit Ladder Switch	155.50	74.66	74.66	....
924-2030	UHC037	5 Bit Buffer	134.00	64.32	64.32	....
924-2040	UHC074	Dual Pos. Ref. Buffer Switch	171.63	85.80	68.65	....
924-2050	UHC080	Dual Pos. Ref. Buffer Switch	171.63	85.80	68.65	....
924-2060	UHC131	Lamp Driver	45.50	21.84	21.84	....
924-2130	UHP181	Lamp Driver Dip	27.63	13.00	13.00	....

SPRAGUE TTL DIGITAL INT. CKTS.

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
924-3000	US74H00A	Quad 2 Input NAND Gate	.96	.76	.59	.54
924-3003	US74H01A	Quad 2 Input NAND Gate No Collector Load	.96	.76	.59	.54
924-3007	US74H04A	Hex Inverter	1.09	.87	.67	.61
924-3010	US74H05A	Hex Inverter Open Collector	1.09	.87	.67	.61
924-3013	US74H08A	Quad 2 Input Pos. AND Gate	.96	.76	.59	.54
924-3020	US74H10A	Triple 3 Input AND Gate	.96	.76	.59	.54
924-3024	US74H11A	Triple 3 Input AND Gate	.96	.76	.59	.54
924-3042	US74H20A	Dual 4 Input NAND Gate	.96	.76	.59	.54
924-3045	US74H21A	Dual 4 Input Pos AND Gate	.96	.76	.59	.54
924-3048	US74H22A	Dual 4 Input Pos. NAND Gate Open Collector	.96	.76	.59	.54
924-3056	US74H30A	Single 8 Input NAND Gate	.96	.76	.59	.54
924-3068	US74H40A	Dual 4 Input NAND Buffer Gate	.96	.76	.59	.54
924-3080	US74H50A	Dual 2-Wide, 2 Input and/or Invert Gate Expandable	.96	.76	.59	.54
924-6000	UHR010	4-Bit 25K Ladder	21.83	16.90	13.55	11.30
924-6004	UHR001	5-Bit 25K Ladder	23.40	18.10	14.50	12.10
924-6008	UHR))*A	5-Bit 25K Ladder	24.43	18.90	15.10	12.60
924-6012	UHR002	12-Bit 25K Ladder	65.90	50.90	40.70	34.00
924-6066	UHR041	BCD Adapter Network	15.90	12.25	9.80	8.20
924-6114	UHR070	4-Bit Ladder for BCD	21.83	16.90	13.55	11.33
924-6118	UHR071	4-Bit Ladder for BCD	21.83	16.90	13.55	11.33
924-6122	UHR072	4-Bit Ladder for BCD	22.38	17.30	13.85	11.55
924-3084	US74H51A	Dual 2-Wide, 2 Input and/or Invert Gate	.96	.76	.59	.54
924-3088	US74H52A	4 Wide 2-2-2-3 Input Expandable	.96	.76	.59	.54
924-3092	US74H53A	4 Wide 2-2-2-3 Input Expandable and/or Inverter Gate	.96	.76	.59	.54
924-3096	US74H54A	4 Wide 2-2-2-3 Input and/or Inverter Gate	.96	.76	.59	.54
924-4268	US7480A	Gated Full Adder	2.13	1.70	1.32	1.02
924-4276	US7482A	2-Bit Binary Full Adder	5.03	4.01	3.11	2.84
924-4280	US7483A	4-Bit Binary Full Adder	3.43	2.74	2.12	2.04
924-4290	US7484A	16-Bit Active Element	6.98	0.00	0.00	0.00
924-4294	US7486A	Quad 2 Input Exclusive 00 Gate	1.45	1.16	.90	.82
924-4300	US7490A	Decade Counter	3.07	2.45	1.90	1.20

See Page 7 for Explanation of Abbreviations and Symbols

 SEE PAGE 41 FOR SEMICONDUCTORS

Stock No.	Mfr's Type	Circuit Function	EACH 1-9	10-99	100-999	1000 Up
924-4304	US7491A	8 Bit Shift Register	10.38	10.38	8.26	7.05
924-4308	US7492A	Divide by 12 Counter	3.07	2.45	1.90	1.20
924-4312	US7493A	4 Bit Binary Counter	3.07	2.45	1.90	1.20
924-4316	US7494A	4 Bit Shift Register	5.59	4.45	3.46	3.15
924-4320	US7495A	4-Bit L/R Shift Register	3.48	2.77	2.15	1.34
924-4324	US7496A	5-Bit Shift Register	6.69	5.34	4.14	3.77
924-4340	US74107A	Dual J-K Master Slave Flip-Flop	1.68	1.34	.98	.94
924-4362	US74121A	Mono Staple Multivibrator (1 shot)	1.68	1.34	.98	.94
924-4386	US74145A	BCD to Decimal Decoder/Driver 15V.	4.71	3.76	2.92	2.66
924-6140	UT1078	Scaling Network (UT-1051) DIP	30.63	18.40	18.40	....
924-6144	UT1079	Weighted Ladder (UT-1057) DIP	70.25	42.20	42.20	....
924-6150	UT1080	Weighted Ladder (UT-1062) DIP	57.88	34.75	34.75	....
924-3105	US74H55A	2 Wide 4-Input Expandable and/or Inverter Gate	.96	.76	.59	.54
924-3115	US74H60A	Dual 4 Input Expander for and/or Inverter Gates	.96	.76	.59	.54
924-3119	US74H61A	Triple 3 Input Expander for and/or Gates	.96	.76	.59	.54
924-3124	US74H62A	3-2-2-3 Input and/or Inverter Gate	.96	.76	.59	.54
924-3133	US74H71A	J-K Flip Flop with and/or Inputs	1.46	1.16	.90	.82
924-3136	US74H72A	J-K Master Slave Flip-Flop	1.27	1.01	.78	.71
924-3139	US74H73A	Dual J-K Master Slave Flip-Flop	2.09	1.67	1.29	1.17
924-3142	US74H74A	Dual D Edge Triggered Flip-Flop	2.09	1.67	1.29	1.17
924-3148	US74H76A	Dual J-K Master Slave Flip-Flop	2.27	1.81	1.40	1.27
924-3154	US74H78A	Dual J-K Master Slave Flip-Flop	2.27	1.81	1.40	1.27
924-3175	US74H571A	50MHz and/or Input J-K Flip-Flop	4.65	4.65	3.70	3.15
924-3178	US74H572A	50MHz AND Input J-K Flip-Flop	4.65	4.65	3.70	3.15
924-4000	US7400A	Quad 2 Input NAND Gate	.77	.62	.48	.43
924-4004	US7401A	Quad 2 Input NAND Gate No Collector Load	.77	.62	.48	.43
924-4008	US7402A	Quad 2 Input NOR Gate	.77	.62	.48	.43
924-4010	US7403A	Quad 2 Input Pos. NAND Gate	.77	.62	.48	.43
924-4014	US7404A	Hex Inverter	.96	.76	.59	.54
924-4018	US7405A	Hex Inverter No Collector Load	.96	.76	.59	.54
924-4028	US7408A	Quad 2 Input AND Gate	1.09	.87	.67	.61
924-4032	US7409A	Quad 2 Input Pos AND Gate	1.09	.87	.67	.61
924-4036	US7410A	Triple 3 Input NAND Gate	.77	.62	.48	.43
924-4040	US7411A	Triple 3 Input AND Gate	2.33	1.85	1.58	1.43
924-4068	US7418A	Triple 3 Input or Gate	2.33	1.85	1.58	1.43
924-4076	US8420A	Dual 4 Input NAND Gate	.77	.62	.48	.43
924-4092	US7426A	Quad 2 Input High V. (MOS) Interface NAND Gate	1.09	.87	.67	.61
924-4104	US7427A	Triple 3 Input NOR Gate	1.18	.94	.73	.66
924-4108	US7430A	Single 8 Input NAND Gate	.77	.66	.48	.43
924-4116	US7432A	Quad 2 Input or Gate	1.18	.94	.73	.66
924-4132	US7438A	Dual 4 Input or Gate	1.27	1.01	.78	.71
924-4144	US7440A	Dual 4 Input NAND Buffer Gate	.77	.66	.48	.43
924-4148	US7441A	BCD-To Decimals Decoder/Driver	10.36	10.36	8.25	7.03
924-4152	US7442A	BCD-To Decimal Decoder	3.39	2.71	2.10	1.31
924-4156	US7443A	Excess to Decimal Decoder	4.78	3.81	2.95	1.84
924-4160	US7444A	Excess 3 Gray to Decimal Decoder	4.78	3.81	2.95	1.84
924-4164	US7445A	BCD-To Decimal Decoder/Driver 30V.	6.70	5.97	4.76	3.69
924-4176	US7448A	BCD-To 7 Segment Decoder/Driver 15V.	5.67	4.52	3.51	3.20
924-4184	US7450A	Dual 2 Wide 2 Input Expandable and/or Invert Gate	.77	.62	.48	.43
924-4188	US7451A	Dual 2 Wide, 2 Input AND/OR Inverter Gate	.77	.62	.48	.43
924-4196	US7453A	4 Wide, 2 Input Expandable AND/OR Invert Gate	.77	.62	.48	.43
924-4200	US7454A	4 Wide, 2 Input and/or Invert Gate	.77	.62	.48	.43
924-4212	US7459A	Dual 2 Wide 2-3 Input or Invert Gate	.77	.62	.48	.43
924-4216	US7460A	Dual 4 Input Expander	.77	.62	.48	.43
924-4232	US7470A	DC Clocked J-K Flip-Flop	1.27	1.01	.78	.71
924-4240	US7472A	J-K Master Slave Flip-Flop	1.18	.94	.73	.63
924-4244	US7473A	Dual J-K Master Slave Flip-Flop	1.68	1.34	.98	.94
924-4248	US7474A	Dual D-Type Edge Triggered Flip-Flop	1.68	1.34	.98	.94
924-4252	US7475A	Quadruple Bistable Latch	2.91	2.91	1.70	1.07
924-4256	US7476A	Dual J-K Master Flip-Flop with SD and RD	1.87	1.48	1.15	1.05
924-6000	UHR010	4-Bit 25K Ladder	21.83	16.90	13.55	11.30
924-6004	UHR001	5-Bit 25K Ladder	23.40	18.10	14.50	12.10
924-6008	UHR001A	5-Bit 25K Ladder	24.43	18.90	15.10	12.60
924-6012	UHR002	12-Bit 25K Ladder	65.90	50.90		
924-6066	UHR041	BCD Adapter Network	15.90	12.25	9.80	8.20
924-6114	UHR070	4-Bit Ladder for BCD	21.83	16.90	13.55	11.33
924-6118	UHR071	4-Bit Ladder for BCD	21.83	16.90	13.55	11.33
924-6122	UHR072	4-Bit Ladder for BCD	22.38	17.30	13.85	11.55
924-3084	US74H51A	Dual 2-Wide, 2 Input and/or Invert Gate	.96	.76	.59	.54
924-3088	US74H52A	4 Wide 2-2-2-3 Input Expandable	.96	.76	.59	.54
924-3092	US74H53A	4 Wide 2-2-2-3 Input Expandable and/or Inverter Gate	.96	.76	.59	.54
924-3096	US74H54A	4 Wide 2-2-2-3 Input and/or Inverter Gate	.96	.76	.59	.54
924-4268	US7480A	Gated Full Adder	2.13	1.70	1.32	1.02
924-4276	US7482A	2-Bit Binary Full Adder	5.03	4.01	3.11	2.84
924-4280	US7483A	4-Bit Binary Full Adder	3.43	2.74	2.12	2.04
924-4290	US7484A	16-Bit Active Element	6.98	5.57	4.75	3.80
924-4294	US7486A	Quad 2 Input Exclusive OR Gate	1.45	1.16	.90	.82
924-4300	US7490A	Decade Counter	3.07	2.45	1.90	1.20
924-4304	US7491A	8 Bit Shift Register	10.38	10.38	8.26	7.05
924-4308	US7492A	Divide by 12 Counter	3.07	2.45	1.90	1.20
924-4312	US7493A	4 Bit Binary Counter	3.07	2.45	1.90	1.20
924-4316	US7494A	4 Bit Shift Register	5.59	4.45	3.46	3.15
924-4320	US7495A	4-Bit L/R Shift Register	3.48	2.77	2.15	1.34
924-4324	US7496A	5-Bit Shift Register	6.69	5.34	4.14	3.77
924-4340	US74107A	Dual J-K Master Slave Flip-Flop	1.68	1.34	.98	.94
924-4362	US74121A	Mono Staple Multivibrator (1 shot)	1.68	1.34	.98	.94
924-4386	US74145A	BCD to Decimal Decoder/Driver 15V.	4.71	3.76	2.92	2.66

924-3105	US74H55A	2 Wide 4-Input Expandable and/or Inverter Gate	.96	.76	.59	.54
924-3115	US74H60A	Dual 4 Input Expander for and/or Inverter Gates	.96	.76	.59	.54
924-3119	US74H61A	Triple 3 Input Expander for and/or Gates	.96	.76	.59	.54
924-3124	US74H62A	3-2-2-3 Input and/or Inverter Gate	.96	.76	.59	.54
924-3133	US74H71A	J-K Flip Flop with and/or Inputs	1.46	1.16	.90	.82
924-3136	US74H72A	J-K Master Slave Flip-Flop	1.27	1.01	.78	.71
924-3139	US74H73A	Dual J-K Master Slave Flip-Flop	2.09	1.67	1.29	1.17
924-3142	US74H74A	Dual D Edge Triggered Flip-Flop	2.09	1.67	1.29	1.17
924-3148	US74H76A	Dual J-K Master Slave Flip-Flop	2.27	1.81	1.40	1.27
924-3154	US74H78A	Dual J-K Master Slave Flip-Flop	2.27	1.81	1.40	1.27
924-3175	US74H571A	50MHz and/or Input J-K Flip-Flop	4.65	4.65	3.70	3.15
924-3178	US74H572A	50MHz AND Input J-K Flip-Flop	4.65	4.65	3.70	3.15
924-4000	US7400A	Quad 2 Input NAND Gate	.77	.62	.48	.43
924-4004	US7401A	Quad 2 Input NAND Gate No Collector Load	.77	.62	.48	.43
924-4008	US7402A	Quad 2 Input NOR Gate	.77	.62	.48	.43
924-4010	US7403A	Quad 2 Input Pos. NAND Gate	.77	.62	.48	.43
924-4014	US7404A	Hex Inverter	.96	.76	.59	.54
924-4018	US7405A	Hex Inverter No Collector Load	.96	.76	.59	.54
924-4028	US7408A	Quad 2 Input AND Gate	1.09	.87	.67	.61
924-4032	US7409A	Quad 2 Input Pos AND Gate	1.09	.87	.67	.61
924-4036	US7410A	Triple 3 Input NAND Gate	.77	.62	.48	.43
924-4040	US7411A	Triple 3 Input AND Gate	2.33	1.85	1.58	1.43
924-4068	US7418A	Triple 3 Input or Gate	2.33	1.85	1.58	1.43
924-4076	US7420A	Dual 4 Input NAND Gate	.77	.62	.48	.43
924-4092	US7426A	Quad 2 Input High V. (MOS) Interface NAND Gate	1.09	.87	.67	.61
924-4096	US7427A	Triple 3 Input NOR Gate	1.18	.94	.73	.66
924-4108	US7430A	Single 8 Input NAND Gate	.77	.66	.48	.43
924-4116	US7432A	Quad 2 Input or Gate	1.18	.94	.73	.66
924-4132	US7438A	Dual 4 Input or Gate	1.27	1.01	.78	.71
924-4144	US7440A	Dual 4 Input NAND Buffer Gate	.77	.66	.48	.43
924-4148	US7441A	BCD-To Decimals Decoder/Driver	10.36	10.36	8.25	7.03
924-4152	US7442A	BCD-To Decimal Decoder	3.39	2.71	2.10	1.31
924-4156	US7443A	Excess to Decimal Decoder	4.78	3.81	2.95	1.84
924-4160	US7444A	Excess 3 Gray to Decimal Decoder	4.78	3.81	2.95	1.84
924-4164	US7445A	BCD-To Decimal Decoder/Driver 30V.	6.70	5.97	4.76	3.69
924-4176	US7448A	BCD-To 7 Segment Decoder/Driver 15V.	5.67	4.52	3.51	3.20
924-4184	US7450A	Dual 2 Wide 2 Input Expandable and/or Invert Gate	.77	.62	.48	.43
924-4188	US7451A	Dual 2 Wide, 2 Input AND/OR Inverter Gate	.77	.62	.48	.43
924-4196	US7453A	4 Wide, 2 Input Expandable AND/OR Invert Gate	.77	.62	.48	.43
924-4200	US7454A	4 Wide, 2 Input and/or Invert Gate	.77	.62	.48	.43
924-4212	US7459A	Dual 2 Wide 2-3 Input or Invert Gate	.77	.62	.48	.43
924-4216	US7460A	Dual 4 Input Expander	.77	.62	.48	.43
924-4232	US7470A	DC Clocked J-K Flip-Flop	1.27	1.01	.78	.71
924-4240	US7472A	J-K Master Slave Flip-Flop	1.18	.94	.73	.63
924-4244	US7473A	Dual J-K Master Slave Flip-Flop	1.68	1.34	.98	.94
924-4248	US7474A	Dual D-Type Edge Triggered Flip-Flop	1.68	1.34	.98	.94
924-4252	US7475A	Quadruple Bistable Latch	2.91	2.91	1.70	1.07
924-4256	US7476A	Dual J-K Master Flip-Flop with SD and RD	1.87	1.48	1.15	1.05

TABLE A

A full range RTμL 9900 in a TO-99 package is designated by code number U5D990021X.

Breakdown of the code is as follows:

U	5D	9900	21	X
A	B	C	D	E

A. Generic Device Type—U for microcircuits, H for hybrids, A for MOS/IC, and Bipolar Arrays and Memories.

B. PACKAGE CODE

Flat Packages

Size	No. of Leads	Name	Code
¼x¼	14	Cerpak	3B
¼x¼	10	Cerpak	3F
¼x¼	14	Cerpak	3I
¼x⅜	24	Flat Pak	3M
½x1	36	Cerpak	3N
.255x.400	16	Cerpak	3Q
.380x.620	24	Cerpak	3R
.460x.980	36	Cerpak	3V
¼x⅜	16	Cerpak	4L
⅜x⅝	24	Cerpak	4M

Dual In-Line Packages

Size	No. of Leads	Name	Code
.271x.785	14	Ceramic	6A
.271x.785	16	Ceramic	6B
.525x.858	16	Ceramic	6D
.525x1.86	36	Ceramic	6H
.575x1.29	24	Ceramic	6N
.590x1.89	36	Ceramic	6P
.271x.700	14	Ceramic	6V
.275x.735	14	Metal	6W
.275x.700	16	Metal	6Y
.291x.785	14	Ceramic	7A
.291x.785	16	Ceramic	7B
.560x1.300	24	Metal	7C
.271x.785	14	Ceramic	7F
.525x1.270	24	Ceramic	7G
.271x.785	16	Ceramic	7H
.295x.765	16	Ceramic	7K
.260x.760	14	Silicone	9A
.260x.760	16	Silicone	9B
.260x.760	14	Silicone	9C
.260x.760	16	Silicone	9D
.256x.393	8	Plastic	9T
.260x1.110	20	Silicone	9Y
.360x1.000	20	Plastic	9Z

Modular

Size	No. of Leads	Name	Code
1.000x1.000	36	Square Line	1B
1.390x1.390	51	Plug In	1G

Cylindrical

To-Type	No. of Leads	Leads Connected To Case	Code
100	10	None	5A
99	8	4	5B
99	6	4	5C
99	6	4	5D
100	10	None	5E
100	10	5	5F

To-Type	No. of Leads	Leads Connected To Case	Code
101	12	None	5G
96	10	5	5R
100	8	None	5T
100	10	None	5U
78	6	None	5Z
Epoxy—	8	——	8A

C. Four or five digits are used for general product groups.

0000-0099 = Kits and kit parts
1000-1999 = Custom integrated circuits
3000-3999 = MOS integrated circuits
5000-5999 = Second source integrated circuits
7000-7999 = Linear integrated circuits
9000-9999 = Digital integrated circuits

D. Two digits are used to indicate process and temperature range respectively.

11 = (−55°C to +125°C)
MOS/Full Range Military

14 = (−55°C to +85°C)
MOS/Intermediate Range

19 = (0°C to +70°C)
MOS/Industrial Range

21 = (−55°C to +125°C)
Full Range Military Equipment

22 = (0°C to +100°C)
Military Grouped Support Equipment

28 = (+15°C to +55°C)
Commercial Equipment

29 = (0°C to +70°C)
Industrial Equipment

31 = (−55°C to +125°C)
Full Range Military Equipment (LIC)

32 = (0°C to +85°C)
Industrial Equipment (LIC)

33 = (−20°C to +85°C)
Industrial Equipment (LIC)

34 = (−40°C to +60°C)
Telephone Equipment (LIC)

39 = (0°C to +70°C)
Industrial Equipment (LIC)

51 = (−55°C to +125°C)
Full Range Military Equipment

56 = (−20°C to +100°C)
Intermediate Range

59 = (0°C to +75°C)
Industrial equipment (DLμL and CμL)

59 = (+15°C to +55°C)
Commercial Equipment (CTμL)

79 = (+15°C to +55°C)
Commercial Equipment (CTμL) Clamped

79 = (0°C to +75°C)
Counting Family (CμL)

E. This digit is used by LIC to indicate electrical class.

X = Spec class not specified
1 = Prime Military
2 = Standard Military
3 = Commercial
4 = Consumer

This digit used by MOS/IC to indicate electrical class.

2 = +5.0 volt analog input
3 = 0 to 5.0 volt analog input

See Page 7 for Explanation of Abbreviations and Symbols

ALLIED

DISCRETE DEVICES DIRECTORY

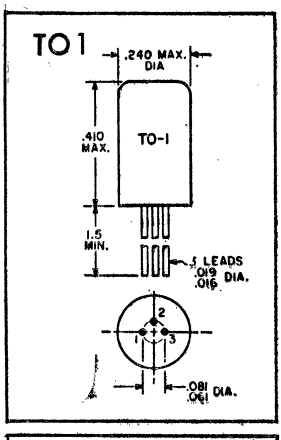
This directory is provided as a convenient means of selecting devices. Major specifications and case dimensions are given. Dissipation is listed at 25°C ambient; on high power devices designated by "C" the rating is listed for case temperature of 25°C. Temperature-compensated zeners list two sets of figures in the tolerance column. The first gives the % of voltage change for each°C of temperature change; the second, zener voltage tolerance. Some abbreviations and symbols were necessary. In the transistor section under the H_{FE} column, † indicates an Alpha value. Under the f_T column, the matching tolerance for a differential amplifier pair is given at % † at the current under the H_{FE} mA column. No listing under collector current means collector current is limited by dissipation of the device. No listing under f_T usually indicates an f_T below 50 kHz. Abbreviations used are: A = Amps; mA = milliamps; μA = microamps; V = Volts; Hz = cycles per second; k = kilo; M = Mega; G = Giga. In material and function column, the first letter indicates type of material (S = Silicon; G = Germanium; SL = Selenium); then the second letter indicates polarity (if any) (N = NPN, P = PNP). Remainder of listing at right indicates functions commonly used.

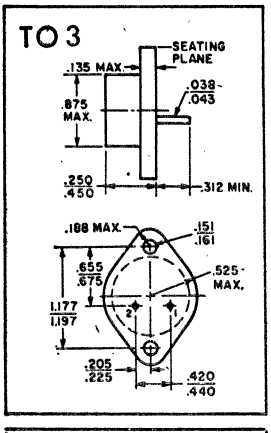
Listings below explain the remaining letters.

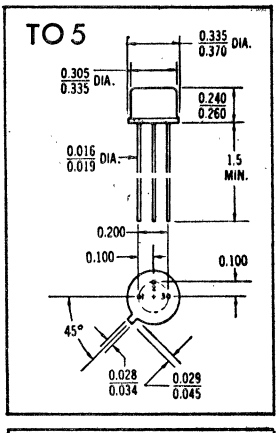
REC-B	Rectifier Bridge	UJ	Unijunction
REC-T	Rectifier Tripler	AU	Amplifier UHF
SS	Small Signal	SCR	Silicon Controlled Rectifier
REC-F	Fast Recovery Rectifier	AV	Amplifier VHF
FRR	Fast Recovery Rectifier	LN	Low Noise Amplifier
RECT	Rectifier	DA	Darlington Amplifier
CD	Computer Diode	SP	Switch Power
ZEN	Zener	SM	Switch Medium Speed
GP	General Purpose	FE	Field Effect
ZTC	Zene Temp. Compensated	AA	Amplifier Audio
REC-D	Rectifier Doubler	AD	Amplifier Differential
SH	Switch High Speed	DT	Dual Transistor
AP	Amplifier Power	DC	Dual Chopper
AR	Amplifier Radio Low Freq.	HCD	High Speed Computer Diode
AH	Amplifier High Freq.	TRIAC	Bi-Directional Thyristor
S	Switch	IF	Insulated Gate FET

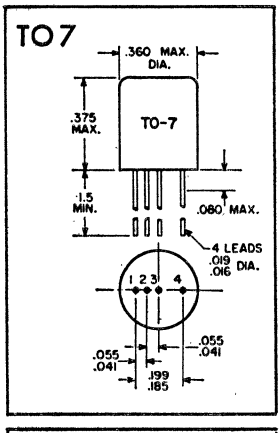
The Information Presented Here and in the Following Pages Has Been Thoroughly Checked For Accuracy. However, Allied Electronics Will Not Be Liable For Inaccuracies Should They Occur.

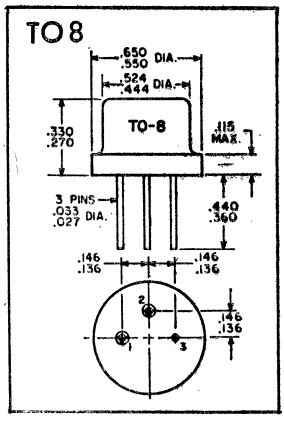
DEVICE OUTLINES

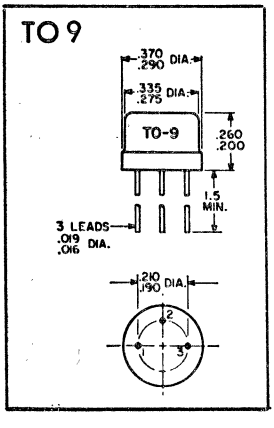


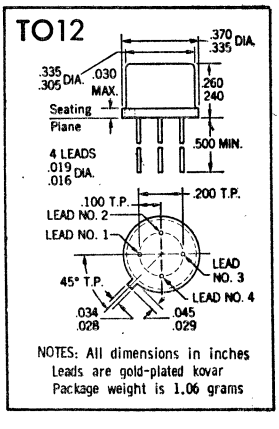


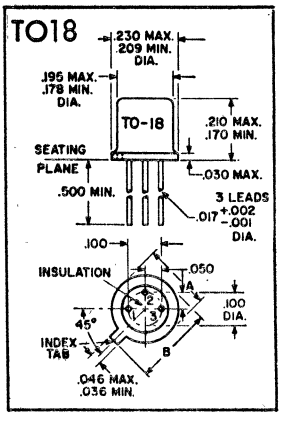












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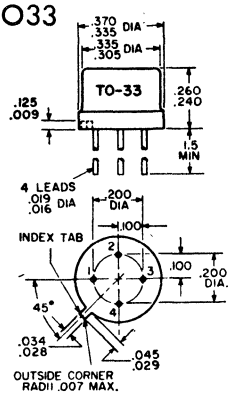

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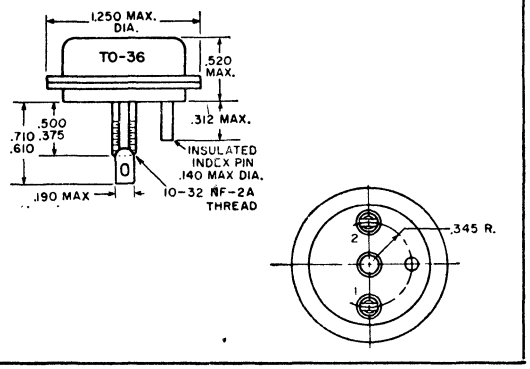

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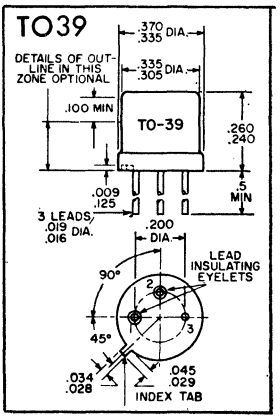

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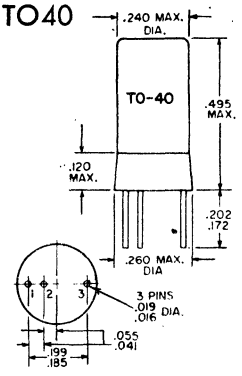

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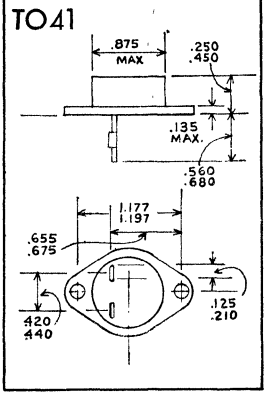

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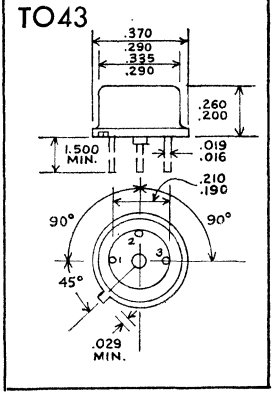

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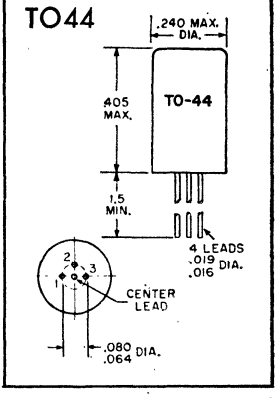

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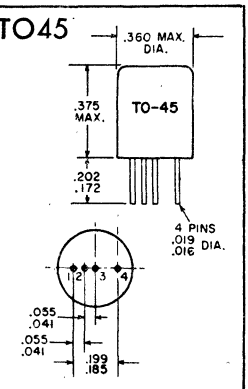

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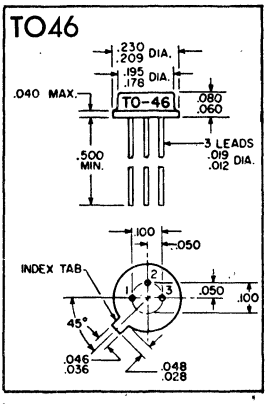

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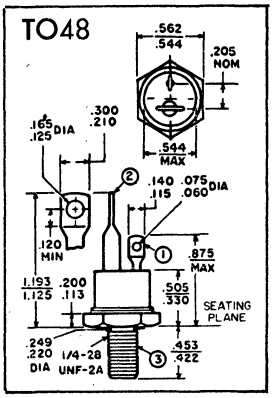

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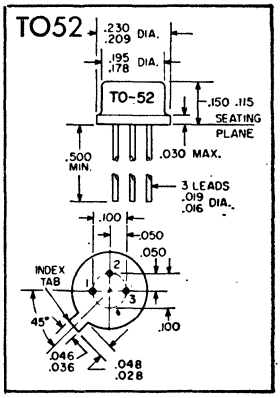

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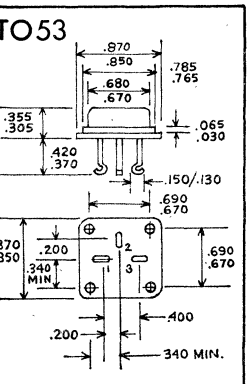

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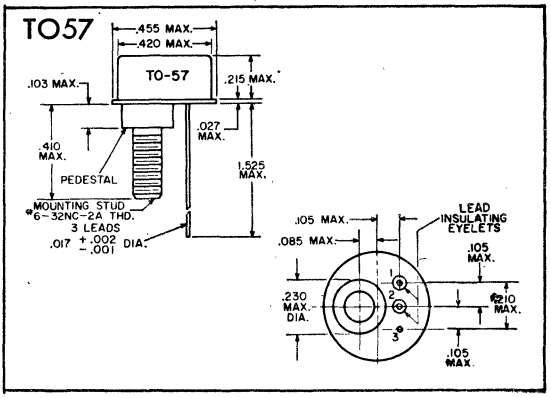

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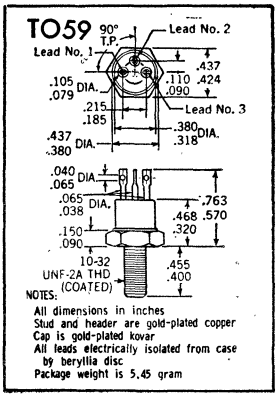
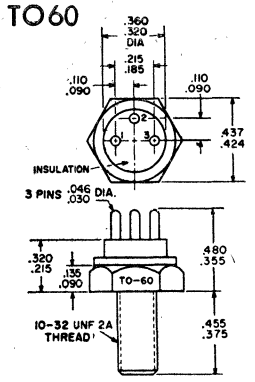


NOTES:
All dimensions in inches
Stud and header are gold-plated copper
Cap is gold-plated kovar
All leads electrically isolated from case by beryllia disc
Package weight is 5.45 gram

TO60



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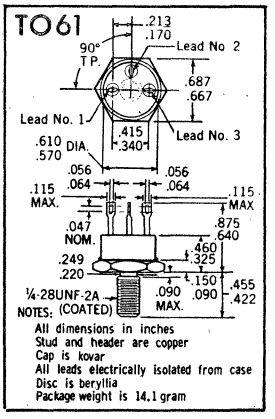
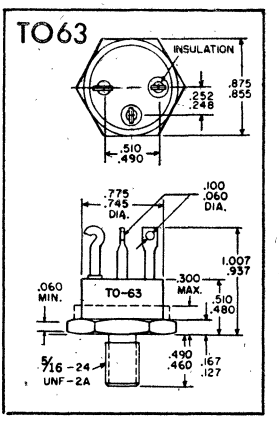
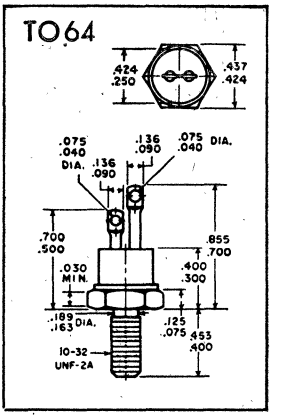


NOTES: (COATED)
All dimensions in inches
Stud and header are copper
Cap is kovar
All leads electrically isolated from case
Disc is beryllia
Package weight is 14.1 gram

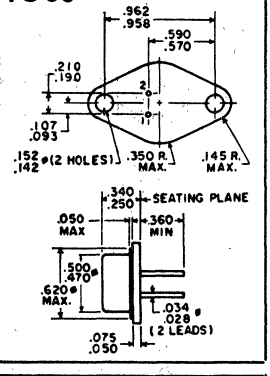
TO63



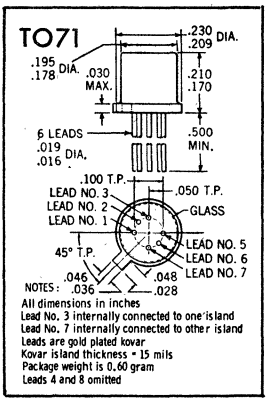
TO64



TO66

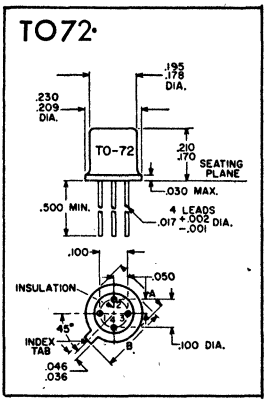


TO71

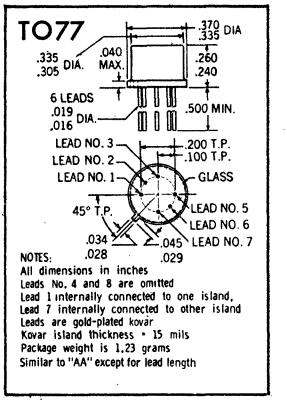


NOTES:
All dimensions in inches
Lead No. 3 internally connected to one island
Lead No. 7 internally connected to other island
Leads are gold plated kovar
Kovar island thickness = 15 mils
Package weight is 0.60 gram
Leads 4 and 8 omitted

TO72

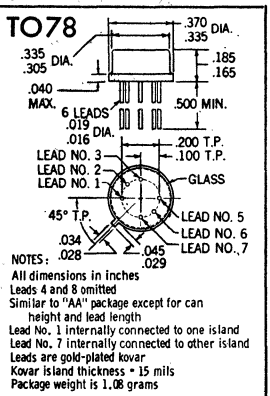


TO77



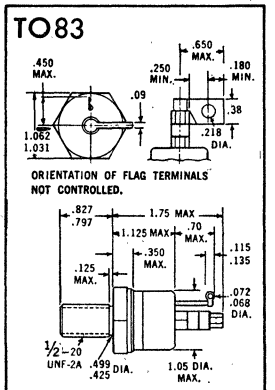
NOTES:
All dimensions in inches
Leads No. 4 and 8 are omitted
Lead 1 internally connected to one island,
Lead 7 internally connected to other island
Leads are gold-plated kovar
Kovar island thickness = 15 mils
Package weight is 1.23 grams
Similar to "AA" except for lead length

TO78

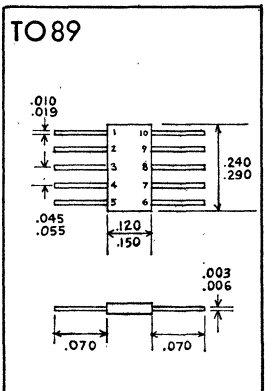


NOTES:
All dimensions in inches
Leads 4 and 8 omitted
Similar to "AA" package except for can height and lead length
Lead No. 1 internally connected to one island
Lead No. 7 internally connected to other island
Leads are gold-plated kovar
Kovar island thickness = 15 mils
Package weight is 1.08 grams

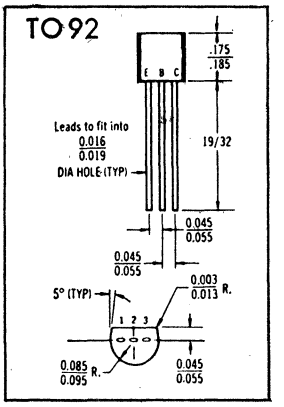
TO83



TO89

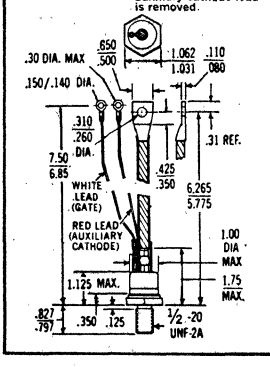


TO92

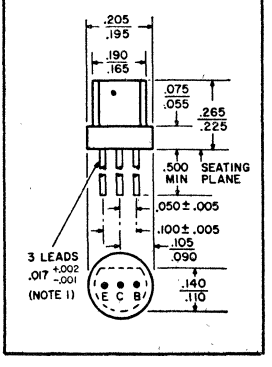


TO94

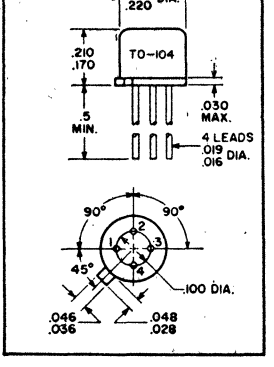
Conforms to JEDEC outline TO-49 when auxiliary cathode lead is removed.



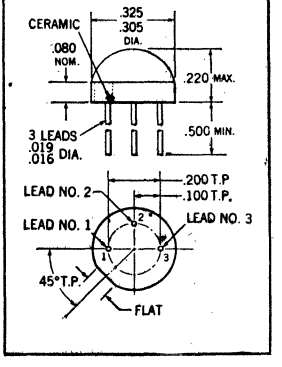
TO98



TO104

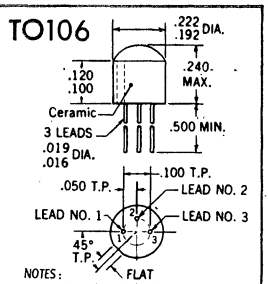


TO105



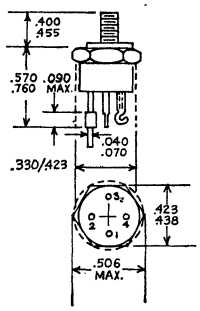
See Page 28 for Explanation of Abbreviations and Symbols

TO106

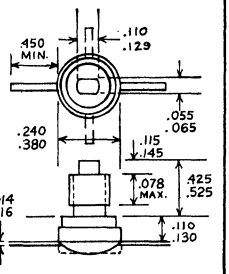


NOTES:
All dimensions in inches
Internal Lead No. 3 length is 110 mils
Lead No. 3 club head length is 85 mils
Leads 1 and 2 are gold-plated nickel
Lead No. 3 is gold-plated kovar
Package weight is 0.31 gram
Same as "CY" except lead No. 3 material

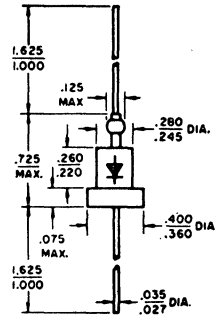
TO111



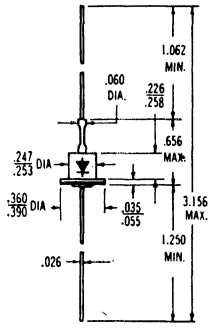
TO117



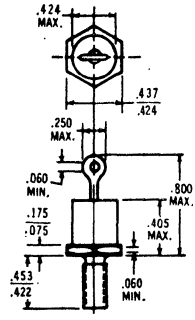
DO1



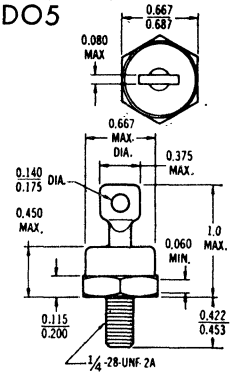
DO3



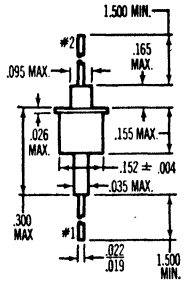
DO4



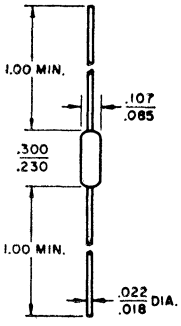
DO5



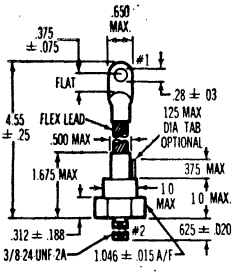
DO6



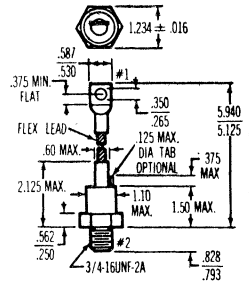
DO7



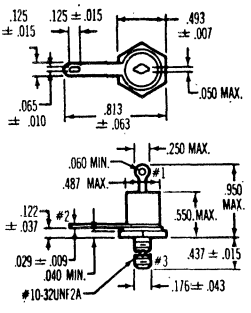
DO8



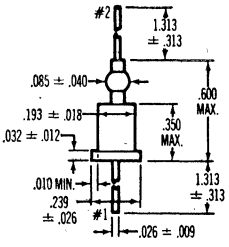
DO9



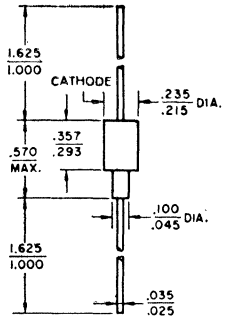
DO10



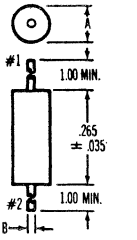
DO12



DO13

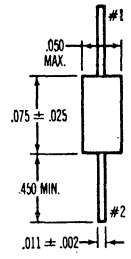


DO14 - 15



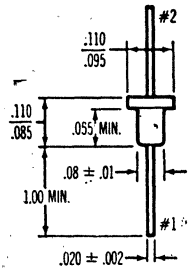
	A	B
DO14	.124 ± .016	.020 ± .002
DO15	.122 ± .018	.031 ± .004

DO16

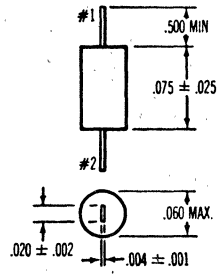


See Page 28 for Explanation of Abbreviations and Symbols

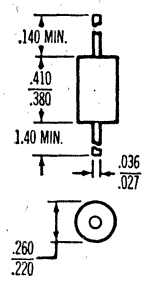
DO17



DO18



DO26



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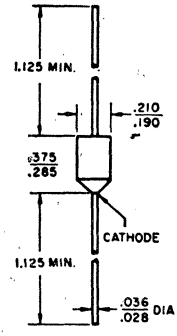
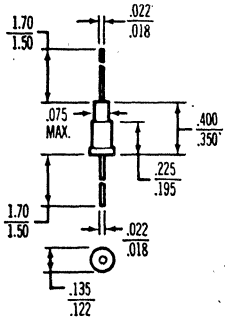
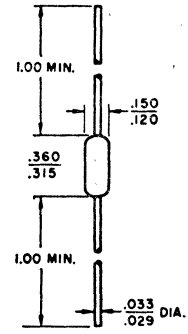


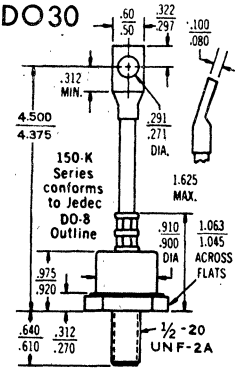
DO28



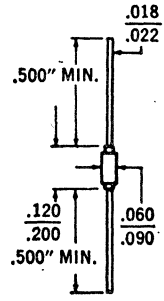
DO29



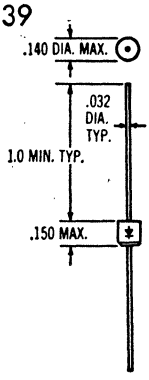
DO30

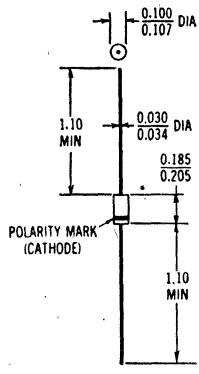


DO35

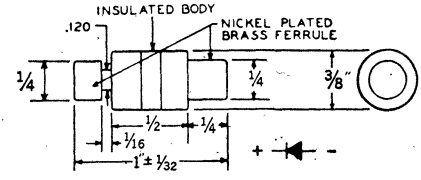


DO39

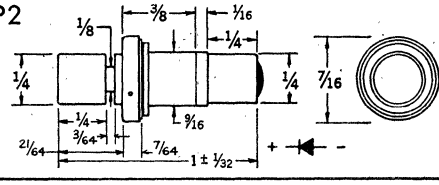




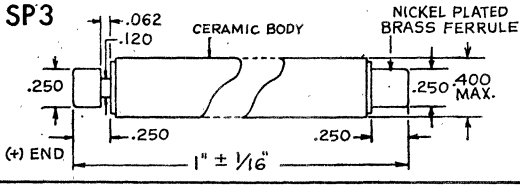
SP1



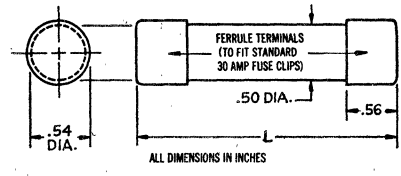
SP2



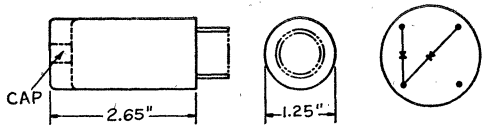
SP3



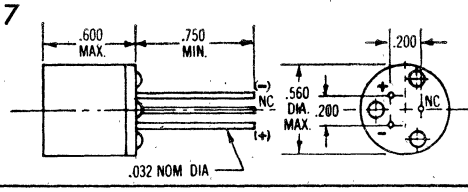
SP4



SP6

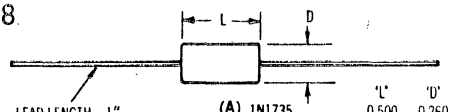


SP7



See Page 28 for Explanation of Abbreviations and Symbols

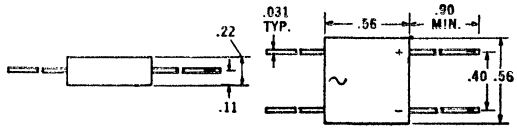
SP8



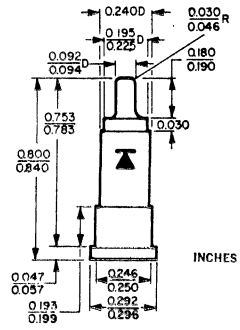
LEAD LENGTH—1"
LEAD DIA. .032
EXCEPT
1N1735—.020

		'L'	'D'
(A)	1N1735	0.500	0.260
(B)	1N1736	1.000	0.312
(C)	1N1737-1N1738	0.625	0.625
(D)	1N1739-1N1742	1.190	0.625

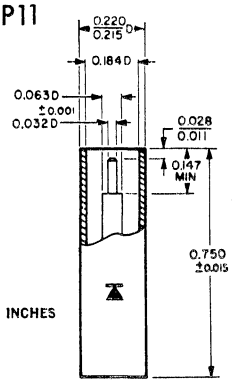
SP9



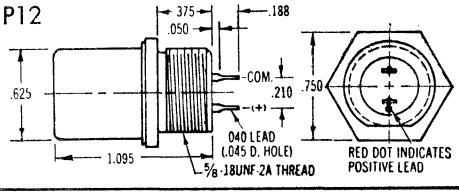
SP10



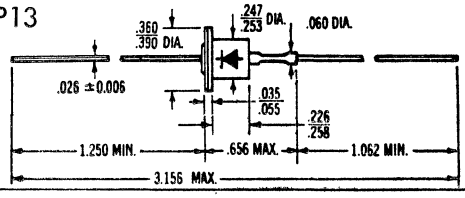
SP11



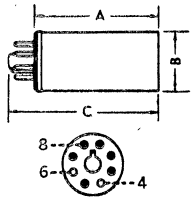
SP12



SP13

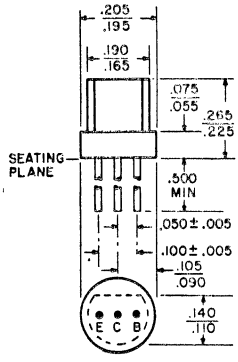


SP15

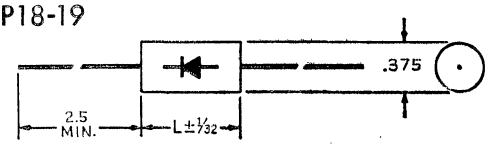


Inches		
A	B	C
2 21/32	1 1/4	3 7/32

SP16

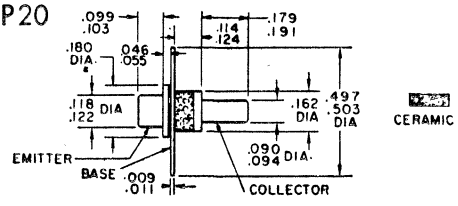


SP18-19

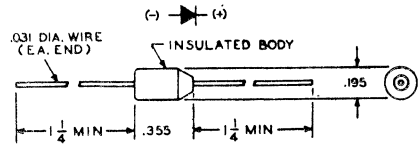


Outline No.	Inches L	Outline No.	Inches L	Outline No.	Inches L
SP-18	1/2	SP-19E	1 11/16	SP-19L	1 15/16
SP-19	1	SP-19F	1 3/16	SP-19M	2 5/16
SP-19A	9/16	SP-19G	1 5/16	SP-19N	2 5/8
SP-19B	11/16	SP-19H	1 3/8	SP-19P	3
SP-19C	3/4	SP-19J	1 1/2	SP-19R	3 1/2
SP-19D	7/8	SP-19K	1 3/4	SP-19S	4 1/16

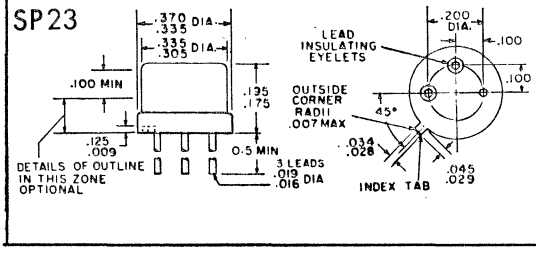
SP20



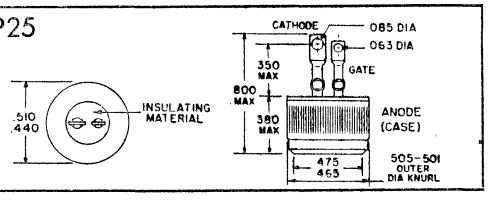
SP21



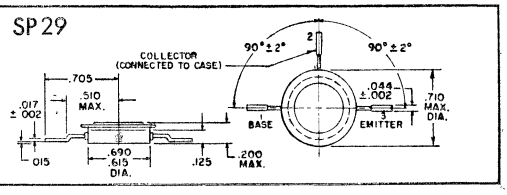
SP23



SP25

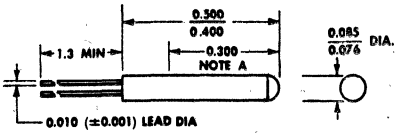


SP29



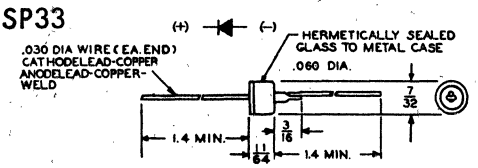
See Page 28 for Explanation of Abbreviations and Symbols

SP30



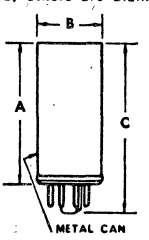
NOTES: A. Within this zone, body diameter is 0.079 ± 0.003

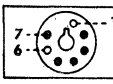
SP33



SP31 & 35

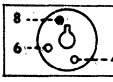
*cathode ●; anode ○. Numbered terminals are wired, others are blank.





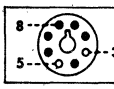
A	B	C
1 9/16	13/16	1 13/16

SP32 & 36



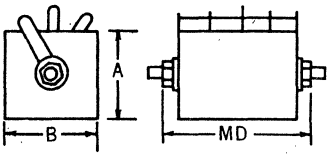
A	B	C
3 3/4	1 3/8	4 5/16

SP37



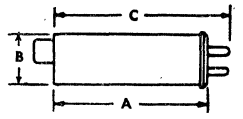
A	B	C
2 21/32	1 1/4	3 7/32

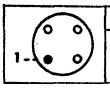
SP34



Case	A	B	MD	Case	A	B	MD	CASE	A	B	MD
SP-34	1	1	7/16	SP-34J	3	3	4 3/16	SP-34U	4	4	8 11/16
SP-34A	1.5	1.5	1 1/8	SP-34K	4	4	4 3/16	SP-34V	6	5	12 9/16
SP-34B	3	3	1 1/8	SP-34L	1	1	3 3/16	SP-34W	6	5	12 9/16
SP-34C	4	4	1 7/8	SP-34M	1.5	1.5	3 3/16	SP-34X	3	3	1/2
SP-34D	1.5	1.5	1 1/2	SP-34N	3	3	7 3/16	SP-34Y	4	4	1/2
SP-34E	4	4	2 5/8	SP-34P	4	4	7 3/16	SP-34Z	6	5	1/2
SP-34F	1	1	1 1/2	SP-34R	1.5	1.5	4 9/16	SP-34a	7.5	6.5	1/2
SP-34G	3	3	2 5/8	SP-34S	1	1	4 9/16	.....	...	...	.....
SP-34H	1.5	1.5	2 1/4	SP-34T	3	3	8 11/16	.....	...	...	.....

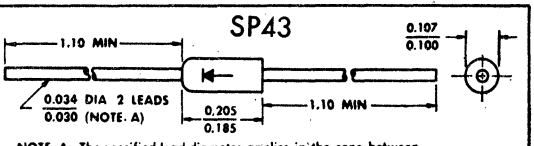
SP38





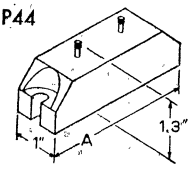
A	B	C
4 7/16	1 1/4	5

SP43



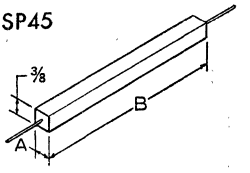
NOTE A: The specified lead diameter applies in the zone between 0.050" and 1.00" from the rectifier body. Outside of this zone the lead diameter is not controlled.

SP44



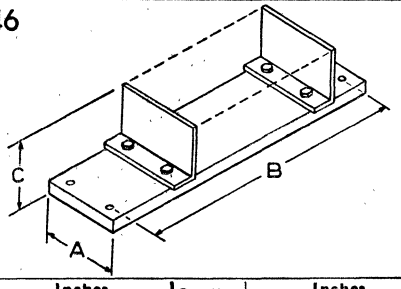
Outline No.	"A" Inches
44a	2 3/8
44b	2 3/8
44c	2 3/8
44d	3 1/4
44e	3 1/4
44f	4 1/2
44g	4 1/2
44h	4 1/2
44i	5 1/2
44j	5 1/2

SP45



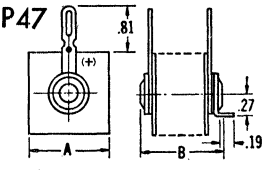
Outline No.	Inches A	Inches B
45a	3/8	2
45b	3/8	3 1/2
45c	3/8	4 1/2
45d	3/4	3 1/2
45e	3/4	3 1/2
45f	3/4	4 1/2
45g	3/4	4 1/2

SP46



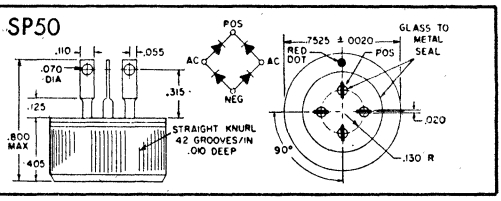
Outline No.	Inches A	Inches B	Inches C	Outline No.	Inches A	Inches B	Inches C
46a	2 1/4	5 1/4	2	46q	3	11 7/8	3 3/8
46b	2 1/4	7	2	46r	3	14 1/4	3 3/8
46c	2 1/4	8 3/4	2	46s	3	16 5/8	3 3/8
46d	2 1/4	10 1/2	2	46t	3	7 1/8	3 3/8
46e	2 1/4	12 1/4	2	46u	3	9 1/2	3 3/8
46f	2 1/4	14	2	46v	3	11 7/8	5 3/8
46g	2 1/4	15 3/4	2	46w	3	14 1/4	5 3/8
46h	2 1/4	5 1/4	2	46x	3	16 5/8	5 3/8
46i	2 1/4	7	2	46y	5 1/2	7 11/16	5 3/8
46hj	2 1/4	8 3/4	2	46z	5 1/2	10 1/4	5 3/8
46k	2 1/4	10 1/2	2	46aa	5 1/2	12 13/16	5 3/8
461	2 1/4	12 1/4	2	46bb	5 1/2	15 3/8	5 3/8
46m	2 1/4	14	2	46cc	5 1/2	7 11/16	5 3/8
46n	2 1/4	15 3/4	2	46dd	5 1/2	10 1/4	5 3/8
46o	3	7 7/8	3 3/8	46ee	5 1/2	12 13/16	5 3/8
46p	3	9 1/2	3 3/8	46ff	5 1/2	15 3/8	5 3/8

SP47

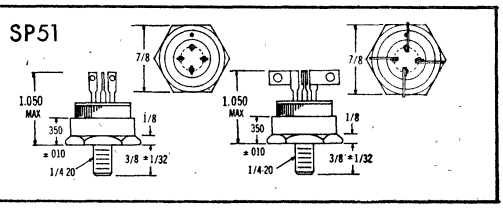


Outline No.	Inches A	Inches B
SP-47	0.66	0.75
SP-47A	1.0	1.0
SP-47B	1.2	1.25
SP-47C	1.5	1.25
SP-47D	2.0	1.25

SP50

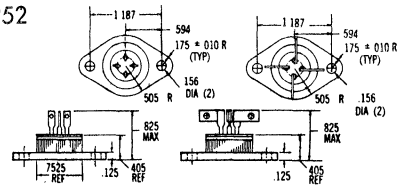


SP51

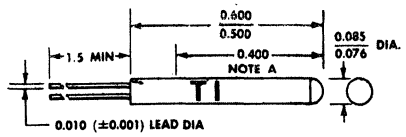


See Page 28 for Explanation of Abbreviations and Symbols

SP52

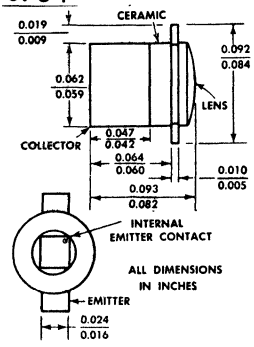


SP53

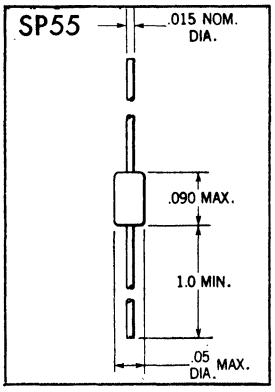


NOTES: A. Within this zone, body diameter is 0.079 ± 0.003

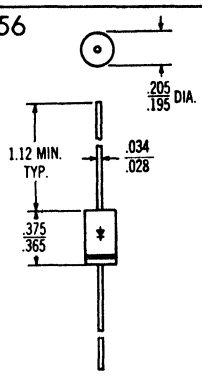
SP54



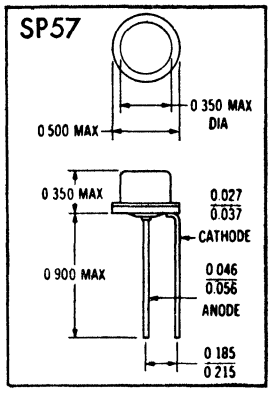
SP55



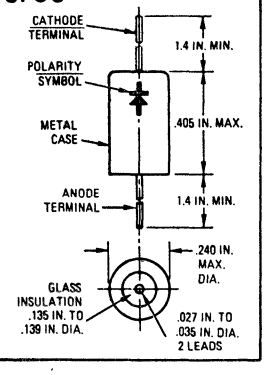
SP56



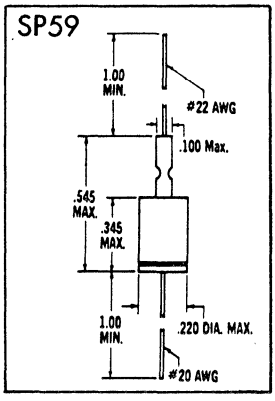
SP57



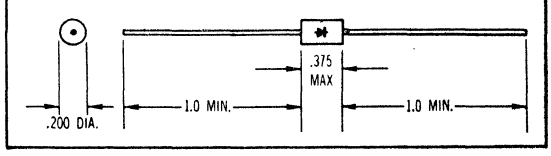
SP58



SP59

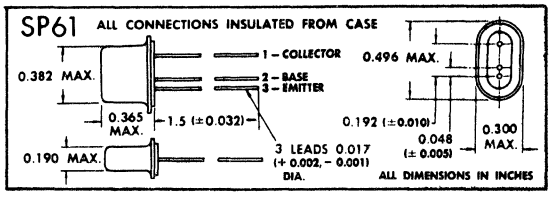


SP60

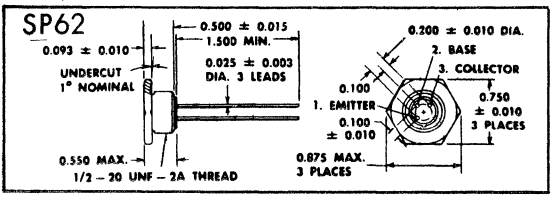


SP61

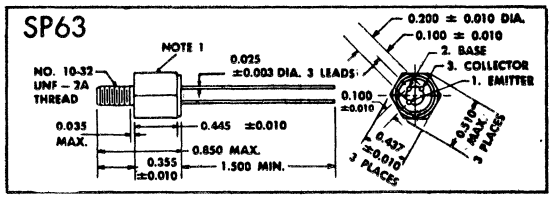
ALL CONNECTIONS INSULATED FROM CASE



SP62

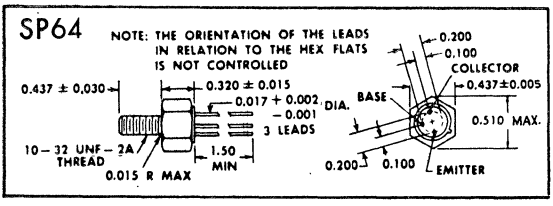


SP63

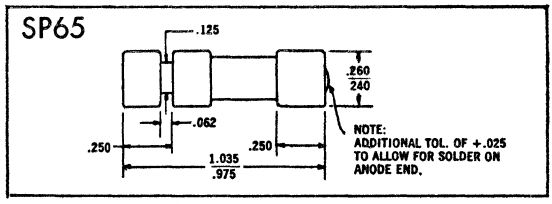


SP64

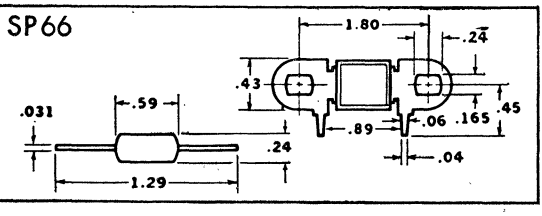
NOTE: THE ORIENTATION OF THE LEADS IN RELATION TO THE HEX FLATS IS NOT CONTROLLED



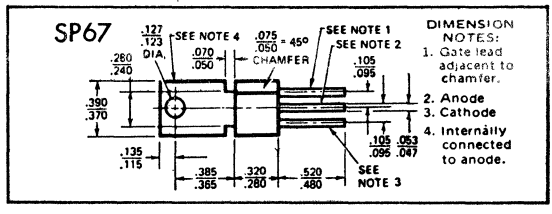
SP65



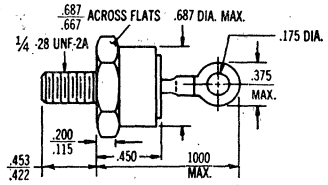
SP66



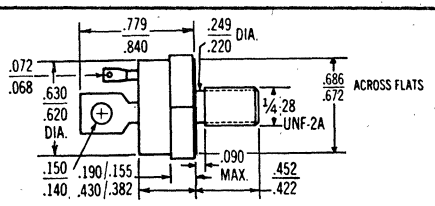
SP67



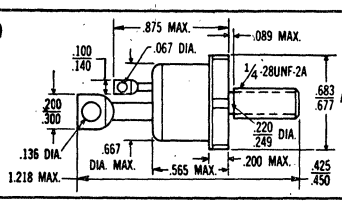
SP68



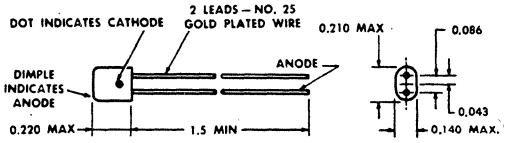
SP69



SP70



SP71



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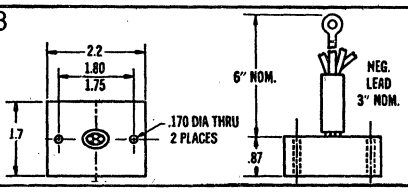
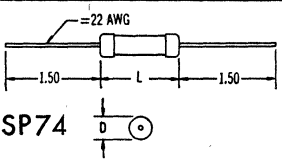
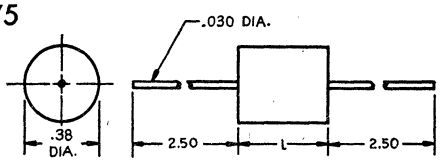


SP74



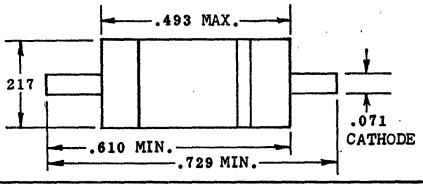
Outline No.	Inches L	Inches D
SP-74	1	.280
SP-74D	1 1/2	.280
SP-74F	2 1/4	.280
SP-74H	2 3/4	.280
SP-74L	4 1/8	.280
SP-74P	5 3/8	.280
SP-74X	7 7/8	.280

SP75

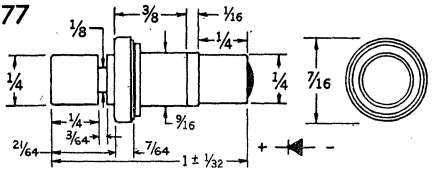


ALL DIMENSIONS IN INCHES

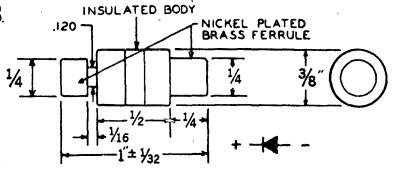
SP76



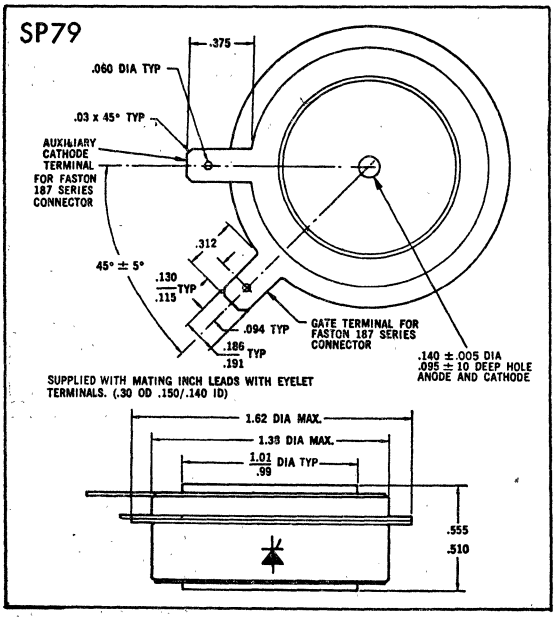
SP77



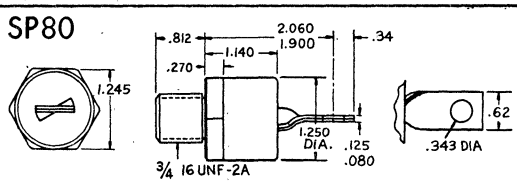
SP78



SP79



SP80



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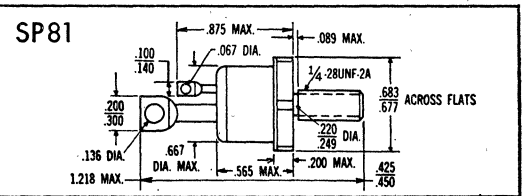
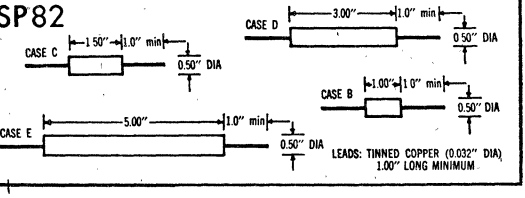
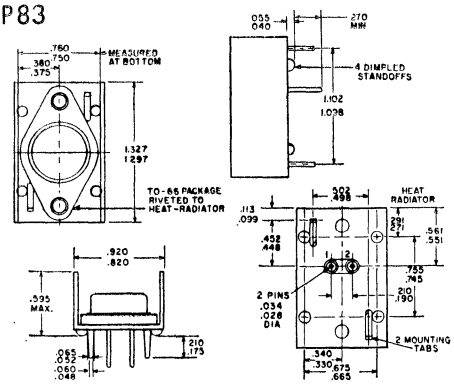


SP82



See Page 28 for Explanation of Abbreviations and Symbols

SP83



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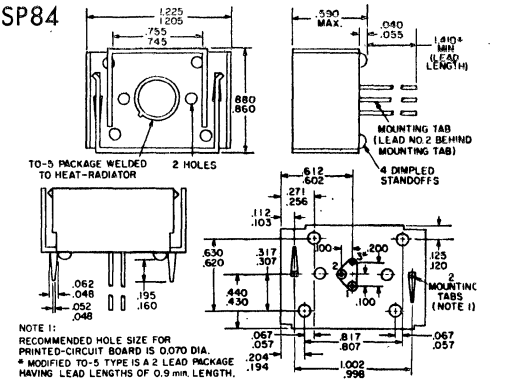

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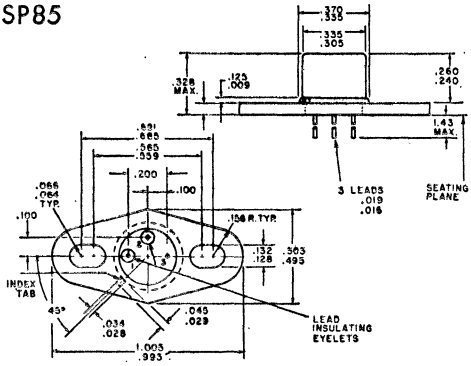

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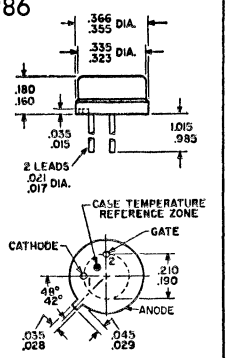
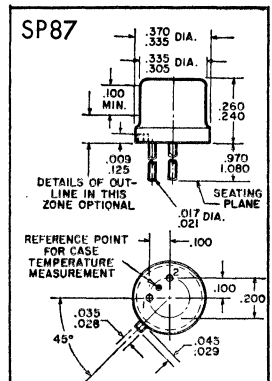


SP87



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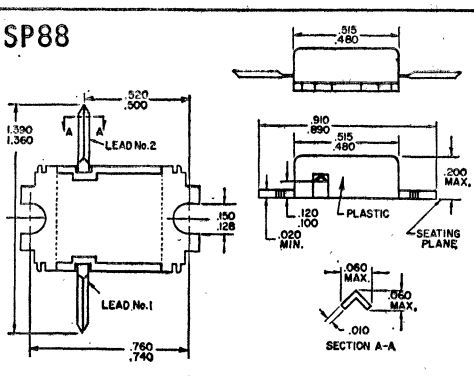

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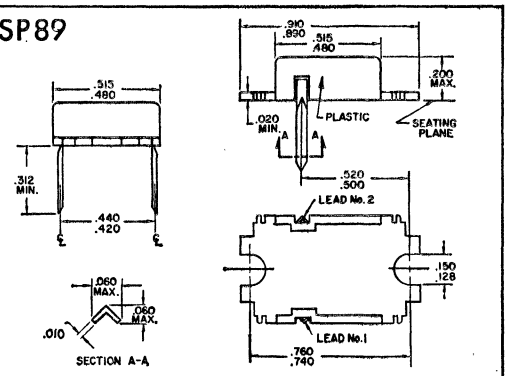

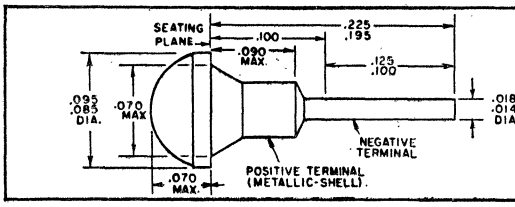

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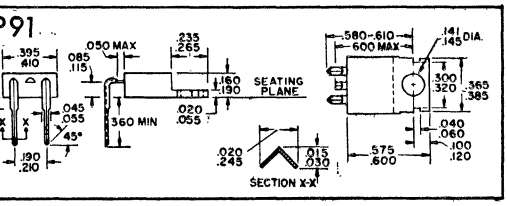

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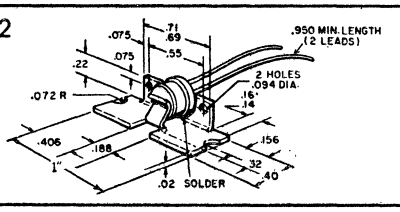

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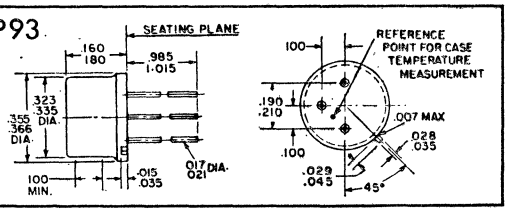

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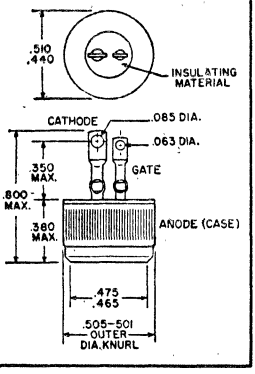
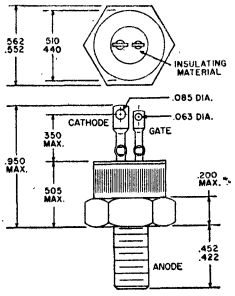
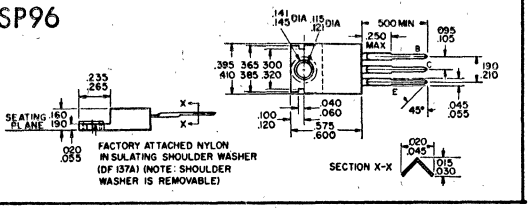


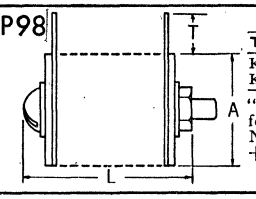
SP95



SP96



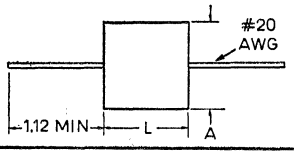
SP98



Type	A	L—See Below
KSA	1" sq.	2 x N x .06 +1.26
KSL	2" sq.	2 x N x .06 +1.26

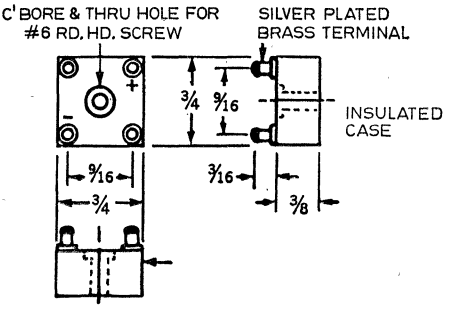
"L" Example—replace "N" in formula with numeral in Type No. KSA5DAF is 2 x 5 x .06 +1.26=1.86

SP99

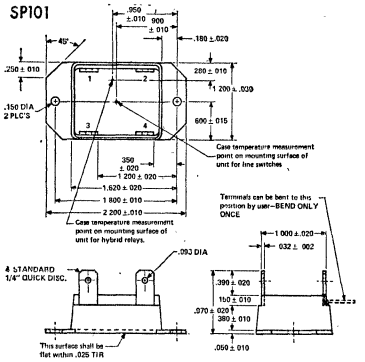


Type	A	B
KZ1 to KZ5	.7"	.63"
KZ6 to KZ11	.7"	.88"

SP100



SP101



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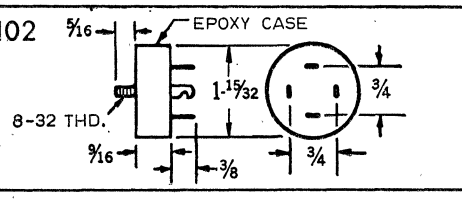
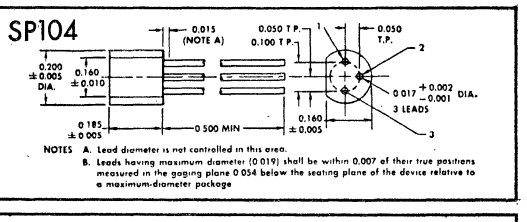
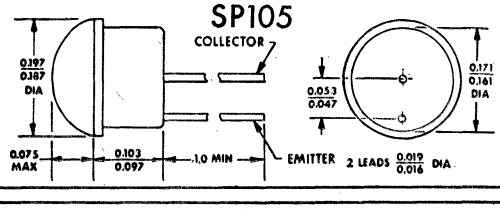


SP104

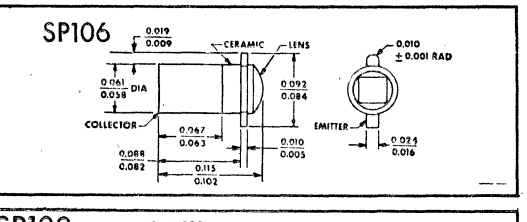


NOTES A. Lead diameter is not controlled in this area.
B. Leads having maximum diameter (0.019) shall be within 0.007 of their true positions measured in the gaging plane 0.054 below the seating plane of the device relative to a maximum-diameter package

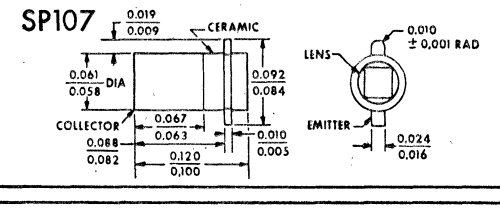
SP105



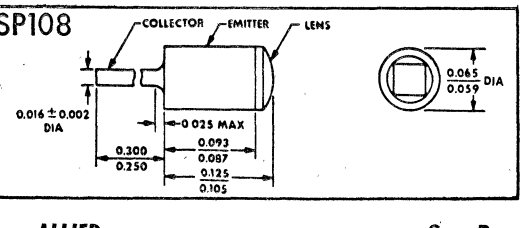
SP106



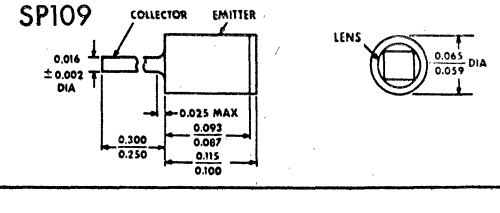
SP107



SP108

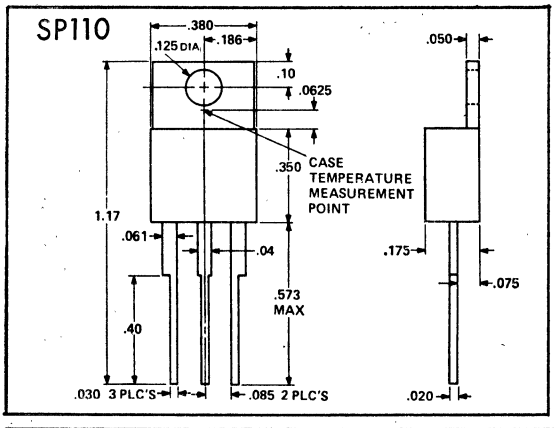


SP109

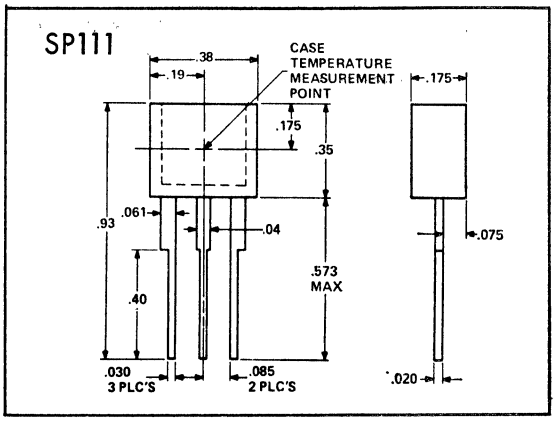


See Page 28 for Explanation of Abbreviations and Symbols

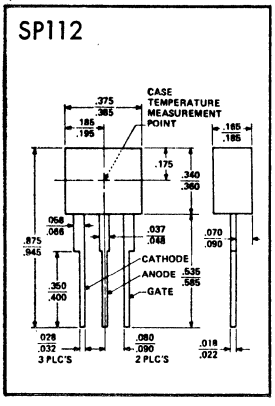
SP110



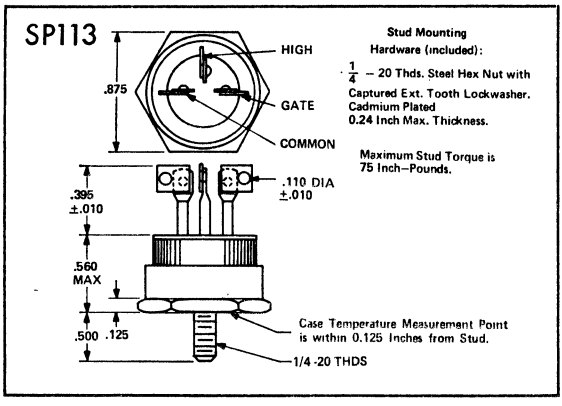
SP111



SP112



SP113

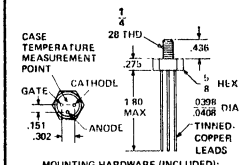


Stud Mounting Hardware (included):

$\frac{1}{4}$ – 20 Thds. Steel Hex Nut with Captured Ext. Tooth Lockwasher. Cadmium Plated 0.24 Inch Max. Thickness.

Maximum Stud Torque is 75 Inch–Pounds.

SP114



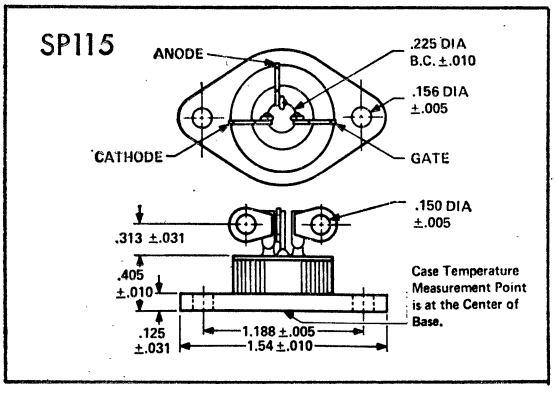
MOUNTING HARDWARE (INCLUDED):

(a) Nut. 1/4 - 28 NF thd 0.24" max thickness Steel hex nut, cadmium-plated

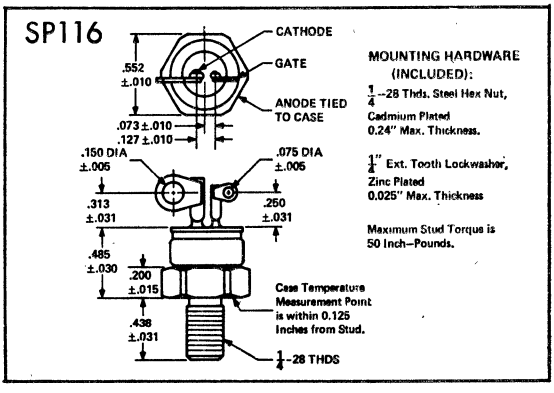
(b) Washer: 1/4", 0.025" max thickness External tooth steel lockwasher, zinc-plated

MAXIMUM STUD TORQUE IS 20 INCH–POUNDS

SP115



SP116



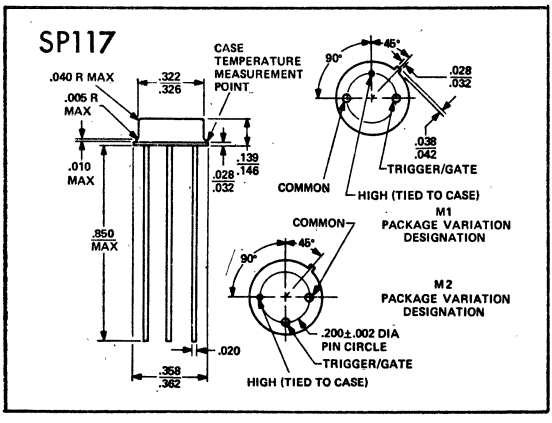
MOUNTING HARDWARE (INCLUDED):

$\frac{1}{4}$–28 Thds. Steel Hex Nut, Cadmium Plated 0.24" Max. Thickness.

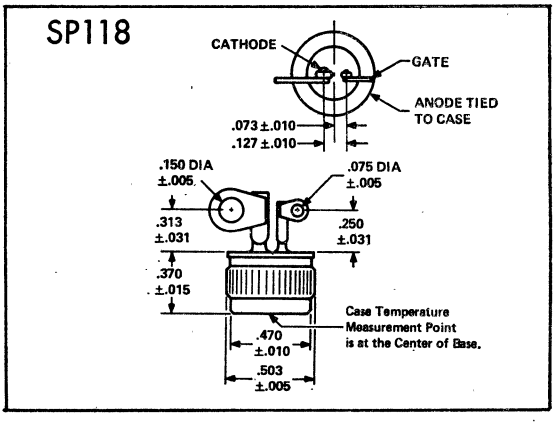
$\frac{1}{4}$" Ext. Tooth Lockwasher, Zinc Plated 0.025" Max. Thickness

Maximum Stud Torque is 50 Inch–Pounds.

SP117

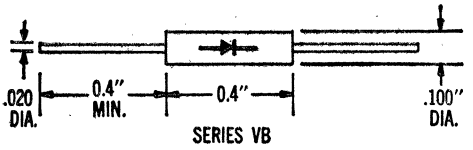


SP118



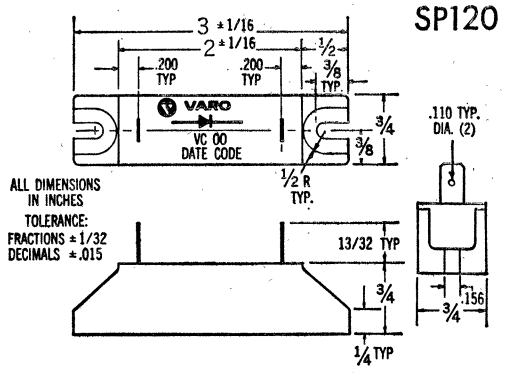
See Page 28 for Explanation of Abbreviations and Symbols

SP119

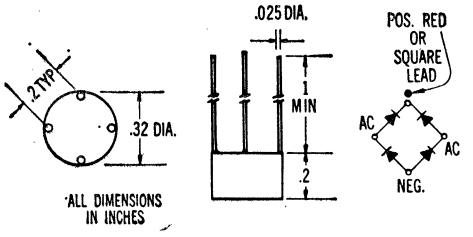


Note:
Specified lead diameter applies between 0.050" and .350" from the rectifier body. Outside of this zone the lead diameter is not controlled.

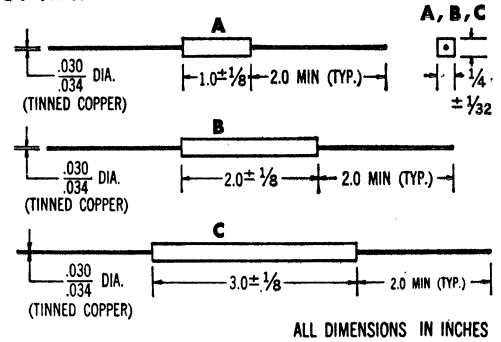
SP120



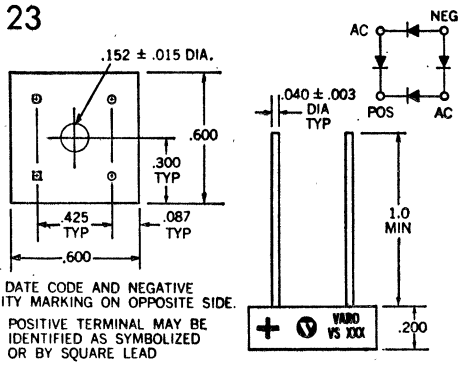
SP121



SP122

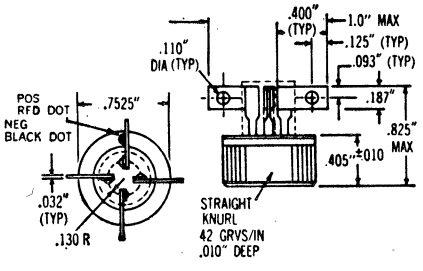


SP123

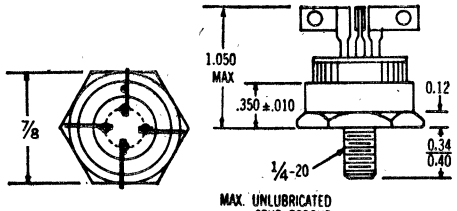


NOTE: DATE CODE AND NEGATIVE POLARITY MARKING ON OPPOSITE SIDE.
POSITIVE TERMINAL MAY BE IDENTIFIED AS SYMBOLIZED OR BY SQUARE LEAD

SP124

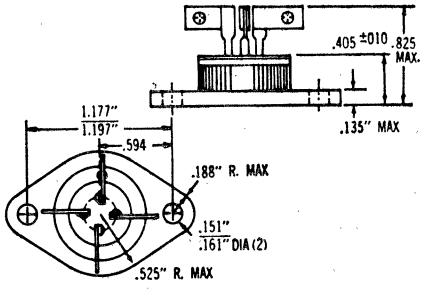


SP125



MAX. UNLUBRICATED STUD TORQUE 30 INCH POUNDS

SP126



See Page 28 for Explanation of Abbreviations and Symbols

Type	Case	Material Function	Dissipation Watts	Max. Peak Rev. Volt	Reverse Current µA @ V	Forward Current @ V_F=IV mA	Rec. Time Nano-Sec.	EACH 1-9	10-99	100-Up
1N21B	SP10		Microwave Mixer Diode S Band 8.3 DB NF					1.62	1.27	.91
1N21C	SP10		Microwave Mixer Diode S Band 8.3 DB NF					1.45	1.01	.84
1N21D	SP10		Microwave Mixer Diode S Band 7.3 DB NF					3.37	2.53	2.10
1N21E	SP10		Microwave Mixer Diode S Band 7.0 DB NF					5.57	4.20	3.79
1N21F	SP10		Microwave Mixer Diode S Band 6.0 DB NF					10.00	8.10	7.56
1N21WE	SP10		Microwave Mixer Diode S Band 7.0 DB NF					5.57	4.05	3.59
1N23B	SP10		Microwave Mixer Diode X Band 11.5 DB NF					1.42	.97	.81
1N23C	SP10		Microwave Mixer Diode X Band 9.5 DB NF					1.47	1.02	.86
1N23D	SP10		Microwave Mixer Diode X Band 7.8 DB NF					3.72	2.79	2.35
1N23E	SP10		Microwave Mixer Diode X Band 7.5 DB NF					5.05	3.79	3.16
1N23F	SP10		Microwave Mixer Diode X Band 7.0 DB NF					11.10	8.40	7.05
1N23G	SP10		Microwave Mixer Diode X Band 6.5 DB NF					16.70	12.60	10.10
1N23WE	SP10		Microwave Mixer Diode X Band 7.5 DB NF					5.57	4.05	3.59
1N25	SP10		Microwave Mixer Diode L Band 12.6 DB NF					5.65	4.19	3.74
1N26	SP10		Microwave Mixer Diode K Band 13.1 DB NF					11.45	8.60	7.15
1N26C	SP11		Microwave Mixer Diode K Band 9.5 DB NF					73.80	53.50	42.90
1N34A	D0-7	GSS	.130	75	30-10	5	....	.36	.30	.23
1N60	D0-7	GSS	.080	.40	200-10	5	....	.45	.36	.30
1N82A	SP10		Microwave Mixer Diode 1,000 MHz 15 DB NF					1.48	1.03	.87
1N248B	D0-5	S Rect	....	50	5000-50	20Io	....	2.12	1.80	1.50
1N249B	D0-5	S Rect	....	100	5000-100	20A Io	....	2.45	1.98	1.65
1N249C	D0-5	S Rect	....	77	3600-77	20A Io	....	2.84	2.05	1.72
1N250B	D0-5	S Rect	....	200	5000-200	20A Io	....	3.50	2.83	2.00
1N250C	D0-5	S Rect	....	154	3600-154	20A Io	....	3.50	2.83	2.00
1N251	SP-25	SCD	....	40	100/10	5	150	.21	.21	.16
1N251/JAN	SP-25	SCD	....	40	100/10	10	30	.21	.21	.16
1N252	D0-7	SCD	....	25	100-5	10	4	.21	.21	.16
1N256	D0-4	S Rect	....	600	250-600	.5A @ 2V	....	2.16	2.16	1.44
1N270	D0-7	GSS	.080	100	100-50	200	....	.48	.33	.27
1N295	D0-7	GSS	.080	40	200-10	....	....	.42	.35	.29
1N358A	SP10		Microwave Detector L - X Band					29.00	22.50	18.00
1N415C	SP10		Microwave Mixer Diode X Band NF 11.4 to 6.5 dB					18.50	15.00	12.85
1N416C	SP10		Microwave Mixer Diode S Band NF 10.3 to 5.5 dB					18.50	15.00	12.85
1N429	SP11		S. Zener TC .002%/°C V_Z-6.2V					6.00	5.00	4.10
1N430A	SP11		S. Zener TC .002%/°C V_Z-8.2V					42.20	27.84	23.20
1N440B	D0-1	S Rect	....	100	.3-100	750	....	.66	.66	.44
1N441B	D0-1	S Rect	....	200	.75-200	750-1.5V	....	.69	.69	.46
1N442B	D0-1	S Rect	....	300	1-300	750-1.5V	....	1.05	.79	.53
1N443B	D0-1	S Rect	....	400	1.5-400	750-1.5V	....	1.26	.97	.65
1N444B	D0-1	S Rect	....	500	1.75-500	650-1.5V	....	1.40	.79	.53
1N445B	D0-1	S Rect	....	600	2-600	650-1.5V	....	1.42	1.42	.95
1N456	D0-7	SGP	.2	30	.025-25	40	....	.35	.35	.23
1N456A	D0-7	SGP	.2	30	.025-25	100	....	.35	.35	.23
1N457	D0-7	SGP	.2	70	.025-60	20	....	.44	.44	.29
1N57A	D0-7	SGP	.2	70	.025-60	100	....	.44	.44	.29
1N457/JAN	D0-7	SGP	.2	70	.025-60	20	....	.44	.44	.29
1N458	D0-7	SGP	.2	125	.025-125	7	....	.47	.47	.31
1N458A	D0-7	SGP	.2	125	.025-125	100	....	.47	.47	.31
1N458/JAN	D0-7	SGP	.2	125	.02-125	7	....	.47	.47	.31

Type	Case	Material Function	Dissipation Watts	Max. Peak Rev. Volt	Reverse Current µA @ V	Forward Current @ V_F=IV mA	Rec. Time Nano-Sec.	EACH 1-99	100-Up
1N459	D0-7	SGP	.2	175	.025-175	40	....	.48	.32
1N459A	D0-7	SGP	.2	175	.025-175	200	....	.48	.32
1N461	D0-7	SGP	.2	30	.5-25	15	....	.34	.23
1N461A	D0-7	SGP	.2	30	.5-25	100	....	.34	.23
1N462	D0-7	SGP	.2	70	.5-60	5	....	.36	.24
1N462A	D0-7	SGP	.2	70	.5-60	5	....	.36	.24
1N463	D0-7	SGP	.2	175	.5-175	5	....	.44	.29
1N463A	D0-7	SGP	.2	175	.5-175	100	....	.44	.29
1N464	D0-7	SGP	.2	125	.5-125	5	....	.45	.30
1N464A	D0-7	SGP	.2	125	.5-125	100	....	.45	.30
1N482	D0-7	SGP	.2	36	.25-30	100 @ 1.1V	....	.48	.32
1N482A	D0-7	SGP	.2	36	.025-30	100	....	.48	.32
1N82B	D0-7	SGP	.2	36	.025-30	100	....	.48	.32
1N483	D0-7	SGP	.2	70	.25-60	100 @ 1.1V	....	.51	.32
1N483A	D0-7	SGP	.2	70	.025-60	100	....	.51	.32
1N483B	D0-7	SGP	.2	70	.025-60	200	....	.51	.32
1N483B/JAN	D0-7	SGP	.2	70	.025-60	200	....	.51	.32
1N484	D0-7	SGP	.2	130	.25-130	100	....	.51	.32
1N484A	D0-7	SGP	.2	130	.025-130	200	....	.51	.32
1N484B	D0-7	SGP	.2	130	.025-130	200	....	.58	.34
1N485	D0-7	SGP	.2	180	.25-180	100	....	.58	.38
1N485A	D0-7	SGP	.2	200	.025-175	100	....	.58	.38
1N485B	D0-7	SGP	.2	200	.025-175	100	....	.58	.38
1N486A	D0-7	SGP	.2	250	.025-225	100	....	.73	.54
1N486B	D0-7	SGP	.2	250	.05-225	100	....	.73	.54
1N536	D0-1	S Rect	....	50	400-50	750 mA Io	....	.45	.30
1N537	D0-1	S Rect	....	100	400-100	750 mA Io	....	.49	.33
1N538	D0-1	S Rect	....	200	300-200	750 mA Io	....	.52	.35
1N539	D0-1	S Rect	....	300	300-300	750 mA Io	....	.60	.40
1N540	D0-1	S Rect	....	400	300-400	750 mA Io	....	.67	.45
1N547	D0-1	S Rect	....	600	350-600	250 mA Io	....	.96	.64

Type	Case	Material Function	Dissipation Watts	Max. Peak Rev. Volt	Reverse Current µA @ V	Forward Current @ V_F=IV mA	Rec. Time Nano-Sec.	EACH 1-9	10-99	100-Up
1N560	SP-13	S Rect	....	800	15-800	250 mA Io	....	2.52	1.80	1.20
1N619	D0-7	SGP	....	30	.08-10	3	....	.21	.21	.16
1N622	D0-7	SGP	....	200	.2-150	7	....	.60	.60	.45
1N625	D0-7	SGP	.400	30	1-20	4 @ 1.5	1000	.40	.40	.26
1N626	D0-7	SGP	.400	50	1-35	4 @ 1.5	1000	.40	.40	.26
1N627	D0-7	SGP	.400	100	1-75	4 @ 1.5	1000	.51	.51	.34
1N628	D0-7	SGP	.400	....	....	4 @ 1.5	1000	.61	.61	.40
1N629	D0-7	SGP	.400	....	....	4 @ 1.5	1000	.68	.68	.44
1N645	D0-7	SGP	....	225	.2-225	400	....	1.40	1.40	.80
1N645A	D0-7	SGP	....	225	.05-225	400	....	1.65	1.65	1.10
1N646	D0-7	SGP	....	300	.2-300	400	....	1.60	1.60	1.05
1N647	D0-7	SGP	....	400	.2-400	400	....	1.70	1.70	1.10
1N648	D0-7	SGP	....	500	.2-500	400	....	1.80	1.80	1.20
1N659	D0-7	SCD	....	60	1-100	400	6	.21	.21	.16
1N660	D0-7	SCD	....	100	5-100	6	300	.65	.65	.34
1N661	D0-7	SCD	....	200	10-200	6	300	.98	.98	.68
1N662	D0-7	SCD	....	80	1-10	10	500	.25	.25	.15
1N662A	D0-7	SCD	....	100	1-10	100	300	.54	.54	.40
1N663	D0-7	SCD	....	80	5-75	100	500	.58	.58	.38
1N663A	D0-7	SCD	....	80	5-75	100	500	.58	.58	.38
1N663/JAN	D0-7	SCD	....	80	.1-75	100	300	.51	.51	.38
1N695	D0-7	SCD	....	20	2-20	100	300	.30		

Type	Case	Material Function	Dissipation Watts	Zener Voltage Volts	Zener Test Current mA	Zener Test Imped. Ohms	Tol. %	EACH 1-99	100 Up
1N702	D0-7	S Zen	.25	2.6	5	60	10	1.00	.80
1N702A	D0-7	S Zen	.25	2.6	5	60	5	1.00	.85
1N703	D0-7	S Zen	.25	3.4	5	55	10	1.00	.80
1N703A	D0-7	S Zen	.25	3.4	5	55	5	1.00	.85
1N704	D0-7	S Zen	.25	4.1	5	45	10	1.00	.80
1N704A	D0-7	S Zen	.25	4.1	5	45	5	1.00	.85
1N705	D0-7	S Zen	.25	4.8	5	35	10	.90	.60
1N705A	D0-7	S Zen	.25	4.8	5	35	5	1.05	.85
1N706	D0-7	S Zen	.25	5.8	5	20	10	.90	.60
1N706A	D0-7	S Zen	.25	5.8	5	20	5	1.05	.85
1N707	D0-7	S Zen	.25	8.0	5	10	10	.90	.60
1N707A	D0-7	S Zen	.25	8.0	5	10	5	1.05	.85
1N708	D0-7	S Zen	.25	5.6	25	3.6	10	.90	.60
1N708A	D0-7	S Zen	.25	5.6	25	3.6	5	1.05	.85
1N709	D0-7	S Zen	.25	6.2	25	4.1	10	.90	.60
1N709A	D0-7	S Zen	.25	6.2	25	4.1	5	1.05	.85
1N710	D0-7	S Zen	.25	6.8	25	4.7	10	.90	.60
1N710A	D0-7	S Zen	.25	6.8	25	4.7	5	1.05	.85
1N711	D0-7	S Zen	.25	7.5	25	5.3	10	.90	.60
1N711A	D0-7	S Zen	.25	7.5	25	5.3	5	1.05	.85
1N712	D0-7	S Zen	.25	8.2	25	6	10	.90	.60
1N712A	D0-7	S Zen	.25	8.2	25	6	5	1.05	.85
1N713	D0-7	S Zen	.25	9.1	12	7	10	.90	.60
1N713A	D0-7	S Zen	.25	9.1	12	7	5	1.05	.85
1N714	D0-7	S Zen	.25	10	12	8	10	.90	.60
1N714A	D0-7	S Zen	.25	10	12	8	5	1.05	.85
1N715	D0-7	S Zen	.25	11	12	9	10	.90	.60
1N715A	D0-7	S Zen	.25	11	12	9	5	1.05	.85
1N718	D0-7	S Zen	.25	15	12	13	10	1.00	.80
1N718A	D0-7	S Zen	.25	15	12	13	5	1.00	.85
1N721	D0-7	S Zen	.25	20	4	20	10	1.00	.80
1N721A	D0-7	S Zen	.25	20	4	20	5	1.00	.85
1N722	D0-7	S Zen	.25	22	4	24	10	1.00	.80
1N722A	D0-7	S Zen	.25	22	4	24	5	1.00	.85
1N723	D0-7	S Zen	.25	24	4	28	10	1.00	.80
1N723A	D0-7	S Zen	.25	24	4	28	5	1.00	.85
1N746	D0-7	S Zen	.4	3.3	20	28	10	.90	.60
1N746A	D0-7	S Zen	.4	3.3	20	28	5	1.05	.85
1N747	D0-7	S Zen	.4	3.6	20	24	10	.90	.60
1N747A	D0-7	S Zen	.4	3.6	20	24	5	1.05	.85
1N748	D0-7	S Zen	.4	3.9	20	23	10	.90	.60
1N748A	D0-7	S Zen	.4	3.9	20	23	5	1.05	.85
1N749	D0-7	S Zen	.4	4.3	20	22	10	.90	.60
1N749A	D0-7	S Zen	.4	4.3	20	22	5	1.05	.85
1N750	D0-7	S Zen	.4	4.7	20	19	10	.90	.60
1N750A	D0-7	S Zen	.4	4.7	20	19	5	1.05	.85
1N751	D0-7	S Zen	.4	5.1	20	17	10	.90	.60
1N751A	D0-7	S Zen	.4	5.1	20	17	5	1.05	.85
1N752	D0-7	S Zen	.4	5.6	20	11	10	.90	.60
1N752A	D0-7	S Zen	.4	5.6	20	11	5	1.05	.85
1N753	D0-7	S Zen	.4	6.2	20	7	10	.90	.60
1N753A	D0-7	S Zen	.4	6.2	20	7	5	1.05	.85
1N754	D0-7	S Zen	.4	6.8	20	5	10	.90	.60
1N754A	D0-7	S Zen	.4	6.8	20	5	5	1.05	.85
1N754/JAN	D0-7	S Zen	.4	6.8	20	5	5	1.10	.90
1N755	D0-7	S Zen	.4	7.5	20	6	10	.90	.60
1N755A	D0-7	S Zen	.4	7.5	20	6	5	1.05	.85
1N755/JAN	D0-7	S Zen	.4	7.5	20	6	5	1.10	.90
1N756	D0-7	S Zen	.4	8.2	20	8	10	.90	.60
1N756A	D0-7	S Zen	.4	8.2	20	8	5	1.05	.85
1N756A/JAN	D0-7	S Zen	.4	8.2	20	8	5	1.10	.90

SEE PAGE 12 FOR INTEGRATED CIRCUITS

Type	Case	Material Function	Dissi-pation Watts	Zenner Volt-age Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-99	EACH 100 Up
1N757	DO-7	S Zen	.4	9.1	20	10	10	.90	.60
1N757A	DO-7	S Zen	.4	9.1	20	10	5	1.05	.85
1N758	DO-7	S Zen	.4	10	20	17	10	.90	.60
1N758A	DO-7	S Zen	.4	10	20	17	5	1.05	.85
1N758A/JAN	DO-7	S Zen	.4	10	20	17	5	1.10	.90
1N759	DO-7	S Zen	.4	12	20	30	10	.90	.60
1N759A	DO-7	S Zen	.4	12	20	30	5	1.05	.85
1N759A/JAN	DO-7	S Zen	.4	12	20	30	5	1.10	.90
1N763	DO-7	S Zen	250	6.2-8	10	8	10	.90	.60
1N764	DO-7	S Zen	.25	7.5-10	10	15	10	.90	.60
1N765	DO-7	S Zen	.25	9-12	5	50	10	.90	.60
1N766	DO-7	S Zen	....	11-14.5	5	70	10	.90	.60
1N770	DO-7	GGP	.080	20PRV-15uA I_R @ 10v - 10 mA I_FV_F=IV				.48	.38
1N779	DO-7	SGP	....	200PRV-0.5uA I_R @ 175v - 10 mA I_FV_F=IV				.75	.56
1N795	DO-7	SGP	....	75PRV-5.0uA I_R @ 50v - 50 mA I_FV_F=IV				.38	.28
1N799	DO-7	SGP	....	150PRV-5.0uA I_R @ 100 - 100 mA I_FV_F=IV				.38	.28
1N814	DO-7	SCD	.4	50PRV-100uA I_R @ 20v - 5 mA I_FV_F=IV				.27	.20
1N816	DO-7	SGP	....	6PRV - 0.1uA I_R @ 4v - 100 mA I_FV_F=IV				.38	.28
1N821	DO-7	SZTC	....	6.2	7.5	15	*.01/10	2.30	1.85
1N821A	DO-7	SZTC	.4	6.2	7.5	15	*.01/10	2.85	1.40
1N823	DO-7	SZTC	.4	6.2	7.5	15	*.005/10	3.05	2.45
1N823A	DO-7	SZTC	.4	6.2	7.5	10	*.005/5	3.30	2.65
1N825	DO-7	SZTC	.4	6.2	7.5	15	*.002/10	5.65	2.65
1N825A	DO-7	SZTC	.4	6.2	7.5	15	*.002/10	5.20	4.30
1N826	DO-7	SZTC	.4	6.5	7.5	15	*.002/10	6.60	5.25
1N827	DO-7	SZTC	.4	6.2	7.5	15	*.001/10	8.70	3.40
1N827A	DO-7	SZTC	.4	6.2	7.5	10	*.001/10	10.60	5.00
1N828	DO-7	SZTC	.4	6.5	7.5	15	*.001/10	11.04	9.00
1N829	DO-7	SZTC	.4	6.2	7.5	15	*.0005/10	24.00	11.25
1N829A	DO-7	SZTC	.4	6.2	7.5	10	.0005/5	28.60	13.50

Type	Case	Material Function	Dissi-pation Watts	Max. Peak Rev. Volt	Reverse Current uA @ V	Forward Current @ V_F=IV mA	Rec. Time Nano-Sec.	EACH 1-99	EACH 100-Up
1N830A	DO-7	S	....	Microwave Detector 1000 MHz			3.853.00		
1N844	DO-7	SGP	....	....	100	.1-80	200	....	.21.16
1N890	DO-7	SCD	....	80	.025-60	20	....	.38	.28
1N903	DO-7	SCD	....	60	100-40	10	4	.45	.34
1N903A	DO-7	SCD	....	60	100-40	10	4	.45	.34
1N904	DO-7	SCD	....	50	100-30	10	4	.45	.34
1N904A	DO-7	SCD	....	35	100-30	20	4	.45	.34
1N905	DO-7	SCD	....	40	100-20	10	4	.45	.34
1N905A	DO-7	SCD	....	40	100-20	20	4	.45	.34
1N906	DO-7	SCD	....	40	100-20	10	4	.24	.18
1N906A	DO-7	SCD	....	40	100-20	20	4	.24	.18
1N907	DO-7	SCD	....	50	100-30	10	4	.24	.18
1N907A	DO-7	SCD	....	50	100-30	20	4	.24	.18
1N908	DO-7	SCD	....	60	100-40	10	4	.24	.18
1N908A	DO-7	SCD	....	60	100-40	20	4	.24	.18
1N914	DO-7	SCD	....	100	25-20	10	4	.21	.16
1N914/JAN	DO-7	SCD	....	100	25-20	10	5	.21	.16
1N914A	DO-7	SCD	....	100	25-20	20	4	.23	.17
1N914B	DO-7	SCD	....	100	25-20	100	4	.23	.17
1N916	DO-7	SCD	....	100	25-20	10	4	.27	.20
1N916A	DO-7	SCD	....	100	25-20	20	4	.27	.20
1N916B	DO-7	SCD	....	100	25-20	30	4	.27	.20
1N925	DO-7	SCD	....	40	1-10	5	....	.21	.16
1N926	DO-7	SCD	....	40	.1-10	5	....	.21	.16

Type	Case	Material Function	Dissi-pation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	EACH 10-99	EACH 100-Up
1N935	DO-7	SZTC	.5	9.0	7.5	20	*.01/20	1.60	1.60	1.45
1N935A	DO-7	SZTC	.5	9.0	7.5	20	*.01/10	1.80	1.80	1.60
1N935B	DO-7	SZTC	.5	9.0	7.5	20	*.01/5	3.50	2.05	1.65
1N936	DO-7	SZTC	.5	9.0	7.5	20	*.005/20	1.90	1.90	1.70
1N936A	DO-7	SZTC	.5	9.0	7.5	20	*.005/10	2.45	2.45	2.20
1N936B	DO-7	SZTC	.5	9.0	7.5	20	*.005/5	2.90	2.90	2.60
1N937	DO-7	SZTC	.5	9.0	7.5	20	*.002/20	3.70	3.70	3.30
1N937A	DO-7	SZTC	.5	9.0	7.5	20	*.002/10	4.25	4.25	3.85
1N937B	DO-7	SZTC	.5	9.0	7.5	20	*.002/5	4.90	4.90	4.40
1N938	DO-7	SZTC	.5	9.0	7.5	20	*.001/20	4.80	4.80	4.30
1N938A	DO-7	SZTC	.5	9.0	7.5	20	*.001/10	5.20	5.20	4.70
1N938B	DO-7	SZTC	.5	9.0	7.5	20	*.001/5	6.90	6.90	6.20
1N938B/USA	DO-7	SZTC	.5	9.0	7.5	20	*.001/5	13.75	11.75	6.50
1N939	DO-7	SZTC	.5	9.0	7.5	20	*.0005/20	12.40	12.40	11.15
1N939A	DO-7	SZTC	.5	9.0	7.5	20	*.0005/10	17.50	17.50	15.75
1N939B	DO-7	SZTC	.5	9.0	7.5	20	*.0005/5	18.85	18.85	17.00
1N940	DO-7	SZTC	.5	12	7.5	30	*01/10	3.07	1.85	1.45
1N941A	DO-7	SZTC	.5	12	7.5	30	*01/10	3.30	1.95	1.55
1N942	DO-7	SZTC	.5	12	7.5	30	*.005/20	3.40	2.00	1.60

Type	Case	Material Function	Dissi-pation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	EACH 10-99	EACH 100-Up
1N942A	DO-7	SZTC	.5	12	7.5	30	*.005/10	4.25	2.50	2.00
1N943	DO-7	SZTC	.5	12	7.5	30	*.002/20	6.70	3.95	3.15
1N943A	DO-7	SZTC	.5	12	7.5	30	*.002/10	6.80	4.00	3.20
1N944	DO-7	SZTC	.5	12	7.5	30	*.001/20	14.85	8.75	7.00
1N945	DO-7	SZTC	.5	12	7.5	30	.0005/20	27.10	23.00	12.75

Type	Case	Material Function	Dissi-pation Watts	Zenner Volt-age Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-99	EACH 100 Up
1N957	DO-7	SZTC	.4	6.8	18.5	4.5	20	.80	.50
1N957A	DO-7	S Zen	.4	6.8	18.5	4.5	10	.90	.60
1N957B	DO-7	S Zen	.4	6.8	18.5	4.5	5	1.05	.85
1N958	DO-7	S Zen	.4	7.5	16.5	5.5	20	.80	.50
1N958A	DO-7	S Zen	.4	7.5	16.5	5.5	10	.90	.60
1N958B	DO-7	S Zen	.4	7.5	16.5	5.5	5	1.05	.85
1N959	DO-7	S Zen	.4	8.2	15	6.5	20	.80	.50
1N959A	DO-7	S Zen	.4	8.2	15	6.5	10	.90	.60
1N959B	DO-7	S Zen	.4	8.2	15	6.5	5	1.05	.85
1N960	DO-7	S Zen	.4	9.1	14	7.5	20	.80	.50
1N960A	DO-7	S Zen	.4	9.1	14	7.5	10	.90	.60
1N960B	DO-7	SZTC	.4	9.1	14	7.5	5	1.05	.85
1N961	DO-7	S Zen	.4	10	12.5	8.5	20	.80	.50
1N961A	DO-7	S Zen	.4	10	12.5	8.5	10	.90	.60
1N961B	DO-7	S Zen	.4	10	12.5	8.5	5	1.05	.85
1N962	DO-7	S Zen	.4	11	11.5	9.5	20	.75	.50
1N962A	DO-7	S Zen	.4	11	11.5	9.5	10	.80	.50
1N962B	DO-7	S Zen	.4	11	11.5	9.5	5	.90	.60
1N962B/JAN	DO-7	S Zen	.4	11	11.5	9.5	5	1.00	.65
1N963	DO-7	S Zen	.4	12	10.5	11.5	20	.75	.50
1N963A	DO-7	S Zen	.4	12	10.5	11.5	10	.80	.55
1N963B	DO-7	S Zen	.4	12	10.5	11.5	10	.90	.60
1N963B/JAN	DO-7	S Zen	.4	12	10.5	11.5	10	1.00	.65
1N964	DO-7	S Zen	.4	13	9.5	13	20	.75	.50
1N964A	DO-7	S Zen	.4	13	9.5	13	10	.80	.55
1N964B	DO-7	S Zen	.4	13	9.5	13	5	.90	.60
1N964B/JAN	DO-7	S Zen	.4	13	9.5	13	5	1.00	.65
1N965	DO-7	S Zen	.4	15	8.5	16	20	.75	.50
1N965A	DO-7	S Zen	.4	15	8.5	16	10	.80	.55
1N965B	DO-7	S Zen	.4	15	8.5	16	5	.90	.60
1N965B/JAN	DO-7	S Zen	.4	15	8.5	16	5	1.00	.65
1N966	DO-7	S Zen	.4	16	7.8	17	20	.75	.50
1N966A	DO-7	S Zen	.4	16	7.8	17	10	.80	.55
1N966B	DO-7	S Zen	.4	16	7.8	17	5	.90	.60
1N966B/JAN	DO-7	S Zen	.4	16	7.8	17	5	1.00	.65
1N967	DO-7	S Zen	.4	18	7.0	21	20	.75	.50
1N967A	DO-7	S Zen	.4	18	7.0	21	10	.80	.55
1N967B	DO-7	S Zen	.4	18	7.0	21	5	.90	.60
1N967B/JAN	DO-7	S Zen	.4	18	7.0	21	5	1.00	.65
1N968	DO-7	S Zen	.4	20	6.2	25	20	.75	.50
1N968A	DO-7	S Zen	.4	20	6.2	25	10	.80	.55
1N968B	DO-7*	S Zen	.4	20	6.2	25	5	.90	.60
1N968B/JAN	DO-7	S Zen	.4	20	6.2	25	5	1.00	.65
1N969	DO-7	S Zen	.4	22	5.6	29	20	.75	.50
1N969A	DO-7	S Zen	.4	22	5.6	29	10	.80	.55
1N969B	DO-7	S Zen	.4	22	5.6	29	5	.90	.60
1N969B/JAN	DO-7	S Zen	.4	22	5.6	29	5	1.00	.65
1N970	DO-7	S Zen	.4	24	5.2	33	20	.75	.50
1N970A	DO-7	S Zen	.4	24	5.2	33	10	.80	.55
1N970B	DO-7	S Zen	.4	24	5.2	33	5	.90	.60
1N970B/JAN	DO-7	S Zen	.4	24	5.2	33	5	1.00	.65
1N971	DO-7	S Zen	.4	27	4.6	41	20	.75	.50
1N971A	DO-7	S Zen	.4	27	4.6	41	10	.80	.55
1N971B	DO-7	S Zen	.4	27	4.6	41	5	.90	.60
1N971B/JAN	DO-7	S Zen	.4	27	4.6	41	5	1.00	.65
1N972	DO-7	S Zen	.4	30	4.2	49	20	.75	.50
1N972A	DO-7	S Zen	.4	30	4.2	49	10	.80	.55
1N972B	DO-7	S Zen	.4	30	4.2	49	5	.90	.60
1N972B/JAN	DO-7	S Zen	.4	30	4.2	49	5	1.00	.65
1N973	DO-7	S Zen	.4	33	3.8	58	20	.75	.50
1N973A	DO-7	S Zen	.4	33	3.8	58	10	.80	.55
1N973B	DO-7	S Zen	.4	33	3.8	58	5	.90	.60
1N973/JAN	DO-7	S Zen	.4	33	3.8	58	5	1.00	.65
1N974	DO-7	S Zen	.4	36	3.4	70	20	.80	.55
1N974A	DO-7	S Zen	.4	36	3.4	70	10	.85	.64
1N974B	DO-7	S Zen	.4	36	3.4	70	5	.90	.67
1N975	DO-7	S Zen	.4	39	3.2	80	20	.80	.60
1N975A	DO-7	S Zen	.4	39	3.2	80	10	.85	.64
1N975B	DO-7	S Zen	.4	39	3.2	80	5	.90	.67
1N976	DO-7	S Zen	.4	43	3.0	93	20	.80	.60
1N976A	DO-7	S Zen	.4	43	3.0	93	10	.85	.64
1N976B	DO-7	S Zen	.4	43	3.0	93	5	.90	.67
1N977	DO-7	S Zen	.4	47	2.7	105	20	.80	.60
1N977A	DO-7	S Zen	.4	47	2.7	105	10	.85	.64
1N977B	DO-7	S Zen	.4	47	2.7	105	5	.90	.67

Type	Case	Material Function	Dissi-pation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	10-99	100-Up
1N978	D0-7	S Zen	.4	51	2.5	125	20	.80	.60
1N978A	D0-7	S Zen	.4	51	2.5	125	10	.85	.64
1N978B	D0-7	S Zen	.4	51	2.5	125	5	.90	.67
1N979	D0-7	S Zen	.4	56	2.2	150	20	.80	.60
1N979A	D0-7	S Zen	.4	56	2.2	150	10	.85	.64
1N979B	D0-7	S Zen	.4	56	2.2	150	5	.90	.67
1N980	D0-7	S Zen	.4	62	2.0	185	20	.80	.60
1N980A	D0-7	S Zen	.4	62	2.0	185	10	.85	.64
1N980B	D0-7	S Zen	.4	62	2.0	185	5	.90	.67
1N981	D0-7	S Zen	.4	68	1.8	230	20	.80	.60
1N981B	D0-7	S Zen	.4	68	1.8	230	5	.85	.64
1N982	D0-7	S Zen	.4	75	1.7	270	20	.80	.60
1N982A	D0-7	S Zen	.4	75	1.7	270	10	.85	.64
1N984A	D0-7	S Zen	.4	91	1.4	400	10	.85	.64
1N985	D0-7	S Zen	.4	100	1.3	500	20	.80	.60
1N985A	D0-7	S Zen	.4	100	1.3	500	10	.85	.64
1N985B	D0-7	S Zen	.4	100	1.3	500	5	.90	.67
1N987	D0-7	S Zen	.4	120	1.0	900	20	.80	.60
1N987A	D0-7	S Zen	.4	120	1.0	900	10	.85	.64
1N987B	D0-7	S Zen	.4	120	1.0	900	5	.90	.67
1N988	D0-7	S Zen	.4	130	.95	1100	20	.80	.60
1N988A	D0-7	S Zen	.4	130	.95	1100	10	.85	.64
1N988B	D0-7	S Zen	.4	130	.95	1100	5	.90	.67
1N989A	D0-7	S Zen	.4	150	.85	1500	10	.85	.64
1N989B	D0-7	S Zen	.4	150	.85	1500	5	.90	.67
1N990	D0-7	S Zen	.4	160	.80	1700	20	.80	.60
1N990A	D0-7	S Zen	.4	160	.80	1700	10	.85	.64
1N992	D0-7	S Zen	.4	200	.65	2500	20	.80	.60
1N992A	D0-7	S Zen	.4	200	.65	2500	10	.85	.64
1N992B	D0-7	S Zen	.4	200	.65	2500	5	.90	.67

Type	Case	Material Function	Max. Peak Reverse Voltage	Reverse Current mA	Operat-ing Current Io Amps	EACH 1-9	10-99	100-Up
1N1081	SP-1	S Rect	100	....	1	1.03	.60	.49
1N1082	SP-1	S Rect	200	....	1	1.10	.65	.57
1N1083	SP-1	S Rect	300	....	1	1.20	.70	.56
1N1084	SP-1	S Rect	400	....	1	1.28	.75	.60
1N1085A	SP-2	S Rect	100	....	2	5.00	3.34	2.86
1N1086A	SP-2	S Rect	200	....	2	6.00	4.00	3.43
1N1088A	SP-2	S Rect	400	....	2	8.00	5.35	4.67
1N1095	D0-1	S Rect	500	.3	.750	.76	.76	.51
1N1096	D0-1	S Rect	600	.3	.750	.97	.97	.64
1N1100	D0-1	S Rect	100	.3	.750	.90	.90	.67
1N1108	SP-3	S Rect	800	....	.450	4.75	2.90	2.25
1N1109	SP-3	S Rect	1200	....	.425	6.00	4.00	3.43
1N1110	SP-3	S Rect	1600	....	.400	7.25	5.65	4.86
1N1111	SP-3	S Rect	2000	....	.375	8.50	6.50	5.57
1N1113	SP-3	S Rect	2800	....	.325	11.00	8.35	7.10
1N1115	D0-4	S Rect	100	.4	1.5	1.05	1.05	.70
1N1116	D0-4	S Rect	200	.3	1.5	1.12	1.12	.75
1N1117	D0-4	S Rect	300	.3	1.5	1.42	1.42	.95
1N1118	D0-4	S Rect	400	.3	1.5	1.72	1.72	1.10
1N1119	D0-4	S Rect	500	.3	1.5	1.80	1.80	1.20
1N1120	D0-4	S Rect	600	.3	1.5	2.40	2.40	1.60
1N1124A	D0-4	S Rect	200	.3	3.3	3.04	2.20	1.45
1N1125	D0-4	S Rect	300	.3	3.0	3.88	2.75	1.82
1N1125A	D0-4	S Rect	300	.3	3.3	3.88	2.75	1.82
1N1126A	D0-4	S Rect	400	.3	3.3	5.47	3.85	2.58
1N1135	D0-4	S Rect	1800	.025	.075	7.00	3.75	3.35
1N1137	SP-4	S Rect	2400	.025	.075	9.40	5.00	4.50
1N1140	SP-4	S Rect	3600	.025	.075	10.50	5.65	5.10
1N1142	SP-5	S Rect	4800	.025	.025	15.60	8.35	7.50
1N1150A	D0-5	S Rect	1600	1.0	.375	11.85	6.65	5.95
1N1183	D0-5	S Rect	50	2.5	35	2.75	1.95	1.30
1N1183A	D0-5	S Rect	50	2.5	40	3.25	1.86	1.36
1N1183RA	D0-5	s Rect	50	2.5	40	3.25	1.86	1.36
1N1184	D0-5	S Rect	100	2.5	35	3.38	2.19	1.60
1N1184A	D0-5	S Rect	100	2.5	40	3.38	2.19	1.60
1N1184RA	D0-5	S Rect	100	2.5	40	3.38	2.19	1.60
1N1185	D0-5	S Rect	150	2.5	35	4.13	2.90	1.95
1N1186	D0-5	S Rect	200	2.5	35	5.75	3.17	2.30
1N1186A	D0-5	S Rect	200	2.5	40	5.75	3.17	2.30
1N1186RA	D0-5	S Rect	200	2.5	40	5.75	3.17	2.30
1N1187	D0-5	S Rect	300	2.5	35	6.69	4.41	3.20
1N1187A	D0-5	S Rect	300	2.5	40	6.69	4.41	3.20
1N1188	D0-5	S Rect	400	2.5	35	8.19	5.88	4.08
1N1188A	D0-5	S Rect	400	2.5	40	8.19	5.88	4.08
1N1188RA	D0-5	S Rect	400	2.5	40	8.19	5.88	4.08
1N1189	D0-5	S Rect	500	2.5	35	9.93	6.55	4.76
1N1189A	D0-5	S Rect	500	2.0	40	9.93	6.55	4.76
1N1190	D0-5	S Rect	600	1.8	35	11.78	7.72	5.62
1N1190A	D0-5	S Rect	800	1.8	40	11.78	7.72	5.62
1N1190RA	D0-5	S Rect				11.78	7.72	5.62
1N1191	D0-5	S Rect	50	5.0	20	1.93	1.35	.90
1N1192	D0-5	S Rect	100	5.0	20	2.44	1.60	1.15
1N1193	D0-5	S Rect	150	5.0	20	3.00	2.00	1.40

Type	Case	Material Function	Max. Peak Reverse Voltage	Reverse Current mA	Operat-ing Current Io Amps	EACH 1-9	10-99	100-Up
1N1194	D0-5	S Rect	200	5.0	20	3.50	2.35	1.65
1N1195	D0-5	S Rect	300	5.0	20	4.83	3.18	2.32
1N1195A	D0-5	S Rect	300	3.2	20	4.83	3.18	2.32
1N1196	D0-5	S Rect	400	5.0	20	6.20	4.09	2.98
1N1196A	D0-5	S Rect	400	2.5	20	6.20	4.09	2.98
1N1197A	D0-5	S Rect	500	2.2	20	8.15	5.36	3.90
1N1198	D0-5	S Rect	600	5.0	20	8.75	5.78	4.20
1N1198A	D0-5	S Rect	600	1.5	20	8.75	5.78	4.20
1N1199A	D0-4	S Rect	50	3.0	12	1.66	1.09	.79
1N1199RA	D0-4	S Rect	50	3.0	12	1.66	1.09	.79
1N1200A	D0-4	S Rect	100	2.5	12	1.91	1.25	.91
1N1200RA	D0-4	S Rect	100	2.5	12	1.91	1.25	.91
1N1201	D0-4	S Rect	150	2.5	12	2.50	1.75	1.20
1N1201A	D0-4	S Rect	150	2.5	12	2.50	1.75	1.20
1N1202	D0-4	S Rect	200	2	12	3.50	2.28	1.66
1N1202A	D0-4	S Rect	200	2	12	3.50	2.28	1.66
1N1203	D0-4	S Rect	300	1.75	12	4.80	3.17	2.30
1N1203A	D0-4	S Rect	300	1.75	12	4.80	3.17	2.30
1N1203RA	D0-4	S Rect	300	1.75	12	4.80	3.17	2.30
1N1204	D0-4	S Rect	400	1.5	12	6.25	4.04	2.94
1N1204A	D0-4	S Rect	400	1.5	12	6.25	4.04	2.94
1N1204RA	D0-4	S Rect	400	1.5	12	6.25	4.04	2.94
1N1205	D0-4	S Rect	500	1.25	12	7.30	4.82	3.50
1N1205A	D0-4	S Rect	500	1.25	12	7.30	4.82	3.50
1N1206	D0-4	S Rect	600	1	12	8.60	5.66	4.12
1N1206A	D0-4	S Rect	600	1	12	8.60	5.66	4.12
1N1206RA	D0-4	S Rect	600	1	12	8.60	5.66	4.12
1N1238	D0-4	S Rect	1600	.025	.750	9.87	5.50	4.95
1N1341	D0-4	S Rect	50	4	650	1.70	1.12	.82
1N1341A	D0-4	S Rect	50	3	650	1.70	1.12	.82
1N1341B	D0-4	S rect	50	.45	650	1.70	1.12	.82
1N1342	D0-4	S Rect	100	4	650	1.84	1.22	.89
1N1342A	D0-4	S Rect	100	3	650	1.84	1.22	.89
1N1342B	D0-4	S Rect	100	2.5	650	1.84	1.22	.89
1N1343	D0-4	S Rect	150	4	6	2.12	1.55	1.00
1N1343A	D0-4	S Rect	150	2.25	6	2.12	1.55	1.00
1N1344	D0-4	S Rect	200	4	6Io	2.73	1.86	1.36
1N1344A	D0-4	S Rect	200	2	6	2.73	1.86	1.36
1N1344B	D0-4	S Rect	200	0.45	6	2.73	1.86	1.36
1N1345	D0-4	S Rect	300	4	6	4.15	2.74	1.99
1N1345A	D0-4	S Rect	300	1.75	6	4.15	2.74	1.99
1N1345B	D0-4	S Rect	300	0.45	6	4.15	2.74	1.99
1N1346	D0-4	S Rect	400	4	6	5.30	3.50	2.54
1N1346A	D0-4	S Rect	400	1.5	6	5.30	3.50	2.54
1N1346B	D0-4	S Rect	400	0.45	6Io	5.30	3.50	2.54
1N1347	D0-4	S Rect	500	4	6	6.39	4.21	3.06
1N1347A	D0-4	S Rect	500	1.25	6	6.39	4.21	3.06
1N1347B	D0-4	S Rect	500	0.45	6	6.39	4.21	3.06
1N1348	D0-4	S Rect	600	4	6	7.65	5.02	3.65
1N1348A	D0-4	S Rect	600	1	6	7.65	5.02	3.65
1N1348B	D0-4	S Rect	600	0.45	6	7.65	5.02	3.65
1N1487	D0-1	S Rect	100	0.4	.750	.49	.49	.33
1N1488	D0-1	S Rect	200	0.3	.750	.52	.52	.35
1N1489	D0-1	S Rect	300	.3	.750	.60	.60	.40
1N1490	D0-1	S Rect	400	.3	.750	.67	.67	.45
1N1491	D0-1	S Rect	500	.3	.750	.76	.76	.51
1N1492	D0-1	S Rect	600	.3	.750	.97	.97	.64

Type	Case	Material Function	Dissi-pation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	10-99	100-Up
1N1507	D0-13	S Zen	.75	3.9	35	15	10	4.37	2.75	2.10
1N1508	D0-13	S Zen	.75	4.7	30	13	10	4.37	2.75	2.10
1N1509	D0-13	S Zen	.75	5.6	26	11	10	4.37	2.75	2.10
1N1510	D0-13	S Zen	.75	6.8	22	3	10	4.37	2.75	2.10
1N1511	D0-13	S Zen	.75	8.2	18	3	10	4.37	2.75	2.10
1N1512	D0-13	S Zen	.75	10.0	15	3.2	10	4.37	2.75	2.10
1N1513	D0-13	S Zen	.75	12.0	12	12	10	4.37	2.75	2.10
1N1513A	D0-13	S Zen	.75	12.0	12	12	5	5.63	3.45	2.65
1N1514	D0-13	S Zen	.75	15.0	10	10.5	10	4.37	2.75	2.10
1N1515	D0-13	S Zen	.75	18.0	8	16	10	4.37	2.75	2.10
1N1516	D0-13	S Zen	.75	22.0	6	40	10	4.37	2.75	2.10
1N1517	D0-13	S Zen	.75	27.0	5	82	10	4.37	2.75	2.10
1N1518	D0-13	S Zen	1.0	3.9	50	10	10	4.50	2.75	2.10
1N1519	D0-13	S Zen	1.0	4.7	40	8.5	10	4.50	2.75	2.10
1N1519A	D0-13	S Zen	1.0	4.7	40	8.5	5	5.75	3.50	2.75
1N1520	D0-13	S Zen	1.0	5.6	35	5.5	10	4.50	2.75	2.10
1N1521	D0-13	S Zen	1.0	6.8	30	1.6	10	4.50	2.75	2.10
1N1522	D0-13	S Zen	1.0	8.2	25	1.1	10	4.50	2.75	2.10
1N1523	D0-13	S Zen	1.0	10	20	1.5	10	4.50	2.75	2.10
1N1524	D0-13	S Zen	1.0	12	15	2.4	10	4.50	2.75	2.10
1N1525	D0-13	S Zen	1.0	15	13	5.4	10	4.50	2.75	2.10
1N1526	D0-13	S Zen	1.0	18	10	11.0	10	4.50	2.75	2.10
1N1527	D0-13	S Zen	1.0	22	9	18.0	10	4.50	2.75	2.10
1N1528	D0-13	S Zen	1.0	27	7	28.0	10	4.50	2.75	2.10
1N1530	SP-7	SZTC	1.0	8.4	....	....	*.002/5	15.60	15.60	12.40
1N1588	D0-4	S Zen	3.5	3.9	....	....	10	6.50	3.80	3.05

See Page 28 for Explanation of Abbreviations and Symbols

SEE PAGE 12 FOR INTEGRATED CIRCUITS

Type	Case	Material Function	Dissipation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	10-99	100-Up
1N1589	D0-4	S Zen	3.5	4.7	....	....	10	6.50	3.80	3.05
1N1590A	D0-4	S Zen	3.5	5.6	....	....	5	7.75	4.55	3.65
1N1591	D0-4	S Zen	3.5	6.8	....	....	10	6.50	3.80	3.05
1N1591A	D0-4	S Zen	3.5	6.8	....	....	5	7.75	4.55	3.65
1N1592	D0-4	S Zen	3.5	8.2	....	....	10	6.50	3.80	3.05
1N1593A	D0-4	S Zen	3.5	10.0	....	....	5	7.75	4.55	3.65
1N1594	D0-4	S Zen	3.5	12.0	....	....	10	6.50	3.80	3.05
1N1594A	D0-4	S Zen	3.5	12.0	....	....	5	7.75	4.55	3.65
1N1595	D0-4	S Zen	3.5	15.0	....	....	10	6.50	3.80	3.05
1N1595A	D0-4	S Zen	3.5	15.0	....	....	5	7.75	4.55	3.65
1N1596	D0-4	S Zen	3.5	18.0	....	....	10	6.50	3.80	3.05
1N1597	D0-4	S Zen	3.5	22.0	....	....	10	6.50	3.80	3.05
1N1598	D0-4	S Zen	3.5	27.0	....	....	10	6.50	3.80	3.05
1N1599	D0-4	S Zen	10.0	3.9	500	1.5	10	10.10	5.95	4.75
1N1600	D0-4	S Zen	10.0	4.7	400	.9	10	10.10	5.95	4.75
1N1600A	D0-4	S Zen	10.0	4.7	400	.9	5	13.50	8.00	6.40
1N1601	D0-4	S Zen	10.0	5.6	350	.6	10	10.10	5.95	4.75
1N1601A	D0-4	S Zen	10.0	5.6	350	.6	5	13.50	8.00	6.40
1N1602	D0-4	S Zen	10.0	6.8	300	.4	10	10.10	5.95	4.75
1N1602A	D0-4	S Zen	10.0	6.8	300	.4	5	13.50	8.00	6.40
1N1604	D0-4	S Zen	10	10	200	1.0	10	10.10	5.95	4.75
1N1604A	D0-4	S Zen	10	10	200	1.0	5	13.50	8.00	6.40
1N1605	D0-4	S Zen	10	12	170	2.0	10	10.10	5.95	4.75
1N1605A	D0-4	S Zen	10	12	170	2.0	5	13.50	8.00	6.40
1N1606	D0-4	S Zen	10	15	140	2.9	10	10.10	5.95	4.75
1N1606A	D0-4	S Zen	10	15	140	2.9	5	13.50	8.00	6.40
1N1608	D0-4	S Zen	10	22	90	6.0	10	10.10	5.95	4.75
1N1608A	D0-4	S Zen	10	22	90	6.0	5	13.50	8.00	6.40
1N1609	D0-4	S Zen	10	27	70	10.0	10	10.10	5.95	4.75

Type	Case	Material Function	Max. Peak Reverse Voltage	Reverse Current mA	Operating Current Io Amps	EACH 1-9	10-99	100-Up
1N1612	D0-4	S Rect	50	1	5	1.07	1.07	.72
1N1612R	D0-4	S Rect	50	1	5	1.48	.97	.71
1N1613	D0-4	S rect	100	1	5	1.20	1.20	.80
1N1613R	D0-4	S Rect	100	1	5	1.67	1.11	.80
1N1614	D0-4	S Rect	200	1	5	1.87	1.87	1.25
1N1614R	D0-4	S Rect	200	1	5	2.60	1.72	1.25
1N1615	D0-4	S Rect	400	1	5	3.71	3.71	2.48
1N1615R	D0-4	S Rect	400	1	5	5.20	3.43	2.50
1N1616	D0-4	S Rect	400	1	5	5.36	5.36	3.50
1N1621	SP22	S Rect	100	....	10	3.38	2.30	1.85
1N1622	SP22	S Rect	200	....	10	4.20	2.90	2.24
1N1624	SP22	S Rect	400	....	10	6.35	4.35	3.24
1N1694	D0-3	S Rect	300	.5	.25	.60	.60	.40
1N1731	SP18	S Rect	1500	.1	.35	5.25	2.95	2.50
1N1732	SP19	S Rect	2000	.1	.35	7.35	4.10	3.50
1N1733	SP19	S Rect	3000	.1	.3	10.60	7.30	5.00
1N1734	SP20	S Rect	5000	.1	.3	15.95	9.80	7.50
1N1735	SP-8	S ZTC	V_Z6.2- - I_{ZT} 7.5 - 30 Z_{ZT} - *.01210			8.40	4.65	3.95
1N1736	SP-8	S ZTC	V_Z12.4- - I_{ZT} 7.5 - 40 Z_{ZT} - *.01210			11.75	6.52	5.55
1N1736A	SP-8	S RectS ZTC	V_Z12.4- - I_{ZT} 7.5 - 40 Z_{ZT} - *.00525			16.80	10.45	8.05
1N1738A	SP-8	S ZTC	V_Z24.8- - I_{ZT} 7.5 - 80 Z_{ZT} - *.00525			25.75	16.10	12.10
1N1763A	SP-13	S Rect	400	.5	1	.625	.42	.30
1N1764A	SP-13	S Rect	500	.5	1	.765	.52	.38

Type	Case	Material Function	Dissipation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-99	100 Up
1N1765	D0-13	SZen		5.6	100	1.2	10	2.55	2.05
1N1766	D0-13	S Zen	1	6.2	100	1.5	10	2.55	2.05
1N1767	D0-13	S Zen	1	6.8	100	1.7	10	2.55	2.05
1N1768	D0-13	S Zen	1	7.5	100	2.1	10	2.55	2.05
1N1769	D0-13	S Zen	1	8.2	100	2.4	10	2.55	2.05
1N1770	D0-13	S Zen	1	9.1	50	3.0	10	2.55	2.05
1N1771	D0-13	S Zen	1	10.0	50	3.5	10	2.55	2.05
1N1772	D0-13	S Zen	1	11.0	50	4.2	10	2.55	2.05
1N1773	D0-13	S Zen	1	12.0	50	5.0	10	2.55	2.05
1N1774	D0-13	S Zen	1	13.0	50	5.8	10	2.55	2.05
1N1775	D0-13	S Zen	1	15.0	50	7.6	10	2.55	2.05
1N1776	D0-13	S Zen	1	16.0	50	8.6	10	2.55	2.05
1N1826	D0-4	S Zen	10	36.0	150	5.0	10	5.10	4.50
1N1832	D0-4	S Zen	10	62.0	50	12.0	10	5.10	4.50
1N1833	D0-4	S Zen	10	68.0	50	14.0	10	5.10	4.50
1N1835	D0-4	S Zen	10	82.0	50	22.0	10	5.10	4.50

Type	Case	Material Function	Max. Peak Reverse Voltage	Reverse Current mA	Operating Current Io Amps	EACH 1-9	10-99	100-Up
1N2069	D0-7	S Rect	200	.01	.75	.45	.45	.29
1N2070	D0-7	S Rect	400	.01	.75	.55	.55	.33
1N2071	D0-7	S Rect	600	.01	.75	.62	.62	.42
1N2128A	D0-5	S Rect	50	10	60	3.60	3.60	2.60
1N2129A	D0-5	S Rect	100	10	60	3.80	3.80	2.70
1N2130A	D0-5	S Rect	150	10	60	4.50	4.50	3.18
1N2131A	D0-5	S Rect	200	10	60	5.05	5.05	3.53
1N2132A	D0-5	S Rect	250	10	60	8.40	5.60	3.96
1N2133A	D0-5	S Rect	300	10	60	9.25	6.15	4.36
1N2134A	D0-5	S Rect	350	10	60	10.05	6.70	4.74
1N2135A	D0-5	S Rect	400	10	60	10.85	7.25	5.12
1N2136A	D0-5	S Rect	450	10	60	11.70	7.85	5.55
1N2137A	D0-5	S Rect	500	10	60	12.60	8.40	5.95
1N2138A	D0-5	S Rect	600	10	60	13.00	9.50	6.70
1N2154	D0-5	S Rect	50	5	25	5.17	5.17	3.53
1N2155	D0-5	S Rect	100	4.5	25	7.75	7.75	4.65
1N2156	D0-5	S Rect	200	4.0	60	11.10	11.10	6.68
1N2157	D0-5	S Rect	300	3.5	60	15.00	15.00	9.00
1N2158	D0-5	S Rect	400	3.0	60	17.75	17.75	10.65
1N2159	D0-5	S Rect	500	2.5	60	24.80	24.80	14.85
1N2160	D0-5	S Rect	600	2.0	60	38.95	38.95	14.85
1N2175	SP-30	SIL Photo Diode I_R Dark 0.5 mA Sen 0.22 ua/mw				6.00	6.00	4.00
1N2326	SP11	GSD	V_R=1	V_F=.15	I_F=2ua	.83	.55	.40
1N2389	SP32	S Rect	1600	.5	.6	7.00	3.50	3.00
1N2490	SP31	S Rect	1600	.5	.5	11.13	6.20	5.55
1N2610	SP33	S Rect	100	.01	.75	.85	.55	.40
1N2611	SP33	S Rect	200	.01	.75	.93	.62	.45
1N2612	SP33	S Rect	300	.01	.75	1.05	.70	.50
1N2613	SP33	S Rect	400	.01	.75	1.17	.79	.56
1N2614	SP33	S Rect	500	.01	.75	1.35	.89	.63
1N2615	SP33	S Rect	600	.01	.75	1.47	1.00	.70
1N2630	SP35	Plug In Tube Replacement 6X4, 12X4				11.10	6.25	5.55
1N2631	SP36	Plug In Tube Replacement 5V3, 5U4				9.90	5.50	4.95
1N2633	SP37	Plug In Tube Replacement 0Z4, 6X5, 6AX				9.90	5.50	4.95
1N2637	SP38	Plug In Tube Replacement 866, 3B28				17.30	9.65	

Type	Case	Material Function	Dissipation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	10-99	100-Up
1N2804	T0-3	S Zen	50	6.8	1850	.2	20	5.32	3.35	2.50
1N2804A	T0-3	S Zen	50	6.8	1850	.2	10	7.75	4.50	3.30
1N2804B	T0-3	S Zen	50	6.8	1850	.2	5	10.00	6.30	4.70
1N2805	T0-3	S Zen	50	7.5	1700	.3	20	5.32	3.35	2.50
1N2805A	T0-3	S Zen	50	7.5	1700	.3	10	7.75	4.50	3.30
1N2805B	T0-3	S Zen	50	7.5	1700	.3	5	10.00	6.30	4.70
1N2806	T0-3	S Zen	50	8.2	1500	.4	20	5.32	3.35	2.50
1N2806A	T0-3	S Zen	50	8.2	1500	.4	10	7.75	4.50	3.30
1N2806B	T0-3	S Zen	50	8.2	1500	.4	5	10.00	6.30	4.70
1N2807	T0-3	S Zen	50	9.1	1370	.5	20	5.32	3.35	2.50
1N2807A	T0-3	S Zen	50	9.1	1370	.5	10	7.75	4.50	3.30
1N2807B	T0-3	S Zen	50	9.1	1370	.5	5	10.00	6.30	4.70
1N2808	T0-3	S Zen	50	10.0	1200	.6	20	5.32	3.35	2.50
1N2808A	T0-3	S Zen	50	10.0	1200	.6	10	7.75	4.50	3.30
1N2808B	T0-3	S Zen	50	10.0	1200	.6	5	10.00	6.30	4.70
1N2809	T0-3	S Zen	50	11.0	1100	.8	20	5.32	3.35	2.50
1N2809A	T0-3	S Zen	50	11.0	1100	.8	10	7.75	4.50	3.30
1N2809B	T0-3	S Zen	50	11.0	1100	.8	5	10.00	6.30	4.70
1N2810	T0-3	S Zen	50	12.0	1000	1.0	20	5.32	3.35	2.50
1N2810A	T0-3	S Zen	50	12.0	1000	1.0	10	7.75	4.50	3.30
1N2810B	T0-3	S Zen	50	12.0	1000	1.0	5	10.00	6.30	4.70
1N2811	T0-3	S Zen	50	13.0	960	1.1	20	5.32	3.35	2.50
1N2811A	T0-3	S Zen	50	13.0	960	1.1	10	7.75	4.50	3.30
1N2811B	T0-3	S Zen	50	13.0	960	1.1	5	10.00	6.30	4.70
1N2813	T0-3	S Zen	50	14.0	890	1.2	20	5.32	3.35	2.50
1N2813A	T0-3	S Zen	50	14.0	890	1.2	10	7.75	4.50	3.30
1N2813B	T0-3	S Zen	50	14.0	890	1.2	5	10.00	6.30	4.70
1N2816	T0-3	S Zen	50	18	700	2.0	20	5.32	3.35	2.50
1N2816A	T0-3	S Zen	50	18	700	2.0	10	7.75	4.50	3.30
1N2816B	T0-3	S Zen	50	18	700	2.0	5	10.00	6.30	4.70
1N2817	T0-3	S Zen	50	19	660	2.2	20	5.32	3.35	2.50
1N2817A	T0-3	S Zen	50	19	660	2.2	10	7.75	4.50	3.30
1N2817B*	T0-3	S Zen	50	19	*660	2.2	5	10.00	6.30	4.70
1N2818	T0-3	S Zen	50	20	630	2.4	20	5.32	3.35	2.50
1N2818A	T0-3	S Zen	50	20	630	2.4	10	7.75	4.50	3.30
1N2818B	T0-3	S Zen	50	20	630	2.4	5	10.00	6.30	4.70
1N2819	T0-3	S Zen	50	22	570	2.5	20	5.32	3.35	2.50
1N2819A	T0-3	S Zen	50	22	570	2.5	10	7.75	4.50	3.30
1N2819B	T0-3	S Zen	50	22	570	2.5	5	10.00	6.30	4.70
1N2820	T0-3	S Zen	50	24	520	2.6	20	5.32	3.35	2.50
1N2820A	T0-3	S Zen	50	24	520	2.6	10	7.75	4.50	3.30
1N2820B	T0-3	S Zen	50	24	520	2.6	5	10.00	6.30	4.70
1N2821	T0-3	S Zen	50	25	500	2.7	20	5.32	3.35	2.50
1N2821A	T0-3	S Zen	50	25	500	2.7	10	7.75	4.50	3.30
1N2821B	T0-3	S Zen	50	25	500	2.7	5	10.00	6.30	4.70

Type	Case	Material Function	Dissipation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	EACH 10-99	EACH 100-Up
1N2822	T0-3	S Zen	50	27	460	2.8	20	5.32	3.35	2.50
1N2822A	T0-3	S Zen	50	27	460	2.8	10	7.75	4.50	3.30
1N2822B	T0-3	S Zen	50	27	460	2.8	5	10.00	6.30	4.70
1N2824	T0-3	S Zen	50	33	380	3.2	20	5.32	3.35	2.50
1N2824A	T0-3	S Zen	50	33	380	3.2	10	7.75	4.50	3.30
1N2824B	T0-3	S Zen	50	33	380	3.2	5	10.00	6.30	4.70
1N2825	T0-3	S Zen	50	36	350	3.5	20	5.32	3.35	2.50
1N2825A	T0-3	S Zen	50	36	350	3.5	10	7.75	4.50	3.30
1N2825B	T0-3	S Zen	50	36	350	3.5	5	10.00	6.30	4.70
1N2826	T0-3	S Zen	50	39	320	4.0	20	5.32	3.35	2.50
1N2826A	T0-3	S Zen	50	39	320	4.0	10	7.75	4.50	3.30
1N2826B	T0-3	S Zen	50	39	320	4.0	5	10.00	6.30	4.70
1N2828	T0-3	S Zen	50	45	280	4.5	20	5.32	3.35	2.50
1N2828A	T0-3	S Zen	50	45	280	4.5	10	7.75	4.50	3.30
1N2828B	T0-3	S Zen	50	45	280	4.5	5	10.00	6.30	4.70
1N2829	T0-3	S Zen	50	47	270	5.0	20	5.32	3.35	2.50
1N2829A	T0-3	S Zen	50	47	270	5.0	10	7.75	4.50	3.30
1N2829B	T0-3	S Zen	50	47	270	5.0	5	10.00	6.30	4.70
1N2830	T0-3	S Zen	50	50	250	5.0	20	5.32	3.35	2.50
1N2830A	T0-3	S Zen	50	50	250	5.0	10	7.75	4.50	3.30
1N2830B	T0-3	S Zen	50	50	250	5.0	5	10.00	6.30	4.70
1N2831	T0-3	S Zen	50	51	245	5.2	20	5.32	3.35	2.50
1N2831A	T0-3	S Zen	50	51	245	5.2	10	7.75	4.50	3.30
1N2831B	T0-3	S Zen	50	51	245	5.2	5	10.00	6.30	4.70
1N2833	T0-3	S Zen	50	62	200	7.0	20	5.32	3.35	2.50
1N2833A	T0-3	S Zen	50	62	200	7.0	10	7.75	4.50	3.30
1N2833B	T0-3	S Zen	50	62	200	7.0	5	10.00	6.30	4.70
1N2834	T0-3	S Zen	50	68	180	8.0	20	5.32	3.35	2.50
1N2834A	T0-3	S Zen	50	68	180	8.0	10	7.75	4.50	3.30
1N2834B	T0-3	S Zen	50	68	180	8.0	5	10.00	6.32	4.70
1N2835	T0-3	S Zen	50	75	170	9.0	20	5.32	3.35	2.50
1N2835A	T0-3	S Zen	50	75	170	9.0	10	7.75	4.50	3.30
1N2835B	T0-3	S Zen	50	75	170	9.0	5	10.00	6.32	4.70
1N2838	T0-3	S Zen	50	100	120	20.0	20	5.32	3.35	2.50
1N2838A	T0-3	S Zen	50	100	120	20.0	10	7.75	4.50	3.30
1N2838B	T0-3	S Zen	50	100	120	20.0	5	10.00	6.32	4.70
1N2839	T0-3	S Zen	50	105	120	25.0	20	7.25	4.10	3.05
1N2839A	T0-3	S Zen	50	105	120	25.0	10	10.84	6.75	5.10
1N2839B	T0-3	S Zen	50	105	120	25.0	5	17.23	10.75	8.10
1N2840	T0-3	S Zen	50	110	110	30	20	7.25	4.10	3.05
1N2840A	T0-3	S Zen	50	110	110	30	10	10.84	6.75	5.10
1N2840B	T0-3	S Zen	50	110	110	30	5	17.23	10.75	8.10
1N2841	T0-3	S Zen	50	120	100	40	20	7.25	4.10	3.05
1N2841A	T0-3	S Zen	50	120	100	40	10	10.84	6.75	5.10
1N2841B	T0-3	S Zen	50	120	100	40	5	17.23	10.75	8.10
1N2842	T0-3	S Zen	50	130	95	50	20	7.25	4.10	3.05
1N2842A	T0-3	S Zen	50	130	95	50	10	10.84	6.75	5.10
1N2842B	T0-3	S Zen	50	130	95	50	5	17.23	10.75	8.10
1N2843	T0-3	S Zen	50	150	85	75	20	7.25	4.10	3.05
1N2843A	T0-3	S Zen	50	150	85	75	10	10.84	6.75	5.10
1N2843B	T0-3	S Zen	50	150	85	75	5	17.23	10.75	8.10
1N2846	T0-3	S Zen	50	200	65	100	20	7.25	4.10	3.05
1N2846A	T0-3	S Zen	50	200	65	100	20	10.84	6.75	5.10
1N2846B	T0-3	S Zen	50	200	65	100	5	17.23	10.75	8.10
1N2858A	D0-1	S Rect	....	V_R 50	I_R .3	1A Io	....	.50	.33	.24
1N2859A	D0-1	S Rect	....	V_R 100	I_R .3	1A Io	....	.55	.37	.27
1N2860A	D0-1	S Rect	....	V_R 200	I_R .3	1A Io	....	.60	.40	.29
1N2861A	D0-1	S Rect	....	V_R 300	I_R .3	Io 1	....	.625	.42	.30
1N2862A	D0-1	S Rect	....	V_R 400	I_R .3	1A Io	....	.725	.48	.35

Type	Case	Material Function	Dissipation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-99	EACH 100 Up
1N2863A	D0-1	S Rect	....	V_R 500	I_R.3	1A Io	....	.58	.42
1N2864A	D0-1	S Rect	....	V_R 600	I_R.3	1A Io	....	.70	.51
1N2970	D0-4	S Zen	10	6.8	370	1.2	20	3.60	2.40
1N2970A	D0-4	S Zen	10	6.8	370	1.2	10	3.98	2.65
1N2970B	D0-4	S Zen	10	6.8	370	1.2	5	4.95	3.30
1N2971	D0-4	S Zen	10	7.5	335	1.3	20	3.60	2.40
1N2971A	D0-4	S Zen	10	7.5	335	1.3	10	3.98	2.65
1N2971B	D0-4	S Zen	10	7.5	335	1.3	5	4.95	3.30
1N2972	D0-4	S Zen	10	8.2	305	1.5	20	3.60	2.40
1N2972A	D0-4	S Zen	10	8.2	305	1.5	10	3.98	2.65
1N2972B	D0-4	S Zen	10	8.2	305	1.5	5	4.95	3.30
1N2973	D0-4	S Zen	10	9.1	275	2.0	20	3.60	2.40
1N2973A	D0-4	S Zen	10	9.1	275	2.0	10	3.98	2.65
1N2973B	D0-4	S Zen	10	9.1	275	2.0	5	4.95	3.30
1N2974	D0-4	S Zen	10	10	250	3	20	3.60	2.40
1N2974A	D0-4	S Zent	10	10	250	3	10	3.98	2.65
1N2974B	D0-4	S Zen	10	10	250	3	5	4.95	3.30
1N2975	D0-4	S Zen	10	11	230	3	20	3.60	2.40
1N2975A	D0-4	S Zen	10	11	230	3	10	3.98	2.65
1N2975B	D0-4	S Zen	10	11	230	3	5	4.95	3.30
1N2976	D0-4	S Zen	10	12	210	3	20	3.60	2.65
1N2976A	D0-4	S Zen	10	12	210	3	10	3.98	2.65
1N2976B	D0-4	S Zen	10	12	210	3	5	4.95	3.30
1N2977	D0-4	S Zen	10	13	190	3	20	3.60	2.65

Type	Case	Material Function	Dissipation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-99	EACH 100 Up
1N2977A	D0-4	S Zen	10	13	190	3	10	3.98	2.65
1N2977B	D0-4	S Zen	10	13	190	3	5	4.95	3.30
1N2978	D0-4	S Zen	10	14	180	3	20	3.60	2.65
1N2978A	D0-4	S Zen	10	14	180	3	10	3.98	2.65
1N2978B	D0-4	S Zen	10	14	180	3	5	4.95	3.30
1N2979	D0-4	S Zen	10	15	170	3	20	3.60	2.65
1N2979A	D0-4	S Zen	10	15	170	3	10	3.98	2.65
1N2979B	D0-4	S Zen	10	15	170	3	5	4.95	3.30
1N2980	D0-4	S Zen	10	16	155	4	20	3.60	2.40
1N2980A	D0-4	S Zen	10	16	155	4	10	3.98	2.65
1N2980B	D0-4	S Zen	10	16	155	4	5	4.95	3.30
1N2982	D0-4	S Zen	10	18	140	4	20	3.60	2.40
1N2982A	D0-4	S Zen	10	18	140	4	10	3.98	2.65
1N2982B	D0-4	S Zen	10	18	140	4	5	4.95	3.30
1N2984	D0-4	S Zen	10	20	125	4	20	3.60	2.40
1N2984A	D0-4	S Zen	10	20	125	4	10	3.98	2.65
1N2984B	D0-4	S zen	10	20	125	4	5	4.95	3.30
1N2985	D0-4	S Zen	10	22	115	5	20	3.60	2.40
1N2985A	D0-4	S Rect	10	22	115	5	10	3.98	2.65
1N2985B	D0-4	S Zen	10	22	115	5	5	4.95	3.30
1N2986	D0-4	S Zen	10	24	105	5	20	3.60	2.40
1N2986A	D0-4	S Zen	10	24	105	5	10	3.98	2.65
1N2986B	D0-4	S Zen	10	24	105	5	5	4.95	3.30
1N2987	D0-4	S Zen	10	25	100	5	20	3.60	2.40
1N2987A	D0-4	S Zen	10	25	100	5	10	3.98	2.65
1N2987B	D0-4	S Zen	10	25	100	5	5	4.95	3.30
1N2988	D0-4	S Zen	10	27	95	7	20	3.60	2.40
1N2988A	D0-4	S Zen	10	27	95	7	10	3.98	2.65
1N2988B	D0-4	S Zen	10	27	95	7	5	4.95	3.30
1N2989	D0-4	S Zen	10	30	85	8	20	3.60	2.40
1N2989A	D0-4	S Zen	10	30	85	8	10	3.98	2.65
1N2989B	D0-4	S Zen	10	30	85	8	5	4.95	3.30
1N2990	D0-4	S Zen	10	33	75	9	20	3.60	2.40
1N2990A	D0-4	S Zen	10	33	75	9	10	3.98	2.65
1N2990B	D0-4	S Zen	10	33	75	9	5	4.95	3.30
1N2991	D0-4	S Zen	10	36	70	10	20	3.60	2.40
1N2991A	D0-4	S Zen	10	36	70	10	10	3.98	2.65
1N2991B	D0-4	S Zen	10	36	70	10	5	4.95	3.30
1N2992	D0-4	S Zen	10	39	65	11	20	3.60	2.40
1N2992A	D0-4	S Zen	10	39	65	11	10	3.98	2.65
1N2992B	D0-4	S Zen	10	39	65	11	5	4.95	3.30
1N2993	D0-4	S Zen	10	43	60	12	20	3.60	2.40
1N2993A	D0-4	S Zen	10	43	60	12	10	3.98	2.65
1N2993B	D0-4	S Zen	10	43	60	12	5	4.95	3.30
1N2994	D0-4	S Zen	10	45	55	13	20	3.60	2.40
1N2994A	D0-4	S Zen	10	45	55	13	10	3.98	2.65
1N2994B	D0-4	S Zen	10	45	55	13	5	4.95	3.30
1N2995	D0-4	S Zen	10	47	55	14	20	3.60	2.40
1N2995A	D0-4	S Zen	10	47	55	14	10	3.98	2.65
1N2995B	D0-4	S Zen	10	47	55	14	5	4.95	3.30
1N2996	D0-4	S Zen	10	50	50	15	20	3.60	2.40
1N2996A	D0-4	S Zen	10	50	50	15	10	3.98	2.65
1N2996B	D0-4	S Zen	10	50	50	15	5	4.95	3.30
1N2997	D0-4	S Zen	10	51	50	15	20	3.60	2.40
1N2997A	D0-4	S Zen	10	51	50	15	10	3.98	2.65
1N2997B	D0-4	S Zen	10	51	50	15	5	4.95	3.30
1N2998	D0-4	S Zen	10	52	45	16	20	3.60	2.40
1N2998A	D0-4	S Zen	10	52	45	16	10	3.98	2.65
1N2998B	D0-4	S Zen	10	52	45	16	5	4.95	3.30
1N2999	D0-4	S Zen	10	56	45	16	20	3.60	2.40
1N2999A	D0-4	S Zen	10	56	45	16	10	3.98	2.65
1N2999B	D0-4	S Zen	10	56	45	16	5	4.95	3.30
1N3002	D0-4	S Zen	10	75	33	22	20	3.60	2.40
1N3002A	D0-4	S Zen	10	75	33	22	10	3.98	2.65
1N3002B	D0-4	S Zen	10	75	33	22	5	4.95	3.30
1N3003	D0-4	S Zen	10	82	30	25	20	3.60	2.40
1N3003A	D0-4	S Zen	10	82	30	25	10	3.98	2.65
1N3003B	D0-4	S Zen	10	82	30	25	5	4.95	3.30
1N3004	D0-4	S Zen	10	91	28	35	20	3.60	2.40
1N3004A	D0-4	S Zen	10	91	28	35	10	3.98	2.65
1N3004B	D0-4	S Zen	10	91	28	35	5	4.95	3.30
1N3005	D0-4	S Zen	10	100	25	40	20	3.60	2.40
1N3005A	D0-4	S Zen	10	100	25	40	10	3.98	2.65
1N3005B	D0-4	S Zen	10	100	25	40	5	4.95	3.30
1N3006	D0-4	S Zen	10	105	24	50	20	3.60	2.40
1N3006A	D0-4	S Zen	10	105	24	50	10	3.98	2.65
1N3006B	D0-4	S Zen	10	105	24	50	5	4.95	3.30
1N3007	D0-4	S Zen	10	110	23	55	20	3.60	2.40
1N3007A	D0-4	S Zen	10	110	23	55	10	3.98	2.65
1N3007B	D0-4	S Zen	10	110	23	55	5	4.95	3.30
1N3008	D0-4	S Zen	10	120	20	75	20	3.60	2.40
1N3008A	D0-4	S Zen	10	120	20	75	10	3.98	2.65
1N3008B	D0-4	S Zen	10	120	20	75	5	4.95	3.30
1N3009	D0-4	S Zen	10	130	19	100	20	3.60	2.40
1N3009A	D0-4	S Zen	10	130	19	100	10	3.98	2.65
1N3009B	D0-4	S Zen	10	130	19	100	5	4.95	3.30
1N3011	D0-4	S Zen	10	150	17	175	20	3.60	2.40
1N3011A	D0-4	S Zen	10	150	17	175	10	3.98	2.65
1N3011B	D0-4	S Zen	10	150	17	175	5	4.95	3.30
1N3013	D0-4	S Zen	10	175	15	230	20	3.40	2.70

 SEE PAGE 12 FOR INTEGRATED CIRCUITS

Type	Case	Material Function	Dissi-pation Watts	Zenner Volt-age Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-99	EACH 100 Up
1N3013A	D0-4	S Zen	10	175	15	230	10	4.90	3.90
1N3013B	D0-4	S Zen	10	175	15	230	5	6.50	5.40
1N3014	D0-4	S Zen	10	180	14	260	20	3.40	2.70
1N3014A	D0-4	S Zen	10	180	14	260	10	4.90	3.90
1N3014B	D0-4	S Zen	10	180	14	260	5	6.50	5.40
1N3015	D0-4	S Zen	10	200	12	300	20	3.40	2.70
1N3015A	D0-4	S Zen	10	200	12	300	10	4.90	3.90
1N3015B	D0-4	S Zen	10	200	12	300	5	6.50	5.40
1N3016	D0-13	S Zen	1	6.8	37	3.5	20	3.40	2.70
1N3016A	D0-13	S Zen	1	6.8	37	3.5	10	4.90	3.90
1N3016B	D0-13	S Zen	1	6.8	37	3.5	5	6.50	5.40
1N3017	D0-13	S Zen	1	7.5	34	4.0	20	2.45	1.95
1N3017A	D0-13	S Zen	1	7.5	37	4.0	10	2.76	2.15
1N3017B	D0-13	S Zen	1	7.5	37	4.0	5	3.20	2.25
1N3018	D0-13	S Zen	1	8.2	31	4.5	20	2.45	1.95
1N3018A	D0-13	S Zen	1	8.2	31	4.5	10	2.76	2.15
1N3018B	D0-13	S Zen	1	8.2	31	4.5	5	3.20	2.25
1N3019	D0-13	S Zen	1	9.1	28	5.0	20	2.45	1.95
1N3019A	D0-13	S Zen	1	9.1	28	5.0	10	2.76	2.15
1N3019B	D0-13	S Zen	1	9.1	28	5.0	5	3.20	2.25
1N3020	D0-13	S Zen	1	10.0	25	7.0	20	2.45	1.95
1N3020A	D0-13	S Zen	1	10.0	25	7.0	10	2.76	2.15
1N3020B	D0-13	S Zen	1	10.0	25	7.0	5	3.20	2.25
1N3021	D0-13	S Zen	1	11.0	23	8.0	20	2.45	1.95
1N3021A	D0-13	S Zen	1	11.0	23	8.0	10	2.76	2.15
1N3021B	D0-13	S Zen	1	11.0	23	8.0	5	3.20	2.25
1N3022	D0-13	S Zen	1	12.0	21	9.0	20	2.45	1.95
1N3022A	D0-13	S Zen	1	12.0	21	9.0	10	2.76	2.15
1N3022B	D0-13	S Zen	1	12.0	21	9.0	5	3.20	2.25
1N3023	D0-13	S Zen	1	13	19	10	20	2.45	1.95
1N3023A	D0-13	S Zen	1	13	19	10	10	2.76	2.15
1N3023B	D0-13	S Zen	1	13	19	10	5	3.20	2.25
1N3024	D0-13	S Zen	1	15	17	14	20	2.45	1.95
1N3024A	D0-13	S Zen	1	15	17	14	10	2.76	2.15
1N3024B	D0-13	S Zen	1	15	17	14	5	3.20	2.25
1N3025	D0-13	S Zen	1	16	15.5	16	20	2.45	1.95
1N3025A	D0-13	S Zen	1	16	15.5	16	10	2.76	2.15
1N3025B	D0-13	S Zen	1	16	15.5	16	5	3.20	2.25
1N3026	D0-13	S Zen	1	18	14	20	20	2.45	1.95
1N3026A	D0-13	S Zen	1	18	14	20	10	2.76	2.15
1N3026B	D0-13	S Zen	1	18	14	20	5	3.20	2.25
1N3027	D0-13	S Zen	1	20	12.5	22	20	2.45	1.95
1N3027A	D0-13	S Zen	1	20	12.5	22	10	2.76	2.15
1N3027B	D0-13	S Zen	1	20	12.5	22	5	3.20	2.25
1N3027B/JAN	D0-13	S Zen	1	20	12.5	22	5	3.40	2.25
1N3028	D0-13	S Zen	1	22	11.5	23	20	2.45	1.95
1N3028A	D0-13	S Zen	1	22	11.5	23	10	2.76	2.15
1N3028B	D0-13	S Zen	1	22	11.5	23	5	3.20	2.25
1N3029	D0-13	S Zen	1	24	10.5	25	20	2.45	1.95
1N3029A	D0-13	S Zen	1	24	10.5	25	10	2.76	2.15
1N3029B	D0-13	S Zen	1	24	10.5	25	5	3.20	2.25
1N3030	D0-13	S Zen	1	27	9.5	35	20	2.45	1.95
1N3030A	D0-13	S Zen	1	27	9.5	35	10	2.76	2.15
1N3030B	D0-13	S Zen	1	27	9.5	35	5	3.20	2.25
1N3031	D0-13	S Zen	1	30	8.5	40	20	2.45	1.95
1N3031	D0-13	S Zen	1	30	8.5	40	20	2.45	1.95
1N3031B	D0-13	S Zen	1	30	8.5	40	5	3.20	2.25
1N3032	D0-13	S Zen	1	33	7.5	45	20	2.45	1.95
1N3032A	D0-13	S Zen	1	33	7.5	45	10	2.76	2.15
1N3032B	D0-13	S Zen	1	33	7.5	45	5	3.20	2.25
1N3033	D0-13	S Zen	1	36	7.0	50	20	2.45	1.95
1N3033A	D0-13	S Zen	1	36	7.0	50	10	2.76	2.15
1N3033B	D0-13	S Zen	1	36	7.0	50	5	3.20	2.25
1N3034	D0-13	S Zen	1	39	6.5	60	20	2.45	1.95
1N3034A	D0-13	S Zen	1	39	6.5	60	10	2.76	2.15
1N3034B	D0-13	S Zen	1	39	6.5	60	5	3.20	2.25
1N3035	D0-13	S Zen	1	43	6.0	70	20	2.45	1.95
1N3035A	D0-13	S Zen	1	43	6.0	70	10	2.76	2.15
1N3035B	D0-13	S Zen	1	43	6.0	705		3.20	2.25
1N3036	D0-13	S Zen	1	47	5.5	80	20	2.45	1.95
1N3036A	D0-13	S Zen	1	47	5.5	80	10	2.76	2.15
1N3036B	D0-13	S Zen	1	47	5.5	80	5	3.20	2.25
1N3037	D0-13	S Zen	1	51	5.0	95	20	2.45	1.95
1N3037A	D0-13	S Zen	1	51	5.0	95	10	2.76	2.15
1N3037B	D0-13	S Zen	1	51	5.0	95	5	3.20	2.25
1N3038	D0-13	S Zen	1	56	4.5	110	20	2.45	1.95
1N3038A	D0-13	S Zen	1	56	4.5	110	10	2.76	2.15
1N3038B	D0-13	S Zen	1	56	4.5	110	5	3.20	2.25
1N3039	D0-13	S Zen	1	62	4.0	125	20	2.45	1.95
1N3039A	D0-13	S Zen	1	62	4.0	125	10	2.76	2.15
1N3039B	D0-13	S Zen	1	62	4.0	125	5	3.20	2.25
1N3040	D0-13	S Zen	1	68	3.7	150	20	2.45	1.95
1N3040A	D0-13	S Zen	1	68	3.7	150	10	2.76	2.15
1N3040B	D0-13	S Zen	1	68	3.7	150	5	3.20	2.25
1N3041	D0-13	S Zen	1	75	3.3	175	20	2.45	1.95
1N3041A	D0-13	S Zen	1	75	3.3	175	10	2.76	2.15
1N3041B	D0-13	S Zen	1	75	3.3	175	5	3.20	2.25

Type	Case	Material Function	Dissi-pation Watts	Zenner Volt-age Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-99	EACH 100 Up
1N3042	D0-13	S Zen	1	82	3.0	200	20	2.45	1.95
1N3042A	D0-13	S Zen	1	82	3.0	200	10	2.76	2.15
1N3042B	D0-13	S Zen	1	82	3.0	200	5	3.20	2.25
1N3043	D0-13	S Zen	1	91	2.8	250	20	2.45	1.95
1N3043A	D0-13	S Zen	1	91	2.8	250	10	2.76	2.15
1N3043B	D0-13	S Zen	1	91	2.8	250	5	3.20	2.25
1N3044	D0-13	S Zen	1	100	2.5	250	20	2.45	1.95
1N3044A	D0-13	S Zen	1	100	2.5	250	10	2.76	2.15
1N3044B	D0-13	S Zen	1	100	2.5	250	5	3.20	2.25
1N3045	D0-13	S Zen	1	110	2.3	450	20	2.45	1.95
1N3045A	D0-13	S Zen	1	110	2.3	450	10	2.76	2.15
1N3045B	D0-13	S Zen	1	110	2.3	450	5	3.20	2.25
1N3046	D0-13	S Zen	1	120	2.0	550	20	2.45	1.95
1N3046A	D0-13	S Zen	1	120	2.0	550	10	2.76	2.15
1N3046B	D0-13	S Zen	1	120	2.0	550	5	3.20	2.25
1N3047	D0-13	S Zen	1	130	1.9	700	20	2.45	1.95
1N3047A	D0-13	S Zen	1	130	1.9	700	10	2.76	2.15
1N3047B	D0-13	S Zen	1	130	1.9	700	5	3.20	2.25
1N3048	D0-13	S Zen	1	150	1.7	1000	20	2.45	1.95
1N3048A	D0-13	S Zen	1	150	1.7	1000	10	2.76	2.15
1N3048B	D0-13	S Zen	1	150	1.7	1000	5	3.20	2.25
1N3049	D0-13	S Zen	1	160	1.6	1100	20	2.45	1.95
1N3049A	D0-13	S Zen	1	160	1.6	1100	10	2.76	2.15
1N3050	D0-13	S Zen	1	180	1.4	1200	20	3.20	2.25
1N3050A	D0-13	S Zen	1	180	1.4	1200	10	2.76	2.15
1N3050B	D0-13	S Zen	1	180	1.4	1200	5	3.20	2.25
1N3051	D0-13	S Zen	1	200	1.2	1500	20	2.45	1.95
1N3051A	D0-13	S Zen	1	200	1.2	1500	10	2.76	2.15
1N3051B	D0-13	S Zen	1	200	1.2	1500	5	3.20	2.25

Type	Case	Material Function	Dissi-pation Watts	Max. Peak Rev. Volt	Reverse Current uA @ V	Forward Current @ V_F=IV mA	Rec. Time Nano-Sec.	EACH 1-99	EACH 100-Up
1N3062	D0-7	SCD	....	75	100-50	20	2	.45	.34
1N3063	D0-7	SCD	....	75	100-50	10 @ .85	4	.23	.17
1N3064	D0-7	SCD	....	75	100-50	10	4	.24	.18
1N3064/JAN	D0-7	SCD	....	75	100-50	10	4	.27	.20
1N3064JAN/TX	D0-7	SCD	....	75	100-50	10	4	1.20	.80
1N3065	D0-7	SCD	....	75	100-50	20	4	.45	.34
1N3066	D0-7	SCD	....	75	100-50	10	2	.45	.34
1N3067	D0-7	SCD	....	30	100-30	5	4	.23	.17

Type	Case	Material Function	Max. Peak Reverse Voltage	Reverse Current mA	Operat-ing Current Io Amps	EACH 1-9	EACH 10-99	EACH 100-Up
1N3085	D0-30	S Rect	100	40	150	17.00	8.00	
1N3086	D0-30	S Rect	200	40	150	27.20	14.00	
1N3087	D0-30	S Rect	300	40	150	37.80	17.75	
1N3088	D0-30	S Rect	400	40	150	42.50	20.00	
1N3089	D0-30	S Rect	500	40	150	47.70	22.50	
1N3090	D0-30	S Rect	600	40	150	51.75	24.25	
1N3091	D0-30	S Rect	800	40	150	64.00	30.10	
1N3092	D0-30	S Rect	1000	40	150	88.75	42.00	
1N3111	D0-30	S Rect	50	40	150	14.85	7.00	

Type	Case	Material Function	Dissi-pation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	EACH 10-99	EACH 100-Up
1N3154	D0-7	S ZTC	.5	8.2	10	15	*.01/5	3.75	2.20	1.75
1N3154A	D0-7	S ZTC	.5	8.2	10	15	*.01/5	5.13	3.05	2.40
1N3155	D0-7	S ZTC	.5	8.2	10	15	*.005/5	5.00	2.95	2.35
1N3156	D0-7	S ZTC	.5	8.2	10	15	*.002/5	8.75	5.20	4.15
1N3157	D0-7	S ZTC	.5	8.2	10	15	*.001/5	11.35	6.50	5.20
1N3161	SP-40	S Rect.		100 PRV - 250 Amp Io				31.00	18.00	14.80
1N3163	SP-40	S Rect.		200 PRV - 250 Amp Io				44.50	25.00	20.95
1N3189	D0-13	S Rect.		200 PRV - 1 Amp Io				3.83	2.10	1.80
1N3190	D0-13	S Rect.		400 PRV - 1 Amp Io				5.95	3.00	2.45
1N3191	D0-13	S Rect.		600 PRV - 1 Amp Io				9.25	4.75	4.00
1N3193	SP-39	S Rect.		200 PRV - 0.5 Amp Io				.525	.35	.26
1N3194	SP-39	S Rect.		400 PRV - 0.5 Amp Io				.525	.35	.26
1N3195	SP-39	S Rect.		600 PRV - 0.5 Amp Io				.80	.53	.39
1N3196	SP-39	S Rect.		800 PRV - 0.5 Amp Io				1.125	.74	.54
1N3208	SP-41	S Rect.		50 PRV - 15 Amp Io				2.40	1.55	1.24
1N3209	SP-41	S Rect.		100 PRV - 15 Amp Io				1.80	1.25	.85
1N3209R	SP-41	S Rect.		100 PRV - 15 Amps Io				1.80	1.25	.85
1N3210	SP-41	S Rect.		200 PRV - 15 Amps Io				2.50	1.70	1.20
1N3210R	SP-41	S Rect.		200 PRV - 15 Amps Io				2.50	1.70	1.20
1N3211	SP-41	S Rect.		300 PRV - 15 Amps Io				3.25	2.05	1.55
1N3211R	SP-41	S Rect.		300 PRV - 15 Amps Io				3.25	2.05	1.55
1N3212	SP-41	S Rect.		400 PRV - 15 Amps Io				4.00	2.85	1.90
1N3213	SP-41	S Rect.		500 PRV - 15 Amps Io				9.35	6.65	4.40
1N3214	SP-41	S Rect.		600 PRV - 15 Amps Io				10.10	7.30	4.80
1N3253	SP-41	S Rect.		200 PRV - 0.5 Amps Io				.575	.38	.28
1N3254	SP-41	S Rect.		400 PRV - 0.5 Amps Io				.625	.40	.30

Type	Case	Material Function	Dissi-pation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	10-99	100-Up
1N3255	SP-41	S Rect.		600 PRV - 0 5 Amps Io				.85	.56	.41
1N3256	SP-41	S Rect.		800 PRV - 0.5 Amps Io				1.18	.78	.57
1N3289	DO-8	S Rect.		200 PRV - 100 Amps Io				34.40	34.40	16.15
1N3290	DO-8	S Rect.		300 PRV - 100 Amps Io				42.50	42.50	19.85
1N3291	DO-8	S Rect.		400 PRV - 100 Amps Io				48.50	48.50	22.80
1N3292	DO-8	S Rect.		500 PRV - 100 Amps Io				54.00	54.00	25.50
1N3293	DO-8	S Rect.		600 PRV - 100 Amps Io				59.00	59.00	27.80
1N3294	DO-8	S Rect.		800 PRV - 100 Amps Io				81.50	81.50	37.80
1N3295	DO-8	S Rect.		1000 PRV - 100 Amps Io				123.50	123.50	57.50
1N3296	DO-8	S Rect.		1200 PRV - 100 Amps Io				136.00	136.00	64.00
1N3305	DO-5	S Zen	50	6.8	1850	0.2	20	4.75	4.75	4.15
1N3305A	DO-5	S Zen	50	6.8	1850	0.2	10	6.40	6.40	5.65
1N3305B	DO-5	S Zen	50	6.8	1850	0.2	5	8.75	8.75	7.90
1N3306	DO-5	S Zen	50	7.5	1700	0.3	20	4.75	4.75	4.15
1N3306A	DO-5	S Zen	50	7.5	1700	0.3	10	6.40	6.40	5.65
1N3306B	DO-5	S Zen	50	7.5	1700	0.3	5	8.75	8.75	7.90
1N3307	DO-5	S Zen	50	8.2	1500	0.4	20	5.50	4.75	4.15
1N3307B	DO-5	S Zen	50	8.2	1500	0.4	5	8.75	8.75	7.90
1N3308	DO-5	S Zen	50	9.1	1370	0.5	20	5.50	4.75	4.15
1N3308A	DO-5	S Zen	50	9.1	1370	0.5	10	6.40	6.40	5.65
1N3308B	DO-5	S Zen	50	9.1	1370	0.5	5	8.75	8.75	7.90
1N3309	DO-5	S Zen	50	10.0	1200	0.6	20	5.50	4.75	4.15
1N3309A	DO-5	S Zen	50	10.0	1200	0.6	10	6.40	5.88	5.65
1N3309B	DO-5	S Zen	50	10.0	1200	0 6	5	8.75	8.75	7.90
1N3310	DO-5	S Zen	50	11	1100	0.8	20	5.50	4.75	4.15
1N3310A	DO-5	S Zen	50	11	1100	0.8	10	6.40	5.88	5.65
1N3310B	DO-5	S Zen	50	11	1100	0.8	5	8.75	8.75	7.90
1N3311	DO-5	S Zen	50	12	1000	1.0	20	5.50	4.75	4.15
1N3311A	DO-5	S Zen	50	12	1000	1 0	10	6.40	5.88	5.65
1N3311B	DO-5	S Zen	50	12	1000	1.0	5	8.75	8.75	7.90
1N3312	DO-5	S Zen	50	13	960	1.1	20	5.50	4.75	4.15
1N3312A	DO-5	S Zen	50	13	960	1.1	10	6.40	5.88	5.65
1N3312B	DO-5	S Zen	50	13	960	1.1	5	8.75	8.75	7.90
1N3313	DO-5	S Zen	50	14	890	1.2	20	5.50	4.75	4.15
1N3313A	DO-5	S Zen	50	14	890	1.2	10	6.40	5.88	5.65
1N3313B	DO-5	S Zen	50	14	890	1.2	5	8.75	8.75	7.90
1N3314	DO-5	S Zen	50	15	830	1.4	20	5.50	4.75	4.15
1N3314A	DO-5	S Zen	50	15	830	1.4	10	6.40	5.88	5.65
1N3314B	DO-5	S Zen	50	15	830	1.4	5	8.75	8.75	7.90
1N3315	DO-5	S Zen	50	16	780	1.6	20	5.50	4.75	4.15
1N3315A	DO-5	S Zen	50	16	780	1.6	10	6.40	5.88	5.65
1N3315B	DO-5	S Zen	50	16	780	1.6	5	8.75	8.75	7.90
1N3316	DO-5	S Zen	50	17	740	1.6	20	5.50	4.75	4.15
1N3316A	DO-5	S Zen	50	17	740	1.6	10	6.40	5.88	5.65
1N3316B	DO-5	S Zen	50	17	740	1.6	5	8.75	8.75	7.90
1N3317	DO-5	S Zen	50	18	700	2.0	20	5.50	4.75	4.15
1N3317A	DO-5	S Zen	50	18	700	2.0	10	6.40	5.88	5.65
1N3317B	DO-5	S Zen	50	18	700	2.0	5	8.75	8.75	7.90
1N3318	DO-5	S Zen	50	19	660	2.2	20	5.50	4.75	4.15
1N3318A	DO-5	S Zen	50	19	660	2.2	10	6.40	5.88	5.65
1N3318B	DO-5	S Zen	50	19	660	2.2	5	8.75	8.75	7.90
1N3319	DO-5	S Zen	50	20	630	2.4	20	5.50	4.75	4.15
1N3319A	DO-5	S Zen	50	20	630	2.4	10	6.40	5.88	5.65
1N3319B	DO-5	S Zen	50	20	630	2.4	5	8.75	8.75	7.90
1N3320	DO-5	S Zen	50	22	570	2.5	20	5.50	4.75	4.15
1N3320A	DO-5	S Zen	50	22	570	2.5	10	6.40	5.88	5.65
1N3320B	DO-5	S Zen	50	22	570	2.5	5	8.75	8.75	7.90
1N3321	DO-5	S Zen	50	24	520	2.6	20	5.50	4.75	4.15
1N3321A	DO-5	S Zen	50	24	520	2.6	10	6.40	5.88	5.65
1N3321B	DO-5	S Zen	50	24	520	2.6	5	8.75	8.75	7.90
1N3322	DO-5	S Zen	50	25	500	2.7	20	5.50	4.75	4.15
1N3322A	DO-5	S Zen	50	25	500	2.7	10	6.40	5.88	5.65
1N3322B	DO-5	S Zen	50	25	500	2.7	5	8.75	8.75	7.90
1N3323	DO-5	S Zen	50	27	460	2.8	20	5.50	4.75	4.15
1N3323A	DO-5	S Zen	50	27	460	2.8	10	6.40	5.88	5.65
1N3323B	DO-5	S Zen	50	27	460	2.8	5	8.75	8.75	7.90
1N3324	DO-5	S Zen	50	30	420	3.0	20	5.50	4.75	4.15
1N3324A	DO-5	S Zen	50	30	420	3.0	10	6.40	5.88	5.65
1N3324B	DO-5	S Zen	50	30	420	3.0	5	8.75	8.75	7.90
1N3325	DO-5	S Zen	50	33	380	3.2	20	5.50	4.75	4.15
1N3325A	DO-5	S Zen	50	33	380	3.2	10	6.40	5.88	5.65
1N3325B	DO-5	S Zen	50	33	380	3.2	5	8.75	8.75	7.90
1N3326	DO-5	S Zen	50	36	350	3.5	20	5.50	4.75	4.15
1N3326A	DO-5	S Zen	50	36	350	3.5	10	6.40	5.88	5.65
1N3326B	DO-5	S Zen	50	36	350	3.5	5	8.75	8.75	7.90
1N3327	DO-5	S Zen	50	39	320	4.0	20	5.50	4.75	4.15
1N3327A	DO-5	S Zen	50	39	320	4.0	10	6.40	5.88	5.65
1N3327B	DO-5	S Zen	50	39	320	4.0	5	8.75	8.75	7.90
1N3328	DO-5	S Zen	50	43	290	4.5	20	5.50	4.75	4.15
1N3328A	DO-5	S Zen	50	43	290	4.5	10	6.40	5.88	5.65
1N3328B	DO-5	S Zen	50	43	290	4.5	5	8.75	8.75	7.90
1N3329	DO-5	S Zen	50	45	280	4.5	20	5.50	4.75	4.15
1N3329A	DO-5	S Zen	50	45	280	4.5	10	6.40	5.88	5.65
1N3329B	DO-5	S Zen	50	45	280	4.5	5	8.75	8.75	7.90
1N3330	DO-5	S Zen	50	47	270	5.0	20	5.50	4.75	4.15
1N3330A	DO-5	S Zen	50	47	270	5.0	10	6.40	5.88	5.65
1N3330B	DO-5	S Zen	50	47	270	5.0	5	8.75	8.75	7.90
1N3331	DO-5	S Zen	50	50	250	5.0	20	5.50	4.75	4.15
1N3331A	DO-5	S Zen	50	50	250	5.0	10	6.40	5.88	5.65
1N3331B	DO-5	S Zen	50	50	250	5.0	5	8.75	8.75	7.90

Type	Case	Material Function	Dissi-pation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	10-99	100-Up
1N3333A	DO-5	S Zen	50	52	240	5.5	20	5.50	4.75	4.15
1N3333B	DO-5	S Zen	50	52	240	5.5	5	8.75	8.75	7.90
1N3334	DO-5	S Zen	50	56	220	6.0	20	5.50	4.75	4.15
1N3334A	DO-5	S Zen	50	56	220	6.0	10	6.40	5.88	5.65
1N3334B	DO-5	S Zen	50	56	220	6.0	5	8.75	8.75	7.90
1N3335	DO-5	S Zen	50	62	200	7.0	20	5.50	4.75	4.15
1N3335A	DO-5	S Zen	50	62	200	7.0	10	6.40	5.88	5.65
1N3335B	DO-5	S Zen	50	62	200	7.0	5	8.75	8.75	7.90
1N3338	DO-5	S Zen	50	82	150	11.0	20	5.50	4.75	4.15
1N3338A	DO-5	S Zen	50	82	150	11.0	10	6.40	5.88	5.65
1N3338B	DO-5	S Zen	50	82	150	11.0	5	8.75	8.75	7.90
1N3339	DO-5	S Zen	50	91	140	15.0	20	5.50	4.75	4.15
1N3339A	DO-5	S Zen	50	91	140	15.0	10	6.40	5.88	5.65
1N3339B	DO-5	S Zen	50	91	140	15.0	5	8.75	8.75	7.90
1N3340	DO-5	S Zen	50	100	120	20.0	20	5.50	4.75	4.15
1N3340A	DO-5	S Zen	50	100	120	20.0	10	6.40	5.88	5.65
1N3340B	DO-5	S Zen	50	100	120	20.0	5	8.75	8.75	7.90
1N3341	DO-5	S Zen	50	105	120	25.0	20	5.50	4.75	4.15
1N3341A	DO-5	S Zen	50	105	120	25.0	10	6.40	5.88	5.65
1N3341B	DO-5	S Zen	50	105	120	25.0	5	8.75	8.75	7.90
1N3342	DO-5	S Zen	50	110	110	30.0	20	5.50	4.75	4.15
1N3342A	DO-5	S Zen	50	110	110	30.0	10	6.40	5.88	5.65
1N3342B	DO-5	S Zen	50	110	110	30.0	5	8.75	8.75	7.90
1N3343	DO-5	S Zen	50	120	100	40	20	10.80	6.80	5.10
1N3343A	DO-5	S Zen	50	120	100	40	10	18.05	11.30	8.50
1N3344	DO-5	S Zen	50	130	95	50	20	10.80	6.80	5.10
1N3344A	DO-5	S Zen	50	130	95	50	10	18.05	11.30	8.50
1N3344B	DO-5	S Zen	50	130	95	50	5	28.30	17.95	13.50
1N3345	DO-5	S Zen	50	140	90	60	20	10.80	6.80	5.10
1N3345B	DO-5	S Zen	50	140	90	60	5	28.30	17.95	13.50
1N3346	DO-5	S Zen	50	150	85	75	20	10.80	6.80	5.10
1N3346A	DO-5	S Zen	50	150	85	75	10	18.05	11.30	8.50
1N3346B	DO-5	S Zen	50	150	85	75	5	28.30	17.95	13.50
1N3347	DO-5	S Zen	50	160	80	80	20	10.80	6.80	5.10
1N3348	DO-5	S Zen	50	160	80	80	5	28.30	17.95	13.50
1N3350	DO-5	S Zen	50	200	65	100	20	10.80	6.80	5.10
1B3350A	DO-5	S Zen	50	200	65	100	10	18.05	11.30	8.50
1N3350B	DO-5	S Zen	50	200	65	100	5	28.30	17.95	13.50
1N3491	DO-21	S Rect		50 PRV - 25 Amps Io				.95	.68	.45
1N3492	DO-21	S Rect		100 PRV - 25 Amps Io				1.10	.75	.52
1N3493	DO-21	S Rect		200 PRV - 25 Amps Io				1.57	1.11	.74
1N3494	DO-21	S Rect		300 PRV - 25 Amps Io				1.80	1.25	.85
1N3495	DO-21	S Rect		400 PRV - 25 Amps Io				2.35	1.48	.98
1N3496	DO-7	S ZTC	.25	6.2	7.5	15	*.05/5	5.25	3.70	2.50
1N3497	DO-7	S ZTC	.25	6.2	7.5	15	*.10/5	9.50	5.75	4.50
1N3498	DO-7	S ZTC	.25	6.2	7.5	15	....	14.80	9.00	7.00
1N3499	DO-7	S ZTC	.25	6.2	7.5	15	*.50/5	32.87	19.00	15.50
1N3563	SP-42	S Rect		1000 PRV - .40 Amp Io				1.43	.94	.69

Type	Case	Material Function	Dissi-pation Watts	Max. Peak Rev. Volt	Reverse Current µA @ V	Forward Current @ V_F=1V mA	Rec. Time Nano-Sec.	EACH 1-9	10-99	100-Up
1N3596	DO-7	SCD		20	100-20	30	4	.45	.45	.34
1N3600	DO-7	SCD	....	75	100-50	200	3	.58	.58	.43
1N3600/JAN	DO-7	SCD	....	....	100-50	200	4	.58	.58	.43
1N3602	DO-7	SCD	....	75	100-50	20	5	.23	.23	.17
1N3603	DO-7	SCD	....	45	100-35	30	5	.23	.23	.17
1N3604	DO-7	SCD	....	75	50-50	50	4	.26	.26	.19
1N3605	DO-7	SCD	....	40	50-30	20 @ .88	2	.26	.26	.19
1N3606	DO-7	SCD	....	75	50-50	20 @ .88	2	.26	.26	.19
1N3639	DO-13	S Rect		200 PIV-.75 Amps Io				.80	.55	.36
1N3641	DO-13	S Rect		600 PIV-.75 Amps Io				1.37	1.00	.65
1N3670	DO-4	S Rect		700 PIV-12 Amps Io				11.15	7.80	5.25
1N3670A	DO-4	S Rect		700 PIV-12 Amps Io				11.15	7.80	5.25
1N3671	DO-4	S Rect		800 PIV-12 Amps Io				12.40	8.70	5.85
1N3671A	DO-4	S Rect		800 PIV - 12 Amps Io				12.40	8.70	5.85
1N3672A	DO-4	S Rect		900 PRV-12 Amps Io				13.40	9.40	6.30
1N3673	DO-4	S Rect		1000 PRV-12 Amps Io				14.00	9.80	6.60
1N3673A	DO-4	S Rect		1000 PRV-12 Amps Io				14.00	9.80	6.60
1N3738	DO-9	S Rect		400 PRV-250 Amps Io				56.50	56.50	26.60
1N3740	DO-9	S Rect		600 PRV-250 Amps Io				85.00	85.00	40.00
1N3741	DO-9	S Rect		800 PRV-250 Amps Io				116.50	116.50	55.00
1N3742	DO-9	S Rect		1000 PRV-250 Amps Io				140.00	140.00	66.00
1N3754	SP-42	S Rect		100 PRV-.125 Amps Io				.48	.32	.23
1N3755	SP-43	S Rect		200 PRV-.125 Amps Io				.50	.33	.24
1N3756	SP-43	S Rect		400 PRV-.125 Amps Io				.575	.35	.26
1N3765	DO-5	S Rect		700 PRV-35 Amps Io				21.85	15.36	10.24
1N3766	DO-5	S Rect		800 PRV-35 Amps Io				24.85	17.58	11.75
1N3768	DO-5	S Rect		1000 PRV - 35 Amps Io				27.10	19.13	12.75
1N3779	DO-7	S ZTC	.4	6.5	7.5	10	1.5/3[2]	7.50	4.50	3.75
1N3780	DO-7	S ZTC	.4	6.5	7.5	10	1.0/3[2]	13.70	8.25	6.90
1N3781	DO-7	S ZTC	.4	6.5	7.5	10	0 5/3[2]	18.10	10.90	9.10
1N3782	DO-7	S ZTC	.4	6.5	7.5	10	0.2/3[2]	23.50	16.80	14.10
1N3783	DO-7	S ZTC	.4	6.5	7.5	10	0.1/3[2]	41.70	24.50	20.50
1N3821	SP-33	S Zen	1.0	3 3	76.0	10	10	3.40	2.00	1.60
1N3821A	SP-33	S Zen	1.0	3 3	76.0	10	5	4.75	2.50	2.00
1N3822	SP-33	S Zen	1.0	3.6	69.0	10	10	3.40	2.00	1.60

See Page 28 for Explanation of Abbreviations and Symbols

SEE PAGE 12 FOR INTEGRATED CIRCUITS

Type	Case	Material Function	Dissi-pation Watts	Max. Peak Rev. Volt	Reverse Current µA @ V	Forward Current @ V_F=1V mA	Rec. Time Nano-Sec.	EACH 1-9	10-99	100-Up
1N3822A	SP-33	S Zen	1.0	3.6	69.0	10	5	4.75	2.50	2.00
1N3823	SP-33	S Zen	1.0	3.9	64.0	9	10	3.40	2.00	1.60
1N3823A	SP-33	S Zen	1.0	3.9	64.0	9	5	4.75	2.50	2.00
1N3824	SP-33	S Zen	1.0	4.3	58.0	9	10	3.40	2.00	1.60
1N3824A	SP-33	S Zen	1.0	4.3	58.0	9	5	4.75	2.50	2.00
1N3825	SP-33	S Zen	1.0	4.7	53.0	8	10	3.40	2.00	1.60
1N3825A	SP-33	S Zen	1.0	4.7	53.0	8	5	4.75	2.50	2.00
1N3826	SP-33	S Zen	1.0	5.1	49.0	7	10	31.40	1.60	
1N3826A	SP-33	S Zen	1.0	5.1	49.0	7	5	4.75	2.50	2.00
1N3827	SP-33	S Zen	1.0	5.6	45.0	5	10	3.40	2.00	1.60
1N3827A	SP-33	S Zen	1.0	5.6	45.0	5	5	4.75	2.50	2.00
1N3828	SP-33	S Zen	1.0	6.2	41.0	2	10	3.40	2.00	1.60
1N3828A	SP-33	S Zen	1.0	6.2	41.0	2	5	4.75	2.50	2.00
1N3829	SP-33	S Zen	1	6.8	37	1.5	10	3.40	2.00	1.60
1N3829A	SP-33	S Zen	1	6.8	37	1.5	5	4.75	2.50	2.00
1N3830	SP-33	S Zen	1	7.5	34	1.5	10	3.19	1.90	1.50
1N3830A	SP-33	S Zen	1	7.5	34	1.5	5	3.75	2.40	1.75
1N3879	D0-4	S FRR	....		50 PRV-6 Amps Io			7.45	4.15	3.50
1N3880	D0-4	S FRR	....		100 PRV-6 Amps Io			6.60	4.65	3.10
1N3881	D0-4	S FRR	....		200 PRV-6 Amps Io			9.35	6.60	4.40
1N3882	D0-4	S FRR	....		300 PRV-6 Amps Io			14.00	9.90	6.60
1N3883	D0-4	S FRR	....		400 PRV-6 Amps Io			19.30	13.65	9.10
1N3889	D0-4	S FRR	....		50 PRV-12 Amps Io			7.38	5.00	3.35
1N3890	D0-4	S FRR	....		100 PRV-12 Amps Io			7.38	5.00	3.35
1N3891	D0-4	S FRR	....		200 PRV-12 Amps Io			11.00	7.80	5.20
1N3892	D0-4	S FRR	....		300 PRV-12 Amps Io			16.50	11.70	7.80
1N3893	D0-4	S FRR	....		400 PRV-12 Amps Io			23.25	16.50	11.00
1N3900	D0-4	S FRR	....		100 PRV-20 Amps Io			9.88	7.00	4.65
1N3901	D0-4	S FRR	....		200 PRV-20 Amps Io			21.25	15.00	10.00
1N3902	D0-4	S FRR	....		300 PRV-20 Amps Io			25.45	17.90	12.00
1N3903	D0-4	S FRR	....		400 PRV-20 Amps Io			31.68	22.25	14.90
1N3909	D0-4	S FRR	....		50 PRV-30 Amps Io			12.65	8.95	5.95
1N3910	D0-4	S FRR	....		100 PRV-30 Amps Io			13.90	9.75	6.50
1N3911	D0-5	S FRR	....		200 PRV-30 Amps Io			18.00	12.70	8.45
1N3912	D0-5	S FRR	....		300 PRV-30 Amps Io			26.15	18.50	12.30
1N3913	D0-5	S FRR	....		400 PRV-30 Amps Io			39.10	27.70	8.40
1N3987	D0-4	S Rect	....		700 PRV-6 Amps Io			10.62	7.25	5.00
1N3988	D0-4	S Rect	....		700 PRV-6 Amps Io			11.90	8.25	5.60
1N3989	D0-4	S Rect	....		700 PRV-6 Amps Io			12.75	9.00	6.00
1N3990	D0-4	S Rect	....		700 PRV-6 Amps Io			13.25	9.50	6.25
1N3993	D0-4	S Zen	10	3.9	640	2.0	10	8.60	4.80	4.05
1N3993A	D0-4	S Zen	10	3.9	640	2.0	5	12.00	6.50	5.65
1N3994	D0-4	S Zen	10	4.3	580	1.5	10	8.60	4.80	4.05
1N3994A	D0-4	S Zen	10	4.3	580	1.5	5	12.00	6.50	5.65
1N3995	D0-4	S Zen	10	4.7	530	1.2	10	8.60	4.80	4.05
1N3995A	D0-4	S Zen	10	4.7	530	1.2	5	12.00	6.50	5.65
1N3996	D0-4	S Zen	10	5.1	490	1.1	10	8.60	4.80	4.05
1N3996A	D0-4	S Zen	10	5.1	490	1.1	5	12.00	6.50	5.65
1N3997	D0-4	S Zen	10	5.6	445	1.0	10	8.60	4.80	4.05
1N3997A	D0-4	S Zen	10	5.6	445	1.0	5	12.00	6.50	5.65
1N3998	D0-4	S Zen	10	6.2	405	1.1	10	8.60	4.80	4.05
1N3998A	D0-4	S Zen	10	6.2	405	1.1	5	12.00	6.50	5.65
1N399	D0-4	S Zen	10	6.8	370	1.2	10	8.60	4.80	4.05
1N3999A	D0-4	S Zen	10	6.8	370	1.2	5	12.00	6.50	5.65
1N4000	D0-4	S Zen	10	7.5	335	1.3	10	8.60	4.80	4.05
1N4000A	D0-4	S Zen	10	7.5	335	1.3	5	12.00	6.50	5.65
1N4001	SP-43	S Rect			50 PRV-1 Amp Io			.39	.39	.26
1N4002	SP-43	S Rect			100 PRV-1 Amp Io			.44	.44	.29
1N4003	SP-43	S Rect			200 PRV-1 Amp Io			.50	.50	.33
1N4004	SP-43	S Rect			400 PRV-1 Amp Io			.56	.56	.37
1N4005	SP-43	S Rect			600 PRV-1 Amp Io			.66	.66	.45
1N4006	SP-43	S Rect			800 PRV-1 Amp Io			.99	.99	.65
1N4007	SP-43	S Rect			1000 PRV-1 Amp Io			1.49	1.49	.99
1N4099	D0-7	S Zen	.25	6.8	250	200	5	5.05	5.05	3.80
1N4100	D0-7	S Zen	.25	7.5	250	200	5	5.05	5.05	3.80
1N4101	D0-7	S Zen	.25	8.2	250	200	5	5.05	5.05	3.80
1N4102	D0-7	S Zen	.25	8.7	250	200	5	5.05	5.05	3.80
1N4103	D0-7	S Zen	.25	9.1	250	200	5	5.05	5.05	3.80
1N4104	D0-7	S Zen	.25	10.0	250	200	5	6.45	4.95	3.70
1N4105	D0-7	S Zen	.25	11.0	250	200	5	5.05	5.05	3.80
1N4106	D0-7	S Zen	.25	12.0	250	200	5	5.05	5.05	3.80
1N4107	D0-7	S Zen	.25	13.0	250	200	5	6.45	4.95	3.70
1N4109	D0-7	S Zen	.25	14.0	250	100	5	6.45	4.95	3.70
1N4111	D0-7	S Zen	.25	17.0	250	100	5	6.45	4.95	3.70
1N4112	D0-7	S Zen	.25	18.0	250	100	5	6.45	4.95	3.70
1N4113	D0-7	S Zen	.25	19.0	250	150	5	6.45	4.95	3.70
1N4114	D0-7	S Zen	.25	20.0	250	150	5	6.45	4.95	3.70
1N4115	D0-7	S Zen	.25	22.0	250	150	5	6.45	4.95	3.70
1N4117	D0-7	S Zen	.25	25.0	250	150	5	6.45	4.95	3.70
1N4118	D0-7	S Zen	.25	27.0	250	150	5	6.45	4.95	3.70
1N4119	D0-7	S Zen	.25	28.0	250	200	5	6.45	4.95	3.70
1N4120	D0-7	S Zen	.25	30.0	250	200	5	6.45	4.95	3.70
1N4123	D0-7	S Zen	.25	39.0	250	200	5	6.45	4.95	3.70
1N4124	D0-7	S Zen	.25	43.0	250	250	5	6.45	4.95	3.70
1N4125	D0-7	S Zen	.25	47.0	250	250	5	6.45	4.95	3.70
1N4129	D0-7	S Zen	.25	62.0	250	500	5	6.45	4.95	3.70
1N4131	D0-7	S Zen	.25	75.0	250	700	5	6.45	4.95	3.70

Type	Case	Material Function	Dissi-pation Watts	Max. Peak Rev. Volt	Reverse Current µA @ V	Forward Current @ V_F=1V mA	Rec. Time Nano-Sec.	EACH 1-9	10-99	100-Up
1N4135	D0-7	S Zen	.25	100.0	250	1500	5	6.45	4.95	3.70
1N4148	D0-35	S HCD		PIV 75V-I_F 10 mA-1V V_P-I_{RR} 4 N Sec.				.33	.33	.22
1N4148/JAN	D0-35	S HCD		PIV 75V-I_F 10 mA-1V V_P-I_{RR} 4 N Sec.				.33	.33	.22
1N4149	D0-35	S HCD		PIV 75V-I_F 10 mA-1V V_P-I_{RR} 4 N Sec.				.50	.50	.32
1N4150	D0-35	S HCD		PIV 50V-I_F 1 mA-.62V V_P-I_{RR} 6 N Sec.				1.50	1.50	.78
1N4151	D0-35	S HCD		PIV 50V-I_F 50 mA-1V V_P-I_{RR} 2 N Sec.				.73	.73	.48
1N4152	D0-35	S HCD		PIV 30V-I_F .1-.55 V_P-I_{RR} 2 N Sec.				.65	.65	.41
1N4153	D0-35	S HCD		PIV 50V-I_F .1-.55 V_P-I_{RR} 2 N Sec.				.90	.90	.60
1N4154	D0-35	S HCD		PIV 25V-I_F 30-1 V_P-I_{RR} 2 N Sec.				.35	.35	.21
1N4360	D0-7	S Zen	.25	2.4	10	60	5	1.05	1.05	.85
1N4370	D0-7	S Zen	.4	2.4	20	30	10	.90	.90	.60
1N4370A	D0-7	S Zen	.4	2.4	20	30	5	1.05	1.05	.85
1N4371	D0-7	S Zen	.4	2.7	20	30	10	.90	.90	.60
1N4371A	D0-7	S Zen	.4	2.7	20	30	5	1.05	1.05	.85
1N4372	D0-7	S Zen	.4	3.0	20	29	10	.90	.90	.60
1N4372A	D0-7	S Zen	.4	3.0	20	29	5	1.05	1.05	.85
1N4383	D0-29	S Rect			200 PRV-1 Amp Io			.76	.48	.38
1N4384	D0-29	S Rect			400 PRV-1 Amp Io			.875	.58	.41
1N4385	D0-29	S Rect			600 PRV-1 Amp Io			1.15	.78	.54
1N4436	SP-50	S RBR			200 VRM-10 Amps Io			5.90	4.15	3.09
1N4436/S/F	SP-51	S RBR			200 VRM-10 Amps Io			6.40	4.65	3.39
1N4436/T/F	SP-52	S RBR			200 VRM-10 Amps Io			6.15	4.40	3.29
1N4437	SP-50	S RBR			400 VRM-10 Amps Io			7.80	5.45	4.00
1N4437/S/F	SP-51	S RBR			400VRM-10 Amps Io			8.25	5.85	4.30
1N4437/T/F	SP-52	S RBR			400 VRM-10 Amps Io			8.15	5.70	4.20
1N4438	SP-50	S RBR			600 VRM-10 Amps Io			10.65	7.45	5.45
1N4438/S/F	SP-51	S RBR			600 VRM-10 Amps Io			11.15	7.85	5.75
1N4438/T/F	SP-52	S RBR			600 VRM-10 Amps Io			11.00	7.70	5.65
1N4446	D0-35	S HCD		75 PIV-I_F 20 mA-V_F 1-I_{RR} 4 NS				.38	.38	.24
1N4447	D0-35	S HCD		75 PIV-I_F 20 mA-V_F 1-I_{RR} 4 NS				.56	.56	.36
1N4448	D0-35	S HCD		75 PIV-I_F100 mA-V_F 1-I_{RR} 4NS				.78	.78	.52
1N4449	D0-35	S HCD		75 PIV-I_F 30 mA-V_F1-I_{RR} 4 NS				.78	.78	.52
1N4450	D0-35	S HCD		30 PIV-I_F 1 mA-V_F 0.64-I_{RR} 4 NS				.74	.74	.55
1N4454	D0-35	S HCD		75 PIV-/$_F$ 10 mA-V_F 1-I_{RR} 2 NS				.33	.33	.19
1N4571	D0-7	S ZTC	.25	6.4	1.0	100	*.005/5	11.00	6.60	5.40
1N4571A	D0-7	S ZTC	.25	6.4	1.0	100	*.005/5	12.00	7.30	6.00
1N4572	D0-7	S ZTC	.25	6.4	1.0	100	*.002/5	19.80	11.90	9.80
1N4572A	D0-7	S ZTC	.25	6.4	1.0	100	*.002/5	22.00	13.30	11.00
1N4573	D0-7	S ZTC	.25	6.4	1.0	100	*.001/5	35.75	21.90	18.10
1N4573A	D0-7	S ZTC	.25	6.4	1.0	100	*.001/5	40.00	24.30	20.00
1N4574	D0-7	S ZTC	.25	6.4	1.0	100	*.0005/5	85.00	49.00	42.20
1N4574A	D0-7	S ZTC	.25	6.4	1.0	100	*.0005/5	95.00	54.00	47.00
1N4575	D0-7	S ZTC	.25	6.4	2.0	50	*.01/5	4.50	2.70	2.20
1N4575A	D0-7	S ZTC	.25	6.4	2.0	50	*.005/5	5.00	3.00	2.40
1N4576	D0-7	S ZTC	.25	6.4	2.0	50	*.005/5	5.50	3.30	2.70
1N4576A	D0-7	S ZTC	.25	6.4	2.0	50	*.005/5	6.00	3.60	3.00
1N4577	D0-7	S ZTC	.25	6.4	2.0	50	*.002/5	9.50	5.90	4.90
1N4577A	D0-7	S ZTC	.25	6.4	2.0	50	*.002/5	11.00	6.60	5.40
1N4578	D0-7	S ZTC	.25	6.4	2.0	50	*.001/5	18.25	10.90	9.00
1N4578A	D0-7	S ZTC	.25	6.4	2.0	50	*.001/5	20.25	12.10	10.00
1N4579	D0-7	S ZTC	.25	6.4	2.0	50	*.0005/5	42.50	24.00	21.00
1N4579A	D0-7	S ZTC	.25	6.4	2.0	50	*.0005/5	46.25	27.00	23.10
1N4580	D0-7	S ZTC	.25	6.4	4.0	25	*.01/5	4.50	2.70	2.20
1N4580A	D0-7	S ZTC	.25	6.4	4.0	25	*.01/5	5.00	3.00	2.40
1N4581	D0-7	S ZTC	.25	6.4	4	25	*.005/5	5.50	3.30	2.70
1N4581A	D0-7	S ZTC	.25	6.4	4	25	*.005/5	6.00	3.60	3.00
1N4582	D0-7	S ZTC	.25	6.4	4	25	*.002/5	9.75	5.90	4.90
1N4582A	D0-7	S ZTC	.25	6.4	4	25	*.002/5	11.00	6.60	5.40
1N4583	D0-7	S ZTC	.25	6.4	4	25	*.001/5	16.50	9.90	8.10
1N4583A	D0-7	S ZTC	.25	6.4	4	25	*.001/5	18.25	11.00	9.00
1N4584	D0-7	S ZTC	.25	6.4	4	25	*.0005/5	38.50	22.00	19.00
1N4584A	D0-7	S ZTC	.25	6.4	4	25	*.0005/5	42.50	24.00	21.00
1N4719	SP-13	S Rect			50 PRV-3 Amps Io			.75	.48	.35
1N4720	SP-13	S Rect			100 PRV-3 Amps Io			.775	.53	.36
1N4721	SP-13	S Rect			200 PRV-3 Amps Io			.80	.60	.38
1N4722	SP-13	S Rect			400 PRV-3 Amps Io			1.37	.75	.65
1N4723	SP-13	S Rect			600 PRV-3 Amps Io			1.75	1.00	.82
1N4724	SP-13	S Rect			800 PRV-3 Amps Io			4.35	3.00	2.05
1N4725	SP-13	S Rect			100 PRV-3 Amps Io			6.35	4.00	3.00
1N4728	SP-55	S Zen	1.0	3.3	76	10	10	1.88	1.25	.93
1N4728A	SP-55	S Zen	1.0	3.3	76	10	5	2.59	1.90	1.40
1N4729	SP-55	S Zen	1.0	3.6	69	10	10	1.88	1.25	.93
1N4729A	SP-55	S Zen	1.0	3.6	69	10	5	2.59	1.90	1.40
1N4730	SP-55	S Zen	1	3.9	64	9	10	1.88	1.25	.93
1N4730A	SP-55	S Zen	1	3.9	64	9	5	2.59	1.90	1.40
1N4731	SP-55	S Zen	1	4.3	58	9	10	1.88	1.25	.93
1N4731A	SP-55	S Zen	1	4.3	58	9	5	2.59	1.90	1.40
1N4732	SP-55	S Zen	1	4.7	53	8	10	1.25	1.25	.93
1N4732A	SP-55	S Zen	1	4.7	53	8	5	1.90	1.90	1.30
1N4733	SP-55	S Zen	1	5.1	49	7	10	1.25	1.25	.93
1N4733A	SP-55	S Zen	1	5.1	49	7	5	1.90	1.90	1.30
1N4734	SP-55	S Zen	1	5.6	45	5	10	1.25	1.25	.93
1N4734A	SP-55	S Zen	1	5.6	45	5	5	1.90	1.90	1.30
1N4735	SP-55	S Zen	1	6.2	41	2	10	1.25	1.25	.93
1N4735A	SP-55	S Zen	1	6.2	41	2	5	1.90	1.90	1.30
1N4736	SP-55	S Zen	1	6.8	37	3.5	10	1.25	1.25	.93
1N4736A	SP-55	S Zen	1	6.8	37	3.5	5	1.90	1.90	1.30

Type	Case	Material Function	Dissipation Watts	Max. Peak Rev. Volt	Reverse Current µA @ V	Forward Current @ V_F=1V mA	Rec. Time Nano-Sec.	EACH 1-9	10-99	100-Up
1N4737	SP-55	S Zen	1	7.5	34	4	10	1.25	1.25	.93
1N4737A	SP-55	S Zen	1	7.5	34	4	5	1.90	1.90	1.30
1N4738	SP-55	S Zen	1	8.2	31	4.5	10	1.25	1.25	.93
1N4738A	SP-55	S Zen	1	8.2	31	4.5	5	1.90	1.90	1.30
1N4739	SP-55	S Zen	1	9.1	28	5	10	1.25	1.25	.93
1N4739A	SP-55	S Zen	1	9.1	28	5	5	1.90	1.90	1.30
1N4740	SP-55	S Zen	1	10.0	25	7	10	1.25	1.25	.93
1N4740A	SP-55	S Zen	1	10.0	25	7	5	1.90	1.90	1.30
1N4741	SP-55	S Zen	1	11.0	23	8	10	1.25	1.25	.93
1N4741A	SP-55	S Zen	1	11.0	23	8	5	1.90	1.90	1.30
1N4742	SP-55	S Zen	1	12.0	21	9	10	1.25	1.25	.93
1N4742A	SP-55	S Zen	1	12.0	21	9	5	1.90	1.90	1.30
1N4743	SP-55	S Zen	1	13.0	19	10	10	1.25	1.25	.93
1N4743A	SP-55	S Zen	1	13.0	19	10	5	1.90	1.90	1.30
1N4744	SP-55	S Zen	1	15.0	17	14	10	1.25	1.25	.93
1N4744A	SP-55	S Zen	1	15.0	17	14	5	1.90	1.90	1.30
1N4745	SP-55	S Zen	1	16.0	15.5	16	10	1.25	1.25	.93
1N4745A	SP-55	S Zen	1	16.0	15.5	16	5	1.90	1.90	1.30
1N4746	SP-55	S Zen	1	18.0	14	20	10	1.25	1.25	.93
1N4746A	SP-55	S Zen	1	18.0	14	20	5	1.90	1.90	1.30
1N4747	SP-55	S Zen	1	20.0	12.5	22	10	1.25	1.25	.93
1N4747A	SP-55	S Zen	1	20.0	12.5	22	5	1.90	1.90	1.30
1N4748	SP-55	S Zen	1	22.0	11.5	23	10	1.25	1.25	.93
1N4748A	SP-55	S Zen	1	22.0	11.5	23	5	1.90	1.90	1.30
1N4749	SP-55	S Zen	1	24.0	10.5	25	10	1.25	1.25	.93
1N4749A	SP-55	S Zen	1	24.0	10.5	25	5	1.90	1.90	1.30
1N4750	SP-55	S Zen	1	27.0	9.5	35	10	1.25	1.25	.93
1N4750A	SP-55	S Zen	1	27.0	9.5	35	5	1.90	1.90	1.30
1N4751	SP-55	S Zen	1	30.0	8.5	40	10	1.25	1.25	.93
1N4751A	SP-55	S Zen	1	30.0	8.5	40	5	1.90	1.90	1.30
1N4752	SP-55	S Zen	1	33.0	7.5	45	10	1.25	1.25	.93
1N4752A	SP-55	S Zen	1	33.0	7.5	45	5	1.90	1.90	1.30
1N4753	SP-55	S Zen	1	36.0	7.0	50	10	1.25	1.25	.93
1N4753A	SP-55	S Zen	1	36.0	7.0	50	5	1.90	1.90	1.30
1N4754	SP-55	S Zen	1	39.0	6.5	60	10	1.25	1.25	.93
1N4754A	SP-55	S Zen	1	39.0	6.5	60	5	1.90	1.90	1.30
1N4755	SP-55	S Zen	1	43.0	6.0	70	10	1.25	1.25	.93
1N4755A	SP-55	S Zen	1	43.0	6.0	70	5	1.90	1.90	1.30
1N4756	SP-55	S Zen	1	47.0	5.5	80	10	1.25	1.25	.93
1N4756A	SP-55	S Zen	1	47.0	5.5	80	5	1.90	1.90	1.30
1N4757	SP-55	S Zen	1	51.0	5.0	95	10	1.25	1.25	.93
1N4757A	SP-55	S Zen	1	51.0	5.0	95	5	1.90	1.90	1.30
1N4758	SP-55	S Zen	1	56	4.5	110	10	1.25	1.25	.93
1N4758A	SP-55	S Zen	1	56	4.5	110	5	1.90	1.90	1.30
1N4759	SP-55	S Zen	1	62	4.0	125	10	1.25	1.25	.93
1N4759A	SP-55	S Zen	1	62	4.0	125	5	1.90	1.90	1.30
1N4760	SP-55	S Zen	1	68	3.7	150	10	1.25	1.25	.93
1N4760A	SP-55	S Zen	1	68	3.7	150	5	1.90	1.90	1.30
1N4761	SP-55	S Zen	1	75	3.3	175	10	1.25	1.25	.93
1N4761A	SP-55	S Zen	1	75	3.3	175	5	1.90	1.90	1.30
1N4762	SP-55	S Zen	1	82	3.0	200	10	1.25	1.25	.93
1N4762A	SP-55	S Zen	1	82	3.0	200	5	1.90	1.90	1.30
1N4763	SP-55	S Zen	1	91	2.8	250	10	1.25	1.25	.93
1N4763A	SP-55	S Zen	1	91	2.8	250	5	1.90	1.90	1.30
1N4764	SP-55	S Zen	1	100	2.5	350	10	1.25	1.25	.93
1N4764A	SP-55	S Zen	1	100	2.5	350	5	1.90	1.90	1.30
1N4785	TO-3	G Rect		320 Volts V_{RM}-10 Amps Io				1.50	1.30	1.08
1N4816	SP-56	S Rect		50 Volts V_{RM}-1.5 Amps Io				.45	.24	.20
1N4817	SP-56	S Rect		100 Volts V_{RM}-1.5 Amps Io				.53	.28	.24
1N4818	SP-56	S Rect		200 Volts V_{RM}-1.5 Amps Io				.63	.32	.28
1N4819	SP-56	S Rect		300 Volts V_{RM}-1.5 Amps Io				.73	.37	.32
1N4820	SP-56	S Rect		200 Volts V_{RM}-1.5 Amps Io				.78	.41	.35
1N4821	SP-56	S Rect		500 Volts V_{RM}-1.5 Amps Io				.85	.45	.38
1N4822	SP-56	S Rect		600 Volts V_{RM}-1.5 Amps Io				1.00	.50	.44
1N4997	SP-57	S Rect		50 Volts V_{RM}-3 Amps Io				.92	.66	.44
1N4998	SP-57	S Rect		100 Volts V_{RM}-3 Amps Io				1.05	.73	.49
1N4999	SP-57	S Rect		200 Volts V_{RM}-3 Amps Io				1.17	.82	.55
1N5000	SP-57	S Rect		400 Volts V_{RM}-3 Amps Io				1.58	1.12	.75
1N5001	SP-57	S Rect		600 Volts V_{RM}-3 Amps Io				2.12	1.50	1.00
1N5002	SP-57	S Rect		800 Volts V_{RM}-3 Amps Io				3.20	2.25	1.50
1N5003	SP-57	S Rect		1000 Volts V_{RM}-3 Amps Io				4.77	3.35	2.25
1N5052	SP-56	S Rect		700 Volts V_{RM}-1.5 Amps Io				1.40	.70	.62
1N5053	SP-56	S Rect		800 Volts V_{RM}-1.5 Amps Io				1.70	.85	.75
1N5054	SP-56	S Rect		1000 Volts V_{RM}-1.5 Amps Io				2.30	1.20	1.02
1N5211	SP-58	S Rect		200 Volts V_{RM}-1 Amp Io				.58	.38	.28
1N5212	SP-58	S Rect		400 Volts V_{RM}-1 Amp Io				.63	.42	.30
1N5213	SP-58	S Rect		600 Volts V_{RM}-1 Amp Io				.85	.56	.41
1N5214	SP-58	S Rect		800 Volts V_{RM}-1 Amp Io				1.23	.81	.59
1N5215	SP-25	S Rect		200 Volts V_{RM}-0.75 Amp Io				.63	.42	.30
1N5216	SP-25	S Rect		400 Volts V_{RM}-0.75 Amp Io				.63	.45	.33
1N5217	SP-25	S Rect		600 Volts V_{RM}-0.75 Amp Io				.90	.60	.44
1N5218	SP-59	S Rect		800 Volts V_{RM}-0.375 Amp Io				1.28	.85	.62
1N5221	DO-7	S Zen	.5	2.4	20	30	20	.53	.48	.26
1N5221A	DO-7	S Zen	.5	2.4	20	30	10	.68	.64	.34
1N5221B	DO-7	S Zen	.5	2.4	20	30	5	.78	.74	.39
1N5222	DO-7	S Zen	.5	2.5	20	30	20	.53	.48	.26
1N5222A	DO-7	S Zen	.5	2.5	20	30	10	.68	.64	.34
1N5222B	DO-7	S Zen	.5	2.5	20	30	5	.78	.74	.39
1N5223	DO-7	S Zen	.5	2.7	20	30	20	.53	.48	.26
1N5223A	DO-7	S Zen	.5	2.7	20	30	10	.68	.64	.34
1N5223B	DO-7	S Zen	.5	2.7	20	30	5	.78	.74	.39
1N5224	DO-7	S Zen	.5	2.8	20	29	20	.53	.48	.26
1N5224A	DO-7	S Zen	.5	2.8	20	29	10	.68	.64	.34
1N5224B	DO-7	S Zen	.5	2.8	20	29	5	.78	.74	.39
1N5225	DO-7	S Zen	.5	3.1	20	29	20	.53	.48	.26

Type	Case	Material Function	Dissipation Watts	Zener Voltage Volts	Zener Test Current mA	Zener Test Imped. Ohms	Tol. %	EACH 1-9	10-99	100-Up
1N5225A	DO-7	S Zen	.5	3.1	20	29	10	.68	.64	.34
1N5225B	DO-7	S Zen	.5	3.1	20	29	5	.78	.74	.39
1N5226	DO-7	S Zen	.5	3.3	20	28	20	.53	.48	.26
1N5226A	DO-7	S Zen	.5	3.3	20	28	10	.68	.64	.34
1N5226B	DO-7	S Zen	.5	3.3	20	28	5	.78	.74	.39
1N5227	DO-7	S Zen	.5	3.6	20	24	20	.53	.48	.26
1N5227A	DO-7	S Zen	.5	3.6	20	24	10	.68	.64	.34
1N5227B	DO-7	S Zen	.5	3.6	20	24	5	.78	.74	.39
1N5228	DO-7	S Zen	.5	3.9	20	23	20	.53	.48	.26
1N5228A	DO-7	S Zen	.5	3.9	20	23	10	.68	.64	.34
1N5228B	DO-7	S Zen	.5	3.9	20	23	5	.78	.74	.39
1N5229	DO-7	S Zen	.5	4.3	20	22	20	.53	.48	.26
1N5229A	DO-7	S Zen	.5	4.3	20	22	10	.68	.64	.34
1N5229B	DO-7	S Zen	.5	4.3	20	22	5	.78	.74	.39
1N5230	DO-7	S Zen	.5	4.7	20	19	20	.53	.48	.26
1N5230A	DO-7	S Zen	.5	4.7	20	19	10	.68	.64	.34
1N5230B	DO-7	S Zen	.5	4.7	20	19	5	.78	.74	.39
1N5231	DO-7	S Zen	.5	5.1	20	17	20	.53	.48	.26
1N5231A	DO-7	S Zen	.5	5.1	20	17	10	.68	.64	.34
1N5231B	DO-7	S Zen	.5	5.1	20	17	5	.78	.74	.39
1N5232	DO-7	S Zen	.5	5.6	20	11	20	.53	.48	.26
1N5232A	DO-7	S Zen	.5	5.6	20	11	10	.68	.64	.34
1N5232B	DO-7	S Zen	.5	5.6	20	11	5	.78	.74	.39
1N5233	DO-7	S Zen	.5	6.0	20	9	20	.53	.48	.26
1N5233A	DO-7	S Zen	.5	6.0	20	9	10	.68	.64	.34
1N5233B	DO-7	S Zen	.5	6.0	20	9	5	.78	.74	.39
1N5234	DO-7	S Zen	.5	6.2	20	7	20	.53	.48	.26
1N5234A	DO-7	S Zen	.5	6.2	20	7	10	.68	.64	.34
1N5234B	DO-7	S Zen	.5	6.2	20	7	5	.78	.74	.39
1N5235	DO-7	S Zen	.5	6.8	20	5	20	.53	.48	.26
1N5235A	DO-7	S Zen	.5	6.8	20	5	10	.68	.64	.34
1N5235B	DO-7	S Zen	.5	6.8	20	5	5	.78	.74	.39
1N5236	DO-7	S Zen	.5	7.5	20	6	20	.53	.48	.26
1N5236A	DO-7	S Zen	.5	7.5	20	6	10	.68	.64	.34
1N5236B	DO-7	S Zen	.5	7.5	20	6	5	.78	.74	.39
1N5237	DO-7	S Zen	.5	8.2	20	8	20	.53	.48	.26
1N5237A	DO-7	S Zen	.5	8.2	20	8	10	.68	.64	.34
1N5237B	DO-7	S Zen	.5	8.2	20	8	5	.78	.74	.39
1N5238	DO-7	S Zen	.5	8.7	20	9	20	.53	.48	.26
1N5238A	DO-7	S Zen	.5	8.7	20	9	10	.68	.64	.34
1N5238B	DO-7	S Zen	.5	8.7	20	9	5	.78	.74	.39
1N5239	DO-7	S Zen	.5	9.1	20	10	20	.53	.48	.26
1N5239A	DO-7	S Zen	.5	9.1	20	10	10	.68	.64	.34
1N5239B	DO-7	S Zen	.5	9.1	20	10	5	.78	.74	.39
1N5240	DO-7	S Zen	.5	10.0	20	17	20	.53	.48	.26
1N5240A	DO-7	S Zen	.5	10.0	20	17	10	.68	.64	.34
1N5240B	DO-7	S Zen	.5	10.0	20	17	5	.78	.74	.39
1N5241	DO-7	S Zen	.5	11.0	20	22	20	.53	.48	.26
1N5241A	DO-7	S Zen	.5	11.0	20	22	10	.68	.64	.34
1N5241B	DO-7	S Zen	.5	11.0	20	22	5	.78	.74	.39
1N5242	DO-7	S Zen	.5	12.0	20	30	20	.53	.48	.26
1N5242A	DO-7	S Zen	.5	12.0	20	30	10	.68	.64	.34
1N5242B	DO-7	S Zen	.5	12.0	20	30	5	.78	.74	.39
1N5243	DO-7	S Zen	.5	13.0	9.5	13	20	.53	.48	.26
1N5243A	DO-7	S Zen	.5	13.0	9.5	13	10	.68	.64	.34
1N5243B	DO-7	S Zen	.5	13.0	9.5	13	5	.78	.74	.39
1N5244	DO-7	S Zen	.5	14	9.0	15	20	.53	.48	.26
1N5244A	DO-7	S Zen	.5	14	9.0	15	10	.68	.64	.34
1N5244B	DO-7	S Zen	.5	14	9.0	15	5	.78	.74	.39
1N5245	DO-7	S Zen	.5	15	8.5	16	20	.53	.48	.26
1N5245A	DO-7	S Zen	.5	15	8.5	16	10	.68	.64	.34
1N5245B	DO-7	S Zen	.5	15	8.5	16	5	.78	.74	.39
1N5246	DO-7	S Zen	.5	16	7.8	17	20	.53	.48	.26
1N5246A	DO-7	S Zen	.5	16	7.8	17	10	.68	.64	.34
1N5246B	DO-7	S Zen	.5	16	7.8	17	5	.78	.74	.39
1N5247	DO-7	S Zen	.5	17	7.4	19	20	.53	.48	.26
1N5247A	DO-7	S Zen	.5	17	7.4	19	10	.68	.64	.34
1N5247B	DO-7	S Zen	.5	17	7.4	19	5	.78	.74	.39
1N5248	DO-7	S Zen	.5	18	7.0	21	20	.53	.48	.26
1N5248A	DO-7	S Zen	.5	18	7.0	21	10	.68	.64	.34
1N5248B	DO-7	S Zen	.5	18	7.0	21	5	.78	.74	.39
1N5249	DO-7	S Zen	.5	19	6.6	23	20	.53	.48	.26
1N5249A	DO-7	S Zen	.5	19	6.6	23	10	.68	.64	.34
1N5249B	DO-7	S Zen	.5	19	6.6	23	5	.78	.74	.39
1N5250	DO-7	S Zen	.5	20	6.2	25	20	.53	.48	.26
1N5250A	DO-7	S Zen	.5	20	6.2	25	10	.68	.64	.34
1N5250B	DO-7	S Zen	.5	20	6.2	25	5	.78	.74	.39
1N5251	DO-7	S Zen	.5	22	5.6	29	20	.53	.48	.26

See Page 28 for Explanation of Abbreviations and Symbols

SEE PAGE 12 FOR INTEGRATED CIRCUITS

Type	Case	Material Function	Dissi-pation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	10-99	100-Up
1N5251A	DO-7	S Zen	.5	22	5.6	29	10	.68	.64	.34
1N5251B	DO-7	S Zen	.5	22	5.6	29	5	.78	.74	.39
1N5252	DO-7	S Zen	.5	24	5.2	33	20	.53	.48	.26
1N5252A	DO-7	S Zen	.5	24	5.2	33	10	.68	.64	.34
1N5252B	DO-7	S Zen	.5	24	5.2	33	5	.78	.74	.39
1N5253	DO-7	S Zen	.5	25	5.0	37	20	.53	.48	.26
1N5253A	DO-7	S Zen	.5	25	5.0	37	10	.68	.64	.34
1N5253B	DO-7	S Zen	.5	25	5.0	37	5	.78	.74	.39
1N5254	DO-7	S Zen	.5	27	4.6	41	20	.53	.48	.26
1N5254A	DO-7	S Zen	.5	27	4.6	41	10	.68	.64	.34
1N5254B	DO-7	S Zen	.5	27	4.6	41	5	.78	.74	.39
1N5255	DO-7	S Zen	.5	28	4.5	45	20	.53	.48	.26
1N5255A	DO-7	S Zen	.5	28	4.5	45	10	.68	.64	.34
1N5255B	DO-7	S Zen	.5	28	4.5	45	5	.78	.74	.39
1N5256	DO-7	S Zen	.5	30	4.2	49	20	.53	.48	.26
1N5256A	DO-7	S Zen	.5	30	4.2	49	10	.68	.64	.34
1N5256B	DO-7	S Zen	.5	30	4.2	49	5	.78	.74	.39
1N5257	DO-7	S Zen	.5	33	3.8	58	20	.53	.48	.26
1N5257A	DO-7	S Zen	.5	33	3.8	58	10	.68	.64	.34
1N5257B	DO-7	S Zen	.5	33	3.8	58	5	.78	.74	.39
1N5258	DO-7	S Zen	.5	36	3.4	70	20	.53	.48	.26
1N5258A	DO-7	S Zen	.5	36	3.4	70	10	.68	.64	.34
1N5258B	DO-7	S Zen	.5	36	3.4	70	5	.78	.74	.39
1N5259	DO-7	S Zen	.5	39	3.2	80	20	.53	.48	.26
1N5259A	DO-7	S Zen	.5	39	3.2	80	10	.68	.64	.34
1N5259B	DO-7	S Zen	.5	39	3.2	80	5	.78	.74	.39
1N5260	DO-7	S Zen	.5	43	3.0	93	20	.53	.48	.26
1N5260A	DO-7	S Zen	.5	43	3.0	93	10	.68	.64	.34
1N5260B	DO-7	S Zen	.5	43	3.0	93	5	.78	.74	.39
1N5261	DO-7	S Zen	.5	47	2.7	105	20	.53	.48	.26
1N5261A	DO-7	S Zen	.5	47	2.7	105	10	.68	.64	.34
1N5261B	DO-7	S Zen	.5	47	2.7	105	5	.78	.74	.39
1N5262	DO-7	S Zen	.5	51	2.5	125	20	.53	.48	.26
1N5262A	DO-7	S Zen	.5	51	2.5	125	10	.68	.64	.34
1N5262B	DO-7	S Zen	.5	51	2.5	125	5	.78	.74	.39
1N5263	DO-7	S Zen	.5	56	2.2	150	20	.53	.48	.26
1N5263A	DO-7	S Zen	.5	56	2.2	150	10	.68	.64	.34
1N5263B	DO-7	S Zen	.5	56	2.2	150	5	.78	.74	.39
1N5264	DO-7	S Zen	.5	60	2.1	165	20	.53	.48	.26
1N5264A	DO-7	S Zen	.5	60	2.1	165	10	.68	.64	.34
1N5264B	DO-7	S Zen	.5	60	2.1	165	5	.78	.74	.39
1N5265	DO-7	S Zen	.5	62	2.0	185	20	.53	.48	.26
1N5265A	DO-7	S Zen	.5	62	2.0	185	10	.68	.64	.34
1N5265B	DO-7	S Zen	.5	62	2.0	185	5	.78	.74	.39
1N5266	DO-7	S Zen	.5	68	1.8	230	20	.53	.48	.26
1N5267A	DO-7	S Zen	.5	68	1.8	230	10	.68	.64	.34
1N5267B	DO-7	S Zen	.5	68	1.8	230	5	.78	.74	.39
1N5267	DO-7	S Zen	.5	75	1.7	270	20	.53	.48	.26
1N5267A	DO-7	S Zen	.5	75	1.7	270	10	.68	.64	.34
1N5267B	DO-7	S Zen	.5	75	1.7	270	5	.78	.75	.39
1N5268	DO-7	S Zen	.5	82	1.5	320	20	.53	.48	.26
1N5268A	DO-7	S Zen	.5	82	1.5	320	10	.68	.64	.34
1N5268B	DO-7	S Zen	.5	82	1.5	320	5	.78	.75	.39
1N5269	DO-7	S Zen	.5	87	1.4	350	20	.53	.48	.26
1N5269A	DO-7	S Zen	.5	87	1.4	350	10	.68	.64	.34
1N5269B	DO-7	S Zen	.5	87	1.4	350	5	.78	.75	.39
1N5270	DO-7	S Zen	.5	91	1.4	400	20	.53	.48	.26
1N5270A	DO-7	S Zen	.5	91	1.4	400	10	.68	.64	.34
1N5270B	DO-7	S Zen	.5	91	1.4	400	5	.78	.75	.39
1N5271	DO-7	S Zen	.5	100	1.3	500	20	.53	.48	.26
1N5271A	DO-7	S Zen	.5	100	1.3	500	10	.68	.64	.34
1N5271B	DO-7	S Zen	.5	100	1.3	500	5	.78	.75	.39
1N5272	DO-7	S Zen	.5	110	1.1	700	20	.53	.48	.26
1N5272A	DO-7	S Zen	.5	110	1.1	700	10	.68	.64	.34
1N5272B	DO-7	S Zen	.5	110	1.1	700	5	.78	.75	.39
1N5273	DO-7	S Zen	.5	120	1.0	900	20	.53	.48	.26
1N5273A	DO-7	S Zen	.5	120	1.0	900	10	.68	.64	.34
1N5273B	DO-7	S Zen	.5	120	1.0	900	5	.78	.75	.39
1N5274	DO-7	S Zen	.5	130	0.95	1100	20	.53	.48	.26
1N5274A	DO-7	S Zen	.5	130	0.95	1100	10	.68	.64	.34
1N5274B	DO-7	S Zen	.5	130	0.95	1100	5	.78	.75	.39
1N5275	DO-7	S Zen	.5	140	0.90	1300	20	.53	.48	.26
1N5275A	DO-7	S Zen	.5	140	0.90	1300	10	.68	.64	.34
1N5275B	DO-7	S Zen	.5	140	0.90	1300	5	.78	.75	.39
1N5276	DO-7	S Zen	.5	150	0.85	1500	20	.53	.48	.26
1N5276A	DO-7	S Zen	.5	150	0.85	1500	10	.68	.64	.34
1N5276B	DO-7	S Zen	.5	150	0.85	1500	5	.78	.75	.39

Type	Case	Material Function	Dissi-pation Watts	Zenner Volt-age Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-99	100 Up
1N5333A	SP-60	S Zen	5	3.3	380	3.0	10	2.20	1.55
1N5333B	SP-60	S Zen	5	3.3	380	3.0	5	2.35	1.75
1N5334A	SP-60	S Zen	5	3.6	350	2.5	10	2.20	1.55

Type	Case	Material Function	Dissi-pation Watts	Zenner Volt-age Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-99	100 Up
1N5334B	SP-60	S Zen	5	3.6	350	2.5	5	2.35	1.75
1N5335A	SP-60	S Zen	5	3.9	320	2.0	10	2.20	1.55
1N5335B	SP-60	S Zen	5	3.9	320	2.0	5	2.35	1.75
1N5336A	SP-60	S Zen	5	4.3	290	2.0	10	2.20	1.55
1N5336B	SP-60	S Zen	5	4.3	290	2.0	5	2.35	1.75
1N5337A	SP-60	S Zen	5	4.7	260	2.0	10	2.20	1.55
1N5337B	SP-60	S Zen	5	4.7	260	2.0	5	2.35	1.75
1N5338A	SP-60	S Zen	5	5.1	240	1.5	10	2.20	1.55
1N5338B	SP-60	S Zen	5	5.1	240	1.5	5	2.35	1.75
1N5339A	SP-60	S Zen	5	5.6	220	1.0	10	2.20	1.55
1N5339B	SP-60	S Zen	5	5.6	220	1.0	5	2.35	1.75
1N5340A	SP-60	S Zen	5	6.0	200	1.0	10	2.20	1.55
1N5340B	SP-60	S Zen	5	6.0	200	1.0	5	2.35	1.75
1N5341A	SP-60	S Zen	5	6.2	200	1.0	10	2.20	1.55
1N5341B	SP-60	S Zen	5	6.2	200	1.0	5	2.35	1.75
1N5342A	SP-60	S Zen	5	6.8	175	1.0	10	2.20	1.55
1N5342B	SP-60	S Zen	5	6.8	175	1.0	5	2.35	1.75
1N5343A	SP-60	S Zen	5	7.5	175	1.5	10	2.20	1.55
1N5343B	SP-60	S Zen	5	7.5	175	1.5	5	2.35	1.75
1N5344A	SP-60	S Zen	5	8.2	150	1.5	10	2.20	1.55
1N5344B	SP-60	S Zen	5	8.2	150	1.5	5	2.35	1.75
1N5345A	SP-60	S Zen	5	8.7	150	2.0	10	2.20	1.55
1N5345B	SP-60	S Zen	5	8.7	150	2.0	5	2.35	1.75
1N5346A	SP-60	S Zen	5	9.1	150	2.0	10	2.20	1.55
1N5346B	SP-60	S Zen	5	9.1	150	2.0	5	2.35	1.75
1N5347A	SP-60	S Zen	5	10.0	125	2.0	10	2.20	1.55
1N5347B	SP-60	S Zen	5	10.0	125	2.0	5	2.35	1.75
1N5348A	SP-60	S Zen	5	11.0	125	2.5	10	2.20	1.55
1N5348B	SP-60	S Zen	5	11.0	125	2.5	5	2.35	1.75
1N5349A	SP-60	S Zen	5	12.0	100	2.5	10	2.20	1.55
1N5349B	SP-60	S Zen	5	12.0	100	2.5	5	2.35	1.75
1N5350A	SP-60	S Zen	5	13.0	100	2.5	10	2.20	1.55
1N5350B	SP-60	S Zen	5	13.0	100	2.5	5	2.35	1.75
1N5351A	SP-60	S Zen	5	14.0	100	2.5	10	2.20	1.55
1N5351B	SP-60	S Zen	5	14.0	100	2.5	5	2.35	1.75
1N5352A	SP-60	S Zen	5	15.0	75	2.5	10	2.20	1.55
1N5352B	SP-60	S Zen	5	15.0	75	2.5	5	2.35	1.75
1N5353A	SP-60	S Zen	5	16.0	75	2.5	10	2.20	1.55
1N5353B	SP-60	S Zen	5	16.0	75	2.5	5	2.35	1.75
1N5354A	SP-60	S Zen	5	17	70	2.5	10	2.20	1.55
1N5354B	SP-60	S Zen	5	17	70	2.5	5	2.35	1.75
1N5355A	SP-60	S Zen	5	18	65	2.5	10	2.20	1.55
1N5355B	SP-60	S Zen	5	18	65	2.5	5	2.35	1.75
1N5356A	SP-60	S Zen	5	19	65	3.0	10	2.20	1.55
1N5356B	SP-60	S Zen	5	19	65	3.0	5	2.35	1.75
1N5357A	SP-60	S Zen	5	20	65	3.0	10	2.20	1.55
1N5357B	SP-60	S Zen	5	20	65	3.0	5	2.35	1.75
1N5358A	SP-60	S Zen	5	22	50	3.5	10	2.20	1.55
1N5358B	SP-60	S Zen	5	22	50	3.5	5	2.35	1.75
1N5359A	SP-60	S Zen	5	24	50	3.5	10	2.20	1.55
1N5359B	SP-60	S Zen	5	24	50	3.5	5	2.35	1.75
1N5360A	SP-60	S Zen	5	25	50	4.0	10	2.20	1.55
1N5360B	SP-60	S Zen	5	25	50	4.0	5	2.35	1.75
1N5360	SP-60	S Zen	5	27	50	5.0	10	2.20	1.55
1N5361B	SP-60	S Zen	5	27	50	5.0	5	2.35	1.75
1N5362A	SP-60	S Zen	5	28	50	6.0	10	2.20	1.55
1N5362B	SP-60	S Zen	5	28	50	6.0	5	2.35	1.75
1N5363A	SP-60	S Zen	5	30	40	8	10	2.20	1.55
1N5363B	SP-60	S Zen	5	30	40	8	5	2.35	1.75
1N5364A	SP-60	S Zen	5	33	40	10	10	2.20	1.55
1N5364B	SP-60	S Zen	5	33	40	10	5	2.35	1.75
1N5365A	SP-60	S Zen	5	36	30	11	10	2.20	1.55
1N5365B	SP-60	S Zen	5	36	30	11	5	2.35	1.75
1N5366A	SP-60	S Zen	5	39	30	14	10	2.20	1.55
1N5366B	SP-60	S Zen	5	39	30	14	5	2.35	1.75
1N5367A	SP-60	S Zen	5	43	30	20	10	2.20	1.55
1N5367B	SP-60	S Zen	5	43	30	20	5	2.35	1.75
1N5368A	SP-60	S Zen	5	47	25	25	10	2.20	1.55
1N5368B	SP-60	S Zen	5	47	25	25	5	2.35	1.75
1N5369A	SP-60	S Zen	5	51	25	27	10	2.20	1.55
1N5369B	SP-60	S Zen	5	51	25	27	5	2.35	1.75
1N5370A	SP-60	S Zen	5	56	20	35	10	2.20	1.55
1N5370B	SP-60	S Zen	5	56	20	35	5	2.35	1.75
1N5371A	SP-60	S Zen	5	60	20	40	10	2.20	1.55
1N5371B	SP-60	S Zen	5	60	20	40	5	2.35	1.75
1N5372A	SP-60	S Zen	5	62	20	42	10	2.20	1.55
1N5372B	SP-60	S Zen	5	62	20	42	5	2.35	1.75
1N5373A	SP-60	S Zen	5	68	20	44	10	2.20	1.55
1N5373B	SP-60	S Zen	5	68	20	44	5	2.35	1.75
1N5374A	SP-60	S Zen	5	75	20	45	10	2.20	1.55
1N5374B	SP-60	S Zen	5	75	20	45	5	2.35	1.75
1N5375A	SP-60	S Zen	5	82	15	65	10	2.20	1.55
1N5375B	SP-60	S Zen	5	82	15	65	5	2.35	1.75
1N5376A	SP-60	S Zen	5	87	15	75	10	2.20	1.55
1N5376B	SP-60	S Zen	5	87	15	75	5	2.35	1.75
1N5377A	SP-60	S Zen	5	91	15	75	10	2.20	1.55
1N5377B	SP-60	S Zen	5	91	15	75	5	2.35	1.75

Type	Case	Material Function	Dissi-pation Watts	Zenner Volt-age Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-99	EACH 100 Up
1N5378A	SP-60	S Zen	5	100	12	90	10	2.20	1.55
1N5378B	SP-60	S Zen	5	100	12	90	5	2.35	1.75
1N5379A	SP-60	S Zen	5	110	12	125	10	2.20	1.55
1N5379B	SP-60	S Zen	5	110	12	125	5	2.35	1.75
1N5380A	SP-60	S Zen	5	120	10	170	10	2.20	1.55
1N5380B	SP-60	S Zen	5	120	10	170	5	2.35	1.75
1N5381A	SP-60	S Zen	5	130	10	190	10	2.20	1.55
1N5381B	SP-60	S Zen	5	130	10	190	5	2.35	1.75
1N5382A	SP-60	S Zen	5	140	8	230	10	2.20	1.55
1N5382B	SP-60	S Zen	5	140	8	230	5	2.35	1.75
1N5383A	SP-60	S Zen	5	150	8	330	10	2.20	1.55
1N5383B	SP-60	S Zen	5	150	8	330	5	2.35	1.75
1N5384A	SP-60	S Zen	5	160	8	350	10	2.20	1.55
1N5384B	SP-60	S Zen	5	160	8	350	5	2.35	1.75
1N5385A	SP-60	S Zen	5	170	8	380	10	2.20	1.55
1N5385B	SP-60	S Zen	5	170	8	380	5	2.35	1.75
1N5386A	SP-60	S Zen	5	180	5	430	10	2.20	1.55
1N5386B	SP-60	S Zen	5	180	5	430	5	2.35	1.75
1N5387A	SP-60	S Zen	5	190	5	450	10	2.20	1.55
1N5387B	SP-60	S Zen	5	190	5	450	5	2.35	1.75
1N5388A	SP-60	S Zen	5	200	5	480	10	2.20	1.55
1N5388B	SP-60	S Zen	5	200	5	480	5	2.35	1.75
1N5411	DO-26	S Diac.		32 Volts VBO Typ. - 2Amps Io				.93	.61.44

Type	Case	Material Function	Maximum Ratings: Dissi-pation Watts	Maximum Ratings: Col't'r To Base Volts	Maximum Ratings: Col't'r Curr. mA	Beta H_{FE} @ Ic Min.-Max.	Beta H_{FE} @ Ic mA	f_T MHz	EACH 1-9	EACH 10-99	EACH 100-Up
2N109	T0-40	GP A	.165	35	150	65-115	50	....	1.50	1.00	.73
2N118A	SP-61	SN SH	.150	45	25	29-	1	2	8.15	8.15	5.45
2N119	SP-61	SN SH	.150	45	25	63-	1	2	11.05	11.05	7.35
2N176	T0-3	GP AP	10	40	3	63 Typ.	.5A	....	2.23	1.49	1.08
2N217	T0-1	GP A	.165	35	150	65-115	50	....	1.00	.67	.49
2N244	SP-61	SN GP	.75	60	60	†.96-.99	5A	....	16.36	16.36	12.24
2N250A	T0-3	GP AP	90	40	7A	25-100	3A	....	1.73	1.73	1.15
2N251A	T0-3	GP AP	90	60	7A	25-100	3A	....	1.88	1.88	1.25
2N274	T0-44	GP AP	.120	40	10	20-175	1.5	20	2.23	1.49	1.08
2N332	T0-5	SN GP	.15	45	25	9-20	....	6	4.65	4.65	3.10
2N333	T0-5	SN GP	.15	45	25	18-40	....	....	4.65	4.65	3.10
2N333A	T0-5	SN GP	.5	45	25	18-40	....	....	4.90	4.90	3.30
2N334	T0-5	SN GP	.15	45	25	18-90	....	8	4.65	4.65	3.10
2N335	T0-5	SN GP	.15	45	25	36-90	....	11	4.90	4.90	3.30
2N335A	T0-5	SN GP	.5	45	25	36-90	....	11	5.20	5.20	3.50
2N336	T0-5	SN GP	.15	45	25	76-333	....	13	5.95	5.95	3.95
2N336A	T0-5	SN GP	.5	45	25	76-333	....	13	6.25	6.25	4.20
2N337	T0-5	SN GP	.125	45	20	20-55	10	20	4.85	4.85	3.20
2N338	T0-5	SN GP	.125	45	20	45-100	10	20	5.50	5.50	3.65
2N339	T0-5	SN GP	1	45	60	†.9-.99	5	....	8.12	8.12	6.08
2N341	T0-5	SN GP	1	125	60	†.9-.99	5	....	14.00	14.00	10.49
2N342	T0-5	SN GP	1	85	60	†.9-.99	5	....	9.48	9.48	7.11
2N342A	T0-5	SN GP	1	85	60	†.9-.99	5	....	9.52	9.52	7.16
2N342/ JAN	T0-5	SN GP	1	85	60	†.9-.99	5	....	11.64	11.64	8.69
2N343	T0-5	SN GP	1	85	60	†.97-.99	5	....	14.75	14.75	11.03
2N370	T0-7	GP AH	80	24	10	....	....	132	1.87	1.24	.91
2N372	T0-7	GP AH	80	24	10	....	....	132	1.85	1.22	.89
2N384	T0-44	GP AH	.120	40	.10	20-175	1.5	100	2.88	1.96	1.38
2N388	T0-5	GN S	.15	25	200	60-180	30	1400	.47	.47	.34
2N388A	T0-5	GN S	.15	40	200	60-180	30	1400	.88	.88	.64
2N389	T0-5	GP S	.15	105	250	20-	5	.8	21.00	21.00	14.00
2N395	T0-5	GP GP	.15	30	250	20-	....	3	.50	.50	.33
2N398	T0-5	GP S	.05	105	100	20-	5	.8	.90	.90	.60
2N398A	T0-5	GP S	.15	105	200	20-	5	.8	.98	.98	.65
2N398B	T0-5	GP S	.25	105	200	20-	5	.8	1.23	1.23	.82
2N404	T0-5	GP S	.15	25	100	30-	12	12	.42	.42	.28
2N404A	T0-5	GP S	.15	40	150	30-	12	12	.785	.51	.37
2N404/JAN	T0-5	GP S	.15	25	100	30-	12	12	.43	.43	.30
2N405	T0-40	GP A	.15	20	35	35-	1	.65	1.05	.70	.51
2N406	T0-1	GP A	.15	20	35	35-	1	.65	.725	.48	.35
2N407	T0-40	GP A	.15	20	70	65-	50	....	1.125	.75	.55
2N408	T0-1	GP A	.15	20	70	65-	50	....	.825	.55	.40
2N410	T0-1	GP AR	.08	13	15	48-	1	6.7	1.03	.68	.50
2N412	T0-1	GP AR	.08	13	15	75-	.6	10	1.08	.71	.52
2N414	T0-5	GP S	.15	30	200	80-	1	8	.575	.38	.28
2N428	T0-5	GP GP	.15	30	400	60-	....	10	1.23	1.23	.82
2N456A	T0-3	GP AP	150	40	7A	30-90	5A	....	1.80	1.80	1.20
2N456B	T0-3	GP AP	150	40	7A	30-90	5A	....	1.80	1.80	1.20
2N457A	T0-3	GP AP	150	60	7A	30-90	5A	....	2.18	2.18	1.45
2N457B	T0-3	GP AP	150	60	7A	30-90	5A	....	2.18	2.18	1.45
2N458A	T0-3	GP AP	150	80	7A	30-90	5A	....	2.63	2.63	1.75
2N458B	T0-3	GP AP	150	80	7A	30-90.	5A	....	2.63	2.63	1.75
2N489	T0-5	S UJ	.600	V_{BB} †65 V - n .51 - .62 I_P 20 ua					7.10	7.10	4.75
2N489A	T0-5	S UJ	.600	V_{BB} †65 V - n .51 - .62 I_P 15ua					7.65	7.65	5.10
2N489B	T0-5	S UJ	.600	V_{BB} †65 V - n .51 - .62 I_P 6ua					9.15	9.15	6.10
2N490	T0-5	S UJ	.600	V_{BB} †65 V - n .51 - .62 I_P 20 ua					7.80	7.80	5.20
2N490A	T0-5	S UJ	.600	V_{BB} †65 V - n .51 - .62 I_P 15 ua					8.35	8.35	5.55
2N491	T0-5	S UJ	.600	V_{BB} †65 V - n .56 - .68 I_P 20u					8.40	8.40	5.60
2N491A	T0-5	S UJ	.600	V_{BB} †65 V - n .56 - .68 I_P 15ua					8.90	8.90	5.95

Type	Case	Material Function	Maximum Ratings: Dissi-pation Watts	Maximum Ratings: Col't'r To Base Volts	Maximum Ratings: Col't'r Curr. mA	Beta H_{FE} @ Ic Min.-Max.	Beta H_{FE} @ Ic mA	f_T MHz	EACH 1-9	EACH 10-99	EACH 100-Up
2N491B	T0-5	S UJ	.600	V_{BB} †65 V - n .56 - .68 I_P 6ua					10.40	10.40	6.95
2N492	T0-5	S UJ	.600	V_{BB} †65 V - n .56 - .68 I_P 20ua					9.80	9.80	6.55
2N492A	T0-5	S UJ	.600	V_{BB} †65 V - n .56 - .68 I_P 15ua					10.40		
2N492B	T0-5	S UJ	.600	V_{BB} †65 V - n .56 - .68 I_P 6ua					11.90	11.90	7.95
2N493	T0-5	S UJ	.600	V_{BB} †65 V - n .62 - .75 I_P 20 ua					10.75	10.75	7.20
2N493A	T0-5	S UJ	.600	V_{BB} †65 V - n .62 - .75 I_P 20 ua					11.20	11.20	7.50
2N493B	T0-5	S UJ	.600	V_{BB} †65 V - n .62 - .75 I_P 20 ua					12.75		8.50
2N497	T0-5	SN GP	.8A-4C	60	200	12-36	200	....	2.72	1.90	1.28
2N497A	T0-5	SN GP	.8A-5C	60	200	12-36	200	....	2.88	2.05	1.35
2N498	T0-5	SN GP	.8A-4C	100	200	12-36	200	....	2.88	2.05	1.35
2N499	T0-1	GP GP	.03	30	50	....	....	....	7.62	4.35	3.20
2N499A	T0-1	GP GP	.03	30	50	....	....	....	8.63	5.30	3.90
2N501	T0-1	GP GP	.06	15	50	30-	50	90	11.40	6.95	5.10
2N502	T0-9	GP AV	.06	20	50	65-	2	260	5.38	3.30	2.45
2N502A	T0-9	GP AV	.075	30	50	65-	2	260	6.25	3.95	2.85
2N502B	T0-9	GP AV	.075	30	50	20-	2	260	7.25	4.30	3.20
2N508	T0-5	GP A	.20	18	200	99-	20	2.5	.69	.69	.46
2N508A	T0-5	GP A	.20	30	200	20-	20	4.5	5.18	5.18	3.45
2N511B	T0-3	GP AP	150	80	25A	20-60	10A	....	5.18	5.18	3.45
2N542	T0-5	GP GP	.200	30	25	80-200	5	....	6.20	6.20	4.10
2N543	T0-5	GN GP	.200	45	25	80-200	5	....	7.95	7.95	5.30
2N581	T0-5	GP S	.150	18	100	20-	20	4	.50	.50	.33
2N582	T0-5	GP S	.150	25	100	20-	5	4	.66	.66	.48
2N585	T0-5	GN S	.120	25	200	20-	20	3	1.88	1.24	.91
2N588	T0-1	GP AV	.03	15	50	....	....	....	2.50	1.45	1.05
2N591	T0-1	GP A	.085	32	40	40-120	2	....	1.00	.67	.49
2N594	T0-5	GN S	.15	20	300	20-	1	1.5	2.75	2.75	1.83
2N595	T0-5	GN S	.15	35	300	35-	1	3.0	4.25	4.25	2.83
2N596	T0-5	GN S	.15	20	300	20-50	1	5.0	5.65	5.65	3.77
2N650	T0-5	GP GP	.20	45	500	50-33	....	....	1.65	1.65	1.10
2N656	T0-5	SN AP	.8	60	....	30-90	.2	....	2.03	2.03	1.35
2N656A	T0-5	SN AP	1.0	60	....	3-90	.2	....	2.40	2.40	1.60
2N657	T0-5	SN AP	.8	100	....	30-90	.2	....	2.20	2.20	1.47
2N657A	T0-5	SN AP	1.0	100	....	30-90	.2	....	9.00	9.00	6.00
2N659	T0-5	GP GP	.17	30	1A	25-	....	10	1.30	1.30	.87
2N660	T0-5	GP GP	.25	25	1A	40-	....	15	1.48	1.48	.99
2N662	T0-5	GP GP	.25	25	1A	18-	....	10	1.40	1.40	.93
2N681	T0-48	SCR	35 V_{RM}- 16 Amps RMS I_F						3.58	2.34	1.70
2N682	T0-48	SCR	75 V_{RM}- 16 Amps RMS I_F						4.25	2.82	2.05
2N683	T0-48	SCR	150 Volts V_{RM} - 16 Amps RMS I_F						5.40	3.57	2.60
2N684	T0-48	SCR	225 Volts V_{RM} - 16 Amps RMS I_F						6.36	4.19	3.05
2N685	T0-48	SCR	300 Volts V_{RM} - 16 Amps RMS I_F						7.30	4.81	3.50
2N686	T0-48	SCR	350 Volts V_{RM} - 16 Amps RMS I_F						8.15	5.36	3.90
2N687	T0-48	SCR	400 Volts V_{RM} - 16 Amps RMS I_F						8.75	5.77	4.20
2N688	T0-48	SCR	500 Volts V_{RM} - 16 Amps RMS I_F						10.20	6.74	4.90
2N689	T0-48	SCR	600 Volts V_{RM} - 16 Amps RMS I_F						12.25	8.05	5.85
2N690	T0-48	SCR	720 Volts V_{RM} - 16 Amps RMS I_F						13.15	8.67	6.30
2N691	T0-48	SCR	700 Volts V_{RM} - 16 Amps RMS I_F						22.50	12.80	10.60
2N692	T0-48	SCR	800 Volts V_{RM} - 16 Amps RMS I_F						30.60	17.50	14.35
2N696	T0-5	SN GP	.600	60	150	20-60	150	50	.69	.69	.42
2N697	T0-5	SN GP	.600	60	150	40-120	150	50	.52	.52	.46
2N697JAN	T0-5	SN GP	.600	60	150	40-120	150	50	.59	.59	.36
2N698	T0-5	SN GP	.800	60	150	20-60	150	40	1.83	1.83	1.12
2N699	T0-5	SN GP	.800	120	150	40-120	150	40	1.32	1.32	.88
2N703	T0-18	SN GP	.300	25	150	40-100	10	70	2.56	2.56	1.58
2N705	T0-18	GP SH	.150	15	50	25-	3	300	1.04	1.04	.69
2N706	T0-18	SN SH	.300	25	....	20-	10	200	.59	.59	.40
2N706/ JAN	T0-18	SN SH	.300	30	....	30-120	10	200	.65	.65	.44
2N706A	T0-18	SN SH	.300	25	....	20-60	10	200	.63	.63	.42
2N706B	T0-18	SN SH	.300	25	....	20-60	10	200	2.10	1.49	.99
2N707	T0-18	SN AH	.300	25	....	....	....	350	2.17	2.17	1.34
2N708	T0-18	SN SH	.300	40	....	30-120	10	300	.49	.49	.43
2N709	T0-18	SN SH	.300	15	....	30-120	10	600	1.29	1.29	.86
2N710	T0-18	GP SH	.150	15	50	25-	10	300	1.34	1.34	.89
2N711	T0-18	GP SH	.150	12	100	20-	3	300	.89	.89	.55
2N711A	T0-18	GP SH	.150	15	100	25-	3	300	.89	.89	.55
2N711B	T0-18	GP SH	.150	18	100	30-	3	300	.94	.94	.63
2N717	T0-18	SN GP	.400	60	....	20-60	150	40	.99	.99	.66
2N718	T0-18	SN GP	.400	60	....	40-120	150	50	.49	.49	.38
2N718A	T0-18	SN GP	.400	75	....	40-120	150	60	.75	.75	.50
2N719	T0-18	SN GP	.400	120	....	20-60	....	40	2.35	2.35	1.56
2N720	T0-18	SN GP	.400	120	....	40-120	....	50	1.41	1.41	.88
2N720A	T0-18	SN GP	.400	120	....	40-120	....	50	1.30	1.30	.75
2N721	T0-18	SP GP	.400	50	....	20-45	....	50	1.46	1.46	1.27
2N722	T0-18	SP GP	.400	50	....	30-90	....	60	1.46	1.46	1.27
2N730	T0-18	SN GP	.400	60	....	20-60	....	40	.70	.70	.47
2N731	T0-....8	SN GP	.400	60	....	40-120		50	1.10	1.10	.75
2N743	T0-18	SN SH	.300	20	200	20-60	10	280	.94	.94	.63
2N744	T0-18	SN SH	.300	20	200	40-120	10	280	.99	.99	.66
2N753	T0-18	SN SH	.300	25	....	40-120	10	200	.55	.55	.34
2N769	T0-18	GP AU	.035	12	100	55-	20	900	3.25	2.95	1.95
2N779A	T0-18	GP AV	.060	15	100	50-	10	320	5.65	3.50	2.55
2N797	T0-18	GN AU	.150	20	150	85-	50	600	4.27	4.27	2.85
2N834	T0-18	SN SH	.300	30	....	25-	10	200	.54	.54	.33
2N835	T0-18	SN SH	.300	25	....	20-	10	300	.69	.69	.42
2N859	T0-18	SP GP	.150	40	50	35-	5	14	15.50	9.35	6.95
2N861	T0-18	SP GP	.150	25	50	35-	5	22	9.65	6.00	4.40
2N863	T0-18	SP GP	.150	6	50	35-	5	22	7.45	4.50	3.30
2N869	T0-18	SP GP	.360	25	200	20-	10	100	1.42	1.42	.88

SEE PAGE 12 FOR INTEGRATED CIRCUITS

Type	Case	Material Function	Maximum Ratings Dissi-pation Watts	Col'tr To Base Volts	Col'tr Curr. mA	Beta H_{FE} @ Ic Min.-Max.	mA	f_T MHz	EACH 1-9	10-99	100-Up
2N869A	T0-18	SP AU	.360	25	200	40-	30	640	.89	.89	.54
2N870	T0-18	SN GP	.500	100	....	30-	1	50	2.48	2.48	1.65
2N871	T0-18	SN GP	.500	100	....	50-	1	60	2.73	2.73	1.82
2N910	T0-18	SN GP	.500	100	....	80-	5	60	1.78	1.78	1.18
2N911	T0-18	SN GP	.500	100	....	36-	1	50	1.78	1.78	1.18
2N914	T0-18	SN SH	.500	40	500	30-120	10	300	.95	.95	.63
2N915	T0-18	SN GP	.360	70	....	50-200	10	250	1.48	1.48	.92
2N916	T0-18	SN GP	.360	70	....	100-200	10	300	.89	.89	.54
2N917	T0-72	SN AU	.200	30	50	....	....	500	2.48	2.48	1.65
2N918	T0-72	SN AU	.200	30	50	....	....	600	3.30	3.30	2.20
2N918/ JAN	T0-72	SN AU	.200	30	50	....	....	600	4.10	4.10	2.75
2N929	T0-18	SN LN	.600	45	....	40-120	.01	60	1.49	1.49	.98
2N929A	T0-18	SN LN	.600	45	....	40-120	.01	60	1.49	1.49	.98
2N930	T0-18	SN LN	.600	45	....	100-300	.01	60	1.36	1.36	.91
2N930A	T0-18	SN LN	.600	45	....	100-300	.01	60	1.36	1.36	.91
2N956	T0-18	SN GP	.600	45	....	100-300	150	70	.85	.85	.74
2N960	T0-18	GP SH	.150	15	150	20-	10	300	.96	.96	.64
2N961	T0-18	GP SH	.150	12	150	20-	10	300	.91	.91	.61
2N962	T0-18	GP SH	.150	12	150	20-	10	300	.86	.86	.57
2N963	T0-18	GP SH	.150	12	150	20-	10	300	.83	.83	.55
2N964	T0-18	GP SH	.150	15	150	40-	10	300	.99	.99	.66
2N964A	T0-18	GP SH	.150	15	150	40-	10	300			
2N965	T0-18	GP SH	.150	12	150	40-	10	300	.94	.94	.63
2N966	T0-18	GP SH	.150	12	150	40-	10	300	.89	.89	.59
2N967	T0-18	GP SH	.150	12	150	40-	10	250	.87	.87	.58
2N968	T0-18	GP SH	.150	15	150	20-	....	300	.90	.90	.60
2N970	T0-18	GP SH	.150	12	150	20-	....	300	.81	.81	.54
2N973	T0-18	GP SH	.150	12	150	20-	....	300	.89	.89	.59
2N974	T0-18	GP SH	.150	12	150	20-	....	300	.83	.83	.55
2N984	T0-18	GP AH	.060	15	100	70-	10	350	3.85	2.30	1.85
2N985	T0-18	GP AH	.150	15	200	60-	100	300	2.83	2.83	1.89
2N995	T0-18	SP GP	.360	20	....	25-	20	100	2.40	2.40	1.48
2N997	T0-72	SN DA	.500	75	300	7K-70K	100	60	10.50	10.50	7.00
2N998	T0-72	SN DA	.500	100	....	1.6K-8K	10	60	3.45	3.45	2.10
2N999	T0-72	SN DA	.500	60	....	7K-70K	100	60	4.30	4.30	2.65
2N1021A	T0-3	GP AP	150	100	7A	30-90	5A	.200	3.08	3.08	2.05
2N1022	T0-3	GP AP	90C	120	7A	30-90	5A	.200	3.60	3.60	2.40
2N1022A	T0-3	GP AP	150	120	7A	30-90	5A	.200	3.60	3.60	2.40
2N1023	T0-44	GP GP	.120	40	50	60	1.5	120	4.75	3.14	2.28
2N1038	T0-5	GP AP	.400	40	3A	20-60	1A	....	1.80	1.80	1.20
2N1039	T0-5	GP AP	.400	60	3A	20-60	1A	....	2.40	2.40	1.60
2N1039/ JAN	T0-5	GP AP	.400	60	3A	20-60	1A	....	2.48	2.48	1.65
2N1040	T0-5	GP AP	.400	80	3A	20-60	1A	....	3.60	3.60	2.40
2N1041	T0-5	GP AP	.400	100	3A	20-60	1A	....	4.50	4.50	3.00
2N1042	SP-62	GP AP	20C	40	3A	20-60	3A	....	2.85	2.85	1.90
2N1043	SP-62	GP AP	20C	60	3A	20-60	3A	....	4.20	4.20	2.80
2N1045	SP-62	GP AP	20C	100	3A	20-60	3A	....	7.20	7.20	4.80
2N1046	T0-3	GP S	50C	100	12	60-	5A	10	10.25	10.25	7.50
2N1047A	SP-63	GN AP	40CC	80	....	12-	.5A	....	14.30	14.30	9.55
2N1047B	SP-63	GN AP	40C	80	....	36-	.5A	....	25.95	25.95	17.30
2N1049A	SP-63	GN AP	40C	80	....	90-	.5A	....	16.75	16.75	11.15
2N1049B	SP-63	GN AP	40C	80	....	90-	.5A	....	33.75	33.75	22.50
2N1050A	SP-63	GN AP	40C	120	....	90-	.5A	....	22.10	22.10	14.20
2N1050B	SP-63	GN AP	40C	120	....	90-	.5A	....	46.90	46.90	31.20
2N1131	T0-39	SP SH	.600	50	150	20-45	150	#370	1.24	1.24	.82
2N1131/JAN	T0-5	SP SH	.600	50	300	20-45	150	#50	6.00	6.00	4.00
2N1132	T0-39	SP SH	.600	50	150	30-90	150	#380	1.46	1.46	1.27
2N1132A	T0-5	SP SH	.600	50	100	30-90	150	#35	2.27	2.27	1.40
2N1141	T0-39	GP AH	.300	35	100	10-	10	750	4.73	4.73	3.15
2N1142	T0-39	GP AH	.300	30	100	10-	10	600	4.05	4.05	2.70
2N1142/ JAN	T0-39	GP AH	.300	30	100	10-	10	600	4.35	4.35	2.90
2N1143	T0-39	GP AH	.300	25	100	10-	10	480	3.34	3.34	2.22
2N1177	T0-45	GP AH	.080	30	10	100	1	140	2.00	1.32	.97
2N1178	T0-45	GP AH	.080	30	10	40-	1	140	1.95	1.29	.94
2N1179	T0-45	GP AH	.080	30	10	80-	1	140	1.95	1.29	.94
2N1180	T0-45	GP AH	.080	30	10	100	1	140	1.88	1.24	.91
2N1183	T0-8	GP AP	1	45	3	20-60	400	.5	3.23	2.15	1.56
2N1183A	T0-8	GP AP	1	60	3	20-60	400	.5	4.00	2.64	1.92
2N1183B	T0-8	GP AP	1	80	3	20-60	400	.5	5.00	3.30	2.40
2N1184	T0-8	GP AP	1	45	3	40-120	400	....	3.73	2.48	1.80
2N1184A	T0-8	GP AP	1	60	3	40-120	400	....	4.75	3.14	2.28
2N1184B	T0-8	GP AP	1	80	3	40-120	400	....	6.50	4.13	3.00
2N1195	T0-27	GP AH	.250	30	10	....	1.5	860	3.95	3.95	2.63
2N1224	T0-33	GP AR	.240	40	10	20-175	30	30	2.50	1.65	1.20
2N1225	T0-33	GP AR	.240	40	10	20-175	1.5	30	2.775	1.82	1.32
2N1226	T0-33	GP AR	.240	60	10	20-175	1.5	30	3.00	1.98	1.44
2N1277	T0-5	SN GP	.150	40	25	18-44	1.0	30	4.25	4.25	2.84
2N1278	T0-5	SN GP	.150	40	25	37-90	1.0	30	4.75	4.75	3.15
2N1302	T0-5	GN GP	.150	25	300	20-	10	3	.42	.42	.30
2N1303	T0-5	GP GP	.150	30	300	20	10	3	.42	.42	.30
2N1303/JAN	T0-5	GP GP	.150	30	300	20-	10	3	.43	.43	.31
2N1304	T0-5	GN GP	.150	25	....	40-200	10	5	.50	.50	.36
2N1305	T0-5	GP GP	.150	30	300	40-200	10	5	.48	.48	.35
2N1306	T0-5	GN GP	.150	25	300	60-300	10	10	.62	.62	.45
2N1307	T0-5	GP GP	.150	30	300	60-300	10	10	.58	.58	.42
2N1308	T0-5	GN GP	.150	25	200	80-	10	15	.91	.91	.66
2N1309	T0-5	GP GP	.150	30	300	80-	10	15	.91	.91	.66
2N1309/ JAN	T0-5	GP GP	.150	30	300	80-	10	15	.96	.96	.70
2N1370	T0-5	GP GP	.150	25	150	50-150	1	5	.72	.72	.48
2N1371	T0-5	GP GP	.150	25	150	50-150	1	5	1.14	1.14	.76
2N1372	T0-5	GP GP	.150	25	200	30-95	1	5	.81	.81	.54
2N1373	T0-5	GP GP	.150	45	200	30-95	1	5	1.20	1.20	.80
2N1374	T0-5	GP GP	.150	25	200	50-150	1	7	1.02	1.02	.68
2N1375	T0-5	GP GP	.150	45	200	50-150	1	7	1.38	1.38	.92
2N1376	T0-5	GP GP	.150	25	200	75-150	1	10	1.29	1.29	.86
2N1377	T0-5	GP GP	.150	45	200	75-150	1	10	1.50	1.50	1.00
2N1378	T0-5	GP GP	.150	12	200	95-300	1	13	1.29	1.29	.86
2N1379	T0-5	GP GP	.150	25	200	95-300	1	13	1.44	1.44	.96
2N1381	T0-5	GP GP	.150	25	200	30-300	1	7	.72	.72	.48
2N1383	T0-5	GP GP	.150	25	200	50-150	1	5	.92	.92	.61
2N1396	T0-33	GP AR	.150	40	100	50-175	1.5	100	3.88	2.56	1.86
2N1397	T0-33	GP AR	.150	40	100	50-175	1.5	100	4.25	2.81	2.04
2N1404	T0-5	GN GP	.150	25	300	50-	24	....	.58	.58	.39
2N1420	T0-5	SN GP	600	60	150	100-300	150	50	1.20	1.20	.80
2N1479	T0-5	SN SP	5C	60	1A	50-	5	1.5	2.79	1.63	1.18
2N1480	T0-5	SN SP	5C	100	1A	35-100	5	1.5	4.25	1.80	1.30
2N1481	T0-5	SN SP	5C	60	1A	35-100	200	1.5	3.20	1.96	1.42
2N1482	T0-5	SN SP	5C	100	1A	35-100	200	1.5	2.79	2.79	2.02
2N1483	T0-8	SN SP	25C	60	3A	20-60	750	1.25	4.35	2.85	2.08
2N1483TX/ JAN	T0-8	SN SP	25C	60	3A	20-60	750	1.25	12.15	7.85	5.70
2N1484	T0-8	SN SP	25C	100	3A	20-60	750	1.25	5.50	3.59	2.62
2N1484TX/ JAN	T0-8	SN SP	25C	100	3A	20-60	750	1.25	12.10	8.60	5.20
2N1485	T0-8	SN SP	25C	60	3A	35-100	750	1.25	6.90	4.39	3.22
2N1485/ JAN	T0-8	SN SP	25C	60	3A	35-100	750	1.25	8.02	5.28	3.84
2N1485TX/ JAN	T0-8	SN SP	25C	60	3A	35-100	750	1.25	14.30	9.40	6.85
2N1486	T0-8	SN SP	25C	100	3A	35-100	750	1.25	10.25	6.69	4.90
2N1486TX/ JAN	T0-8	SN SP	25C	100	3A	35-100	750	1.25	17.80	10.30	8.55
2N1487	T0-3	SN SP	75C	60	6A	15-45	1.5A	1	6.84	4.48	3.13
2N1488	T0-3	SN SP	75C	100	6A	15-45	1.5A	1	7.40	4.89	3.41
2N1489	T0-3	SN SP	75C	60	6A	25-75	1.5A	1	11.08	7.87	4.92
2N1490	T0-3	SN SP	75C	100	6A	25-75	1.5A	1	12.25	8.19	5.45
2N1491	T0-39	GP SH	3C	30	100	15-200	15	300	2.75	1.82	1.32
2N1493	T0-39	GP SH	3C	100	100	15-200	15	300	10.60	7.01	5.10
2N1499A	T0-39	GP SH	.060	20	100	50-	40	110	3.90	2.65	1.70
2N1499B	T0-39	GP SH	.075	30	100	40-	10	150	3.55	2.65	1.70
2N1500	T0-39	GP SH	.060	15	50	70-	10	175	11.25	6.95	5.10
2N1507	T0-5	SN GP	.600	60	1A	150	150	50	1.20	1.20	.80
2N1524	T0-1	GP GP	.080	24	10	17-	1	33	1.00	.67	.49
2N1529	T0-3	GP SP	125C	40	5A	20-40	3A	....	1.45	1.45	1.08
2N1530	T0-3	GP SP	125C	60	5A	20-40	3A	....	1.60	1.60	1.15
2N1531	T0-3	GP SP	125C	80	5A	20-40	3A	....	2.30	2.30	1.70
2N1532	T0-3	GP SP	125C	100	5A	20-40	3A	....	3.00	3.00	2.24
2N1532A	T0-3	GP SP	125C	100	5A	20-40	3A	....	6.85	4.56	4.29
2N1533	T0-3	GP SP	125C	120	5A	20-40	3A	....	4.35	4.35	3.25
2N1534	T0-3	GP SP	125C	40	5A	35-70	3A	....	1.40	1.40	1.05
2N1535	T0-3	GP SP	125C	60	5A	35-70	3A	....	1.50	1.50	1.14
2N1535AML	T0-3	GP SP	125C	60	5A	35-70	3A	3.25	2.17	2.04	
2N1536	T0-3	GP SP	125C	80	5A	35-70	3A	....	1.70	1.70	1.25
2N1536AML	T0-3	GP SP	125C	80	5A	35-70	3A	3.45	2.31	2.17	
2N1537	T0-3	GP SP	125C	100	5A	35-70	3A	....	3.90	3.90	2.90
2N1538	T0-3	GP SP	125C	120	5A	35-70	3A	....	5.50	5.50	4.05
2N1539	T0-3	GP SP	125C	40	5A	50-100	3A	....	1.50	1.50	1.12
2N1540	T0-3	GP SP	125C	60	5A	50-100	3A	....	1.58	1.58	1.18
2N1541	T0-3	GP SP	125C	80	5A	50-100	3A	....	1.85	1.85	1.38
2N1542	T0-3	GP SP	125C	100	5A	50-100	3A	....	2.35	2.35	1.75
2N1543	T0-3	GP SP	125C	120	5A	50-100	3A	....	3.60	3.60	2.65
2N1544	T0-3	GP SP	125C	40	5A	75-150	3A	....	1.65	1.65	1.24
2N1545	T0-3	GP SP	90C	60	5A	75-150	3A	....	1.85	1.85	1.35
2N1546	T0-3	GP SP	90C	80	5A	75-150	3A	....	2.30	2.30	1.70
2N1547	T0-3	GP SP	90C	100	5A	75-150	3A	....	2.75	2.75	2.05
2N1548	T0-3	GP SP	90C	120	5A	75-150	3A	....	4.00	4.00	2.95
2N1550	T0-3	GP SP	90C	60	15A	10-30	10A	.01	3.93	2.62	2.47
2N1551	T0-3	GP SP	90C	80	15A	10-30	10A	.01	5.95	3.98	3.74
2N1552	T0-3	GP SP	90C	100	15A	10-30	10A	.01	6.78	4.53	4.26
2N1553	T0-3	GP SP	90C	40	15A	30-60	10A	....	2.33	1.55	1.46
2N1554	T0-3	GP SP	90C	60	15A	30-60	10A	....	3.45	2.31	2.17
2N1555	T0-3	GP SP	90C	80	15A	30-60	10A	....	4.15	2.77	2.61
2N1556	T0-3	GP SP	90C	100	15A	30-60	10A	....	5.95	3.98	3.74
2N1557	T0-3	GP SP	90C	40	15A	50-100	10A	....	2.73	1.82	1.71
2N1558	T0-3	GP SP	90C	60	15A	50-100	10A	....	3.65	2.44	2.29
2N1559	T0-3	GP SP	90C	80	15A	50-100	10A	....	4.35	2.93	2.75
2N1560	T0-3	GP SP	90C	100	15A	50-100	10A	....	5.75	3.84	3.61
2N1595	T0-5	SCR	50 Volts PIV - 1 Amp Io 10 mA Max I_{GT}						2.05	2.05	1.40
2N1596	T0-5	SCR	100 Volts PIV - 1 Amp Io 10 mA Max I_{GT}						2.50	2.50	1.65
2N1597	T0-5	SCR	200 Volts PIV - 1 Amp Av. - 10 mA Max I_{GT}						4.90	4.90	3.25

Type	Case	Material Function	Maximum Ratings Dissipation Watts	Col'r To Base Volts	Col'r Curr. mA	Beta H_{FE} @ Ic Min.-Max.	mA	f_T MHz	EACH 1-9	10-99	100-Up
2N1598	T0-5	SCR	300 Volts PIV - 1 Amp Av. - 10 mA Max I_{GT}						8.50	8.50	5.65
2N1599	T0-5	SCR	400 Volts PIV - 1 Amp Av. - 10 mA Max I_{GT}						12.00	12.00	8.00
2N1600	T0-5	SCR	50 Volts PIV - 3 Amp Av. - 10 mA Max I_{GT}						7.32	5.70	3.45
2N1601	T0-5	SCR	100 Volts PIV - 3 Amp Av. - 10 mA Max I_{GT}						8.18	5.70	3.85
2N1602	T0-5	SCR	200 Volts PIV - 3 Amp Av. - 10 mA Max I_{GT}						13.40	9.45	6.30
2N1603	T0-5	SCR	300 Volts PIV - 3 Amp Av. - 10 mA Max I_{GT}						19.10	13.50	9.00
2N1604	T0-5	SCR	400 Volts PIV - 3 Amp Av. - 10 mA Max I_{GT}						23.00	16.80	10.80
2N1605	T0-5	GN SM	.150	25	100	40-	20	4	.62	.62	.46
2N1605A	T0-5	GN SM	.200	40	100	40-	20	4	1.55	.75	.62
2N1613	T0-5	SN GP	.800	75	1A	40-120	150	....	.79	.79	.68
2N1631	T0-40	GP AR	.08	34	10	80-	1	45	1.50	1.00	.73
2N1632	T0-1	GP AR	.08	34	10	40-170	1	45	1.05	.75	.55
2N1637	T0-1	GP AR	.08	34	10	80-	1	45	1.10	.73	.53
2N1638	T0-1	GP AR	.08	34	10	75-	1	45	1.00	.67	.49
2N1639	T0-1	GP AR	.08	34	10	75-	1	45	1.05	.70	.51
2N1671	T0-5	SUJ	30 Volts E_{BB} - .47-.62 - 25 μa I_P						2.95	2.95	1.98
2N1671A	T0-5	SUJ	30 Volts E_{BB} - .47-.62 - 25 μa I_P						3.20	3.20	2.14
2N1700	T0-5	SN SP	C	60	1A	20-80	100	....	2.88	1.90	1.38
2N1701	T0-8	SN SP	25C	60	2.5A	20-80	300	....	3.50	2.31	1.68
2N1702	T0-3	SN SP	75C	60	5A	15-60	800	....	6.88	4.54	3.30
2N1708	T0-46	SN SH	300C	25	10	20-	10	200	3.20	3.20	3.10
2N1711	T0-5	SN GP	5C	75	1A	100-300	150	....	.85	.85	.74
2N1714	T0-5	SN GP	.800	60	750	20-	200	....	6.00	6.00	4.00
2N1715	T0-5	SN GP	.800	100	750	20-	200	....	8.25	8.25	5.50
2N1718	SP-64	SN SP	2	60	750	20-	200	....	6.75	6.75	4.50
2N1719	SP-64	SN SP	2.0	100	1A	20-60	200	....	9.00	9.00	6.00
2N1720	SP-64	SN SP	2.0	60	1A	40-120	200	....	8.25	8.25	5.50
2N1722A	T0-53	SN SP	50C	180	7.5	20-	5A	10	60.00	60.00	40.00
2N1723	T0-53	SN SP	50C	120	7.5	50-150	2A	10	43.50	43.50	29.00
2N1724	T0-61	SN SP	50C	175	7.5	20-90	2A	10	27.60	27.60	18.40
2N1726	T0-9	GP AH	.060	20	50	10-	12	100	1.86	1.15	.85
2N1742	T0-9	GP AH	.060	20	50	10-	2	10	4.75	2.93	2.15
2N1743	T0-9	GP AH	.060	20	50	10-	2	....	4.70	2.87	2.11
2N1744	T0-9	GP AH	.060	20	50	10-	2	....	3.62	2.25	1.65
2N1745	T0-9	GP AH	.060	20	50	10-		200	4.25	2.85	1.90
2N1746	T0-9	GP AH	.060	20	50	10-	2	175	2.25	1.70	1.15
2N1748	T0-9	GP AH	.060	20	50	30-	1	50	2.13	1.65	1.10
2N1748A	T0-9	GP AH	.060	20	50	70-	1	132	2.25	1.60	1.15
2N1754	T0-9	GP AH	.050	13	100	50-	40	75	2.13	1.65	1.10

Type	Case	Material Function	Maximum Ratings Peak Repetitive Volts	Forward Current Rms Amps	Required Gate Current mA	EACH 1-9	10-99	100-Up
2N1770	T0-64	SCR	25	6.0	15	8.75	5.10	4.10
2N1770A	T0-64	SCR	25	7.4	15	8.88	6.15	4.20
2N1771	T0-64	SCR	50	6.0	15	8.90	5.70	4.25
2N1771A	T0-64	SCR	50	7.4	15	9.90	6.97	4.65
2N1772	T0-64	SCR	100	6.0	15	9.40	6.25	4.40
2N1772A	T0-64	SCR	100	7.4	15	12.15	8.55	5.20
2N1773	T0-64	SCR	150	6.0	15	10.10	6.92	4.75
2N1773A	T0-64	SCR	150	7.4	15	15.60	11.05	7.35
2N1774	T0-64	SCR	200	6.0	15	11.85	8.12	5.60
2N1774A	T0-64	SCR	200	7.4	15	18.25	12.90	8.50
2N1775	T0-64	SCR	250	6.0	15	13.60	9.32	6.40
2N1775A	T0-64	SCR	250	7.4	15	21.90	15.50	10.45
2N1776	T0-64	SCR	300	6.0	15	15.40	10.60	7.30
2N1776A	T0-64	SCR	300	7.4	15	26.00	18.35	12.20
2N1777	T0-64	SCR	400	6.0	15	18.25	12.40	8.50
2N1777A	T0-64	SCR	400	7.4	15	38.50	22.50	15.00
2N1778	T0-64	SCR	500	6.0	15	25.60	18.15	12.30
2N1792	T0-83	SCR	50	110	70	25.25	19.00	11.95
2N1793	T0-83	SCR	100	110	70	27.25	20.50	12.60
2N1794	T0-83	SCR	150	110	70	30.00	21.50	13.80
2N1795	T0-83	SCR	200	110	70	32.85	24.60	15.20
2N1798	T0-83	SCR	400	110	70	48.45	37.50	22.30
2N1842	T0-48	SCR	25	16	90	4.00	2.68	1.78
2N1842A	T0-48	SCR	25	16	45	3.33	2.20	1.60
2N1843	T0-48	SCR	50	16	90	4.74	3.12	2.08
2N1843A	T0-48	SCR	50	16	45	3.95	2.61	1.90
2N1844	T0-48	SCR	100	16	90	5.23	4.13	2.72
2N1845	T0-48	SCR	150	16	90	7.25	4.90	3.23
2N1845A	T0-48	SCR	150	16	45	5.83	3.84	2.80
2N1846	T0-48	SCR	200	16	90	7.87	5.25	3.50
2N1846A	T0-48	SCR	200	16	45	6.78	4.46	3.75
2N1847	T0-48	SCR	250	16	90	8.50	5.60	3.80
2N1847A	T0-48	SCR	250	16	45	7.70	5.10	3.70
2N1848	T0-48	SCR	300	16	90	9.00	6.00	4.00
2N1848A	T0-48	SCR	300	16	45	8.33	5.51	4.00
2N1849	T0-48	SCR	400	16	90	11.00	7.35	4.90
2N1849A	T0-48	SCR	400	16	45	9.88	6.54	4.75
2N1850	T0-48	SCR	500	16	90	13.25	8.80	5.90
2N1850A	T0-48	SCR	500	16	45	11.40	7.56	5.50

Type	Case	Material Function	Maximum Ratings Dissipation Watts	Col'r To Base Volts	Col'r Curr. mA	Beta H_{FE} @ Ic Min.-Max.	mA	f_T MHz	EACH 1-9	10-99	100-Up
2N1890	T0-5	SN GP	.8	100	....	100-300	150	60	2.20	2.20	1.48
2N1893	T0-5	SN GP	.8	120	....	40-120	150	50	1.35	1.35	.90
2N1893/JAN	T0-5	SN GP	.8	120	....	40-120	150	50	.92	.92	.56
2N1905	T0-5	GP AP	30C	100	6A	50-	1A	4	6.25	4.13	3.00
2N1906	T0-3	GP AP	30C	130	6	75-	1A	5	10.00	6.60	4.80
2N1907	T0-3	GP AP	60C	100	20	20-	15A	10	9.38	9.38	6.75
2N1908	T0-3	GP AP	60C	300	20-	20	15A	10	12.75	12.75	9.00
2N1913	T0-83	SCR	200 PRV - 110 Amps RMS Io - 75 mA I_{GT}						31.25	23.75	14.25
2N1916	T0-83	SCR	400 PRV - 110 Amps RMS Io - 75 mA I_{GT}						47.50	35.50	21.25
2N1973	T0-5	SN GP	3C	100	....	80-200	5	60	2.20	2.20	1.48
2N1974	T0-5	SN GP	3C	100	....	40-100	5	50	1.35	1.35	1.90
2N1975	T0-5	SN GP	3C	100	....	20-50	5	50	2.20	2.20	1.48
2N1983	T0-5	SN GP	.80	60	....	75-	10	60	1.36	1.36	.84
2N1984	T0-5	SN GP	.80	60	....	35-	10	50	1.36	1.36	.84
2N1990	T0-5	SN GP	.60	60	....	20-	30	....	1.70	1.70	1.03
2N1991	T0-5	SP GP	.60	30	....	15-60	150	40	1.88	1.88	1.16
2N1994	T0-5	GN S	.15	30	300	15-	10	3	2.33	2.33	1.55
2N1995	T0-5	GN S	.15	25	300	25-	10	5	3.75	3.75	2.50
2N1996	T0-5	GN S	.15	20	300	35	10	8	5.14	5.14	3.43
2N1997	T0-5	GP GP	.25	45	500	15-40	10	4	1.77	1.77	1.18
2N1999	T0-5	GP GP	.25	30	500	15-75	10	12	2.07	2.07	1.38
2N2000	T0-5	GP GP	.30	50	1000	30-5	....	....	2.50	2.50	1.67
2N2001	T0-5	GP GP	.30	30	1000	15-60	....	....	2.17	2.17	1.45
2N2015	T0-36	SN SP	150C	100	10A	15-50	5A	....	13.75	9.08	6.60
2N2016	T0-36	SN SP	150C	130	10A	15-50	5A	....	15.00	9.90	7.20
2N2025	T0-94	SCR	100 PRV - 110 Amps RMS Io - 70 mA I_{GT}						38.75	29.50	17.75
2N2027	T0-94	SCR	200 PRV - 110 Amps RMS Io - 70 mA I_{GT}						43.67	33.50	20.25
2N2028	T0-94	SCR	250 PRV - 110 Amps RMS Io - 70 mA I_{GT}						46.25	34.50	21.25
2N2048	T0-9	GP SH	.150	20	100	50-	10	150			
2N2060	T0-77	SN AD	.600	60	500	30-90	.1	10%	6.75	6.75	4.50
2N2060A	T0-77	SN AD	600	60	500	30-90	.1	10	5.70	5.70	3.50
2N2080	T0-36	GP AP	170C	70	15A	35-70	5A	.01	7.10	4.74	4.46
2N2080A	T0-36	GP AP	170C	70	15A	35-70	5A	.01	7.25	4.84	4.55
2N2081	T0-36	GP AP	170C	50	15A	35-70	5	.01	4.40	2.94	2.76
2N2102	T0-5	SN AP	63C	45	1A	40-120	150	....	.99	.99	.75
2N2138	T0-3	GP AP	63C	45	3A	30-60	500	.012	3.08	2.05	1.93
2N2139	T0-3	GP AP	63C	60	3A	30-60	500	.012	3.30	2.20	2.07
2N2140	T0-3	GP AP	63C	75	3A	30-60	500	.012	5.83	3.89	3.66
2N2141	T0-3	GP AP	63C	90	3A	30-60	500	.012	11.70	7.82	7.35
2N2142	T0-3	GP AP	63C	30	3A	50-100	500	.012	3.43	2.29	2.15
2N2143	T0-3	GP AP	63C	45	3A	50-100	500	.012	3.70	2.47	2.32
2N2144	T0-3	GP AP	63C	60	3	50-100	500	.012	5.50	3.67	3.45
2N2145	T0-3	GP AP	63C	75	3A	50-100	500	.012	6.68	4.46	4.19
2N2147	T0-3	GP AP	12.5C	75	5A	100-300	1A	4	3.00	1.98	1.44
2N2148	T0-3	GP AP	12.5C	60	5A	100-300	1A	4	2.25	1.49	1.08
2N2151	T0-111	SN AP	30C.0	125	2A	40-120	1A	10	21.00	21.00	14.00
2N2160	T0-5	S UJ	.45	35 Volts B_1B_2 - 45-.8h - 25mA I_P					1.49	1.49	.99
2N2188	T0-58	GP AH	.125	40	30	40-	1.5	60	1.28	1.28	.85
2N2189	T0-58	GP AH	.125	40	30	60-	1.5	100	1.64	1.64	1.09
2N2190	T0-58	GP AH	.125	60	30	40-	1.5	102	1.47	1.47	.98
2N2191	T0-58	GP AH	.125	60	30	60	1.5	125	1.85	1.85	1.23
2N2192	T0-5	SN AH	.800	60	1A	75-	10.0	50	1.86	1.86	1.24
2N2192A	T0-5	SN AH	1800	60	1A	75-	10.0	50	1.86	1.86	1.24
2N2193	T0-5	AN AH	.800	80	1A	30-	10.0	50	1.75	1.75	1.15
2N2193A	T0-5	SN AH	.800	80	1A	30-	10.0	50	1.75	1.75	1.15
2N2194	T0-5	SN AH	.800	60	1A	15-	10.0	50	1.75	1.75	1.15
2N2194A	T0-5	SN AH	.800	60	1A	15-	10.0	50	1.75	1.75	1.15
2N2195	T0-5	SN AH	.600	45	1A	20-	150.0	20	1.00	1.00	.61
2N2195A	T0-5	SN AH	.600	45	1A	20-	150.0	20	1.28	1.28	.79
2N2217	T0-5	SN SH	.800	60	800	12-	1.0	250	1.00	1.00	.81
2N2218	T0-5	SN SH	.800	60	800	25-	1.0	250	1.00	1.00	.81
2N2218/JAN	T0-5	SN SH	.800	60	800	25-	1.0	250	1.80	1.80	1.20
2N2218A	T0-5	SN SH	.800	75	800	340-120	150	250	1.10	1.10	.86
2N2219	T0-5	SN SH	.800	60	800	100-300	150	250	1.00	1.00	.70
2N2219A	T0-5	SN SH	.800	75	800	100-300	150	300	1.31	1.31	.87
2N2219/JAN	T0-5	SN SH	.800	60	800	100-300	150	250	1.76	1.76	1.17
2N2220	T0-18	SN SH	.800	60	800	20-60	150	250	1.11	1.11	.74
2N2221	T0-18	SN SH	.800	60	800	40-120	150	250	1.11	1.11	.74
2N2221A	T0-18	SN SH	.500	75	800	40-120	150	250	1.10	1.10	.86
2N2222	T0-18	SN SH	.500	60	800	100-300	150	250	.95	.95	.63
2N2222A	T0-18	SN SH	.500	75	800	100-300	150	250	1.20	1.20	.79
2N2222A/JAN	T0-18	SN SH	.500	60	800	100-300	150	250	1.60	1.60	1.07
2N2223	T0-77	SN DA	.600	60	500	40-200	1.0	....	4.95	4.95	3.30
2N2223A	T0-77	SN DA	.600	60	500	40-200	1.0	....	5.85	5.85	3.90
2N2243	T0-5	SN GP	.800	120	1A	30-	10	50	1.60	1.60	1.00
2N2270	T0-5	SN AR	1	60	1A	50-200	150	50	.90	.90	.60
2N2280	T0-18	AP AR	.150	10	50	10-	5	16	6.88	4.20	3.10
2N2303	T0-5	SP SH	.600	50	500	75-200	150	60	8.25	8.25	5.50
2N2322	T0-5	SCR	25 PRV - 1.6 Amps RMS Io - .2 mA I_{GT}						2.25	2.25	1.50
2N2323	T0-5	SCR	50 PRV - 1.6 Amps RMS Io - .2 mA I_{GT}						2.47	2.47	1.65
2N2324	T0-5	SCR	100 PRV - 1.6 Amps RMS Io - .2 mA I_{GT}						4.05	4.05	2.70
2N2325	T0-5	SCR	150 PRV - 1.6 Amps RMS Io - .2 mA I_{GT}						5.92	5.92	3.25
2N2326	T0-5	SCR	200 PRV - 1.6 Amps RMS Io - .2 mA I_{GT}						7.50	7.50	5.20
2N2338	T0-36	SN SP	150C	60	7.5A	15-60	3A	....	10.00	6.60	4.80
2N2360	T0-12	GP AU	.060	20	....	33-	2	1.6G	5.95	3.95	2.75
2N2361	T0-12	GP AU	.060	20	....	33-	2	1.6G	4.75	3.30	2.20
2N2362	T0-12	GP AU	.060	20	....	33-	2	1.6G	3.50	2.10	1.55

See Page 28 for Explanation of Abbreviations and Symbols

SEE PAGE 12 FOR INTEGRATED CIRCUITS

Type	Case	Material Function	Maximum Ratings Dissipation Watts	Col'tr To Base Volts	Col'tr Curr. mA	Beta H_{FE} @ Ic Min.-Max.	mA	f_T MHz	EACH 1-9	10-99	100-Up
2N2368	T0-18	SN AU	.360	40	500	40-	10	640	.95	.95	.69
2N2369	T0-18	SN AU	.360	40	500	80-	10	800	.98	.98	.73
2N2369A	T0-18	SN AU	.360	40	200	40-	10	500	1.10	1.10	.79
2N2369A/JAN	T0-18	SN AU	.360	40	....	40-	10	500	2.23	2.23	1.48
2N2386	T0-72	SP FE	.500	20BV$_{GSS}$ - 12 V$_{os}$ - 200 ma I$_d$					2.70	2.70	1.80
2N2396	T0-52	SN GP	.450	60	300	40-120	150	....	11.55	11.55	7.70
2N2398	T0-12	GP AU	.060	20	....	33-	2	1.6G	6.75	3.90	2.95
2N2400	T0-18	GP AV	.150	12	100	30-	10	150	6.25	3.35	2.80
2N2402	T0-18	GP AV	.150	12	100	6- 0	10	250	6.87	3.60	3.05
2N2405	T0-5	SN AP	1	120	1A	60-200	150	....	1.40	1.40	.86
2N2410	T0-5	SN AV	.800	60	800	30-	10	200	1.82	1.82	1.12
2N2411	T0-5	SP AV	.300	25	100	35-	10	200	1.61	1.61	1.07
2N2412	T0-18	SP AV	.300	25	100	55-	10	200	1.73	1.73	1.15
2N2415	T0-18	GP AU	.075	15	20	45-	2	560	5.80	5.80	3.85
2N2453	T0-77	SN GP	.200	60	50	150-	1	60	9.57	9.57	6.38
2N2453A	T0-77	SN GP	.200	80	50	150-	1	60	7.15	7.15	4.40
2N2475	T0-18	SN AU	.300	15	....	50-	20	800	1.28	1.28	.79
2N2476	T0-5	SN SH	.600	60	....	20	150	200	1.08	1.08	.76
2N2477	T0-5	SN SH	.600	60	....	40	150	200	1.12	1.12	.84
2N2480	T0-77	SN AD	.600	75	500	30-350	1	20%	5.70	5.70	3.50
2N2480A	T0-ad	SN DA	.600	80	500	50-200	1	20%	7.15	7.15	4.40
2N2481	T0-18	SN SH	.600	40	....	40-120	....	300	1.36	1.36	.91
2N2484	T0-18	SN GL	.600	60	....	80-	1 ua	....	1.36	1.36	.91
2N2498	T0-5	SP FE	.500 20 Volt		BV$_{gss}$ - 10 mA Ig				3.70	3.70	2.45
2N2499	T0-5	SP FE	.500	20 Volt BV$_{gss}$ - 10 mA Ig					3.60	3.60	2.40
2N2500	T0-5	SP FE	.500	20 Volt BV$_{gss}$ - 10 mA Ig					5.25	5.25	3.50
2N2501	T0-18	SN SH	.360	40	....	50-	10	350	6.18	4.00	2.90
2N2537	T0-5	SN SH	.800	60	800	20	1	250	1.66	1.66	1.10
2N2538	T0-5	SN SH	.800	60	800	30	1	250	1.86	1.86	1.24
2N2552	T0-5	GP AP	20C	60	3A	20-60	1A	....	1.88	1.88	1.25
2N2553	T0-5	GP AP	20C	40	3A	20-60	1A	....	2.48	2.48	1.65
2N2557	T0-5	GP AP	20C	60	A3	20-60	1A	....	2.48	2.48	1.65
2N2564	T0-5	GP AP	20C	40	3A	20-60	3A	....	3.00	3.00	2.00
2N2586	T0-18	SN GP	.600C	45	60	80-	1 ua	45	1.86	1.86	1.25
2N2604	T0-46	SP LN	.400	45	....	40-120	10 ua	30	2.60	2.60	1.74
2N2605	T0-46	SP LN	.400	45	....	10-300	10 ua	30	2.35	2.35	1.56
2N2614	T0-1	GP AA	.120	40	50	100-250	1	4	9.25	.62	.45
2N2619	T0-64	SCR	600 PRV - 6A Io - 15 mA I$_{GT}$						30.10	21.30	14.20
2N2631	T0-39	SN AV	8.75C	80	1.5A - 7.5W RF @ 50 MHz			200	5.75	3.80	2.76
2N2635	T0-18	GP SH	.150	30	100	45-300	....	150	.94	.94	.63
2N2639	T0-77	SN AD	.300	45	30	50-300	10 ua	10%†	9.00	9.00	6.00
2N2640	T0-77	SN AD	.300	45	30	50-300	10 ua	20%†	6.75	6.75	4.50
2N2641	T0-77	SN DA	.30ad	45	30	50-300	10 ua	10%†	4.28	4.28	2.85
2N2642	T0-77	SN AD	.300	45	30	100-300	10 ua	10%†	10.25	10.25	6.75
2N2643	T0-77	SN DA	.300	45	30	100-300	10 ua	10%†	7.32	7.32	4.88
2N2644	T0-77	SN DA	.300	45	30	100-300	10 ua	....	5.00	5.00	3.50
2N2646	T0-18	S UJ	.300V † 30V - .56-75 n - 5 ua I$_B$						1.05	1.05	.67
2N2647	T0-18	S UJ	.300V † 30V - .68-.82 n - .2 ua I$_B$						1.89	1.89	1.26
2N2652	T0-5	SN AD	.300	60	500	50-200	1	15%†	8.50	8.50	5.25
2N2652A	T0-5	SN AD	.300	60	500	50-200	1	10%†	11.40	11.40	7.00
2N2659	T0-5	GP AP	15C	50	3A	30-90	500	....	1.65	1.65	1.10
2N2660	T0-5	GP AP	15C	70	3A	30-90	500	....	1.95	1.95	1.30
2N2661	T0-5	GP AP	15C	90	3A	30-90	500	....	2.85	2.85	1.90
2N2662	T0-5	GP AP	15C	30	3A	30-90	500	....	1.65	1.65	1.10
2N2663	T0-5	GP AP	15C	40	3A	30-90	500	....	2.40	2.40	1.60
2N2665	T0-5	GP AP	15C	50	3A	50-150	500	....	2.40	2.40	1.60
2N2667	T0-5	GP AP	15C	90	3A	50-150	500	....	3.75	3.75	2.50
2N2668	T0-5	GP AP	15C	50	3A	50-150	500	....	2.33	2.33	1.55
2N2695	T0-43	SP GP	2C	25	500	30-130	50	100	4.25	4.25	2.72
2N2710	T0-18	SN AU	.360	40	500	40-	10	500	1.62	1.62	1.00
2N2711	T0-18	SN GP	.200	18	100	30-90	2	....	.275	.23	.15
2N2712	T0-18	SN GP	.200	18	100	75-225	2	....	.30	.24	.16
2N2713	T0-18	SN GP	.200	18	200	30-90	2	....	.48	.38	.26
2N2714	T0-18	SN GP	.200	18	200	75-225	2	....	.425	.36	.24
2N2720	T0-77	SN AD	.600	80	....	30-120	.1	10%†	5.70	5.70	3.50
2N2721	T0-77	SN AD	.600	80	....	30-120	.1	20%†	4.30	4.30	2.65
2N2722	T0-77	SN AD	.600	45	....	50-250	.01	10%†	2.85	2.85	1.75
2N2723	T0-72	SN DA	.500	80	....	2K-70K	10	100	5.70	5.70	3.50
2N2724	T0-72	SN DA	.500	80	....	2K-50K	10	100	6.45	6.45	3.95
2N2725	T0-72	SN DA	.500	45	....	2K-10K	10	100	5.30	5.30	3.25
2N2800	T0-5	SP GP	.800	50	150	30-90	150	120	2.50	2.50	1.55
2N2801	T0-5	SP GP	.800	50	150	75-225	150	120	2.75	2.75	1.68
2N2802	T0-77	SN AD	.250	25	30	20-120	1	10%†	13.50	13.50	9.00
2N2803	T0-77	SN AD	.250	25	30	20-120	1	20%†	11.25	11.25	7.50
2N2804	T0-77	SN AD	.250	25	30	20-120	1	....	7.00	7.00	4.70
2N2805	T0-77	SN AD	.250	25	30	40-120	1	10%†	14.25	14.25	9.50
2N2806	T0-77	SN AD	.250	25	30	40-120	1	20%†	11.70	11.70	7.80
2N2807	T0-77	SN AD	.250	25	30	40-120	1	....	6.00	6.00	4.00
2N2838	T0-18	SP GP	500	50	800	75-225	150	120	2.75	2.75	1.68
2N2845	T0-18	SN SH	360	60	150	30-120	150	250	1.43	1.43	.88
2N2846	T0-5	SN SH	.800	60	150	30-120	150	250	1.52	1.52	.93
2N2847	T0-18	SN SH	.360	60	150	40-140	150	250	1.50	1.50	.91
2N2848	T0-5	SN SH	.800	60	150	40-140	150	250	1.50	1.50	.91
2N2857	T0-72	SN AU	.200	30	40	50	2	1000	7.38	4.87	3.54
2N2862	T0-18	SP LN	1C	25	....	12-120	10 ua	45	1.22	1.22	.81
2N2869/ 2N301	T0-3	GP AP	30C	60	3A	50-165	1A	.200	2.75	1.82	1.32
2N2870/ 2N301	T0-3	GP AP	30C	80	3A	50-165	1A	.200	4.87	3.22	2.34
2N2876	T0-60	SN AV	17.5C	80	2.5A	....	....	200	19.50	11.25	9.30
2N2894	T0-18	SP SH	1.2C	12	200	40-150	30	400	1.24	1.24	.83
2N2895	T0-18	SN GP	.500	120	1A	60-150	1	120	2.12	1.44	1.02
2N2896	T0-18	SN GP	.500	140	1A	60-150	1	....	3.12	2.06	1.50
2N2897	T0-18	SN GP	.500	60	1A	50	5	100	1.75	1.16	.84
2N2903	T0-77	SN AD	.300	60	50	125-625	1	20%†	6.45	6.45	3.95
2N2903A	T0-77	SN AD	.300	60	50	125-625	1	10%†	9.30	9.30	5.70
2N2904	T0-5	SP GP	.600	60	650	40-120	150	200	1.24	1.24	.82
2N2904A	T0-5	SP GP	.600	60	650	40-120	150	200	1.60	1.60	1.07
2N2905	T0-5	SP GP	.600	60	600	100-300	150	200	1.36	1.36	.91
2N2905A	T0-5	SP GP	.600	60	600	100-300	150	200	1.62	1.62	1.07
2N2905/ JAN	T0-5	SP GP	.600	60	600	100-300	150	200	2.00	2.00	1.32
2N2906	T0-18	SP GP	.400	60	600	40-120	150	200	1.24	1.24	.82
2N2906A	T0-18	SP GP	.400	60	600	40-100	150	200	1.60	1.60	1.07
2N2907	T0-18	SP GP	.400	60	6000	40-100	150	200	1.24	1.24	.82
2N2907A	T0-18	SP GP	.400	60	600	40-100	150	200	1.38	1.38	.91
2N2907A/ JAN	T0-18	SP GP	.400	60	600	40-100	150	200	1.74	1.74	1.15
2N2913	T0-77	SN DT	.300	45	30	60-240	.01	60	2.70	2.70	1.80
2N2914	T0-77	SN DT	.300	45	30	150-600	.01	60	3.05	3.05	2.03
2N2915	T0-77	SN AD	.300	45	30	60-240	.01	60	7.10	7.10	4.70
2N2916	T0-77	SN AD	.300	45	30	150-600	.01	60	9.23	9.23	6.15
2N2917	T0-77	SN AD	.300	45	30	60-240	.01	60	3.60	3.60	2.40
2N2918	T0-77	SN AD	.300	45	30	150-600	.01	60	4.73	4.73	3.15
2N2919	T0-77	SN AD	.300	60	30	60-240	.01	60	7.88	7.88	5.25
2N2920	T0-77	SN AD	.300	60	30	150-600	.01	60	11.15	11.15	7.43
2N2923	T0-98	SN GP	.200	25	100	90-	2	120	.30	.25	.17
2N2924	T0-98	SN GP	.200	25	100	150-	2	120	.325	.27	.18
2N2925	T0-98	SN GP	.200	25	100	235-	2	120	.40	.33	.22
2N2926	T0-98	SN GP	.200	18	100	470-	2	120	.275	.24	.16
2N2944	T0-46	SP SM	.400	15	100	80-450	1	15	2.76	2.76	1.84
2N2945	T0-46	SP SM	.400	25	100	40-250	1	10	2.50	2.50	1.65
2N2946	T0-46	SP SM	.400	40	100	30-150	1	5	2.70	2.70	1.90
2N2951	T0-5	SN AP	3.0C	60	250	20-150	10	200	4.95	3.75	2.50
2N2952	T0-18	SN AP	1.8C	60	250	20-150	10	200	4.95	3.75	2.50
2N2953	T0-1	GP AA	.120	30	150	200	10	10	.90	.60	.44
2N2958	T0-5	SN GP	.600	60	600	40-120	150	250	2.00	2.00	1.50
2N2959	T0-5	SN GP	.600	60	600	100-300	150	250	2.40	2.40	1.80
2N2994	T0-5	SN GP	2	155	800	60-120	200	30	13.90	13.90	9.25
2N2996	T0-72	GP AV	.075	15	50	25-500	4	400	1.43	1.43	.95
2N2997	T0-72	GP AV	.075	30	50	40-500	4	400	3.08	3.08	2.05
2N3005	T0-18	SCR	30 PRV - .35 Amp Io - .02 mA I$_{GT}$						3.30	3.30	2.20
2N3009	T0-52	SN SH	.360	40	200	30-120	30	350	.91	.91	.56
2N3010	T0-18	SN SH	.300	15	50	25-125	10	600	1.17	1.17	.78
2N3011	T0-18	SN SH	.360	30	200	30-120	10	400	.98	.98	.67
2N3012	T0-18	SN SH	.360	12	200	100-300	150	400	1.17	1.17	.78
2N3013	T0-52	SN SH	.360	40	200	30-120	30	350	1.36	1.36	.91
2N3014	T0-52	SN SH	.360	40	200	30-120	30	350	1.29	1.29	.86
2N3015	T0-5	SN SH	.800	60	....	30-120	150	250	1.51	1.51	.99
2N3019	T0-5	SN GP	.800	140	1A	100-300	150	100	1.15	1.15	.70
2N3020	T0-5	SN GP	.800	140	1A	40-120	150	80	1.00	1.00	.61
2N3026	T0-3	SP AP	25	60	3A	50-180	1A	....	70.13	49.50	33.00
2N3036	T0-5	SN AP	.800	120	1.2A	40-	10	50	5.83	5.50	3.70
2N3043	T0-89	SN AD	.350	45	....	100-300	.01	20%q	39.40	39.40	26.00
2N3044	T0-89	SN AD	.350	45	....	100-300	.01	10%q	33.00	33.00	22.00
2N3045	T0-89	SN DT	.350	45	....	100-300	.01	....	14.25	14.25	9.50
2N3046	T0-89	SN AD	.350	45	....	50-200	.01	20%q	36.00	36.00	24.00
2N3047	T0-89	SN AD	.350	45	....	50-200	.01	10%q	28.00	28.00	19.00
2N3048	T0-89	SN DT	.350	45	....	50-200	.01	....	12.75	12.75	8.50
2N3049	T0-77	SN AD	.600	60	....	40-160	1	20%q	34.50	34.50	23.00
2N3050	T0-89	SP AD	.350	25	....	30-120	10	20%q	24.00	24.00	16.00
2N3053	T0-5	SN AP	5C	60	700	50-250	150	50	.70	.70	.45
2N3054	T0-66	SN AP	25C	90	4A	25-100	500	.800	1.16	1.16	.84
2N3055	T0-3	SN AP	117C	100	15A	20-70	4A	.800	1.82	1.82	1.32
2N3091	T0-94	SCR	600 PRV - 110 Amps RMS Io - 200 mA I$_{GT}$						63.75	50.00	30.00
2N3092	T0-94	SCR	700 PRV - 110 Amps RMS Io - 200 mA I$_{GT}$						78.75	62.00	37.00
2N3093	T0-94	SCR	800 PRV - 110 Amps RMS Io - 200 mA I$_{GT}$						95.00	74.00	44.00
2N3094	T0-94	SCR	900 PRV - 110 Amps RMS Io - 200 mA I$_{GT}$						107.50	85.00	51.00
2N3095	T0-94	SCR	1000 PRV - 110 Amps RMS Io - 200 ma I$_{GT}$						132.00	104.00	62.00
2N3096	T0-94	SCR	1100 PRV - 110 Amps RMS Io - 200 mA I$_{GT}$						155.00	120.00	73.00
2N3097	T0-94	SCR	1200 PRV - 110 Amps RMS Io - 200 mA I$_{GT}$						180.00	140.00	84.00
2N3098	T0-94	SCR	1300 PRV - 110 Amps RMS Io - 200 mA I$_{GT}$						199.95	155.00	94.00
2N3114	T0-5	SN GP	.800C	150	200	30-120	30	....	6.00	6.00	4.00
2N3115	T0-18	SN SH	.400	60	300	40-120	150	250	1.03	1.03	.64
2N3116	T0-18	SN SH	.400	60	300	100-30	150	250	1.04	1.04	.67
2N3118	T0-5	SN AV	1	85	500	50-275	25	400	7.50	4.95	3.60
2N3119	T0-5	SN SH	1	100	500	50-200	100	250	8.12	5.36	3.90
2N3133	T0-5	SP SH	.600	50	600	40-120	150	200	1.26	1.26	.78
2N3134	T0-5	SP SH	.600	50	600	100-300	150	200	1.15	1.15	.70
2N3135	T0-18	SP SH	.400	50	600	40-120	150	200	1.00	1.00	.61
2N3136	T0-18	SP SH	.400	50	600	100-300	150	200	5.25	5.25	3.90
2N3137	T0-5	SN AV	.600	40	150	70-	50	800	3.40	3.40	2.10
2n3146	T0-3	GP AP	150C	150	15A	30-90	5A	.20	4.35	4.35	2.90
2N3217	T0-46	SP GP	.400	15	100	40-	1	10	2.75	2.55	1.70

Type	Case	Material Function	Maximum Ratings Dissipation Watts	Col't'r To Base Volts	Col't'r Curr. mA	Beta H_{FE} @ Ic Min.-Max.	mA	f_T MHz	EACH 1-9	10-99	100-Up
2N3218	T0-46	SP GP	.400	25	100	30-	1	5	2.175	2.25	1.50
2N3219	T0-46	SP GP	.400	40	100	20-	1	3	2.75	2.55	1.70
2N3227	T0-18	SN SH	.360	40	....	100-300	10	500	3.40	2.40	1.60
2N3228	T0-8	SCR	330 PRV - 5 Amp RMS Io - 15 mA I_{GT}						2.23	1.47	1.07
2N3229	T0-60	SN AV	17.5C	105	2.5A	5W POE 3 150 MHz			38.05	22.21	18.38
2N3232	T0-3	SN AP	117C	110	7.5A	18-55	3A	1	1.80	1.80	1.20
2N3241A	T0-104	SN GP	.500	30	....	100-200	10	175	1.18	.78	.57
2N3242A	T0-104	SN GP	.500	40	....	125-300	10	175	1.32	.88	.64
2N3244	T0-5	SP AP	1	40	1A	50-150	500	175	2.46	2.46	1.63
2N3245	T0-5	SP AP	1	50	1A	30-90	500	150	2.60	2.60	1.73
2N3248	T0-18	SP SH	.360	15	200	50-150	10	250	5.53	3.90	2.60
2N3249	T0-18	SP SH	.360	15	200	100-300	10	300	6.60	4.65	3.10
2N3250	T0-18	SP SH	.360	50	200	50-150	10	250	1.37	1.37	.91
2N3250A	T0-18	SP SH	.360	60	200	50-150	10	250	1.39	1.39	.92
2N3251	T0-18	SP SH	.360	50	200	100-300	10	300	1.42	1.42	.94
2N3251A	T0-18	SP SH	.360	60	200	100-300	10	300	1.44	1.44	.96
2N3252	T0-5	SN AP	1	30	1A	30-90	500	200	1.36	1.36	.91
2N3253	T0-5	SN AP	1	40	1A	25-75	375	1.75	1.49	1.49	.99
2N3261	T0-52	SN SH	.300	40	500	40-150	10	200	2.37	1.57	1.14
2N3262	T0-39	SN SH	1	100	1.5A	40-	500	75	11.25	7.43	5.40
2N3263	T0-39	SN SP	125C	150	25A	40-	5A	....	80.00	46.40	38.40
2N3264	T0-39	SN SP	125C	120	25A	40-	5A	....	70.00	40.60	33.60
2N3265	T0-39	SN SP	125C	150	25A	40-	5A	....	81.25	47.15	39.00
2N3266	T0-39	SN SP	125C	150	25A	40-	5A	....	69.95	40.45	33.50
2N3299	T0-5	SN SH	.800	60	500	40-120	150	250	1.03	1.03	.64
2N3300	T0-5	SN SH	.800	60	500	100-300	150	250	.85	.85	.53
2N3301	T0-18	SN SH	.360	60	500	40-120	150	250	.70	.70	.40
2N3302	T0-18	SN SH	.360	60	50	100-300	150	250	.97	.97	.70
2N3303	T0-5	SN SH	.600	25	1A	30-120	300	450	8.60	8.60	5.30
2N3304	T0-18	SN SH	.300	6	....	30-120	10	500	1.48	1.48	.92
2N3329	T0-72	SP FE	.300	15	V_{dS} - 10 ma I_G - I_do 5V				3.80	3.80	2.55
2N3331	T0-72	SP FE	.300	15	V_{dS} - 10 ma - I_G - I_do 5V				3.65	3.65	2.45
2N3348	T0-77	SN AD	.300	60	....	40-300	10ua	20%q	11.25	11.25	7.50
2N3350	T0-77	SN AD	.300	60	....	100-300	10ua	10%q	14.25	14.25	9.50
2N3351	T0-77	SN AD	.300	60	....	100-300	10ua	20%q	11.70	11.70	7.80
2N3375	T0-60	SN AU	11.6C	65	1.5A	3W POE @ 400 MHz			10.80	10.80	8.95
2N3375TX/ JAN	T0-60	SN AU	11.6C	65	1.5A	3W POE @ 400 MHz			37.25	21.60	17.85
2N3391	T0-98	SN GP	.200	25	100	250-	2	120	.48	.39	.26
2N3391A	T0-98	SN GP	.200	25	100	250-	2	120	.55	.45	.30
2N3392	T0-98	SN GP	.200	25	100	150-	2	120	.30	.25	.17
2N3393	T0-98	SN GP	.200	25	100	90-	2	120	.30	.25	.17
2N3394	T0-98	SN GP	.200	25	100	55-	2	120	.30	.25	.17
2N3395	T0-98	SN GP	.200	25	100	150-	2	120	.40	.33	.22
2N3396	T0-98	SN GP	.200	25	100	90-	2	120	.30	.25	.17
2N3397	T0-98	SN GP	.200	25	100	55-	2	120	.28	.24	.16
2N3398	T0-98	SN GP	.200	25	100	55-	2	120	.28	.24	.16
2N3402	T0-98	SN GP	.200	25	100	75-	2	120	.40	.33	.22
2N3403	T0-98	SN GP	.200	25	100	180-	2	120	.48	.35	.23
2N3404	T0-98	SN GP	.200	25	100	75-	2	120	.58	.50	.33
2N3405	T0-98	SN GP	.200	25	100	100-	2	120	.73	.60	.40
2N3409	T0-77	SN AD	.500	60	500	30-120	1	20%q	11.50	11.50	7.00
2N3410	T0-77	SN AD	.500	60	500	30-120	1	10%q	14.30	14.30	8.75
2N3414	T0-98	SN GP	.360	25	500	75-	2	....	.35	.28	.19
2N3415	T0-98	SN GP	.360	25	500	180-	2	....	.385	.30	.20
2N3416	T0-98	SN GP	.360	50	500	75-	2	....	.55	.45	.30
2N3417	SP-16	SN GP	.360	50	500	100-	2	....	.68	.55	.37
2N3418	T0-5	SN AP	1	85	3A	20-60	1A	40	10.45	10.45	6.95
2N3423	T0-78	AN AD	.550	30	50	20-200	3	20%q	11.50	11.50	7.00
2N3424	T0-78	SN AD	.450	30	50	20-200	3	10%q	17.00	17.00	10.50
2N3425	T0-77	SN DT	.550	40	....	30-120	10	300	5.30	5.30	3.25
2N3439	T0-5	SN AP	10C	450	1A	40-60	20	15	2.00	2.00	1.35
2N3440	T0-5	SN AP	10C	300	1A	40-60	20	15	1.35	1.35	.90
2N3441	T0-66	SN AP	25C	160	3A	20-80	500	1	2.65	2.65	1.77
2N3441/JAN	T0-66	SN AP	25C	160	3A	20-80	500	1	4.63	3.05	2.22
2N3442	T0-3	SN AP	117C	160	10A	20-70	3A	....	4.85	4.85	3.25
2N3442/JAN	T0-3	SN AP	117C	160	10A	20-70	3A	....	8.65	5.69	4.14
2N3444	T0-5	SN AP	25C	80	1A	20-60	500	150	4.05	4.05	2.45
2N3467	T0-5	SP AP	1C	40	1A	40-120	500	175	2.66	2.66	1.77
2N3478	T0-5	SP AP	1C	50	1A	25-75	500	150	3.13	2.06	1.50
2N3486	T0-46	SP AP	2	60	600	100-300	150	200	10.20	10.20	6.80
2N3486A	T0-46	SP AV	.400	60	600	100-300	10	200	13.50	13.50	9.00
2N3494	T0-5	SP AV	.600	80	100	40-	10	200	3.22	3.22	2.15
2N3495	T0-5	SP AV	.600	120	100	40-	10	150	3.70	3.70	2.48
2N3496	T0-18	SP AV	.400	80	100	40-	10	200	3.22	3.22	2.15
2N3498	T0-5	AP AP	1	100	500	40-120	150	150	4.40	4.40	3.30
2N3499	T0-5	SN AP	1	100	500	100-300	150	150	4.10	4.10	3.10
2N3500	T0-5	SN AP	1	150	300	40-120	150	150	17.90	7.50	5.60
2N3501	T0-5	SN AP	1	150	300	100-300	150	150	11.90	8.40	5.60
2N3502	T0-39	SP AV	.700	45	600	115-300	50	200	1.90	1.90	1.65
2N3504	T0-18	SP GP	.400	45	600	115-300	50	200	2.00	2.00	1.32
2N3505	T0-18	SP GP	.400	60	600	115-300	50	200	3.10	3.10	2.00
2N3510	T0-52	SN SH	.360	40	500	25-150	150	350	1.42	1.42	.90
2N3511	T0-52	SN SH	.360	40	500	30-120	150	450	1.70	1.70	1.10
2N3512	T0-5	SN SP	.800	60	....	10-	500	250	1.75	1.16	.85
2N3515	T0-89	SN AD	.350	40	....	50-300	1	20%q	24.00	24.00	15.00
2N3525	T0-66	SCR	400 PRV - 5A RMS Io - 15 mA I_{GT}						2.66	1.77	1.29
2N3528	T0-8	SCR	200 PRV - 2A RMS Io - 15 mA I_{GT}						2.17	1.44	1.05
2N3529	T0-8	SCR	400 PRV - 2A RMS Io - 15 m I_{GT}						2.55	1.75	1.28
2N3546	T0-18	SP AU	.360	15	200	30-	10	640	2.65	2.65	1.64

Type	Case	Material Function	Maximum Ratings Dissipation Watts	Col't'r To Base Volts	Col't'r Curr. mA	Beta H_{FE} @ Ic Min.-Max.	mA	f_T MHz	EACH 1-9	10-99	100-Up
2N3553	T0-39	SN AP	7C	65	350	15-150	250	350	4,37	4.37	3.02
2N3553TX/ JAN	T0-39	SN AP	7C	65	350	15-150	250	350	8.75	5.78	4.20
2N3555	T0-5	SCR	30 PRV -1.6 Amp Io - .02 mA I_{GT}						7.45	7.45	4.95
2N3556	T0-5	SCR	60 PRV - 1.6 Amp Io - .02 mA I_{GT}						8.95	8.95	5.95
2N3558	T0-5	SCR	200 PRV - 1.6 Amp Io - .02 mA I_{GT}						14.20	14.20	9.45
2N3559	T0-5	SCR	30 PRV - 1.6 Amp Io - .2 mA I_{GT}						5.75	5.75	3.83
2N3563	T0-106	SN AV	.200	30	50	....	....	600	.27	.27	.20
2N3564	T0-106	SN AV	.200	30	100	....	....	400	.30	.30	.22
2N3565	T0-106	SN AL	.200	30	50	150-600	1	....	.22	.22	.16
2N3566	T0-105	SN GP	.300	40	200	150-600	10	40	.27	.27	.20
2N3567	T0-105	SN GP	.300	80	500	40-120	150	60	.24	.24	.18
2N3568	T0-105	SN GP	.300	80	500	40-120	150	60	.35	.35	.26
2N3569	T0-105	SN GP	.300	80	500	100-300	150	60	.30	.30	.22
2N3572	T0-72	SN AU	.200	25	50	20-	5	1 GHz	5.90	5.90	3.95
2N3576	T0-18	SP SH	.360	12	200	30-	30	400	2.45	2.45	1.63
2N3583	T0-66	SN AP	35C	250	1A	40-200	500	10	3.50	2.31	1.68
2N3584	T0-66	SN AP	35C	330	2A	8-140	1A	10	4.36	2.89	2.10
2N3585	T0-66	SN AP	35C	440	2A	8-140	1A	10	7.25	4.79	3.48
2N3600	T0-72	SN AV	.200	30	....	200-	2	850	6.37	4.21	3.06
2N3632	T0-60	SN SP	23C	65	3A	10-150	250	....	12.75	12.15	10.55
2N3634	T0-5	SN SP	1	140	1A	50-150	50	....	8.00	8.00	5.00
2N3635	T0-5	SN SP	1	140	1A	100-300	50	....	8.00	8.00	5.60
2N3636	T0-5	SN SP	1	175	1A	50-150	50	....	14.00	14.00	8.50
2N3637	T0-5	SN SP	1	175	1A	100-300	50	....	17.00	17.00	10.50
2N3638	T0-105	SP SH	.300	25	500	30	50	100	.24	.24	.18
2N3638A	T0-105	SP SH	.300	25	500	100	50	150	.27	.27	.20
2N3639	T0-106	SP SH	.200	6	....	30-120	10	500	.34	.34	.25
2N3640	T0-106	SP SH	.200	12	....	30-120	10	500	.41	.41	.36
2N3641	T0-105	SN GP	.350	60	500	40-120	150	250	.30	.30	.22
2N3642	T0-105	SN GP	.350	60	500	40-120	150	250	.32	.32	.20
2N3643	T0-105	SN GP	.350	60	500	100-300	150	250	.32	.32	.20
2N3644	T0-105	SP SH	.300	45	500	115-300	50	200	.34	.34	.22
2N3645	T0-105	SP SH	.300	60	500	115-300	50	200	.34	.34	.22
2N3646	T0-106	SN SH	200	40	200	30-120	30	350	.29	.29	.18
2N3647	T0-5	SN SH	.400	40	500	150-	150	350	2.00	2.00	1.25
2N3648	T0-46	SN SH	.400	40	500	120-	150	450	2.40	2.40	1.50
2N3668	T0-3	SCR	150 PRV - 12.5 Amps RMS - 40 mA I_{GT}						3.62	2.39	1.74
2N3669	T0-3	SCR	330 PRV - 12.5 Amps RMS - 40 mA I_{GT}						4.27	2.81	2.04
2N3670	T0 - 3	SCR	660 PRV - 12.5 Amps RMS-40 mA I_{GT}						5.75	3.80	2.76
2N3671	T0-5	SP SH	.600	60	600	75-225	150	200	2.30	2.30	1.43
2N3672	T0-18	SP SH	.400	60	600	75-225	150	200	1.97	1.97	1.21
2N3673	T0-48	SP SH	.350	60	600	75-225	150	200	4.55	4.55	2.80
2N3677	T0-46	SP GP	.400	30	100	....	....	5	5.50	5.50	3.68
2N3690	T0-106	SN AV	.200	40	30	30-	10	400	.47	.47	.35
2N3693	T0-106	SN GP	.200	45	30	40-	10	200	.30	.30	.22
2N3694	T0-106	SN GP	.200	45	30	100-400	10	200	.30	.30	.22
2N3702	T0-92	SP GP	.360	25	200	60-	50	100	.37	.37	.32
2N3703	T0-92	SP GP	.360	30	200	30-	50	100	.34	.34	.29
2N3704	T0-92	SN GP	.360	50	800	300-	50	100	.34	.34	.29
2N3705	T0-92	SN GP	.360	50	800	150-	50	100	.29	.29	.25
2N3706	T0-92	SN GP	.360	40	800	600-	50	100	.27	.27	.24
2N3707	T0-92	SN GP	.360	30	30	100-	1	....	.34	.34	.29
2N3708	T0-92	SN GP	.360	30	30	45-	1	....	.27	.27	.24
2N3709	T0-92	SN GP	.360	30	30	45-	1	....	.29	.29	.25
2N3710	T0-92	SN GP	.360	30	30	90-	1	....	.30	.30	.27
2N3711	T0-92	SN GP	.360	30	30	180-	1	....	.32	.32	.28
2N3712	T0-5	SN GP	.800	150	200	25-	30	40	3.00	3.00	2.00
2N3713	T0-3	SN AP	150C	80	10A	25-75	2A	.03	4.40	4.40	2.95
2N3714	T0-3	SN AP	150C	100	10A	25-75	2A	.03	4.70	4.70	3.15
2N3715	T0-3	SN AP	150C	80	10A	50-150	2A	.03	4.85	4.85	3.25
2N3716	T0-3	SN AP	150C	100	10A	50-150	2A	.03	6.75	6.75	4.50
2N3719	T0-5	SP AP	6C	40	3A	25-180	1A	60	13.90	9.75	6.50
2N3720	T0-5	SP AP	6C	60	3A	25-180	1A	60	15.40	10.85	7.25
2N3721	T0-5	SN GP	.200	18	100	60	2	....	.275	.24	.16
2N3722	T0-5	SN SH	.800	80	500	25	10-	300	2.30	2.30	1.40
2N3723	T0-5	SN SH	.800	100	500	250	10	300	11.50	11.50	7.00
2N3730	T0-3	GP AP	10C	200	3A	10-200	50	1	2.73	1.82	1.32
2N3731	T0-3	GP AP	5C	320	10A	15	6	....	3.50	2.31	1.68
2N3732	T0-3	GP AP	3C	100	3A	35-500	700	1	2.50	1.65	1.20
2N3733	T0-60	SN AP	23C	65	1A	10-150	250	250	15.80	15.80	13.10
2N3734	T0-5	SN SH	1	50	1.5A	30-120	1A	300	2.47	2.47	1.53
2N3740	T0-66	SP AP	25C	60	1A	30-100	250	4	1.80	1.80	1.20
2N3741	T0-66	SP AP	25C	80	1A	30-100	250	4	2.10	2.10	1.40
2N3742	T0-5	SN AP	1	300	50	20-200	30	30	2.50	2.50	1.54
2N3743	T0-5	SP AP	1	300	50	25-250	30	30	22.00	22.00	15.40
2N3766	T0-66	SN AP	20C	80	1A	40-160	500	10	1.85	1.85	1.25
2N3767	T0-66	SN AP	20C	100	1A	4-160	500	10	2.10	2.10	1.40
2N3771	T0-3	SN AP	150C	50	30A	15-60	15A	....	4.13	4.13	3.00
2N3772	T0-3	SN AP	150C	100	30A	15-60	15A	....	4.13	4.13	3.00
2N3773	T0-3	SN AP	150C	160	16A	5-60	16A	....	7.95	7.95	5.30
2N3789	T0-3	SP AP	150C	60	10A	25-90	1A	....	7.50	7.50	5.00
2N3790	T0-3	SP AP	150C	80	10A	25-90	1A	....	8.90	8.90	5.95
2N3791	T0-3	SP AP	150C	80	10A	25-180	1A	....	8.75	8.75	5.85
2N3792	T0-3	SP AP	150C	80	10A	50-180	1A	....	9.50	9.50	6.35
2N3798	T0-18	SP SH	.360	60	50	125	10	500	3.70	3.70	2.48
2N3799	T0-18	SP SH	.360	60	50	250	10	500	4.35	4.35	2.70
2N3800	T0-71	SP DT	.360	60	50	150-450	.1	....	4.30	4.30	2.65
2N3801	T0-71	SP DT	.360	60	50	150-450	1	....	5.70	5.70	3.50
2N3802	T0-71	SP AD	.360	60	50	150-450	.1	20%q	7.15	7.15	4.40

See Page 28 for Explanation of Abbreviations and Symbols

SEE PAGE 12 FOR INTEGRATED CIRCUITS

Type	Case	Material Function	Maximum Ratings Dissi-pation Watts	Col't'r To Base Volts	Col't'r Curr. mA	Beta H_{FE} @ Ic Min.-Max.	mA	f_T MHz	EACH 1-9	10-99	100-Up
2N3803	T0-71	SP AD	.360	60	50	300-900	.1	10%q	8.50	8.50	5.25
2N3804	T0-71	SP AD	.360	60	50	150-450	.1	10%q	10.00	10.00	6.15
2N3804A	T0-71	SP AD	.360	60	50	150-450	.1	10%q	14.30	14.30	8.75
2N3805	T0-71	SP AD	.360	60	50	300-900	.1	20%q	14.30	14.30	8.75
2N3805A	T0-71	SP AD	.360	60	50	300-900	.1	10%q	17.00	17.00	10.50
2N3806	T0-77	SP DT	.600	60	50	150-450	.1	%	9.00	9.00	6.00
2N3807	T0-78	SP DT	.600	60	50	300-900	.1		10.15	10.15	6.75
2N3808	T0-78	SP AD	.600	60	50	150-450	.1	10%q	14.25	14.25	9.50
2N3809	T0-78	SP AD	.600	60	50	300-900	.1	20%	16.30	16.30	10.75
2N3810	T0-78	SP AD	.600	60	50	150-450	.1	10%q	16.85	16.85	11.25
2N3810A	T0-78	SP AD	.600	60	50	150-450	.1	20%q	14.30	14.30	8.75
2N3811	T0-78	SP AD	.600	60	50	300-900	.1	10%q	19.30	19.30	12.75
2N3811A	T0-78	SP AD	.600	60	50	300-900	.1	10%q	17.00	17.00	10.50
2N3817A	T0-71	SP DT	.600	60	50	300-900	.01	....	43.00	43.00	26.00
2N3819	T0-92	SN FE	.360		25 V BV_{dss} - 8 V V_P @ I_D				.56	.56	.49
2N3820	T0-92	SF FE	.360		20 V BV_{dss} - 8 V V @ I_D				.72	.72	.63
2N3822	T0-72	SN FE	.300-		50 V BV_{dss} - 6 V V_P @ I_D				2.10	2.10	1.50
2N3823	T0-72	SN FE	.300		30 V BV_{dss} - 8 V V_P @ I_D				1.95	1.95	1.40
2N3824	T0-72	SN FE	.300		50 V BV_{dss}-10 ma I_G				1.90	1.90	1.35
2N3829	T0-52	SP AV	.360	35	200	30	30	350	5.45	5.45	3.62
2N3838	T0-89	S Complimentary-unmatched Dual V_{CB} 60 V							27.75	27.75	18.50
2N3839	T0-72	SN AU	.200	30	40	25	1	2GHz	26.13	15.15	12.55
2N3843	T0-98	SN GP	.200	30	100	20	2	60	.53	.41	.27
2N3843A	T0-98	SN GP	.200	30	100	40	2	60	.65	.43	.29
2N3844	T0-98	SN GP	.200	30	100	35	2	90	.65	.43	.29
2N3844A	T0-98	SN GP	.200	30	100	70	2	90	.68	.45	.30
2N3845	T0-98	SN GP	.200	30	100	60	2	126	.68	.45	.30
2N3845A	T0-98	SN GP	.200	30	100	120	2	126	.70	.47	.32
2N3854	T0-98	SN GP	.200	18	100	70	2	100	.38	.29	.20
2N3854A	T0-98	SN GP	.200	30	100	70	2	100	.40	.32	.21
2N3855	T0-98	SN GP	.200	18	100	120	2	130	.40	.32	.21
2N3855A	T0-98	SN GP	.200	30	100	120	2	130	.43	.34	.23
2N3856	T0-98	SN GP	.200	18	100	100-700	2	375		.34	.23
2N3856A	T0-98	SN GP	.200	30	100	100-200	2	375	.45	.36	.24
2N3858	T0-98	SN GP	.200	30	100	60-120	2	125	.30	.25	.17
2N3858A	T0-98	SN GP	.200	30	100	....	2	....	.40	.33	.22
2N3859	T0-98	SN GP	.200	30	100	100-200	2	135		.27	.18
2N3859A	T0-98	SN GP	.200	60	100	100-200	2	135		.36	.24
2N3860	T0-98	SN GP	.200	30	100	150-300	2	135		.32	.21
2N3866	T0-39	SN AP	5	55	400	10-200	50	500	1.90	1.90	1.50
2N3870	T0-39	SCR			100 PRV - 35 Amp RMS Io - 40 mA I_{GT}				5.50	3.63	2.64
2N3871	T0-39	SCR			200 PRV - 35 Amp RMS Io - 40 mA I_{GT}				6.88	4.54	3.30
2N3772	T0-39	SCR			400 PRV - 35 Amp RMS Io - 40 mA I_{GT}				9.00	5.94	4.32
2N3873	T0-39	SCR			600 PRV - 35 Amp RMS Io - 40 mA I_{GT}				11.25	7.34	5.34
2N3877	T0-98	SN GP	.200	70	50	20-	2	....	.55	.45	.30
2N3877A	T0-98	SN AP	.200	85	50	20-	2	....	.58	.49	.33
2N3878	T0-66	SN AP	7C	120	7A	50-200	500	20	3.13	2.06	1.50
2N3879	T0-66	SN AP	7C	120	7A	20-80	4A	20	4.87	3.22	2.34
2N3896	T0-66	SCR			100 PRV - 35 Amp RMS Io - 40 ma I_{GT}				6.00	3.96	2.88
2N3897	T0-66	SCR			200 PRV - 35 Amp RMS Io - 40 mA I_{GT}				7.37	4.87	3.54
2N3898	T0-66	SCR			400 PRV - 35 Amp RMS Io - 40 mA I_{GT}				9.50	6.27	4.56
2N3899	T0-66	SCR			600 PRV - 35 Amp RMS Io - 40 mA I_{GT}				11.63	7.67	5.58
2N3900	T0-98	SN GP	.200	18	100	170-	2	....	.435	.36	.24
2N3900A	T0-98	SN GP	.200	18	100	170-	2	....	.48	.39	.26
2N3903	T0-92	SN SH	.310	60	200	50-	....	250	.46	.46	.34
2N3904	T0-92	SN SH	.310	60	200	100-	1	250	.46	.46	.34
2N3905	T0-92	SP SH	.310	40	200	50-	1	200	.49	.49	.36
2N3906	T0-92	SP SH	.310	40	200	100-	1	250	.49	.49	.36
2N3909	T0-72	SP FE	.300		20 v BV_{dss} - 10 mA I_G - V_D Id				2.05	2.05	1.40
2N3932	T0-104	SN AU	.200	30	....	40-150	2	750	2.38	1.57	1.14
2N3933	T0-104	SN AU	.200	40	....	60-200	2	750	2.70	1.78	1.30
2N3959	T0-18	SN AU	.400	20	30	400	10	1.3GHz	10.40	10.40	6.50
2N3960	T0-18	SN AU	.400	20	30	400	10	1.6G	12.80	12.80	7.85
2N3970	T0-18	SN FE	1.8		40 Volts BV_{dss} - 50 mA I_G - 10 V I_D				3.35	3.35	2.40
2N3971	T0-18	SN FE	1.8		40 Volts BV_{dss} - 50 mA I_G - 10 V I_D				3.00	3.00	2.15
2N3972	T0-18	SN FE	1.8		40 Volts BV_{dss} - 50 mA I_G - 10 V I_D				2.65	2.65	1.90
2N3975	T0-98	SN GP	.360	60	400	30-	150	200	.475	.38	.26
2N3976	T0-98	SN GP	.360	60	400	50-	150	200	.525	.41	.27
2N3977	T0-46	SP GP	.400	15	100	40-	5	1	3.30	3.30	2.20
2N3878	T0-46	SP GP	.400	25	100	30-	5	1	3.00	3.00	2.00
2N3980	T0-72	S UJ	.360		35 Volts V_{BB} - .68-.82 n-2 μa I_P				3.40	3.40	2.25
2N3993	T0-72	SP FE	.300		25 Volts BV_{dss} - 10 mA I_G				5.60	5.60	4.05
2N3993A	T0-72	SP FE	.300		25 Volts BV_{dss} - 10 mA I_G				5.70	5.70	4.20
2N3994	T0-72	SP FE	.300		25 Volts BV_{dss} - 10 mA I_G				4.80	4.80	3.42
2N3994A	T0-72	SP FE	.300		25 Volts BV_{dss} - 10 mA I_G				4.95	4.95	3.54
2N4001	T0-5	SN GP	1	120	1A	40-120	500	40	7.65	7.65	5.10
2N4012	T0-60	SN AV	11C	65	1A	6-60	1A	350	24.50	14.20	11.75
2N4036	T0-5	SP AP	5C	90	1A	40-140	150	60	1.50	1.50	1.10
2N4037	T0-5	SP AP	1	60	1A	50-250	150	60	1.20	1.20	.90
2N4058	T0-92	SN GP	.360	30	30	100-	1	....	.35	.35	.31
2N4059	T0-92	SN GP	.360	30	30	45-	1	....	.29	.29	.25
2N4060	T0-92	SN GP	.360	30	30	45-	1	....	.30	.32	.28
2N4061	T0-92	SN GP	.360	30	30	90-	1	....	.32	.32	.28
2N4062	T0-92	SN GP	.360	30	30	180-	1	....	.34	.34	.29
2N4063	T0-5	SN AP	10C	450	1A	40-160	20	....	2.05	1.35	.98
2N4064	T0-5	SN AP	10C	300	1A	40-160	20	....	1.60	1.06	.77
2N4068	T0-104	SN AP	.500	150	200	30-	30	50	2.23	1.47	1.07

Type	Case	Material Function	Maximum Ratings Dissi-pation Watts	Col't'r To Base Volts	Col't'r Curr. mA	Beta H_{FE} @ Ic Min.-Max.	mA	f_T MHz	EACH 1-9	10-99	100-Up
2N4069	T0-104	SN AP	.1	150	200	30-	30	50	2.35	1.55	1.13
2N4074	T0-104	SN AP	.500	40	300	75-300	10	50	1.17	.78	.57
2N4101	T0-66	SCR			700 PRV - 5 Amp RMS Io - 15 mA I_{GT}				3.32	2.72	1.61
2N4102	T0-8	SCR			700 PRV - 5 Amp RMS Io-15 mA I_{GT}				3.23	2.70	1.60
2N4103	T0-3	SCR			700 PRV - -12.5 Amp RMS Io - 15 mA I_{GT}				7.75	5.12	3.72
2N4121	T0-106	SP GP	.200	40	100	70-200	10	400	.27	.27	.20
2N4122	T0-106	SP GP	.200	40	100	150-300	10	450	.30	.30	.22
2N4123	T0-92	SN GP	.310	40	200	50-	2	250	.33	.33	.24
2N4124	T0-92	SN GP	.310	30	200	120-	2	300	.33	.33	.24
2N4125	T0-92	SP GP	.310	30	200	50-	2	200	.33	.33	.24
2N4126	T0-92	SP GP	.310	25	200	120-	2	250	.33	.33	.24
2N4200	T0-92	SCR			400 PRV - 2 Amps RMS Io - 100 mA I_{GT}				33.58	22.40	15.80
2N4202	T0-92	SCR			600 PRV - 2 Amps RMS Io - 100 mA I_{GT}				40.60	26.00	19.10
2N4212	T0-92	SCR			25 PRV - 2 Amps RMS Io - .3 mA I_{GT}				2.63	1.90	1.25
2N4213	T0-92	SCR			50 PRV - 2 Amps RMS Io - .3 mA I_{GT}				3.02	2.10	1.45
2N4214	T0-92	SCR			100 PRV - 2 Amps RMS Io - .3 mA I_{GT}				3.72	2.60	1.75
2N4216	T0-92	SCR			200 PRV - 2 Amps RMS Io - .3 mAa I_{GT}				7.13	5.00	3.35
2N4220	T0-72	SN FE	.300		30 Volt BV_{dss}-15 mA I_D4 VP I_D				1.90	1.90	1.35
4220A	T0-72	SN FE	.300		30 Volt BV_{dss}-15 mA I_D4 VP I_D				2.10	2.10	1.50
2N4221	T0-72	SN FE	.300		30 Volt BV_{dss} - 15 mA I_D6 VP I_D				1.82	1.82	1.30
2N4221A	T0-72	SN FE	.300		30 Volt BV_{dss} - 15 mA I_D6 VP I_D				2.03	2.03	1.45
2N4222	T0-72	SN FE	.300		30 Volt BV_{dss} - 15 mA I_D8 VP I_D				1.82	1.82	1.30
2N4222A	T0-72	SN FE	.300		30 Volt BV_{dss} - 15 ma I_DA VP I_D				2.03	2.03	1.45
2N4223	T0-72	SN FE	.300		30 Volt BV_{dss} - 20 mA I_D8 VP I_D				1.90	1.90	1.35
2N4224	T0-72	SN FE	.300		30 Volt BV_{dss} - 20 mA I_D 8 VP I_D				1.82	1.82	1.30
2N4231	T0-66	SN AP	35C	40	3A	25-100	1.5A	4	1.25	1.25	.85
2N4232	T0-66	SN AP	35C	60	3A	25-100	1.5A	4	1.40	1.40	.95
2N4233	T0-66	SN AP	35C	80	3A	25-100	1.5A	4	1.85	1.85	1.25
2N4234	T0-5	SP AP	1	40	1	30-150	250	3	1.80	1.80	1.20
2N4235	T0-5	SP AP	1	60	1	30-150	250	3	2.10	2.10	1.40
2N4236	SP AP	SP AP	1	80	1	30-150	250	3	2.30	2.30	1.55
2N4237	T0-5	SN GP	.800	50	1	30	100	1	1.35	1.35	.90
2N4238	T0-5	SN GP	.800	80	1A	30	100	1	1.65	1.65	1.10
2N4239	T0-5	SN GP	.800	100	1A	30	100	1	1.80	1.80	1.20
2N4240	T0-66	SN AP	35C	440	2A	6-240	750	15	4.75	3.14	2.28
2N4252	T0-72	SN AU	.200	30	50	50	2	600	1.82	1.82	1.30
2N4259	T0-104	SN AU	.175	40	....	60-250	2	900	3.10	2.06	1.50
2N4264	T0-92	SN A	.310	30	200	40	10	300	.43	.43	.32
2N4265	T0-92	SN SH	.310	30	200	100	10	300	.49	.49	.36
2N4314	T0-5	SP AV	1	90	1A	50-250	150	200	1.22	.81	.59
2N4346	T0-3	SP AP	5C	320	10A	TV Horiz. Output			4.50	2.97	2.16
2N4347	T0-3	SN AP	100C	140	5A	15-60	2A	....	3.18	3.18	2.12
2N4348	T0-3	SN AP	120C	140	10A	15-60	5A	....	4.40	4.40	2.95
2N4383	T0-5	SN AV	.800	40	800	....	....	120	1.38	1.05	.70
2N4384	T0-18	SN AV	.500	40	800	....	....	120	1.38	1.05	.70
2N4390	T0-104	SN SH	.500	120	....	20	20	20	1.22	.81	.59
2N4391	T0-18	SN FE	1.8C - 40 Volt BVdss - 50 mA I_G - 10 V_P I_{DO}						3.35	3.35	2.40
2N4392	T0-18	SN FE	1.8C - 40 Volt BVdss - 50 mA Ig - 5 V_P I_{DO}						3.00	3.00	2.15
2N4393	T0-18	SN FE	1.8C - 40 Volt BVdss - 50 mA Ig - 3 V_P I_{DO}						2.65	2.65	1.90
2N4398	T0-3	SP AP	200C	40	30A	15-60	15A	4	11.25	11.25	7.50
2N4399	T0-3	SP AP	200C	60	30A	15-60	15A	4	13.50	13.50	9.05
2N4400	T0-92	SN GP	.310	60	600	20	10	200	.54	.54	.40
2N4401	T0-92	SN GP	.310	60	600	40	10	250	.65	.68	.50
2N4402	T0-92	SP GP	.310	40	600	30	10	150	.54	.54	.40
2N4403	T0-92	SP GP	.310	40	600	60	10	200	.68	.68	.50
2N4409	T0-92	SN GP	.310	80	250	400	10	300	.61	.61	.45
2N4410	T0-92	SN GP	.310	120	250	400	10	300	.86	.86	.64
2N4416	T0-72	SN FE	.300		30 Volt BVdss - 10 mA IG - 6 V V_P I_P				2.15	2.15	1.45
2N4424	T0-98	SN GP	.360	40	500	180	2	....	.48	.39	.26
2N4425		SN GP	.560	40	500	100	2	....	.58	.43	.29
2N4427	T0-39	SN AP	3.5C	40	400	10-200	100	500	2.70	1.78	1.30
2N4440	T0-60	SN AP	11C	65	1.5A	10-200	125	400	17.75	10.30	8.50
2N4440/JAN	T0-60	SN AP	2.6	65	1.5A	15-150	150	350	32.55	18.00	15.00
2N4440TX/ JAN	T0-60	SN AP	2.6	65	1.5A	15-150	150	350	41.25	24.00	20.00
2N4851	T0-72	S UJ	.300		35 V_{BB} - .56/.70h				1.10	1.10	.75
2N4852	T0-72	S UJ	.300		35 V_{BB} - .70/.85h				1.10	1.10	.75
2N4853	T0-72	S UJ	.300		35 V_{BB} - .70/.85h				2.25	2.25	1.50
2N4898	T0-66	SP AP	25C	40	1A	20-100	500	3	1.50	1.50	1.00
2N4899	T0-66	SP AP	25C	60	1A	20-100	500	3	1.80	1.80	1.20
2N4900	T0-66	SP AP	25C	60	1A	20-100	500	3	2.10	2.10	1.40
2N4901	T0-3	SP AP	87C	40	5A	20-80	1A	4	3.93	2.75	1.84
2N4902	T0-3	SP AP	87C	60	5A	20-80	1A	4	4.75	3.30	2.21
2N4903	T0-3	SP AP	87C	80	5A	20-80	1A	4	6.00	4.25	2.84
2N4904	T0-3	SP AP	87C	40	5A	25-100	2.5	4	4.90	3.35	2.25
2N4905	T0-3	SP AP	87C	60	5A	25-100	2.5	4	6.40	4.45	2.98
2N4906	T0-3	SP AP	87C	80	5A	25-100	2.5	4	7.99	5.60	3.75
2N4910	T0-66	SN AP	25C	40	1A	20-100	500	3	1.05	1.05	.70
2N4911	T0-66	SN AP	25C	60	1A	20-100	500	3	1.20	1.20	.80
2N4912	T0-66	SN AP	25C	80	1A	20-100	500	3	1.40	1.40	.95
2N4913	T0-3	SN AP	88C	40	5A	25-100	2.5A	4	3.37	2.40	1.60
2N4914	T0-3	SN AP	88C	60	5A	25-100	2.5A	4	3.62	2.60	1.75
2N4915	T0-3	SN AP	88C	80	5A	25-100	2.5A	4	5.82	4.20	2.80
2N4916	T0-106	SP AV	.200	30	100	60-	10	400	.30	.30	.22
2N4917	T0-106	SP AV	.200	30	100	15- 0	10	450	.33	.33	.24
2N4926	T0-39	SN AP	5.0C	200	50	20-200	30	30	2.00	2.00	1.24
2N4927	T0-39	SN AP	5.0C	250	50	20-200	30	30	2.28	2.28	1.40

Type	Case	Material Function	Maximum Ratings Dissipation Watts	Col'tr To Base Volts	Col'tr Curr. mA	Beta H_{FE} @ Ic Min.-Max.	mA	f_T MHz	EACH 1-9	10-99	100-Up
2N4932	T0-60	SN AP	70C	50	3.3	10-100	1A	.100	50.00	29.00	24.00
2N4933	T0-60	SN AP	70C	70	3.3	10-100	1A	.100	50.00	29.00	24.00
2N4937	T0-60	SP SH	.500	50	50	50-	1	300	8.50	8.50	5.25
2N4938	T0-60	SP SH	.500	50	50	50-	1	300	6.45	6.45	3.95
2N4948	T0-18	TTS UJ	.360	35 Volt V_{BB} - .55/.82 n - 2 ua I_P					1.35	1.35	.90
2N4949	T0-18	S UJ	.360	35 Volt V_{BB} - .74/.86 n - 1 ua I_P					2.40	2.40	1.60
2N5016	T0-60	SN AU	30C	65	4.5A	10-200	500	500	50.00	29.00	24.00
2N5034	SP-84	SN AP	100C	55	12A	20-70	2.5A	.800	2.05	1.34	.98
2N5035	SP-84	SN AP	100C	55	12A	20-70	2.5A	.800	2.00	1.32	.96
2N5036	SP-84	SN AP	100C	70	12A	20-70	2.5A	.800	2.15	1.42	1.04
2N5037	SP-84	SN AP	100C	70	12A	20-70	3A	.800	2.10	1.41	1.02
2N5038	T0-3	SN AP	140	150	20A	20-100	12A	60	11.90	8.17	5.94
2N5039	T0-3	SN AP	140	120	20A	20-100	12A	60	8.15	5.36	3.90
2N5060	T0-92	SCR	30 Volts PRV - 255 mA Io - 350uA I_{GT}						.85	.67	.45
2N5061	T0-92	SCR	60 Volts PRV - 255 mA Io - 350uA I_{GT}						.925	.75	.50
2N5062	T0-92	SCR	100 Volts PRV - 255 mA Io - 350uA I_{GT}						1.10	.78	.52
2N5063	T0-92	SCR	150 Volts PRV - 255 mA Io - 350uA I_{GT}						1.23	.87	.58
2N5067	T0-3	SN AP	88C	40	5A	20-80	1A	4	1.88	1.50	1.00
2N5068	T0-3	SN AP	88C	60	5A	20-80	1A	4	2.25	2.25	1.20
2N5069	T0-3	SN AP	88C	80	5A	20-80	1A	4	2.85	2.85	1.50
2N5070	T0-60	SN AP	70C	65	3.3A	10-100	3A	100	50.00	29.00	24.00
2N5071	T0-60	SN AP	70C	65	3.3A	10-100	3A	100	50.00	29.00	24.00
2N5086	T0-92	SP GP	.310	50	50	150-	1	40	.68	.68	.50
2N5087	T0-92	SP GP	.310	50	50	250-	1	40	.73	.73	.54
2N5088	T0-92	SN GP	.310	35	50	350-	1	....	.68	.68	.50
2N5089	T0-92	SN GP	.310	30	50	450-	1	....	.88	.88	.65
2N5090	T0-60	SN AP	50C	55	400	10-200	50	500	17.25	11.40	8.30
2N5102	T0-60	SN AP	70C	90	3.3	10-200	500	150	37.50	21.75	18.00
2N5108	T0-39	SN AP	3.5C	55	400	....	....	1.2G	22.25	12.90	10.70
2N5109	T0-39	SN AP	3.5C	40	400	40-120	50	1.2G	5.25	3.42	2.52
2N5126	T0-106	SN AV	.200	20	30	15-	4	300	.27	.27	.20
2N5127	T0-106	SN AV	.200	20	100	12-	2	150	.24	.24	.18
2N5128	T0-106	SN AV	.200	15	500	35-	50	150	.19	.19	.14
2N5129	T0-106	SN AV	.300	15	500	35-	50	150	.22	.22	.16
2N5130	T0-106	SN AV	.200	30	50	12-	8	450	.19	.19	.14
2N5131	T0-106	SN AV	.200	20	200	25-	10	100	.22	.22	.16
2N5132	T0-106	SN AV	.200	20	30	20-	10	200	.19	.19	.14
2N5133	T0-106	SN AV	.200	20	50	50-	1	40	.19	.19	.14
2N5134	T0-106	SN AV	.200	20	100	150-	10	250	.19	.19	.14
2N5135	T0-106	SN AV	.300	30	200	50-	10	40	.19	.19	.14
2N5136	T0-105	SN AV	.220	30	500	20-	150	40	.22	.22	.16
2N5137	T0-106	SN AV	.300	30	500	20-	150	40	.22	.22	.16
2N5164	SP-25	SCR	50 PRV - 7 Amp RMS Io - 75 mA I_{GT}						4.57	3.25	2.15
2N5165	SP-25	SCR	200 PRV - 7 Amp RMS Io - 75 mA I_{GT}						7.49	4.65	3.05
2N5166	SP-25	SCR	400 PRV - 7 Amp RMS Io - 75 mA I_{GT}						9.03	6.45	4.25
2N5167	SP-25	SCR	600 PRV - 7 Amp RMS Io - 75 mA I_{GT}						13.70	9.70	6.45
2N5168	SP-25	SCR	50 PRV - 7 Amp RMS Io - 75 mA I_{GT}						5.10	3.76	2.40
2N5169	SP-25	SCR	200 PRV - 7 Amp RMS Io - 75 mA I_{GT}						4.90	4.85	2.30
2N5170	SP-25	SCR	400 PRV - 7 Amp RMS Io - 75 mA I_{GT}						9.57	6.75	4.50
2N5171	SP-25	SCR	600 PRV - 7 Amp RMS Io - 75 mA I_{GT}						14.25	10.00	6.70
2N5172	T0-98	SN GP	.200	25	100	100-	10	....	.23	.19	.12
2N5179	T0-72	SN AU	.200	20	50	25-	20	900	1.35	.90	.65
2N5180	T0-104	SN AU	.180	30	....	20-	2	650	.93		.45
2N5183	T0-104	SN GP	.500	18	1A	70-	10	62	.68	.45	.33
2N5184	T0-104	SN GP	.500	120	50	10-	50	50	.78	.52	.38
2N5185	T0-104	SN GP	1	120	50	10-	50	30	.95	.63	.46
2N5186	T0-52	SN AV	.300	10	300	25-	10	400	.675	.45	.33
2N5187	T0-52	SN AV	.300	25	300	30-	10	400	.95	.63	.46
2N5188	T0-39	SN AV	.800	60	1A	25-	150	400	1.13	.75	.55
2N5189	T0-39	SN SH	.800	60	....	20-	500	400	1.15	.76	.56
2N5202	T0-66	SN PA	35C	100	4A	10-100	4A	60	3.93	2.89	2.10
2N5209	T0-92	SN GP	.310	50	50	150-	1	30	.59	.59	.44
2N5210	T0-92	SN GP	.310	5	50	250-	1	30	.65	.65	.48
2N5219	T0-92	SN GP	.310	20	100	35-	2	150	.27	.26	.19
2N5220	T0-92	SN GP	.310	15	500	30-	50	100	.24	.24	.18
2N5221	T0-92	SN GP	.310	15	500	30-	50	100	.27	.27	.20
2N5223	T0-92	SN GP	.310	25	100	50-	2	150	.22	.22	.16
2N5224	T0-92	SN GP	.310	25	100	4-	1	250	.19	.19	.14
2N5225	T0-92	SN GP	.310	25	500	30-	50	150	.22	.22	.16
2N5226	T0-92	SN GP	.310	25	500	30-	50	50	.24	.24	.18
2N5227	T0-92	SN GP	.310	30	50	50-	2	100	.27	.27	.20
2N5228	T0-92	SN GP	.310	5	50	150-	50	300	.26	.26	.19
2N5239	T0-117	SN AP	100	300	5A	20-80	2A	5	7.35	4.87	3.54
2N5240	T0-117	SN AP	100	375	5A	20-80	2A	5	9.88	6.50	4.74
2N5262	SP-23	SN SH	5C	75	3A	35-	100	100	2.44	1.62	1.18
2N5293	SP-91	SN AP	36C	80	4A	30-120	500	.800	1.22	.81	.59
2N5294	SP-96	SN AP	36C	80	4A	30-120	500	.800	1.22	.81	.59
2N5295	SP-91	SN AP	36C	80	4A	30-120	1A	.800	1.22	.81	.59
2N5296	SP-96	SN AP	36C	80	4A	30-120	1A	.800	1.22	.81	.59
2N5297	SP-91	SN AP	36C	80	4A	20-80	1.5A	.800	1.30	.86	.62
2N5298	SP-96	SN AP	36C	80	4A	20-80	1.5A	.800	1.30	.86	.62
2N5301	T0-3	SN AP	200C	40	30A	15-60	15A	2	6.90	6.90	4.15
2N5302	T0-3	SN AP	200C	60	30A	15-60	15A	2	7.65	7.65	4.60
2N5303	T0-3	SN AP	200C	80	30A	15-60	15A	2	18.00	18.00	12.00
2N5320	T0-5	SN AP	10C	100	2A	30-130	500	50	1.88	1.24	.90
2N5321	T0-5	SN AP	10C	75	2A	40-250	500	50	1.13	.74	.54
2N5322	T0-5	SP AP	10C	100	2A	30-130	500	50	2.13	1.40	1.02
2N5323	T0-5	SP AP	10C	75	2A	40-250	500	50	1.33	.91	.66
2N5334	T0-39	SN AP	6C	60	3A	30-150	1A	40	3.94	3.15	2.10
2N5335	T0-39	SN AP	6C	80	3A	30-150	1A	40	4.50	3.60	2.40

Type	Case	Material Function	Maximum Ratings Dissipation Watts	Col'tr To Base Volts	Col'tr Curr. mA	Beta H_{FE} @ Ic Min. Max.	mA	f_T MHz	EACH 1-9	10-99	100-Up
2N5346	T0-59	SN AP	60C	80	7A	30-120	2A	30	45.55	36.00	24.00
2N5347	T0-59	SN AP	60C	80	7A	60-240	2A	30	52.00	39.00	26.00
2N5348	T0-59	SN AP	60C	100	7A	30-120	2A	30	59.95	45.00	30.00
2N5349	T0-59	SN AP	60C	100	7A	60-240	2A	30	67.75	51.00	34.00
2N5400	T0-92	SP GP	.310	130	600	30-	1	100	.68	.68	.50
2N5401	T0-92	SP GP	.310	160	600	40-	1	100	.82	.82	.61
2N5415	T0-5	SP AP	1C	200	500	30-150	50	15	3.20	3.20	2.40
2N5416	T0-5	SP AP	1C	350	500	30-120	50	15	4.85	4.85	3.60
2N5441		Triac	200 PRV - 40 Amps RMS Io - 80 mA I_{GT}						8.55	4.10	4.10
2N5442	SP-94	Triac	400 PRV - 40 Amps RMS Io - 80 mA I_{GT}						10.25	6.77	4.92
2N5443	SP-94	Triac	600 PRV - 40 Amps RMS Io - 80 mA I_{GT}						12.80	8.46	6.16
2N5444	SP-95	Triac	200 PRV - 40 Amps RMS Io - 80 mA I_{GT}						9.05	5.97	4.34
2N5445	SP-95	Triac	400 PRV - 40 Amps RMS Io - 80 mA I_{GT}						10.75	7.10	5.16
2N5446	SP-95	Triac	600 PRV - 40 Amps RMS Io - 80 mA I_{GT}						13.30	8.79	6.40
2N5470		SN AP	3.5C	55	400	POB 1W 3 2 GHz			135.00	62.25	54.00
2N5477	T0-59	SN AP	60C	80	7A	30-120	2A	30	43.75	33.00	22.00
2N5478	T0-59	SN AP	60C	80	7A	60-240	2A	30	48.00	36.00	24.00
2N5479	T0-59	SN AP	60C	100	7A	30-120	2A	30	55.95	42.00	28.00
2N5490	T0-59	SN AP	50C	60	7A	20-100	2A	....	1.45	.96	.70
2N5491	T0-59	SN AP	50C	60	7A	20-100	2A	....	1.45	.96	.70
2N5492	T0-59	SN AP	50C	75	7A	20-100	2A	....	1.45	.96	.70
2N5493	T0-59	SN AP	50C	75	7A	20-100	2A	....	1.45	.96	.70
2N5494	T0-59	SN AP	50C	60	7A	20-100	2A	....	1.45	.96	.70
2N5495	T0-59	SN AP	50C	60	7A	20-100	2A	....	1.45	196	.70
2N5496	T0-59	SN AP	50C	60	7A	20-100	2A	....	1.58	1.04	.76
2N5497	T0-59	SN AP	50C	60	7A	20-100	2A	....	1.58	1.04	.76
2N5550	T0-92	SN GP	.310	160	600	50-	1	100	.62	.62	.46
2N5567	SP-94	Triac	200 Volt V_{DROM} - 10 Amp RMS I_T - 150 mA I_G						4.62	3.05	2.22
2N5568	SP-94	Triac	400 Volt V_{DROM} - 10 Amp RMS I_T - 150 mA I_G						5.55	3.66	2.66
2N5569	SP-95	Triac	200 Volt V_{DROM} - 10 Amp RMS I_T - 150 mA I_G						5.25	3.38	2.46
2N5570	SP-95	Triac	400 Volt V_{DROM} - 10 Amp RMS I_T - 150 mA I_G						6.05	3.99	2.90
2N5571	SP-94	Triac	200 Volt V_{DROM} - 15 Amp RMS I_T - 200 mA I_G						4.93	3.25	2.36
2N5572	SP-94	Triac	400 Volt V_{DROM} - 15 Amp RMS I_T - 200 mA I_G						5.90	3.89	2.83
2N5573	SP-95	Triac	200 Volt V_{DROM} - 15 Amp RMS I_T - 200 mA I_G						5.42	3.58	2.60
2N5574	SP-95	Triac	400 Volt V_{DROM} - 15 Amp RMS I_T - 200 mA I_G						6.50	4.22	3.07
2N5575	T0-3	SN SP	300C	70	80A	10-40	60A	....	45.00	26.00	21.60
2N5576	T0-3	SN SP	300C	70	80A	10-40	60A	....	45.00	26.10	21.60
2N5577	T0-3	SN SP	300C	70	80A	10-40	60A	....	50.00	29.00	24.00
2N5578	T0-3	SN SP	300C	90	60A	10-40	40A	....	50.00	29.00	24.00
2N5579	T0-3	SN SP	300C	90	60A	10-40	40A	....	50.00	29.00	24.00
2N5580	T0-3	SN SP	300C	90	60A	10-40	40A	....	55.00	31.90	26.40
2N5671	T0-3	SN SP	140C	120	30A	20-100	20A	....	27.25	15.80	13.10
2N5672	T0-3	SN SP	140C	150	30A	20-100	20A	....	37.25	21.60	17.90
2N5754	T0-5	Triac	100 Volt V_{DROM} - 2.5 Amp RMS I_T - 40 mA I_G						1.80	1.19	.82
2N5755	T0-5	Triac	200 Volt V_{DROM} - 2.5 Amp RMS I_T - 40 mA I_G						2.07	1.41	1.02
2N5756	T0-5	Triac	400 Volt V_{DROM} - 2.5 Amp RMS I_T - 40 mA I_G						2.55	1.69	1.23
2N5781	T0-5	SP AP	10C	80	3.5A	20-100	1A	5	2.07	1.41	1.02
2N5782	T0-5	SP AP	10C	65	3.5A	20-100	1.2A	5	1.88	1.24	.90
2N5783	T0-5	SP AP	10C	45	3.5A	20-100	1.6A	5	1.75	1.16	.84
2N5784	T0-5	SP AP	10C	80	3.5A	20-100	1A	....	1.88	1.24	.90
2N5785	T0-5	SP AP	10C	65	3.5A	20-100	1.2A	....	1.63	1.08	.78
2N5786	T0-5	SP AP	10C	45	3.5A	20-100	1.6A	....	1.50	.99	.72
2N5804	T0-3	SN SP	110C	300	5A	10-100	5A	5	12.47	8.15	5.95
2N5805	T0-3	SN SP	110C	375	5A	10-100	5A	5	17.35	11.45	8.35
2N5838	T0-3	SN AP	100C	275	3A	8-40	3A	2	6.05	4.00	2.91
2N5839	T0-3	SN AP	100C	300	3A	10-50	2A	2	6.20	4.10	2.99
2N5840	T0-3	SN AP	100C	375	3A	10-50	2A	2	7.25	4.70	3.42
3N74	T0-72	SN DC	.600	18 Volt $BV_{E_1E_2}$ - 50uVolt $V_{E_1E_2}$					12.40	12.40	8.25
3N79	T0-72	SN DC	.600	12 Volt $BV_{E_1E_2}$ - 200uVolt $V_{E_1E_2}$					4.88	3.68	2.45
3N108	T0-72	SN DC	.600	50 Volt $BV_{E_1E_2}$ - 30uVolt $V_{E_1E_2}$					15.60	12.20	8.15
3N111	T0-72	SP DC	.600	30 Volt $BV_{E_1E_2}$ - 150uVolt $V_{E_1E_2}$					11.25	8.85	5.90
3N116	T0-72	SP DC	.600	12 Volt $BV_{E_1E_2}$ - 200uVolt $V_{E_1E_2}$					6.25	3.75	2.50
3N128	T0-72	SN 1F	.330	35 Volt V_{DS} - 50 ma Io - 5 kuMHOgfs					1.95	1.29	.94
3N138	T0-72	SN 1F	.330	35 Volt V_{DS} - 50 ma I_D - 6 kuMHOgfs					4.37	2.89	2.10
3N139	T0-72	SN 1F	.330	35 Volt V_{DS}50 ma I_D - 3 kuMHOgfs					3.75	2.48	1.80
3N140	T0-72	SN 1F	.330	20 Volt V_{DS} - 50 ma I_D - 6 kuMHOgfs					2.45	1.62	1.18
3N141	T0-72	SN 1F	.330	20 Volt V_{DS} - 50 ma I_D - 6 kuMHOgfs					2.20	1.45	1.06
3N142	T0-72	SN 1F	.330	20 Volt V_{DS} - 50 ma I_D 5 kuMHOgfs					1.57	1.04	.76
3N143	T0-72	SN 1F	.330	20 Volt V_{DS} - 50 ma I_D kuMHOgfs					1.98	1.30	.95
3N152	T0-72	SN 1F	.330	20 Volt V_{DS} - 50 ma I_D kuMHOgfs					2.44	1.62	1.18
3N153	T0-72	SN 1F	.330	20 Volt V_{DS} - 50 ma I_D 10 8kuMHOgfs					2.15	1.42	1.03
3N154	T0-72	SN 1F	.330	20 Volt V_{DS} - 50 ma I_D kuMHOgfs					2.25	1.49	1.08
3N159	T0-72	SN 1F	.330	20 Volt V_{DS} - 50 ma I_D kuMHOgfs					3.13	2.06	1.50

Stock No.	Type	Case	Material Function	Specifications	EACH 1-9	10-99	100-Up
817-7000	1MA4	SP-65	S Rect	700 PRV - 470 Amps RMS	1.00	.96	.80
817-7005	2F4	SP-65	S Rect	400 PRV - 2 Amps Io	.88	.60	.50
817-7010	3Z6.2T5	D0-4	S Zen	3.5 Watts - 6.2 V_Z - 5% V_{TOL}	5.46	5.46	4.55
817-7100	5A2	SP-56	S Rect	200 PRV - 1 Amp RMS Io	.63	.32	.28
817-7105	5A4	SP-56	S Rect	400 PRV - 1 Amp RMS Io	.78	.41	.35
817-7110	5A5	SP-56	S Rect	500 PRV - 1 Amp RMS Io	.85	.45	.38
817-7114	5A6	SP-56	S Rect	600 PRV - 1 Amp RMS Io	1.00	.50	.44
817-7118	5A8	SP-56	S Rect	800 PRV - 1 Amp RMS Io	1.70	.85	.75
817-7122	5A10	SP-56	S Rect	1000 PRV - 1 Amp RMS Io	2.30	1.20	1.02
817-7125	5MA4	SP-65	S Rect	400 PRV - 1 Amp RMS Io	1.50	.94	.76
817-7129	5MA6	SP-65	S Rect	600 PRV - 1 Amp RMS Io	2.75	1.70	1.35

See Page 28 for Explanation of Abbreviations and Symbols

SEE PAGE 12 FOR INTEGRATED CIRCUITS

Stock No.	Type	Case	Material Function	Specifications	EACH 1-9	10-99	100-Up
817-7132	6DP6A		Rec Tr	600 PRV - .65 Amp RMS Io	5.85	3.48	2.90
817-7137	6DP10A		Rec Tr	1000 PRV - .65 Amp RMS Io	11.75	6.30	5.25
817-7142	8D4	D0-39	Rec Tr	400 PRV - .8 Amp RMS Io	.75	.44	.30
817-7146	8D6	D0-39	Rec Tr	600 PRV - .8 Amp RMS Io	.81	.81	.67
817-7150	9DD6A		Rec Do	600 PRV - .9 Amp RMS Io	4.60	2.76	2.30
817-7155	9DD10A	D0-39	Rec Do	100 PRV - .9 Amp RMS Io	5.18	3.12	2.60
817-7159	10B1	D0-1	S Rect	100 PRV -1.3 Amp RMS Io	.78	.50	.37
817-7164	10B2	D0-1	S Rect	200 PRV -1.3 Amp RMS Io	.85	.55	.40
817-7168	10B3	D0-1	S Rect	300 PRV - 1.3 Amp RMS Io	1.08	.65	.51
817-7170	10B4	D0-1	S Rect	400 PRV - 1.3 Amp RMS Io	1.35	.80	.64
817-7172	10B5	D0-1	S Rect	500 PRV - 1.3 Amp RMS Io	1.60	.95	.75
817-7174	10B6	D0-1	S Rect	600 PRV - 1.3 Amp RMS Io	1.88	1.10	.88
817-7176	10B8	D0-1	S Rect	800 PRV - 1.3 Amp RMS Io	2.63	1.60	1.28
817-7178	10B10	D0-1	S Rect	1000 PRV - 1.3 Amp RMS Io	3.38	2.05	1.64
817-7179	10C1	SP-58	S Rect	100 PRV - 1.0 Amp RMS Io	.60	.32	.29
817-7180	10C2	SP-58	S Rect	200 PRV - 1.0 Amp RMS Io	.68	.35	.32
817-7181	10C3	SP-58	S Rect	300 PRV - 1.0 Amp RMS Io	.75	.38	.36
817-7182	10C4	SP-58	S Rect	400 PRV - 1.0 Amp RMS Io	.80	.42	.38
817-7184	10C6	SP-58	S Rect	600 PRV - 1.0 Amp RMS Io	.95	.52	.46
817-7186	10C8	SP-58	S Rect	800 PRV - 1.0 Amp RMS Io	1.38	.75	.65
817-7188	10C10	SP-58	S Rect	1000 PRV - 1.0 Amp RMS Io	2.50	1.70	1.20
817-7190	10D2	D0-39	S Rect	200 PRV - 1.0 Amp RMS Io	.32	.32	.28
817-7191	10D3	D0-39	S Rect	300 PRV - 1.0 Amp RMS Io	.73	.37	.32
817-7192	10D4	D0-39	S Rect	400 PRV - 1.0 Amp RMS Io	1.38	.41	.35
817-7193	10D5	D0-39	S Rect	500 PRV - 1.0 Amp RMS Io	.85	.45	.38
817-7194	10D6	D0-39	S Rect	600 PRV - 1.0 Amp RMS Io	.50	.50	.44
817-7196	10D8	D0-39	S Rect	800 PRV - 1.0 Amp RMS Io	1.70	.85	.75
817-7198	10D10	D0-39	S Rect	1000 PRV - 1.0 Amp RMS Io	1.20	1.20	1.02
817-7206	10DB2P		Rec Br	200 PRV - 1.0 Amp RMS Io	2.38	1.90	1.40
817-7208	10DB4P		Rec Br	400 PRV - 1.0 Amp RMS Io	2.75	2.10	1.60
817-7212	10DB6P		Rec Br	600 PRV - 1.0 Amp RMS Io	2.25	1.79	1.49
817-7230	16HFP		Rec Br		1.03	.82	.52
817-7234	16RC10A	T0-48	SCR	100 PRV - 16 Amp RMS Io	7.00	4.73	3.12
817-7238	16RC20A	T0-48	SCR	200 PRV - 16 Amp RMS Io	8.83	5.85	3.93
817-7242	16RC40A	T0-48	SCR	400 PRV - 16 Amp RMS Io	12.25	8.25	5.45
817-7246	16RC60A	T0-48	SCR	600 PRV - 16 Amp RMS Io	18.75	12.75	8.50
817-7250	16RC80A	T0-48	SCR	800 PRV - 16 Amp RMS Io	30.63	17.50	14.35
817-7254	16RC100A	T0-48	SCR	1000 PRV - 16 Amp RMS Io	44.25	25.15	20.60
817-7258	18DB2A		Rec Br	200 PRV - 1.8 Amp RMS Io	5.95	2.38	1.14
817-7266	10DB6A		Rec Br	600 PRV - 1.8 Amp RMS Io	4.38	2.90	2.75
817-7270	18DB10A		Rec Br	1000 PRV -1.8 Amp RMS Io	7.63	5.12	4.95
817-7274	18DC2A		Rec Ct	200 PRV - 1.8 Amp RMS Io	3.63	2.52	2.10
817-7278	18DC6A		Rec Ct	600 PRV - 1.8 Amp RMS Io	4.45	2.76	2.30
817-7282	18DC10A		Rec Ct	1000 PRV - 1.8 Amp RMS Io	5.18	3.12	2.60
817-7286	18DJ2A		Rec Ct	200 PRV - 1.8 Amp RMS Io	4.08	2.52	2.10
817-7290	18DJ6A		Rec Ct	600 PRV - 1.8 Amp RMS Io	4.60	2.76	2.30
817-7294	18DJ10A		Rec Ct	1000 PRV - 1.8 Amp RMS Io	5.18	3.12	2.60
817-7300	20A05	SP-56	S Rect	50 PRV - 2 Amps RMS Io	.73	.45	.32
817-7304	20A1	SP-56	S Rect	100 PRV - 2 Amps RMS Io	.78	.50	.35
817-7306	20A2	SP-56	S Rect	200 PRV - 2 Amps RMS Io	.88	.55	.38
817-7308	20A3	SP-56	S Rect	300 PRV - 2 Amps RMS Io	.98	.60	.43
817-7310	20A4	SP-56	S Rect	400 PRV - 2 Amps RMS Io	1.13	.70	.50
817-7312	20A5	SP-56	S Rect	500 PRV - 2 Amps RMS Io	1.25	.80	.56
817-7314	20A6	SP-56	S Rect	600 PRV - 2 Amps RMS Io	1.43	.90	.63
817-7316	20A8	SP-56	S Rect	800 PRV - 2 Amps RMS Io	2.05	1.30	.91
817-7318	20A10	SP-56	S Rect	1000 PRV - 2 Amps RMS Io	2.48	1.60	1.10
817-7324	21PT5	SP-66	S Rect	50 PRV - 20 Amp RMS Io	1.63	1.10	.82
817-7328	21PT10	SP-66	S Rect	100 PRV - 20 Amp RMS Io	1.75	1.20	.90
817-7332	21PT20	SP-66	S Rect	200 PRV - 20 Amp RMS Io	1.95	1.30	.98
817-7336	21PT40	SP-66	S Rect	400 PRV - 20 Amp RMS Io	2.50	1.70	1.27
817-7340	21PT60	SP-66	S Rect	600 PRV - 20 Amp RMS Io	3.38	2.25	1.70
817-7352	30S1	SP-60	S Rect	100 PRV - 3 Amp RMS Io	.55	.55	.32
817-7354	30S2	SP-60	S Rect	200 PRV - 3 Amp RMS Io	.60	.60	.40
817-7356	30S3	SP-60	S Rect	300 PRV - 3 Amp RMS Io	1.03	.70	.48
817-7358	30S4	SP-60	S Rect	400 PRV - 3 Amp RMS Io	.86	.86	.58
817-7360	30S5	SP-60	S Rect	500 PRV - 3 Amp RMS Io	1.38	.95	.65
817-7362	30S6	SP-60	S Rect	600 PRV - 3 Amp RMS Io	1.17	1.17	.78
817-7364	30S8	SP-60	S Rect	800 PRV - 3 Amp RMS Io	2.70	1.80	1.28
817-7366	30S10	SP-60	S Rect	1000 PRV - 3 Amp RMS Io	2.50	2.50	1.77
817-7368	40HF5	SP-68	S Rect	50 PRV - 40 Amp RMS Io	2.33	1.55	1.10
817-7370	40HF20	SP-68	S Rect	200 PRV - 40 Amp RMS Io	4.28	2.85	2.02
817-7372	40HF30	SP-68	S Rect	300 PRV - 40 Amp RMS Io	5.48	3.65	2.58
817-7374	40HF40	SP-68	S Rect	400 PRV - 40 Amp RMS Io	6.68	4.45	3.14
817-7376	40HF50	SP-68	S Rect	500 PRV - 40 Amp RMS Io	7.88	5.25	3.71
817-7378	40HF60	SP-68	S Rect	600 PRV - 40 Amp RMS Io	9.00	6.00	4.23
817-7380	40HF70	SP-68	S Rect	700 PRV - 40 Amp RMS Io	10.13	6.75	4.77
817-7382	40HF80	SP-68	S Rect	800 PRV - 40 Amp RMS Io	11.63	7.75	5.47
817-7390	40HF90	SP-68	S Rect	900 PRV - 40 Amp RMS Io	13.18	8.80	6.20
817-7400	40HF100	SP-68	S Rect	1000 PRV - 40 Amp RMS Io	15.25	9.90	7.20
817-7404	40RC505	SP-69	SCR	50 PRV - 63 Amp RMS Io	19.50	12.90	9.15
817-7406	40	SP-69	SCR	50 PRV - 63 Amp RMS Io	19.50	12.90	9.15
817-7408	40RC510	SP-69	SCR	100 PRV - 63 Amp RMS Io	19.88	13.40	8.75
817-7410	40RC520	SP-69	SCR	200 PRV - 63 Amp RMS Io	20.75	13.75	9.40
817-7412	40RC530	SP-69	SCR	300 PRV - 63 Amp RMS Io	22.13	14.70	10.00
817-7414	40RC540	SP-69	SCR	400 PRV - 63 Amp RMS Io	23.75	15.80	10.75
817-7416	40RC550	SP-69	SCR	500 PRV - 63 Amp RMS Io	26.50	17.60	11.90
817-7418	40RC560	SP-69	SCR	600 PRV - 63 Amp RMS Io	31.00	20.60	13.90
817-7420	40RC570	SP-70	SCR	700 PRV - 63 Amp RMS Io	36.50	24.25	16.20

Stock No.	Type	Case	Material Function	Specifications	EACH 1-9	10-99	100-Up
817-7422	40RCS80	SP-70	SCR	800 PRV - 63 Amp RMS Io	45.50	30.25	20.30
817-7426	40RCS90	SP-70	SCR	900 PRV - 63 Amp RMS Io	57.00	38.00	25.50
817-7428	40RCS100	SP-70	SCR	1000 PRV - 63 Amp RMS Io	68.75	45.75	30.50
817-7430	40RCS110	SP-70	SCR	1100 PRV - 63 Amp RMS Io	79.50	53.00	35.50
817-7432	40RCS120	SP-70	SCR	1200 PRV - 63 Amp RMS Io	88.75	59.25	40.00
817-7436	48HFP	SP-73	S Rect	3000 PRV - 2 ma I_F	2.20	1.14	.73
817-7440	50FB1L	SP-73	S Rec Br	100 PRV - 5 Amp RMS Io	4.13	2.75	2.05
817-7442	50FB2L	SP-73	S Rec Br	200 PRV - 5 Amp RMS Io	4.75	3.20	2.40
817-7446	50FB3L	SP-73	S Rec Br	300 PRV - 5 Amp RMS Io	5.38	3.60	2.70
817-7448	50FB4L	SP-73	S Rec Br	400 PRV - 5 Amp RMS Io	6.25	4.20	3.15
817-7450	50FB5L	SP-73	S Rec Br	500 PRV - 5 Amp RMS Io	7.00	4.70	3.50
817-7452	50FB6L	SP-73	S Rec Br	600 PRV - 5 Amp RMS Io	7.75	5.20	3.90
817-7458	51RCG10	T0-94	SCR	100 PRV - 50 Amp RMS Io	25.13	18.57	11.15
817-7460	51RCG20	T0-94	SCR	200 PRV - 50 Amp RMS Io	26.88	20.00	12.00
817-7464	51RCG30	T0-94	SCR	300 PRV - 50 Amp RMS Io	29.75	22.00	13.20
817-7466	51RCG40	T0-94	SCR	400 PRV - 50 Amp RMS Io	37.25	27.00	16.60
817-7468	51RCG50	T0-94	SCR	500 PRV - 50 Amp RMS Io	45.88	33.00	20.40
817-7470	51RCG60	T0-94	SCR	600 PRV - 50 Amp RMS Io	54.00	40.00	24.00
817-7472	60AC40	T0-94	Triac	400 PRV - 60 Amp RMS Io	45.00	40.00	21.50
817-7474	60AC60	T0-94	Triac	600 PRV - 60 Amp RMS Io	55.00	37.00	26.00
817-7476	60AC80	T0-94	Triac	800 PRV - 60 Amp RMS Io	8.00	53.50	38.00
817-7480	60AC100	T0-94	Triac	1000 PRV - 60 Amp RMS Io	121.25	83.00	57.00
817-7482	60FB05L	SP-73	S Rec Br	50 PRV - 6 Amp RMS Io	5.38	3.20	2.45
817-7484	60FB1L	SP-73	S Rec Br	100 PRV - 6 Amp RMS Io	5.88	3.45	2.65
817-7486	60FB2L	SP-73	S Rec Br	200 PRV - 6 Amp RMS Io	6.50	4.25	3.20
817-7488	60FB3L	SP-73	S Rect	300 PRV - 6 Amp RMS Io	7.00	4.70	3.50
817-7492	60FB4L	SP-73	S Rect	400 PRV - 6 Amp RMS Io	8.50	5.70	4.25
817-7496	60FB5L	SP-73	S Rect	500 PRV - 6 Amp RMS Io	5.38	3.20	2.45
817-7500	60FB6L	SP-73	S Rect	600 PRV - 6 Amp RMS Io	10.50	7.00	5.25
817-7504	61-8969	SP-74	S Rect	6500 PRV - 2 mA RMS Io	6.13	3.54	2.95
817-7506	67D020T0-5H53PN	SP-75	S Rect	2000 PRV - 250 mA RMS Io	10.25	6.80	4.95
817-7508	67D030T0-5H53PNN	SP-75	S Rect	3000 PRV - 250 mA RMS Io	11.A5	7.47	5.40
817-7513	67D050H04TNN	SP-75	S Rect	5000 PRV - 35 ma RMS Io	9.50	6.31	4.50
817-7512	67D050T0-5H55FNN	SP-75	S Rect	5000 PRV - 250 ma RMS Io	16.25	10.79	7.85
817-7514	67D07504T0-5TNN	SP-75	S Rect	7500 PRV - 35 ma RMS Io	14.25	9.46	6.75
817-7515	67D100T0-5H04TNN	SP-75	S Rect	10K PRV - 35 mA RMS Io	19.13	12.70	9.00
817-7516	67D120T0-5H04TNN	SP-75	S Rect	12K PRV - 35 mA RMS Io	23.00	15.27	10.80
817-7517	67D150T0-5H04TNN	SP-75	S Rect	15K PRV - 35 mA RMS Io	28.75	19.09	13.50
817-7518	67D300T0-5H04TNN	SP-75	S Rect	30K PRV - 35 mA RMS Io	57.50	38.18	27.00
916-4030	60J2	SP-76	S Rect	600 PRV - 10 Amp RMS Io	10.20	6.80	5.45
916-4040	60LA	SP-77	S Rect	600 PRV - 2 Amp RMS Io	9.68	6.45	5.15
916-4050	60M	SP-78	S Rect	600 PRV - 0.75 Amp RMS Io	1.58	1.35	.95
817-7526	79FP	SP-74	S Rect	5000 PRV - 2 mA I_F	2.13	1.45	.94
817-7528	100AC40	T0-94	Triac	400 PRV - 100 Amp RMS Io	162.50	112.50	72.00
817-7530	100AC60	T0-94	Triac	600 PRV - 100 Amp RMS Io	258.75	164.00	115.00
817-7532	100AC80	T0-94	Triac	800 PRV - 100 Amp RMS Io	315.00	230.00	140.00
817-7534	100AC100	T0-94	Triac	1000 PRV - 100 Amp RMS Io	415.00	278.00	185.00
817-7538	100PB05	SP-73	S Rec B	35 PRV - 10 Amp RMS Io	6.88	4.05	3.25
817-7542	100PB1P	SP-73	S Rec B	70 PRV - 10 Amp RMS Io	7.13	4.30	3.35
817-7544	100PB2P	SP-73	S Rec B	140 PRV - 10 Amp RMS Io	8.75	5.15	4.15
817-7546	100PB3P	SP-73	S Rec B	210 PRV - 10 Amp RMS Io	9.50	5.55	4.50
817-7548	100PB4P	SP-73	S Rec B	280 PRV - 10 Amp RMS Io	10.88	4.05	3.25
817-7538	100PB5P	SP-73	S Rec B	420 PRV - 10 Amp RMS Io	6.88	4.05	3.25
817-7552	100PB6P	SP-73	S Rec B	420 PRV - 10 Amp RMS Io	17.00	9.95	8.00
817-7554	115PA100	SP-79	S Rect	1000 PRV - 180 RMS Io	107.50	84.00	50.50
817-7556	115PA120	SP-79	S Rect	1200 PRV - 180 RMS Io	146.88	115.00	69.00
817-7558	115PA50	SP-79	S Rect	500 PRV - 180 RMS Io	42.50	33.00	19.75
817-7560	115PA80	SP-79	S Rect	800 PRV - 180 RMS Io	76.88	60.00	36.00
817-7564	126HFP	SP-74	S Rect	8000 PRV -2mA I_F2.38	1.78	1.14	
817-7568	151RA100	T0-93	SCR	1000 PRV - 235 Amp RMS	270.00	212.00	127.00
817-7570	151ra110	T0-93	SCR	1100 PRV - 235 Amp RMS	305.00	238.00	143.00
817-7571	151RA120	T0-93	SCR	1200 PRV - 235 Amp RMS	337.50	264.00	158.00
817-7572	151RA130	T0-93	SCR	1300 PRV - 235 Amp RMS	367.50	286.00	172.00
817-7574	151RA50	T0-93	SCR	500 PRV - 235 Amp RMS	121.25	95.00	57.00
817-7576	151RA60	T0-93	SCR	600 PRV - 235 Amp RMS	146.88	115.00	69.00
817-7580	151RA80	T0-93	SCR	800 PRV - 235 Amp RMS	210.00	165.00	99.00
817-7582	175PA100	SP-79	S Rect	1000 PRV - 275 Amp RMS	475.00	258.00	223.00
817-7584	175PA120	SP-79	S Rect	1200 PRV - 275 Amp RMS	585.00	325.00	275.00
817-7586	175RA50	SP-79	S Rect	500 PRV - 275 Amp RMS	232.00	122.00	110.00
817-7588	175PA80	SP-79	S Rect	800 PRV -275 Amp RMS	370.00	206.00	175.00
817-7590	158HEP	SP-74	S Rect	10K PRV - 2 mA I_F	2.13	1.88	1.21
817-7592	2000B10	SP-74	S Rect	100 PRV - 200 Amp Average	13.63	8.52	7.10
817-7594	2000B20	SP-74	S Rect	200 PRV - 200 Amp Average	22.25	13.92	11.60
817-7596	2000B30	SP-74	S Rect	300 PRV - 200 Amp Average	25.75	16.08	13.04
817-7598	2000B40	SP-74	S Rect	400 PRV - 200 Amp Average	29.25	18.36	15.30
817-5600	2000B50	SP-74	S Rect	50 PRV - 200 Amp Average	12.13	7.56	6.30
817-5602	20ADS	SP-74	S Rect	500 PRV - 200 Amp Average	34.25	21.36	17.80
817-5604	20A05	D0-27	S Rect	50 PRV - 2 Amp Average	.73	.45	.32
817-5606	237HFP	SP-74	S Rect	15K PRV - 2 mA I_F	3.05	2.32	1.49

Stock No.	Type	Case	Material Function	Specifications	EACH 1-9	10-99	100-Up
817-5608	24HFP	SP-74	S Rect	1000 PRV - 2 mA I_F	1.23	.92	.59
817-5610	250PA100	SP-79	S Rect	1000 PRV - 400 Amp RMS	595.00	325.00	280.00
817-5612	250PA120	SP-79	S Rect	1200 PRV - 400 Amp RMS	735.00	409.00	345.00
817-5614	250PA50	SP-79	S Rect	500 PRV - 400 Amp RMS	292.50	152.00	137.00
817-5616	250PA80	SP-79	S Rect	800 PRV - 400 Amp RMS	467.50	258.00	220.00
817-7618	250RA100	TO-118	S Rect	1000 PRV - 400 Amp RMS	555.00	348.00	261.00
817-7620	250RA110	TO-118	S Rect	1100 PRV - 400 Amp RMS	625.00	394.00	295.00
817-7622	250RA120	TO-118	S Rect	1200 PRV - 400 Amp RMS	710.00	446.00	334.00
817-7624	250RA50	TO-118	S Rect	500 PRV - 400 Amp RMS	280.00	176.00	132.00
817-7626	250RA60	TO-118	S Rect	600 PRV - 400 Amp RMS	332.50	210.00	157.00
817-7628	250RA80	TO-118	S Rect	800 PRV - 400 Amp RMS	430.00	271.00	203.00
817-7630	300H04TO-5 TNN	SP-75	S Rect	30K PRV - 0.25 Amp I_F	755.00		
817-7632	300RA100	TO-118	S Rect	1000 - 470 Amp RMS	755.00	422.00	356.00
817-7634	300RA110	TO-118	S Rect	1100 - 470 Amp RMS	862.50	482.00	407.00
817-7636	300RA120	TO-118	S Rect	1200 - 470 Amp RMS	990.00	551.00	466.00
817-7638	300RA50	TO-118	S Rect	500 - 470 Amp RMS	365.00	204.00	172.00
817-7640	300RA70	TO-118	S Rect	700 PRV - 470 Amps rms	450.00	450.00	450.00
817-7642	300RA80	TO-118	S Rect	800 - 470 Amp RMS	580.00	324.00	273.00
817-7644	315HFB	SP-74	S Rect	20K PRV - 2 mA I_F	3.58	2.86	1.83
817-7646	471PD120	SP-79	S Rect	1200 PRV - 470 Amp RMS	125.00	84.00	59.00
817-7648	471PD140	SP-79	S Rect	1400 PRV - 470 Amp RMS	145.00	97.00	69.00
817-7649	471PD160	SP-79	S Rect	1600 PRV - 470 Amp RMS	172.50	115.00	81.00
817-7650	471PD180	SP-79	S Rect	1800 PRV - 470 Amp RMS	200.00	133.00	94.00
817-7652	471PD200	SP-79	S Rect	2000 PRV - 470 Amp RMS	225.00	150.00	106.00
817-7656	473HFP	SP-74	S Rect	30K PRV - 2 mA I_F	5.50	4.14	2.65
953-8550	650C0	SP-71	Silicon Volt Reg Diode - 250 MW - 3.7 V 5%		9.63	4.85	4.15
953-8551	650C3	SP-71	Silicon Volt Reg Diode - 250 MW - 4.0 V 5%		9.63	4.85	4.15
953-8552	651C0	SP-71	Silicon Volt Reg Diode - 250 MW - 4.5 V 5%		9.63	4.85	4.15
953-8553	651C4	SP-71	Silicon Volt Reg Diode - 250 MW - 4.9 V 5%		9.63	4.85	4.15
953-8558	651C9	SP-71	Silicon Volt Reg Diode - 250 MW - 5.4 V 5%		9.63	4.85	4.15
953-8559	652C0	SP-71	Silicon Volt Reg Diode - 250 MW - 5.5 V 5%		9.63	4.85	4.15
953-8805	652C2	SP-71	Silicon Volt Reg Diode - 250 MW - 5.7 V 5%		9.63	4.85	4.15
953-8810	652C5	SP-71	Silicon Volt Reg Diode - 250 MW - 6.0 V 5%		9.63	4.85	4.15
953-8815	652C7	SP-71	Silicon Volt Reg Diode - 250 MW - 6.2 V 5%		9.63	4.85	4.15
953-8820	653C0	SP-71	Silicon Volt Reg Diode - 250 MW - 6.5 V - 5%		9.63	4.85	4.15
953-8825	653C2	SP-71	Silicon Volt Reg Diode - 250 MW - 6.7 V - 5%		9.63	4.85	4.15
953-8830	653C3	SP-71	Silicon Volt Reg Diode - 250 MW - 6.8 V - 5%		9.63	4.85	4.15
953-8835	653C4	SP-71	Silicon Volt Reg Diode - 250 MW - 7.0 V - 5%		9.63	4.85	4.15
953-8840	653C9	SP-71	Silicon Volt Reg Diode - 250 MW - 8.0 V - 5%		9.63	4.85	4.15
953-8845	654CC9	SP-71	Silicon		9.63	4.85	4.15
953-8850	655C9	SP-71	Silicon Volt Reg Diode - 250 MW - 9.5-10.5 V -		9.63	4.85	4.15
976-1001	7715-3	SP-82	S Rect	3K PRV - 75 mA RMS	3.35	2.20	1.80
976-1002	7715-3X	SP-82	S Rect	3K PRV - 50 mA RMS	6.17	4.06	3.32
976-1003	7715-5	SP-82	S Rect	5K PRV - 50 mA RMS	4.25	2.75	2.25
976-1004	7715-5X	SP-82	S Rect	5K PRV - 30 mA RMS	7.85	5.07	4.15
976-1005	7715-6	SP-82	S Rect	6K PRV - 50 mA RMS	4.67	3.03	2.48
976-1006	7715-7	SP-82	S Rect	7K PRV - 50 mA RMS	4.95	3.30	2.70
976-1007	7715-7X	SP-82	S Rect	7K PRV - 30 mA RMS	9.12	6.08	5.00
976-1008	7715-10	SP-82	S Rect	10K PRV - 25 mA RMS	6.20	4.40	3.60
976-1009	7715-10X	SP-82	S Rect	10K PRV - 20 mA RMS	11.50	8.10	6.65
976-1010	7715-15	SP-82	S Rect	15K PRV - 25 mA RMS	9.62	6.60	5.40
976-1011	7715-15X	SP-82	S Rect	15K PRV - 20 mA RMS	17.75	12.20	9.95
976-1012	7715-20	SP-82	S Rect	20K PRV - 25 mA RMS	11.12	7.70	6.30
976-1013	7715-20X	SP-82	S Rect	20K PRV - 20 mA RMS	20.50	14.20	11.60
976-1014	7715-30	SP-82	S Rect	30K PRV - 25 ma RMS	16.57	9.90	8.10
976-1015	7715-30X	SP-82	S Rect	30K PRV - 15 mA RMS	25.00	18.27	11.90
976-1016	7715-40	SP-82	S Rect	40K PRV - 25 mA RMS	19.25	12.10	9.90
976-1017	7715-40X	SP-82	S Rect	40K PRV - 15 mA RMS	35.52	22.32	18.27
976-1018	7715-50	SP-82	S Rect	50K PRV - 25 mA RMS	25.25	15.40	12.60
976-1019	7715-50X-	SP-82	S Rect	50K PRV - 15 mA RMS	46.57	28.41	23.25

Stock No.	Type	Case	Mat. Func.	Maximum Ratings: Dissipation Watts	Col'tr To Base Volts	Col'tr Curr. mA	Beta H_{FE} @ Ic Max.-Min.	mA	f_T MHz	EACH 1-9	10-99	100-Up
898-4841	40080	TO-5	SN AV	.500	30	250	....	....	350	1.50	1.08	.78
898-4842	40081	TO-5	SN AV	2C	60	250	....	....	350	1.98	1.41	1.02
898-4843	40082	TO-39	SN AV	5C	60	1.5A	....	....	200	5.68	4.04	2.94
898-4845	40084	TO-18	SN GP	.500	60	1A	50	150	100	1.38	.99	.72
898-4852	40108	DO-4	S Rect		50 PIV - 10 Amp RMS Io					1.40	.99	.72
898-4854	40109	DO-4	S Rect		100 PIV - 10 Amp RMS Io					1.63	1.16	.84
898-4855	40109R	DO-4	S Rect		100 PIV - 10 Amp RMS Io					1.63	1.16	.84
898-4856	40110	DO-4	S Rect		200 PIV - 10 Amp RMS Io					2.20	1.57	1.14
898-4857	40110R	DO-4	S Rect		200 PIV - 10 Amp RMS Io					2.20	1.57	1.14
898-4858	40111	DO-4	S Rect		300 PIV - 10 Amp RMS Io					3.03	2.15	1.56
898-4860	40112	DO-4	S Rect		400 PIV - 10 Amp RMS Io					3.50	2.48	1.80
898-4864	40114	DO-4	S Rect		600 PIV - 10 Amp RMS Io					3.23	3.71	2.70
898-4866	40115	DO-4	S Rect		800 PIV - 10 Amp RMS Io					9.30	6.60	4.80
898-4886	40208	DO-5	S Rect		50 PIV - 18 Amp RMS Io					1.55	1.10	.80
898-4888	40209	DO-5	S Rect		100 PIV - 18 Amp RMS Io					1.85	1.30	.95
898-4890	40210	DO-5	S Rect		200 PIV - 18 Amp RMS Io					2.43	1.72	1.25
898-4891	40210R	DO-5	S Rect		200 PIV - 18 Amp RMS Io					3.30	2.34	1.70
898-4894	40212	DO-5	S Rect		400 PIV - 18 Amp RMS Io					4.08	2.89	2.10
898-4896	40213	DO-5	S Rect		500 PIV - 18 Amp RMS Io					5.05	3.58	2.60
898-4898	40214	DO-5	S Rect		600 PIV - 18 Amp RMS Io					5.83	4.13	3.00
898-4899	40214R	DO-5	S Rect		600 PIV - 18 Amp RMS Io					5.83	4.13	3.00
898-4902	40216	TO-48	SCR		720 Volt V_{RSOM} - 900 Amp I_{RSOM}					46.78	42.20	34.90
898-4918	40231	TO-104	SN GP	.500	18	100	55	2	60	.80	.57	.41
898-4919	40232	TO-104	SN GP	.500	18	100	90-	2	60	.93	.65	.47
898-4920	40233	TO-104	SN GP	500	18	100	90-	2	60	1.00	.70	.51
898-4921	40234	TO-104	SN GP	.500	18	100	35-	2	60	.70	.50	.37
898-4922	40235	TO-104	SN AU	.180	45	50	40/170	2	1K	.98	.68	.50
898-4923	40236	TO-104	SN AU	.180	45	50	40/275	2	1K	.80	.57	.41
898-4924	40237	TO-104	SN AU	.180	45	50	27/275	1	1K	.68	.47	.34
898-4929	40242	TO-104	SN AV	.180	45	50	40-170	1	800	.98	.68	.50
898-4930	40243	TO-104	SN AV	.180	45	50	40-170	1	800	.78	.55	.40
898-4931	40244	TO-104	SN AV	.180	45	50	25-150	2	400	.65	.47	.34
898-4932	40245	TO-104	SN AV	.180	45	50	70-275	1	250	.68	.48	.34
898-4933	40246	TO-104	SN AV	180	45	50	27-90	1	250	.68	.47	.34
898-4937	40250	TO-66	SN AP	29C	50	4A	25-100	1.5A	....	1.28	.94	.69
898-4938	40250V1	SP-83	SN AP	5.8	50	4A	25-100	1.5A	....	1.50	1.08	.78
898-4939	40251	TO-3	SN AP	117C	50	15A	15-60	81A	....	2.03	1.49	1.08
898-4942	40254	TO-3	GP AP	12.5C	32	5A	38-	1	.300	1.05	.75	.55
898-4954	40266	DO-1	S Rect		100 PIV - 2 Amp RMS Io					.29	.29	.21
898-4955	40267	DO-1	S Rect		200 PIV - 2 Amp RMS Io					.33	.33	.24
898-4968	40280	TO-39	SN AV	7C	36	500	....	....	550	6.50	4.62	3.36
898-4969	40281	TO-60	SN AV	11.6C	36	1A	....	....	400	17.00	10.60	8.75
898-4970	40282	TO-60	SN AV	23.2C	36	2A	....	....	350	19.13	11.90	9.85
898-4978	40290	TO-39	SN AV	7C	50	500	....	....	500	3.48	2.48	1.80
898-4980	40292	TO-60	SN AV	23.2C	50	1.25A	....	....	300	18.13	11.30	9.35
898-4997	40309	TO-5	SN AP	5C	18	700	70-350	50	100	.83	.58	.42
898-4998	40309V1	TO-5	SN AP	5C	18	700	70-350	50	100	1.08	.78	.57
898-4999	40309V2	TO-5	SN AP	5C	18	700	70-350	50	100	1.08	.78	.57
898-5000	40310	TO-66	SN AP	29C	35	4A	20-120	1A	.750	1.30	.91	.66
898-5002	40311	TO-5	SN AP	5C	30	700	70-350	50	100	.83	.59	.43
898-5003	40311V1	TO-5	SN AP	5C	30	700	70-350	50	100	1.13	.81	.59
898-5004	40311V2	TO-5	SN AP	5C	30	700	70-350	50	100	1.13	.81	.59
898-5005	40312	TO-66	SN AP	29C	60	4A	20-120	1A	.750	1.33	.93	.67
898-5007	40313	TO-66	SN AP	35C	300	1A	40-250	100	....	2.90	2.06	1.50
898-5008	40314	TO-5	SN AP	5C	35	700	70-350	50	100	.85	.61	.44
898-5009	40314V1	TO-5	SN AP	5C	35	700	70-350	50	100	1.20	.86	.63
898-5010	40314V2	TO-5	SN AP	5C	35	700	70-350	50	100	1.20	.86	.63
898-5011	40315	TO-5	SN AP	5C	35	700	70-350	50	100	.83	.59	.43
898-5012	40315V1	TO-5	SN AP	5C	35	700	70-350	50	100	1.15	.83	.60
898-5013	40315V2	TO-5	SN AP	5C	35	700	70-350	50	100	1.15	.83	.60
898-5014	40316	TO-66	SN AP	29C	40	4A	20-120	1A	.750	1.38	.99	.72
898-5015	40317	TO-5	SN AP	5C	40	700	40-200	10	....	.85	.61	.44
898-5016	40317V1	TO-5	SN AP	5C	40	700	40-200	10	....	1.20	.86	.63
898-5017	40317V2	TO-5	SN AP	5C	40	700	40-200	10	....	1.20	.86	.63
898-5018	40318	TO-66	SN AP	35C	300	1A	50-	500	....	2.95	2.10	1.52
898-5019	40319	TO-5	SP AP	5C	40	700	35-200	50	100	1.00	.71	.52
898-5020	40319V1	TO-5	SP AP	5C	40	700	35-200	50	100	1.73	1.24	.90
898-5021	40319V2	TO-5	SP AP	5C	40	700	35-200	50	100	1.73	1.24	.90
898-5022	40320	TO-5	SN AP	5C	40	700	40-200	10	....	.85	.61	.44
898-5023	40320V1	TO-5	SN AP	5C	40	700	40-200	10	....	1.20	.86	.63
898-5024	40320V2	TO-5	SN AP	5C	40	700	40-200	10	....	1.20	.86	.63
898-5025	40321	TO-5	SN AP	5C	300	1A	25-200	20	....	1.20	.86	.63
898-5026	40321V1	TO-5	SN AP	5C	300	1A	25-200	20	....	1.85	1.32	.96
898-5027	40321V2	TO-5	SN AP	5C	300	1A	25-200	20	....	1.85	1.32	.96
898-5028	40322	TO-66	SN AP	35C	300	2A	40-250	100	....	3.00	2.15	1.56
898-5029	40323	TO-5	SN AP	5C	18	700	70-350	50	100	.83	.58	.42
898-5030	40323V1	TO-5	SN AP	5C	18	700	70-350	50	100	1.08	.78	.57
898-5031	40323V2	TO-5	SN AP	5C	18	700	70-350	50	100	1.08	.78	.57
898-5032	40324	TO-66	SN AP	29C	35	4A	20-120	1A	.750	1.30	.91	.66
898-5033	40325	TO-3	SN AP	117C	35	15A	12-60	8A	....	2.23	1.57	1.14
898-5034	40326	TO-5	SN AP	5C	40	700	40-200	10	....	.85	.61	.44
898-5035	40326V1	TO-5	SN AP	5C	40	700	40-200	10	....	1.20	.86	.63
898-5039	40326V2	TO-5	SN AP	5C	40	700	40-200	10	....	1.20	.86	.63
898-5037	40327	TO-5	SN AP	5C	300	500	40-250	20	....	1.23	.87	.64
898-5038	40327V1	TO-5	SN AP	5C	300	500	40-250	20	....	1.85	1.32	.96
898-5039	40327V2	TO-5	SN AP	5C	300	500	40-250	1	....	1.85	1.32	.96
898-5040	40328	TO-66	SN AP	35C	300	2A	20-	1A	....	3.08	2.19	1.60
898-5041	40329	TO-1	GP GP	.120	25	100	50-200	25	1.5	.80	.57	.41
898-5052	40340	TO-60	SN AP	70C	60	10A	....	....	200	46.50	29.00	24.00
898-5053	40341	TO-60	SN AP	70C	70	10A	....	....	200	46.50	29.00	24.00
898-5056	40346	TO-5	SN GP	10C	175	1A	25-	10	10	.88	.64	.47
898-5057	40346V1	SP-84	SN GP	10C	175	1A	25-	10	10	1.70	1.23	.89
898-5058	40346V2	SP-85	SN GP	10C	175	1A	25-	10	10	1.70	1.23	.89
898-5059	40347	TO-5	SN SP	8.75C	60	1.5A	25-100	450	....	1.05	.75	.54
898-5060	40347V1	SP-84	SN SP	8.75C	60	1.5A	25-100	450	....	1.28	.91	.66
898-5061	40347V2	SP-85	SN SP	8.75C	60	1.5A	25-100	450	....	1.28	.91	.66
898-5062	40348	TO-5	SN SP	8.75C	90	1.5A	30-100	300	....	1.48	1.06	.77
898-5063	40348V1	SP-84	SN SP	8.75C	90	1.5A	30-100	300	....	1.60	1.14	.83
898-5064	4034BV2	SP-85	SN SP	8.75C	90	1.5A	30-100	300	....	1.60	1.14	.83
898-5065	40349	TO-5	SN SP	8.75C	160	1.5A	25-100	150	....	2.18	1.56	1.13
898-5066	40349V1	SP-84	SN SP	8.75C	160	1.5A	25-100	150	....	2.30	1.64	1.19
898-5068	40354	TO-104	SN GP	.500	150	50	55-	10	50	1.75	1.24	.91
898-5069	40355	TO-104	SN GP	1.0	150	50	55-	10	50	1.88	1.32	.97
898-5073	40359	TO-1	GP GP	.120	20	50	....	....	50	.68	.48	.35
898-5074	40360	TO-5	SN AP	5C	70	700	40-200	10	100	1.13	.79	.58
898-5075	40360V1	TO-5	SN AP	5C	70	700	40-200	10	100	1.38	.99	.72
898-5076	40360V2	TO-5	SN AP	5C	70	700	40-200	10	100	1.38	.99	.72
898-5077	40361	TO-5	SN AP	5C	70	700	70-350	50	100	1.18	.83	.60
898-5078	40361V1	TO-5	SN AP	5C	70	700	70-350	50	100	1.55	1.11	.81
898-5079	40361V2	TO-5	SN AP	5C	70	700	70-350	50	100	1.55	1.11	.81
898-5080	40362	TO-5	SP AP	5C	70	700	35-200	50	100	1.08	.76	.55
898-5081	40362V1	TO-5	SP AP	5C	70	700	35-200	50	100	1.85	1.32	.96
898-5082	40362V2	TO-5	SP AP	5C	70	700	35-200	50	100	1.85	1.32	.96
898-5083	40363	TO-3	SN AP	115C	70	7A	20-70	4A	.700	2.10	1.49	1.08

SEE PAGE 12 FOR INTEGRATED CIRCUITS

Stock No.	Type	Case	Mat. Func.	Maximum Ratings: Dissipation Watts	Maximum Ratings: Col'tr To Base Volts	Maximum Ratings: Col'tr Curr. mA	Beta H_{FE} @ Ic: Max.-Min.	Beta: mA	f_T MHz	EACH: 1-9	EACH: 10-99	EACH: 100-Up
898-5084	40364	T0-66	SN AP	35C	60	7A	35-175	500	15	3.03	2.15	1.56
898-5086	40366	T0-5	SN SP	5C	80	1A	40-120	150	....	7.55	5.36	3.90
898-5087	40366V1	T0-5	SN SP	5C	80	1A	40-120	150	....	11.15	7.92	5.75
898-5088	40366V2	T0-5	SN SP	5C	80	1A	40-120	150	....	11.15	7.92	5.75
898-5089	40367	T0-5	SN SP	5C	100	1A	35-100	200	....	11.05	7.84	5.70
898-5091	40369	T0-3	SN SP	75C	100	6A	25-75	1.5A	....	20.88	13.05	10.80
898-5095	40372	SP-83	SN SP	5.8C	90	4A	25-100	500	.800	1.40	.99	.72
898-5096	40373	SP-83	SN SP	25C	140	4A	20-80	500	....	3.60	2.56	1.86
898-5097	40374	SP-83	SN SP	35C	250	2A	40-	100	....	3.60	2.56	1.86
898-5098	40375	SP-83	SN AP	35C	120	7A	50-200	500	....	3.15	2.23	1.62
898-5101	40378	SP-86	SCR	200 PRV - 7 Amp RMS Io						2.05	1.47	1.07
898-5110	40385V2	T0-5	SN SP	10C	175	1A	25-	10	10	13.50	9.55	6.95
898-5114	40389	T0-5	SN GP	3.5	60	700	50-250	150	....	1.05	.74	.54
898-5115	40390	SP-84	SN GP	10C	300	1A	40-160	20	....	1.25	1.06	.77
898-5116	40391	SP-84	SN GP	7C	60	1A	50-250	150	....	1.15	.81	.59
898-5117	40392	T0-5	SN GP	5C	60	700	50-250	150	....	1.05	.74	.54
898-5119	40394	SP-85	SP GP	7C	60	1A	50-250	150	....	1.15	.81	.59
898-5120	40395	T0-1	GP AA	.120	20	50	170-	1	....	.73	.52	.38
898-5121	40396	T0-1	GP GN	Match Pair 0.3W - 18V - 500 ma						1.40	1.00	.73
898-5123	40398	T0-104	SN AP	.5	25	200	75-300	10	10	1.00	.71	.52
898-5124	40399	T0-104	SN AP	.5	18	200	165-600	10	....	.95	.67	.49
898-5125	40400	T0-104	SN AP	.5	18	200	75-300	10	....	.88	.62	.45
898-5130	40405	T0-52	SN AU	1C	16	500	20-	100	300	3.03	2.15	1.56
898-5131	40406	T0-5	SP GP	1C	50	700	30-200	50	100	1.08	.76	.55
898-5132	40407	T0-5	SN GP	1C	50	700	30-200	50	100	.80	.58	.42
898-5133	40408	T0-5	SN GP	1C	18	700	70-350	50	100	1.18	.84	.61
898-5134	40409	SP-84	SN AP	3C	18	700	70-350	50	100	1.23	.87	.64
898-5135	40410	SP-84	SP AP	3C	40	700	35-200	50	100	1.25	.89	.65
898-5136	40411	T0-3	SN AP	30C	90	15A	35-100	4A	.800	4.50	3.30	2.40
898-5137	40412	T0-5	SN AP	10C	250	1A	40	30	....	1.48	1.06	.76
898-5138	40412VI	SP-84	SN AP -	10C	250	1A	40-	30	....	1.60	1.14	.83
898-5148	40421	T0-3	GE AP	12.5	75	5A	62-175	1A	4	1.60	1.14	.83
898-5157	40429	T0-66	Triac	200 PRV- 6 amps RMS I3						2.35	1.65	1.20
898-5158	40430	T0-66	Triac	400 PRV-6 amps RMS Io						2.68	1.89	1.37
898-5159	40431	SP-87	Triac	Int. Trig.-200 PRV-6 amps RMS Io						3.38	2.40	1.75
898-5160	40432	SP-87	Triac	Int. Trig.-400 PRV-6 amps RMS Io						4.05	2.88	2.09
898-5167	40439	T0-3	GP SP	5C	320	10A	....	....	....	3.60	2.56	1.86
898-5168	40440	T0-3	GP AP	5C	200	10A	....	....	....	2.80	1.98	1.44
898-5172	40446	SP-85	SN AP	10C	36	500	....	....	550	6.03	4.29	3.12
898-5186	40458	T0-104	SN AP	.500	60	1A	100-300	10	150	1.18	.83	.61
898-5190	40462	T0-3	GP AP	12.5C	40	5A	50	3A	.600	1.63	1.16	.84
898-5195	40467A	T0-72	SN IF	.330	20 volts V_{DS}-50ma Io 4Kumho gfs					1.73	1.24	.90
898-5197	40468A	T0-72	SN IF	.375	20 v V_{DS}-25ma Io-7.5 Kumho gfs					1.03	.75	.54
898-5214	40485	SP-87	Triac	200 PRV-6 amps RMS Io-40ma I_{GT}						2.10	1.49	1.08
898-5215	40486	SP-87	Triac	400 PRV-6 amps RMS Io-40ma I_{GT}						2.53	1.79	1.30
898-5231	40502	SP-83	Triac	200 PRV - 3.3 Amp RMS Io - 40 ma I_{GT}						2.45	1.74	1.26
898-5232	40503	SP-83	Triac	400 PRV - 3.3 Amp RMS Io - 40 ma I_{GT}						2.90	2.05	1.49
898-5233	40504	SP-83	SCR	200 PRV - 5 Amp RMS Io - 15 ma I_{GT}						2.30	1.64	1.19
898-5234	40505	SP-83	SCR	400 PRV - 5 Amp RMS Io - 15 ma I_{GT}						2.73	1.94	1.41
898-5235	40506	SP-83	SCR	600 PRV - 5 Amp RMS Io - 15 ma I_{GT}						3.35	2.38	1.73
898-5236	40507	SP-84	SCR	200 PRV - 7 Amp RMS Io - 15 ma I_{GT}						2.30	1.63	1.19
898-5237	40508	SP-84	SCR	400 PRV - 7 Amp RMS Io - 15 ma I_{GT}						2.83	2.01	1.46
898-5238	40509	SP-84	Triac	200 PRV - 6 Amp RMS Io - 40 ma I_{GT}						2.33	1.65	1.20
898-5239	40510	SP-84	Triac	400 PRV - 6 Amp RMS Io - 40 ma I_{GT}						2.75	1.95	1.42
898-5240	40511	SP-84	Triac	200 PRV - 6 Amp RMS Io - Int.Trig.						3.63	2.56	1.86
898-5241	40512	SP-84	Triac	400 PRV - 6 Amp RMS Io - Int.Trig.						4.53	3.21	2.33
898-5242	40513	SP-88	SN AP	100C	45	12	20-70	2.5A	....	1.73	1.24	.90
898-5243	40514	SP-89	SN AP	100C	45	12	20-70	2.5A	....	1.75	1.26	.92
898-5246	40519	T0-52	SN AP	1C	40	500	20	50	....	2.33	1.63	1.19
898-5247	40525	T0-5	Triac	100 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						2.20	1.57	1.14
898-5248	40526	T0-5	Triac	200 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						2.50	1.78	1.30
898-5249	40527	T0-5	Triac	400 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						3.50	2.48	1.80
898-5250	40528	T0-5	Triac	100 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						1.83	1.29	.94
898-5251	40529	T0-5	Triac	200 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						2.10	1.49	1.08
898-5252	40530	T0-5	Triac	400 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						2.53	1.19	1.30
898-5253	40531	SP-84	Triac	100 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						2.43	1.73	1.26
898-5254	40532	SP-84	Triac	200 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						2.75	1.94	1.41
898-5255	40533	SP-84	Triac	400 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						3.73	2.65	1.92
898-5256	40534	SP-84	Triac	100 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						2.05	1.46	1.06
898-5257	40535	SP-84	Triac	200 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						2.33	1.65	1.20
898-5258	40536	SP-84	Triac	400 PRV - 2.5 Amp RMS Io - 10 ma I_{GT}						2.75	1.95	1.42
898-5259	40537	T0-5	SP AP	5C	55	700	50-300	50	100	.98	.69	.50
898-5260	40538	T0-5	SP AP	5C	55	700	15-90	500	100	.80	.59	.43
898-5261	40539	T0-5	SN AP	5C	55	700	15-90	500	100	.70	.53	.37
898-5262	40542	SP-89	SN AP	83C	50	6A	20-70	2.5A	.800	1.83	1.31	.95
898-5263	40543	SP-89	SN AP	83C	60	8A	20-70	3A	....	1.93	1.37	1.00
898-5264	40544	SP-84	SN AP	7C	50	700	35-200	50	100	.80	.58	.42
898-5273	40553	T0-66	SCR	200 PRV - 5 Amp RMS - 40 ma I_{GT}						3.88	2.75	2.00
898-5274	40554	T0-66	SCR	400 PRV - 5 Amp RMS - 40 ma I_{GT}						6.32	4.44	3.22
898-5275	40555	T0-66	SCR	600 PRV - 5 Amp RMS - 40 ma I_{GT}						6.73	4.76	3.47
898-5280	40559A	SP-90	GA AS	Light Emit. Diode - 1 Amp I_F - 24 mw out						.98	.70	.51
898-5282	40561	D0-17		Tunnel Diodes I_P Min/Max 4.5/5.5 ma - I_P/I_V 6:1						6.38	4.54	3.30
898-5283	40562	D0-17		Tunnel Diodes I_P Min/Max 9/11 ma - I_P/I_V6:1						6.38	4.54	3.30
898-5284	40563	D0-17		Tunnel Diodes I_PMin/Max 18/22 ma - I_P/I_V6:1						6.38	4.54	3.30
898-5285	40564	D0-17		Tunnel Diodes I_PMin/Max45/55 ma - I_P/I_V6:1						6.38	4.54	3.30
898-5286	40565	D0-17		Tunnel Diodes I_PMin/Max 90/110 ma - I_P/I_V6:1						6.38	4.54	3.30
898-5287	40566	D0-17		Tunnel Diodes I_PMin/Max 4.75/5.22 ma - I_P/I_V 8:1						10.48	7.43	5.40
898-5288	40567	D0-17		Tunnel Diodes I_PMin/Max 9.5/10.5 ma - I_P/I_V 8:1						9.18	6.52	4.74
898-5289	40568	D0-17		Tunnel Diodes I_PMin/Max 19/21 ma - I_P/I_V 8:1						9.88	7.01	5.10
898-5290	40569	D0-17		Tunnel Diodes I_PMin/Max 47.5/52.5 ma - I_P/I_V 8:1						10.48	7.43	5.40
898-5291	40570	D0-17		Tunnel Diodes I_PMin/Max 95/105 ma - I_P/I_V 8:1						15.13	10.75	7.80
898-5292	40571	D0-17		Tunnel Diodes I_PMin/Max 4.75/5.25 ma - I_P/I_V 8:1						12.10	8.60	6.24
898-5293	40572	D0-17		Tunnel Diodes I_PMin/Max 9.5/10.5 ma - I_P/I_V 8:1						9.88	7.01	5.10
898-5294	40573	D0-17		Tunnel Diodes I_PMin/Max 19/21 ma - I_P/I_V 8:1						11.50	8.15	5.94
898-5295	40574	D0-17		Tunnel Diodes I_PMin/Max 47.5/52.5 ma - I_P/I_V 8:1						15.13	10.75	7.80
898-5296	40575	T0-66		SCR 200PRV - 15 Amp RMS - 80 ma I_{GT}						2.93	2.01	1.80
898-5397	40576	T0-66	SCR	400 PRV - 15 Amp RMS Io - 80 ma I_{GT}						3.50	2.48	1.80
898-5304	40581	T0-39	SN AP	5C	60	1.5A	3.5 W POE 27 MHz			6.85	4.87	3.54
898-5305	40582	T0-39	SN AP	10C	60	15A	3.5 W Poe @ 27 MHz			7.20	5.12	3.72
898-5313	40594	T0-5	SN AP	10C	95	2A	70-350	300	....	1.75	1.24	.90
898-5314	40595	T0-5	SN AP	10C	95	2A	70-350	300	....	2.03	1.44	1.04
898-5320	40600	T0-72	SI FE	.330	20 v V_{DS} - 50ma Io-11K umhos Yfs					1.73	1.24	.90
898-5321	40601	T0-72	SI FE	.330	20 v V_{DS} - 50ma Io-2.75K umhos Yfs					1.63	1.16	.84
898-5322	40602	T0-72	SI FE	.330	20 v V_{DS} - 50ma Io-11K umhos Yfs					1.15	.83	.60
898-5323	40603	T0-72	SI FE	.330	0 v V_{DS} - 50ma Io-11K umhos Yfs					1.45	1.04	.76
898-5324	40604	T0-72	SI FE	.330	20 v V_{DS} - 50ma Io-2.8K umhos gfs					1.35	.98	.71
898-5327	40608	T0-39	SN AV	3.5	40	400	35-120	50	700	3.48	2.48	1.80
898-5331	40611	T0-5	SN AP	5C	25	700	70-500	50	....	.78	.54	.39
898-5332	40612	T0-3	GP AP	12.5C	25	1A	30-150	1A	....	.95	.67	.49
898-5333	40613	SP-91	SN AP	36C	25	4A	30-20	1A	....	.93	.70	.51
898-5334	40616	T0-5	SN AP	5C	32	700	70-500	....	....	.80	.56	.41
898-5336	40618	SP-91	SN AP	36C	30	4A	30-120	1A	....	.95	.71	.52
898-5341	40621	SP-91	SN AP	36C	30	4A	25-100	1A	....	1.08	.79	.58
898-5342	40622	SP-91	SN AP	36C	40	4A	15-100	1.5A	....	1.10	.81	.59
898-5343	40623	T0-3	GP AP	12.5C	45	5A	50-170	1A	....	1.88	1.32	.97
898-5344	40624	SP-91	SN AP	50C	45	6A	20-100	2.5A	....	1.25	.93	.67
898-5345	40625	SP-84	SN AP	3.5	45	1A	100-300	150	....	1.05	.74	.54
898-5346	40626	T0-3	GP AP	12.5C	55	1A	50-170	1A	....	1.75	1.24	.91
898-5347	40627	SP-91	SN AP	50C	55	6A	20-100	2.5A	....	1.35	.99	.72
898-5348	40628	T0-5	SN AP	3.5	55	1A	100-300	100	....	1.08	.76	.55
898-5349	40629	SP-91	SN AP	36C	35	4A	20-70	1A	....	1.03	.74	.54
898-5350	40630	SP-91	SN AP	36C	40	4A	20-70	1.5A	....	1.20	.86	.62
898-5351	40631	SP-91	SN AP	36C	45	4A	20-70	2A	....	1.35	.97	.71
898-5352	40632	SP-91	SN AP	50C	60	6A	20-70	3A	....	1.73	1.24	.90
898-5353	40633	SP-91	SN AP	83C	75	8A	20-70	4A	....	1.78	1.27	.92
898-5354	40634	T0-5	SP AP	5C	75	700	50-250	150	....	1.18	.84	.64
898-5355	40635	T0-5	SN AP	5C	95	700	50-250	150	....	.90	.63	.46
898-5356	40636	T0-3	SN AP	115C	70	15A	20-70	4A	....	2.25	1.65	1.20
898-5357	40637	T0-52	SN AV	1C	30	100	....	....	200	1.40	1.00	.73
898-5358	40638	SP-92	Triac	200 PRV - 6 amps Rms Io						2.23	1.57	1.14
898-5359	40639	SP-92	Triac	400 PRV - 6 amps Rms Io						2.63	1.87	1.36
898-5360	40640	T0-66	SCR	600 PRV - 5 amps Rms Io						3.83	2.72	1.98
898-5361	40641	T0-66	SCR	600 PRV - 5 amps Rms Io						4.03	2.85	2.08
898-5362	40642	D0-26	S RECT	700 PRV - 1 amp Rms Io						1.40	.99	.72
898-5363	40643	D0-26	S RECT	800 PRV - 1 amp Rms Io						1.28	.91	.66
898-5364	40644	D0-26	S RECT	700 PRV - 1 amp Rms Io						1.18	.83	.60
898-5374	40654	SP-93	SCR	200 PRV - 7 amps Rms Io						1.25	1.41	1.02
898-5375	40655	SP-93	SCR	400 PRV - 7 amps Rms Io						2.38	1.69	1.23
898-5376	40656	SP-92	SCR	200 PRV - 7 amps Rms Io						2.10	1.49	1.08
898-5377	40657	SP-92	SCR	400 PRV - 7 amps Rms Io						2.50	1.77	1.29
898-5378	40658	SP-84	SCR	200 PRV3.3 amps Rms Io						2.23	1.57	1.14
898-5379	40659	SP-84	SCR	400 PRV - 3.3 amps Rms Io						2.63	1.85	1.35
898-5380	40660	SP-94	Triac	200 PRV - 30 amps Rms Io						6.38	4.52	3.29
898-5381	40661	SP-94	Triac	400 PRV - 30 amps Rms Io						7.63	5.41	3.94
898-5382	40662	SP-95	Triac	200 PRV - 30 amps Rms Io						6.83	4.85	3.53
898-5383	40663	SP-95	Triac	400 PRV - 30 amps Rms Io						8.10	5.74	4.18
898-5384	40664	SP-97	Triac	450 PRV - 6 amps Rms Io						2.23	1.57	1.14
898-5387	40667	SP-92	Triac	450 PRV - 6 amps RMS Io						2.33	1.69	1.20
898-5388	40668	SP-96	Triac	200 PRV - 8 amps Rms Io						2.28	1.62	1.18
898-5389	40669	SP-96	Triac	400 PRV - 8 amps Rms Io						3.08	2.18	1.58
898-5390	40671	SP-94	Triac	600 PRV - 30 amps Rms Io						9.53	6.77	4.92
898-5391	40672	SP-95	Triac	600 PRV - 30 amps Rms Io						10.00	7.10	5.16
898-5392	40673	T0-72	SI FE	20 V_{DS} 50 ma Io 12K umho gfs						1.43	1.01	.73
817-7660	A1H	SP-34	SL Rect	25 Volts RMS 100 ma						.63	.43	.30

Stock No.	Type	Case	Mat. Func.	Maximum Ratings: Peak Repetitive Volts	Maximum Ratings: Forward Current Rm Amps	Maximum Ratings: Required Gate Curr. mA	EACH: 1-9	EACH: 10-99	EACH: 100-Up
779-2004	A01001	A01014	Triac	200	3.0	10	1.90	1.59	1.06
779-2008	A01002	A01014	Triac	200	3.0	25	1.45	1.21	.81
779-2012	A01003	A01014	Triac	400	3.0	10	1.99	1.66	1.11
779-2016	A01004	A01014	Triac	400	3.0	25	1.54	1.29	.86
779-2020	A01013	A01014	Triac	400	3.0	S Trig.	1.90	1.59	1.06
779-2024	A01014	A01014	Triac	400	3.0	S Trig.	1.99	1.66	1.11
779-2028	A01021	SP-110	Triac	200	4.5	25	1.69	1.41	.94
779-2032	A01022	SP-110	Triac	400	4.5	25	1.98	1.65	1.10
779-2036	A01024	SP-110	Triac	600	4.5	25	3.78	3.15	2.10
779-2040	A01041	SP-110	Triac	200	4.5	Trig.	2.34	1.95	1.30
779-2044	A01042	SP-110	Triac	400	4.5	Trig.	2.62	2.19	1.46
779-2048	A01044	SP-110	Triac	600	4.5	Trig.	4.42	3.69	2.46
779-2052	A01061		Triac	200	6.5	25	1.80	1.50	1.00

Stock No.	Type	Case	Mat. Func.	Maximum Ratings: Peak Repetitive Volts	Forward Current Rm Amps	Required Gate Curr. mA	EACH 1-9	10-99	100-Up
779-2056	A01062	SP-110	Triac	400	6.5	25	2.08	1.74	1.16
779-2060	A01064	SP-110	Triac	600	6.5	25	3.88	3.24	2.16
779-2064	A01081	SP-110	Triac	200	6.5	Trig.	2.44	2.04	1.36
779-2068	A01082		Triac	400	6.5	Trig.	2.73	2.28	1.52
779-2076	A01101	SP-110	Triac	200	8.5	25	2.12	1.77	1.18
779-2080	A01102	SP-110	Triac	400	8.5	25	2.37	1.98	1.32
779-2088	A01121	SP-110	Triac	200	8.5	Trig.	2.77	2.31	1.54
779-2100	A01141	SP-110	Triac	200	10	25	2.34	1.95	1.30
779-2104	A01142	SP-110	Triac	400	10	25	2.98	2.40	1.60
779-2108	A01144	SP-110	Triac	600	10	25	4.60	3.90	2.80
779-2112	A01161	SP-110	Triac	200	10	Trig.	2.98	2.48	1.66
779-2116	A01162	SP-110	Triac	400	10	Trig.	3.52	2.94	1.96
779-2124	A01181	SP-110	Triac	200	16	50	3.24	2.70	1.80
779-2128	A01182	SP-110	Triac	400	16	50	4.22	3.52	2.35
779-2136	A01201		Triac	200	16	Trig.	3.88	3.24	2.16
779-2140	A01202	SP-110	Triac	400	16	Trig.	4.87	4.06	2.71
817-7662	B1B	SP-39	S Rect	25 Volts RMS Io			1.73	1.28	.86
817-7664	B1H	SP-40	S Rect	25 Volts RMS 150 ma RMS Io			.53	.40	.28
817-7676	C1B	SP-41	S Rect	25 Volts RMS 600 ma			2.00	1.46	1.00
817-7678	C1H	SP-42	S Rect	25 Volts RMS 250 ma			.55	.42	.29
898-8102	CR102	SP-44B	S Rect	1.0 Volts RMS 5 Amp			14.25	7.20	6.85
898-8103	CR103	SP-44C	S Rect.	3165 PRV - 5 Amp RMS			16.15	8.15	7.75
898-8104	CR104	SP-44D	S Rect.	4430 PRV - 5 Amp RMS			19.00	9.60	9.10
898-8105	CR105	SP-44E	S Rect.	5065 PRV - 5 Amp RMS			20.90	10.55	10.05
898-8106	CR106	SP-44F	S Rect.	6330 PRV - 5 Amp RMS			23.75	12.00	11.40
898-8107	CR107	SP-44G	S Rect.	7595 PRV - 5 Amp RMS			25.65	12.95	12.30
898-8108	CR108	SP-44H	S Rect.	8230 PRV - 5 Amp RMS			27.55	13.90	13.20
898-8109	CR109	SP-44I	S Rect.	9495 PRV - 5 Amp RMS			30.40	15.35	14.60
898-8110	CR110	SP-44J	S Rect.	10130 PRV - 5 Amp RMS			32.30	16.30	15.50
898-8201	CR201	SP-45A	S Rect.	1900 PRV - 5 Amp RMS			6.18	3.10	2.96
898-8203	CR203	SP-45B	S Rect.	3165 PRV - 5 Amp RMS			9.50	4.80	4.56
898-8204	CR204	SP-45C	S Rect.	4800 PRV - 5 Amp RMS			11.40	5.75	5.47
898-8208	CR208	SP-45E	S Rect.	8000 PRV - 5 Amp RMS			16.63	8.40	8.00
898-8212	CR212	SP-45G	S Rect.	12K PRV - 5 Amp RMS			23.75	12.00	11.40
898-8273	CR273/ 8008	SP-38	S Rect.	Tube Replace't For Type 8008			105.00	60.00	
898-8274	CR274/ 872A	SP-38	S Rect.	Tube Replace't For Type 872, 872A			105.60	60.00	
898-8275	CR275/ 866A	SP-38	S Rect.	Tube Replace't For Type 866, 866A, 3B28, 3B25			22.50	13.10	
898-8401	CR401	SP-46A	S Rec B	444 PRV - 18 Amp RMS			55.45	28.00	26.60
898-8402	CR402	SP-46A	S Rec B	444 PRV - 18 Amp RMS			63.30	32.00	30.40
898-8403	CR403	SP-46C	S Rec B	888 PRV - 18 Amp RMS			87.05	44.00	41.80
898-8404	CR404	SP-46D	S Rec B	222 PRV - 34 Amp RMS			59.38	30.00	28.50
898-8405	CR405	SP-46D	S Rec B	444 PRV - 34 Amp RMS			71.25	36.00	34.20
898-8406	CR406	SP-46V	S Rec B	888 PRV - 34 Amp RMS			106.88	54.00	51.30
898-8407	CR407	SP-46Y	S Rec B	222 PRV - 70 Amp RMS			79.08	40.00	38.00
898-8408	CR408	SP-46Y	S Rec B	444 PRV - 70 Amp RMS			95.00	48.00	45.00
898-8409	CR409	SP-46A	S Rec B	888 PRV - 70 Amp RMS			126.70	64.00	60.80
898-8501	CR501	SP-46B	S Rec B	222 PRV - 24 Amp RMS 3 0			79.00	40.00	38.00
898-8502	CR502	SP-46B	S Rec B	444 PRV - 24 Amp RMS 3 0			95.00	48.00	45.60
898-8503	CR503	SP-46P	S Rec B	222 PRV - 46 Amp RMS 3 0			98.93	50.00	47.50
898-8504	CR504	SP-46P	S Rec B	444 PRV - 46 Amp RMS 3 0			122.68	62.00	58.90
898-8505	CR505	SP-46Z	S Rec B	222 PRV - 92 Amp RMS 3 0			126.70	64.00	60.80
898-8506	CR506	SP-46Z	S Rec B	222 PRV - 92 Amp RMS 3 0			166.25	84.00	79.80
925-5022	D29A5	SP-16	SP GP	.225 Watt Dis. - 25 V_{CEO}-H_{FE}30/90			.51	.51	.42
925-5023	D29A5	SP-16	SP GP	.225 Watt Dis. - 25 V_{CEO}-H_{FE}75/225			.58	.58	.48
817-7680	DD170C	SP-13	S Zen	Zener Diode Kit - 1 Watt			2.50	2.34	1.95
817-7682	DD175C	SP-13	S Rect	100 PRV - 1 Amp RMS I_OS.R. Kit			4.00	1.19	.99
817-7684	DD176C	SP-13	S Rect	200 PRV - 1 Amp RMS I_OS.R. Kit			2.00	.71	.59
817-7686	DD177C	SP-13	S Rect	400 PRV - 1 Amp RMS I_OS.R. Kit			2.50	1.19	.99
817-7688	E075LC	SP-47	SL Rec	130 PRV - 75 Amp RMS io			.75	.44	.35
817-7690	E150LC	SP-47A	SL Rec	130 PRV - 150 Amp RMS Io			.93	.62	.44
817-7692	E300L	SP-47B	SL Rec	130 PRV - 300 Amp RMS Io			1.28	.92	.61
817-7694	E500LC	SP-47C	SL Rec	130 PRV - 500 Amp RMS Io			1.60	1.23	1.02
817-7696	E650L	SP-47D	SL Rec	130 PRV - 650 Amp RMS Io			2.60	1.73	1.56
779-3072	EC106A1	SP-47D	SCR	100	3.0	200	.93	.77	.51
779-3148	EC106A2	SP-47D	SCR	100	1.6	200	.92	.77	.51
779-3008	EC106B1	SP-47D	SCR	200	3.0	200	1.03	.86	.57
779-3120	EC106B2	SP-47D	SCR	200	1.6	200	1.03	.86	.57
779-3016	EC106D1	SP-47D	SCR	400	3.0	200	1.68	1.40	.94
779-3128	EC106D2	SP-47D	SCR	400	1.6	200	1.68	1.40	.94
779-3068	EC106F1	SP-47D	SCR	50	3.0	200	.89	.74	.49
779-3144	EC106F2	SP-47D	SCR	50	1.6	200	.89	.74	.49
779-3064	EC106Y1	SP-47D	SCR	30	3.0	200	.82	.68	.45
779-3140	EC106Y2	SP-47D	SCR	30	1.6	200	.82	.68	.45

Stock No.	Type	Case	Material Function	Specifications	EACH 1-9	10-99	100-Up
916-4010	FA6	SP-21	S Rect	600 PIV - 1 Amp RMS Io	2.25	1.73	1.56
916-4020	FA8			SP-21S Rect800 PIV - 1 Amp RMS Io	1.92	1.92	1.60
551-7000	FD100			D0-7SCD75 PIV - 10 ma I_F @ 1 V_T - 2 n sec T_{RR}	.85	.83	.62
551-7230	FD333			D0-7SCD150 PIV - 200 ma I_F @ 1 V_T	1.68	1.13	.84
551-7300	FD400			D0-7SCD200 PIV - 400 ma I_F @ 1 V_T - 50 n sec T_{RR}	3.75	1.88	1.40
551-7350	FD444			D0-7SCD150 PIV - 30 ma I_F @ 1 V_T - 60 n sec T_{RR}	1.68	.90	.67
551-7420	FD600			D0-35SCD75 PIV - 200 ma I_F @ 1 V_T - 4 n sec T_{RR}	3.38	2.10	1.57
551-7460	FD666			D0-7SCB40 PIV - 100 ma I_F @ 1 V_T - 4 n sec T_{RR}	1.05	1.05	.78
551-7490	FD700			D0-7SCD30 PIV - 50 ma I_F @ 1 V_T - .7 n sec T_{RR}	6.25	2.63	1.96
551-7520	FD777			D0-35SCD15 PIV - 20 ma I_F @ 1 V_T - .75 n sec T_{RR}	2.50	1.88	1.40
551-7550	FDH600			D0-35SCD75 PIV - 200 ma I_F @ 1 V_T - 4 n sec T_{RR}	3.38	2.10	1.57
551-7620	FDH666			D0-35SCD40 PIV - 200 ma I_F @ 1 V_T - 4 n sec T_{RR}	1.68	1.05	.78
953-8855	G129			D0-7SCD10 PIV - .56 V_F @ I_F 1 ma	1.75	1.00	.75
779-3920	GT22			D0-7Diac22V (±4V) V_{BO}	.82	.68	.45
779-3930	GT32			D0-7Diac32V (±4V) V_{BO}	.72	.60	.40
779-3940	GT40			D0-7Diac43V (±4V) V_{BO}	.72	.60	.40
779-3955	GT60			D0-7Diac50V (±4V) V_{BO}	.72	.60	.40
953-8860	H11			SP-30Sil. Ph Di 250 mw Dis - 40 ua Li Cur - .5 ua Dk Cur.	4.00	4.00	2.80
953-8865	H35			SP-30Sil. Ph Di 250 mw Dis - 60 ua Li Cur - .5 ua Dk Cur.	5.00	5.00	3.50
953-8870	H38			SP-30Sil. Ph Di 250 mw Dis - 100 ua Li Cur - 10 ua Dk Cu	4.00	4.00	2.80
953-8875	H60			SP-30Sil. Ph Di 250 mw Dis - 100 ua Li Cur - .5 ua Dk Cu	8.25	8.00	5.60
953-8880	H61			SP-30Sil. Ph Di 250 mw Dis - 200 ua Li Cur - .5 ua Dk Cu	9.50	9.00	6.25
953-8885	H62			SP-30Sil. Ph Di 250 mw Dis - 300 ua Li Cur - .5 ua Dk C	13.50	13.50	10.00
916-4101	HVC180			SP-19AS Rect1800 PIV - 250 ma	5.00	3.35	2.66
916-4102	HVC240			SP-19BS Rect2400 PIV - 250 ma	5.38	3.60	2.87
916-4103	HVC300			SP-19CS Rect3000 PIV - 200 ma	5.75	3.85	3.07
916-4104	HVC400			SP-19DS Rect4000 PIV - 200 ma	6.00	4.00	3.20
916-4105	HVC500			SP-19S Rect5000 PIV - 200 ma	6.25	4.15	3.34
916-4106	HVC600			SP-19ES Rect6000 PIV - 150 ma Io	6.88	4.55	3.66
916-4107	HVC650			SP-19FS Rect6500 PIV - 150 ma Io	7.50	5.00	4.00
916-4108	HVC750			SP-19GS Rect7500 PIV - 150 ma Io	8.13	5.40	4.34
916-4109	HVC840			SP-19hS Rect8400 PIV - 100 ma Io	8.75	5.85	4.66
916-4110	HVC960			SP-19JS Rect9600 PIV - 100 ma Io	10.00	6.65	5.34
916-4111	HVC1000			SP-19KS Rect10K PIV - 100 ma Io	10.63	7.10	5.66
916-4112	HVC1200			SP-19LS Rect12K PIV - 75 ma Io	12.50	8.35	6.66
916-4113	HVC1500			SP-19MS Rect15K PIV - 75 ma Io	15.63	10.40	8.34
916-4114	HVC1800			SP-19NS Rect18K PIV - 75 ma Io	18.75	12.50	10.00
916-4115	HVC2100			SP-19PS Rect21K PIV - 50 ma Io	21.88	14.60	11.67
916-4116	HVC2500			SP-19RS Rect25K PIV - 50 ma Io	26.25	17.50	14.00
916-4117	HVC3000			SP-19SS Rect30K PIV - 50 ma Io	31.25	20.80	16.70
817-7754	IR106B1			SP-67SCR100 PRV - 2 Amp Io	.83	.80	.53
817-7755	IR106C1			SP-67SCR200 PRV - 2 Amp Io	.89	.89	.59
817-7756	IR106CL			SP-67SCR300 PRV - 2 Amp Io	1.65	1.65	1.12
817-7757	IR106F1			SP-67SCR50 PRV - 2 Amp Io	.80	.77	.51
817-7758	IR106Y1			SP-67SCR30 PRV - 2 Amp Io	.78	.74	.49
817-8915	J14C1			SP-34ASL Rec36V AC Input - 1.5 Amp DC Io	2.38	1.58	1.25
817-8916	J14C5			SP-34BSL Rec36V AC Input - 4.8 Amp DC Io	6.00	3.98	3.30
817-8917	J14C8			SP-34CSL Rec36V AC Input - 8.4 Amp DC Io	8.25	5.48	4.50
817-8918	J29B1			SP-34DSL Rec36V AC Input - 1.5 Amp DC Io	3.75	2.40	2.10
817-8919	J29B8			SP-34ESL Rec36V AC Input - 8.4 Amp DC Io	15.25	9.70	8.20
817-8920	J29B04			SP-34FSL Rec36V AC Input - 0.4 Amp DC Io	2.50	1.70	1.40
817-8921	J29B5			SP-34GSL Rec36V AC Input - 4.8 Amp DC Io	4.00	2.50	2.12
817-8923	J58B1			SP-34HSL Rec72V AC Input - 1.5 Amp DC Io	7.75	4.90	4.15
817-8924	J58B5			SP-34JSL Rec72V AC Input - 4.8 Amp DC Io	22.00	14.61	11.80
817-8925	J58B8			SP-34KSL Rec72V AC Input - 8.4 Amp DC Io	30.75	20.41	16.40
817-8926	J116B04			SP-34LSL Rec144V AC Input - 0.4 Amp DC Io	9.50	6.00	5.15
817-8927	J116B1			SP-34MSL Rec144V AC Input - 1.5 Amp DC Io	14.00	8.90	7.50
817-8928	J116B5			SP-34NSL Rec144 AC Input - 4.8 Amp DC Io	42.00	27.88	22.40
817-8929	J116B8			SP-34PSL Rec144 AC Input - 8.4 Amp DC Io	58.75	39.01	31.40
817-8930	J135B04			SP-34RSL Rec180 AC Input - 1.5 Amp DC Io	17.25	10.80	9.10
817-8931	J135B04			SP-34SSL Rec180 AC Input - 0.4 Amp DC Io	11.75	7.70	6.20
817-8932	J135B5			SP-34TSL Rec180 AC Input - 4.8 Amp DC Io	51.75	32.70	27.50
817-8933	J135B8			SP-34USL Rec180 AC Input - 10.0 Amp DC Io	72.50	48.14	38.80
817-8934	J135B17			SP-34VSL Rec180 AC Input - 20.0 Amp DC Io	114.50	76.03	61.00
817-8935	J280025			SP-34WSL Rec360 AC Input - 1.0 Amp DC Io	112.50	90.00	75.00
817-8936	JD116K			SP-34XSL Rec165 VAC Input - 2 Amps DC	2.80	1.75	1.49
817-8937	JD117K			SP-34YSL Rec165 VAC Input - 3 Amps DC	3.75	2.34	2.00
817-8938	JD241K			SP-34ZSL Rec165 VAC Input - 6 Amps DC	5.70	3.35	3.04
817-8941	K505C			....SCRKit - 50-200 PRV - 1.5 - 9 Amp Io	10.63	9.54	7.95
817-8942	KSA1DAF			SP-98SL TPN26 V RMS Max Oper.- For Rect 60A Rated	2.63	1.74	1.12
817-8943	KSA20DBF			SP-98SL TPN520 V RMS Max Oper.- For Rect 60A Rated	12.33	5.80	5.20
817-8944	KSA2DAF			SP-98SL TPN52 V RMS Max Oper.- For Rect 60A Rated	3.15	2.07	1.33
817-8945	KSA3DAF			SP-98SL TPN78 V RMS Max Oper.- For Rect 60A Rated	3.65	2.42	1.55
817-8946	KSA4DAF			SP-98SL TPN104 V RMS Max Oper.- For Rect 60A Rated	4.18	2.77	1.76
817-8947	KSA5DAF			SP-98SL TPN130 V RMS Max Oper.- For Rect 60A Rated	4.68	3.10	1.98
817-8948	KSA6DAF			SP-98SL TPN156 V RMS Max Oper.- For Rect 60A Rated	5.18	2.44	2.19
817-8949	KSA7DAF			SP-98SL TPN178 V RMS Max Oper.- For Rect 60A Rated	5.70	2.68	2.41
817-8950	KSA8DAF			SP-98SL TPN208 V RMS Max Oper.- For Rect 60A Rated	6.20	2.92	2.62
817-8951	KSA9DAF			SP-98SL TPN234 V RMS Max Oper.- For Rect 60A Rated	6.70	3.16	2.84
817-8952	KSA10DAF			SP-98SL TPN260 V RMS Max Oper.- For Rect 60A Rated	7.23	3.40	3.05
817-8953	KSA11DAF			SP-98SL TPN286 V RMS Max Oper.- For Rect 60A Rated	7.75	3.64	3.27
817-8954	KSA12DBF			SP-98SL TPN316 V RMS Max Oper.- For Rect 60A Rated	7.50	3.88	3.48
817-8955	KSA14DBF			SP-98SL TPN364 V RMS Max Oper.- For Rect 60A Rated	9.25	4.36	3.91
817-8956	KSA16DBF			SP-98SL TPN416 V RMS Max Oper.- For Rect 60A Rated	10.30	4.84	4.34
817-8957	KSA18DBF			SP-98SL TPN468 V RMS Max Oper.- For Rect 60A Rated	11.30	5.32	4.77
817-8960	KSL2DAF			SP-98SL TPN52 V RMS Max Oper.- For Rect 250A Rated	5.75	3.60	2.71
817-8961	KSL5DAF			SP-98SL TPN130 V RMS Max Opr-for Rect 250A Rated	11.00	6.90	5.20
817-8962	KSL10DBF			SP-98SL TPN160 V RMS Max Opr-for Rect 250A Rated	19.88	12.40	9.35
817-8963	KSL19DBF			SP-98SL TPN494 V RMS Max Opr-for Rect 250A Rated	35.75	22.30	16.82
817-8964	KZ1DPF			SP-99SL TPN26 V RMS Max Opr-forRect 16A Rated	1.65	1.10	.70
817-8965	KZ2DPF			SP-99SL TPN52 V RMS Max Oper.- For Rect 16A Rated	1.85	1.23	.78
817-8966	KZ3DPF			SP-99SL TPN78 V RMS Max Oper.- For Rect 16A Rated	2.05	1.36	.87
817-8967	KZ4DPF			SP-99SL TPN104 V RMS Max Oper.- For Rec 16A Rated	2.25	1.50	.95
817-8968	KZ5DPF			SP-99SL TPN130 V RMS Max Oper.- For Rect 16A Rated	2.43	1.61	1.03
817-8969	KZ6DPF			SP-99SL TPN156 V RMS Max Oper.- For Rect 16A Rated	2.63	1.74	1.11
817-8970	KZ7DPF			SP-99SL TPN182 V RMS Max Oper.- For Rect 16A Rated	2.80	1.32	1.19
817-8971	KZ8DPF			SP-99SL TPN208 V RMS Max Oper.- For Rect 16A Rated	3.00	1.41	1.27
817-8972	KZ9DPF			SP-99SL TPN234 V RMS Max Oper.- For Rect 16A Rated	3.18	1.50	1.35

SEE PAGE 12 FOR INTEGRATED CIRCUITS

Stock No.	Type	Case	Material Function	Specifications	EACH 1-9	10-99	100-Up
817-8973	KZ10DPF	SP-99SL	TPN	260 V RMS Max Oper.- For Rect 16A Rated	3.38	1.59	1.43
779-5303	L2000M3	T0-5	Triac	120 V RMS Line 150 W - 3 ma Igt	2.06	1.72	1.25
779-5305	L2000M5	T0-5	Triac	120 V RMS Line 150 W - 5 ma Igt	1.90	1.58	1.05
779-5307	L2000M7	T0-5	Triac	120 V RMS Line 150 W - 10 ma Igt	1.69	1.41	.95
779-5343	L4000M3	T0-5	Triac	240 V RMS Line 300 W - 3 ma Igt	2.48	2.07	1.50
779-5345	L4000M5	T0-5	Triac	240 V RMS Line 300 W - 3 ma Igt	2.28	1.90	1.38
779-5347	L4000M7	T0-5	Triac	240 V RMS Line 300 W - 3 ma Igt	1.91	1.59	1.15
779-5349	L4000M9	T0-5	Triac	240 V RMS Line 300 W - 3 ma Igt	1.57	1.31	.95
953-8895	LS-600	SP-54	Sil Pho	D2-800 μa Li Cur - 5 μa Dark Cur	3.38	3.20	2.15
817-5974	M1B	SP-39B	SL REC	25 V RMS Max Input - 1200 ma DC Io	2.00	1.72	1.03
817-8975	M1H	SP-39A	SL REC	25 Volt RMS Max Input - 500 ma DC Io	1.73	.67	.56

Stock No.	Type	Case	Mat. Func.	Maximum Ratings Dissipation Watts	Col'tr To Base Volts	Col'tr Curr. mA	Beta H_{FE} @ Ic Max.- Min.	mA	f_T MHz	EACH 1-9	10-99	100-Up
555-5706	MPS706	T0-92	SN SH	.310	20	....	20-	10	200	.44	.44	.27
556-5706	MPS706A	T0-92	SN SH	.310	20	....	20-60	10	200	.62	.62	.39
555-5834	MPS834	T0-92	SN SH	.310	40	200	25-	10	350	.50	.50	.31
555-6329	MPS2369	T0-92	SN SH	.310	40	500	40/120	10	....	.50	.50	.31
555-7638	MPS3638	T0-92	SP GP	.625	25	500	30-	50	100	.39	.39	.24
556-7638	MPS3638A	92	SP GP	.625	25	500	100-	50	150	.60	.59	.39
555-7639	MPS3639	T0-92	SP SH	.200	6	80	30-20	10	....	.32	.32	.20
555-7640	MPS3640	T0-92	SP GP	.310	12	80	30-120	10	500	.43	.43	.29
555-7646	MPS3646	T0-92	SN SH	.200	40	200	30-120	30	....	.55	.52	.34
555-7693	MPS3693	T0-92	SN GP	.310	45	....	40-160	10	200	.45	.44	.29
555-7694	MPS3694	T0-92	SN GP	.310	45	200	100-400	10	200	.45	.44	.29
555-5812	MPS6512	T0-92	SN GP	.310	40	100	50-100	2	250	.52	.52	.33
555-5813	MPS6513	T0-92	SN GP	.310	40	100	90-180	2	250	.55	.55	.34
555-5815	MPS6515	T0-92	SN GP	.310	40	100	250-500	2	390	.62	.62	.39
555-5816	MPS6516	T0-92	SP GP	.310	40	100	50-100	2	200	.57	.57	.36
555-5817	MPS6517	T0-92	SP GP	.310	40	100	90-180	2	200	.59	.59	.37
555-5818	MPS6518	T0-92	SP GP	.310	40	100	150-300	2	340	.64	.64	.40
555-5819	MPS6519	T0-92	SP GP	.310	25	100	250-500	2	340	.71	.71	.45
555-5820	MPS6520	T0-92	SN LN	.310	40	100	200-400	2	480	.78	.78	.49
555-5821	MPS6521	T0-92	SN LN	.310	40	100	300-600	2	480	.86	.86	.53
555-5822	MPS6522	T0-92	SP LN	.310	25	100	200-400	2	420	.86	.86	.53
555-8523	MPS6523	T0-92	SP LN	.310	25	100	300-600	2	420	.93	.93	.58
555-8531	MPS6531	T0-92	SN GP	.310	60	600	60-120	10	390	.71	.71	.45
555-8532	MPS6532	T0-92	SP GP	.310	50	600	30-	100	390	.52	.52	.33
555-8533	MPS6533M	92	SP GP	.310	40	600	30-70	10	260	.66	.66	.41
555-8534	MPS6534M	92	SP GP	.310	40	600	60-110	10	260	.76	.76	.47
555-8535	MPS6535M	92	SP GP	.310	30	600	30-	100	260	.51	.51	.36
555-8560	MPS6560	T0-92	SN GP	.500	25	600	50-200	500	60	.48	.48	.31
555-8561	MPS6561	T0-92	SN GP	.500	20	600	50-200	350	60	.45	.45	.30
555-8562	MPS6562	T0-92	SP GP	.500	25	600	50-200	500	60	.54	.54	.34
555-8563	MPS6563	T0-92	SP GP	.500	20	600	50-200	350	60	.51	.51	.33
555-8565	MPS6565	T0-92	NP GP	.310	60	200	40-160	10	....	.50	.50	.31
555-8566	MPS6566	T0-92	NP GP	.310	60	200	100-400	10	....	.55	.55	.35
555-8571	MPS6571	T0-92	SN LN	.310	20	50	200-1000	.10	50	.57	.57	.36
555-9005	MPSA05	T0-92	SN GP	.500	60	500	....	50		.50	.50	.31
555-9006	MPSA06	T0-92	SN GP	.500	80	500	....	50		.57	.57	.36
555-4709	MPSA09	T0-92	SN LN	.310	50	50	100-600	.10	30	.52	.52	.33
555-4710	MPSA10	T0-92	SN GP	.300	40	100	40-100	5	50	.26	.26	.16
555-4712	MPSA12	T0-92	SN DA	.310	20	....	20K-	10	....	.64	.64	.40
555-4713	MPSA13	T0-92	SN DA	.500	30	300	10K-	100	125	.43	.43	.32
555-4714	MPSA14	T0-92	SN DA	.500	30	300	20K-	100	125	.50	.50	.31
555-4720	MPSA20	T0-92	SN GP	.300	100	100	40-400	5	125	.31	.31	.20
555-4765	MPSA65	T0-92	PN DA	.500	30	300	50K-	10	100	.55	.55	.34
555-4766	MPSA66	T0-92	PN DA	.500	30	300	75K-	10	100	.59	.59	.37
555-4907	MPSL07	T0-92	SP SH	.310	6	80	30-120	10	500	.41	.41	.25
555-4908	MPSL08	T0-92	SP SH	.310	6	80	30-120	10	700	.55	.55	.34

Stock No.	Type	Case	Mat. Func.	Maximum Ratings Peak Repetitive Volts	Forward Current Rm Amps	Required Gate Curr. mA	EACH 1-9	10-99	100-Up
779-4204	Q15	T0-5	Triac	200	2.3	3	2.14	1.78	1.30
779-4208	Q16	T0-5	Triac	400	2.3	3	2.79	2.30	1.63
779-4380	Q2000K	SP-112	Triac	200	1.2	25	1.16	.97	.65
779-4390	Q2000KS	SP-112	Triac	200	1.2	10	1.52	1.27	.85
779-4400	Q2001MS2	T0-5	Triac	200	2.3	10	1.90	1.59	1.06
779-4404	Q2001MT2	T0-5	Triac	200	2.3	Trig.	1.90	1.59	1.06
779-4420	Q2001P	T0-105	Triac	200	2.3	25	1.90	1.59	1.06
779-4424	Q2006G	SP-116	Triac	200	9.2	50	3.06	2.55	1.70
779-4426	Q2006H	SP-114	Triac	200	9.2	50	3.60	3.00	2.00
779-4428	Q2008G	SP-116	Triac	200	12.0	50	3.33	2.78	1.85
779-4430	Q2008H	SP-114	Triac	200	12.0	50	3.68	3.07	2.05
779-4432	Q2010G	SP-116	Triac	200	14.0	50	3.60	3.00	2.00
779-4434	Q2010H	SP-114	Triac	200	14.0	50	3.66	3.30	2.20
779-4436	Q2015G	SP-116	Triac	200	22.5	50	4.14	3.45	2.30
779-4438	Q2015H	SP-114	Triac	200	22.5	50	4.56	3.80	2.53
779-4440	Q2025C	SP-114	Triac	200	35.0	50	7.44	6.20	4.13
779-4452	Q2025D	SP-115	Triac	200	35.0	50	7.80	6.50	4.33
779-4456	Q2025G	SP-113	Triac	200	35.0	50	5.75	4.90	3.20
779-4458	Q2025H	SP-116	Triac	200	35.0	50	6.20	5.12	3.45
779-4461	Q2040G	SP-116	Triac	200	57.0	100	7.20	6.00	4.00

Stock No.	Type	Case	Mat. Func.	Maximum Ratings Peak Repetitive Volts	Forward Current Rm Amps	Required Gate Curr. mA	EACH 1-9	10-99	100-Up
779-4468	Q2040H	SP-116	Triac	200	57.0	100	7.65	6.38	4.25
779-4468	Q2040PFC	SP-116	Triac	200	57.0	100	9.52	7.95	5.30
779-4472	Q2040PFD	SP-115	Triac	200	57.0	100	9.90	8.25	5.50
779-4616	Q4000K	SP-113	Triac	400	1.2	25	1.25	1.04	.69
779-4618	Q4000KS	SP-112	Triac	400	1.2	10	1.61	1.34	.89
779-4620	Q4001MS2	SP-112	Triac	400	2.3	10	1.99	1.66	1.11
779-4628	Q4001MT2	SP-117	Triac	400	2.3	Trig.	1.99	1.66	1.11
779-4636	Q4001P	SP-117	Triac	400	2.3	25	1.99	1.66	1.11
779-4638	Q4006G	SP-118	Triac	400	9.2	50	3.78	3.15	2.10
779-4640	Q4006H	SP-118	Triac	400	9.2	50	4.32	3.60	2.40
779-4644	Q4008G	SP-118	Triac	400	12.0	50	4.05	3.38	2.25
779-4645	Q4008H	SP-116	Triac	400	12.0	50	4.50	3.75	2.50
779-4646	Q4010G	SP-118	Triac	400	14.0	50	4.32	3.60	2.40
779-4649	Q4010H	SP-116	Triac	400	14.0	50	4.78	3.98	2.65
779-4652	Q4015G	SP-118	Triac	400	22.5	50	4.86	4.05	2.70
779-4655	Q4015H	SP-116	Triac	400	22.5	50	6.35	4.45	2.97
779-4660	Q4025C		Triac	400	35.0	50	10.38	8.65	5.76
779-4668	Q4025D	SP-115	Triac	400	35.0	50	10.74	8.95	5.96
779-4669	Q4025G	SP-113	Triac	400	35.0	50	6.65	5.55	3.70
779-4670	Q4025H	SP-118	Triac	400	35.0	50	7.20	6.00	4.00
779-4671	Q4040G	SP-116	Triac	400	57.0	100	8.64	7.20	4.60
779-4673	Q4040H	SP-118	Triac	400	57.0	100	9.07	7.57	5.05
779-4672	Q4040PFC	SP-116	Triac	400	57.0	100	14.34	11.95	7.95
779-4680	Q4040PFD	SP-115	Triac	400	57.0	100	14.70	12.25	8.15
779-4720	Q025C	SP-113	Triac	600	35.0	50	12.54	10.45	6.07
779-4726	Q5025D	SP-115	Triac	600	35.0	50	12.90	10.75	7.17
779-4780	Q6040PFC	SP-115	Triac	600	57.0	100	19.74	16.45	10.95
779-4788	Q6040PFD	SP-113	Triac	600	57.0	100	20.10	16.75	11.15
779-4816	Q8016U	SP-101	Triac	440	6.6	100	14.00	11.70	7.80
779-4825	Q8025U	SP-101	Triac	440	11.0	100	16.70	13.80	9.18
779-4840	Q8040U	SP-101	Triac	440	17.6	100	26.40	22.00	14.70
779-5116	Q10016U	SP-101	Triac	440	6.6	100	18.00	15.00	10.00
779-5125	Q10025U	SP-101	Triac	440	11.0	100	27.00	22.50	15.00
779-5140	Q10040U	SP-101	Triac	440	17.6	100	36.00	30.00	20.00
779-5216	Q12016U	SP-101	Triac	550	8.8	100	25.10	21.00	14.00
779-5225	Q12025U	SP-101	Triac	550	13.8	100	36.00	30.00	20.35
779-5240	Q12040U	SP-101	Triac	550	22.0	100	46.80	39.00	26.00
551-7700	RF100	DO-34	SCD	.350 W Diss - 30 PIV-100 ma I_F @ 1 V			1.80	1.00	.90
551-7720	RF101	DO-34	SCD	.350 W Diss - 30 PIV-100 ma I_F @ 1.0 V			1.80	1.00	.90
551-7740	RF300	DO-34	SCD	.350 W Diss - 130 PIV-100 ma I_F @ 1.1			1.80	1.00	.90
551-7840	RF400	DO-34	SCD	.350 W Diss - 30 PIV-100 ma I_F @ 1.0 V			1.80	1.00	.90
551-7860	RF401	DO-34	SCD	.350 W Diss - 30 PIV-100 ma I_F @ 1.0 V			1.80	1.00	.90
916-4205	S-256	SP-99	SL TPN	130 V RMS MAX Input - .7A Max Dis			2.50	1.25	1.12
916-4252	S-490	SP-99	SL TPN	140 V RMS MAX Input - 2.5A Max Dis			1.80	.90	.81
779-2701	S0301JS1	T0-5	SCR	30	2.3	50	.84	.71	.47
779-2751	S0301K	SP-111	SCR	30	1.2	10	.59	.49	.33
779-2851	S0301KS2	SP-112	SCR	30	1.2	200	.72	.60	.40
779-3052	S0303LS1	SP-110	SCR	30	4.3	50	.85	.71	.47
779-3076	S0306LS2	SP-110	SCR	30	8.6	200	1.26	1.05	.70
779-3088	S0308LS2	SP-110	SCR	30	12.2	200	1.36	1.13	.75
779-3133	S0501JS1	SP-110	SCR	50	2.3	50	.92	.77	.51
779-2771	S0501K	SP-110	SCR	50	1.2	50	.74	.62	.41
779-2901	S0501KS2	SP-110	SCR	50	1.2	200	.74	.62	.43
779-3056	S0503LS1	SP-110	SCR	50	4.3	50	.92	.77	.51
779-2606	S0506H	SP-118	SCR	50	8.6	15	1.22	1.02	.68
779-3080	S0506LS2	SP-110	SCR	50	8.6	200	1.36	1.13	.75
779-2608	S0508H	SP-118	SCR	50	12.2	15	1.08	1.50	1.00
779-3092	S0508LS2	SP-110	SCR	50	12.2	200	1.44	1.20	.80
779-2610	S0510H	SP-118	SCR	50	14.3	50	2.07	1.73	1.15
779-2616	S0516H	SP-118	SCR	50	22.5	15	3.27	3.00	2.00
779-3136	S100JS1	SP-110	SCR	100	2.3	50	.96	.80	.53
779-2791	S101K	SP-110	SCR	100	1.2	10	.78	.66	.44
779-5402	S101KS2	SP-110	SCR	100	1.2	200	.83	.69	.46
779-3060	S103LS1	SP-110	SCR	100	4.3	50	.96	.80	.53
779-2656	S1006H	SP-116	SCR	100	8.6	15	1.36	1.14	.76
779-3084	S0106LS2	SP-110	SCR	100	8.6	200	1.44	1.20	.80
779-2658	S1008H	SP-116	SCR	100	12.2	15	2.05	1.71	1.14
779-3100	S1008LS2	SP-110	SCR	100	12.2	200	1.54	1.28	.85
779-2660	S1010H	SP-116	SCR	100	14.3	15	2.32	1.94	1.29
779-2666	S116H	SP-116	SCR	100	22.5	15	4.10	3.75	2.50
779-3116	S2001JSL	SP-110	SCR	200	2.3	50	1.18	.90	.60
779-2801	S2001K	SP-110	SCR	200	1.2	10	.84	.70	.47
779-5501	S2001KS2	SP-110	SCR	200	1.2	200	.88	.73	.49
779-3401	S2001M	SP-5	SCR	200	2.3	10	1.56	1.30	.87
779-3303	S2003L	SP-110	SCR	200	4.3	10	1.56	1.30	.87
779-3004	S2003LS1	SP-110	SCR	200	4.3	50	1.18	.90	.60
779-2686	S2006H	SP-116	SCR	200	8.6	15	1.52	1.27	.85
779-3020	S2006LS2	SP-110	SCR	200	8.6	200	1.62	1.35	.90
779-2688	S2008H	SP-116	SCR	200	12.2	15	2.30	1.91	1.27
779-3028	S2008LS2	SP-110	SCR	200	12.2	200	1.72	1.43	.95
779-2690	S2010H	SP-116	SCR	200	14.3	15	2.61	2.18	1.45
779-2696	S2016H	SP-116	SCR	200	22.5	15	4.90	4.50	3.00
779-3124	S4001JS	SP-110	SCR	400	2.3	50	1.80	1.50	1.00
779-4101	S4001K	SP-110	SCR	400	1.2	10	1.01	.84	.56
779-5201	S4001KS2	SP-110	SCR	400	1.2	200	1.25	1.04	.69
779-4301	S4001M	T0-5	SCR	400	2.3	10	1.68	1.40	.94
779-4203	S4003L	SP-110	SCR	400	4.3	10	1.68	1.40	.94
779-3012	S4003LS1	SP-110	SCR	400	4.3	50	1.80	1.50	1.00
779-4006	S4006H	SP-116	SCR	400	8.6	15	1.80	1.50	1.00
779-3024	S4006LS2	SP-110	SCR	400	8.6	200	2.16	1.80	1.20
779-4008	S4008H	SP-116	SCR	400	12.2	15	2.70	2.25	1.50
779-3032	S4008LS2	SP-110	SCR	400	12.2	200	2.26	1.88	1.25
779-4010	S4010H	SP-116	SCR	400	14.3	15	3.07	2.56	1.71
779-4016	S4016H	SP-116	SCR	400	22.5	15	6.12	5.62	3.75
779-4058	S-5130	SP-38	Tube Replacement For 866, 866A, 3B28				17.25	9.65	8.65
779-4064	S-5343	SP-38	Tube Replacement For 816, 836, 3B28, 3B28				14.88	8.33	7.44
779-4065	S-5991	SP-31	Tube Replacement For 5V4, 5Y3, etc.				5.75	4.50	4.00
779-4066	S-6121	SP-102	S Rec B	70 Volts RMS - 8.6 Amp			6.00	4.01	3.43
779-4067	S-6121-1	SP-102	S Rec B	140 Volts RMS - 8.6 Amp			6.30	4.21	3.60
779-4068	S-6121-2	SP-102	S Rec B	210 Volts RMS - 8.6 Amp			6.53	4.36	3.73
916-4269	S-6211	SP-100	S Rec B	140 Volts Rms Input 2 amp Io			3.18	2.12	1.82
916-4270	S-6211-1	SP-100	S Rec B	280 Volts Rms Input 2 amp Io			3.50	2.34	2.00

Stock No.	Type	Case	Mat. Func.	Maximum Ratings: Peak Repetitive Volts	Forward Current Rm Amps	Required Gate Curr. mA	EACH 1-9	10-99	100-Up
916-4300	S-6211-2	SP-100	S Rec B	420 Volts Rms Input 2 amp Io			3.83	2.56	2.19
916-4275	S-6230	SP-102	S Rec B	140 Volts Rms Input 2 amp Io			2.20	1.72	1.47
916-4277	S-6230-1	SP-102	S Rec B	280 Volts Rms Input 2 amp Io			2.65	2.13	1.77
916-4279	S-6230-2	SP-102	S Rec B	420 Volts Rms Input 2 amp Io			3.15	2.53	2.11
916-4281	S-6240	SP-103	S Rec B	140 Volts Rms Input 12 amp Io			5.63	4.52	3.76
916-4283	S-6240-1	SP-103	S Rec B	280 Volts Rms Input 12 amp Io			7.70	6.18	5.15
779-5816	S8016U	SP-101	SCR	440	6.6		8.10	6.75	4.51
779-5825	S8025U	SP-101	SCR	440	11.0		14.00	11.71	7.41
779-5835	S8035U	SP-101	SCR	440	17.6		18.70	15.61	10.41
779-5916	S10016U	SP-101	SCR	440	6.6		11.70	9.75	6.50
779-5925	S10025U	SP-101	SCR	440	11.0		19.70	16.43	10.95
779-5935	S10035U	SP-101	SCR	440	17.6		22.35	18.61	12.41
779-6016	S12016U	SP-101	SCR	550	8.3		15.30	12.75	8.50
779-6025	S12025U	SP-101	SCR	550	13.8		24.90	20.81	13.81
779-6035	S12035U	SP-101	SCR	550	22.0		29.70	24.81	16.56
916-4285	S-6240-2	SP-103	S Rec B	420 Volts Rms Input 12 amp Io			10.38	8.32	6.93
817-8978	SD-91	D0-3	S Rec B	70 Volts Rms Input 10 amp Io			.75	.64	.53
817-8979	SD-91A	D0-3	S Rec B	70 Volts Rms Input 15 amp Io			.83	.71	.59
817-8980	SD-92	D0-3	S Rec B	140 Volts Rms Input 10 amp Io			.90	.76	.63
817-8981	SD-92A	D0-3	S Rec B	140 Volts Rms Input 15 amp Io			.98	.82	.68
817-8982	SD-93	D0-3	S Rec B	210 Volts Rms Input 10 amp Io			1.10	.88	.73
817-8983	SD-93A	D0-3	S Rec B	210 Volts Rms Input 15 amp Io			1.20	1.03	.86
817-8984	SD-94	D0-3	S Rec B	280 Volts Rms Input 10 amp Io			1.28	1.07	.89
817-8985	SD-94A	D0-3	S Rec B	280 Volts Rms Input 15 amp Io			1.35	1.15	.96
817-8986	SD-95	D0-3	S Rec B	350 Volts Rms Input 10 amp Io			1.43	1.19	.99
817-8987	SD-95A	D0-3	S Rec B	350 Volts Rms Input 15 amp Io			1.50	1.27	1.06

Stock No.	Type	Case	Mat. Func.	Maximum Ratings: Dissipation Watts	Col't'r To Base Volts	Col't'r Curr. mA	Beta H_{FE} @ Ic Max.-Min.	mA	f_T MHz	EACH 1-9	10-99	100-Up
898-8801	SK-3003	T0-1	GP AA	.150	20	70	90 typ	....	1	1.65	1.65	.99
898-8002	SK-3004	T0-1	GP AA	.165	35	100	90 typ	....	1	1.90	1.90	1.14
898-8003	SK-3005	T0-1	GP AR	.200	40	5	165	....	1	1.95	1.95	1.17
898-8004	SK-3006	T0-7	GP AR	.08	30	10	100	....	118	2.35	2.35	1.41
898-8005	SK-3007	T0-7	GP AR	.08	24	10	120	....	30	2.10	2.10	1.26
898-8006	SK-3008	T0-1	GP AR	.08	34	10	150	....	1	2.05	2.05	1.23
898-8007	SK-3009	T0-3	GP AA	30C	60	10A	90	....	.450	3.25	2.34	3.90
898-8008	SK-3010	T0-1	GN AA	.100	25	100	120	....	2	2.10	2.10	1.26
898-8009	SK-3011	T0-5	GN AR	.120	25	200	20	....	3	2.70	2.70	1.62
898-8010	SK-3012	T0-36	GP AA	150C	50	15A	50	....	.100	7.95	7.95	4.77
898-8011	SK-3013	T0-3	GP MP	Matched Pair of SK 3009						7.80	7.80	4.68
898-8012	SK-3014	T0-3	GP AP	12.5C	75	5A	150 typ	....	4	5.25	5.25	3.15
898-8013	SK-3015	T0-3	GP MP	Matched Pair of SK 3014						10.50	10.50	6.30
898-8014	SK-3016	D0-1	S Rect	500 PRV - 1 Amp Io						.90	.90	.57
898-8015	SK-3017A	SP-58	S Rect	600 PRV - 1 Amp Io						.95	.95	.60
898-8016	SK-3018	T0-104	SN AR	.180	45	50	130 typ	....	120	2.25	2.25	1.35
898-8017	SK-3019	T0-104	SN AU	.180	45	50	130 typ	....	1.2 GHz	2.45	2.45	1.47
898-8018	SK-3020	T0-104	SN AA	.500	30	300	175 typ	....	175	2.20	2.20	1.32
898-8019	SK-3021	T0-66	SN AP	35C	500	2A	105 typ	....	20	3.15	3.15	1.95
898-8020	SK-3022	T0-100		Int Ckt Soun IF Amplifier						6.60	6.60	3.95
898-8021	SK-3023	T0-100		Int Ckt Soun IF Amplifier Formed Leads						6.60	6.60	3.96
898-8022	SK-3024	T0-5	SN AP	5C	120	1A	100	....	150	3.30	3.30	1.98
898-8023	SK-3025	T0-5	SP AP	7C	90	1A	100	....	100	4.50	4.50	2.70
898-8024	SK-3026	T0-66	SN AP	29C	70	4A	70	....	1	3.00	3.00	1.80
898-8025	SK-3027	T0-3	SN AP	115C	90	15A	60	....	1	5.25	5.25	3.15
898-8026	SK-3028	T0-66	SN MP	29C	70	4A	70	....	1	6.00	6.00	3.60
898-8027	SK-3029	T0-3	SN MP	115C	90	15A	60	....	1	10.50	10.50	6.30
898-8028	SK-3030	SP-58	S Rect	200 PRV-1 Amp I_F						.70	.70	.42
898-8029	SK-3031	SP-58	SRect	400 PRV - 1 Amp Io			.70		.70.42			
898-8030	SK-3032	SP-58	S Rect	800 PRV - 1 Amp Io						1.02	1.02	.61
898-8031	SK-3033	D0-1	S Rect	1000 PRV - 1 Amp Io						1.35	1.35	.81
898-8032	SK-3034	T0-3	GP AP	10C	200	10A	35 typ	....	2.5	7.50	7.50	4.50
898-8033	SK-3035	T0-3	GP AP	5C	320	10A	25 typ	....	2.5	9.15	9.15	5.49
898-8034	SK-3036	T0-3	SN AP	150C	150	30A	100 typ	....	1.5	9.75	9.75	5.85
898-8035	SK-3037	T0-3	SN MP	150C	150	30A	100 typ	....	1.5	19.50	19.50	11.70
898-8036	SK-3038	T0-104	SN LN SN	.300	30	300	175 typ	....	175	2.40	2.40	1.44
898-8037	SK-3039	T0-18	SN AU	.300	20	40	60 typ	....	1.2 G	3.30	3.30	1.98
898-8038	SK-3040	T0-104	SN AV	1	120	50	50 typ	....	100	3.75	3.75	2.25
898-8039	SK-3041	SP-96	SN AP	50C	35	7A	100 typ	....	2	4.20	4.20	2.52
817-8988	ST-14C	SP-15	S Rect	Tube Replacement 544, 5Y3, 5T4, 5W4						7.00	5.04	4.20
925-6900	TD-100	T0-77	SN AD	H_{FE1}/H_{FE2} 10% 60 120 .1						2.25	2.25	1.50
925-6902	TD-101	T0-77	SN AD	H_{FE1}/H_{FE2} 10% 60 120 .1						1.75	1.50	1.00
925-6903	TD-102	T0-77	SN DT	Dual 60						1.63	1.35	.90
925-6920	TD-400	T0-77	SP AD	H_{FE1}/H_{FE2} 10% 40 120 .1						3.38	3.00	2.00
925-6921	TD-401	T0-77	SP AD	H_{FE1}/H_{FE2} 10% 40 120 .1						2.38	1.95	1.30
925-6924	TD-402	T0-77	SP DT	Dual 40						2.13	1.80	1.20
925-6935	TD-600	T0-77	....	Comp. pair H_{FE1}/H_{FE2} 10% - Voff 2 mv						3.13	2.70	1.80
925-6936	TD-601	T0-77	....	Comp. pair H_{FE1}/H_{FE2} 10% - Voff 2 mv						1.88	1.65	1.10
925-6937	TD-602	T0-77	% DT	Dual 40 One Each NPN - PNP						1.75	1.50	1.00
925-6980	TD-2219	T0-77	S DT	Dual 60 One Each NPN - PNP						2.62	2.25	1.50
925-6990	TD-2905	T0-77	S DT	Dual 60 One Each NPN - PNP						2.88	2.55	1.70
853-8900	TI-40A0	to-64	SCR	50 VRM -5 amp Av. Io - 25 ma I_{GT}						2.65	2.04	1.70
853-8901	TI-40A1	T0-64	SCR	100 VRM - 5 Amp Av. Io - 25 ma I_{GT}						2.88	2.22	1.85
853-8902	TI-40A2	T0-64	SCR	200 VRM - 5 Amp Av. Io - 25 ma I_{GT}						3.43	2.46	2.05
853-8903	TI-40A3	T0-64	SCR	300 VRM - 5 Amp Av. Io - 25 ma I_{GT}						5.50	4.38	3.65
853-8904	TI-40A4	T0-64	SCR	400 VRM - 5 Amp Av. Io - 25 ma I_{GT}						8.00	6.60	5.50
853-8905	TI-42	D0-7		S Trig Diode 100 mw Diss. 32 4 Volt V_{BR}						1.05	1.05	.87
853-9155	TI-43	D0-7		S Trig Diode 100 mw Diss. 32 4 Volt V_{BR}						1.23	1.23	1.02
953-9165	TI-51	D0-7	SD GP	.400 w Diss. - 10 V_R max - 200 ma @ $1V_F$						.39	.39	.26
953-9170	TI-52	D0-7	SD GP	.400 w Diss. - 20 V_R max - 200 ma @ $1V_F$						.39	.39	.26
953-9175	TI-53	D0-7	SD GP	.400 w Diss. - 30 V_R max - 200 ma @ $1V_F$						.39	.39	.26
953-9180	TI-54	D0-7	SD GP	.400 w Diss. - 40 V_R max - 200 ma @ $1V_F$						.39	.39	.26
953-9185	TI-55	D0-7	SD GP	.400 w Diss. - 60 V_R max - 200 ma @ $1V_F$						.39	.39	.26
953-9190	TI-56	D0-7	SD GP	.400 w Diss. - 100 V_R max - 400 ma @ $1V_F$						.65	.65	.40
953-9195	TI-57	D0-7	SD GP	.400 w Diss. - 150 V_R max - 400 ma @ $1V_F$						.73	.73	.46
953-9200	TI-59	D0-7	SD GP	.400 w Diss. - 200 V_R max - 499 ma @ $1V_F$						.90	.90	.60
953-9225	TI-145 A0	T0-5	SCR	50 VRM - .56 Amp Av Io - 25 ma I_{GT}						2.48	1.65	1.10
953-9230	TI-145 A2	T0-5	SCR	200 VRM - .56 Amp Av Io - 25 ma I_{GT}						3.05	2.10	1.40

Stock No.	Type	Case	Mat. Func.	Maximum Ratings: Dissipation Watts	Col't'r To Base Volts	Col't'r Curr. mA	Beta H_{FE} @ Ic Max.-Min.	mA	f_T MHz	EACH 1-9	10-99	100-Up
953-9235	TI-145 A4	T0-11	SN GP	400 VRM - .56 Amp Io - 25 ma I_{GT}						7.88	5.25	3.50
953-9245	TI-480	T0-11	SN GP	.600	50	....	9-36	....	....	2.15	1.55	1.20
953-9247	TI-481	T0-5	SN GP	.600	80	....	9-36	....	....	2.58	1.90	1.45
953-9250	TI-482	T0-5	SN GP	.600	20	....	20	....	....	5.70	5.70	3.78
953-9255	TI-483	T0-5	SN GP	.600	40	....	20-60	....	....	6.35	6.35	4.23
953-9260	TI-484	T0-5	SN GP	.600	40	....	4-120	....	....	7.75	7.75	5.16
953-9565	TI-486	T0-5	SN GP	1.0	60	1A	20-80	200	....	7.30	4.90	3.25
953-9270	TI-487	SP-62	SN GP	2.0	60	1A	20-80	200	....	8.43	5.60	3.75
953-9275	TI-492	T0-5	SN GP	.200	15		80-200	....	....	2.20	1.55	1.20
953-9280	TI-493	T0-5	SN GP	.200	30	....	80-200	....	....	2.20	1.90	1.45
953-9285	TI-494	T0-5	SN GP	.200	45	....	80-200	....	....	2.67	2.50	1.90
953-9290	TI-495	T0-5	SN GP	.150	40	....	15-45	....	....	3.00	3.00	2.30
953-9295	TI-496	T0-11	SN GP	.600	70	....	10	....	....	2.35	1.75	1.35
953-9300	TI-550	D0-7	SRTD	200 PIV - 100 ma @ 1.1 V_F						14.25	8.60	6.50
953-9305	TI-551	D0-7	SRTD	290 PIV - 200 ma @ 1.2 V_F						16.50	9.60	4.50
953-9310	TI-1121	T0-53	SN AP	80C	50	7.5A	30-120	2A	....	27.00	18.00	12.00
953-9315	TI-1122	T0-53	SN AP	80C	50	7.5A	15-60	2A	....	24.40	16.30	10.85
953-9320	TI-1124	T0-53	SN AP	80C	50	7.5A	15-60	2A	....	19.00	12.70	8.45
953-9325	TI-1134	T0-61	SN AP	80C	50	7.5A	15-60	2A	....	19.85	13.05	8.70
953-9330	TI-1144	T0-53	SN AP	80C	50	7.5A	20-80	5A	....	33.30	22.02	14.80
953-9335	TI-1143	T0-53	SN AP	80C	50	7.5A	10-40	5A	....	29.93	19.95	13.30
953-9346	TI-1144	T0-53	SN AP	80C	50	7.5A	20-80	5A	....	26.10	17.40	11.60
953-9347	TI-1145	T0-53	SN AP	80C	50	7.5A	10-40	5A	....	22.28	14.85	9.90
953-9356	TI-1151	T0-61	SN AP	80C	50	7.5A	20-80	5A	....	34.43	22.95	15.30
953-9357	TI-1152	T0-61	SN AP	80C	50	7.5A	10-40	5A	....	31.73	21.15	14.10
953-9359	TI-1154	T0-61	SN AP	80C	50	7.5A	10-40	5A	....	27.23	18.15	12.10
953-9361	TI-1156	T0-61	SN AP	80C	50	7.5A	10-40	5A	....	20.25	13.50	9.00
953-9365	TI-3027	T0-3	GP AP	150C	45	7A	40-250	3A	....	1.33	.80	.72
953-9366	TI-3028	T0-3	GP AP	106C	60	7A	40-250	3A	....	1.43	1.43	.95
953-9375	TIC44	SP-104	SCR	30 PRV - .6 Amp Io - .2 ma I_{GT}						1.15	.83	.45
953-9376	TIC45	SP-104	SCR	60 PRV - .6 Amp Io - .2 ma I_{GT}						1.25	.83	.55
953-9377	TIC47	SP-104	SCR	200 PRV - .6 Amp Io - .2 ma I_{GT}						1.93	1.09	.85
953-9340	TID32	D0-35	SCD	75 V_R max - 10 n sec T_{RR} - 200 ma @ 1 V_F						2.30	2.30	1.09
953-9341	TID33	D0-35	SCD	50 V_R max - 10 n sec T_{RR} - 200 ma @ 1 V_F						2.30	2.30	1.09
953-9342	TID34	D0-35	SCD	75 V_R max - 10 n sec T_{RR} - 150 ma @ 1 V_F						2.30	2.30	1.09
953-9343	TID35	D0-35	SCD	50 V_R max - 10 n sec T_{RR} - 150 ma @ 1 V_F						2.30	2.30	1.09
953-9344	TID36	D0-35	SCD	75 V_R max - 10 n sec T_{RR} - 100 ma @ 1 V_F						2.30	2.30	1.09
953-9345	TID37	D0-35	SCD	50 V_R max - 6 n sec T_{RR} - 100 ma @ 1 V_F						1.45	1.45	.84
953-9348	TID40	D0-7	SCD	250 V_R max - 30 n sec T_{RR} - 50 ma @ 1 V_F						2.32	2.32	1.74
953-9349	TID41	D0-7	SCD	200 V_R max - 30 n sec T_{RR} - 100 ma @ 1 V_F						2.10	2.10	1.58
953-9350	TID42	D0-7	SCD	150 V_R max - 30 n sec T_{RR} - 100 ma @ 1 V_F						2.20	2.56	.55
953-9352	TID44	SP-105	SCD	100 V_R max - 30 n sec T_{RR} - 200 ma @ 1 V_F						2.56	2.56	1.92
953-9361	TIL63	SP-105		Sil Photo Diode - .3 ma Li Cur - .5 ua Dark Cur						1.08	1.00	.67
953-9461	TIL64	SP-105		Sil Photo Diode - 50 mw Diss - .4 ma Lt - 25 na Dark						1.23	1.16	.78
953-9462	TIL65	SP-105		Sil Photo Diode - 50 mw Diss - 1 ma Lt - 25 na Dark						1.25	1.18	.79
953-9463	TIL66	SP-105		Sil Photo Diode - 50 mw Diss - 2.5 ma Lt - 25 na Dark						1.30	1.26	.84
953-9464	TIL67	SP-105		Sil Photo Diode - 50 mw Diss - 6 ma Lt - 25 na Dark						1.53	1.50	1.00
953-9490	TIL601	SP-106		Sil Photo Diode - 50 mw Diss - .5 ma Lt - 25 na Dark						3.75	3.52	2.36
953-9491	TIL602	SP-106		Sil Photo Diode - 50 mw Diss - 2 ma Lt - 25 na Dark						3.88	3.70	2.48
953-9492	TIL603	SP-106		Sil Photo Diode - 50 mw Diss - 4 ma Lt - 25 na Dark						4.13	3.80	2.60
953-9493	TIL604	SP-106		Sil photo Diode - 50 mw Diss - 7 ma Lt - 25 na Dark						4.38	4.10	2.75
953-9494	TIL605	SP-107		Sil Photo Diode - 50 mw Diss - .5 ma Lt - 25 na Dark						3.88	3.70	2.48
953-9495	TIL606	SP-107		Sil Photo Diode - 50 mw Diss - 2 ma Lt - 25 na Dark						4.25	3.97	2.66
953-9496	TIL607	SP-107		Sil Photo Diode - 50 mw Diss - 4 ma Lt - 25 na Dark						4.50	4.15	2.77
953-9497	TIL608	SP-107		Sil Photo Diode - 50 mw Diss - 7 ma Lt - 25 na Dark						4.50	4.36	2.92
953-9498	TIL609	SP-108		Sil Photo Diode - 50 mw Diss - .5 ma Lt - 25 na Dark						3.75	3.52	2.36
953-9499	TIL610	SP-108		Sil Photo Diode - 50 mw Diss - 2 ma Lt - 25 na Dark						3.88	3.70	2.48
953-9500	TIL611	SP-108		Sil Photo Diode - 50 mw Diss - 4 ma Lt - 25 na Dark						4.13	3.88	2.60
953-9501	TIL612	SP-108		Sil Photo Diode - 50 mw Diss - 7 ma Lt - 25ma Dark						4.38	4.10	2.75
953-9502	TIL613	SP-109		Sil Photo Diode - 50 mw Diss. - .5 ma Lt - 25ma Dark						3.88	3.70	2.48
953-9503	TIL614	SP-109		Sil Photo Diode - 50 mw Diss. - 2 ma Lt - 25ma Dark						4.25	3.77	2.66
953-9504	TIL615	SP-109		Sil Photo Diode - 50 mw Diss. - 4 ma Lt - 25ma Dark						4.50	4.13	2.77
953-9505	TIL616	SP-109		Sil Photo Diode - 50 mw Diss. - 7 ma Lt - 25ma Dark						4.50	4.36	2.92
953-9565	TIS14	T0-72	SN FE	30 V_{GT}- .5/15 ma I_{DSS}- 1K/7.5 umho Y_{FS}						4.28	2.50	1.90
953-9576	TIS26	T0-78	SN FED	50 V_{GT}Dual Match Y_{FS} 10%						8.00	7.10	5.90
953-9577	TIS27	T0-78	SN FED	50 V_{GT}Dual Match Y_F 10%						6.13	5.50	4.60
953-9587	TIS37	T0-92	SP GP	.360	.32	50	45	....	180	.45	.38	.34
953-9588	TIS38	T0-92	SP GP	.360	.32	50	25	....	140	.40	.35	.31
953-9594	TIS43	T0-92	S UJ		.90	.76	.66					
953-9610	TIS58	T0-99	N FE	25 V_{GT}- 2.5/8 ma I_{DSS}-1.3k/4kumho Y_F						.70	.62	.53
953-9611	TIS59	T0-99	SN FE	25 V_{GT}- 6/25 MA I_{DSS}- 2.3k/5kumho Y_F						.68	.61	.53
953-9626	TIS23	SP-104	SN FE	30 V_{GT} - 25 ohm Vds(on) - 2 ma I_D(off)						1.85	1.76	1.54
953-9628	TIS74	SP-104	SN FE	30 V_{GT} - 40 ohm Vds(on) - 2 ma I_D(off)						1.54	1.54	1.34
953-9630	TIS75	SP-104	SN FE	30 V_{GT} - 60 ohm Vds(on) - 2 ma I_D(off)						1.60	1.60	1.40
953-9634	TIS78	SP-104	SN FE	25 V_{GT} - 2/10 ma I_{DSS}-750/3Kumho Y_F						1.75	1.54	1.34
953-9636	TIS79	SP-104	SN FE	25 V_{GT} - 2/10 ma I_{DSS}- 750/3Kumho Y_F						1.38	1.20	1.05
953-9471	TIL102	T0-99		Optically Coupled Insolator 1012 ohms on 2.5 ma						10.63	10.00	6.70
953-9472	TIL103	T0-99		Optically Coupled Insolator 1012 ohms on 10.0 ma						13.00	12.00	10.00
953-9489	TIL209	....		Discrete Visible Emitter - 200 ma @ 2V						1.13	.85	.49
925-7001	TN53	T0-5	SN PE	Pd(W) 0.8 BV 75 Io 50 ma fT 100 MHz						1.13	.85	.57
925-7007	TN59	T0-5	)SN PE	PD(W) 0.8 BV 40 Io 100 ma fT 100 MHz						.88	.65	.45
925-7008	TN60	T0-18	SN PE	Pd(W) 0.5 BV 40 Io 100 ma fT 100 MHz						.88	.65	.45
925-7009	TN61	T0-5	SN PE	Pd(W) 0.8 BV 40 Io 50 ma fT 100 MHz						.75	.60	.40
925-7019	TP3638	T0-105		LGE Signal Amp V_{BR}25 h_{FE}30/-						.42	.42	.28
925-7020	TP 3638A	T0-105		Lege signal Amp V_{BR}ik h_{FE}100/-						.45	.45	.30
925-7034	TQ59	T0-5	SN PE	Pd(W) 3 V .2 h_{FE} 100/-						1.38	.99	.68
925-7046	TQ59	T0-98		Small Sig. Amp V_{BR} 30 h_{FE} 100/500						.42	.42	.28

Stock No.	Type	Case	Material Function	Max. Peak Reverse Voltage	Reverse Current mA	Operating Current Io Amps	EACH 1-9	10-99	100-Up
925-7047	TZ82	T0-98	SN GP	30 V_{BR} - 40/500 H_{FE}			.38	.38	.25
925-7048	TZ581	T0-98	SN GP	30 V_{BR} - 100/500 H_{FE}			.51	.51	.34
925-7049	TZ582	T0-98	SN GP	30 V_{BR} - 40/500 H_{FE}			.45	.45	.30
817-8990	US16HFP	SP-74	S Rect	1000 PRV - 2ma Io			1.10	.99	.82
817-8991	US24HFP	SP-74	S Rect	1500 PRV - 2ma Io			1.23	1.11	.92
817-8992	US48HFP	SP-74	S Rect	3000 PRV - 2ma Io			1.50	1.37	1.14
817-8993	US79HFP	SP-74D	S Rect	5000 PRV - 2ma Io			1.93	1.74	1.45
817-8994	US126HFP	SP-74F	S Rect	8000 PRV - 2ma Io			2.38	2.14	1.78
817-8995	US158HFB	SP-74H	S Rect	10K PRV - 2ma Io			2.53	2.26	1.88

SEE PAGE 12 FOR INTEGRATED CIRCUITS

Stock No.	Type	Case	Material Function	Max. Peak Reverse Voltage	Reverse Current mA	Operating Current Io Amps	EACH 1-9	10-99	100-Up
817-8996	US237HFP	SP-74L	S Rect	15K PRV - 2ma Io			3.05	2.75	2.32
817-8997	US315HFP	SP-74P	S Rect	20K PRV - 2ma Io			3.78	3.43	2.86
817-8998	US473HFP	SP-74X	S Rect	30K PRV - 2ma Io			5.50	4.97	4.14
976-1400	VB10	SP-119	S Rec	1K	100	2.30	1.41	1.07	79
976-1401	VB10X	SP-119	S Rec	1K	....	50	3.07	1.88	1.43
976-1402	VB15	SP-119	S Rec	1.5K	....	100	2.45	2.01	1.53
976-1403	VB15X	SP-119	S Rec	1.5K	....	50	3.27	2.01	1.53
976-1404	VB20	SP-119	S Rec	2K	....	100	2.60	1.59	1.20
976-1405	VB20X	SP-119	S Rec	2K	....	50	3.47	2.12	1.60
976-1406	VB25	SP-119	S Rec	2.5K	....	100	2.80	1.72	1.30
976-1407	VB25X	SP-119	S Rec	2.5K	....	25	3.72	2.30	1.73
976-1408	VB30	SP-119	S Rec	3K	....	50	3.05	1.88	1.42
976-1409	VB30X	SP-119	S Rec	3K	....	25	4.07	2.50	1.90
976-1410	VB40	SP-119	S Rec	4K	....	50	3.32	2.05	1.56
976-1411	VB40X	SP-119	S Rec	4K	....	25	4.42	2.74	2.08
976-1412	VB50	SP-119	S Rec	5K	....	50	3.90	2.40	1.82
976-1413	VB50X	SP-119	S Rec	5K	....	25	5.20	3.20	2.42
976-1414	VB60	SP-119	S Rec	6K	....	50	4.25	2.62	1.99
976-1500	VC20	SP-120	S Rect	2K	....	2	7.00	5.20	4.00
976-1510	VC30	SP-120	S Rect	3K	....	2	7.42	5.51	4.25
976-1520	VC40	SP-120	S Rect	4K	....	2	7.87	5.85	4.50
976-1530	VC50	SP-120	S Rect	5K	....	1.5	8.30	6.18	4.75
976-1540	VC60	SP-120	S Rect	6K	....	1.5	8.75	6.50	5.00
976-1550	VC70	SP-120	S Rect	7K	....	1.5	9.17	6.82	5.25
976-1560	VC80	SP-120	S Rect	8K	....	1	9.62	7.15	5.50
976-2010	VE18	SP-121	S Rec B	100	....	....	1.57	1.00	.90
976-2019	VE27	SP-121	S Rec B	200	....	....	1.92	1.20	1.10
976-2020	VE28	SP-121	S Rec B	200	....	....	1.75	1.10	1.00
976-2042	VE47	SP-121	S Rec B	400	....	....	2.10	1.30	1.20
976-2050	VE48	SP-121	S Rec B	400	....	....	1.92	1.20	1.10
976-2074	VE67	SP-121	S Rec B	600	....	....	2.52	1.59	1.45
976-2090	VE68	SP-121	S Rec B	600	....	....	2.35	1.49	1.35
976-2600	VF5-5	SP-122a	S Rec	5	....	5	2.37	1.60	1.36
976-2605	VF5-5X	SP-122a	S Rec FX	5	....	5	2.62	1.77	1.50
976-2610	VF5-7	SP-122a	S Rec	7	....	5	2.52	1.71	1.45
976-2615	VF5-7X	SP-122a	S Rec	7	....	5	2.80	1.89	1.60
976-2620	VF5-10	SP-122a	S Rec	10	....	5	2.90	1.96	1.66
976-2625	VF5-10X	SP-122a	S Rec	10	....	5	3.20	2.16	1.83
976-2630	VF5-12	SP-122a	S Rec	12	....	5	3.30	2.22	1.88
976-2635	VF5-12X	SP-122a	S Rec	12	....	5	3.62	2.44	2.07
976-2640	VF5-15	SP-122a	S Rec	15	....	5	3.40	2.30	1.95
976-2645	VF5-15X	SP-122a	S Rec	15	....	5	3.75	2.54	2.15
976-2650	VF5-20	SP-122a	S Rec	20	....	5	4.40	2.97	2.52
976-2655	VF5-20X	SP-122a	S Rec	20	....	5	4.85	3.27	2.77
976-2660	VF5-25	SP-122a	S Rec	25	....	5	5.50	3.72	3.15
976-2665	VF5-25X	SP-122a	S Rec	25	....	5	6.07	4.09	3.47
976-2670	VF5-30	SP-122a	S Rec	30	....	5	6.62	4.46	3.78
976-2675	VF5-30X	SP-122a	S Rec	30	....	5	7.27	4.91	4.16
976-2680	VF5-40	SP-122a	S Rec	40	....	5	8.82	5.95	5.04
976-2685	VF5-40X	SP-122a	S Rec	40	....	5	9.70	6.54	5.54
976-2686	VF105	SP-122b	S Rec	5	....	10	2.62	1.77	1.50
976-2687	VF105X	SP-122b	S Rec	5	....	10	2.87	1.95	1.65
976-2688	VF107	SP-122b	S Rec	7	....	10	2.80	1.89	1.60
976-2689	VF107X	SP-122b	S Rec	7	....	10	3.07	2.08	1.76
976-2690	VF110	SP-122b	S Rec	10	....	10	3.20	2.16	1.83
976-2691	VF110X	SP-122b	S Rec	10	....	10	3.52	2.38	2.02
976-2692	VF112	SP-122b	S Rec	12	....	10	3.62	2.44	2.07
976-2693	VF112X	SP-122b	S Rec	12	....	10	3.97	2.68	2.27
976-2694	VF115	SP-122b	S Rec	15	....	10	3.75	2.54	2.15
976-2695	VF115X	SP-122b	S Rec	15	....	10	4.15	2.80	2.37
976-2696	VF120	SP-122b	S Rec	20	....	10	4.85	3.27	2.77
976-2697	VF120X	SP122b	S Rec	20	....	10	5.32	3.60	3.05
976-2698	VF125	SP-122b	S Rec	25	....	10	6.07	4.09	3.47
976-2699	VF125X	SP122b	S Rec	25	....	10	6.67	4.51	3.82
976-2700	VF130	SP-122b	S Rec	30	....	10	7.27	4.91	4.16
976-2701	VF130X	SP-122b	S Rec	30	....	10	8.00	5.39	4.57
976-2702	VF140	SP-122b	S Rec	40	....	10	9.70	6.54	5.54
976-2703	VF140X	SP-122b	S Rec	40	....	10	10.67	7.20	6.10
976-2704	VF25-5	SP-122c	S Rec	5	....	25	2.87	1.95	1.65
976-2705	VF25-5X	SP-122c	S Rec	5	....	25	3.17	2.14	1.81
976-2706	VF25-7	SP-122c	S Rec	7	....	25	3.07	2.08	1.76
976-2707	VF25-7X	SP-122c	S Rec	7	....	25	3.40	2.29	1.94
976-2708	VF25-10	SP-122c	S Rec	10	....	25	3.52	2.38	2.02
976-2709	VF25-10X	SP-122c	S Rec	10	....	25	3.87	2.62	2.22
976-2710	VF25-12	SP-122c	S Rec	12	....	25	3.97	2.68	2.27
976-2711	VF25-12X	SP-122c	S Rec	12	....	25	4.35	2.94	2.49
976-2712	VF25-15	SP-122c	S Rec	15	....	25	4.15	2.80	2.37
976-2713	VF25-15X	SP-122c	S Rec	15	....	25	4.57	3.08	2.61
976-2714	VF25-20	SP-122c	S Rec	20	....	25	5.32	3.60	3.06
976-2715	VF25-20X	SP-122c	S Rec	20	....	25	4.12	3.95	3.35
976-2716	VF25-25	SP-122c	S Rec	25	....	25	6.67	4.51	3.83
976-2717	VF25-25X	SP-122c	S Rec	25	....	25	7.35	4.96	4.20
976-2718	VF25-30	SP-122c	S Rec	30	....	25	8.00	7.20	4.57
976-2719	VF25-30X	SP-122c	S Rec	30	....	25	8.80	5.94	5.03
976-2720	VF25-40	SP-122c	S Rec	40	....	25	10.67	7.20	6.10
976-2721	VF25-40X	122c	S Rec	40	....	25	11.72	7.91	6.70
976-2850	VH148	SP-123	S Rec B	100	....	6 Amp	2.77	1.93	1.58
976-2852	VH247	SP-123	S Rec B	200	....	6 Amp	3.22	2.25	1.85
976-2853	VH248	SP-123	S Rec B	200	....	6 Amp	3.05	2.15	1.75
976-2854	VH447	SP-123	S Rec B	400	....	6 Amp	3.72	2.59	2.13
976-2856	VH448	SP-123	S Rec B	400	....	6 Amp	3.55	2.49	2.03
976-2858	VH647	SP-123	S Rec B	600	....	6 Amp	4.27	2.98	2.45
976-2860	VH648	SP-123	S Rec B	600	....	6 Amp	3.50	2.88	2.35
976-3049	VR100X/F	SP-123	S Rec B	100	....	10 Amp	10.00	6.30	5.05
976-3050	VR100X2 S/F	SP-123	S Rec B	100	....	10 Amp	10.50	6.70	5.35
976-3051	VR100X2 T/F	SP-123	S Rec B	100	....	10 Amp	10.37	6.55	5.25
976-3100	VR200X/F	SP-123	S Rec B	200	....	10 Amp	11.87	7.45	5.95
976-3101	VR200X2 S/F	SP-123	S Rec B	200	....	10 Amp	12.37	7.85	6.25
976-3102	VR200X2 T/F	SP-123	S Rec B	200	....	10 Amp	12.25	7.70	6.15

Stock No.	Type	Case	Material Function	Max. Peak Reverse Voltage	Reverse Current mA	Operating Current Io Amps	EACH 1-9	10-99	100-Up
976-3110	VR400X/F	SP-123	S Rec B	400	....	10 Amp	15.50	10.90	8.00
976-3111	VR400X2 S/F	SP-123	S Rec B	400	....	10 Amp	16.00	11.30	8.30
976-3112	VR400X/S/F	123	S Rec B	400	....	10 Amp	15.87	11.15	8.20
976-3114	VS148X	SP-123	S Rec B	100	....	2 Amp	2.62	1.65	1.50
976-3130	VS247	SP-123	S Rec B	200	....	2 Amp	2.00	1.20	1.10
976-3131	VS248	SP-123	S Rec B	200	....	2 Amp	1.75	1.10	1.00
976-3144	VS248X	SP-123	S Rec B	200	....	2 Amp	2.87	1.81	1.65
976-3140	VS447	SP-123	S Rec B	400	....	2 Amp	2.25	1.30	1.20
976-3141	VS448	SP-123	S Rec B	400	....	2 Amp	2.00	1.20	1.10
976-3153	VS448X	SP-123	S Rec B	400	....	2 Amp	3.17	1.98	1.81
976-3148	VS647	SP-123	S Rec B	600	....	2 Amp	2.67	1.60	1.50
976-3152	VS648	SP-123	S Rec B	600	....	2 Amp	2.50	1.50	1.40
976-3160	VT200	SP-124	S Rec B	200	....	25 Amp	7.62	5.35	3.95
976-3161	VT200/S	SP-125	S Rec B	200	....	25 Amp	8.12	5.75	4.25
976-3162	VT200/T	SP-126	S Rec B	200	....	25 Amp	8.00	5.60	4.15
976-3170	VT400	SP-124	S Rec B	400	....	25 Amp	10.25	7.00	5.30
976-3171	VT400/S	SP-125	S Rec B	400	....	25 Amp	10.75	7.40	5.60
976-3172	VT400/T	SP-126	S Rec B	400	....	25 Amp	10.62	7.25	5.50
976-3180	VS600	SP-124	S Rec B	600	....	25 Amp	13.87	9.85	7.10
976-3181	VS600/S	SP-125	S Rec B	600	....	25 Amp	14.37	10.25	7.40
976-3182	VS600/T	SP-126	S Rec B	600	....	25 Amp	14.25	10.10	7.30
976-3183	VY100X	SP-124	S Rec B	100	....	25 Amp	12.92	8.16	6.54
976-3184	VY100X/S	SP-125	S Rec B	100	....	25 Amp	13.42	8.56	6.84
976-3185	VY100X/T	SP-126	S Rec B	100	....	25 Amp	13.30	8.41	6.74
976-3186	VY200X	SP-124	S Rec B	200	....	25 Amp	15.40	9.60	7.70
976-3187	VY200X/S	SP-125	S Rec B	200	....	25 Amp	15.90	10.00	8.00
976-3188	VY200X/T	SP-126	S Rec B	200	....	25 Amp	15.77	9.85	7.90
976-3189	VY400X	SP-124	S Rec B	400	....	25 Amp	20.50	14.00	10.60
976-3190	VY400X/S	SP-125	S Rec B	400	....	25 Amp	21.00	14.40	10.95
976-3191	VY400X/T	SP-126	S Rec B	400	....	25 Amp	20.87	14.25	10.80
976-3200	W110	SP-121	S Rec B	25	....	1 Amp	1.42	.91	.81
976-3201	W111	SP-121	S Rec B	25	....	1 Amp	1.47	.95	.85
817-8999	Z1138	....	Zen Reg	150 Volts Ez - 5 ma I_T			1.25	1.02	.85

Stock No.	Type	Case	Mat. Func.	Dissipation Watts	Zenner Voltage Volts	Zenner Test Current mA	Zenner Test Imped. Ohms	Tol. %	EACH 1-9	10-99	100-Up
916-4300	VR6	SP-110	S Zen	1	6	25	4	10	1.25	1.25	.93
916-4301	VR6A	SP-110	S Zen	1	6		4	5	1.80	1.80	1.35
916-4303	VR7	SP-110	S Zen	1	7		5	10	1.25	1.25	.93
916-4304	VR7A	SP-110	S Zen	1	7		5	5	1.80	1.80	1.35
916-4306	VR8.5	SP-110	S Zen	1	8.5		6	10	1.25	1.25	.93
916-4307	VR8.5A	SP-110	S Zen	1	8.5		6	5	1.80	1.80	1.35
916-4309	VR10	SP-110	S Zen	1	10	12	8	10	1.25	1.25	.93
916-4310	VR10A	SP-110	S Zen	1	10		8	5	1.80	1.80	1.35
916-4312	VR12	SP-110	S Zen	1	12		10	10	1.25	1.25	.93
916-4313	VR12A	SP-110	S Zen	1	12		10	5	1.80	1.80	1.35
916-4314	VR14	SP-110	S Zen	1	14		11	10	1.25	1.25	.93
916-4315	VR14A	SP-110	S Zen	1	14		11	5	1.80	1.80	1.35
916-4317	VR18	SP-110	S Zen	1	18		17	10	1.25	1.25	.93
916-4318	VR18A	SP-110	S Zen	1	18		17	5	1.80	1.80	1.35
916-4320	VR20	SP-110	S Zen	1	20		20	10	1.25	1.25	.93
916-4321	VR20A	SP-110	S Zen	1	20	4	20	5	1.80	1.80	1.35
916-4323	VR24	SP-110	S Zen	1	24	4	28	10	1.25	1.25	.93
916-4324	VR24A	SP-110	S Zen	1	24		28	5	1.80	1.80	1.35
916-4326	VR28	SP-110	S Zen	1	28	4	42	10	1.25	1.25	.93
916-4327	VR28A	SP-110	S Zen	1	28	4	42	5	1.80	1.80	1.35
916-4329	VR33	SP-110	S Zen	1	33	4	50	10	1.25	1.25	.93
916-4330	VR33A	SP-110	S Zen	1	33	4	50	5	1.80	1.80	1.35
916-4332	VR39	SP-110	S Zen	1	39	4	70	10	1.25	1.25	.93
916-4333	VR39A	SP-110	S Zen	1	39	4	70	5	1.80	1.80	1.35
916-4335	VR47	SP-110	S Zen	1	47	4	98	10	1.25	1.25	.93
916-4336	VR47A	SP-110	S Zen	1	47	4	98	5	1.80	1.80	1.35
916-4337	VR56	SP-110	S Zen	1	56	4	140	10	1.25	1.25	.93
916-4338	VR56A	SP-110	S Zen	1	56	4	140	5	1.80	1.80	1.35
916-4340	VR67	SP-110	S Zen	1	67	2	200	10	1.25	1.25	.93
916-4341	VR67A	SP-110	S Zen	1	67	2	200	5	1.80	1.80	1.35
916-4343	VR80	SP-110	S Zen	1	80	2	280	10	1.25	1.25	.93
916-4344	VR80A	SP-110	S Zen	1	80	2	280	5	1.80	1.80	1.35
916-4346	VR90	SP-110	S Zen	1	90	1	340	10	1.25	1.25	.93
916-4347	VR90A	SP-110	S Zen	1	90	1	340	5	1.80	1.80	1.35
916-4351	VR105	SP-110	S Zen	1	105	1	400	10	1.90	1.90	1.43
916-4352	VR105A	SP-110	S Zen	1	105	1	400	5	2.26	2.26	1.70
916-4354	VR110	SP-110	S Zen	1	110	1	490	10	1.90	1.90	1.43
916-4355	VR110A	SP-110	S Zen	1	110	1	490	5	2.26	2.26	1.70
916-4357	VR120	SP-110	S Zen	1	120	1	570	10	1.90	1.90	1.43
916-4358	VR120A	SP-110	S Zen	1	120	1	570	5	2.26	2.26	1.70
916-4360	VR130	SP-110	S Zen	1	130	1	650	10	1.90	1.90	1.43
916-4361	VR130A	SP-110	S Zen	1	130	1	650	5	2.26	2.26	1.70
916-4363	VR150	SP-110	S Zen	1	150	1	860	10	1.90	1.90	1.43
916-4364	VR150A	SP-110	S Zen	1	150	1	860	5	2.26	2.26	1.70
916-4368	VR160	SP-110	S Zen	1	160	1	970	10	1.90	1.90	1.43
916-4369	VR160A	SP-110	S Zen	1	160	1	970	5	2.26	2.26	1.70
916-4374	VR200	SP-110	S Zen	1	200	1	1400	10	1.90	1.90	1.43
916-4375	VR200A	SP-110	S Zen	1	200	1	1400	5	2.26	2.26	1.70

ORDER INFORMATION

Be Sure to Specify the Manufacturer's Name and Type Number When Ordering. As New Types Are Released by Manufacturers, Allied Electronics Will Stock Them. At Our Discretion, We Ship the Better Tolerance Device at the Same Price.

Sprague Integrated Circuits

SPRAGUE DIODE-CLAMPED INTEGRATED CIRCUITS

The Sprague line of Integrated Circuits includes a wide range of devices to give you a broad selection of digital and linear functions with full levels of efficiency and high speed. Ideal for applications in military, industrial, and commercial equipment that requires high performance characteristics and adherence to specifications.

SERIES 74 AND 74H TTL

Integrated circuit logic modules offer maximum logic capability in a minimum amount of space, have clamp diode on each input to limit undershoot in typical system applications, prevent "ringing." Complex-function circuits take full advantage of semiconductor structures. *16-lead package. †High-speed devices. Wt., 1 oz.

Stock No.	Type US-	Circuit Function	EACH 1-9	10-24	25-99	100-Up
924-4000	7400A	Quad 2-Input NAND Gate	.77	.62	.48	.43
924-4004	7401A	Quad 2-Input NAND Gate—No Collector Load	.77	.62	.48	.43
924-4008	7402A	Quad 2-Input NOR Gate	.77	.62	.48	.43
924-4010	7403A	Quad 2-Input Pos. NAND Gate	.77	.62	.48	.43
924-4014	7404A	Hex Inverter	.96	.76	.59	.54
924-4018	7405A	Hex Inverter—No Collector Load	.96	.76	.59	.54
924-4028	7408A	Quad 2-Input AND Gate	1.09	.87	.67	.61
924-4032	7409A	Quad 2-Input Pos. AND Gate Open collector	1.09	.87	.67	.61
924-4036	7410A	Triple 3-Input NAND Gate	.77	.62	.48	.43
924-4040	7411A	Triple 3-Input AND Gate	2.33	1.85	1.58	1.43
924-4060	7418A	Triple 3-Input Or Gate	2.33	1.85	1.58	1.43
924-4076	7420A	Dual 4-Input NAND Gate	.77	.62	.48	.43
924-4096	7427A	Triple 3-Input NOR Gate	1.18	.94	.73	.66
924-4108	7430A	Single 8-Input NAND Gate	.77	.66	.48	.43
924-4116	7432A	Quad 2-Input Or Gate	1.18	.94	.73	.66
924-4132	7438A	Dual 4-Input Or Gate	1.27	1.01	.78	.71
924-4144	7440A	Dual 4-Input NAND Buffer Gate	.77	.66	.48	.43
924-4148	7441A*	BCB-to-Decimal Decoder/Driver	10.36	10.36	8.25	7.03
924-4152	7442A	BCD-to-Decimal Decoder	3.39	2.71	2.10	1.31
924-4156	7443A	Excess 3 to Decimal Decoder	4.78	3.81	2.95	1.84
924-4160	7444A	Excess 3 Gray to Decimal Decoder	4.78	3.81	2.95	1.84
924-4164	7445A	BCD-to-Decimal Decoder/Driver 30V	6.70	5.97	4.76	3.69
924-4176	7448A	BCD-to-7-segment Decoder/Driver	5.67	4.52	3.51	3.20
924-4184	7450A	Dual 2-Wide, 2-Input Exp. And/Or-Invert Gate	.77	.62	.48	.43
924-4188	7451A	Dual 2-Wide, 2-Input And/Or Inverter Gate	.77	.62	.48	.43
924-4196	7453A	4-Wide, 2-Input Expandable And/Or Inverter Gate	.77	.62	.48	.43
924-4200	7454A	4-Wide, 2-Input And/Or Invert Gate	.77	.62	.48	.43
924-4212	7459A	Dual 2-Wide 2-3 Input Or Invert Gate	.77	.62	.48	.43
924-4216	7460A	Dual 4-Input Expander	.77	.62	.48	.43
924-4232	7470A	D-C Clocked J-K Flip-Flop	1.27	1.01	.78	.71
924-4240	7472A	J-K Master Slave Flip-Flop	1.18	.94	.73	.63
924-4244	7473A	Dual J-K Master Slave Flip-Flop	1.68	1.34	.98	.94
924-4248	7474A	Dual D-Type Edge Triggered Flip-Flop	1.68	1.34	.98	.94
924-4252	7475A*	Quadruple Bistable Latch	2.91	2.91	1.70	1.09
924-4256	7476A*	Dual J-K Master Flip-Flop with Sd and Rd	1.87	1.48	1.15	1.05
924-4268	7480A	Gated Full Adder	2.13	1.70	1.32	1.02
924-4276	7482A	2-Bit Binary Full Adder	3.60	2.88	2.40	2.15
924-4280	7483A*	4-Bit Binary Full Adder	6.25	5.00	4.15	3.75

Stock No.	Type US-	Circuit Function	EACH 1-9	10-24	25-99	100-Up
924-4294	7486A	Quad 2-Input Exclusive—Or Gate	1.45	1.16	.90	.90
924-4300	7490A	Decade Counter	3.07	2.45	1.90	1.90
924-4304	7491A	8-Bit Shift Register	10.38	10.38	8.26	8.26
924-4308	7492A	Divide by-Twelve Counter	3.07	2.45	1.90	1.90
924-4312	7493A	4-Bit Binary Counter	3.07	2.45	1.90	1.90
924-4316	7494A	4-Bit Shift Register	5.59	4.45	3.46	3.46
924-4320	7495A	4-Bit L/R Shift Register	3.48	2.39	2.18	2.18
924-4324	7496A	5-Bit Shift Register	6.69	5.34	4.14	4.14
924-4340	74107A	Dual J-K Master Slave Flip-Flop	1.68	1.34	.98	.98
924-4362	74121A	Mono Staple Multivibrator (one shot)	1.68	1.34	.98	.98
924-4386	74145A	BCD to Decimal Decorder/Driver 15V	4.71	3.76	2.92	2.92
924-3000	74H00A†	Quad 2-Input NAND Gate	.96	.76	.59	.54
924-3003	74H01A†	Quad 2-Input NAND Gate No Collector Load	.96	.76	.59	.54
924-3007	74H04A	Hex Inverter	1.09	.87	.67	.61
924-3010	74H05A	Hex Inverter Open Collector	1.09	.87	.67	.61
924-3013	74H08A	Quad 2 Input Pos. AND Gate	.96	.87	.59	.54
924-3020	74H10A†	Triple 3-Input AND Gate	.96	.76	.59	.54
924-3024	74H11A†	Triple 3-Input AND Gate	.96	.76	.59	.54
924-3042	74H20A†	Dual 4-Input NAND Gate	.96	.76	.59	.54
924-3045	74H21A	Dual 4-Input Pos. AND Gate	.96	.76	.59	.54
924-3048	74H22A	Dual 4-Input Pos. NAND Gate, open collector	.96	.76	.59	.54
924-3056	74H30A†	Single 8-Input NAND Gate	.96	.76	.59	.54
924-3068	74H40A†	Dual 4-Input NAND Buffer Gate	.96	.76	.59	.54
924-3080	74H50A†	Dual 2-Wide, 2-Input And/Or Invert Gate, Expandable	.96	.76	.59	.54
924-3084	74H51A†	Dual 2-Wide, 2-Input And/Or Invert Gate	.96	.76	.59	.54
924-3088	74H52A†	4-Wide 2-2-2-3 Input Expandable And/Or Gate	.96	.76	.59	.54
924-3092	74H53A†	4-Wide 2-2-2-3 Input Expandable And/Or Inverter Gate	.96	.76	.59	.54
924-3096	74H54A†	4-Wide 2-2-2-3 Input And/Or Inverter Gate	.96	.76	.59	.54
924-3105	74H55A†	2-Wide, 4-Input Expandable And/Or Inverter Gate	.96	.76	.59	.54
924-3115	74H60A†	Dual 4-Input Expander For And/Or Inverter Gates	.96	.76	.59	.54
924-3119	74H61A†	Triple 3-Input Expander For And/Or Gates	.96	.76	.59	.54
924-3124	74H62A†	3-2-2-3 Input And/Or Expander for And/Or Inverter Gates	.96	.76	.59	.54
924-3133	74H71A†	J-K Flip-Flop with And/Or Inputs	1.16	1.16	.90	.82
924-3136	74H72A†	J-K Master Slave Flip-Flop	1.27	1.01	.78	.71
924-3139	74H73A	Dual J-K Master Slave Flip-Flop	2.09	1.67	1.27	1.17
924-3142	74H74A	Dual D Edge Triggered Flip-Flop	2.09	1.67	1.29	1.17
924-3148	74H76A	Dual J-K Master Slave Flip Flop	2.27	1.81	1.40	1.27
924-3154	74H78A	Dual J-K Master Slave Flip-Flop	2.27	1.81	1.40	1.27
924-3175	74H571A	50 MHz AND/OK Input J-K Flip-Flop	4.65	4.65	3.70	3.15
924-3178	74H572A	50 MHz AND Input J-K Flip-Flop	4.65	4.65	3.70	3.15

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Integrated Circuits

DIGITAL INTEGRATED CIRCUITS

Fairchild offers a broad line of digital integrated circuits, including ECL, TTL, DTL, CUL and RTL. The TTL family consists of logic, memory and interface functions, and is a unique blend of Fairchild proprietary circuits and a large number of second source devices which have achieved wide market acceptance.

TTL and DTL products are available in two operating temperature ranges: 59X (7400) for 0° C to +75° C; or 51X (5400) for −55° C to +125° C. The series listed below are in ceramic dual in-line packages (or plastic dual in-line packages, where indicated). Also available in 14, 16 and 24-pin flatpacks.

SERIES 96 TTL/ONE SHOTS

Stock No.	Type No.	Circuit Description	EACH 1-9	10-24	25-99	100-Up
570-6060	U6A960059X	Retriggerable 1-Shot with Reset	5.65	5.65	5.20	4.70
570-6080	U6A960159X	Retriggerable 1-Shot	5.65	5.65	5.20	4.70
570-6100	U6B960259X	Dual Space-Retrgbl. 1-Shot with Reset	8.88	7.15	6.60	6.05
570-6105	U6A960359X	1-Shot Multivibrator	5.63	4.50	3.60	3.00
570-6110	U9A960359X	1-Shot Multivibrator	2.08	1.65	1.30	1.10

DTL COUNTER AND DECODERS

Stock No.	Type No.	Circuit Description	1-9	10-24	25-99	100-Up
570-5280	U6A995859X	Decade Counter	15.88	11.20	9.00	7.50
570-5285	U6B995959X	Buffer Decoder	14.38	10.95	8.00	6.75
570-5290	U6B996059X	Decade Decoder Display Driver	22.25	15.70	12.55	10.50

DTL INTEGRATED CIRCUITS

Stock No.	Type No.	Circuit Description	1-9	10-24	25-99	100-Up
570-4060	U6A909359X	Dual J-K Flip-Flop	1.65	1.65	1.32	1.15
570-4080	U9A909359X	Dual J-K Flip-Flop	1.30	1.30	1.05	.93
570-4100	U6A909459X	Dual J-K Flip-Flop	1.65	1.65	1.32	1.15
570-4120	U6A909459X	Dual J-K Flip-Flop	1.30	1.30	1.05	.93
570-4140	U6A909759X	Dual J-K Flip-Flop	1.65	1.65	1.32	1.15
570-4160	U9A909759X	Dual J-K Flip-Flop	1.30	1.30	1.05	.93
570-4180	U6A909959X	Dual J-K Flip-Flop	1.65	1.65	1.32	1.15
570-4185	U9A909959X	Dual J-K Flip-Flop	1.30	1.30	1.05	.93
570-4187	U6A910959X	Hi Level Hex Invert.	7.20	5.40	4.30	3.60
570-4190	U6A911059X	Hi Level Hex Invert.	7.20	5.40	4.30	3.60
570-4195	U6A911159X	Parallel Gated Clocked Flip-Flop	6.25	4.10	4.30	2.75
570-4199	U6A911259X	Hi Level Hex Invert.	7.20	5.40	4.30	3.60
570-4915	U6A993059X	Dual 4-Input Gate	.69	.69	.54	.45
570-4920	U9A993059X	Dual 4-Input Gate	.60	.60	.48	.42
570-4940	U6A993159X	Clocked Flip-Flop	6.38	4.50	3.60	3.00
570-4995	U6A993259X	Dual Buffer	.82	.82	.66	.55
570-5000	U9A993259X	Dual Buffer	.75	.75	.60	.53

DTL INTEGRATED CIRCUITS (Cont'd)

Stock No.	Type No.	Circuit Description	1-9	10-24	25-99	100-Up
570-5015	U6A993359X	Dual 4-Extender	.68	.60	.54	.45
570-5020	U9A993359X	Dual 4-Extender	.60	.60	.48	.42
570-5035	U6A993559X	Hex Inverter w/o Input Diode	.82	.82	.66	.55
570-5040	U9A993559X	Hex Inverter w/o Input Diode	.75	.75	.60	.53
570-6055	U6A993659X	Hex Inverter Gate	.82	.82	.66	.55
570-6060	U9A993659X	Hex Inverter Gate	.75	.75	.60	.53
570-6075	U6A993759X	Hex Inverter Gate	.82	.82	.66	.55
570-6080	U9A993759X	Hex Inverter Gate	.75	.75	.60	.53
570-5100	U6A994159X	1-Shot Monostable	10.25	7.25	5.80	5.05
570-5115	U6A994459X	Dual Power Gate	.82	.82	.66	.55
570-5120	U9A994459X	Dual Power Gate	.75	.75	.60	.53
570-5135	U6A994559X	RS Clocked Flip-Flop	1.12	1.12	.90	.75
570-5140	U9A994559X	RS Clocked Flip-Flop	.93	.93	.75	.65
570-5155	U6A994659X	Quad 2-Input Gate	.75	.75	.60	.50
570-5160	U9A994659X	Quad 2-Input Gate	.66	.66	.54	.46
570-5175	U6A994859X	RS Clocked Flip-Flop	1.12	1.12	.90	.75
570-5180	U9A994859X	RS Clocked Flip-Flop	.93	.93	.75	.65
570-5185	U6A994959X	Quad 2-Input Gate	.75	.75	.60	.50
570-5200	U9A994959X	Quad 2-Input Gate	.66	.66	.54	.46
570-5235	U6A995059X	Binary	7.25	7.25	5.80	4.85
570-5240	U9A995059X	Binary	6.50	6.50	5.20	4.55
570-5255	U6A995159X	1-Shot Multivibrator	7.25	7.25	5.80	4.95
570-5260	U9A995159X	1-Shot Multivibrator	6.50	6.50	5.20	4.55
570-5315	U6A996159X	Dual 4-Input Gate/Exp.	.75	.75	.60	.50
570-5320	U9A996159X	Dual 4-Input Gate/Exp.	.66	.66	.54	.46
570-5340	U6A996259X	Triple 3-Input Gate	.75	.75	.60	.50
570-5342	U9A996259X	Triple 3-Input Gate	.75	.75	.66	.52
570-5350	U6A996359X	Triple 3-Input Gate	.94	.75	.60	.50
570-5360	U9A996359X	Triple 3-Input Gate	.66	.66	.54	.46

TTL MEMORIES

Fairchild TTL memory product line includes a variety of high speed memory devices suitable for use in all types of data processing equipment. Three general types of memory products are included in the TTL line: read only memories (ROM), random access read/write memories (RAM) and associative or content addressable memories (CAM). Type 93400, 93403 and 93407/93433 RAM's and 93434 ROM are widely used in the industry, and system oriented for the best possible speed/power ratios available today. Tables show device orientation and speed.

TTL RAM

Stock No.	Type No.	Description	Typ. Speed, nsec	EACH 1-24	25-99	Mixed 100-Up	Single 100-Up
570-0900	93400	256W x 1B (partially decoded)	70	28.50	22.80	19.30	19.00
570-0910	93400B	256W x 1B (partially decoded)	100	18.90	15.00	13.10	12.50
570-0920	93401	3 of 6 Decoder for 93400	20	5.60	4.55	4.00	3.80
570-0930	93403	16W x 4B (fully decoded)	40	10.50	8.40	7.35	7.00
570-0940	93407/93433	16W x 1B scratchpad	18	7.20	5.75	5.05	4.80
570-0960	93435	16W x 4B (linear select)	22	43.50	35.00	30.00	29.00

TTL ROM

570-0970	93434	32W x 8B (fully decoded)	30	18.00	14.40	12.60	12.00

TTL CAM

570-0980	93402	4W x 4B (linear select)	20	37.50	30.00	26.20	25.00

SERIES 93L LOW POWER TTL/MSI AND 9L LOW POWER TTL/SSI

Fairchild 93L Low Power TTL/MSI product line features low power (one-fourth that of standard TTL) at 10 MHz clock frequencies. Sell for the same price as standard TTL, so the designer saves because smaller power supplies, fewer decoupling elements, and smaller cooling systems can be used. Functional and pin-compatible with standard 93 TTL/MSI. Ceramic DIP.

Stock No.	Type No.	Description	EACH 1-9	10-24	25-99	100-Up
570-4660	U7B93L0059X	Low Power 4-Bit Shift Register	5.63	4.30	3.95	3.45
570-4665	U7B93L0159X	Low Power One of Ten Decoder	5.63	4.30	3.95	3.45
570-4670	U6N93L0859X	Low Power 8-Bit Latch	8.63	6.05	5.60	4.85
570-4675	U6B93L0959X	Low Power Dual 4-Input Multiplexer	4.38	3.10	2.80	2.45
570-4678	U7B93L1059X	Low Power BCD Decade Counter	11.25	7.50	6.90	6.00
570-4684	U6N93L1159X	Low Power 1 of 16 Decoder	8.63	6.05	5.60	4.85
570-4688	U7B93L1259X	Low Power 8-Input Multiplexer	4.38	3.10	2.80	2.45
570-4690	U7B93L1459X	Low Power Quad Latch	4.38	3.10	2.80	2.45
570-4693	U7B93L1659X	Low Power 4-Bit Binary Counter	11.25	7.50	6.90	6.00
570-4697	U7B93L1859X	Low Power 8-Input Priority Encoder	11.25	7.50	6.90	6.00
570-4702	U7B93L2159X	Low Power Dual 1 of 4 Decoder	8.00	5.75	5.30	4.60
570-4709	U7B93L2259X	Low Power Quad 2-Input Multiplexer	4.38	3.10	2.80	2.45
570-4710	U7B93L2459X	Low Power 5-Bit Comparator	10.38	7.35	6.80	5.90
570-4717	U7B93L2859X	Low Power Dual 8-Bit Shift Register	13.13	9.30	8.55	7.45
570-4818	U6N93L4059X	Low Power 4-Bit Arithmetic Logic Unit	24.50	17.50	16.10	14.00
570-4200	U6A9L0059X	Low Power Quad 2-Input NAND Gate	.75	.50	.46	.40
570-4205	U6A9L0459X	Low Power Hex Inverter	.95	.63	.58	.50
570-4210	U7B9L2459X	Low Power Dual J-K Flip-Flop	1.98	1.32	1.20	1.05
570-4215	U6A9L5459X	Low Power 4-Wide, 2-Input AOI Gate	.75	.50	.46	.40
570-4220	U6A9L8659X	Low Power Quad Exclusive-OR	1.35	.90	.83	.72

When Ordering, Be Sure to Specify Mfr's Type No. and Name

Linear Integrated Circuits

FAIRCHILD

OPERATIONAL AMPLIFIERS

A complete family of operational amplifiers including the μA741 internally-compensated type and its dual version, the μA747; μA715 high-speed operational amplifier; μA725 instrumentation amplifier; μA740 FET input amplifier; and the μA776 programmable operational amplifier. All devices are monolithically constructed using the Fairchild Planar epitaxial process.

Stock No.	Type No.	Circuit Function	EACH 1-9	10-24	25-99	100-Up
569-1234	μ5B7101311	General Purpose Operational Amplifier	5.50	4.10	3.80	3.25
569-1236	μ5B7101333	General Purpose Operational Amplifier	5.14	3.85	3.50	3.05
569-1238	μ5B7101392	General Purpose Operational Amplifier	1.88	1.40	1.30	1.10
569-1240	μ6A7101311	General Purpose Operational Amplifier	5.52	4.10	3.80	3.25
569-1246	μ6A7101333	General Purpose Operational Amplifier	5.14	3.85	3.50	3.05
569-1242	μ6A7101392	General Purpose Operational Amplifier	1.88	1.40	1.30	1.10
569-1254	μ9T7101392	General Purpose Operational Amplifier	1.75	1.30	1.20	1.05
569-1260	μ5B7108311	High Precision Operational Amplifier	41.80	31.25	28.75	25.00
569-1262	μ5B7108312	High Precision Operational Amplifier	25.20	18.75	17.25	15.00
569-1264	μ5B7108332	High Precision Operational Amplifier	33.60	25.00	22.50	20.00
569-1268	μ5B7108333	High Precision Operational Amplifier	16.75	12.50	11.50	10.00
569-1270	μ5B7108392	High Precision Operational Amplifier	16.75	12.40	11.50	10.00
569-1272	μ5B7108393	High Precision Operational Amplifier	8.40	6.25	5.75	5.00
569-1460	μ5B7702312	Wide Band DC Operational Amplifier	12.25	10.50	8.40	7.00
569-1465	μ5B7702393	Wide Band DC Operational Amplifier	3.75	3.38	2.70	2.25
569-1470	μ6A7702312	Wide Band DC Operational Amplifier	13.13	11.25	9.00	7.50
569-1490	μ6A7702393	Wide Band DC Operational Amplifier	5.63	4.50	3.60	3.00
569-1514	μ5B7709311	High Performance Operational Amplifier	28.13	22.50	18.00	15.00
569-1520	μ5B7709312	High Performance Operational Amplifier	3.13	2.93	2.34	1.95
569-1540	μ5B7709393	High Performance Operational Amplifier	1.38	1.10	1.05	.90
569-1560	μ6A7709312	High Performance Operational Amplifier	3.38	3.38	2.70	2.25
569-1580	μ6A7709393	High Performance Operational Amplifier	1.38	1.10	1.05	.90
569-1712	μ5F7715312	High Speed Operational Amplifier	35.00	30.00	24.00	20.00
569-1720	μ5F7715393	High Speed Operational Amplifier	8.90	7.43	5.94	4.95
569-1724	μ6A7715312	High Speed Operational Amplifier	40.00	33.75	27.00	22.50
569-1728	μ6A7715393	High Speed Operational Amplifier	10.38	8.25	6.60	5.50
569-1820	μ5T7725312	Instrumentation Operational Amplifier	45.00	37.50	30.00	25.00
569-1822	μ5T7725333	Instrumentation Operational Amplifier	27.00	22.50	18.00	15.00
569-1840	μ5T7725393	Instrumentation Operational Amplifier	13.50	11.25	9.00	7.50
569-2030	μ6A7739312	Dual Low Noise Operational Amplifier	11.25	8.93	7.14	5.95
569-2040	μ6A7739393	Dual Low Noise Operational Amplifier	3.75	3.38	2.70	2.25
569-2050	μ5B7740312	FET Input Operational Amplifier	67.50	56.25	45.00	37.50
569-2060	μ5B7740393	FET Input Operational Amplifier	18.00	14.93	11.94	9.95
569-2075	μ5B7741312	Internally Compensated Operational Amplifier	7.38	5.93	4.74	3.95
569-2100	μ5B7741393	Internally Compensated Operational Amplifier	2.38	1.50	1.40	1.25
569-2140	μ6A7741312	Internally Compensated Operational Amplifier	8.00	6.38	5.10	4.25
569-2145	μ6A7741393	Internally Compensated Operational Amplifier	2.38	1.50	1.40	1.25
569-2160	μ9T7741393	Internally Compensated Operational Amplifier	1.80	1.30	1.20	1.05
569-2180	μ5F7747312	Dual Internally Compensated Operational Amplifier	18.63	14.93	11.94	9.95
569-2200	μ5F7747393	Dual Internally Compensated Operational Amplifier	7.38	5.93	4.74	3.95
569-2260	μ7A7747312	Dual Internally Compensated Operational Amplifier	23.50	18.75	15.00	12.50
569-2240	μ7A7747393	Dual Internally Compensated Operational Amplifier	8.50	6.75	5.00	4.50
569-2280	μ5B7748312	High Performance Operational Amplifier	7.00	5.93	4.74	3.95
569-2300	μ5B7748393	High Performance Operational Amplifier	1.88	1.30	1.20	1.10
569-2305	μ6A7748312	High Performance Operational Amplifier	7.95	6.38	5.10	4.00
569-2310	μ6A7748393	High Performance Operational Amplifier	2.00	1.30	1.20	1.10
569-2320	μ9T7748393	High Performance Operational Amplifier	1.80	1.30	1.20	1.05
569-2360	μ6A7749312	Dual Operational Amplifier	9.25	7.43	5.94	4.95
569-2380	μ6A7749393	Dual Operational Amplifier	3.13	2.85	2.28	1.90
569-2482	μ5B7776312	Programmable Operational Amplifier	15.30	11.04	10.16	8.83
569-2483	μ5B7776393	Programmable Operational Amplifier	5.50	4.10	3.77	3.28
569-2484	μ6A7776312	Programmable Operational Amplifier	15.30	11.04	10.16	8.83
569-2485	μ6A7776393	Programmable Operational Amplifier	5.50	4.10	3.77	3.28
569-2486	μ9T7776393	Programmable Operational Amplifier	5.50	4.10	3.77	3.28
569-2495	μ5B7777312	Precision Operational Amplifier	10.50	8.95	7.15	5.95
569-2500	μ5B7777393	Precision Operational Amplifier	4.13	3.55	2.85	2.35
569-2510	μ6A7777312	Precision Operational Amplifier	10.50	7.45	6.85	5.95
569-2520	μ6A7777393	Precision Operational Amplifier	4.13	2.95	2.70	2.35
569-2615	μXX7791312	Power Operational Amplifier (10-lead TO-3 package)	24.20	18.00	16.35	14.40
569-2616	μXX7791393	Power Operational Amplifier (10-lead TO-3 package)	9.25	6.88	6.33	5.50

TRANSISTOR ARRAYS

Available in variety of configurations for use as basic building blocks in Linear Systems. V_{CEO} (max.)=15 V; I_C (max.)=50 mA.

569-1200	μ6A7045312	Differential Amplifier and 3 Isolated Transistors	1.95	1.31	1.21	1.05
569-1202	μ6A7045393	Differential Amplifier and 3 Isolated Transistors	1.95	1.31	1.21	1.05
569-1212	μ6A7054393	Dual Independent Differential Amplifiers	1.95	1.31	1.21	1.05
569-1150	μ5G7018312	Two Isolated Transistors and Darlington Connected Transistor Pair	1.95	1.31	1.21	1.05
569-1160	μ5G7026312	Dual Independent Differential Amplifiers	2.34	1.74	1.60	1.39
569-1170	μ5F7036312	Dual Darlington Array	1.68	1.25	1.15	.99
569-1208	μ5G7049312	Dual Independent Differential Amplifiers	3.69	2.75	2.50	2.17

TEMPERATURE STABILIZED SUBSTRATE DEVICES

569-1842	μ5U7726312	TSS Transistor Pair	56.25	45.00	36.00	30.00
569-1844	μ5U7726323	TSS Transistor Pair	14.00	11.25	9.00	7.50
569-1846	μ5U7727312	Temperature Controlled Preamp	86.63	71.25	57.00	47.50
569-1860	μ5U7727333	Temperature Controlled Preamp	22.89	16.88	13.50	11.25

VIDEO AMPLIFIERS

569-1878	μ5F7733312	Wide Band Video Amplifier	11.25	8.93	7.14	5.95
569-1880	μ5F7733393	Wide Band Video Amplifier	5.50	4.43	3.54	2.95
569-1882	μ6A7733312	Wide Band Video Amplifier	12.25	9.75	7.80	6.50
569-2000	μ6A7733393	Wide Band Video Amplifier	6.13	4.88	3.90	3.25

FAIRCHILD

Integrated Circuits

VOLTAGE REGULATORS

THREE-TERMINAL VOLTAGE REGULATORS

Three-terminal devices are complete Voltage Regulators, monolithically constructed using the Fairchild Planar epitaxial process. Current limiting, thermal shutdown, and safe-area compensation are internally employed, making them essentially blowout-proof. Intended as fixed-voltage regulators in a wide range of applications including local regulation for elimination of noise and distribution problems associated with single point distribution. In addition, these devices can be used with external components to obtain adjustable output voltages and currents, and as the power pass element in precision regulators.

Stock No.	Type No.	Pkg.	Output Voltage	Output Current	EACH 1-9	10-24	25-99	100-Up
569-1274	UGJ7109312	TO-3	5 V	1 A	18.70	13.90	12.80	10.95
569-1276	UGJ7109333	TO-3	5 V	1 A	7.38	5.50	5.05	4.40
569-1278	UGJ7109393	TO-3	5 V	1 A	4.27	3.15	2.90	2.50
569-2800	UGH7805393	TO-220	5 V	1 A	2.95	2.20	2.00	1.75
569-2805	UGJ7805393	TO-3	5 V	1 A	3.75	2.80	2.60	2.25
569-2810	UGH7806393	TO-220	6 V	1 A	2.95	2.20	2.00	1.75
569-2815	UGJ7806393	TO-3	6 V	1 A	3.75	2.80	2.60	2.25
569-2820	UGH7808393	TO-220	8 V	1 A	2.95	2.20	2.00	1.75
569-2825	UGJ7808393	TO-3	8 V	1 A	3.75	2.80	2.60	2.25
569-2830	UGH7812393	TO-220	12 V	1 A	2.95	2.20	2.00	1.75
569-2835	UGJ7812393	TO-3	12 V	1 A	3.75	2.80	2.60	2.25
569-2840	UGH7815393	TO-220	15 V	1 A	2.95	2.20	2.00	1.75
569-2845	UGJ7815393	TO-3	15 V	1 A	3.75	2.80	2.60	2.25
569-2850	UGH7824393	TO-220	24 V	1 A	2.95	2.20	2.00	1.75
569-2855	UGJ7824393	TO-3	24 V	1 A	3.75	2.80	2.60	2.25

PRECISION VOLTAGE REGULATORS

Stock No.	Type No.	Description	EACH 1-9	10-24	25-99	100-Up
569-1740	U5R7723312	Precision Voltage Regulators for use in positive or	7.38	5.93	4.74	3.95
569-1760	U5R7723393	negative, series, shunt, floating and switching applications.	3.13	2.93	2.34	1.95
569-1762	U6A7723312	Line/load regulation, 0.1%. Output adjustable, 2-37 V. Output	8.00	6.38	5.10	4.25
569-1800	U6A7723393	current to 150 mA without external pass transistors	3.13	2.93	2.34	1.95

POWER CONTROL CIRCUITS

569-2162	U6A7742312	Zero Crossing AC Trigger	14.00	11.25	9.00	7.50
569-2164	U6A7742393	Zero Crossing AC Trigger	4.43	4.43	3.54	2.95
569-2385	U6A7750312	Dual Power Comparator	9.15	6.88	6.33	5.25
569-2390	U6A7750393	Dual Power Comparator	3.60	2.70	2.49	2.10

MULTIPLIER

569-2640	U6A7795393	Four-Quadrant Analog Multiplier	12.13	8.93	7.14	5.95

DIGITAL/ANALOG INTERFACE CIRCUITS

Electronic systems are seldom purely analog or purely digital in design, but instead are a combination of both and require interfacing between these two worlds. These circuits listed are specifically designed for this task and are completely compatible in both supply voltage requirements and input/output characteristics with the systems they are designed to interface.

LINE DRIVER/RECEIVER CIRCUITS

Stock No.	Type No.	Description	EACH 1-9	10-24	25-99	100-Up
570-6110	U7B961451X	Dual Differential Line Driver	34.20	22.80	18.20	15.20
570-6120	U7B961459X	Dual Differential Line Driver	16.88	11.40	9.10	7.50
570-6135	U7B961551X	Dual Differential Line Receiver	43.20	28.60	22.80	19.20
570-6140	U7B961559X	Dual Differential Line Receiver	21.48	14.30	11.40	9.55
570-6145	U7B961659X	EIA Triple Line Driver	7.50	5.62	5.18	4.50
570-6147	U7B961759X	EIA Triple Line Receiver	7.50	5.62	5.18	4.50
570-6150	U6A962051X	Dual Differential Line Receiver	15.63	10.90	8.40	7.00
570-6160	U6A962059X	Dual Differential Line Receiver	8.88	5.90	4.70	3.95
570-6175	U6A962151X	Dual Line Driver	12.75	8.45	6.75	5.65
570-6180	U6A962159X	Dual Line Driver	7.25	4.75	3.80	3.20
570-6235	U6A962251X	Dual Line Receiver	17.38	11.50	9.25	7.70
570-6240	U6A962259X	Dual I ine Receiver	9.38	6.20	4.95	4.15
570-6285	U6A962759X	Dual Line Receiver	16.70	12.50	11.50	10.00

TRANSLATOR CIRCUITS

570-6255	U6A962451X	Dual TTNL to MOS Interface Circuit	8.50	5.60	4.50	3.75
570-6260	U6A962459X	Dual TTNL to MOS Interface Circuit	6.25	4.10	3.25	2.75
570-6275	U6A962551X	Dual MOS to TTNL Interface Circuit	6.50	4.30	3.45	2.90
570-6280	U6A962559X	Dual MOS to TTNL Interface Circuit	4.95	3.30	2.65	2.20

SENSE AMPLIFIERS

569-1296	U7B7524392	Two-Channel Core Memory Sense Amplifier	9.26	7.35	5.88	4.90
569-1298	U7B7524393	Two-Channel Core Memory Sense Amplifier	5.00	3.98	3.18	2.65
569-2450	U7B7761392	Two-Channel Core Memory Sense Amplifier	8.88	7.13	5.70	4.75
569-2460	U7B7761393	Two-Channel Core Memory Sense Amplifier	4.75	3.75	3.00	2.50

SYSTEM INTERFACE CIRCUITS

569-1320	U6A755059X	Dual Lamp Relay Driver	2.20	1.65	1.23	1.10
569-1325	U9T755159X	Memory Driver	1.95	1.46	1.11	.99
570-6305	U7B964451X	Dual High Voltage, High Current Driver	22.25	14.80	11.80	9.90
570-6300	U7B964459X	Dual High Voltage, High Current Driver	11.13	7.40	5.90	4.95

When Ordering, Be Sure to Specify Stock No., Mfr's Type No. and Name

DIGITAL/ANALOG INTERFACE CIRCUITS (Cont'd)

COMPARATORS

Stock No.	Type No.	Description	EACH 1-9	10-24	25-99	100-Up
569-1600	U5B7710312	High Speed Comparator	3.14	2.93	2.34	1.95
569-1620	U5B7710393	High Speed Comparator	1.38	1.10	1.05	.90
569-1640	U6A7710312	High Speed Comparator	3.75	3.38	2.70	2.25
569-1660	U6A7710393	High Speed Comparator	1.38	1.10	1.05	.90
569-1680	U5F7711312	Dual Comparator	3.75	3.38	2.70	2.25
569-1700	U5F7711393	Dual Comparator	1.38	1.10	1.05	.90
569-1705	U6A7711312	Dual Comparator	3.75	3.38	2.70	2.25
569-1710	U6A7711393	Dual Comparator	1.38	1.10	1.05	.90
569-2001	U6A7734312	High Precision Comparator	14.00	11.04	10.16	8.83
569-2002	U6A7734393	High Precision Comparator	5.13	4.10	3.77	3.28
569-2385	U6A7750312	Dual High Power Comparator	8.59	6.88	6.33	5.50
569-2390	U6A7750393	Dual High Power Comparator	3.38	2.71	2.49	2.17
569-2442	U6A7760312	High Speed Comparator	13.75	11.00	10.20	8.83
569-2443	U6A7760393	High Speed Comparator	6.15	4.92	3.76	3.28

D/A CURRENT SOURCES

569-1736	U3M7722333	10-Bit Current Source	70.50	56.25	45.00	37.50
569-1738	U3M7722334	10-Bit Current Source	27.00	22.50	18.00	15.00
570-6310	U6A965051X	4-Bit Current Source	10.90	8.70	8.00	6.95

MOS INTEGRATED CIRCUITS

Fairchild MOS integrated circuits utilize either Metal Gate or Silicon Gate technology. The benefits of these technologies, combined with the extensive usage of computer-aided design, have resulted in a group of highly complex and sophisticated products that are offered at the lowest possible cost. Type No. indicates oper. temperature: 19X, 0° to 70° C; 14X, −55° to +85° C.

Stock No.	Type No.	Family	Description	Packages	EACH 1-9	10-24	25-99	100-Up
570-1000	A7K310014X	MOS/MGT	Dual 5-Input Gate	16-lead DIP	13.50	.900	9.00	6.00
570-1020	A7K310114X	MOS/MGT	Dual J-K Flip-Flop	16-lead DIP	18.00	12.00	12.00	8.00
570-1040	A5F3102XXX	MOS/MGT	3-Input Gate	TO-5	9.00	6.00	6.00	4.00
570-1055	A7G325014X	MOS/MGT	CRT Numeric Character Generator	24-lead DIP	65.00	48.00	36.00	28.80
570-1060	A7G325019X	MOS/MGT	CRT Numeric Character Generator	24-lead DIP	54.00	38.00	30.00	24.00
570-1080	A7K325519X	MOS/SGT	5x7x16 Character Generator	16-lead DIP	22.50	15.00	12.50	10.00
570-1100	A7K325619X	MOS/SGT	5x7x16 Character Generator	16-lead DIP	22.50	15.00	12.50	10.00
570-1120	A7C325719X	MOS/SGT	5x7x64 Character Generator	24-lead DIP	37.50	25.00	20.00	16.70
570-1130	A5F330014X	MOS/MGT	25-Bit 1ϕ Static Shift Register	TO-5	11.63	7.80	6.25	5.20
570-1140	A5F330019X	MOS/MGT	25-Bit 1ϕ Static Shift Register	TO-5	9.00	6.00	4.80	4.00
570-1150	A5F330314X	MOS/MGT	2x25-Bit 2ϕ Dynamic Shift Register	TO-5	11.63	7.80	6.25	5.20
570-1160	A5F330319X	MOS/MGT	2x25-Bit 2ϕ Dynamic Shift Register	TO-5	9.00	6.00	4.80	4.00
570-1170	A5F330414X	MOS/MGT	2x16-Bit 2ϕ Static Shift Register	TO-5	11.63	7.80	6.25	5.20
570-1180	A5F330419X	MOS/MGT	2x16-Bit 2ϕ Static Shift Register	TO-5	9.00	6.00	4.80	4.00
570-1200	A7K330514X	MOS/MGT	4x16-Bit 1ϕ Static Shift Register	16-lead DIP	18.00	12.00	9.60	8.00
570-1220	A5F330614X	MOS/MGT	2x16 and 1x32 1ϕ Static Shift Reg.	TO-5	11.25	7.50	6.00	5.00
570-1230	A5F3307141	MOS/MGT	2x100-Bit 2ϕ Static Shift Register	TO-5	11.75	7.80	6.25	5.20
570-1240	A5F3307192	MOS/MGT	2x100-Bit 2ϕ Static Shift Register	TO-5	9.00	6.00	4.50	4.00
570-1250	A5E332614X	MOS/MGT	3x66-Bit 2ϕ Dynamic Shift Register	TO-5	12.38	8.25	6.60	5.50
570-1260	A5E332619X	MOS/MGT	3x66-Bit 2ϕ Dynamic Shift Register	TO-5	10.63	7.10	5.70	4.75
570-1280	A5F332919X	MOS/SGT	512-Bit 2ϕ Dynamic Shift Register	TO-5	11.00	7.35	5.85	4.90
570-1300	A5F333019X	MOS/SGT	480-Bit 2ϕ Dynamic Shift Register	TO-5	11.00	7.35	5.85	4.90
570-1820	A5F333119X	MOS/SGT	500-Bit 2ϕ Dynamic Shift Register	TO-5	11.00	7.35	5.85	4.90
570-1340	A7K333319X	MOS/MGT	3x48/64-Bit 2ϕ Dynamic Shift Reg.	16-lead DIP	22.50	15.00	12.00	10.00
570-1360	A5F338319X	MOS/SGT	256-Bit 2ϕ Dynamic Shift Register	TO-5	10.38	6.90	5.50	4.60
570-1403	A7G350114X	MOS/MGT*	1024-Bit (128x8) Static ROM	24-lead DIP	36.00	24.00	19.20	16.00
570-1404	A7G350119X	MOS/MGT*	1024-Bit (128x8) Static ROM	24-lead DIP	27.00	18.00	14.40	12.00
570-1405	A7G350719X	MOS/MGT*	2048-Bit (256x8) Static ROM	24-lead DIP	40.50	27.00	21.60	18.00
570-1406	A7C351219X	MOS/SGT*	2048-Bit (256x8) Static ROM	24-lead DIP	45.00	30.00	24.00	20.00
570-1407	A7C351319X	MOS/SGT*	2560-Bit (256x10) Static ROM	24-lead DIP	49.50	33.00	26.40	22.00
570-1408	A7G358019X	MOS/MGT*	2048-Bit (256x8) Static ROM	24-lead DIP	40.50	27.00	21.60	18.00
570-1409	A7G358419X	MOS/MGT*	2048-Bit (512x4) Static ROM	24-lead DIP	40.50	27.00	21.60	18.00
570-1410	A3I3700112	MOS/MGT	4-Channel Multiplex Switch	14-lead F.P.	27.00	20.00	16.00	12.00
570-1412	A3I3700113	MOS/MGT	4-Channel Multiplex Switch	14-lead F.P.	21.63	16.00	12.70	9.60
570-1413	A3I3700192	MOS/MGT	4-Channel Multiplex Switch	14-lead F.P.	18.00	13.40	10.60	8.00
570-1414	A3I3700193	MOS/MGT	4-Channel Multiplex Switch	14 lead F.P.	14.88	12.00	9.32	6.60
570-1415	A3I370119X	MOS/MGT	6-Channel Multiplex Switch	14 lead F.P.	14.88	12.00	9.30	6.60
570-1417	A7K3705142	MOS/MGT	8-Channel Multiplex Switch	16-lead DIP	40.50	27.00	21.60	18.00
570-1418	A7K3705143	MOS/MGT	8-Channel Multiplex Switch	16-lead DIP	33.75	22.50	18.00	15.00
570-1419	A7K3705192	MOS/MGT	8-Channel Multiplex Switch	16-lead DIP	27.00	18.00	14.40	12.00
570-1420	A7K3705193	MOS/MGT	8-Channel Multiplex Switch	16-lead DIP	22.50	15.00	12.50	10.00
570-1437	A7K3708142	MOS/SGT	8-Channel Multiplex Switch	16-lead DIP	52.50	35.10	28.10	23.40
570-1438	A7K3708143	MOS/SGT	8-Channel Multiplex Switch	16-lead DIP	43.88	29.25	23.40	19.50
570-1439	A7K3708192	MOS/SGT	8-Channel Multiplex Switch	16-lead DIP	35.00	23.40	18.75	15.60
570-1440	A7K3708193	MOS/SGT	8-Channel Multiplex Switch	16-lead DIP	29.25	19.50	15.60	13.00
570-1455	A6H375014X	MOS/MGT	10-Bit D/A Converter	36-lead DIP	67.50	40.00	34.00	30.00
570-1460	A6H375019X	MOS/MGT	10-Bit D/A Converter	36-lead DIP	56.25	33.00	29.00	25.00
570-1475	A6H375114X	MOS/MGT	12-Bit A/D Converter	36-lead DIP	67.50	45.00	36.00	30.00
570-1480	A6H375119X	MOS/MGT	12-Bit A/D Converter	36-lead DIP	61.88	36.50	30.00	27.50
570-1495	A6H380014X	MOS/MGT	8-Bit Parallel Accumulator	36-lead DIP	83.25	50.00	40.00	37.00
570-1500	A6H380019X	MOS/MGT	8-Bit Parallel Accumulator	36-lead DIP	69.75	41.00	37.00	31.00
570-1515	A6H380114X	MOS/MGT	10-Bit Ser/Par Par/Ser Converter	36-lead DIP	56.25	38.00	31.00	25.00
570-1520	A6H380119X	MOS/MGT	10-Bit Ser/Par Par/Ser Converter	36-lead DIP	49.50	30.00	27.00	22.00

*Minimum order of 25 pieces and $500.00 non-recurring mask charge. No masking charge for orders equal to or greater than 100 pieces.

FAIRCHILD

Integrated Circuits

INTEGRATED MICROSYSTEMS

Stock No.	Type No.	Type	Circuit Description	Package	EACH 1-24	25-99	100-999
570-0500	HAG20011XX	Military	High Voltage, High Current Driver	TO-5	20.60	16.50	13.40
570-0505	HBG20011XX	Military	High Voltage, High Current Driver	Flatpack	20.60	16.50	13.40
570-0510	HAG20019XX	Industrial	High Voltage, High Current Driver	TO-5	10.30	8.25	6.67
570-0515	HBG20019XX	Industrial	High Voltage, High Current Driver	Flatpack	10 30	8.25	6.67
570-0520	HAG20021XX	Military	High Current, High Voltage Driver	TO-5	16.30	13.04	10.92
570-0525	HBG20021XX	Military	High Current, High Voltage Driver	Flatpack	16.30	13.04	10.92
570-0530	HAG20029XX	Industrial	High Current, High Voltage Driver	TO-5	7.90	6.32	5.27
570-0535	HBG20029XX	Industrial	High Current, High Voltage Driver	Flatpack	7.90	6.32	5.27
570-0540	H9F20029XX	Industrial	High Current, High Voltage Driver	Plastic	5.10	4.10	3.40
570-0550	H9F22009XX	Industrial	High Voltage, High Current Driver	Plastic	5.65	4.52	3.75
570-0555	HAG22001XX	Military	High Voltage, High Current Driver	TO-5	17.93	14.34	12.02
570-0560	HAG22009XX	Industrial	High Voltage, High Current Driver	TO-5	8.70	7.05	5.80
570-0565	HBG22001XX	Military	High Voltage, High Current Driver	Flatpack	17.93	14.34	12.02
570-0570	HBG22009XX	Industrial	High Voltage, High Current Driver	Flatpack	8.70	7.05	5.80
570-0600	H2B80903XX	Industrial	10-Bit D/A Converter	1"x1"	98.00	75.00	68.37
570-0605	H2B80951XX	Military	Prescaler	1"x1"	120.00	110.00	100.00
570-0610	H2B80959XX	Industrial	Prescaler	1"x1"	60.00	55.00	50.00

STANDARD SPEED AND HIGH-SPEED GATES

Stock No.	Type No.	Speed	Circuit Description	EACH 1-9	10-24	25-99	100-999
570-4760	U6B950259X	Standard Speed Gates	Dual 4-Input OR/NOR with Enable	3.50	2.00	1.85	1.70
570-4780	U6B950359X		Triple 2-Input OR/NOR with Enable	3.50	2.00	1.85	1.70
570-4800	U6B950459X		Quad 2-Input NOR with Enable	3.50	2.00	1.85	1.70
570-4805	U6B950559X		4-Wide OR-AND/NOR-OR	5.50	3.15	2.90	2.75
570-4820	U6B952859X		Dual D 160 MHz Flip-Flop	10.38	4.95	4.24	4.00
570-4825	U6B953459X	(2-3 nano-seconds)	Quad D/S Latch with Input/Output Enables	10.20	5.80	5.35	5.00
570-4840	U6B953895X		3-Line to 8-Line Decoder with Enables	14.38	6.60	6.10	5.70
570-4900	U6B958159X		8-Input Multiplexer with Enable	10.50	6.00	5.55	5.40
570-4901	U6B958259X		Triple Line Receiver—Schmitt Trigger	5.50	3.15	2.90	2.75
570-4905	U6B959559X		Dual ECL-TTL Converter	5.50	3.15	2.90	2.75
570-4910	U6B95H0259X	High Speed Gates (1.5 nono-seconds)	Dual 4-Input OR/NOR with Enable	5.50	3.15	2.90	2.75
570-4911	U6B95H0359X		Triple 2-Input OR/NOR with Enable	5.50	3.15	2.90	2.75
570-4912	U6B95H0459X		Quad 2-Input NOR with Enable	5.50	3.15	2.90	2.75
570-4913	U6B95H2959X		220 MHz J-K Flip-Flop	8.15	4.65	4.25	4.00
570-4915	U6B95H9059X		320 MHz ÷ 10/11 Prescaler	20.00	16.00	14.50	13.60
570-4916	U6B95L2259X	Low Power/ High Speed (20 mW/2 ns)	Dual 4-Input OR/NOR with Enable	4.20	2.50	2.30	2.00
570-4917	U6B95L2359X		Triple 2-Input OR/NOR with Enable	4.20	2.50	2.30	2.00
570-4918	U6B95L2459X		Quad 2-Input NOR with Enable	4.20	2.50	2.30	2.00

SERIES 93 TTL/MSI INTEGRATED CIRCUITS

Provides the digital system designed with a complete line of standard, complex functional building blocks that can significantly reduce package count and system cost while providing smaller size, increased reliability and greater system speed. Ceramic DIP pkg.

Stock No.	Type No.	Description	EACH 1-9	10-24	25-99	100-999
570-4185	U7B930059X	4-Bit Shift Register	5.63	4.30	3.95	3.45
570-4187	U7B930159X	1 of 10 Decoder	6.00	4.30	3.95	3.45
570-4190	U6B930459X	Dual Full Adder	16.00	9.35	8.60	7.50
570-4192	U7A930559X	Var. Modulo Counter	6.00	4.30	3.95	3.45
570-4195	U6N930659X	Up/Down Decade Counter	28.13	16.55	15.20	13.25
570-4200	U6B930759X	7-Segment Decoder	9.13	6.55	6.05	5.25
570-4220	U6N930859X	Dual 4-Bit Latch	8.63	6.05	5.60	4.85
570-4240	U6B930959X	Dual 4-Input Multiplexer	4.38	3.10	2.80	2.45
570-4260	U7B931059X	Decade Counter	11.25	7.50	6.90	6.00
570-4280	U6N931159X	1 of 16 Decoder	8.63	6.05	5.60	4.85
570-4300	U7B931259X	8-Input Multiplexer	4.38	3.10	2.80	2.45
570-4320	U7B931359X	8-Input Multiplexer (O.C.)	3.15	2.45	2.25	1.95
570-4350	U6B931559X	1 of 10 Decoder/Driver	6.05	6.06	5.60	4.85
570-4360	U7B931659X	Binary Counter	11.25	7.50	6.90	6.00
570-4365	U7B9317591	7-Segment Decoder/ Driver (40 mA; 30 V)	17.50	12.50	11.15	10,00
570-4370	U7B9317592	7-Segment Decoder/ Driver (40 mA; 20 V)	16.25	11.55	10.65	9.25
570-4375	U7B9317593	7-Segment Decoder/ Driver (20 mA; 30 V)	11.38	7.50	6.90	6.50
570-4380	U7B9317594	7-Segment Decoder/ Driver (20 mA; 20 V)	10.38	7.45	6.85	5.95
570-4400	U7B931859X	8-In. Priority Encoder	12.38	7.50	6.90	6.00
570-4420	U7B932159X	Dual 1 of 4 Decoder	8.00	5.75	5.30	4.60
570-4440	U7B932259X	Quad 2-Input Multi-plexer	4.38	3.10	2.80	2.45
570-4460	U7B932459X	5-Bit Comparator	10.38	7.35	6.80	5.90
570-4479	U7B9327591	7-Seg. Decoder/Driver	16.63	11.85	10.90	9.50
570-4480	U7B9327592	7-Seg. Decoder/Driver	14.00	10.00	9.20	8.00
570-4500	U7B932859X	Dual 8-Bit Shift Register	13.13	9.30	8.55	7.45
570-4520	U7B933459X	8-Bit Address. Latch	8.63	6.05	5.60	4.85

Stock No.	Type No.	Description	EACH 1-9	10-24	25-99	100-999
570-4540	U7B933759X	7-Seg. Decoder/Driver	7.88	5.60	5.20	4.50
570-4560	U7B933859X	8-Bit Multiport Reg.	10.38	7.35	6.80	5.90
570-4570	U6N934059X	4-Bit Arithmetic Logic	24.50	17.50	16.10	14.00
570-4580	U6N934159X	4-Bit Arithmetic Logic	12.63	9.70	8.95	7.77
570-4590	U7B934259X	Carry Lookahead	3.60	2.78	2.56	2.22
570-4600	U7B934859X	12-Bit Parity Generator/Checker	6.88	4.95	4.55	3.95
570-4620	U7A935059X	Decade Counter	3.10	3.10	2.80	2.45
570-4625	U6B935259X	1 of 10 Decoder	6.90	5.15	4.15	3.45
570-4630	U6B935359X	Excess 3 to Decimal Decoder	10.25	8.05	6.40	5.35
570-4685	U6B935459X	Excess 3 Gray to Decimal Decoder	10.25	8.05	6.40	5.35
570-4640	U7A935659X	Binary Counter	3.10	3.10	2.80	2.45
570-4641	U6B9357591	BCD to 7-Segment Decoder	9.75	9.75	7.80	6.50
570-4642	U6B9357592	BCD to 7-Segment Decoder	8.90	8.90	7.15	5.95
570-4643	U6B935859X	BCD to 7-Segment Decoder	7.90	7.90	6.30	5.25
570-4644	U7B936059X	Up/Down Decade Counter	9.13	7.50	6.90	6.00
570-4645	U7B936659X	Up/Down Binary Counter	9.13	7.50	6.90	6.00
570-4646	U6B937559X	Quad Latch	3.70	3.70	2.95	2.45
570-4647	U6A938059X	Gated Full Adder	3.20	3.20	2.60	2.15
570-4648	U6A938259X	2-Bit Bin. Full Adder	4.80	4.80	3.85	3.20
570-4649	U6B938359X	4-Bit Bin. Full Adder	7.60	7.60	6.05	5.05
570-4650	U6A939059X	Decade Counter	3.70	3.70	2.95	2.45
570-4651	U6A939159X	8-Bit Shift Register	6.70	6.70	5.35	4.45
570-4652	U6A939259X	Divide by 12 Counter	3.70	3.70	2.95	2.45
570-4653	U6A939359X	4-Bit Binary Counter	3.70	3.70	2.95	2.45
570-4654	U6B939459X	4-Bit Shift Register	5.75	5.75	4.60	3.85
570-4656	U6A939559X	4-Bit Right/Left Shift Register	5.75	5.75	4.60	3.85
570-4657	U7B939659X	5-Bit Shift Register	8.10	8.10	6.50	5.40

When Ordering, Be Sure to Specify Mfr's Type No. and Name

Integrated Circuits

FAIRCHILD

SERIES 9N/74 TTL/SSI AND 93/74 TTL/MSI

Fairchild 9N/54, 74 series is a broad family of TTL/SSI devices; 93/54, 74 series are pin and function identical with 7400 series.

Stock No.	Type No.	Description	EACH 1-9	10-24	25-99	100-Up
570-1980	U6A740059X	Quad 2-Input NAND Gate	.75	.75	.60	.50
570-2000	U9A740059X	Quad 2-Input NAND Gate	.60	.60	.48	.40
570-2020	U6A740159X	Quad 2-In. NAND (O.C.)	.75	.75	.60	.50
570-2040	U9A740159X	Quad 2-In. NAND (O.C.)	.60	.60	.48	.40
570-2060	U6A740259X	Quad 2-Input NOR Gate	.75	.75	.60	.50
570-2080	U9A740259X	Quad 2-Input NOR Gate	.60	.60	.48	.40
570-2100	U6A740359X	Quad 2-In. NAND (O.C.)	.75	.75	.60	.50
570-2120	U9A740359X	Quad 2-In. NAND (O.C.)	.60	.60	.48	.40
570-2140	U6A740459X	Hex Inverter	.93	.93	.74	.62
570-2160	U9A740459X	Hex Inverter	.75	.75	.60	.50
570-2180	U6A740559X	Hex Inverter (O.C.)	.93	.93	.74	.62
570-2200	U9A740559X	Hex Inverter (O.C.)	.75	.75	.60	.50
570-2220	U6A740859X	Quad 2-Input AND Gate	.98	.98	.78	.65
570-2240	U9A740859X	Quad 2-Input AND Gate	.78	.78	.63	.52
570-2260	U6A740959X	Quad 2-In. AND (O.C.)	.78	.78	.63	.52
570-2280	U6A741059X	Triple 3-In. NAND Gate	.75	.75	.60	.50
570-2285	U9A741059X	Triple 3-In. NAND Gate	.60	.60	.48	.40
570-2290	U6A741159X	Triple 3-In. AND Gate	.98	.98	.78	.65
570-2295	U9A741159X	Triple 3-In. AND Gate	.78	.78	.63	.52
590-2300	U6A742059X	Dual 4-Input NAND Gate	.75	.75	.60	.50
570-2305	U9A742059X	Dual 4-Input NAND Gate	.60	.60	.48	.40
570-2310	U6A743059X	8-Input NAND Gate	.75	.75	.60	.50
570-2315	U9A743059X	8-Input NAND Gate	.60	.60	.48	.40
570-2320	U6A744059X	Dual 4-In. NAND Buffer	.75	.75	.60	.50
570-2325	U9A744059X	Dual 4-In. NAND Buffer	.60	.60	.48	.40
570-2330	U6B744159X	1 of 10 Decoder/Driver	6.05	6.05	5.60	4.85
570-2335	U6B744259X	1 of 10 Decoder	5.15	5.15	4.15	3.45
570-2340	U6B744359X	Excess 3 to Dec. Decoder	8.05	8.05	6.40	5.35
570-2345	U6B744459X	Excess 3 Gray to Decimal	8.05	8.05	6.40	5.35
570-2352	U7B744659X	BCD to 7 Segment Driver	9.75	9.75	7.80	6.50
570-2357	U7B744759X	BCD to 7 Segment Driver	.....	8.90	7.15	5.95
570-2363	U7B744859X	BCD to 7 Seg. Decoder	7.90	7.90	6.30	5.25
570-2365	U6A745059X	Dual 2-Wide 2-In. AOI Gate (Expandable)	.75	.75	.60	.50
570-2370	U9A745059X	Dual 2-Wide 2-In. AOI Gate (Expandable)	.60	.60	.48	.40
570-2375	U6A745159X	Dual 2-Wide 2-In. AOI	.75	.75	.60	.50
570-2380	U9A745159X	Dual 2-Wide 2-In. AOI	.60	.60	.48	.40
570-2385	U6A745359X	4-Wide 2-In. AOI (Exp.)	.75	.75	.60	.50
570-2390	U9A745359X	4-Wide 2-In. AOI (Exp.)	.60	.60	.48	.40

Stock No.	Type No.	Description	EACH 1-9	10-24	25-99	100-Up
570-2395	U6A745459X	4-Wide 2-In. AOI Gate	.75	.75	.60	.50
570-2400	U9A745459X	4-Wide 2-In. AOI Gate	.60	.60	.48	.40
570-3040	U6A746059X	Dual 4-Input Expander	.75	.75	.60	.50
570-3060	U9A746059X	Dual 4-Input Expander	.60	.60	.48	.40
570-3080	U6A747059X	Edge Trig. JK F-F (AND)	1.25	1.25	1.00	.84
570-3100	U9A747059X	Edge Trig. JK F-F (AND)	1.00	1.00	.80	.67
570-3120	U6A747259X	JK Mas./Slave F-F (AND)	1.15	1.15	.92	.77
570-3140	U9A747259X	JK Mas./Slave F-F (AND)	.93	.93	.74	.62
570-3160	U6A747359X	Dual JK Mas./Slave F-F	1.95	1.95	1.55	1.30
570-3180	U9A747359X	Dual JK Mas./Slave F-F	1.50	1.50	1.20	.98
570-3200	U6A747459X	Dual D Edge Trig. F-F	1.65	1.65	1.30	1.10
570-3220	U9A747459X	Dual D Edge Trig. F-F	1.35	1.35	1.10	.90
570-3240	U6B747559X	Quad Latch	3.70	3.70	2.95	2.45
570-3260	U6B747659X	Dual JK Mas./Slave F-F	1.75	1.75	1.40	1.17
570-3280	U6A748059X	Full Adder	3.20	3.20	2.60	2.15
570-3300	U6A748259X	Dual Full Adder	4.80	4.80	3.85	3.20
570-3320	U6B748359X	Quad Full Adder	7.60	7.60	6.05	5.05
570-3340	U6A748659X	Quad Exclusive OR Gate	1.10	1.10	.86	.72
570-3360	U6A749059X	Decade Counter	3.70	3.70	2.95	2.45
570-3380	U6A749159X	8-Bit Shift Register	6.70	6.70	5.35	4.45
570-3400	U6A749259X	Divide-by 12 Counter	3.70	3.70	2.95	2.45
570-3420	U6A749359X	Binary Counter	3.70	3.70	2.95	2.45
570-3440	U6B749459X	4-Bit Shift Register	5.75	5.75	4.60	3.85
570-3460	U6A749559X	4-Bit Left/Right S. Reg.	5.75	5.75	4.60	3.85
570-3480	U7B749659X	5-Bit Shift Register	8.10	8.10	6.50	5.40
570-3485	U6A7410459X	JK Mas./Slave Flip-Flop	2.32	2.32	1.85	1.43
570-3490	U6A7410559X	JKK Mas./Slave Flip-Flop	2.32	2.32	1.85	1.43
570-3500	U6A7410759X	Dual JK Mas./Slave F-F	1.95	1.95	1.55	1.30
570-3505	U9A7410759X	Dual JK Mas./Slave F-F	1.50	1.50	1.20	.98
570-3510	U6A7412159X	One-Shot Multivibrator	4.50	4.50	3.60	3.00
570-3512	U9A7412159X	One-Shot Multivibrator	1.68	1.68	1.34	1.04
570-3520	U6N7415459X	1 of 16 Decoder	6.05	6.05	5.60	4.85
570-3525	U7B7415759X	Quad 2-Input Multiplexer	3.10	3.10	2.80	2.45
570-3530	U7B7416059X	Decade Counter	7.50	7.50	6.90	6.00
570-3535	U7B7416159X	Binary Counter	7.50	7.50	6.90	6.00
570-3550	U6N7418159X	4-Bit Arithmetic Logic	12.63	9.70	8.95	7.77
570-3560	U7B7418259X	Carry Look Ahead Unit	3.60	2.78	2.56	2.22
570-3570	U7B7419259X	Up/Down Decade Counter	9.12	7.50	6.90	6.00
570-3575	U7B7419359X	Up/Down Binary Counter	9.12	7.50	6.90	6.00
570-3580	U7B7419559X	4-Bit Shift Register	5.25	4.30	3.95	3.45

SERIES 9H/54H, 74H HIGH SPEED TTL/SSI

High speed gates and flip-flops; pin and function identical with 74H00 series. Ceramic DIP package.

U6A Series Stock No.	Type No.	Description	EACH 1-9	10-24	25-99	100-Up
570-1840	U6A74H0059X (9H00)	Quad 2-Input NAND Gate	.75	.60	.48	.42
570-1860	U6A74H0159X (9H01)	Quad 2-Input NAND Gate (O.C.)	.75	.60	.48	.42
570-1864	U6A74H0459X (9H04)	Hex Inverter	.75	.75	.60	.50
570-1866	U6A74H0559X (9H05)	Hex Inverter (O.C.)	.75	.75	.60	.50
570-1870	U6A74H0859X (9H08)	AND Gate	.75	.75	.60	.50
570-1872	U6A74H1059X (9H10)	Triple 3-Input NAND Gate	.75	.75	.60	.50
570-1874	U6A74H1159X (9H11)	Triple 3-Input AND Gate	.75	.75	.60	.50
570-1876	U6A74H2059X (9H20)	Dual 4-Input NAND Gate	.75	.75	.60	.50
570-1877	U6A74H2159X (9H21)	Dual 4-Input AND Gate	.98	.98	.78	.65
570-1878	U6A74H2259X (9H22)	Dual 4-Input NAND (O.C.)	.75	.75	.60	.50
570-1885	U6A74H3059X (9H30)	8-Input NAND Gate	.75	.75	.60	.50
570-1900	U6A74H4059X (9H40)	Dual 4-Input NAND Buffer	.75	.75	.60	.50
570-1910	U6A74H5059X (9H50)	Exp. Dual 2-Wide 2-In. AOI	.75	.60	.48	.42
570-1930	U6A74H5159X (9H51)	Dual 2-Wide 2-Input AOI	.75	.60	.48	.42
570-1935	U6A74H5259X (9H52)	Exp. 2-2-2-3 AND-OR	.75	.75	.60	.50
570-1940	U6A74H5359X (9H53)	Exp. 2-2-2-3 AOI	.75	.75	.60	.50
570-1942	U6A74H5459X (9H54)	4-Wide 2-Input AOI	.75	.75	.60	.50
570-1944	U6A74H5559X (9H55)	Exp. 2-Wide 4-Input AOI	.75	.75	.60	.50
570-1947	U6A74H6059X (9H60)	Dual 4-Input Expander	.75	.75	.60	.50
570-1949	U6A74H6159X (9H61)	Triple 3-Input Expander	.75	.75	.60	.50
570-1951	U6A74H6259X (9H62)	3-2-2-3 Input AND-OR Exp.	.75	.75	.60	.50
570-1956	U6A74H7159X (9H71)	JK Master Slave F-F (AND-OR)	1.15	1.15	.92	.77
570-1958	U6A74H7259X (9H72)	JK Master Slave F-F (AND)	1.15	1.15	.92	.77
570-1960	U6A74H7359X (9H73)	Dual JK Master Slave F-F	1.95	1.95	1.55	1.30
570-1962	U6A74H7459X (9H74)	Dual D Edge Triggered F-F	1.70	1.35	1.10	.95
570-1964	U6B74H7659X (9H76)	Dual JK Master Slave F-F	1.75	1.75	1.40	1.15
570-1968	U6A74H7859X (9H78)	Dual JK Master Slave F-F	1.25	1.25	1.00	.84
570-1970	U6A74H10159X (9H101)	JK Edge Trigger F-F (AND-OR)	1.25	1.25	1.00	.84
570-1972	U6A74H10259X (9H102)	JK Edge Trigger F-F (AND)	1.25	1.25	1.00	.84

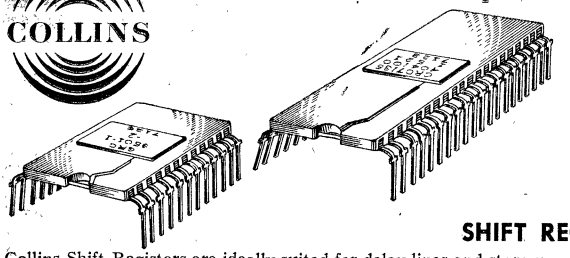
TELEVISION, FM/AM RADIO AND HI-FI CIRCUITS

Stock No.	Type No.	Description	EACH 1-9	10-24	25-99	100-Up
569-1215	U5E7064394	TV Automatic Fine Tuning	1.95	1.31	1.21	1.05
569-1218	U6A7065394	TV/FM Sound System	2.05	1.38	1.26	1.10
569-1505	U5Z7703312	RF/IF Limiting Amp.	2.35	1.50	1.20	1.00
570-1862	U6A7729394	FM Stereo Multiplex Decoder	2.80	1.88	1.72	1.50
570-1874	U6A7732394	FM Stereo Multiplex Decoder	2.50	1.66	1.53	1.33
570-2040	U6A7739393	Low Noise Stereo Preamp	3.75	3.38	2.70	2.25
570-2168	U5E7746394	Color TV Chroma Demodulator	3.13	2.04	1.83	1.67
570-2170	U6A7746394	Color TV Chroma Demodulator	3.13	2.04	1.83	1.67
570-2340	U5B7749394	Dual Amplifier	2.50	2.10	1.68	1.40
570-2420	U6A7754394	TV/FM Sound System	1.85	1.24	1.14	.99

Stock No.	Type No.	Description	EACH 1-9	10-24	25-99	100-Up
570-2430	U6A7757312	AGC IF Amplifier	6.10	4.08	3.76	3.27
570-2440	U6A7757393	AGC IF Amplifier	2.63	1.74	1.60	1.39
570-2480	U6A7767394	FM Stereo Multiplex Decoder	1.95	1.31	1.21	1.05
570-2550	U6A7780394	Phase Locked Loop	3.13	2.04	1.82	1.67
570-2555	U6A7781394	Gain Controlled IF Amp.	3.13	2.04	1.82	1.67
570-2560	U6A7784394	TV/FM Sound System	1.95	1.31	1.21	1.05
570-2580	U6B7785394	TV Signal Processing Ckt.	3.13	2.08	1.92	1.67
570-2600	U6A7786394	PAL TV Chromed Demodulator	2.50	1.66	1.53	1.33
570-2650	U5E7796312	/Doubly Balanced	5.10	3.40	3.12	2.72
570-2660	U5E7796393	\Modulator/Demodulators	1.98	1.33	1.22	1.06

Collins MOS/LSI Standard Product Arrays

COLLINS



Collins MOS/LSI shift register, memory and functional logic standard products are fabricated using a proved P-channel enhancement mode technology. Most of the devices are also available over the MIL temperature range of −55° C to +125° C. All are available in DIP or flat pack configuration. All electrical characteristics given are measured at t_{case} = +25° C. See following page for information on special cases and temperature ranges.

SHIFT REGISTERS

Collins Shift Registers are ideally suited for delay lines and storage elements in such applications as sonar and radar signal processors, digital filters, visual displays, buffer memories, and various computer and peripheral equipment. Data is shifted serial-in/serial-out through the registers by externally-generated clocks. Collins low threshold shift registers require clocks with swings from +5.0 to −12.0 volts. The high threshold shift registers require clocks with swings from 0 to −27.0 volts.

TYPE CRC1502, CRC1503 AND CRC1504 16-BIT AND 32-BIT QUAD GATED SHIFT REGISTERS

These devices interface with DTL/TTL and low threshold MOS devices. Circuitry is low threshold dynamic 2 φ. Each of its four shift registers operates up to 1.0 MHz with a 50 pF load. Storage capacity is 128 bits; however, a register with 512 bits of storage can be built by connecting four registers in series. Further increases are achieved by serially coupling several units. When used with Collins R-Adder and/or Collins Quad Serial Summer, the register forms a DDA system capable of solving linear differential equations (see DDA under Functional Logic, on following page).

TYPE CRC1501 1024-BIT SHIFT REGISTER

This device operates up to 1.0 MHz with a 25 pF load, and interfaces with standard MOS input and output levels. Circuitry is high threshold dynamic 4 φ. By multiplexing two units, a 2048-bit register operating at 2.0 MHz can be constructed. A 1023-bit mode allows 1 bit of time for processing.

TYPE CRC1505 198-BIT (TRIPLE 66) SHIFT REGISTER

Made up of three 66-bit shift registers, this device interfaces with standard MOS input and output levels. Circuitry is high threshold dynamic 2 φ. Capable of 1.0 MHz frequency rates with 20 pF output loads. The output buffer for each of the registers is an open drain MOS transistor which, with the addition of an external load resistor, inverts the input data logic level. The CRC1505 Shift Register is pin-compatible with pL5R198C, RD13F, MK1001L, Mc1141E, and 3322 (Fairchild).

*Also available for operation over MIL temperature range of −55°C to −125°C.

Stock No.	Mfr's Type No.	Description	Power Supply	Dissip. (mW/bit)	Package	Operating Temp.	EACH 1-9	10-99	100-Up
539-1501	CRC1501-1-2	1024-Bit Shift Register	V_{DD} = −12	0.29	14-lead DIP	−25° to +85°C*	32.00	19.95	15.00
539-1502	CRC1502-1-2	32-Bit Quad Gated Shift Register	V_{CC} = +5, V_{DD} = gnd.	0.7	24-lead DIP	−25° to +85°C*	29.60	18.50	13.90
539-1503	CRC1503-1-2	32-Bit Quad Gated Shift Register	V_{CC} = +5, V_{DD} = gnd.	0.7	40-lead DIP	−25° to +85°C	30.35	18.95	14.25
539-1504	CRC1504-1-2	16-Bit Quad Gated Shift Register	V_{CC} = +5, V_{DD} = gnd.	0.7	24-lead DIP	−25° to +85°C	29.85	18.60	14.00
539-1505	CRC1505-1-2	198-Bit (Triple 66) Shift Register	V_{DD} = −14	0.075	14-lead DIP	0° to +70°C	13.15	8.20	6.15
539-1515	CRC1505-3-2	198-Bit (Triple 66) Shift Register	V_{DD} = −14	0.075	10-lead TO-100	0° to +70°C	13.15	8.20	6.15

MEMORIES

Collins ROM'S and RAM'S are ideally suited for such applications as code conversion, data storage, microprogramming, and control ro combinatorial logic. Large systems are built from individual units by paralleling address inputs to increase word size or by wire-OR-ing outputs to increase the numbers of words in the memory. ROM'S may be ordered with custom patterns or with standard code conversion and character generator patterns. RAM'S have non-destructive readout, need no refresh or post read/write.

TYPE CRC3001 AND CRC3003 1024-BIT 128-WORD ROM'S

These ROM'S are organized as 128 x 8 bits/word. Circuitry is high threshold static. Data readouts are achieved with the application of the desired 7-bit binary address pattern, and remain valid as long as the address remains constant. The standard 1024-bit ROM is programmed as a Sine Look-Up Table. The bit pattern stored in the memory can be programmed to meet individual customer requirements. Access time is 2.0 μsec. Pin-compatible with pMS-1024C and 3501 (Fairchild).

TYPE CRC3002 AND CRC3004 2048-BIT 256- AND 512-WORD ROM'S

These devices are organized as 256 x 8 or 512 x 4-bit words. Circuitry is high threshold static. Since operation is static, data is available at the outputs as long as an input is selected. CRC3002 is available with custom pattern; CRC3004 is programmed as a 4x4 Multiplier Look-Up Table. Output voltage swings of +7.5 volts or +5.5 volts are optional. Access time is 0.600 μsec. Pin-compatible with pMS2048LVC, MM423/MM523.

TYPE CRC3501 TO CRC3505 2560-BIT 256- AND 512-WORD ROM'S

Utilize a unique combination of low threshold dynamic address decoding and static output storage. Can be organized as 256 x 10, 256 x 9, 256 x 8, 512 x 5 and 512 x 4-bit words. The 256-word ROM can be expanded to 2048 words of any number of bits in length, the 512-word ROM to 4096 words. Expansion is limited only by operational speed requirements. The ROM's are DTL/TTL compatible with a fanout of one. With the low impedance push-pull output buffers as the only gates requiring the V_{DD}, each ROM output can drive standard and MOS low threshold circuitry or a single DTL/TTL gate, and not require external hardware. Internal amplifiers allow low level timing signals also not requiring external hardware. Access time is 0.600 μsec. Custom pattern capability is offered for both the 256- and 512-word ROM's. The 256-word ROM is available as a code converter with ASCII to EBCDIC (CRC3502) or EBCDIC to ASCII (CRC3503) standard patterns. As a character generator the 512-word ROM is available in both ASCII upper case (CRC3504) or ACSII lower case (CRC3505) patterns.

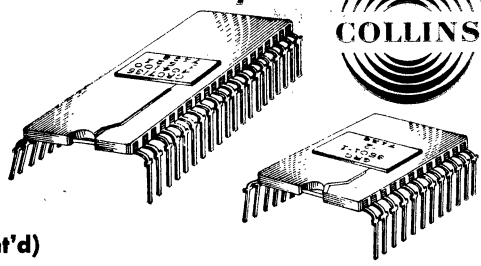
*Also available for operation at MIL temperature range, −55° to +125°C.
†Prices listed do not include custom pattern charge.

Stock No.	Mfr's Type No.	Description	Power Supply	Dissip. (mW/bit)	DIP Leads	Operating Temp.	EACH 1-9	10-99	100-Up
539-1701	CRC3001-1-3	1024-Bit 128-Word ROM (custom)†	V_{GG} = V_S = −27,				23.30	14.55	10.95
539-1703	CRC3003-1-3	1024-Bit 128-Word ROM (sine look-up)	V_{DD} = −13	0.130	24	0° to +70°C	23.30	14.55	10.95
539-1702	CRC3002-1-3	2048-Bit 256 & 512-Word ROM (cust.)†	V_{SS} = +12, V = −12,				31.60	19.70	14.80
539-1704	CRC3004-1-3	2048-Bit 256-Word ROM (4x4 Multipl.)	V_{DD} = 0.0	0.150	24	0° to +70°C	31.60	19.70	14.80
539-1741	CRC3501-1-2	2560-Bit 256 & 512-Word ROM (cust.)†	V_{SS} = +5, V_{GG} = −12,				53.50	33.40	25.10
539-1752	CRC3502-1-2	2560-Bit 256-Word ROM ASCII/EBCDIC Conv.	V_{DD} = gnd.	0.200	28	−25° to +85°C*	53.50	33.40	25.10
539-1760	CRC3503-1-2	2560-Bit 256-Word ROM EBCDIC/ASCII Converter	V_{SS} = +5, V_{GG} = −12, V_{DD} = gnd.	0.200	28	−25° to +85°C*	53.50	33.40	25.10
539-1770	CRC3504-1-2	2560-Bit 512-Word ROM Row Character Generator ASCII Upper Case	V_{SS} = +5, V_{GG} = −12, V_{DD} = gnd.	0.200	28	−25° to +85°C*	53.50	33.40	25.10
539-1780	CRC3505-1-2	2560-Bit 512-Word ROM Row Character Generator ASCII LC & Spec. Charact.	V_{SS} = +5, V_{GG} = −12, V_{DD} = gnd.	0.200	28	−25° to +85°C*	53.50	33.40	25.10
539-1801	CRC4001-1-3	64-Bit (16 x 4) RAM	V_{SS} = 0.0, V_{GG} = −27, V_{DD} = −15	3.9	14	0° to +70°C	21.30	13.25	9.95
539-1802	CRC4002-1-2	128-Bit (64 x 2) RAM	V_{SS} = +12, V_{DD} = gnd.	0.9	24	−25° to +85°C*	32.30	20.15	15.15
539-1803	CRC4003-1-2	256-Bit (64 x 4) RAM	V_{SS} = +12, V_{DD} = gnd.	0.9	28	−25° to +85°C*	51.20	31.90	24.00

Call, Write or Wire for Prices on Larger Quantities

Collins MOS/LSI Standard Product Arrays

When ordering a Collins MOS/LSI standard product, please give the Stock Number and complete Mfr's Type Number, which includes suffixes to indicate package style and operating temperature. All standard products are available in cases and temperatures other than those listed; these can be ordered by changing the two suffixes. The package suffix for a dual in-line package is −1; for a flatback −2, for a TO case −3. The final suffix to indicate temperature range is −1 for MIL range of −55° C to +125° C; −2 for extended commercial range of −25° C to +85° C; −3 for commercial range of 0 to +70°C. Write or call for prices on types other than those listed.



MEMORIES (Cont'd)

TYPE CRC4001 64-BIT (16x4) RAM

Contains 64 bits of storage, complete address decoding, read/write control logic, sense amplifiers and output buffers. Circuitry is high threshold static. Each data input bit and output bit share a common pin, allowing the use of a single data in-data out line per bit. Each output buffer is a single-ended transistor capable of providing 1.5 mA at −2.0 volts, making it both MOS and bipolar compatible. Separate non-overlapping read enable and write enable inputs simplify system timing. Expansion from 16x4 bits/word to a larger memory system is accomplished by using the address enable as a chip select. Access time is 0.2-0.4 μsec. Pin compatible with pMS16-x4C and MS1160L.

TYPE CRC4002 AND CRC4003 128-BIT (64x2) AND 256-BIT (64x4) RAM's

High speed and low system power of these devices is achieved by moving the decode, read/write logic and buffers out of the individual package. Circuitry is low threshold static. The shared use of TTL decoding and integrated circuit sense amplifiers among many units allows large capacity storage with 100 nanosecond access time and less than 1 mW/bit power dissipation. ECL, DTL and COSMOS interfaces are possible. Larger memories are created by wire-OR-ing the digit-sense lines of separate RAM's to increase the word plane. The number of bits per word is increased by paralleling the address lines of separate RAM's.

SEE PRECEDING PAGE FOR PRICES ON TYPES CRC4001, CRC4002 AND CRC4003

FUNCTIONAL LOGIC

TYPE CRC2001 16-CHANNEL MULTIPLEXER

Adaptable to many system applications requiring sequential or random access multiplexing, such as telemetry (either analog or digital) systems, simple data systems, and other airborne/ground instrumentation signal routing requirements. Consists of 16 channel switches, a 4-bit address register/counter, random access gating, decode matrix and a control flip-flop. Circuitry is high threshold static. The control flip-flop permits additional address storage when large multiplexing systems (any multiple of 16) are formed by interconnection of CRC2001 Multiplexers. An internal counter mode allows sequential sampling at an externally controlled rate. Output ON resistance, 1000 ohms. Switch setting time is 4 μsec.

TYPE CRC9503 R-ADDER

Uses the same number system as the Quad Serial Summer, but instead of supplying a shift register internally, it has additional logic to detect word length overflows. Circuitry is low threshold dynamic 2 φ. The chip consists of three independent R-Adders. The first two are full R-Adders with overflow and both biased and unbiased outputs. The third R-Adder has a biased output only; however, it can be configured, under the control of two mode lines, as a servo adder preceded by a serial summer subtractor. Clocks with swings from +5.0 to −12.0 volts are required. Clock repetition rate is 0.05 MHz minimum, 6.00 MHz maximum.

TYPE CRC9504 QUAD SERIAL SUMMER

Ideal for serial addition in digital computation, the Quad Serial Summer is an arithmetic device that adds or subtracts serial words represented in the 2's complement (the appearance of a "1" in the last bit position indicates the number is negative). Circuitry is low threshold dynamic 2 φ. Since five independent inputs are provided with separate add and subtract control leads for each input, the output is $\pm Y_1 \pm \Delta Y_1 \pm \Delta Y_2 \pm \Delta Y_3 \pm \Delta V_4$. The output is then stored in a 32-bit Shift Register which can be used as an accumulator by connecting the output to main input Y_1, and serially loading the initial word into the SER LOAD input with Mode control set at logic "1". Clock repetition rate is 0.05 MHz min., 1.00 MHz max.

DIGITAL DIFFERENTIAL ANALYZER (DDA)

Digital differential analyzers are used in control systems, system simulation, and wherever real time solution of differential equations is required. Two DDA's can be built from Collins MOS/LSI devices—(1) the R-Adder, 32-bit Quad Gated Shift Register and the Quad Serial Summer solve the differential equation: $dz/dx = \pm Y_1(x) \pm Y_2(x) \pm Y_3(x) \pm Y_4(x)$; (2) the R-Adder and 16- or 32-bit Quad Gated Shift Register solve the differential equation: $dz/dx = Y(x)$. Data is shifted through the gates by an externally generated two-phase clock system. The R-Adder and Quad Serial Summer by themselves find application in digital computers, servo systems and wherever the addition of two functions is required.

TYPE CRC9501 AND CRC9502 8-BIT PLUS SIGN A/D, D/A CONVERTERS

Ideal for voice transmitting and receiving systems processing of sensor signals, and automated equipment control. Used either as analog-to-digital converters or as digital-to-analog converters, by external strapping. The successive approximation technique is used for analog-to-digital conversion; digital-to-analog conversion is performed by the weighted resistor ladder method. Circuitry is high threshold dynamic 2 φ and is divided into two separate chips, permitting use of low value graduated "on" resistance MOS switches in the output devices. The nine SPDT switches range in value from 150 to 800 ohms. Output ON resistance is 140-400 ohms (CRC9501) or 600-800 ohms (CRC9502). Two-phase clocking system is required. Clock rates to 1.0 MHz can be used in D/A mode; 200 kHz in A/D.

TYPE CRC9505 ANALOG SWITCH

Used for airborne and ground support systems requiring analog transmission, multiplexing and numerous signal routing applications. Can also be used in conjunction with operational amplifiers for load or gain-changing requirements. Circuitry is high threshold static. The device is a SPDT switch electrically driven to obtain a double-pole switching function. Input is made through a two-input OR gate which controls low "on" resistance output devices. The logic OR gate is capable of handling maximum logic "0" levels of +0.7 volts and minimum Logic "1" levels of +2.4 volts, allowing for direct interface with TTL systems. Input pins are internally tied through resistors to a +5.0-volt power supply, allowing the user to float the inputs and maintain a valid logic "1" input to the chip. The outputs are capable of switching ±10 volts or maintaining a 20-volt potential across an output switch with a leakage current of less than 1 μA. Output ON resistance is 180 ohms. Switch setting time is 4 μsec. Pin-compatible with SH9019A, SH9919B and SDG7501.

RECURSIVE DIGITAL FILTERS SYSTEM

Several new devices are used to implement sampled data low pass, band pass, and high pass configurations. The new devices include: I/O, multipler, storage, MOS buffer, and timing arrays. Circuitry is high threshold dynamic 4 φ. A dual two-pole bandpass filter is implemented with one set of filter arrays. The input and output sample word length is 8 bits plus sign; the multiplier coefficient accuracy is 10 bits plus sign, and the internal storage word size is 21 bits. Typical word sample rate is 7040 Hz with an internal filter computation clock rate of 887,040 Hz. A typical application configures a cascade of three two-pole bandpass filters with a resulting 150 Hz bandwidth at 605 Hz center frequency. Dynamic logic requiring two external clock phases is used. The timing array requires external drive.

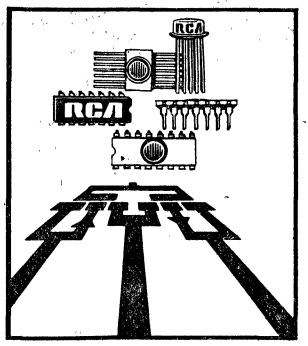
*Also available for operation over MIL temperature range of −55° to −125°C.
†Also available for operation over temperature range of −55° to −100°C.

Stock No.	Mfr's Type No.	Description	Power Supply	Dissip. (mW/bit)	DIP Pkg.	Operating Temp.	EACH 1-9	10-99	100-Up
539-1601	CRC2001-1-3	16-Channel Multiplexer	$V_{DD}=-28$	120	40-lead	0° to +70°C	32.00	19.95	15.00
539-1951	CRC9501-1-2	8-Bit Plus Sign A/D Converter	$V_{DD}=-12$, $V_{GG}=-28$	100	24-lead	−25° to +85°C*	53.60	33.40	25.10
539-1952	CRC9502-1-2	8-Bit Plus Sign D/A Converter	$V_{DD}=-12$, $V_{GG}=-28$	120	24-lead	−25° to +85°C*	54.80	33.60	25.25
539-1953	CRC9503-1-2	R-Adder	$V_{CC}=+5$, $V_{DD}=0$	120	40-lead	−25° to +85°C*	42.50	26.55	19.95
539-1954	CRC9504-1-2	Quad Serial Summer	$V_{CC}=+5$, V_{DD}=gnd.	90	24-lead	−25° to +85°C*	43.30	26.40	19.85
539-1955	CRC9505-1-2	Analog Switch	$V_{SS}=+12$, $V_{CC}=+5$, $V_{GG}=-28$, gnd.	95	14-lead	−25°to+ 85°C †	15.30	9.50	7.15

Write or Call for Prices on Other Case Styles and Temperature Ranges

RCA COS/MOS Digital Integrated Circuits

For low-Voltage (3 to 15 V) Digital Circuit Designs



CD4000A Series features include wider supply voltage range; faster gate propagation delay; faster flip-flop toggle rates; supply voltage compatible with DTL, T^2L bipolar logic families—completely eliminates need for second and third power supplies, and insures voltage level compatibility when interfacing. Also provides direct connection from COS/MOS to bipolar device in most applications, only a single pull-up resistor may be required.

WIDE VARIETY OF APPLICATIONS

AUTOMOTIVE: Clocks, Adaptive Braking, Electronic Transmission, Electronic Speedometer, Electronic Locks
ADDRESSING: Pocket Pages, Utility Meter Read, Selective Call, Demolition Fuse, Satellites, Resource Monitoring
COMPUTERS: Serial Adder, Address Decoder, Memory Driver, Parallel Processor, Complete Computers, Peripheral Terminals, Line Printers
TIMERS: Wrist Watches, Auto Clocks, Digital Clocks, Battery Wall Clocks, Navigation Clocks, Heart Pacer, Down-Time Clocks
POWER CONTROL: Speed/Time Control, Heat/Time Control, Industrial Sequencers, Appliance Timers
COMMUNICATIONS: Frequency Synthesizers, Digital Filters, Pulse Pair Decoders, Preset Channel Memory, Phased Lock Oscillators
FUSES: Free-Fall Counter, Var-Time Fuse, Self Destruct Fuse, Anti-Tank Mine, Electronic Lock, Demolition Decoder
DATA ACQUISITION: Industrial Monitoring, Satellites, Meter Reading, Aircraft Flight Engineering Systems
MISCELLANEOUS: Multiplexers, Phase Array Radar, Dial Pulse Converter, Coded Ringing

TOP PERFORMANCE FEATURES

Low power—10 nW typ. for gates (per pkg.), 10 μW typ. for MSI circuits (per pkg.); Wide voltage range, 3 to 15 volts (1.3 volts for special types); High noise immunity—45% of supply voltage (typ.); High speed—to 10 MHz; High fanout—>50; Wide variety of packages—dual in-line ceramic, dual in-line plastic, flat pack, TO-5 style; Logic compatibility—T^2L & DTL interfacing; Excellent temperature stability—±1.5% shift in transfer characteristics over —55 to +125°C; Inputs fully protected; High input impedance—10^{12} Ω typ.; Clock voltage = supply voltage; Single phase clock; Wide operating temperature range—ceramic package types —55°C to +125°C, plastic package types —40°C to +85°C.

WIDE VARIETY OF LOGIC FUNCTIONS

Gates—NOR, NAND, Transmission, AND-OR Select, Exclusive-OR, Complementary Pairs; Shift Registers—8 stage, dual 4-stage, 18-stage, 64-stage static; 200 bit—dynamic; Counters/Dividers—Binary: Ripple-Carry, 7 & 14 stage, Presettable: Up-Down, Divide-by-N, Decade: with 10 Decoded Outputs with 7 Segment Display Outputs; Flip-Flops—"D", J-K; Arithmetic Devices—Adders, Parallel Processors; Decoders—BCD-to-Decimal, 3-Bit Binary-to-Octal; Multiplexers—Quad Bilateral Switch; Hex Buffer/Logic-Level Converters—Inverting, Non-Inverting; Memories, 16- and 64-Bit NDRO Static RAM, 32-Bit Word Organized, 256-Bit Fully Decoded RAM.

Characteristic	CD4000 Series	CD4000A Series
Supply voltage range	5 to 15 V	3 to 15 V
Gate propagation Delay (typ)	50 ns at $V_{DD}=10$ V $C_L=15$ pF	25 ns at $V_{DD}=10$ V $C_L=15$ pF 35 ns at $V_{DD}=5$ V
Flip-Flop Toggle Rate (typ)	3 MHz at $V_{DD}=10$ V $C_L=15$ pF	10 MHz at $V_{DD}=10$ V $C_L=15$ pF 4 MHz at $V_{DD}=5$ V

Maximum Ratings	CD4000 Series	CD4000A Series
Storage Temp. Range	−65°C to +150°C	−65°C to +150°C
Operating Temp. Range: ceramic pkg. types: plastic pkg. types:	−55°C to +125°C −40°C to +85°C	
DC Supply Volt. Range	−0.5 V to +15 V	−0.5 V to +15 V
Device Dissip. (per pkg.)	200 mW	200 mW
All Inputs for types CD4009A, CD4010A	$V_{SS} \leq V_I \leq V_{DD}$	$V_{SS} \leq V_I \leq V_{DD}$ $V_{CC} \leq V_{DD}$

TYPICAL CHARACTERISTICS FOR CD4000A SERIES AT $T_A=25°C$, $V_{DD}=5$ V, $C_L=15$ pF

Logic Function	Quiescent Device Dissipation (P_D) μW	Impedance Ω	Noise Immunity (All Inputs) (V_{NL}, V_{NH})	Input Capacitance (C_I) pF
Counter/Dividers (CD4004A, CD4017A, CD4018A, CD4020A, CD4022A)	0.025 to 2.5			
Arithmetic Devices (CD4008A)	1.5			
Memories (CD4005A)	0.1			
Gates (CD4000A, CD4001A, CD4002A, CD4007A, CD4011A, CD4012A, CD4019A, CD4023A, CD4025A)	0.001 to 0.15	10^{12}	45% of V_{DD}	5
Static Shift Register (CD4006A, CD4014A, CD4015A, CD4021A)	0.025 to 2.5			
Flip Flops (CD4013A)	0.025			
Hex-Buffer/Logic-Level Converters (CD4009A, CD4010A)	0.15			
Bilateral Switch (CD4016A)	5		1.5 V typ*	

*N_{TH}

ORDERING INFORMATION

COS/MOS IC's are available in a wide variety of package designs. These packages are identified by Suffix Letters indicated in the chart shown below.

Package	SUFFIX LETTERS: Standard CD4000 Series (5 to 15 V)	SUFFIX LETTERS: New CD4000A Series (3 to 15 V)
Dual In-Line Ceramic	D	D
Dual In-Line Plastic	E	E
Flat Pack	—	K
TO-5 Style	T	T

RCA COS/MOS IC SERIES CD4000

Stock No.	Mfr's Type	Description	EACH 1-9	10-99	100-999	1000-Up
897-2401	CD4000AE	Dual 3-Input NOR plus Inverter	2.00	1.75	1.39	1.15
897-2402	CD4001AE	Quad 2-Input NOR Gate	2.05	1.77	1.42	1.18
897-2413	CD4002AE	Dual 4-Input NOR Gate	2.14	1.85	1.48	1.22
897-2426	CD4004AE	7-Stage Binary Counter	7.02	6.00	4.86	4.02
897-2432	CD4005AE	16 Bit Random Access Memory	9.65	8.35	6.70	5.55
897-2437	CD4006AE	18-Stage Static Shift Register	9.74	8.40	6.74	5.60
897-2441	CD4007AE	Dual Complimentary Pair Plus Inverter	2.05	1.77	1.42	1.18
897-2448	CD4008AE	4 Bit Full Adder with Parallel Carry	9.43	8.10	6.53	5.40
897-2449	CD4009AE	Hex Inverter	4.50	3.90	3.12	2.60
897-2451	CD4010AE	Hex Buffer	4.50	3.90	3.12	2.60
897-2457	CD4011AE	Quad 2-Input NAND Gate	2.05	1.77	1.42	1.18
897-2463	CD4012AE	Dual 4-Input NAND Gate	2.14	1.85	1.48	1.22
897-2469	CD4013AE	Dual D-Type Set Restet Flip Flop	4.14	3.60	2.87	2.40
897-2475	CD4014AE	8 Stage Sync Parallel in Series Out Shift Reg.	9.74	8.40	6.74	5.60
897-2481	CD4015AE	Dual 4-Stage Serial in Parallel Out Shift Reg.	9.74	8.40	6.74	5.60
897-2487	CD4016AE	Quad Bilateral Switch	4.14	3.60	2.87	2.40
897-2493	CD4017AE	Decade Counter, Divider—10 Decimal Coded Out	10.04	8.65	6.96	5.75
897-2499	CD4018AE	Presetable Divide by "N" Counter	8.80	7.55	6.09	5.05
897-2502	CD4019AE	Quad-AND-OR Select Gate	3.68	3.15	2.54	2.10
897-2507	CD4020AE	14-Stage Binary Counter	11.93	10.25	8.27	6.85
897-2509	CD4021AE	8-Stage Async Parallel IN-Series OUT Shift	9.11	7.85	6.31	5.20
897-2511	CD4022AE	Divide By 8 Counter—8 Decoded Outputs	8.89	7.65	6.16	5.18
897-2512	CD4023AE	Triple 3-Input NAND Gate	2.14	1.85	1.48	1.22
897-2513	CD4025AE	Triple 3-Input NOR Gate	2.14	1.85	1.48	1.22

Be Sure to Specify Allied Stock No. and Mfr's Type No. When Ordering.

COS/MOS Digital Integrated Circuits (cont'd)

COS/MOS, RCA's Complementary Symmetry MOS line of IC's for digital applications is the realization of a technological breakthrough in solid-state technology. This capability to produce both N and P type MOS transistors on the same IC substrate has enabled the design of a family of digital IC's with unique advantageous characteristics for both logic and memory applications.

THE BASIC COS/MOS INVERTER CIRCUIT

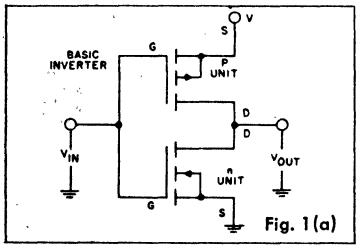


Fig. 1(a)

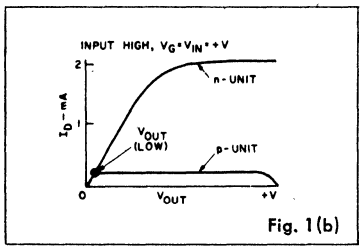


Fig. 1(b)

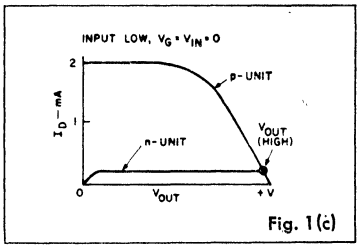


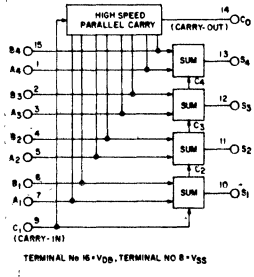
Fig. 1(c)

The basic COS/MOS inverter circuit is shown in Fig. 1(a). This monolithic circuit consists of one p-channel enhancement-type MOS transistor and one n-channel enhancement-type MOS transistor, with their drains tied in common and effectively operating in a "series" connection from a single power supply. The logic-swing gate voltage ranges from zero to the supply voltage V. When the voltage of +V (e.g., logical "1") is applied at the input, the n-channel unit is turned ON and the p-channel unit is turned OFF; the output is then in the low state (logical "0"), and logic-voltage inversion has been accomplished, as illustrated by the curve in Fig. 1(b). When zero voltage (e.g., logical "0") is applied at the input, the p-channel unit is turned ON and the n-channel unit is turned OFF. This inverter action results in an output of +V volts (logical "1"), as shown in the curve of Fig. 1(c).

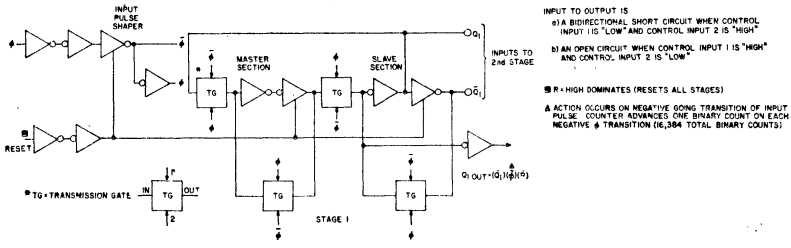
It should be understood that in either logic state one unit is OFF while the other is ON. Consequently the quiescent power dissipation is simply the product of the OFF-unit leakage current and the supply voltage.

Because the OFF-unit leakage current is typically about 1 nanoampere at a drain-to-source voltage of 10 volts, the quiescent power dissipation for the simple inverter is typically about 10 nanowatts in either logic state.

A COS/MOS flip-flop circuit is formed by the direct cross-coupled connection of two COS/MOS inverters. The COS/MOS flip-flop is the basic building block of complex function COS/MOS circuits like counters, shift registers, NDRO memories, adders etc.



Logic diagram for CD4008A.

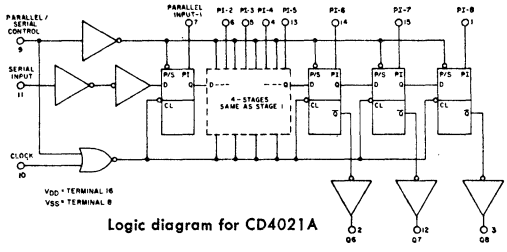


Logic diagram for 1 of 14 binary stages in CD4020A

CD4008A
COS/MOS Four-Bit Full Adder
With Parallel Carry Out

SPECIAL FEATURES:
- MSI complexity on a single chip . . . 4 Sum Outputs plus parallel Carry-Output
- High speed operation . . . Carry-In to Carry-Out delay, t_{PHL}, t_{PLH} = 45 ns at C_L = 15 pF

APPLICATIONS:
- Binary addition/arithmetic units



Logic diagram for CD4021A

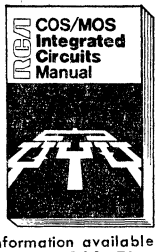
CD4020A
COS/MOS
14-Stage Ripple-Carry Binary Counter/Divider

SPECIAL FEATURES:
- Medium speed operation . . . 8 MHz (typ.) at $V_{DD}-V_{SS}$ = 10 V
- Low "high"- and "low"-level output impedance . . . 1000 Ω (typ.) at $V_{DD}-V_{SS}$ = 10 V
- MSI complexity on a single chip . . . 14 fully static, master-slave stages
- COS/MOS gate-input loading at both Reset and Input-pulse lines

APPLICATIONS:
- Frequency-dividing circuits
- Time-delay circuits
- Counter control
- Counting functions

CD4021A
COS/MOS
8-Stage Static Shift Register
Asynchronous Parallel Input/ Serial Output, Synchronous Serial Input/Serial Output

SPECIAL FEATURES:
- Asynchronous parallel or synchronous serial operation under control of parallel/serial control-input
- Individual "jam" inputs to each register stage
- Master-slave flip-flop register stages
- Fully static operation . . . DC to 5 MHz



Additional information available in the COS/MOS Product Guide, COS-278, and in the new 160-page RCA COS/MOS Integrated Circuits Manual, CMS-270.
897-2600. CMS 270.....2.50

RCA Linear Integrated Circuits

Select from one of the broadest lines of linear integrated circuits in the world.

OPERATIONAL AMPLIFIERS

Broad line for applications with: Supply voltages from ±0.75 to ±18 V Power output to 220 mW min.

Plus—RCA's totally new concept—The OTA (Operational Transconductance Amplifier) with extremely low-power consumption; adjustable transconductance; broad-range, adjustable input characteristics; and all *active* components.

ARRAYS

Multiple Transistor Arrays & Multiple Diode Arrays for maximum design flexibility.

Features monolithic construction for close-tolerance matching and temperature tracking.

Transistor arrays offer a variety of combinations of Darlington interconnections, differential amplifier configurations, and independent transistors.

Diode arrays are available as a bridge circuit and as independent diodes.

DIFFERENTIAL AMPLIFIERS

General Purpose & Special Purpose Types: from simple, broadly applicable Differential/Cascode amplifiers and Dual Differential amplifiers to DC/IF/AF/RF/Video & Wide-Band amplifier circuits.

For applications to 120 MHz.

HIGH-GAIN WIDE-BAND AMPLIFIERS

Approved high-performance line applicable for: FM/IF; Video & Wide-Band Amplifiers with typical 3 dB bandwidth of 55 MHz; Audio Power to 1 Watt.

SPECIAL-FUNCTION SUBSYSTEMS

TV Chroma Systems; TV AFT Systems; TV and FM IF Amplifiers; Amplifier Arrays; Stereo Preamplifier.

POWER CONTROL CIRCUITS

Integral-Cycle Zero-Voltage Switch; 100 mA Voltage Regulator.

DIFFERENTIAL AMPLIFIERS (TO-5 Pkg.)

	Uncommitted Bases	Uncommitted Collectors	Emitter-Follower Inputs	Emitter-Follower Output(s)	Single-Ended Output	Emitter Degeneration
CA3000	X		X			X
CA3001	X		X	X		X
CA3002	X		X	X	X	X
CA3004	X	X				X
CA3005	X	X				
CA3006	X	X				
CA3007				X		
CA3028A	X	X				
CA3028B	X	X				
CA3053	X	X				

TRANSISTOR & DIODE ARRAYS

	Package	Transistors	Diodes	Internal Connections	
CA3018	TO-5	4		1	Darlington Ampl.*
CA3018A	TO-5	4		1	Darlington Ampl.*
CA3019	TO-5		6	1	Bridge*
CA3026	TO-5	6		2	Diff. Ampl.
CA3036	TO-5	4		2	Darlington Pairs
CA3039	TO-5		6		Independent Diodes
CA3045	DIC	5		1	Diff. Ampl.*
CA3046	DIP	5		1	Diff. Ampl.*
CA3049	TO-5	6		2	Diff. Ampl.*
CA3050	DIC	10	3	2	Darlington Diff. Ampl.*
CA3051	DIP	10	3	2	Darlington Diff. Ampl.*
CA3054	DIF	6		2	Indepen. Diff. Ampl.

*Plus independent devices

HIGH-GAIN WIDE-BAND AMPLIFIERS (TO-5 Pkg.)

	Description	Low Freq. Voltage Gain, typ. (dB)	3 dB Bandwidth, typ. (MHz)	Max. Useful Freq. (MHz)	AGC Capability
CA3011	FM/IF	70	—	20	
CA3012	Amplifiers	70	—	20	
CA3020	AF Power	—	8	8	
CA3020A	Amplifiers	—	8	8	
CA3021	Video &	56	2.4	—	X
CA3022	Wideband	57	7.5	—	X
CA3023	Amplifiers	53	16	—	X
CA3040		37	55	200	

POWER CONTROL CIRCUITS

	Pkg.	Description
CA3055	TO-5	Voltage Regulator
CA3059	DIP	Zero Voltage Switch
CA3062	TO-5	Photo Detector & Power Ampl.

OTAs (OPERATIONAL TRANSCONDUCTANCE AMPLIFIERS)

	Package	Transconductance, min. μmho	Input Bias Current, max. μA	Input Offset Voltage, typ. mV	Slew Rate Unity Gain (compensated) V/μs
CA3060	DIC	15,000 (OTA Array—3 indepen. OTAs and indepen. bias reg.)			
CA3080	TO-5	6,700	5	0.4	50
CA3080A	TO-5	7,700	5	0.3	50
CA3081	TO-5	7,700	—	—	—

Packages:
FP = Flat Pack; DIC = Dual In-Line Ceramic; DIP = Dual In-Line Plastic; QUIP = Quad In-Line Plastic

SPECIAL-FUNCTION SUBSYSTEMS

	Pkg.	Application
CA3013	TO-5	Wide-Band Ampl./Limiter/FM Detector
CA3014	TO-5	Wide-Band Ampl./Limiter/FM Detector
CA3035	TO-5	High-Gain Ampl. System/3-Ampl. Array
CA3035V1	TO-5	High-Gain Ampl. System/3-Ampl. Array
CA3041	QUIP	Wide-Band Ampl./Limiter/FM Detector/Audio Driver
CA3042	QUIP	Wide-Band Ampl./Limiter/FM Detector/Audio Driver
CA3043	TO-5	FM IF Ampl./Limiter/FM Detec./AF Preampl./Driver
CA3044	TO-5	Wide-Band Ampl./Phase Detector/Output Ampl.
CA3044V1	TO-5	Wide-Band Ampl./Phase Detector/Output Ampl.
CA3048	DIP	High-Gain Amplifier System/4-Amplifier Array
CA3052	DIP	Stereo Preamplifier
CA3064	TO-5	Wide-Band Ampl./Diff. Detector/DC Ampl./Zener Diode Voltage Regulator
CA3065	QUIP	IF Ampl./Limiter/FM Detector/Elec. Atten./Audio Dr.
CA3066	QUIP	TV Chroma System; Chroma Signal Processor
CA3067	QUIP	TV Chroma System; Chroma Demodulator
CA3068	QUIP	TV Video IF System
CA3070	DIP	TV Chroma System; Chroma Signal Processor
CA3071	DIP	TV Chroma System; Chroma Amplifier
CA3072	DIP	TV Chroma System; Chroma Demodulator
CA3075	QUIP	FM IF Amplifier/Limiter/Detector/Audio Preamplifier
CA3076	TO-5	High-Gain Wide-Band IF Amplifier-Limiter

Additional information available in the RCA CDL-820 Integrated Circuit Product Guide FREE upon request; and in the RCA IC-42 Linear Integrated Circuits Manual, below.
897-3630. Type IC-42 ..... 2.50

OPERATIONAL AMPLIFIERS

	Low 1/f Noise	Power Supply Volts, max. V	Package	Open-Loop Voltage Gain, typ. dB	Input Bias Current, max. μA	Input Offset Voltage, typ. mV	Slew Rate, typ. V/μs
CA3008		±6	FP	60	12	1.08	—
CA3008A	X	±6	FP	60	4	0.9	3
CA3010		±6	TO-5	60	12	1.08	—
CA3010A	X	±6	TO-5	60	4	0.9	3
CA3015		±12	TO-5	70	24	1.37	—
CA3015A	X	±12	TO-5	70	6	1.0	7
CA3016		±12	FP	70	24	1.37	—
CA3016A	X	±12	FP	70	6	1.0	7
CA3029		±6	DIP	60	12	1.08	—
CA3029A	X	±6	DIP	60	4	0.9	3
CA3030		±12	DIP	70	24	1.37	—
CA3030A	X	±12	DIP	70	6	1.0	7
CA3033		±12	DIC	90	350 nA	2.6	2.7
CA3033A	X	±15	DIC	93	180 nA	2.9	3
CA3037		±6	DIC	60	12	1.08	—
CA3037A	X	±6	DIC	60	4	0.9	3
CA3038		±12	DIC	70	24	1.37	—
CA3038A	X	±12	DIC	70	6	1.0	7
CA3047		±12	DIP	90	350 nA	2.6	2.7
CA3047A	X	±15	DIP	93	180 nA	2.9	3
CA3056		±15	TO-5	—	500 nA	2	0.5
CA3056A		±15	TO-5	—	500 nA	1	0.5
CA3078		±0.75 to ±6	TO-5	92	200 nA	1.3	1.4

See Prices on RCA Linear IC's on Following Page

RCA Linear Integrated Circuits

Stock No.	Mfr's Type	EACH 1-9	10-99	100-999	1000-Up
897-1000	CA3000	4.75	3.80	2.76	2.30
897-1003	CA3001	6.95	5.55	4.00	3.35
897-1006	CA3002	4.66	3.71	2.70	2.25
897-1007	CA3004	4.66	3.71	2.70	2.25
897-1012	CA3005	3.10	2.48	1.80	1.50
897-1015	CA3006	7.26	5.80	4.20	3.50
897-1018	CA3007	6.73	5.35	3.90	3.25
897-1021	CA3008	4.37	3.47	2.52	2.10
897-1024	CA3008A	7.04	5.00	4.08	3.40
897-1027	CA3010	3.27	2.61	1.90	1.58
897-1030	CA3010A	6.02	4.79	3.48	2.90
897-1033	CA3011	1.82	1.47	1.07	.89
897-1036	CA3012	2.27	1.82	1.32	1.10
897-1039	CA3013	2.67	2.15	1.56	1.30
897-1042	CA3014	3.09	2.48	1.80	1.50
897-1045	CA3015	4.97	3.96	2.88	2.40
897-1048	CA3015A	8.09	6.44	4.68	3.90
897-1052	CA3016	6.02	4.79	3.48	2.00
897-1055	CA3016A	9.12	7.25	5.30	4.40
897-1058	CA3018	2.02	1.62	1.18	.98
897-1061	CA3018A	2.78	2.22	1.62	1.35
897-1064	CA3019	2.02	1.62	1.18	.98
897-1067	CA3020	3.21	2.56	1.86	1.55
897-1070	CA3020A	4.10	3.26	2.37	1.98
897-1073	CA3021	3.92	3.14	2.28	1.90
897-1076	CA3022	3.30	2.64	1.92	1.60
897-1079	CA3023	3.21	2.56	1.86	1.55

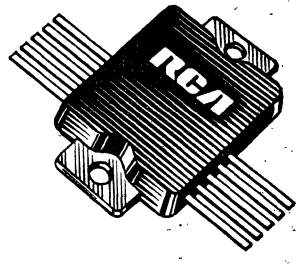
Stock No.	Mfr's Type	EACH 1-9	10-99	100-999	1000-Up
897-1082	CA3026	2.58	2.06	1.60	1.25
897-1085	CA3028A	1.82	1.47	1.07	.89
897-1088	CA3028B	2.58	2.06	1.50	1.25
897-1091	CA3029	2.02	1.62	1.18	.91
897-1094	CA3039A	3.94	3.14	2.28	1.90
897-1097	CA3030	3.27	2.61	1.90	1.58
897-1100	CA3030A	6.02	4.79	3.48	2.90
897-1109	CA3033	6.02	4.79	3.48	2.90
897-1112	CA3033A	10.16	8.09	5.88	4.90
897-1120	CA3035	3.09	2.48	1.80	1.50
897-1123	CA3035V1	3.09	2.48	1.80	1.50
897-1126	CA3036	1.82	1.47	1.07	.89
897-1129	CA3037	3.94	3.14	2.28	1.98
897-1132	CA3037A	6.02	4.79	3.48	2.90
897-1135	CA3038	6.02	4.79	3.48	2.90
897-1138	CA3038A	8.09	6.44	4.68	3.90
897-1141	CA3039	2.02	1.61	1.17	.98
897-1144	CA3040	6.11	4.87	3.54	2.95
897-1147	CA3041	2.58	2.06	1.50	1.25
897-1150	CA3042	2.58	2.06	1.50	1.25
897-1153	CA3043	3.52	2.81	2.04	1.70
897-1156	CA3044	2.89	2.31	1.68	1.40
897-1159	CA3044V1	2.89	2.31	1.68	1.40
897-1162	CA3045	3.09	2.47	1.80	1.50
897-1165	CA3046	2.02	1.61	1.17	.98
897-1168	CA3047	3.27	2.61	1.90	1.58
897-1171	CA3047A	6.02	4.79	3.48	2.90

Stock No.	Mfr's Type	EACH 1-9	10-99	100-999	1000-Up
897-1174	CA3048	5.06	4.04	2.94	2.45
897-1177	CA3049	4.03	3.22	2.34	1.95
897-1180	CA3050	4.66	3.71	2.70	2.25
897-1183	CA3051	3.41	2.72	1.98	1.65
897-1186	CA3052	3.94	3.14	2.28	1.90
897-1189	CA3053	1.00	.81	.59	.49
897-1198	CA3054	2.58	1.06	1.50	1.25
897-1192	CA3055	3.52	2.80	2.04	1.70
897-1193	CA3056	3.07	2.44	1.78	1.48
897-1194	CA3056A	8.18	6.50	4.74	3.95
897-1195	CA3059	4.03	3.20	2.35	1.95
897-1208	CA3060	12.37	9.82	7.14	5.95
897-1214	CA3062	6.11	4.86	3.54	2.95
897-1215	CA3064	2.89	2.31	1.68	1.40
897-1217	CA3065	2.89	2.31	1.68	1.40
897-1218	CA3066	5.39	4.29	3.12	2.60
897-1220	CA3067	5.57	4.46	3.24	2.70
897-1222	CA3068	6.22	4.95	3.60	3.00
897-1224	CA3070	4.34	3.47	2.52	2.10
897-1226	CA3071	4.14	3.30	2.40	2.00
897-1228	CA3072	4.25	3.38	2.46	2.05
897-1235	CA3075	2.89	2.31	1.68	1.40
897-1238	CA3076	3.32	2.64	1.92	1.60
897-1242	CA3078	8.18	6.50	4.74	3.95
897-1246	CA3080	2.00	1.58	1.15	.96
897-1248	CA3080A	8.18	6.50	4.74	3.95
897-1250	CA3081	3.92	3.12	2.27	1.89

POWER CIRCUIT MODULE

MODEL HC1000 HYBRID LINEAR AMPLIFIER

- Up to 7-Ampere Peak Current • 30 kHZ Bandwidth at 60 Watts
- Up to 100-Watt (rms) Power Output • Efficient Heat Dissipation
- Single or Split Power Supply (30 Volts to 75 Volts, Total)
- Built-In Load-Fault Protection • Hometaxial Output Transistors



Multi-purpose, all-silicon 7-ampere power amplifier for a multitude of applications in industrial and commercial equipment. The HC1000 employs a quasi-complementary-symmetry Class B output with built-in load-fault protection and hometaxial output transistors. Ideal for use as servo amplifiers (AC, DC, PWM), deflection amplifiers, power operational amplifiers, audio amplifiers, voltage regulators and driven inverters. Offers you appreciable savings in space and weight when designing, plus additional savings in assembly costs. Also reduction of parts proliferation. Engineered for efficient heat dissipation. Shpg. wt. 2 oz.

897-2650. 1-9 . . Ea. 63.00 10-99 . . Ea. 58.00
100-Up . . . . . Ea. 48.00

IC KITS AND EXPERIMENTER'S KITS

ONLY A SOLDERING IRON NEEDED!

Perfect for beginners, hobbyists, Hams, educators, technicians, engineers—anyone who wants to extend his knowledge of integrated circuits.

RCA Project Kits are complete with active and passive components, pre-drilled printed-circuit boards and easy-to-follow instructions. Less batteries.

EXPERIMENTER'S KITS

KD2105 EXPERIMENTER'S KIT. Has all the active components (additional passive components are required) for building 10 practical control circuits described in RCA's Experimenter's Manual KM-71.
897-3500. Shpg. wt. 8 oz. 13.50

KD2106 LIGHT SENSOR KIT. Has one photocell. For use in conjunction with KD2105 Experimentor's Kit (above).
897-3503. Shpg. wt. 10 oz. 3.50

KD2117 IC VARIETY PACK. Everything an engineer or hobbyist needs to extend his knowledge of IC's. Full instructions.
897-3523. Shpg. wt. 8 oz. 5.90

IC PROJECT KITS

KC4000 MIKE PREAMPLIFIER. High-gain, wide band. Hi-Z/lo-Z inputs.
897-3003. Shpg. wt. 3 oz. 5.95

KC4002 AUDIO OSCILLATOR. Use as a code-practice oscillator or to test Amateur radio transmitters or hi-fi, etc.
897-3009. Shpg. wt. 3 oz. 4.95

KC4004 9-V REGULATED POWER SUPPLY. Supplies 9-volts DC output with voltage regulation of 3% at a maximum current of 250 mA.
897-3012. Shpg. wt. 5 oz. 10.95

KC4005 INTRUDER ALARM. A specially designed circuit that develops a "whooping" signal for security system. Ideal for home, business, auto, etc.
897-3015. Shpg. wt. 3 oz. 7.95

KC4001 2-CHANNEL MIXER. Mix audio from 2 mikes, etc. into one input.
897-3006. Shpg. wt. 3 oz. 8.20

KC4003 OSCILLATOR AND AMPLIFIER. Build a 500-mW audio amplifier or a variable-tone audio oscillator.
897-3010. Shpg. wt. 4 oz. 11.30

KC4006 FIRE ALARM. An invaluable protection aid. Special low-melting-point solder sets off super-sensitive circuit for a fire warning device.
897-3018. Shpg. wt. 3 oz. 9.50

KC4500 KIT ENCLOSURE AND HARDWARE PACK. Case with input, output jacks, switch, and other hardware. Provides enclosure for KC4000, KC4001 and KC4002.
897-3100. Shpg. wt. 4 oz. 6.10

IC KITS FOR ADAPTING RADIOS TO TUNE PUBLIC SERVICE BANDS

897-3021. Aircraft Band Converter Kit. 108-130 MHz. 1 lb. 13.50
897-3024. Ham, Government Space Research Band Kit. 1 lb. 13.50
897-3027. Maritime, Mobile, Fire and Police Band Kit. 1 lb. 13.50
897-3030. Police and Fire Band Kit. 1 lb. 13.50

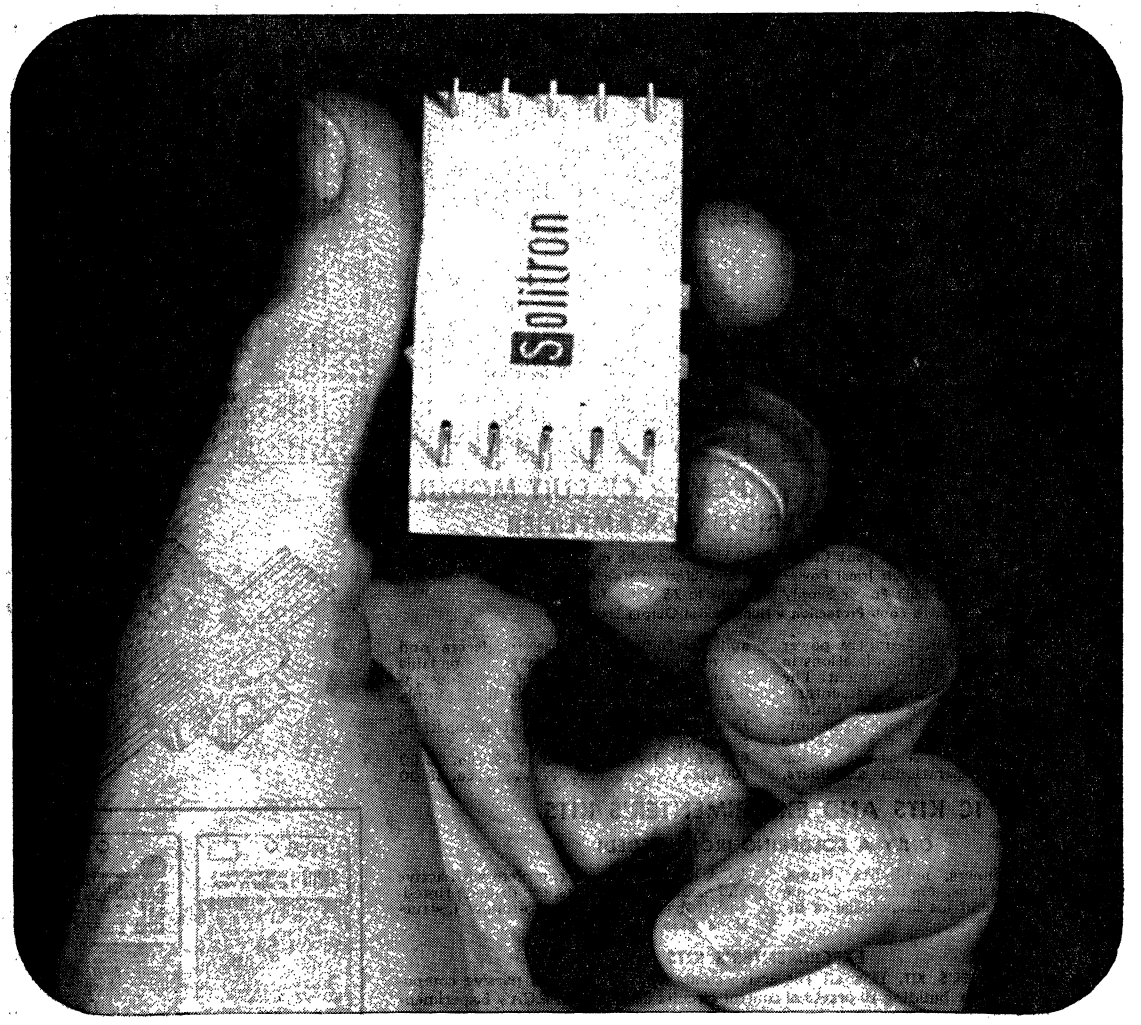
RCA EXPERIMENTER/HOBBYIST BOOKS

SOLID-STATE HOBBY CIRCUITS MANUAL. 10 oz.
897-3600. Type HM91 . . . . . 1.95

SCR EXPERIMENTER'S MANUAL. Wt. 6 oz.
897-3610. Type KM71 95

TRANSISTOR, THYRISTOR AND DIODE MANUAL. Shpg. wt. 6 oz.
897-3620. Type SC15 . . . . . 2.50

Solitron Hybrid Solid-State Audio Amplifiers . . .



- Used by "Name" Brand Manufacturers of Quality Stereo and Hi-Fi Equipment
- Fast, Easy Assembly, Even for Semi-Skilled—Saves Hours of Drudgery
- For Hobbyist or Professional—Automotive, Marine and Countless Other Applications
- Thick Film Cermet Techniques Assure Uniform Performance, Optimum Reliability, Low Function Cost, Minimum Distortion
- Preset Idle Current and Center Voltage Provide Ideal Operation Over a Wide Range of Load Conditions

Amazing space-age microcircuit modules each contain a complete audio amplifier, rated for 2, 5 or 15 watts output power. Employ the latest thick film construction techniques to assure uniform performance, optimum reliability and low function cost. The hybrid principle utilized requires fewer external components than monolithic partial amplifiers. Its simplicity permits easy assembly in less than one hour, even for those with semi-technical skills, thus saving valuable hours of needless drudgery. High gain and high input impedance almost always eliminate the necessity for preamplifiers. Extensive applications range from automotive and marine to stereo/hi-fi amplifiers, high quality receivers, public address systems, intercoms, record players and music instruments. The 2-watt and 5-watt amplifiers are optimized for 14-volt operation; ideal for use in automotive and marine applications. Operating Temperature: −30° to +100°C. Storage Temperature: −55° to +125°C. Size: 2.06″ x 1.06″ x .330″ maximum (see complete dimensions on following page). Additional technical information available on request.

USER NOTE

Performance of Solitron Hybrid Audio Amplifiers is Dependent on the External Components that Are Used in the Test Circuit

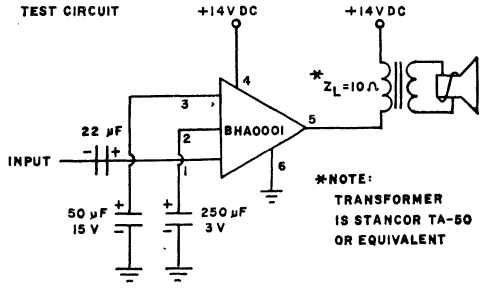
. . . for Simplicity, Economy and Top Performance

BHA-0001 2-WATT CLASS A AUDIO AMPLIFIER

Standard Solitron modular package, optimized for marine and automotive applications with battery voltages of 14 volts. Rated output will be sustained even under elevated temperatures and power supply voltages ranging from 11 to 16 volts. Low cost thick film fabrication techniques are used. Operation with input of 5 mV eliminates the need for preamplifiers, while retaining minimum distortion. Fewer external components are required than for monolithic partial amplifiers. Dissipation: 12 watts at under 100° C.
568-0001. 1-9...Ea. 10.65 10-99...Ea. 8.05 100-Up....Ea. 5.05

ELECTRICAL CHARACTERISTICS

Characteristics given at 14-volt supply, 40° C; performance depends on the external components used in test circuit. Frequency Response: 40-10,000 Hz typical. Input Voltage: 5 mV rms typical for P_o=2 W at f=1 kHz. Output Current: 600-850 mA (700 mA typical). Bias Supply Current: 75-125 mA (1000 mA typ.). Impedance: 300 ohms.



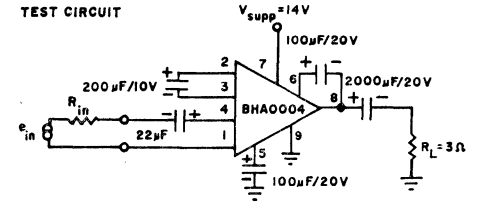
- 2 Watts Rated Output Power at 100° C
- Optimized for 14-volt Operation

BHA-0004 5-WATT CLASS B AUDIO AMPLIFIER

Class B complementary audio amplifier uses thick film cermet construction for uniform performance, optimum reliability. Produces 5 watts rms continuous output power at room temperature with no external heat sink. High gain and input impedance eliminate need for preamps in most applications. Three external capacitors provide all the compensation required for stable operation. Preset idle current and center voltage provide ideal operation over wide range of load conditions. Optimized for 14-volt operation.
568-0002. 1-9...Ea. 18.80 10-99...Ea. 12.25 100-Up...Ea. 9.00

ELECTRICAL CHARACTERISTICS

Characteristics given with 14-volt supply, Tc<100°C. Input Voltage: 20 mV rms typical for P_o=5 watts at f=1 kHz (Gp=10 log P_o/P_{in}) Frequency Response: 25 Hz to 15 kHz (−3 dB at P_o=5 watts). Distortion: 1% maximum at f=1 kHz and P_o=5 watts.



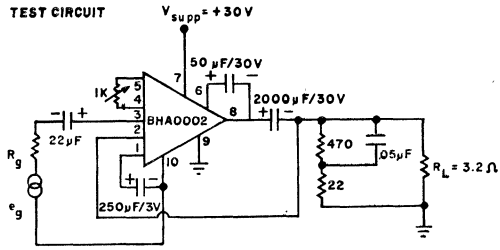
- 5 Watts Output with 14-volt Supply, Tc<100°C
- No Heat Sinking for Po< 5 Watts, TA< 30°C
- Frequency Response, 25 Hz to 15 kHz

BHA-0002 15-WATT CLASS B AUDIO AMPLIFIER

Class B quasi-complementary audio amplifier, capable of continuous operation at output powers as high as 15 watts into conventional speaker loads. Produces full output from 350 mV input signals; compatible with the great majority of preamp designs. Useful feedback compensation can be achieved with no external components, but external networks may be added to tailor response to any desired characteristic. External terminals permit optional trimming of idle current and crossover characteristics.
568-0004. 1-9..Ea. 20.00 10-99..Ea...14.00 100-Up..Ea. 10.20

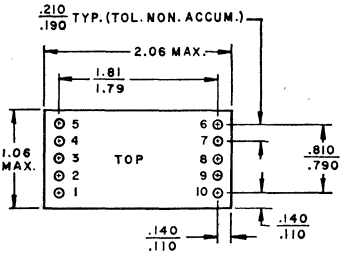
ELECTRICAL CHARACTERISTICS

Characteristics given with 30-volt supply voltage and T_c<50° C. Input Voltage: 0.35 V rms typical, 0.5 V maximum for P_o=15 watts at f=1 kHz. Frequency Response: 25 Hz to 20 kHz (−2 dB at P_o= 15 watts). Distortion: 1% maximum at f=1 kHz and P_o= 15 watts. Input Impedance: 18k ohms typical.

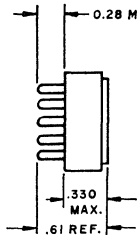


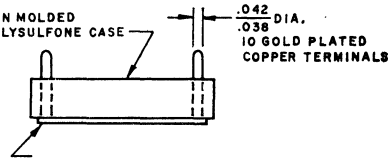
- Standard Solitron Modular Package
- 15 Watts Rated Output (rms) at T< 50°C
- Frequency Response, 25 Hz to 20 kHz
- Minimum of External Components Required

STANDARD MODULAR PACKAGE DESIGN



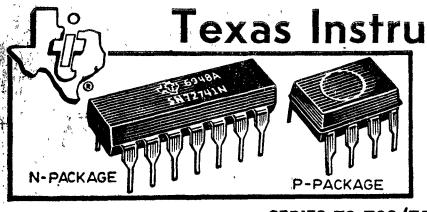
Dimensions Shown Apply to All Three Solitron Amplifiers





Ceramic Substrate Forms Bottom of Package and Must be Heatsinked for Output Powers Greater than 2 Watts and Ambient Temperatures Greater than 25° C. Heatsink Should be Equivalent to That Used for Transistors Dissipating Similar Powers (Typical 6"x6"x⅛" Aluminum)

Texas Instruments Integrated Circuits



LINEAR INTEGRATED CIRCUITS

DIFFERENTIAL/OPERATIONAL AMPLIFIERS

State-of-the-art ICs. Series 52 have −55° to +125° C operating temperature range, Series 72, 0° to +70° C. The 72700 and 7500 Series are listed here. Call Allied for 52700 and 5500 devices. Most circuits are available in TO-100, flat-pack and plastic dual-in-line packages. Feature low input and low output offset characteristics. High common-mode input capability. 1 oz.

SERIES 72 700/7510 (Operating Temperature Range 0° to 70° C)

Stock No.	Mfr's Type	Description	EACH 1-9	10-99	100-Up
952-4750	SN72301AL	High-Performance Op Amp	2.10	1.40	1.26
952-4754	SN72301AN	High-Performance Op Amp	1.95	1.29	1.16
952-4758	SN72301AP	High-Performance Op Amp	1.90	1.26	1.14
952-4762	SN72307L	Internally Compensated Op Amp	2.08	1.40	1.26
952-4766	SN72307N	Internally Compensated Op Amp	1.95	1.29	1.16
952-4770	SN72307P	Internally Compensated Op Amp	1.90	1.26	1.14
952-4804	SN72702L	General-Purpose Op Amp	1.75	1.16	1.04
952-4806	SN72702N	General-Purpose Op Amp	1.60	1.06	.96
952-4820	SN72709L	High-Performance Op Amp	1.20	1.06	.96
952-4821	SN72709N	High-Performance Op Amp	1.10	1.00	.90
952-4822	SN72709P	High-Performance Op Amp	1.05	.97	.88
952-4828	SN72710L	Differential Comparator	1.60	1.06	.96

Stock No.	Mfr's Type	Description	EACH 1-9	10-99	100-Up
952-4829	SN72710N	Differential Comparator	1.50	1.00	.90
952-4834	SN72711L	Dual Differential Comparator	1.48	1.14	1.02
952-4838	SN72711N	Dual Differential Comparator	1.38	1.08	.97
952-4840	SN72733L	Differential Video Amplifier	4.00	2.66	2.40
952-4842	SN72733N	Differential Video Amplifier	3.75	2.49	2.24
952-4845	SN72741L	Internally Compensated Op Amp	1.38	1.14	1.03
952-4844	SN72741N	Internally Compensated Op Amp	1.25	1.06	.96
952-4847	SN72741P	Internally Compensated Op Amp	1.20	1.04	.94
852-4850	SN72747N	Dual 741 Operational Amp	2.13	1.92	1.73
952-4855	SN72748L	High Performance Op Amp	1.70	1.14	1.03
952-4860	SN72748N	High Performance Op Amp	1.60	1.06	.96
952-4865	SN72748P	High Performance Op Amp	1.55	1.04	.94

SYSTEMS INTERFACE CIRCUITS—SENSE AMPLIFIERS

Stock No.	Mfr's Type	Description	EACH 1-9	10-99	100-Up
952-4124	SN7520N	FF or Register-Type Output	7.00	4.65	4.20
952-4128	SN7521N	FF or Register-Type Output	4.25	2.82	2.54
952-4132	SN7522N	Open-Collector Output	6.50	4.32	3.90
952-4138	SN7523N	Open-Collector Output	4.13	2.74	2.47
952-4142	SN7524N	Separate AND Outputs	6.50	4.32	3.90
952-4146	SN7525N	Separate AND Outputs	4.13	2.74	2.47
952-4150	SN7526N	Including Data Register	7.50	4.99	4.50
952-4154	SN7527N	Including Data Register	5.00	3.32	3.00
952-4155	SN7528N	Separate AND Outputs	6.60	4.39	3.96
952-4156	SN7529N	Separate AND Outputs	4.25	2.82	2.54

SYSTEMS INTERFACE CIRCUITS—DUAL-LINE DEVICES

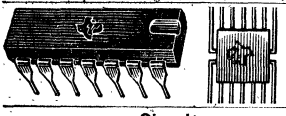
Stock No.	Mfr's Type	Description	EACH 1-9	10-99	100-Up
952-5020	SN75107N	Receiver with SN5400 (TTL) Gate Output	4.50	2.99	2.70
952-5024	SN75108N	Receiver with SN5401 (Open-Collector) Gate Output	4.50	2.99	2.70
952-5029	SN75109N	Driver with 6-mA Typical Line Current	4.75	3.15	2.84
952-5033	SN75110N	Driver with 12 mA Typical Line Current	4.75	3.15	2.84
952-5090	SN75450N	Dual Lamp, Relay	1.75	1.46	1.32
952-5125	SN75451P	Memory Driver	1.50	1.13	1.02

ULTRA HIGH SPEED TTL INTEGRATED CIRCUITS

For fastest digital systems. Dual inline pkg. Compatible with all popular TTL and DTL families. Low power dissipation.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-Up
952-2250	SN74S00N	Quad 2-Input NAND Gate	5.23	3.89	3.10	2.64
952-2255	SN74S03N	Quad 2-Input NAND (open collector) Gate	5.23	3.89	3.10	2.64
952-2260	SN74S04N	Hex Inverter	6.28	4.67	3.72	3.17
952-2266	SN74S05N	Hex Inverter (open col.)	6.28	4.67	3.72	3.17
952-2272	SN74S10N	Triple 3-input NAND	5.23	3.89	3.10	2.64
952-2277	SN74S11N	Triple 3-inputs AND	5.23	3.89	3.10	2.64
952-2280	SN74S15N	Triple 3-input AND (o.c.)	5.23	3.89	3.10	2.64

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-Up
952-2285	SN74S20N	Dual 4-input NAND	5.23	3.89	3.10	2.64
952-2292	SN74S22N	Dual 4-input NAND (o.c.)	5.23	3.89	3.10	2.64
952-2300	SN74S40N	Dual 4-input NAND Buf	5.70	4.29	3.42	2.91
952-2320	SN74S64N	4-2-2-3 And/Or Invert Gates	5.23	3.89	3.10	2.64
952-2321	SN74S65N	4-2-2-3 And/Or Inv. Gts (o.c.)	5.23	3.89	3.10	2.64
952-2325	SN74S74N	Dual D Flip-Flop	8.98	7.16	6.10	5.55
952-2330	SN74S112N	S Dual JK Flip-Flop	14.13	10.53	8.38	7.15
952-2335	SN74S140N	Dual 4-NAND Driver	8.65	6.44	5.13	4.37



HIGH SPEED DIGITAL DTL INTEGRATED CIRCUITS

Wide range of devices to give you a broad selection of digital and linear functions with full levels of efficiency and high speed. High-speed digital integrated circuits below offer two versions for a wide variety of uses. Features high speed, low power dissipation and high noise immunity. Multiple circuit functions per package for wide versatility. Single-ended outputs.

Circuit Description	−55° to +125° C Stock No.	Type	EACH 1-9	10-24	25-99	100-Up	0°-+75° C Stock No.	Type	EACH 1-99	100-999	1000-Up
Dual 4-input NAND (6kΩ)	952-4475	SN15930N	2.00	1.68	1.50	1.08	952-4320	SN15830N	.90	.75	.58
J-K/R-S Flip-Flop	952-4480	SN15931N	2.80	2.46	2.10	1.65	952-4330	SN15831N	1.15	1.02	.80
Dual 4-input Expandable Buffer	952-4485	SN15932N	2.00	1.68	1.50	1.08	952-4335	SN15832N	.90	.75	.58
Dual 4-input Expander	952-4490	SN15933N	1.80	1.51	1.31	1.06	952-4345	SN15833N	.90	.75	.58
Hex Inverter (6kΩ)	.....	.....	.....	.....	.....	.....	952-4350	SN15834N	.98	.85	.64
Hex Inverter (open collector)	.....	.....	.....	.....	.....	.....	952-4355	SN15835N	.98	.85	.64
Hex Inverter (6kΩ)	952-4495	SN15936N	2.20	1.85	1.65	1.19	952-4360	SN15836N	.98	.85	.64
Hex Inverter (2kΩ)	952-4500	SN15937N	2.20	1.85	1.65	1.19	952-4365	SN15837N	.98	.85	.64
Hex Inverter (open collector)	.....	.....	.....	.....	.....	.....	952-4370	SN15838N	.98	.85	.64
Dual 4-input NAND Power Gate	952-4505	SN15944N	2.00	1.68	1.50	1.08	952-4375	SN15844N	.90	.75	.58
J-K/R-S Flip-Flop (6kΩ)	952-4510	SN15945N	2.80	2.46	2.10	1.65	952-4385	SN15845N	1.15	1.02	.80
Quad 2-Input NAND Gate	952-4515	SN15946N	2.00	1.68	1.50	1.08	952-4395	SN15846N	.90	.75	.58
J-K/R-S Flip-Flop (2kΩ)	952-4520	SN15948N	2.80	2.46	2.10	1.65	952-4405	SN15848N	1.15	1.02	.80
Quad 2-Input NAND/NOR Gate	952-4525	SN15949N	2.00	1.68	1.50	1.19	952-4410	SN15849N	.90	.75	.58
A-C Flip-Flop	952-4530	SN15950N	6.00	5.05	4.50	3.42	952-4420	SN15850N	3.75	3.50	2.55
Monostable Multivibrator	952-4540	SN15951N	6.00	5.05	4.50	3.42	952-4430	SN15851N	3.75	3.50	2.55
Quad 2-Input Buffer Power Gate	.....	.....	.....	.....	.....	.....	952-4440	SN15857N	.90	.75	.58
Quad 2-Input NAND Power Gate	.....	.....	.....	.....	.....	.....	952-4445	SN15858N	.90	.75	.58
Dual 4-Input NAND/NOR Gate (2kΩ)	952-4545	SN15961N	2.00	1.68	1.50	1.08	952-4450	SN15861N	.90	.75	.58
Triple 3-Input NAND Gate (6kΩ)	952-4550	SN15962N	2.00	1.68	1.50	1.08	952-4460	SN15862N	.90	.75	.58
Triple 3-Input Fast NAND/NOR (2kΩ)	952-4560	SN15963N	2.00	1.68	1.50	1.08	952-4470	SN15863N	.90	.75	.58
Dual J-K Master-Slave Flip-Flop (6kΩ)	952-5710	SN159093N	3.60	3.02	2.70	1.95	952-5610	SN158093N	1.56	1.36	.93
Dual J-K Master-Slave Flip-Flop (2kΩ)	952-5714	SN159094N	3.60	3.02	2.70	1.95	952-5614	SN158094N	1.56	1.36	.93
Dual J-K Master-Slave Common Clear and Clock Flip-Flop (2kΩ)	952-5730	SN159097N	3.60	3.02	2.70	1.95	952-5630	SN158097N	1.56	1.36	.93
Dual J-K Master-Slave Common Clear and Clock Flip-Flop (6kΩ)	952-5738	SN159099N	3.60	3.02	2.70	1.95	952-5638	SN158099N	1.56	1.36	.93
Dual 5-Input NAND Gate (6kΩ)	.....	.....	.....	.....	.....	.....	952-5510	SN151800N	.90	.75	.58
Dual 5-Input NAND Gate (2kΩ)	.....	.....	.....	.....	.....	.....	952-5514	SN151801N	.90	.75	.58
8-Input Expandable NAND Gate (6kΩ)	.....	.....	.....	.....	.....	.....	952-5518	SN151802N	.90	.75	.58
8-Input Expandable NAND Gate (2kΩ)	.....	.....	.....	.....	.....	.....	952-5522	SN151803N	.90	.75	.58
10-Input NAND Gate (6kΩ)	.....	.....	.....	.....	.....	.....	952-5526	SN151804N	.90	.75	.58
10-Input NAND Gate (2kΩ)	.....	.....	.....	.....	.....	.....	952-5530	SN151805N	.90	.75	.58
Quad 2-Input NOR Gate (6kΩ)	.....	.....	.....	.....	.....	.....	952-5548	SN151811N	.90	.75	.58

Texas Instruments Integrated Circuits

MOS INTEGRATED CIRCUITS

Offer the advantages of small size for large scale integrations, low power dissipation and low bit cost. Replace existing shift registers in many applications and can perform functions not practical with conventional ICs, such as high-capacity digital delay lines and recirculating memories. Industrial uses with serial data transmission and storage use MOS shift registers. The first of the two suffix letters indicates package. J—ceramic dual inline; L—TO-99 and TO-100. These are usually not the same as packages for bipolar integrated circuits. *Read Only Memories ICs may be programmed to your special requirements.

Stock No.	Mfr's Type	Circuit Description	EACH 1-9	10-24	25-99	100-Up
952-5900	TMS-1101NC	Static R.A.M. Decoder 256X1	21.00	19.20	11.60	10.00
952-5904	TMS-1103NC	Dynamic Random Access Memory 1024X1	28.60	26.00	15.75	13.55
952-5930	TMS-2301NC	Dynamic Read Only Memory 256C Coded	35.60	32.50	19.50	17.00
952-6000	TMS-2400JC	2240 Bit (ROM*)	40.32	33.60	20.40	17.50
952-6004	TMS-2403JC	2240 Bit ASC II (ROM*)	31.60	29.00	17.50	15.00
952-6008	TMS-2404JC	2240 Bit E.C (ROM*)	31.60	29.00	17.50	15.00
952-6050	TMS-2501NC	2560 Bit Coded Read Only Memory	23.70	21.60	13.00	11.25
952-6100	TMS-2600JC	2048 Bit (ROM*)	45.20	36.00	21.70	18.80
952-6105	TMS-2602NC	2048 Bit ROM Code Converter	23.70	21.60	13.00	11.25
952-6106	TMS-2603NC	2048 Bit ROM Code Converter	23.70	21.60	13.00	11.25
952-6108	TMS-2604NC	2048 Bit ROM Code Converter	23.70	21.60	13.00	11.25
952-6100	TMS-2605NC	Quick Brown Fox Generator	23.70	21.60	13.00	11.25
952-6140	TMS-3000LR	Dual 25 Bit Static Shift Register	10.50	9.60	5.80	5.00
952-6144	TMS-3001LR	Dual 32 Bit Static Shift Register	10.50	9.60	5.80	5.00
952-6148	TMS-3002LR	Dual 50 Bit Static Shift Register	10.50	9.60	5.80	5.00
952-6152	TMS-3003LR	Dual 100 Bit Static Shift Register	10.50	9.60	5.80	5.00
952-6178	TMS-3016LR	Dual 16 Bit Static Shift Register	10.50	9.60	5.80	5.00
952-6168	TMS-3012NC	Dual 128 Bit Static Accumulator	15.80	14.40	8.60	7.50
952-6218	TMS-3028LR	Dual 128 Bit Static Shift Reg.	23.76	19.80	11.96	10.31
952-6250	TMS-3101LC	Dual 100 Bit Static Shift Reg.	10.50	9.60	5.80	5.00
952-6254	TMS-3101NC	Dual 100 Bit Static Shift Reg.	10.50	9.60	5.80	5.00
952-6256	TMS-3102NC	Dual 80 Bit Static Shift Reg.	10.50	9.60	5.80	5.00
952-6258	TMS-3102LC	Dual 80 Bit Static Shift Reg.	10.50	9.60	5.80	5.00
952-6260	TMS-3103NC	Dual 64 Bit Static Shift Reg.	10.50	9.60	5.80	5.00
952-6262	TMS-3103LC	Dual 64 Bit Static Shift Reg.	10.50	9.60	5.80	5.00
952-6264	TMS-3112NC	Dual 32 Bit Static Shift Reg.	21.00	19.20	11.60	10.00
952-6268	TMS-3113NC	Dual 133 Bit Static Shift Reg.	15.80	14.40	8.60	7.50
952-6270	TMS-3114NC	Dual 128 Bit Static Shift Reg.	15.80	14.40	8.60	7.50
952-6300	TMS-3304LR	3x66 Dynamic Shift Reg.	10.50	9.60	5.80	5.00
952-6305	TMS-3305LR	3x64 Dynamic Shift Reg.	10.50	9.60	5.80	5.00

Stock No.	Mfr's Type	Circuit Description	EACH 1-9	10-24	25-99	100-Up
952-6315	TMS-3309JC	Dual 512 Bit Dynamic Shift Reg.	31.60	28.80	17.20	15.00
952-6320	TMS-3314JC	Three (60+4) Dynamic Shift Reg.	21.00	19.20	11.60	10.00
952-6350	TMS-3401LC	512 Bit Programable Dyn. Shift Reg.	10.50	9.60	5.80	5.06
952-6352	TMS-3401NC	512 Bit Programable Dyn. Shift Reg.	10.50	9.60	5.80	5.00
952-6354	TMS-3402LC	512 Bit Dynamic Shift Reg.	10.50	9.60	5.80	5.00
952-6356	TMS-3402NC	502 Bit Dynamic Shift Reg.	10.50	9.60	5.80	5.00
952-6360	TMS-3404NC	Dual 512 Bit Dynamic Shift Reg.	21.00	19.20	11.60	10.00
952-6364	TMS-3406LC	Dual 100 Bit Dynamic Shift Reg.	10.50	9.60	5.80	5.00
952-6372	TMS-3409NC	Quad 80 Bits Dynamic Shift Reg.	15.80	14.40	8.60	7.50
952-6380	TMS-3412NC	Quad 256 Bits Dynamic Shift Reg.	21.00	19.20	11.60	10.00
952-6384	TMS-3412LC	Dual 512 Bits Dynamic Shift Reg.	21.00	19.20	11.60	10.00
952-6386	TMS-3413NC	Dual 512 Bits Dynamic Shift Reg.	21.00	19.20	11.60	10.00
952-6390	TMS-3414LC	1024 Bit Dynamic Shift Reg.	21.00	19.20	11.60	10.00
952-6392	TMS-3414NC	1024 Bit Dynamic Shift Reg.	21.00	19.20	11.60	10.00
952-6395	TMS-4000JC	High Speed Content Addressable Memory	50.60	46.00	27.80	24.00
952-6402	TMS-4003NC	256 Bit Random Access Memory	39.50	36.00	21.80	18.75
952-6412	TMS-4006JC	2024 Bit Random Access Memory	42.20	38.00	23.50	20.00
952-6420	TMS-4020NC	Dual 1024 Bit Dynamic R.A.M.	42.20	38.00	23.50	20.00
952-6426	TMS-4022NC	1024 Bit Dynamic R.A.M.	21.00	19.20	11.60	10.00
952-6430	TMS-4023NC	1024 Bit Dynamic R.A.M.	21.00	19.20	11.60	10.00
952-6434	TMS-4025NC	Dual 1024 Bit Dynamic R.A.M.	42.20	38.00	23.50	20.00
952-6860	TMS-4880JC	2812 Bit (ROM*)	.....	59.00	36.00	24.00
952-6474	TMS-4103NC	2240 Bit (ROM*)	23.70	21.60	13.00	11.25
952-6498	TMS-4177JC	7x5 ASCII (ROM*)	31.60	28.80	17.50	15.00
952-6502	TMS-4178JC	C G 12 Piece Kit	31.60	28.80	17.50	15.00
952-6506	TMS-4179JC	5x5 EBC DIC (ROM*)	21.60	28.80	17.50	15.00
952-6868	TMS-4886JC	(ROM*) Char. Gen. USAC II Code	52.70	48.00	29.00	25.00
952-6940	TMS 6000JR	10-Channel Analog Switch	31.60	28.80	17.50	15.00
952-6950	TMS-6005JR	6-Channel Analog Switch	15.80	14.40	8.60	7.50
952-6958	TMS-6009JR	6-Channel Analog Switch	21.00	19.20	11.60	10.00

HIGH-SPEED AND LOW-POWER TTL INTEGRATED CIRCUITS

Available in two operating temperature ranges: SN54H00 and SN54L00 Series, −55° C to +125° C; SN74H00 and SN74L00 Series, 0° to +70° C. Available in same case styles as standard SN54/SN74 series—see case description on page 82. All types available from Allied. The SN74H00N and SN74L00N plastic dual inline types are listed below.

74H HIGH SPEED TTL INTEGRATED CIRCUITS

Six nanoseconds per gate. Edge-triggered flip-flops will operate with clock input frequencies as high as 50 MHz. Can interface directly with all Series 54/74 ICs. Typical Characteristics: supply voltage, 5 V; Logical 0 output 0.2V; Logical 1 output 3 V.

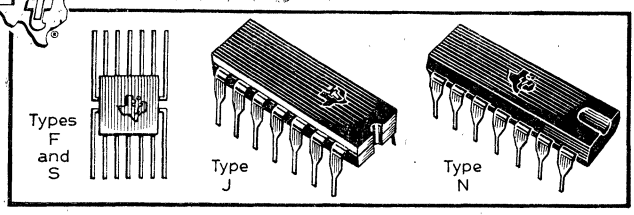
Stock No.	Mfr's Type	Circuit Description	EACH 1-9	10-24	25-99	100-Up
952-1012	SN74H00N	Quad 2-Input Pos. NAND Gate	.96	.76	.59	.54
952-1015	SN74H01N	Quad 2-Input Pos. NAND (Open coll. output)	.96	.76	.59	.54
952-1018	SN74H04N	Hex Inverter	1.09	.87	.67	.61
952-1021	SN74H05N	Hex Inverter (open collector output)	1.09	.87	.67	.61
952-1025	SN74H10N	Triple 3-Input Pos. NAND Gate	.96	.76	.59	.54
952-1029	SN74H11N	Triple 3-Input Pos. AND Gate	.96	.76	.59	.54
952-1033	SN74H20N	Dual 4-Input Pos. NAND Gate	.96	.76	.59	.54
952-1037	SN74H21N	Dual 4-Input Pos. AND Gate	.96	.76	.59	.54
952-1040	SN74H22N	Dual 4-Input Pos. NAND (open coll.)	.96	.76	.59	.54
952-1044	SN74H30N	8-Input Pos. NAND Gate	.96	.76	.59	.54
952-1048	SN74H40N	Dual 4-Input Pos. NAND Buffer	.96	.76	.59	.54
952-1052	SN74H50N	Exp. Dual 2-wide 2-In. And-Or-Invert	.96	.76	.59	.54
952-1055	SN74H51N	Expand. 2-wide 2-Input Inverter	.96	.76	.59	.54
952-1059	SN74H52N	Exp. 4-wide 2-2-2-3 In. And-Or	.96	.76	.59	.54
952-1062	SN74H53N	Exp. 4-wide 2-2-2-3 In. And-Or-Invert	.96	.76	.59	.54
952-1065	SN74H54N	4-wide 2-In. And-Or-Invert	.96	.76	.59	.54
952-1069	SN74H55N	Exp. 2-wide 4-In. And-Or-Invert	.96	.76	.59	.54
952-1073	SN74H60N	Dual 4-Input Expander	.96	.76	.59	.54
952-1077	SN74H61N	Triple 3-Input Expander	.96	.75	.59	.54
952-1081	SN74H62N	3-2-2-3 Input And-Or-Expander	.96	.76	.59	.54
952-1085	SN74H71N	J-K Flip-Flop with And-Or Inputs	1.46	1.16	.90	.82
952-1089	SN74H72N	J-K Master-Slave Flip-Flop	1.27	1.10	.78	.71
952-1092	SN74H73N	Dual J-K Master-Slave Flip-Flop	2.09	1.67	1.29	1.17
952-1095	SN74H74N	Dual D-Type Edge-Triggered Flip-Flop	2.09	1.67	1.29	1.17
952-1098	SN74H76N	Dual J-K Master-Slave Flip-Flop	2.27	1.81	1.40	1.27
952-1101	SN84H78N	Dual J-K Master-Slave Flip-Flop	2.27	1.81	1.40	1.27
952-1104	SN74H101N	J-K Neg. Edge-Trig. Flip-Flop/And-Or	1.36	1.09	.84	.76
952-1107	SN74H102N	J-K Neg. Edge-Trig. Flip-Flop w/And Input	1.36	1.09	.84	.76
952-1110	SN74H103N	Dual J-K Neg. Edge-Trig. Flip-Flop	2.14	1.70	1.32	1.20
952-1113	SN74H106N	Dual J-K Neg. Edge-Trig. Flip-Flop with Indv. Preset/Clear	1.87	1.48	1.15	1.05
952-1116	SN74H108N	Dual J-K Neg. Edge-Trig. Flip-Flop/Com. Cl	2.05	1.63	1.26	1.15
952-1118	SN74H183N	Dual Carry-Save Full Adders	6.10	4.87	3.78	3.45

74L LOW POWER TTL INTEGRATED CIRCUITS

Series 54L/74L gives you the best speed/power product of any logic form. Power requirement is 1/10 that of standard ICs . . yet speeds are twice as fast as other circuits with similar power dissipation. 0° to +70°C dual inline listed. Other cases on page 82.

Stock No.	Mfr's Type	Circuit Description	EACH 1-9	10-24	25-99	100-Up
952-2000	SN74L00N	Quad 2-Input Pos. NAND Gate	1.13	.93	.75	.64
952-2008	SN74L02N	Quad 2-Input Pos. NOR Gate	1.25	1.04	.84	.71
952-2009	SN74L03N	Quad 2-Input Pos. NAND Gate	1.13	.93	.75	.64
952-2002	SN74L04N	Hex Inverter	1.25	1.04	.84	.71
952-2003	SN74L10N	Triple 3-Input Pos. NAND Gate	1.13	.93	.75	.64
952-2005	SN74L20N	Dual 4-Input Pos. NAND Gate	1.13	.93	.75	.64
952-2006	SN74L30N	8-Input Pos. NAND Gate	1.13	.93	.75	.64
952-2011	SN74L42N	BCD to Decimal Decoder	6.15	5.10	4.15	3.15
952-2012	SN74L47N	BCD to 7-Segment/Decoder Driver	6.15	5.10	4.15	3.51
952-2015	SN74L51N	Dual 2-Wide 2-Input And-Or-Invert	1.13	.93	.75	.64
952-2019	SN74L54N	Exp. 4-W. 2-2-2-3 In. And-Or-Invert	1.13	.93	.75	.64
952-2024	SN74L55N	Exp. 4-W. 4-Input And-Or-Invert	1.13	.93	.75	.64
952-2030	SN74L71N	R-S Master Slave Flip-Flop	1.58	1.31	1.07	.90
952-2036	SN74L72N	J-K Master Slave Flip-Flop	1.58	1.31	1.07	.90
952-2042	SN74L73N	Dual J-K Master Slave Flip-Flop	2.70	2.24	1.82	1.54
952-2043	SN74L74N	Dual D Edge-Trig. Flip-Flop	2.25	1.87	1.52	1.29
952-2048	SN74L78N	Dual J-K Master Slave Flip-Flop	2.70	2.24	1.82	1.54
952-2050	SN74L83N	4-Bit Binary Full Adders	6.15	5.10	4.15	3.15
952-2055	SN74L85N	4-Bit Magnitude Comparator	8.20	6.82	5.54	4.69
952-2060	SN74L86N	Quad 2-Input Exclusive-Or Gate	2.88	2.38	1.94	1.64
952-2063	SN74L90N	Decade Counter	6.15	5.10	4.15	3.51
952-2066	SN74L91N	8-Bit Shift Register	6.15	5.10	4.15	3.51
952-2071	SN74L93N	4-Bit Binary Counter	6.15	5.10	4.15	3.51
952-2077	SN74L95N	4-Bit Right Shift/Left Shift Register (Parallel-in, Parallel-Out)	6.15	5.10	4.15	3.51
952-2082	SN74L98N	4-Bit Data Selector Storage Register	6.15	5.10	4.15	3.51
952-2088	SN74L99N	4-Bit Right Shift/Left Shift Register	6.15	5.10	4.15	3.51
952-2095	SN74L121N	Monostable Multiplexer with Strobe	2.70	2.24	1.82	1.54
952-2096	SN74L122N	Retriggerable One-Shot Multivibrator	2.70	2.24	1.82	1.54
952-2120	SN74L153N	Dual 4-Line to 1 Line Data Selector/Mutiplexer	6.15	5.10	4.15	3.51
952-2132	SN74L164N	8-Bit Series-In Parallel-Out Shift Reg.	8.20	6.82	5.54	4.69
952-2160	SN74L192N	Synchronous Up/Down Decade Counter	10.98	9.12	7.41	6.27
952-2163	SN74L193N	Synchronous Up/Dn 4-Bit Binary Counter	10.98	9.12	7.41	6.27

Texas Instruments Integrated Circuits



TTL DIGITAL INTEGRATED CIRCUITS

Digital integrated circuits for a wide variety of applications. Available in two operating temperature ranges: SN5400 Series for −55° C to +125° C and SN7400 Series for 0° C to +70° C. The SN7400N Series listed below is in plastic dual inline case with 14, 16 and 24 leads. TTL Series is available in all cases described immediately below. All types are available from Allied. Call for information on types not listed.

CASES AVAILABLE AT ALLIED ELECTRONICS

SN5400F and SN7400F. Ceramic flat pack. 10 and 14 lead case insulated from circuit. **SN5400S and SN7400S.** Ceramic flat pack. 10 and 14 lead case shorted to circuit.

SN5400J and SN7400J. Ceramic dual inline. 14 and 16 leads, insulated case. **SN7400N.** Plastic dual inline. 14, 16 and 24 leads. Case insulated from circuit.

Stock No.	Type No.	Description	EACH 1-24	25-99	100-999	1000-Up
952-3601	SN7400N	Quad 2-Input Pos. NAND Gate	.77	.62	.48	.43
952-3604	SN7401N	Quad 2-Input Pos. NAND Gate with Open Collector Output	.77	.62	.48	.43
952-3605	SN7402N	Quad 2-Input Pos NOR Gate	.77	.62	.48	.43
952-3607	SN7403N	Quad 2-Input Pos. NAND Gate	.77	.62	.48	.43
952-3609	SN7404N	Hex Inverter	.96	.76	.59	.54
952-3611	SN7405N	Hex Inverter with Open Collector Output	.96	.76	.59	.54
952-3608	SN7406N	Hex Inverter Buffer/Driver with 30V Open-Collector Output	3.50	2.79	2.21	2.01
952-3610	SN7407N	Hex Buffer	3.50	2.79	2.21	2.01
952-3612	SN7408N	Quadruple 2-Input Positive AND Gate	1.09	.87	.67	.61
952-3613	SN7409N	Quad 2-Input Pos. AND Gate with Open-Collector Output	1.09	.87	.67	.61
952-3614	SN7410N	Triple 3-Input Pos. NAND Gate	.77	.62	.48	.43
952-3622	SN7412N	Triple 3-NAND Gate Open Collector Output	.77	.66	.48	.43
952-3615	SN7413N	DualSchmittTrig.4-InputNAND	2.43	1.93	1.62	1.48
952-3617	SN7416N	Hex Invert. Buffer/Driver with 15V Open Collector Output	2.92	2.32	1.85	1.68
952-3618	SN7417N	Hex Buffer/Driver with 15V Open Collector Output	2.92	2.32	1.85	1.68
952-3619	SN7420N	Dual 4-Input Pos. NAND Gate	.77	.62	.48	.43
952-3629	SN7423N	Dual 4 NOR Str. Exp.	1.18	.94	.73	.66
952-3631	SN7425N	Dual 4 NOR Strobes	1.18	.94	.73	.66
952-3621	SN7426N	Quad 2-Input High Volt. (MOS) Interface NAND Gate	1.09	.87	.67	.61
952-3634	SN7427N	Triple 3 NOR	1.18	.94	.73	.66
952-3623	SN7430N	8-Input Pos. NAND Gate	.77	.66	.48	.43
952-3636	SN7432N	Quad 2-Input OR	1.18	.94	.73	.66
952-3625	SN7437N	Quadruple 2 Input Positive NAND Buffer	1.27	1.01	.78	.71
952-3626	SN7438N	Quadruple 2-Input Pos NAND Buffer Open Collector	1.27	1.01	.78	.71
952-3627	SN7440N	Dual 4-Input Pos. NAND Buffer	.77	.66	.48	.43
952-3633	SN7442N	BCD to Decimal Decoder	3.39	2.71	2.10	1.31
952-3635	SN7443N	Excess-3 to Decimal Decoder	4.78	3.81	2.95	1.84
952-3637	SN7444N	Excess-3-Gray-to-Dec. Decoder	4.78	3.81	2.95	1.84
952-3639	SN7445N	BCD to Decimal Decoder/Driver (30 V Outputs)	6.70	5.97	4.76	3.69
952-3642	SN7446AN	BCD to 7-Seg. Decoder/Driver	5.50	5.10	4.06	3.15
952-3644	SN7447AN	BCD to 7-Seg. Decoder/Driver	5.30	4.78	3.81	2.95
952-3645	SN7448N	BCD to 7-Seg. Decoder/Driver	5.67	4.52	3.51	3.20
952-3648	SN7450N	Expandable Dual 2-Wide 2-Input AND-OR-INVERT Gate	.77	.62	.48	.43
952-3652	SN7451N	Dual 2-Wide 2-Input AND-OR-INVERT Gate	.77	.62	.48	.43
952-3656	SN7453N	Expandable 4-Wide 2-Input AND-OR-INVERT Gate	.77	.62	.48	.43
952-3660	SN7454N	4-Wide2-InputAnd-or-Inv.Gate	.77	.62	.48	.43
952-3661	SN7460N	Dual 4-Input Expander	.77	.62	.48	.43
952-3667	SN7470N	J-K Flip-Flop	1.27	1.01	.78	.71
952-3671	SN7472N	J-K Master-Slave Flip-Flop	1.18	.94	.73	.66
952-3675	SN7473N	Dual J-K Master Slave Flip-Flop	1.68	1.34	.98	.94
952-3681	SN7474N	Dual D Type Edge-Triggered Flip-Flop	1.68	1.34	.98	.93
952-3685	SN7475N	Quadruple Bistable Latch	2.75	2.91	1.70	1.07
952-3687	SN7476N	DualJ-KMaster-SlaveFlip-Flop	1.87	1.48	1.15	1.05
952-3691	SN7480N	Gated Full Adder	2.13	1.70	1.32	1.82
952-3692	SN7481N	16-Bit Active-Element Memory	5.09	4.06	3.15	2.87
952-3693	SN7482N	2-Bit Binary Full Adder	5.03	4.01	3.11	2.84

Stock No.	Type No.	Description	EACH 1-24	25-99	100-999	1000-Up
952-3695	SN7483N	4-Bit Binary Full Adder	3.43	2.74	2.12	1.94
952-3697	SN7484N	16-Bit Active-Element Memory (Gated Write Inputs)	5.53	4.41	3.42	3.12
952-3698	SN7486N	Quarduple 2-Input Exclusive-OR Gate	1.45	1.16	.90	.82
952-3699	SN7485N	16-Bit Active Element Memory	6.98	5.57	4.32	3.94
952-3701	SN7490N	Decade Counter	3.07	2.45	1.90	1.20
952-3702	SN7489N	64-Bit Random Access Memory	10.68	8.50	7.20	6.56
952-3710	SN7491AN	8-Bit Shift Register	4.36	3.48	2.70	1.60
952-3715	SN7492N	Divide by 12 Counter	3.07	2.45	1.90	1.20
952-3720	SN7493N	4-Bit Binary Counter	3.07	2.45	1.90	1.20
952-3740	SN7494N	4-Bit Shift Register (Parallel-In, Serial Out)	5.59	4.45	3.46	3.15
952-3750	SN7495N	4-Bit Right Shift/Left Shift Reg. (Parallel-In, Parall. Out)	3.48	2.77	2.15	1.34
952-3751	SN7496N	5-Bit Shift Register (Dual Parallel In and Out)	6.69	5.34	4.14	3.77
952-4116	SN7497N	Bi Rate Multiple	6.98	5.57	4.32	3.94
952-4900	SN74100N	8-Bit Bistable Latch	5.59	4.45	3.46	3.15
952-4902	SN74104N	GatedJ-KMasterSlaveFlip-Flop	2.32	1.85	1.43	1.30
952-4903	SN74105N	GatedJ-KKMast.SlaveFlipFlop	2.32	1.85	1.43	1.30
952-4904	SN74107N	Dual J-K Master Slave Flip Flop	1.68	1.34	.98	.94
952-4906	SN74110N	Var. Skew J-K Flip Flop	2.17	1.73	1.47	1.34
952-4907	SN74111N	Dual 74110	3.47	2.76	2.36	2.14
952-4908	SN74121N	Monostable Multivib. (1 Shot)	3.47	2.76	2.36	2.14
952-4909	SN74122N	Retrig. One-Shot	2.14	1.70	1.32	1.20
952-4910	SN74141N	BCD to Dec. Decoder/Driver	4.36	3.48	2.70	1.56
952-4911	SN74123N	Dual 74122	4.78	3.80	2.94	2.68
952-4912	SN74145N	BCD to Decimal Decoder/Driver (15 V Output)	4.71	3.76	2.92	2.66
952-4919	SN74150N	16-Bit Data Sel./Multiplexer	6.98	5.57	4.32	3.94
952-4920	SN74151N	8-Bit Data Selector/Multiplexer with Strobe	5.12	4.08	3.44	3.13
952-4921	SN74153N	Dual 4-Line to 1-Line Data Selector Multiplexer	5.33	4.67	3.72	3.13
952-4922	SN74154N	4-Line to 16 Line (1 of 16) Decoder/Demultiplexer	5.76	4.59	3.56	3.25
952-4923	SN74155N	Dual 2-Line to 4-Line Decoder/Demultiplexer	5.08	4.45	3.55	2.99
952-4925	SN74157N	Quad 2-1 Multiplexer	3.12	2.49	2.11	1.92
952-3765	SN74156N	Dual 2-4 Decoder	5.08	4.45	3.55	2.99
952-4926	SN74160N	Syn BCD Counter	3.55	2.83	2.20	2.00
952-4927	SN74161N	Syn 4-Bit Binary Counter	3.55	2.83	2.20	2.00
952-4928	SN74162N	74160 and Syn Clr	3.55	2.83	2.20	2.00
952-4929	SN74163N	74161 and Syn Clr	3.55	2.83	2.20	2.00
952-4930	SN74164N	8-BitSer.In/Par.Out Shift Reg.	6.55	5.22	4.05	3.69
952-4931	SN74165N	8-BitPar.In./Ser.OutShiftReg.	6.55	5.22	4.05	3.69
952-4932	SN74166N	Syn8-BitParIn/SerOutShftReg	6.55	5.22	4.05	3.69
952-4933	SN74167N	Decade Dec. Rate Multiplexer	6.41	5.10	4.32	3.94
952-4935	SN74170N	4 By 4 Regi File	8.70	6.93	5.87	5.35
952-4936	SN74174N	Hex D Type F/FS	4.73	3.76	3.19	2.90
952-4937	SN74175N	Quad D Type F/FS	4.00	3.19	2.70	2.46
952-4938	SN74176N	4-Bit BCD Counter	3.06	2.44	1.89	1.72
952-4939	SN74177N	4-Bit Bi Counter	3.06	2.44	1.89	1.72
952-4924	SN74180N	8-Bit Odd/Even Parity Generator Checker	6.25	4.95	4.18	3.80
952-3769	SN74181N	4-Bit Arithmetic Logic Unit	23.72	18.91	14.67	13.37
952-3773	SN74182N	Look Ahead Carry Generator	5.21	4.15	3.22	2.94
952-3777	SN74184N	BCD to Binary Converter	3.77	3.47	2.76	2.34
952-3781	SN74185AN	Binary to BCD Converter	3.77	3.47	2.76	2.34
952-3785	SN74190N	Up/Down Decade Counter	8.15	7.13	5.68	4.41
952-3789	SN74191N	Up/Down Binary Counter	8.15	7.13	5.68	4.41

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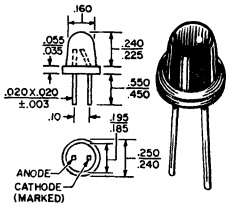
Specify Stock No. and Integrated Circuit Type No. When Ordering

Industrial Light Emitting Devices by litronix

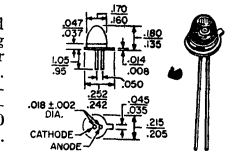
RED-LIT 2 LED



Gallium Arsenide Phosphide light-emitting diode packaged in a red-diffusive molded lens. Also available in 3 additional colors. Large radiating area. Features low power consumption in an economical molded plastic package. IC compatible. Max. power dissipation @ 25°C, 200 mW. Continuous forward current, 100 mA. Luminous intensity, 1.5 mod @ 50 mA; .3 mod @ 10 mA. Forward voltage, typically 1.65 @ 50 mA; 1.58 @ 10 mA. Reversible leakage, typically 0.1 μA @ 3.0 V. Emission wavelength, 650 nm. 2 oz.

568-0200. Red-Lit 2 (Red Diffuse)...1-9 1.52 10-99 1.17 100-Up .79
568-0202. Red-Lit 2-02 (Red Clear) 1-9 1.52 10-99 1.17 100-Up. .79
568-0203. Red-Lit 2-03 (Whit Diff.).1-9 1.52 10-99 1.17 100-Up. .79
568-0204. Red-Lit 2-04 (Water Clear) 1-9 1.52 10-99 1.17 100-Up. 79

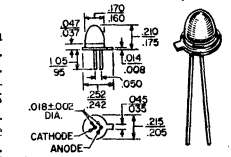
RED-LIT 4 LED



Red light-emitting diode in an isolated island package. Center die mounting post is embedded in lens. Max. power dissipation @ 25°C, 180 mW. Contin. forward current, 75 mA. Lum. intensity, 1.5 mod @ 50 mA. Forward voltage, typically, 1.65 @ 50 mA; 1.58 @ 10 mA. Emission peak wavelength, 650 nm. Av. shpg. wt. 2 oz.

568-0400. Red-Lit 4-01 (Water Clear) 1-9 1.52 10-99 1.15 100-Up..77
568-0402. Red-Lit 4-02 (Red Clear).1-9 1.52 10-99 1.15 100-Up. .77

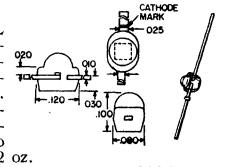
RED-LIT 7 LED



Visible red light-emitting diode in a TO-18 isolated island package. Max. power dissipation @ 25°C, 180 mW. Contin. forward current, 75 mA Luminous intensity, 0.3 mod @ 10 mA; 1.5 mod @ 50 mA. Forward voltage, typ. 1.65 @ 50 mA; 1.58 @ 10 mA. Reverse leakage current, typ. 0.1 μA @ 3.0 V. Emission peak wavelength, 650 nm. Wt. 2 oz.

568-0700. Red-Lit 7 (White Diff.)...1-9 1.52 10-99 1.15 100-Up. .77
568-0701. Red-Lit 7-01 (Red Diff)..1-9 1.52 10-99 1.15 100-Up. .77

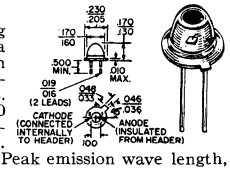
RED-LIT 50 GaASP RED LED



Light emitting diode provides 750 ft.-L @ 20 mA. Operates from IC logic supply. Offers maximum strength at minimum linear spacing. Max. power dissipation @ 25°C, 180 mW. Contin. forward current, 40 mA. Forward voltage, typ. 1.6 V @ 20 mA. Reverse current, typ. 100 nA @ 3.0 V. Current to produce 50-ft. L, typically 2 mA. Wt. 2 oz.

568-0500. Red-Lit 50 (Water Clear)..1-9 1.09 10-99 .85 100-Up. .57
568-0503. Red-Lit 50 (Red Clear) ...1-9 1.09 10-99 .85 100-Up. .57

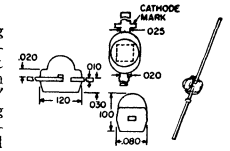
IR-LIT 40 INFRARED EMITTER



Gallium arsenide infrared emitting diode. On forward bias, it emits a spectrally narrow band of radiation peaking at 900 nm. Packaged on a TO-46 header with clear epoxy dome lens. Max. power dissipation @ 25°C, 150 mW. Peak forward current, 3.0 A. Forward voltage, typ. 1.25 @ 100 mA. Reverse current, typ. 15 μA @ 3.0 V. Peak emission wave length, 900 nm. Av. shpg. wt. 2 oz.

568-0040. 1-9.....3.14 10-99.....1.95 100-Up.....1.65

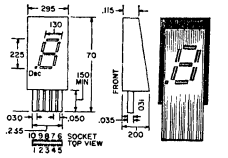
IR-LIT 60 INFRARED EMITTER



Gallium arsenide infrared emitting diode. On forward bias, emits a spectrally narrow band of radiation peaking at 900 nm. Maximum package strength consistent with mounting on .087" centers. Optical encoding, positioning and counting sources. Max. power dissipation @ 25°C, 75 mW. DC forward current, 50 mA. Forward voltage, typically 1.3 @ 50 mA. Reverse current, .15 μA @ 3 V. Av. shpg. wt. 2 oz.

568-0060. 1-9.....2.48 10-99.....1.60 100-Up.....1.30

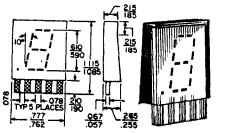
DATA-LIT 3 SEVEN SEGMENT NUMERIC INDICATOR



Red numeric display used for a variety of industrial and military applications. Especially useful in all type of digital readout displays. High brightness—500 ft.-lamberts @ 20 mA. Low power consumption of 480 mW. Optimum size of .70x.295" overall. Has 3/10" mnt. centers. PC connector mounting. DC forward current, 20 mA per segment. Forward voltage segment, 2.0 V @ 30 mA. Reverse leakage, 0.1 μA @ 5 V. Emission peak wavelength, 600 nm. IC compatible. Single plane, wide angle viewing. Av. shpg. wt. 2 oz.

568-1030. 1-9.....24.70 10-99.....16.75 100-Up.....13.20

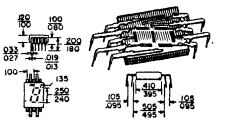
DATA-LIT 6 NUMERIC DISPLAY



Gallium Arsenide Phosphide red light-emitting diode 7-segment numeric display. Large 0.6" character height. High luminance—350 ft.-L @ 20 mA. Stand-up mounting in standard PC connectors (0.156" centers). Continuous forward current, 30 mA (segment or decimal). Forward voltage: 4.0 V @ 20 mA, segment; 2.0 V @ 20 mA, decimal. Max. reverse leakage: 100 μA @ 6.0 V, segment; 100 μA @ 3.0 V, decimal. Emission peak wavelength, 650 nm. 2 oz.

568-1030. 1-9.....32.50 10-99.....23.15 100-Up.....20.00

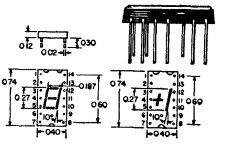
DATA-LIT 8 & 81 DISPLAYS



Data-Lit 8 is a 7-segment red light-emitting display. Data-Lit 81 is a polarity, colon and overflow companion Stagger-bent 9.100" ctrs. Luminance—350 ft.-L @ 20 mA. DC forward current @ 25°C: 20 mA per seg.; 240 mA total; 30 mA dec. pnt. Forward V, 2.0 V @ 30 mA, seg./dec. Reverse leakage, 0.1 @ 5 V. Emission peak wavelength, 650 nm. Av. shpg. wt. 3 oz.

568-1081. Data-Lit 8.....1-9 9.90 10-99 8.50 100-Up 7.00
568-1080. Data-Lit 81.....1-9 15.65 10-99 10.40 100-Up 8.90

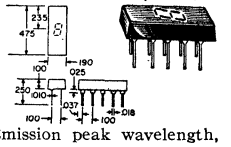
DATA-LIT 10 & 101 DISPLAYS



Data-Lit 10 is a 7 segment monochromatic red, light-emitting diode numeric display. Data-Lit 101 is a polarity and overflow display. Features high luminance—typ. 350 ft.-L@ 20 mA. Operates with 5 V IC logic circuit. Displays all numbers, many letters. Standard 14-pin dual in-line package. Power dis. @ 25°C ambient, 750 mW. Contin forward current: 30 mA, seg./dec.; 240 mA, total. Max. rev. leakage: 100 μA @ 6.0 V, seg.; 100 μA @ 3.0, dec. Emission peak wavelength, 700 nm. Av. shpg. wt. 3 oz.

568-1010. DL-10.....1-9..18.80 10-99..12.25 100-Up..10.25
568-1101. DL-101.....1-9..17.50 10-99..11.50 100-Up...9.75
568-1011. DL-10A.....1-9..16.90 10-99..11.25 100-Up...9.65
568-1102. DL-101A....1-9..16.30 10-99..10.80 100-Up...9.25

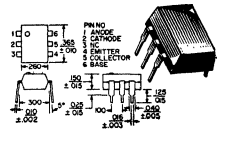
DATA-LIT 300 SEGMENT DISPLAY



Red light-emitting diode display. Leads on .100" grid; 10 digits per sq. in. mnt. density. Power dis. @ 25°C, 160 mW. Contin. forward cur., 80 mA, total. Luminance, typ. 200 ft. L @ 5 mA. Forward V: 1.7 V @ 5 mA, seg./dec. Reverse current, 100 μA @ 3.0 V. Emission peak wavelength, 650 nm. Av. shpg. wt. 3 oz.

568-1300. 1-9 .....9.50 10-99.....6.35 100-Up.....5.40

ISO-LIT 1 PHOTOTRANSISTOR



An optically coupled pair using an infrared LED and a silicon NPN phototransistor. Dual inline package. 2500 V breakdown voltage; 35% typical transfer ratio. 0.5 pF coupling capacitance. Power dis. @ 25°C., 100 mW. Contin. forward cur., 60 mA. Max. forward V, 1.5 V @ 100 mA. Rev. cur., 10 μA @ 3.5 V. 3 oz.

568-2001. 1-9.....8.80 10-99.....5.95 100-Up.....4.70

OPTOELECTRONIC CROSS REFERENCE GUIDE

Lists available discrete LED devices by manufacturers part number for which there is a direct or similar Litronix replacement. *Litronix devices that are direct replacements, but have difference in mechanical configuration. Acceptability can be determined by reviewing electrical characteristics, case dimensions of Litronix part. †Special lens capability; ‡ special array cap.

Device Type	Litronix Type	Device Type	Litronix Type	Device Type	Litronix Type	Device Type	Litronix Type	Device Type	Litronix Type
ME1	IR-Lit 60*	MV10C(C3)	Red-Lit 7*	FLV100	Red-Lit 4*	TIL203	Red-Lit 4*	OSL-1	Red-Lit 50*
ME3	IR-Lit 60*	MV50	Red-Lit 50	FLV101	Red-Lit 7*	TIL204	Red-Lit 4-02*	OSL-2	Red-Lit 50*
ME4	IR-Lit 40	MV5020	Red-Lit 2-04	FLV102	Red-Lit 7*	TIL205	Red-Lit 50*	OSL-3	Red-Lit 2*
ME60	IR-Lit 60	MV5021	Red-Lit 2-03	MLED50	Red-Lit 50	TIL206	Red-Lit 50*†	SSL-15	IR-Lit 60*
ME6	IR-Lit 40*†	MV5022	Red-Lit 2-02	MLED600	Red-Lit 50*	TIL209	Red-Lit 50*	SSL-4	IR-Lit 40*†
ME7	IR-Lit 60†	MV5023	Red-Lit 2	MLED900	IR-Lit 60*	TIL23	IR-Lit 60*	SSL-22	Red-Lit 2*
MV10A(A3)	Red-Lit 50	MV5040	Red-Lit 50*‡	MLED910	IR-Lit 60*	TIL-24	IR-Lit 60*	SSL-34	IR-Lit 40*†
MV10B(B3)	Red-Lit 4	FLD100	IR-Lit 40	MLED930	IR-Lit 40*	TIXL-26	IR-Lit 40*.	.....	.....

FAIRCHILD

Silicon Diodes and Rectifiers

All FSC switching diodes employ planar construction with nitride passivation and EQR rings for guaranteeing stability in adverse environments. All standard devices conform with JEDEC registered outlines. Rectifiers are glass encapsulated mesa devices utilizing silicon nitride passivation and a double stud package for better thermal dissipation and mechanical strength.

COMPUTER DIODES

Stock No.	Mfr's Type	B_V (V)	I_r(na) @V_r(V)	I_F (mA) @ 1.0V	T_{rr} (ns)	EACH 1-99	EACH 100-Up
551-0251	1N251	40	100 @ 10	5	150.0	.21	.16
554-0251	1N251JAN	40	100 @ 10	10	30.0	.21	.16
551-0252	1N252	25	100 @ 5	10	4.0	.21	.16
551-0659	1N659	60	5 @ 50	6	6.0	.21	.16
551-0814	1N814	50	100 @ 20	5	25.0	.27	.20
551-0903	1N903	60	100 @ 40	10	4.0	.45	.34
552-0903	1N903A	...	100 @ 40	20	4.0	.45	.34
551-0904	1N904	50	100 @ 30	10	4.0	.45	.34
552-0904	1N904A	35	100 @ 30	20	4.0	.45	.34
551-0905	1N905	40	100 @ 20	10	4.0	.45	.34
552-0905	1N905A	40	100 @ 20	20	4.0	.45	.34
551-0906	1N906	40	100 @ 20	10	4.0	.24	.18
552-0906	1N906A	40	100 @ 20	20	4.0	.24	.18
551-0907	1N907	50	100 @ 30	10	4.0	.24	.18
552-0907	1N907A	50	100 @ 30	20	4.0	.24	.18
551-0908	1N908	60	100 @ 40	10	4.0	.24	.18
552-0908	1N908A	60	100 @ 40	20	4.0	.24	.18
551-0914	1N914	100	25 @ 20	10	4.0	.21	.16
554-0914	1N914JAN	100	25 @ 20	10	5.0	.21	.16
552-0914	1N914A	100	25 @ 20	20	4.0	.23	.17
553-0914	1N914B	100	25 @ 20	100	4.0	.23	.17
551-0916	1N916	100	25 @ 20	10	4.0	.27	.20
552-0916	1N916A	100	25 @ 20	20	4.0	.27	.20
553-0916	1N916B	100	25 @ 20	30	4.0	.27	.20
551-3062	1N3062	75	100 @ 50	20	2.0	.45	.34
551-3063	1N3063	75	100 @ 50	10 @ .85	4.0	.23	.17
551-3064	1N3064	75	100 @ 50	10	4.0	.24	.18
553-3064	1N3064JAN	75	100 @ 50	10	4.0	.27	.20
554-3064	1N3064JANTX	75	100 @ 50	10	4.0	1.20	.80
551-3065	1N3065	75	100 @ 50	20	4.0	.45	.34
551-3066	1N3066	75	100 @ 50	10	2.0	.45	.34
551-3067	1N3067	30	100 @ 30	5	4.0	.23	.17
551-3596	1N3596	20	100 @ 20	30	4.0	.45	.34
551-3600	1N3600	75	100 @ 50	200	3.0	.58	.43
554-3600	1N3600JAN	...	100 @ 50	200	4.0	.58	.43
551-3602	1N3602	75	100 @ 50	20	5.0	.23	.17
551-3603	1N3603	45	100 @ 35	30	5.0	.23	.17
551-3604	1N3604	75	50 @ 50	50	4.0	.26	.19
551-3605	1N3605	40	50 @ 30	20 @ .88	2.0	.26	.19
551-3606	1N3606	75	50 @ 50	20 @ .88	2.0	.26	.19
551-4086	1N4086	...	250 @ 70	200	4.0	.58	.43
554-4087	1N4087JAN	...	90 @ 50	30 @ .975	2.5	.58	.43
551-4148	1N4148	100	25 @ 20	10	4.0	.21	.16
553-4148	1N4148JAN	100	25 @ 20	10	5.0	.21	.16
554-4148	1N4148JANTX	100	25 @ 20	10	5.0	1.50	1.10
551-4149	1N4149	100	25 @ 20	10	4.0	.58	.43
551-4150	1N4150	75	100 @ 50	200	4.0	.58	.43
551-4151	1N4151	75	50 @ 50	50	4.0	.27	.20
551-4152	1N4152	40	50 @ 30	20 @ .88	2.0	.27	.20
551-4153	1N4153	75	50 @ 50	20 @ .88	2.0	.27	.20
551-4154	1N4154	35	100 @ 25	30	4.0	.21	.16
551-4244	1N4244	20	100 @ 10	20	0.75	1.88	1.40
551-4305	1N4305	75	100 @ 50	10 @ .85	4.0	.27	.20
551-4322	1N4322	75	100 @ 50	200	4.0	2.63	1.96
551-4376	1N4376	20	100 @ 10	50 @ 1.1	0.75	2.25	1.68
554-4376	1N4376JAN	20	100 @ 10	50 @ 1.1	0.75	2.25	1.68
551-4446	1N4446	100	25 @ 20	20	4.0	.21	.16
551-4447	1N4447	100	25 @ 20	20	4.0	.27	.20
551-4448	1N4448	100	25 @ 20	100	4.0	.27	.20
551-4449	1N4449	100	25 @ 20	30	4.0	.27	.20
551-4450	1N4450	40	50 @ 30	200	4.0	.58	.43
551-4454	1N4454	75	100 @ 50	10	4.0	.21	.16
553-4454	1N4454JAN	75	100 @ 50	10	4.0	.21	.16
554-4454	1N4454JANTX	75	100 @ 50	10	4.0	1.50	1.10
551-4531	1N4531	100	25 @ 20	10	4.0	.21	.16
551-4532	1N4532	75	100 @ 50	10	4.0	.21	.16
551-4533	1N4533	40	50 @ 30	20 @ .88	2.0	.27	.20
551-4534	1N4534	75	50 @ 50	20 @ .88	2.0	.27	.20
551-4536	1N4536	35	100 @ 25	30	4.0	2.46	1.84
551-4606	1N4606	85	250 @ 70	250 @ 1.1	4.0	.54	.40
551-4607	1N4607	85	250 @ 70	400 @ 1.1	4.0	.90	.67
551-4610	1N4610	80	100 @ 55	20	4.0	.54	.40
551-4727	1N4727	80	100 @ 20	10 @ .85	.....	.21	.16
551-4850	1N4850	80	100 @ 25	300	4.0	.23	.17
551-5282	1N5282	80	100 @ 65	500 @ 1.3	2.0	1.58	1.18

GENERAL PURPOSE DIODES

Stock No.	Mfr's Type	B_V (V)	I_r(mA) @ 1.0V	I_F(mA) @ 1.0V	EACH 1-99	EACH 100-Up
551-0461	1N461	30	500 @ 25	15	.38	.28
552-0461	1N461A	30	500 @ 25	100	.38	.28
551-0462	1N462	70	500 @ 50	5	.38	.28
552-0462	1N462A	70	500 @ 60	100	.38	.28
551-0463	1N463	200	500 @ 175	1	.38	.28
552-0463	1N463A	200	500 @ 175	100	.38	.28
551-0464	1N464	150	500 @ 125	3	.38	.28
552-0464	1N464A	150	500 @ 125	100	.38	.28
551-0482	1N482	75	100 @ 30	100 @ 1.1	.38	.28
551-0483	1N483	80	250 @ 60	100 @ 1.1	.38	.28
551-0484	1N484	150	250 @ 125	100 @ 1.1	.38	.28
551-0485	1N485	200	250 @ 175	100	.60	.45
551-0619	1N619	30	80 @ 10	3	.21	.16
551-0622	1N622	200	200 @ 150	7	.60	.45
551-0661	1N661	240	350 @ 200	7	.90	.67
551-0676	1N676	125	1000 @ 100	400	.38	.28
551-0678	1N678	230	1000 @ 200	200	.60	.45
551-0779	1N779	200	500 @ 175	10	.75	.56
551-0795	1N795	75	5000 @ 50	50	.38	.28
551-0799	1N799	150	5000 @ 100	50	.38	.28
551-0816	1N816	6	100 @ 4	100	.38	.28
551-0844	1N844	100	100 @ 80	200	.21	.16
551-0925	1N925	40	1000 @ 10	5	.21	.16
551-0926	1N926	40	100 @ 10	5	.21	.16

LOW LEAKAGE DIODES

Stock No.	Mfr's Type	B_V (V)	I_r (mA) @V_r (V)	I_F (mA) @ 1.0 V	EACH 1-99	EACH 100-Up
551-0456	1N456	30	25 @ 25	40	.38	.28
552-0456	1N456A	30	25 @ 25	100	.38	.28
551-0457	1N457	70	2.5 @ 60	20	.38	.28
554-0457	1N457JAN	.....	25 @ 60	20	.38	.28
552-0457	1N457A	.....	25 @ 60	100	.38	.28
551-0458	1N458	150	25 @ 125	7	.38	.28
554-0458	1N458JAN	.....	25 @ 125	7	.38	.28
552-0458	1N458A	150	5 @ 125	100	.38	.28
551-0459	1N459	200	25 @ 175	3	.38	.28
554-0459	1N459JAN	.....	25 @ 175	3	.38	.28
552-0459	1N459A	.....	25 @ 175	100	.38	.28
552-0482	1N482A	40	25 @ 30	100	.38	.28
553-0482	1N482B	40	25 @ 30	100	.38	.28
551-0483	1N483A	80	25 @ 60	100	.38	.28
552-0483	1N483B	80	25 @ 60	100	.38	.28
553-0483	1N483BJAN	80	25 @ 70	100	.38	.28
554-0483	1N483BJANTX	80	25 @ 70	100	1.65	1.20
552-0484	1N484A	150	25 @ 125	100	.38	.28
553-0484	1N484B	150	25 @ 125	100	.38	.28
551-0485	1N485A	200	25 @ 175	100	.60	.45
552-0485	1N485B	200	25 @ 175	100	.60	.45
553-0485	1N485BJAN	200	25 @ 180	100	.64	.49
554-0485	1N485BJANTX	200	25 @ 180	100	1.65	1.20
551-0486	1N486	250	50 @ 225	100 @ 1.1	.60	.45
552-0486	1N486A	250	25 @ 225	100	.60	.45
553-0486	1N486B	250	50 @ 225	100	.60	.45
554-0486	1N486BJAN	250	25 @ 225	100	.64	.49
551-0890	1N890	80	25 @ 60	20	.38	.28
551-3595	1N3595	150	1 @ 125	200	2.25	1.68
554-3595	1N3595JAN	150	1 @ 125	200	2.70	2.00

HOT CARRIER DIODES

Stock No.	Mfr's Type	B_V (V)	I_F	I_R	EACH 1-99	EACH 100-Up
551-1100	1N1100	5	10mA @ 0.55V	50mA @ 1.0V	.90	.67
551-5390	1N5390	5	10mA @ 0.55V	50mA @ 1.0V	.90	.67

1-AMP RECTIFIERS

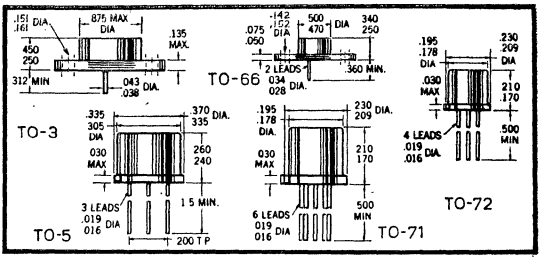
Stock No.	Mfr's Type	B_V (V)	V_F(V) @ 1A	I_R @ .88V (μa)	EACH 1-99	EACH 100-Up
551-4001	1N4001	50	1.0	0.75	.30	.22
551-4002	1N4002	100	1.0	0.75	.34	.25
551-4003	1N4003	200	1.0	0.75	.38	.28
551-4004	1N4004	400	1.0	0.75	.45	.34
551-4005	1N4005	600	1.0	0.75	.55	.40

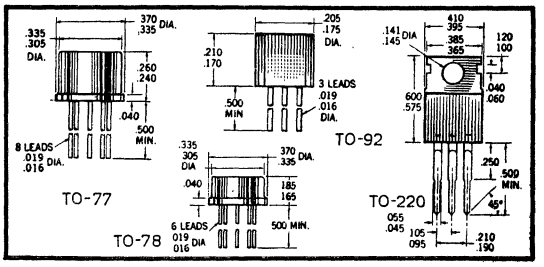
Silicon Power and Dual Transistors

FAIRCHILD

A WIDE VARIETY OF DEVICES FOR COMMERCIAL AND INDUSTRIAL APPLICATIONS

The following tables list a standard line of silicon dual and power transistors from Fairchild. The wide selection of devices gives the designer exceptional performance in a variety of industrial, consumer and military applications. The power tables list the devices by package, polarity, voltage and current. Devices are available with voltage ranges from 40-350 volts, current ranges from 1-30 amps, and frequencies from 1-80 MHz. The dual transistor table provides for standard Darlington and Differential Amplifier transistors.





LOW-FREQ. SILICON POWER TRANSISTORS

NPN TO-5

Stock No.	Mfr's Type	Comp.	V_{CEO} Volt	h_{FE} @ I_C Min/Max	Amps	Pd W	EACH 1-9	10-99	100-Up
555-4237	2N4237	2N4234	40	30/150	.25	6	1.35	1.35	.90
555-4896	2N4896	.....	60	100/300	2.00	7	8.25	8.25	5.50
555-4897	2N4897	.....	80	40/120	2.00	7	10.85	10.85	6.75
555-3440	2N3440	.....	250	40/160	.02	10	1.35	1.35	.90
555-3439	2N3439	.....	350	40/160	.02	10	2.00	2.00	1.35

PNP TO-5

555-4234	2N4234	2N4237	40	30/150	.25	6	1.80	1.80	1.20

NPN TO-66

555-4910	2N4910	2N4898	40	20/100	.5	25	1.30	1.05	.70
555-4231	2N4231	.....	40	25/100	1.5	35	1.55	1.25	.85
555-3054	2N3054	.....	55	25/100	.5	25	1.40	1.10	.82
555-3766	2N3766	.....	60	40/160	.5	20	1.88	1.62	1.20

PNP TO-66

555-4898	2N4898	2N4910	40	20/100	.5	25	1.50	1.50	1.00
555-3740	2N3740	.....	60	30/100	.25	25	1.80	1.80	1.20
555-3741	2N3741	.....	80	30/100	.25	25	2.10	2.10	1.40

NPN TO-220 (Plastic TO-66)

Stock No.	Mfr's Type	Comp.	V_{CEO} Volt	h_{FE} @ I_C Min/Max	Amps	Pd W	EACH 1-9	10-99	100-Up
555-7921	PN4921	PN4918	40	20/100	.5	30	1.34	1.07	.79
555-6121	2N6121	2N6124	45	25/100	1.5	40	1.57	1.25	.94
555-7922	PN4922	PN4919	60	20/100	.5	30	1.61	1.29	.95
555-6122	2N6122	2N6125	60	25/100	1.5	40	1.88	1.50	1.12
555-7923	PN4923	PN4920	80	20/100	.5	30	1.86	1.49	1.10
555-6123	2N6123	2N6126	80	20/80	1.5	40	2.19	1.75	1.32

PNP TO-220 (Plastic TO-66)

Stock No.	Mfr's Type	Comp.	V_{CEO} Volt	h_{FE} @ I_C Min/Max	Amps	Pd W	EACH 1-9	10-99	100-Up
555-7918	PN4918	PN4921	40	20/100	.5	30	1.58	1.26	.93
555-6124	2N6124	2N6121	45	25/100	1.5	40	1.75	1.40	1.05
555-7919	PN4919	PN4922	60	20/100	.5	30	1.85	1.48	1.10
555-6125	2N6125	2N6122	60	25/100	1.5	40	2.00	1.60	1.20
555-7920	PN4920	PN4923	80	20/100	.5	30	2.19	1.75	1.30
555-6126	2N6126	2N6123	80	20/80	1.5	40	2.25	2.00	1.50

NPN TO-3

Stock No.	Mfr's Type	Comp.	V_{CEO} Volt	h_{FE} @ I_C Min/Max	Amps	Pd W	EACH 1-9	10-99	100-Up
555-4913	2N4913	2N4904	40	25/100	2.5	....	1.73	1.73	1.20
555-5301	2N5301	2N4398	40	15/60	15.0	200	5.25	5.25	3.50
555-4914	2N4914	2N4905	60	25/100	2.5	87.5	1.95	1.95	1.30
555-5881	2N5881	2N5879	60	20/100	6.0	160	3.50	2.80	2.15
555-5885	2N5885	2N5883	60	20/100	10.0	200	4.87	3.90	3.00
555-5302	2N5302	2N4399	60	15/60	15.0	200	5.70	5.70	3.80
555-4915	2N4915	2N4906	80	25/100	2.5	87.5	2.10	2.10	1.40
555-5878	2N5878	2N5876	80	20/100	4.0	150	2.30	2.08	1.60
555-5882	2N5882	2N5880	80	20/100	6.0	160	3.90	3.12	2.40
555-5886	2N5886	2N5884	80	20/100	10.0	200	5.52	4.42	3.40
555-7802	MJ802	.....	90	25/100	7.5	200	6.08	4.86	3.60

PNP TO-3

Stock No.	Mfr's Type	Comp.	V_{CEO} Volts	h_{FE} @ I_C Min/Max	Amps	Pd W	EACH 1-9	10-99	100-Up
555-4904	2N4904	.....	40	25/100	2.5	87.5	2.70	2.31	1.71
555-4398	2N4398	2N5301	40	15/60	15.0	200	9.60	6.75	5.00
555-5879	2N5879	2N5881	60	20/100	6.0	160	4.72	3.78	2.90
555-4399	2N4399	2N5302	60	15/60	15.0	200	11.85	8.75	6.50
555-5883	2N5883	2N5885	60	20/100	10.0	200	5.29	4.23	3.25
555-4905	2N4905	2N4914	60	25/100	2.5	87.5	3.60	3.08	2.28
555-4906	2N4906	2N4915	80	25/100	2.5	87.5	4.50	3.85	2.85
555-5876	2N5876	2N5878	80	20/100	4.0	150	3.75	2.99	2.30
555-5880	2N4399	2N5302	80	20/100	6.0	160	5.45	4.35	3.35
555-7502	MJ4502	.....	90	25/100	7.5	200	6.60	5.26	3.90

NPN DIFFERENTIAL AMPLIFIERS

Stock No.	Mfr's Type	Pd 25° mW	V_{CEO} Volt	h_{FE} @ I_C Min/Max	mA	Pkg. TO-	EACH 1-9	10-99	100-Up
555-2060	2N2060	600	60	30/90	0.1	77	4.10	4.10	2.75
555-2640	2N2640	600	45	50/300	0.01	77	5.00	5.00	3.35
555-2642	2N2642	600	45	100/300	0.01	77	8.50	8.50	5.65
556-2915	2N2915A	500	45	60/240	0.01	77	7.15	7.15	4.40
556-2916	2N2916A	500	45	150/600	0.01	77	8.15	8.15	5.00
555-2917	2N2917	500	45	60/240	0.01	77	2.85	2.85	1.75
555-2918	2N2918	500	45	150/600	0.01	77	3.55	3.55	2.20
555-2919	2N2919	500	60	60/240	0.01	77	4.30	4.30	2.65
556-2919	2N2919A	500	60	60/240	0.01	77	8.50	8.50	5.25
555-2920	2N2920	500	60	150/6000	0.01	77	5.25	5.25	3.40
556-2920	2N2920A	500	60	150/600	0.01	77	10.00	10.00	6.15
555-2978	2N2978	300	60	60/240	0.01	71	13.00	13.00	8.70
555-2979	2N2979	300	60	150/600	0.01	71	16.50	16.50	11.00
555-3424	2N3424	450	15	20/200	3.0	78	18.00	17.00	11.35
555-3729	2N2729	550	30	45/180	1.0	78	6.60	6.60	4.90
555-3908	2N3908	600	60	200/---	1.0	77	7.15	7.15	4.75

PNP DIFFERENTIAL AMPLIFIERS

Stock No.	Mfr's Type	Pd 25° mW	V_{CEO} Volt	h_{FE} @ I_C Min/Max	mA	Pkg. TO-	EACH 1-9	10-99	100-Up
555-3727	2N3727	500	60	135/450	1.0	78	7.50	7.50	5.00
555-3804	2N3804	360	60	150/450	0.1	71	10.00	10.00	6.65
555-3805	2N3805	360	60	300/900	0.1	71	14.30	14.30	9.55
555-3808	2N3808	600	60	150/450	0.1	78	7.15	7.15	4.75
555-3809	2N3809	360	60	300/900	0.1	78	8.50	8.50	5.65
555-3810	2N3810	600	60	150/450	0.1	78	10.00	10.00	6.65
555-3811	2N3811	360	60	300/900	0.1	78	14.30	14.30	9.55
555-4020	2N4020	600	45	250/600	0.01	77	10.80	10.80	6.60
555-4021	2N4021	600	60	100/450	0.01	77	10.80	10.80	6.60
555-4023	2N4023	600	45	250/600	0.1	77	12.80	12.80	7.75

NPN DARLINGTON AMPLIFIERS

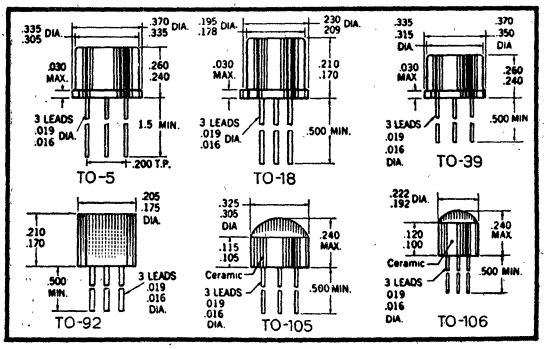
Stock No.	Mfr's Type	Pd 25° mW	V_{CEO} Volt	h_{FE} @ I_C Min/Max	mA	Pkg. TO-	EACH 1-9	10-99	100-999	1000-Up
555-4712	MPSA12	310	29	20,000/——	10	92	.85	.64	.40	.345
555-4713	MPSA13	310	30	5,000/——	10	92	.60	.45	.28	.243
555-4714	MPSA14	310	30	10,000/——	10	92	.68	.50	.31	.27
555-0997	2N997	500	40	7,000/70,000	100	72	10.50	10.50	6.55	.....
555-0998	2N998	500	60	1,600/8,000	10	72	10.50	10.50	6.55	.....
555-0999	2N999	500	60	7,000/70,000	100	72	14.50	14.50	9.05	.....
555-2723	2N2723	500	60	2,000/70,000	10	72	10.00	10.00	6.70	.....
555-2724	2N2724	500	60	7,000/50,000	10	72	11.00	11.00	7.35	.....
555-2725	2N2725	500	45	2,000/10,000	10	72	12.00	12.00	8.00	.....

PNP DARLINGTON AMPLIFIERS

555-4765	MPSA65	310	30	50,000/——	10	92	.75	.55	.34	.29
555-4766	MPSA66	310	30	75,000/——	10	92	.80	.59	.37	.32

FAIRCHILD

Silicon Planar Transistors



NPN HIGH VOLTAGE AMPLIFIERS

Stock No.	Mfr's Type	V_{CEO} Volt	h_{FE} min/max @ mA	I_C	25° Pd *50° mW	Pkg. TO-	EACH 1-99	100-999	1000-Up
555-0657	2N657	100	30/90	200	800	5	1.62	1.01	0.88
557-0657	2N657JAN	100	30/90	200	800	5	2.10	1.29	1.12
555-2008	2N2008	110	40/120	50	800	5	10.00	6.70	6.45
555-2443	2N2443	100	50/150	50	800	5	2.75	1.70	1.48
555-3114	2N3114	150	30/120	30	800	5	2.78	1.42	1.23
555-3526	2N3526	120	30/—	30	800	5	2.55	1.59	1.39
555-3742	2N3742	300	20/200	30	1000	5	6.40	4.00	3.45
555-3923	2N3923	150	30/120	25	800	5	4.00	2.50	2.15
555-4926	2N4926	200	20/200	30	1000	39	2.00	1.24	1.08
555-4927	2N4927	250	20/200	30	1000	39	2.30	1.42	1.23
555-5830	2N5830	120	80/500	25	310	106	.58	.35	.315
555-5831	2N5831	160	80/250	10	310	106	.65	.405	.355
555-5832	2N5832	160	175/500	10	310	106	.70	.43	.375
555-5833	2N5833	200	50/250	10	310	106	.80	.495	.43
555-5964	2N5964	150	50/250	10	700	105	.65	.405	.355
555-5965	2N5965	180	50/250	10	700	105	.80	.495	.43
555-7055	SE7055	220	40/150	10	1000	39	2.80	1.75	1.52
555-7056	SE7056	300	40/100	10	1000	39	3.10	1.91	1.66
555-7057	SE7057	450	30/70	10	1000	39	25.50	16.00	13.75
555-7066	SE7066	300	40/100	10	1750	39	3.25	1.96	1.71

PNP HIGH VOLTAGE AMPLIFIERS

Stock No.	Mfr's Type	V_{CEO} Volt	h_{FE} min/max @ mA	I_C	25° Pd *50° mW	Pkg. TO-	EACH 1-99	100-999	1000-Up
555-3495	2N3495	120	40/—	10	600	5	12.75	8.50	8.25
555-3497	2N3497	120	40/—	10	400	18	11.50	7.10	6.15
555-3634	2N3634	140	50/150	50	1000	5	9.00	5.60	4.85
555-3635	2N3635	140	100/300	50	1000	5	10.50	6.55	5.70
555-3636	2N3636	175	50/150	50	1000	5	14.25	8.85	7.70
555-3637	2N3637	175	100/300	50	1000	5	17.10	10.60	9.25
555-3743	2N3743	300	25/250	30	1000	5	22.00	15.40	14.50
555-3930	2N3930	180	80/300	10	400	18	6.40	4.00	3.45
555-3931	2N3931	180	80/300	10	400	39	6.40	4.00	3.45
555-4888	2N4888	150	40/400	10	300	105	.52	.32	.28
555-4889	2N4889	150	80/300	10	300	105	.74	.46	.40
555-5415	2N5415	200	30/150	50	1000*	5	3.30	2.40	2.00
555-5416	2N5416	300	30/120	50	1000*	5	4.95	3.55	3.00

NPN RF-IF AMPLIFIERS AND OSCILLATORS

Stock No.	Mfr's Type	V	PG @ f dB Min Hz	NF @ f dB Max MHz	C_{obo} pF-Max	Pkg. TO-	EACH 1-99	100-999	1000-Up
555-0917	2N917	15	9 200	6.0 60	1.7	72	.71	.445	.385
555-0918	2N918	15	15 200	6.0 60	1.7	72	.74	.46	.40
555-3187	2N3137	20	6 250	.....	3.5	5	5.40	2.10	1.85
555-3563	2N3563	12	14 200	4.0 60	1.7	106	.285	.177	.154
555-5770	2N5770	15	15 500	6.0 60	1.7	92	.285	.177	.154
555-7918	MPS918	15	15 200	6.0 60	1.7	92	.80	.495	.43
555-7563	MPS3563	12	30 500	6.0 60	1.7	92	.365	.227	.197
555-7100	PE3100	30	.....	.....	.85	92	.64	.395	.345
555-7010	PE5010	30	20 200	3.3 200	.5	92	1.03	.64	.55
555-7015	PE5015	20	20 100	4.0 100	.5	92	.88	.55	.475
555-7025	PE5025	30	25 45	.....	1.0	92	.64	.395	.345
555-7029	PE5029	30	28 45	6.0 45	.4	92	.77	.48	.415
556-7030	PE5030B	40	28 45	.....	.4	92	.94	.58	.51
555-7031	PE5031	30	19 200	4.5 200	.4	92	.81	.50	.44
555-7006	SE5006	40	20 100	.....	1.6	106	.425	.265	.23
555-7020	SE5020	20	20 200	3.3 200	.5	72	5.95	3.20	2.75
555-7050	SE5050	20	20 100	4.0 100	.5	72	3.40	2.12	1.85
555-7055	SE5055	20	27 45	5.0 45	.22	72	5.15	3.12	2.75

NPN LOW LEVEL AMPLIFIERS

Stock No.	Mfr's Type	V_{CBO} V	h_{FE} min/max @ mA	I_C	Pkg. TO-	EACH 1-99	100-999	1000-Up
555-0930	2N930	45	100/300	0.01	18	.455	.285	.245
557-0930	2N930JAN	45	100/300	0.01	18	.54	.335	.295
555-2484	2N2484	60	100/500	0.01	18	.51	.23	.275
557-2484	2N2484JAN	60	100/500	0.01	18	.60	.37	.325
555-3117	2N3117	60	250/500	0.01	18	2.80	1.75	1.52
555-3565	2N3565	25	70/—	1.00	106	.228	.142	.123
555-5088	2N5088	30	300/900	0.01	92	.71	.445	.385
555-5089	2N5089	25	400/1200	0.10	92	.93	.58	.50
555-5209	2N5209	50	100/300	0.10	92	.62	.385	.335
555-5210	2N5210	50	200/600	0.10	92	.69	.43	.375
555-5961	2N5961	60	100/—	0.01	92	.50	.31	.27
555-5962	2N5962	45	450/—	0.01	92	.50	.31	.27
555-5963	2N5963	30	900/—	0.01	02	.90	.56	.485
556-7107	FT107B	45	450/—	0.01	18	.83	.51	.445
557-7107	FT107C	60	100/—	0.01	18	.51	.32	.275
555-8520	MPS6520	25	100/—	2.0	92	.78	.485	.41
555-8521	MPS6521	25	150/—	2.0	92	.86	.53	.45
555-8571	MPS6571	20	250/1000	.01	92	.57	.355	.30
555-4709	MPSA09	50	100/600	.01	92	.52	.325	.28

PNP LOW LEVEL AMPLIFIERS

Stock No.	Mfr's Type	V_{CBO} V	h_{FE} min/max @ mA	I_C	Pkg. TO-	EACH 1-99	100-999	1000-Up
555-3962	2N3962	60	60/—	0.001	18	.91	.57	.49
555-3963	2N3963	80	60/—	0.001	18	1.43	.89	.77
555-3964	2N3964	45	180/—	0.001	18	1.48	.92	.80
555-3965	2N3965	60	180/—	0.001	18	2.05	1.27	1.11
555-4248	2N4248	40	50/—	0.10	106	.288	.142	.123
555-4249	2N4249	60	100/300	0.10	106	.285	.177	.154
555-4250	2N4250	40	250/700	0.10	106	.34	.212	.185
556-4250	2N4250	60	250/700	0.10	106	.50	.31	.27
555-4964	2N4964	40	30/120	0.01	106	.37	.23	.20
555-4965	2N4965	40	80/400	0.01	106	.37	.23	.20
555-5086	2N5086	50	150/500	0.10	92	.71	.445	.385
555-5087	2N5087	50	250/800	0.10	92	.76	.47	.41
555-8522	MPS6522	25	100/—	0.10	92	.86	.53	.45
555-8523	MPS6523	25	150/—	0.10	92	.93	.58	.49

NPN GENERAL-PURPOSE AMPLIFIERS AND SWITCHES

Stock No.	Mfr's Type	V_{CEO} V_{CER}* Volts	h_{FE} @ I_C (h_{fe}) min/max	mA	f MHz min	Pd 25° mW	Pkg. TO-	EACH 1-99	100-999	1000-Up
555-0697	2N697	40*	40/120	150	50	600	5	.51	.32	.275
557-0697	2N697JAN	40*	40/120	150	60	600	5	.60	.37	.325
556-0699	2N699B	80	40/120	150	60	870	18	4.35	2.70	2.35
556-0718	2N718A	50	40/120	150	60	500	18	.60	.37	.325
557-0718	2N718AJAN	30	40/120	150	60	500	18	.74	.46	.40
556-0720	2N720A	80	40/120	150	60	500	18	1.32	.85	.74
557-0720	2N720AJAN	80	40/120	150	60	500	18	1.45	.90	.79
555-0870	2N870	60	40/120	150	50	500	18	1.48	.92	.80
555-0871	2N871	61	100/300	150	60	500	18	1.43	.89	.77
555-0956	2N956	50*	100/300	150	70	500	18	.66	.405	.355
555-1613	2N1613	50*	40/120	150	80	800	5	.54	.335	.295
557-1613	2N1613JAN	30	40/120	150	60	800	5	.68	.425	.37
555-1711	2N1711	50	100/300	150	70	800	5	.57	.355	.31
556-1711	2N1711A	32	100/300	150	70	800	5	4.00	2.50	2.15
557-1711	2N1711JAN	30	100/300	150	70	800	5	.71	.445	.385
555-1893	2N1893	80	40/120	150	50	800	5	.85	.53	.46
557-1893	2N1893JAN	80	40/120	150	60	800	5	1.00	.62	.54
555-2218	2N2218	30	40/120	150	250	800	5	.57	.355	.31
556-2218	2N2218A	40	40/120	150	250	800	5	.63	.39	.34
555-2219	2N2219	30	100/300	150	250	800	5	.54	.335	.295
556-2219	2N2219A	40	100/300	150	350	800	5	.60	.37	.325
557-2219	2N2219AJAN	50	100/300	150	250	800	5	.68	.425	.37
555-2221	2N2221	30	40/120	150	250	500	18	.455	.285	.246
556-2221	2N2221A	40	40/120	150	250	500	18	.51	.32	.275
555-2222	2N2222	30	100/300	150	250	500	18	.40	.25	.216
556-2222	2N2222A	40	100/300	150	300	500	18	.455	.285	.246
557-2222	2N2222AJAN	50	100/300	150	250	500	18	.54	.335	.295
555-3019	2N3019	80	100/300	150	100	800	5	1.14	.71	.62
555-3020	2N3020	80	40/120	150	80	800	5	1.62	1.01	.88
555-3053	2N3053	50*	50/250	150	100	....	5	.54	.335	.29
555-3107	2N3107	60	100/300	150	70	800	5	1.14	.71	.62
555-3108	2N3108	60	40/120	150	60	800	5	1.14	.71	.62
555-3109	2N3109	40	100/300	150	70	800	5	1.14	.71	.62
555-3110	2N3110	40	40/120	150	60	800	5	1.12	.71	.62
555-3566	2N3566	30	150/600	10	40	300	105	.285	.177	.154
555-3567	2N3567	40	40/120	150	60	300	105	.255	.159	.139
555-3568	2N3568	60	40/120	150	60	300	105	.37	.23	.20

Silicon Planar Transistors

FAIRCHILD

A Wide Variety of Devices for Commercial and Industrial Applications

NPN GENERAL-PURPOSE AMPLIFIERS AND SWITCHES—(CONTINUED)

Stock No.	Mfr's Type	V_{CEO} Volt	h_{FE} @ I_C (h_{fe}) mix/max	mA	f_T MHz min	Pd. 25° mW	Pkg. TO-	EACH 1-99	100-999	1000-Up
555-3569	2N3569	30	100/300	150	60	300	105	.315	.195	.169
555-3641	2N3641	30	40/120	150	250	350	105	.315	.195	.169
555-3642	2N3642	45	40/120	150	250	350	105	.315	.195	.169
555-3643	2N3643	30	100/300	150	250	350	105	.315	.195	.169
555-3903	2N3903	40	50/150	10	250	310	92	.51	.32	.275
555-3904	2N3904	40	100/300	10	300	310	92	.51	.32	.275
555-4123	2N4123	30	50/150	2	250	310	92	.34	.212	.185
555-4124	2N4124	25	120/360	2	300	310	92	.34	.212	.185
555-4400	2N4400	40	50/150	150	200	310	92	.57	.355	.31
555-4409	2N4409	50	60/400	1	60	310	92	.64	.40	.345
555-4410	2N4410	80	60/400	10	60	310	92	.90	.56	.485
555-7693	MPS3693	45	40/160	10	200	625	92	.44	.29	.28
555-7694	MPS3694	45	100/400	10	200	625	92	.44	.29	.28
555-8512	MPS6512	30	50/100	2	250	625	92	.52	.325	.27
555-8513	MPS6513	30	90/180	2	150	625	92	.55	.34	.28
555-8514	MPS6514	25	150/300	2	390	625	92	.57	.355	.30
555-8515	MPS6515	25	250/500	2	390	625	92	.62	.385	.32
555-8530	MPS6530	40	40/120	100	390	625	92	.62	.385	.32
555-8531	MPS6531	40	90/270	100	390	625	92	.71	.445	.37
555-8532	MPS6532	30	30/—	100	390	625	92	.52	.325	.27
555-8560	MPS6560	25	50/200	500	60	625	92	.48	.31	.27
555-8561	MPS6561	20	50/200	350	60	625	92	.45	.295	.255
555-8565	MPS6565	45	40/150	10	200	625	92	.50	.31	.26
555-8566	MPS6566	45	100/400	10	200	625	92	.55	.34	.28
555-4705	MPSA05	60	50/—	100	50	625	92	.50	.31	.27
555-4706	MPSA06	80	50/—	100	50	625	92	.57	.355	.31
555-4710	MPSA10	40	40/400	5	50	625	82	.255	.159	.139
555-4720	MPSA20	40	40/400	5	125	625	92	.31	.191	.166

PNP GENERAL-PURPOSE AMPLIFIERS AND SWITCHES

Stock No.	Mfr's Type	V_{CEO} Volt	h_{FE} @ I_C mix/max	mA	f_T MHz min	Pd 25° mW	Pkg. TO-	EACH 1-99	100-999	1000 Up
556-0869	2N869A	18	40/120	30	400	360	18	1.57	.97	.85
557-0869	2N869AJAN	18	40/120	10	400	360	18	1.65	1.03	.89
556-0995	2N995A	15	35/140	20	100	360	18	3.40	2.10	1.85
555-1132	2N1132	35	30/90	150	60	600	39	.71	.445	.385
556-1132	2N1132A	40	30/90	150	60	600	5	2.30	1.42	1.23
555-2904	2N2904	40	40/120	150	200	600	5	.54	.335	.295
556-2904	2N2904A	60	40/120	150	200	600	5	.54	.335	.295
555-2905	2N2905	40	100/300	150	200	600	5	.57	.335	.31
556-2905	2N2905A	60	100/300	150	200	600	5	.63	.39	.34
557-2905	2N2905AJAN	60	100/300	150	200	600	5	.71	.445	.385
555-2906	2N2906	40	40/120	150	200	400	18	.43	.265	.231
556-2906	2N2906A	60	40/120	150	200	400	18	.43	.265	.231
555-2907	2N2907	40	100/300	150	200	400	18	.43	.265	.231
556-2907	2N2907A	60	100/300	150	200	400	18	.485	.30	.26
557-2907	2N2907AJAN	60	100/300	150	200	400	18	.57	.355	.31
555-3250	2N3250	40	50/150	10	250	360	18	.83	.51	.445
556-3250	2N3250A	60	50/160	10	250	360	18	.88	.55	.475
555-3251	2N3251	40	100/300	10	300	360	18	1.11	.69	.60
556-3251	2N3251A	60	100/300	10	300	360	18	1.23	.76	.66
555-3494	2N3494	80	35/—	100	200	600	5	9.75	6.20	5.40
555-3496	2N3496	80	35/—	100	200	400	18	9.75	6.20	5.40
555-3638	2N3638	25	30/—	50	100	300	105	.255	.159	.139
556-3638	2N3638A	25	100/—	50	150	300	105	.285	.177	.154
555-3644	2N3644	45	115/300	50	200	300	105	.34	.212	.185
555-3645	2N3645	60	115/300	50	200	300	105	.34	.212	.185
555-3905	2N3905	40	50/150	10	200	310	92	.53	.33	.285
555-3906	2N3906	40	100/300	10	250	310	92	.53	.33	.285
555-4030	2N4030	60	40/120	100	100	800	92	.90	.61	.54
555-4031	2N4031	80	40/120	100	100	800	5	1.08	.67	.59
555-4032	2N4032	60	100/300	100	150	800	5	1.05	.70	.62
555-4033	2N4033	80	100/300	100	150	800	5	1.32	.88	.77
555-4121	2N4121	40	70/200	10	400	200	106	.285	.177	.154
555-4122	2N4122	40	150/300	10	450	200	106	.314	.195	.169
555-4125	2N4125	30	50/150	2	200	310	92	.34	.212	.185
555-4126	2N4126	25	120/360	2	250	310	92	.34	.212	.185
555-4354	2N4354	60	50/500	10	100	350	105	.45	.285	.246
555-4355	2N4355	60	100/400	10	100	350	105	.51	.32	.275
555-4356	2N4356	80	50/250	10	100	350	105	.51	.32	.275
555-4402	2N4402	40	50/150	150	150	310	92	.57	.355	.31
555-4403	2N4403	40	100/300	150	200	310	92	.71	.445	.385
555-7638	MPS3638	25	30/—	50	100	625	92	.39	.24	.21
556-7638	MPS3638A	25	100/—	50	150	625	92	.59	.39	.37
555-8516	MPS6516	40	50/100	2	200	625	92	.57	.335	.30
555-8517	MPS6517	40	90/180	2	200	625	92	.59	.37	.31
555-8518	MPS6518	40	150/300	2	340	625	92	.64	.40	.34
555-8519	MPS6519	25	250/500	2	340	625	92	.71	.445	.37
557-8533	MPS6533M	40	40/120	100	260	625	92	.66	.41	.35
557-8534	MPS6534M	40	90/270	100	260	625	92	.76	.47	.40
555-8535	MPS6535	30	30/—	100	260	625	92	.57	.355	.30
555-8562	MPS6562	25	50/200	500	60	625	92	.54	.34	.295
555-8563	MPS6563	20	50/200	350	60	625	92	.51	.325	.28

NPN HIGH-SPEED SATURATED SWITCHES

Stock No.	Mfr's Type	V_{CEO} V_{CER}† Volts	T_{s-ns}@I_C t_{off}* max/mA	h_{fe} @ I_C min /max	mA	Pkg. TO-	EACH 1-99	100-999	1000-Up
555-0706	2N706	20†	60/10	20/—	10	18	.34	.212	.185
556-0706	2N706A	15	25/10	20/60	10	18	.485	.30	.26
557-0706	2N706JAN	15	35/10	30/120	10	18	.43	.265	.231
555-0708	2N708	15	25/10	30/120	10	18	.455	.285	.246
555-0709	2N709	6	6/10	20/120	10	18	.86	.53	.46
555-0743	2N743	12	14/10	20/60	10	18	.57	.355	.31
555-0744	2N744	12	18/10	40/120	10	18	.57	.355	.31
555-0753	2N753	15	35/10	40/120	10	18	.57	.355	.31
555-0834	2N834	12	25/10	25/—	10	18	.54	.355	.295
556-0834	2N834A	15	10/10	25/—	10	18	2.40	1.50	1.31
555-0835	2N835	20	35/10	20/0	10	18	.68	.425	.37
555-0914	2N914	15	20/10	30/120	10	18	.485	.30	.26
555-2368	2N2368	15	10/10	20/60	10	18	.52	.25	.216
556-2369	2N2369A	15	13/10	40/120	10	18	.43	.265	.231
557-2369	2N2369AJAN	15	13/10	40/120	10	18	.51	.32	.275
555-2481	2N2481	15	20/10	40/120	10	18	.43	.265	.231
555-2845	2N2845	30	40*/150	30/120	150	18	1.43	.89	.77
555-2846	2N2846	30	40*/150	30/150	150	5	1.51	.94	.82
555-2847	2N2847	20	40*/150	40/140	150	18	1.42	.92	.80
555-2848	2N2848	20	40*/150	40/140	150	5	1.48	.92	.80
555-3009	2N3009	15	18/10	30/120	30	52	.91	.57	.495
555-3010	2N3010	6	6/10	25/125	10	18	1.14	.71	.62
555-3011	2N3011	12	13/10	30/120	10	18	.57	.355	.31
555-3013	2N3013	15	18/10	30/120	30	52	1.03	.64	.55
557-3013	2N3013JAN	20	18/10	35/120	30	52	1.11	.69	.60
555-3014	2N3014	20	18/10	30/120	30	52	1.00	.62	.54
555-3015	2N3015	30	60*/300	30/120	150	5	.86	.53	.46
555-3252	2N3252	30	70*/500	30/90	500	5	3.00	1.86	1.62
555-3253	2N3253	40	70*/500	25/—	150	5	3.28	2.04	1.77
555-3444	2N3444	50	70*/500	20/60	500	5	4.05	2.50	2.20
555-3646	2N3646	15	18/10	30/120	30	106	.285	.177	.154
555-3722	2N3722	60	100*/500	40/150	100	5	2.30	1.42	1.23
555-3734	2N3734	30	60*/1A	30/120	300	5	2.50	1.54	1.34
555-3724	2N3724	30	60*/500	60/150	100	5	.83	.51	.445
555-3725	2N3725	50	60*/500	60/160	100	5	.94	.58	.51
555-4013	2N4013	30	60*/500	60/150	100	18	1.85	1.15	1.00
555-4014	2N4014	50	60*/500	60/150	100	18	2.00	1.24	1.08
555-4046	2N4046	40	60*/500	40/150	100	5	1.28	.80	.69
555-4047	2N4047	50	60*/500	40/150	100	5	1.43	.89	.77
555-4137	2N4137	20	13/10	40/120	10	18	1.00	.62	.54
555-4264	2N4264	15	20/10	40/160	10	92	.45	.28	.243
555-4265	2N4265	12	20/10	100/400	10	92	.52	.325	.28
555-4274	2N4274	12	13/10	35/120	10	106	.285	.177	.154
555-4275	2N4275	15	13/10	35/120	10	106	.285	.177	.154
555-5769	2N5769	15	13/10	40/120	10	92	.285	.177	.154
555-5722	2N5772	15	18/10	30/120	30	92	.285	.177	.154
555-5845	2N5845	40	60*/500	25/150	500	92	.71	.445	.385
556-5845	2N5845A	40	50*/500	35/150	500	92	.86	.53	.46
555-5706	MPS706	20†	60/10	20/0	10	92	.435	.27	.234
556-5706	MPS706A	20†	25/10	20/60	10	92	.62	.385	.335
555-5834	MPS834	.....	25/10	25/—	10	92	.50	.31	.27
555-6369	MPS2369	15	13/10	40/120	10	92	.50	.31	.27
555-7646	MPS3646	15	18/10	30/120	30	92	.52	.34	.33

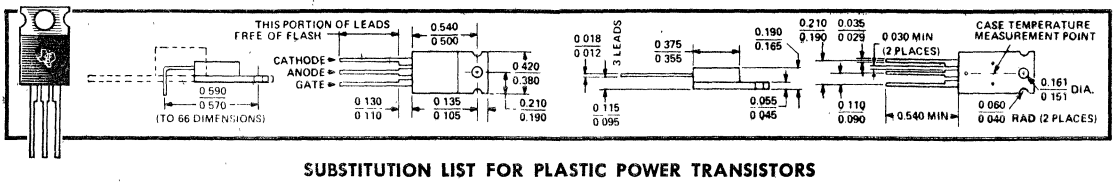
PNP HIGH-SPEED SATURATED SWITCHES

Stock No.	Mfr's Type	V_{CEO} Volts	T_{s-ns} @ I_C t_{off}* max/mA	h_{fe} @ I_C min/max	mA	Pkg. TO-	EACH 1-99	100-999	1000-Up
555-2894	2N2894	12	90*/30	30/150	30	18	.68	.425	.37
556-2894	2N2894A	12	20/10	40/120	30	18	3.40	2.10	1.85
555-3012	2N3012	12	75*/30	30/120	30	18	1.25	.78	.68
555-3209	2N3209	20	90*/30	30/120	30	18	1.28	.80	.69
555-3304	2N3304	6	30/10	30/120	10	18	1.38	.92	.80
555-3467	2N3467	40	90*/500	40/120	500	5	3.00	1.86	1.62
555-3468	2N3468	50	90/500	25/75	500	5	5.15	3.20	2.75
555-3639	2N3639	6	30/10	30/120	10	106	.355	.221	.193
555-3640	2N3640	12	50/10	30/120	10	106	.425	.265	.23
555-4207	2N4207	6	15/10	50/120	10	18	3.00	1.86	1.62
555-4208	2N4208	12	20/10	30/120	10	18	3.30	2.05	1.77
555-4209	2N4209	15	20/10	50/120	10	18	4.00	2.50	2.15
556-5257	2N5257A	6	12/10	30/120	10	106	.485	.30	.26
556-4258	2N4258A	12	15/10	30/120	10	106	.57	.355	.31
555-4389	2N4389	12	90*/50	30/180	10	106	.43	.265	.231
555-5053	2N5053	12	20/10	30/100	30	106	.43	.265	.231
555-5056	2N5056	15	30/10	30/100	30	18	4.00	2.50	2.15
555-5057	2N5057	15	30/10	40/100	30	18	4.55	2.85	2.45
555-5455	2N5455	15	35/300	30/120	10	52	2.55	1.59	1.39
555-5456	2N5456	25	35/300	30/120	10	52	3.00	1.86	1.62
555-5771	2N5771	15	20/10	50/120	10	92	.57	.355	.31
555-5910	2N5910	20	20/10	30/120	10	106	.57	.35	.305
555-7639	MPS3639	6	28*/50	30/120	10	92	.32	.198	.173
555-7640	MPS3640	12	35*/50	30/120	10	92	.44	.29	.26
555-4907	MPSL07	6	15/10	30/120	10	92	.405	.25	.219
555-4908	MPSL08	12	20/10	30/120	10	92	.55	.34	.295

Texas Instruments Plastic Power Transistors

Listed below are 41 voltage/current combinations to choose from. You have a choice of styles and types with ratings up to 25 amps and up to 100 volts which lets you more precisely match the transistor to your design rather than conforming your design to what's available. There are two package types, each featuring single-screw mounting to facilitate installation. There are fully complementary NPN and PNP pairs to simplify designs and reduce costs even more. See Substitution List below.

Package	P_D 25°C Watts	I_C Continuous Amps	V_{CEO} Volts	h_{FE} @ Min	h_{FE} @ Max	h_{FE} @ I_C Amp	h_{FE} @ V_{CE} Volt	$V_{CE(SAT)}$ Max @ I_C Volts	$V_{CE(SAT)}$ Max @ I_C Amps	NPN Stock No.	NPN Mfr's Type	NPN EACH 1-9	NPN EACH 10-99	NPN EACH 100-Up	PNP Stock No.	PNP Mfr's Type	PNP EACH 1-9	PNP EACH 10-99	PNP EACH 100-Up
TO-66	30	1	40	15	75	1	4	0.7	1	953-9510	TIP29	.93	.70	.53	953-9515	TIP30	1.13	.85	.64
TO-66	30	1	60	15	75	1	4	0.7	1	953-9511	TIP29A	1.05	.80	.60	953-9516	TIP30A	1.23	.95	.71
TO-66	30	1	80	15	75	1	4	0.7	1	953-9512	TIP29B	1.18	.91	.68	953-9517	TIP30B	1.40	1.06	.80
TO-66	30	1	100	15	75	1	4	0.7	1	953-9513	TIP29C	1.35	1.03	.77	953-9518	TIP30C	1.58	1.21	.91
TO-66	40	3	40	10	50	3	4	1.2	3	953-9520	TIP31	1.18	.91	.68	953-9525	TIP32	1.38	1.05	.79
TO-66	40	3	60	10	50	3	4	1.2	3	953-9521	TIP31A	1.30	.99	.75	953-9526	TIP32A	1.50	1.14	.85
TO-66	40	3	80	10	50	3	4	1.2	3	953-9522	TIP31B	1.45	1.10	.83	953-9527	TIP32B	1.63	1.24	.93
TO-66	40	3	100	10	50	3	4	1.2	3	953-9523	TIP31C	1.63	1.24	.93	953-9528	TIP32C	1.83	1.40	1.05
TO-66	65	6	40	15	75	3	4	2.0	6	953-9553	TIP41	1.55	1.19	.90	953-9558	TIP42	1.85	1.42	1.07
TO-66	65	6	60	15	75	3	4	2.0	6	953-9554	TIP41A	1.68	1.28	.96	953-9559	TIP42A	2.00	1.53	1.15
TO-66	65	6	80	15	75	3	4	2.0	6	953-9555	TIP41B	1.83	1.40	1.05	953-9560	TIP42B	2.13	1.67	1.25
TO-66	65	6	100	15	75	3	4	2.0	6	953-9556	TIP41C	2.10	1.60	1.20	953-9561	TIP42C	2.43	1.85	1.39
TO-3	90	15	60	20	70	4	4	3.0	10	953-9563	TIP3055	1.50	1.50	1.00	.....	.....	.....	.....	.....
TO-3	80	10	40	20	100	3	4	4.0	10	953-9530	TIP33	1.75	1.33	1.00	953-9535	TIP34	2.10	1.60	1.20
TO-3	80	10	60	20	100	3	4	4.0	10	953-9531	TIP33A	1.85	1.42	1.07	953-9536	TIP34A	2.23	1.70	1.28
TO-3	80	10	80	20	100	3	4	4.0	10	953-9532	TIP33B	2.05	1.56	1.17	953-9537	TIP34B	2.45	1.86	1.40
TO-3	80	10	100	20	100	3	4	4.0	10	953-9533	TIP33C	2.28	1.74	1.31	953-9538	TIP34C	2.68	2.04	1.53
TO-3	125	25	40	10	50	15	4	4.0	25	953-9540	TIP35	4.09	3.10	2.34	953-9545	TIP36	5.00	3.80	2.87
TO-3	125	25	60	10	50	15	4	4.0	25	953-9541	TIP35A	4.31	3.28	2.47	953-9546	TIP36A	5.25	4.00	3.00
TO-3	125	25	80	10	50	15	4	4.0	25	953-9542	TIP35B	4.66	3.55	2.67	953-9547	TIP36B	5.60	4.25	3.20
TO-3	125	25	100	10	50	15	4	4.0	25	953-9543	TIP35C	5.15	3.90	2.93	953-9548	TIP36C	6.07	4.60	3.47



SUBSTITUTION LIST FOR PLASTIC POWER TRANSISTORS

Type No.	TI Nearest Replacement
MJE101	TIP34
MJE102	TIP34A
MJE103	TIP34A
MJE104	TIP34B
MJE105	TIP34A
MJE201	TIP33
MJE202	TIP33A
MJE203	TIP33A
MJE204	TIP33B
MJE205	TIP33A

Type No.	TI Nearest Replacement
MJE2801	TIP33A
MJE2901	TIP34A
MJE2955	TIP34A
MJE3055	TIP3055
2N4918	TIP30
2N4919	TIP30A
2N4920	TIP30B
2N4921	TIP29
2N4922	TIP29A
2N4923	TIP29B

Type No.	TI Nearest Replacement
2N5190	TIP31
2N5191	TIP31A
2N5192	TIP31B
2N5193	TIP32
2N5194	TIP32A
2N5195	TIP32B
MJE370	TIP32
MJE371	TIP32
MJE488	TIP31A
MJE520	TIP31

Type No.	TI Nearest Replacement
MJE521	TIP31
D40D	TIP29
D41D	TIP30
D42C	TIP31
D43C	TIP32
D44C	TIP31
D45C	TIP32

PLASTIC TRIACS AND SCR'S

PLASTIC SILICON TRIACS

Bidirectional—may be triggered from off to on state by either polarity of gate signal with Main Terminal 2 at either polarity. 8 amps at 85°C. Gate Voltage: 2.5 max. Gate Current; 50 mA max. Application: interface switch between TTL and DTL Logic devices and AC operated controllers for lights and AC motor equipt.

Stock No.	Mfr's Type	Description	EACH 1-9	EACH 10-99	EACH 100-Up
953-9394	TIC226B	120 VAC operation	1.68	1.30	.98
953-9395	TIC226D	240 VAC operation	2.13	1.60	1.25

P-N-P-N SILICON REVERSE BLOCKING TRIODE THYRISTORS

SERIES TIC106

Stock No.	Mfr's Type	Repetitive PRV	Max Gate Trigger Voltage	Max Gate Trigger Current	Surge Current	Max Current Ratings @ 80°C AC Average	EACH 1-9	EACH 10-99	EACH 100-Up
953-9791	TIC106Y	30	1.2 V	200 μA	30 amps	3.2 amps	.80	.68	.50
953-9792	TIC106F	50	1.2 V	200 μA	30 amps	3.2 amps	.83	.71	.52
953-9793	TIC106A	100	1.2 V	200 μA	30 amps	3.2 amps	.88	.74	.54
953-9794	TIC106B	200	1.2 V	200 μA	30 amps	3.2 amps	.95	.81	60
953-9795	TIC106C	300	1.2 V	200 μA	30 amps	3.2 amps	1.25	1.08	.80
953-9796	TIC106D	400	1.2 V	200 μA	30 amps	3.2 amps	1.53	1.33	.98

SERIES TIC116 AND TIC126

Stock No.	Mfr's Type	Repetitive PRV	Max Gate Trigger Voltage	Max Gate Trigger Current	Surge Current	Max Current Ratings @ 70°C AC Average	EACH 1-9	EACH 10-99	EACH 100-Up
953-9850	TIC116F	50	1.7 V	20 mA	80 amps	5 amps	1.10	.97	.72
953-9851	TIC116A	100	1.7 V	20 mA	80 amps	5 amps	1.30	1.12	.83
953-9852	TIC116B	200	1.7 V	20 mA	80 amps	5 amps	1.50	1.28	.95
953-9853	TIC116C	300	1.7 V	20 mA	80 amps	5 amps	1.75	1.50	1.11
953-9854	TIC116D	400	1.7 V	20 mA	80 amps	5 amps	2.01	1.73	1.28
953-9855	TIC116E	500	1.7 V	20 mA	80 amps	5 amps	2.61	2.25	1.67
953-9856	TIC116M	600	1.7 V	20 mA	80 amps	5 amps	3.36	2.90	2.15
953-9872	TIC126F	50	1.4 V	20 mA	100 amps	7.5 amps	1.30	1.12	.83
953-9873	TIC126A	100	1.4 V	20 mA	100 amps	7.5 amps	1.50	1.28	.95
953-9874	TIC126B	200	1.4 V	20 mA	100 amps	7.5 amps	1.63	1.42	1.05
953-9875	TIC126C	300	1.4 V	20 mA	100 amps	7.5 amps	2.00	1.73	1.28
953-9876	TIC126D	400	1.4 V	20 mA	100 amps	7.5 amps	2.61	2.25	1.67
953-9877	TIC126E	500	1.4 V	20 mA	100 amps	7.5 amps	3.29	2.83	2.10
953-9878	TIC126M	600	1.4 V	20 mA	100 amps	7.5 amps	4.17	3.58	2.65

Sarkes Tarzian Avalanche Rectifiers

LOW AND MEDIUM CURRENT TYPES

M SERIES (1.0 AMP)

Stock No.	Type No.	S-T No.	Max. PIV	Max. rms V	EACH 1-9	10-24	25-99	100-Up
586-1081	1N1081	10M	100	70	.95	.60	.55	.51
586-1082	1N1082	20M	200	140	1.00	.65	.57	.53
586-1084	1N1084	40M or M500	400	280	1.10	.75	.63	.59
916-4050	.....	60M	600	420	1.80	.85	.70	.66

F SERIES (1.0 AMP)

586-2482	1N2482	F-2	200	140	.50	.33	.29	.27
586-2483	1N2483	F-4	400	280	.52	.35	.30	.28
586-2484	1N2484	F-6	600	420	.55	.37	.32	.29
916-4020	.....	F-8	800	560	.88	.52	.44	.41

C SERIES (1.0 AMP)

586-2610	1N2610	10C	100	70	.55	.35	.30	.28
586-2611	1N2611	20C	200	140	.60	.37	.32	.29
586-2613	1N2613	40C	400	280	.72	.43	.37	.35
586-2615	1N2615	60C	600	420	.87	.47	.30	.37

LA SERIES (2 AMPS)

586-1085	1N1085A	10LA	100	70	5.00	3.34	2.86	2.66
586-1086	1N1086A	20LA	200	140	6.00	4.00	3.43	3.20
586-1088	1N1088A	40LA	400	280	8.00	5.35	4.67	4.27

HIGH-VOLTAGE SERIES (.325 to .45 AMP)

586-1108	1N1108	80SM	800	560	4.75	3.15	2.71	2.54
586-1109	1N1109	120SM	1200	840	6.00	4.00	3.43	3.20
586-1110	1N1110	160SM	1600	1120	7.25	4.75	4.15	3.86
586-1111	1N1111	200SM	2000	1400	8.50	5.65	4.86	4.53
586-1113	1N1113	280SM	2800	1960	11.00	7.35	6.30	5.87

MEDIUM CURRENT TYPES

H3 SERIES (6 AMPS)

All are positive base types.

Stock No.	Type No.	S-T No.	Max. PIV	Max. rms V	EACH 1-9	10-24	25-99	100-Up
586-1341	1N1341	10H3P	100	70	1.67	1.19	.96	.89
586-1343	1N1343	20H3P	200	140	1.85	1.20	1.03	.96
586-1346	1N1346	40H3P	400	280	2.40	1.50	1.29	1.20

ST2 SERIES (12 AMPS)

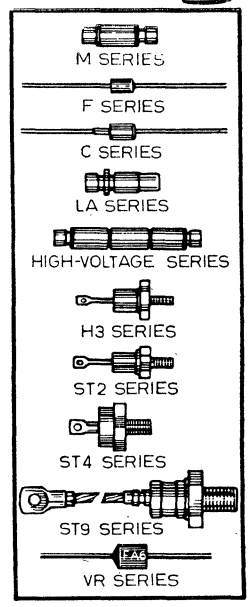
Stock No.	Type No.	S-T No.	Max. PIV	Max. rms V	EACH 1-9	10-24	25-99	100-Up
586-1202	1N1202	ST220P	200	140	2.25	1.25	1.07	1.00
586-1204	1N1204	ST240P	400	280	2.65	1.67	1.43	1.33
586-1206	1N1206	ST260P	600	420	3.50	2.34	2.00	1.86

ST4 SERIES (35 AMPS)

Stock No.	Type No.	S-T No.	Max. PIV	Max. rms V	EACH 1-9	10-24	25-99	100-Up
586-1190	1N1190	ST460P	600	420	8.12	4.89	4.19	3.90

ST9 SERIES (250 AMPS)

Stock No.	Type No.	S-T No.	Max. PIV	Max. rms V	EACH 1-9	10-24	25-99	100-Up
586-3161	1N3161	ST910P	100	70	21.37	14.20	12.19	11.36
586-3163	2N3163	ST920P	200	140	23.62	15.80	13.50	12.60



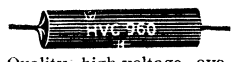
PLUG-IN TUBE-REPLACEMENT SILICON RECTIFIERS (Not illus.)

Stock No.	Type Nos.	Max. PIV	Replaces	1-9	10-24	25-99	100-Up
916-4265	S5991	1600	5AU4, 5AW4, 5AZ4, 5T4, 5U4, 5V3	5.75	3.50	3.00	2.52
586-2490	1N2490 (S5207)	1600	6X4	12.62	12.00	7.61	8.65
586-2389	1N2389 (S5251)	1600	5U4, 5AU4, 5AW4, 5AZ4, 5T4, 5V3	9.12	6.10	5.23	4.40
916-4264	S5343	7000	816, 836, 3B28	14.87	8.33	7.90	7.44
916-4258	S5130	10,400	866, 866A, 3B28	17.25	22.50	14.25	16.20

TYPE HVC HIGH-VOLTAGE AXIAL-LEAD CARTRIDGE-TYPE SILICON RECTIFIERS

Stock No.	Type HVC	Max. PIV	I_F (av) mA	Max. V_F	EACH 1-9	10-24	25-99	100-Up
916-4101	180	1800	250	4	5.00	3.35	2.86	2.66
916-4102	240	2400	250	5	5.37	3.60	3.08	2.87
916-4103	300	3000	200	6	5.75	3.85	3.28	3.07
916-4104	400	4000	200	8	6.00	4.00	3.44	3.20
916-4105	500	5000	200	10	6.25	4.15	3.67	3.34
916-4106	600	6000	150	12	6.87	4.55	3.92	3.66
916-4107	650	6500	150	13	7.50	5.00	4.29	4.00
916-4108	750	7500	150	15	8.12	5.40	4.64	4.34
916-4109	840	8400	100	16	8.75	5.85	5.00	4.66

Stock No.	Type HVC	Max. PIV	I_F (av) mA	Max. V_F	EACH 1-9	10-24	25-99	100-Up
916-4110	960	9600	100	18	10.00	6.65	5.72	5.34
916-4111	1000	10,000	100	20	10.62	7.0	6.07	5.66
916-4112	1200	12,000	75	22	12.50	8.35	7.15	6.66
916-4113	1500	15,000	75	25	15.62	10.40	8.94	8.34
916-4114	1800	18,000	75	30	18.75	12.50	10.70	10.00
916-4115	2100	21,000	50	35	21.87	14.60	12.50	11.67
916-4116	2500	25,000	50	40	26.25	17.50	15.00	14.00
916-4117	3000	30,000	50	50	31.25	20.80	17.90	16.70



Quality high-voltage avalanche rectifiers available in a wide range of ratings. Use in high-voltage power supplies in TV sets, oscilloscopes and test equipment. All are .375″ in diameter. Body length ranges from .362″ to 4″. Lead length is a minimum of 2″.

VR SERIES LOW COST ZENER RECTIFIERS

1 Watt zeners in rugged plastic case. For use in ¼, .4, ½, and 1 watt applications. Vz is avalanche voltage.

Stock No.	Type	Vz	Stock No.	Type	Vz	Stock No.	Type	Vz	Stock No.	Type	Vz	Stock No.	Type	Vz	Stock No.	Type	Vz
916-4346	VR90	90	916-4360	VR130	130	916-4323	VR24	24	916-4335	VR47	47	916-4300	VR6	6	916-4312	VR12	12
916-4347	VR90A	90	916-4361	VR130A	130	916-4324	VR24A	24	916-4336	VR47A	47	916-4301	VR6A	6	916-4313	VR12A	12
916-4351	VR105	105	916-4363	VR150	150	916-4326	VR28	28	916-4337	VR56	56	916-4303	VR7	7	916-4314	VR14	14
916-4352	VR105A	105	916-4364	VR150A	150	916-4327	VR28A	28	916-4338	VR56A	56	916-4304	VR7A	7	916-4315	VR14A	14
916-4354	VR110	110	916-4368	VR160	160	916-4329	VR33	33	916-4340	VR67	67	916-4306	VR8.5	8.5	916-4317	VR18	18
916-4355	VR110A	110	916-4369	VR160A	160	916-4330	VR33A	33	916-4341	VR67A	67	916-4307	VR8.5A	8.5	916-4318	VR18A	18
916-4357	VR120	120	916-4374	VR200	200	916-4332	VR39	39	916-4343	VR80	80	916-4309	VR10	10	916-4320	VR20	20
916-4358	VR120A	120	916-4375	VR200A	200	916-4333	VR39A	39	916-4344	VR80A	80	916-4310	VR10A	10	916-4321	VR20A	20

PRICES FOR VR SERIES

Type	Tolerance	1-9	10-24	25-99	100-Up
VR6 to VR90	Suffix "A" ±5%	1.05	.67	.57	.53
	No Suffix ±10%	.97	.62	.53	.49

Type	Tolerance	1-9	10-24	25-99	100-Up
VR105 to VR200	Suffix "A" ±5%	1.77	.87	.73	.69
	No Suffix ±10%	1.50	.82	.70	.65

AVALANCHE SILICON BRIDGE RECTIFIERS

Compact efficient assemblies for easy installation in single phase full wave bridge applications. All offer the inherent transient protection of avalanche characteristics. Use in power supplies for communication equipment, computers, control systems, etc.

2.0 AMPS SINGLE PHASE

Stock No.	Type No.	Max. PIV	Max. rms Volts	EACH 1-9	10-24	25-99	100-Up
916-4269	S6211	200	140	3.17	2.12	1.82	1.69
916-4270	S6211-1	400	280	3.50	2.34	2.00	1.86
916-4272	S6211-2	600	420	3.77	2.56	2.19	2.04

6.0 AMPS SINGLE PHASE

916-4266	S6121	100	.....	6.00	4.01	3.43	3.19
916-4267	S6121-1	200	.....	6.30	4.21	3.60	3.35
916-4268	S6121-2	300	.....	6.52	4.36	3.73	3.47

2 AMP MINIATURE SINGLE PHASE

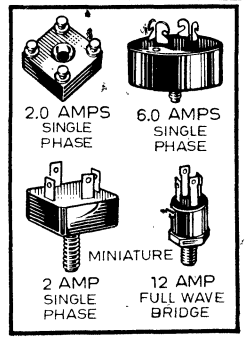
Compact bridge rectifiers are only 9/16″ square and ¼″ high. DC load amps. 2.0.

Stock No.	Type No.	Max. PIV	Max. rms Volts	EACH 1-9	10-24	25-99	100-Up
916-4275	S6230	200	140	2.20	1.47	1.26	1.19
916-4277	S6230-1	400	280	2.65	1.77	1.52	1.41
916-4279	S6230-2	600	420	3.15	2.11	1.80	1.68

MINIATURE 12 AMP FULL WAVE BRIDGES

Miniature rectifiers, only a fraction of the size of conventional equipment. ⅝″x1½″ (with lugs).

916-4281	S6240	100	140	5.62	3.76	3.22	3.00
916-4283	S6240-1	400	280	7.70	5.15	4.40	4.00
916-4285	S6340-2	600	420	10.37	6.93	5.93	5.40



RCA Power Transistors

The following are only a few of the reasons why RCA is the leader in Silicon Power Transistors.

FEATURES
Thermal Cycle Ratings, DC Safe Area Ratings, Pulse Safe Area Ratings, Hometaxial-Base Types, P-N-P Power Types, High-Voltage N-P-N Power Types, High-Speed Switching N-P-N Power Types.

MAJOR APPLICATIONS
Power Conversion (Switching), AC to DC Converters, Solenoid (Hammer) Relay Drivers, Inverters: Ring Choke, Bridge, Pulse-Width Modulated, Two-Transformer, Push-Pull; Power Oscillators, Switching Regulators—Series & Shunt, Linear & Switching Servo Amplifiers, Magnetostriction Generators, Ultrasonic Generators, Power Gates, Linear Amplifiers.

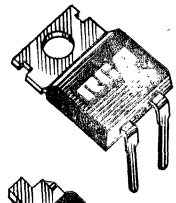
Hometaxial-Base N-P-N Power Types: I_C to 100 A...P_T to 300 W...V_{CE} to 160 V

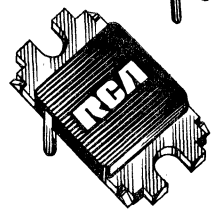
P_T max.	8.75 W	10 W	25 W	36 W	50 W	75 W	100 W	117 W	150 W	300 W
Pkg.	TO-5	TO-5	TO-66	VERSAWATT	VERSAWATT	VERSAWATT	Plastic TO-3	TO-3	TO-3	TO-3*
RCA Types	40347 40348 40349	2N5784 2N5785 2N5786	40250 2N3054 2N3441	2N5293 thru 2N5298	2N5490 thru 2N5497	2N6098 thru 2N6103	2N5034 thru 2N5037 40513 40514	40251 2N3055 2N3442 2N4347	2N3771 2N3772 2N3773 2N4348	2N5575 thru 2N5580

*Modified TO-3

P-N-P Power Types: I_C to 7 A...f_T to 60 MHz...P_T to 40 W

P_T max.	7 W	10 W	10 W	10 W	40 W	40 W
I_C max.	−1 A	−1 A	−2 A	−3.5 A	−6 A	−7 A
Pkg.	TO-5	TO-5	TO-5	TO-5	TO-66	VERSAWATT
RCA Types	2N4036 2N4037 2N4314	2N5415 2N5416	2N5322 2N5323	2N5781 2N5782 2N5783	2N5954 2N5955 2N5956	2N6107 2N6109 2N6111





High-Voltage N-P-N Power Types: I_C to 8 A...f_T to 15 MHz...P_T to 110 W

P_T max.	10 W	35 W	100 W		110 W
I_C max.	1 A	2 A	Switching 5 A	Linear 5 A	8 A
Pkg.	TO-5	TO-66	TO-3	TO-3	TO-3
RCA Types	2N3439 2N3440	2N3583 2N3584 2N3585 2N4240	2N5838 2N5839 2N5840	2N5239 2N5240	2N5804 2N5805

High-Speed Switching N-P-N Power Types: f_T to 120 MHz...I_C to 50 A....P_T to 140 W

P_T max.	5 W	10 W	35 W	140 W	125 W	140 W	140 W
I_C max.	1 A	2 A	7 A	20 A	25 A	30 A	50 A
Pkg.	TO-5	TO-5	TO-66	TO-3	TO-63	TO-3	TO-3 Modified
RCA Types	2N2102 2N3053	2N5320 2N5321	2N3878 2N3879 2N5202	2N5038 2N5039	2N3263 2N3265 2N3266	2N5671 2N5672	2N6032 2N6033

Additional information on RCA Power Transistors is contained in the RCA Power Transistor Directory, PTD-187; RCA Transistor, Thyristor, & Diode Manual, SC-15—$2.50; and the RCA High-Speed, High-Voltage, High-Current Power Transistors Manual, PM-81—$2.00.

POWER TRANSISTORS 2N AND 40 SERIES

Stock No.	Mfr's Type	EACH 1-9	10-99	100-999	1000-Up
583-2102	2N2102	1.34	1.97	.78	.65
583-3053	2N3053	.58	.48	.33	.29
583-3054	2N3054	1.12	.94	.69	.57
583-3055	2N3055	1.80	1.49	1.08	.90
583-3263	2N3263	82.95	58.00	48.00	40.00
583-3265	2N3265	67.45	47.15	39.00	32.50
583-3266	2N3266	57.86	40.45	33.50	27.90
583-3439	2N3439	1.44	1.19	.86	.67
583-3440	2N3440	1.07	.89	.65	.54
583-3441	2N3441	3.10	2.48	1.80	1.50
583-3442	2N3442	5.68	4.54	3.30	2.75
583-3583	2N3583	2.89	2.31	1.68	1.40
583-3584	2N3584	3.63	2.89	2.10	1.75
583-3585	2N3585	6.02	4.79	3.48	2.90
583-3771	2N3771	3.81	3.14	2.28	1.90
583-3772	2N3772	3.81	3.14	2.28	1.90
583-3773	2N3773	9.34	7.43	5.40	4.50
583-3878	2N3878	2.52	2.06	1.50	1.25
583-3879	2N3879	3.90	3.22	2.34	1.95
583-4036	2N4036	1.07	.89	.65	.54
583-4037	2N4037	.87	.73	.53	.44
583-4314	2N4314	1.02	.81	.59	.49
583-4347	2N4347	3.72	2.97	3.16	1.80
583-4348	2N4348	5.17	4.13	3.00	2.50
583-5034	2N5034	1.67	1.34	.98	.81
583-5035	2N5035	1.65	1.32	.96	.80
583-5036	2N5036	1.76	1.42	1.04	.86
583-5037	2N5037	1.76	1.41	1.02	.85
583-5038	2N5038	9.52	8.17	5.94	4.95

Stock No.	Mfr's Type	EACH 1-9	10-99	100-999	1000-Up
583-5039	2N5039	6.51	5.36	3.90	3.25
583-5202	2N5202	3.50	2.89	2.10	1.75
583-5239	2N5239	6.11	4.87	3.54	2.95
583-5240	2N5240	8.18	6.50	4.74	3.95
583-5293	2N5293	.98	.81	.59	.49
583-5294	2N5294	.98	.81	.59	.49
583-5295	2N5295	.98	.81	.59	.49
583-5296	2N5296	.98	.81	.59	.49
583-5297	2N5297	1.02	.86	.62	.52
583-5298	2N5298	1.02	.86	.62	.52
583-5320	2N5320	1.49	1.24	.90	.75
583-5321	2N5321	.89	.74	.54	.45
583-5322	2N5322	1.69	1.40	1.02	.86
583-5323	2N5323	1.09	.91	.66	.55
583-5415	2N5415	1.49	1.24	.90	.75
583-5416	2N5416	1.96	1.60	1.18	.98
583-5490	2N5490	1.16	.96	.70	.58
583-5491	2N5491	1.16	.96	.70	.58
583-5492	2N5492	1.16	.96	.70	.58
583-5493	2N5493	1.16	.96	.70	.58
583-5494	2N5494	1.16	.96	.70	.58
583-5495	2N5495	1.16	.96	.70	.58
583-5496	2N5496	1.24	1.04	.76	.63
583-5497	2N5497	1.24	1.04	.76	.63
583-5575	2N5575	51.84	36.25	30.00	25.00
583-5576	2N5576	51.84	36.25	30.00	25.00
583-5577	2N5577	58.09	40.60	33.60	28.00
583-5578	2N5578	62.21	43.50	36.00	30.00
583-5579	2N5579	62.21	43.50	36.00	30.00
583-5580	2N5580	68.46	47.85	39.60	33.00

Stock No.	Mfr's Type	EACH 1-9	10-99	100-999	1000-Up
583-5671	2N5671	22.63	15.80	13.10	10.90
583-5672	2N5672	32.27	21.60	17.90	14.90
583-5781	2N5781	1.78	1.41	1.02	.85
583-5782	2N5782	1.56	1.24	.90	.75
583-5783	2N5783	1.47	1.16	.84	.70
583-5784	2N5784	1.56	1.24	.90	.75
583-5785	2N5785	1.36	1.08	.78	.65
583-5786	2N5786	1.24	.99	.72	.60
583-5838	2N5838	6.11	4.87	3.54	2.95
583-5839	2N5839	6.11	4.87	3.54	2.95
583-5840	2N5840	8.80	7.00	5.10	4.25
583-5954	2N5954	2.60	2.15	1.56	1.30
583-5955	2N5955	2.29	1.90	1.38	1.15
583-5956	2N5956	2.00	1.65	1.00	.88
583-6032	2N6032	49.61	34.65	28.70	23.90
583-6033	2N6033	66.34	46.40	38.40	32.00
583-6098	2N6098	1.36	1.07	.78	.65
583-6099	2N6099	1.36	1.07	.78	.65
583-6100	2N6100	1.45	1.15	.84	.70
583-6102	2N6102	1.56	1.24	.90	.75
583-6103	2N6103	1.56	1.24	.90	.75
898-4937	40250	1.13	.94	.69	.57
898-4939	40251	1.80	1.49	1.08	.90
898-5059	40347	.93	.75	.54	.45
898-5062	40348	1.31	1.06	.77	.64
898-5065	40349	1.94	1.56	1.13	.94
898-5242	40513	1.53	1.24	.90	.75
898-5243	40514	1.56	1.26	.92	.76

RF Power Transistors

RCA

The industry's broadest line of high-frequency power transistors featuring "overlay" construction . . . for HF-VHF-UHF-Microwave applications.

POWER AMPLIFIERS (9-13 VOLT OPERATION)

Applications	CB	Mobile	Comm. Aircraft	VHF Mobile, Sonobuoy	Beacons	UHF Mobile
Freq. MHz	27	25-50	108-156	148-175	240	450-470
RCA Types	40081 40581 40082 40582	2N4932† 40082 40081 40340	2N3866 40290 2N5994 40291 40292	2N3553 2N5995 40280 2N4427 2N5996 40281 2N5913 40282	2N4427 2N5914 2N5913 40280	2N5913 2N5914 2N5915

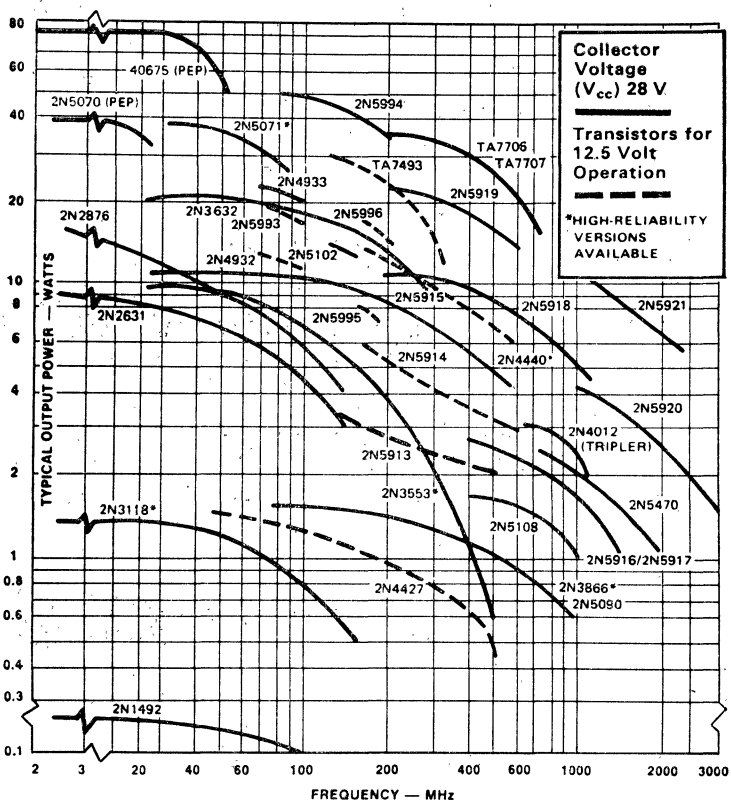
POWER AMPLIFIERS (24-28 VOLT OPERATION)

Applications	Military Marine Amateur AM/FM/SSB	Military Mobile, FM/SSB	Comm. Aircraft	VHF Mobile, Marine, ECM, Sonobuoy	Military Communications, Telemetry	UHF Mobile, ECM, L/S Band Telem. Driver, DME, CAS, Varactor Dr.	DME, L-Band Telemetry	S-Band Phase Array, Telemetry
Freq. MHz	2-30	30-76	76-150	150-125	225-400	400-1000	1000-1500	1500-2300
RCA Types	2N1492 2N1493 2N2631 2N2876 2N3118 2N3229 2N5070 40675	2N1492 2N3375 2N1493 2N3553 2N2631 2N3632 2N2876 2N4933† 2N3118 2N5071 2N3229 40341	2N1492 2N3632 2N1493 2N3866 2N2631 2N4427 2N2876 2N4933 2N3118 2N5102 2N3229 2N5994 2N3375	2N3375 2N3553 2N3632 2N3733 2N3866 2N4427 2N4440 2N5016 2N5994	2N3375 2N5016 2N3733 2N5090 2N3866 2N5916 2N4427 2N5918 2N4440 2N5919	2N3866 2N5108 2N5916 2N5917 2N5918 2N5919	2N5108 2N5470 2N5916 2N5917 2N5920 2N5921	2N5470 2N5920 2N5921

†International VHF Mobile & Portable Communications (66-88 MHz)

Other types available as wide-band amplifiers and power oscillators.

For additional information, see the RCA RF Power Transistors Product Guide, RFT-700.



RF POWER TRANSISTORS

Stock No.	Mfr's Type	EACH 1-9	10-99	100-999	1000 Up-
583-1492	2N1492	5.37	4.29	3.21	2.60
583-1493	2N1493	8.80	7.01	5.10	4.25
583-2631	2N2631	4.77	3.80	2.76	2.30
583-2876	2N2876	16.07	11.25	9.30	7.75
583-3118	2N3118	6.22	4.95	3.60	3.00
583-3229	2N3229	31.77	22.21	18.38	15.32
583-3375	2N3375	12.44	9.90	7.20	6.00
583-3553	2N3553	3.79	3.00	2.20	1.83
583-3632	2N3632	16.43	11.50	9.50	7.93
583-3733	2N3733	18.15	12.70	10.50	8.75
583-3866	2N3866	2.00	1.58	1.15	.96
583-4427	2N4427	2.23	1.78	1.30	1.08
583-4440	2N4440	14.71	10.30	8.50	7.10
583-4932	2N4932	41 47	29 00	24 00	20 00
583-4933	2N4933	41.47	29.00	24.00	20.00
583-5016	2N5016	41.47	29.00	24 00	20.00
583-5070	2N5070	41.47	29.00	24.00	20.00
583-5071	2N5071	41.47	29.00	24.00	20.00
583-5090	2N5090	14.27	11.40	8.30	6.90
583-5102	2N5102	31.10	21.75	18.00	15.00
583-5108	2N5108	18.50	12.90	10.70	8.90
583-5470	2N5470	93.32	62.25	54.00	45.00
583-5913	2N5913	4.57	3.63	2.64	2.20
583-5914	2N5914	12.48	9.90	7.20	6.00
583-5915	2N5915	15.61	10.88	9.00	7.50
583-5916	2N5916	17.61	12.33	10.20	8.50
583-5917	2N5917	16.61	11.60	9.60	8.00
583-5918	2N5918	31.10	21.75	18.00	15.00
583-5919	2N5919	62.21	43.50	36.00	30.00
583-5920	2N5920	134.80	94.25	78.00	65.00
583-5921	2N5921	165.91	116.00	96.00	80.00
583-5994	2N5994	25.98	18.15	15.00	12.50
583-5995	2N5995	10.37	8.25	6.00	5.00
583-5996	2N5996	16.61	11.60	9.60	8.00
898-4842	40081	1.76	1.41	1.02	.85
898-4843	40082	5.06	4.04	2.94	2.45
898-4968	40280	5.79	4.62	3.36	2.80
898-4969	40281	15.16	10.60	8.75	7.30
898-4970	40282	17.06	11.90	9.85	8.20
898-4978	40290	3.10	2.48	1.80	1.50
898-4979	40291	13.04	10.40	7.55	6.30
898-4980	40292	16.16	11.30	9.35	7.80
898-5052	40340	41.47	29.00	24.00	20.00
898-5053	40341	41.47	29.00	24.00	20.00
898-5304	40581	6.11	4.87	3.54	2.95
898-5305	40582	6.42	5.12	3.72	3.10
898-5354	40675	191.00	132.00	110.00	91.00

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RCA Thyristors/Rectifiers

The RCA line of Thyristors/Rectifiers offers designers one of the industry's most complete selection of package configurations available, including stud, isolated stud, press-fit, VERSAWATT (plastic), TO-3 "Modified TO-5," TO-66, and others.

SCRs for 240-V line operation (50 & 60 Hz); Voltage (V_{DROM})=400 V...Power Control to 8.4 kW
Current ($I_{T(RMS)}$) to 35 A...Surge Current (I_{TSM}) to 350 A

POWER CONTROL							
to 480 W	to 1200 W	to 1680 W	to 2400 W	to 3000 W	to 4800 W	to 6000 W	to 8400 W
TO-8	TO-66	TO-5*	Press-Fit & Stud	TO-3	Press-Fit & Stud	TO-48	Press-Fit & Stud
2N3529	2N3525 40505	40379 40508 40655 40657 40659	40739 40743 40747	2N3670	40751 40755 40759	2N688 2N1849A	2N3872 2N3898 40682 *Low Profile

SCRs for 120-V Line operation (50 & 60 Hz); Voltage (V_{DROM})=200 V...Power Control to 4.2 kW
Current ($I_{T(RMS)}$) to 35 A...Surge Current (I_{TSM}) to 350 A

POWER CONTROL							
to 240 W	to 600 W	to 840 W	to 1200 W	to 1500 W	to 2400 W	to 3000 W	to 4200 W
TO-8	TO-66	TO-5*	Press-Fit & Stud	TO-3	Press-Fit & Stud	TO-48	Press-Fit & Stud
2N3528	2N3228 40504	40378 40507 40654 40656 40658	40738 40742 40746	2N3669	40750 40754 40758	2N685 2N1846A	2N3871 2N3897 40681 *Low Profile

SCRs for Low/High Voltage Line Operation (50 & 60 Hz); Voltage (V_{DROM})=25 V to 600 V...Current ($I_{T(RMS)}$)=0.5 A to 35 A

$I_{T(RMS)}$ to:	25 A	25 A	35 A		25 A	25 A	25 A	25 A	35 A	
V_{DROM}	25 V	50 V	100 V		150 V	250 V	300 V	500 V	600 V	
	2N681 2N1842A	2N682 2N1843A	2N683 2N1844A 2N3668 2N3870 2N3896 40680 40737	40741 40745 40749 40753 40757	2N684 2N1845A	2N686 2N1847A	2N687 2N1848A	2N689 2N1850A	2N3873 2N3899 2N4101 2N4102 2N4103 40505	40683 40740 40744 40748 40752 40756 40760

Triacs for Low/High Voltage Line Operation (50 & 60 Hz); Voltage (V_{DROM})=100 & 600 V...Current ($I_{T(RMS)}$) to 40 A

V_{DROM}	100 V	600 V	600 V	600 V
$I_{T(RMS)}$ to:	2.5 A	2.5 A	30 A	40 A
Pkg.	TO-5 Modified	TO-5 Modified	Press-Fit & Stud	Press-Fit & Stud
	2N5754 40525 40528 40531 40534 40684	2N5757 40687	40671 40672	2N5443 2N5446 40690

Triacs for 240-V Line Operation (50 & 60 Hz); Voltage (V_{DROM})=400 V...Current ($I_{T(RMS)}$) to 40 A...Power Control to 10 kW
Triggering In All Four Firing Modes—3 to 80 mA...Surge Current (I_{TSM}) to 300 A

POWER CONTROL								
to 600 W	to 1440 W		to 2000 W	to 2400 W	to 3600 W		to 7200 W	to 10000 W
TO-5*	TO-5*	TO-66	VERSAWATT	Press-Fit & Stud	TO-66	Press-Fit & Stud	Press-Fit & Stud	Press-Fit & Stud
2N5756 40527 40530 40533 40536 40686	40432 40486 40510 40512 40639 40664 40667	40430 40503	40669	2N5568 2N5570	40576	2N5572 2N5574	40661 40663	2N5442 2N5445 40689 *Modified

Triacs for 120-V line Operation (50 & 60 Hz); Voltage (V_{DROM})=200 V...Current ($I_{T(RMS)}$) to 40 A...Power Control to 5 kW
Triggering In All Four Firing Modes—3 to 80 mA...Surge Current (I_{TSM}) to 300 A

POWER CONTROL								
to 300 W	to 720 W		to 1000 W	to 1200 W	to 1800 W		to 3600 W	to 5000 W
TO-5*	TO-5*	TO-66	VERSAWATT	Press-Fit & Stud	TO-66	Press-Fit & Stud	Press-Fit & Stud	Press-Fit & Stud
2N5755 40526 40529 40532 40535 40685	40431 40485 40509 40511 40638	40429 40502	40668	2N5567 2N5569	40575	2N5571 2N5573	40660 40662	2N5441 2N5444 40688 *Modified

Low-Current Sensitive-Gate Triacs

V_{DROM} = 100 V	V_{DROM} = 200 V	V_{DROM} = 400 V
40525	40526	40527
40528	40529	40530
40531	40532	40533
40534	40535	40536

- Triacs with type numbers 40693 through 40734 are designed especially to be triggered by the RCA CA3059 Zero-Voltage Switch.
- Triacs with type numbers 40769 through 40794 are designed to operate from 400 Hz power supplies such as used in control systems of airborne equipment. These triacs are rated to handle rms on-state currents from 0.5 A to 40 A.

Recently Announced Plastic Package (DO-15) Rectifiers

	1N5391	1N5392	1N5393	1N5394	1N5395	1N5396	1N5397	1N5398	1N5399
Peak Reverse Voltage Repetitive (V_{RRM})	50 V	100 V	200 V	300 V	400 V	500 V	600 V	800 V	1000 V
RMS $V_{R(RMS)}$	35 V	70 V	140 V	210 V	280 V	350 V	420 V	560 V	700 V
Average Rectified Forward Current	1.5 A	1.5 A	1.5 A	1.5 A	1.5 A	1.5 A	1.5 A	1.5 A	1.5 A
Peak Surge (one-half cycle at 60 Hz) I_{FSM}	50 A	50 A	50 A	50 A	50 A	50 A	50 A	50 A	50 A

See Following Page for Prices on RCA Thyristors and Rectifiers

Thyristors and Rectifiers

RCA

Stock No.	Mfr's Type	EACH 1-9	10-99	100-999	1000-Up
583-0681	2N681	2.94	2.34	1.70	1.42
583-0682	2N682	3.54	2.82	2.05	1.71
583-0683	2N683	4.48	3.57	2.60	2.16
583-0684	2N684	5.26	4.19	3.05	2.54
583-0685	2N685	6.06	4.81	3.50	2.92
583-0686	2N686	6.73	5.36	3.90	3.25
583-0687	2N687	3.26	5.77	4.20	3.50
583-0688	2N688	8.45	6.74	4.90	4.08
583-0689	2N689	10.10	8.05	5.85	4.87
583-1842	2N1842A	2.76	2.20	1.60	1.33
583-1843	2N1843A	3.27	2.61	1.90	1.58
583-1844	2N1844A	4.14	3.30	2.40	2.00
583-1845	2N1845A	4.83	3.84	2.80	2.33
583-1846	2N1846A	5.91	4.46	3.75	2.71
583-1847	2N1847A	6.40	5.10	3.70	3.09
583-1848	2N1848A	6.93	5.51	4.00	3.34
583-1849	2N1849A	8.20	6.54	4.75	3.96
583-1850	2N1850A	9.49	7.56	5.50	4.58
583-3228	2N3228	1.85	1.47	1.07	.89
583-3525	2N3525	2.23	1.77	1.29	1.07
583-3528	2N3528	1.80	1.44	1.05	.87
583-3529	2N3529	2.20	1.75	1.28	1.06
583-3668	2N3668	3.01	2.39	1.74	1.45
583-3669	2N3669	3.52	2.81	2.04	1.70
583-3670	2N3670	4.77	3.80	2.76	2.30
583-3870	2N3870	4.88	3.88	2.82	2.35
583-3871	2N3871	5.70	4.54	3.30	2.75
583-3872	2N3872	7.67	6.11	4.44	3.70
583-3873	2N3873	10.32	8.22	5.98	4.98
583-3896	2N3896	5.48	4.37	3.18	2.65
583-3897	2N3897	6.33	5.03	3.66	3.05
583-3898	2N3898	8.29	6.60	4.80	4.00
583-3899	2N3899	10.99	8.75	6.36	5.30
583-4101	2N4101	2.78	2.72	1.61	1.34
583-4102	2N4102	2.76	2.70	1.60	1.33
583-4103	2N4103	6.42	5.12	3.72	3.10
583-5441	2N5441	7.09	4.10	4.10	3.42
583-5442	2N5442	8.49	6.77	4.92	4.10
583-5443	2N5443	10.63	8.46	6.16	5.13
583-5444	2N5444	7.51	5.97	4.34	3.62
583-5445	2N5445	8.92	7.10	5.16	4.30
583-5446	2N5446	11.06	8.79	6.40	5.33
583-5567	2N5567	3.83	3.05	2.22	1.85
583-5568	2N5568	4.61	3.66	2.66	2.22
583-5569	2N5569	4.25	3.38	2.46	2.05
583-5570	2N5570	5.01	3.99	2.90	2.42
583-5571	2N5571	4.08	3.25	2.36	1.97
583-5572	2N5572	4.90	3.89	2.83	2.36
583-5573	2N5573	4.50	3.58	2.60	2.17
583-5574	2N5574	5.30	4.22	3.07	2.56
583-5754	2N5754	1.49	1.19	.82	.72
583-5755	2N5755	1.78	1.41	1.02	.85
583-5756	2N5756	2.11	1.69	1.23	1.02
583-5757	2N5757	2.67	2.12	1.54	1.28
898-5101	40378	1.82	1.47	1.07	.89
899-5102	40379	2.31	1.85	1.34	1.12
898-5157	40429	1.89	1.57	1.14	.89
898-5158	40430	2.38	1.89	1.37	1.14
898-5159	40431	3.01	2.40	1.75	1.45
898-5160	40432	3.61	2.88	2.09	1.74
898-5214	40485	1.87	1.49	1.08	.90
898-5215	40486	2.25	1.79	1.30	1.08
898-5231	40502	2.18	1.74	1.26	1.05
898-5232	40503	2.58	2.05	1.49	1.24
898-5233	40504	2.05	1.64	1.19	.99
898-5234	40505	2.43	1.94	1.41	1.17
898-5236	40507	2.05	1.63	1.19	.99
898-5237	40508	2.51	2.01	1.46	1.22
898-5238	40509	2.07	1.65	1.20	1.00
898-5239	40510	2.45	1.95	1.42	1.18

Stock No.	Mfr's Type	EACH 1-9	10-99	100-999	1000-Up
898-5240	40511	3.23	2.56	1.86	1.55
898-5241	40512	4.03	3.21	2.33	1.94
898-5247	40525	1.96	1.57	1.24	.95
898-5248	40526	2.23	1.78	1.30	1.08
898-5249	40527	3.20	2.48	1.80	1.50
898-5250	40528	1.62	1.29	.94	.78
898-5251	40529	1.87	1.49	1.08	.90
898-5252	40530	2.25	1.79	1.30	1.08
898-5253	40531	2.16	1.73	1.26	1.05
898-5254	40532	2.45	1.94	1.41	1.18
898-5255	40533	3.32	2.65	1.92	1.60
898-5256	40534	1.82	1.46	1.06	1.46
898-5257	40535	2.07	1.65	1.20	1.00
898-5258	40536	2.45	1.95	1.42	1.18
898-5296	40575	2.60	2.02	1.50	1.25
898-5297	40576	3.12	2.48	1.80	1.50
898-5358	40638	1.98	1.57	1.14	.95
898-5359	40639	2.34	1.87	1.36	1.13
898-5374	40654	1.76	1.41	1.02	.85
898-5375	40655	2.11	1.69	1.23	1.02
898-5376	40656	1.87	1.49	1.08	.90
898-5377	40657	2.23	1.77	1.29	1.07
898-5378	40658	1.98	1.57	1.14	.95
898-5379	40659	2.34	1.85	1.35	1.12
898-5380	40660	5.68	4.52	3.29	2.74
898-5381	40661	6.80	5.41	3.94	3.28
898-5382	40662	6.08	4.85	3.53	2.94
898-5384	40663	7.22	5.74	4.18	3.48
898-5384	40664	1.98	1.57	1.14	.95
898-5387	40667	2.07	1.65	1.20	1.00
898-5388	40668	2.02	1.62	1.18	.98
898-5389	40669	2.74	2.18	1.58	1.32
898-5390	40671	8.49	6.77	4.92	4.10
898-5391	40672	8.92	7.10	5.16	4.30
898-5397	40680	6.84	5.45	3.96	3.30
898-5398	40681	7.78	6.19	4.50	3.75
898-5399	40682	9.74	7.76	5.64	4.70
898-5400	40683	12.48	9.90	7.20	6.00
898-5403	40684	1.71	1.36	.99	.82
898-5404	40685	1.98	1.57	1.14	.95
898-5405	40686	2.34	1.85	1.35	1.12
898-5406	40687	2.87	2.28	1.66	1.38
898-5407	40688	8.96	7.13	5.18	4.32
898-5408	40689	10.36	8.25	6.00	5.00
898-5409	40690	12.51	9.95	7.24	6.03
898-5458	40737	2.74	2.18	1.58	1.32
898-5459	40738	3.21	2.56	1.86	1.55
898-5460	40739	4.19	3.33	2.42	2.02
898-5461	40740	5.66	4.50	3.28	2.73
898-5462	40741	3.36	2.67	1.94	1.63
898-5463	40742	3.83	3.05	2.22	1.85
898-5464	40743	4.81	3.83	2.78	2.32
898-5465	40744	6.28	5.00	3.64	3.03
898-5466	40745	4.81	3.83	2.78	2.32
898-5467	40746	5.28	4.21	3.06	2.55
898-5468	40747	6.26	4.98	3.62	3.02
898-5469	40748	7.73	6.15	4.48	3.73
898-5470	40749	4.30	3.43	2.50	2.08
898-5471	40750	5.08	4.04	2.94	2.45
898-5472	40751	6.84	5.45	3.96	3.30
898-5473	40752	9.25	7.39	5.38	4.48
898-5474	40753	4.92	3.93	2.86	2.38
898-5475	40754	5.70	4.54	3.30	2.75
898-5476	40755	7.47	5.94	4.32	3.60
898-5477	40756	9.92	7.89	5.73	4.78
898-5478	40757	6.37	5.08	3.70	3.08
898-5479	40758	7.15	5.69	4.14	3.45
898-5480	40759	8.92	7.10	5.16	4.30
898-5481	40760	11.37	9.04	6.58	5.48
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Sprague Semiconductors

SILICON SEPT NPN PLANAR EPITAXIAL HI-SPEED

C_{ob}, 8pF. †BV_{CBO} V.

Stock No.	Type No.	Case TO-	Pd (W)	†	h_{FE}@ I_C-150mA	V_{CE} SAT (max)	f_T MHz	EACH 1-9	10-99	100-Up
588-2218	2N2218A	5	0.8	75	40-120	0.3	250	1.50	1.50	1.00
587-2219	2N2219	5	0.8	60	100-300	0.4	250	1.00	1.00	.65
587-2845	2N2845	18	0.36	60	30-120	0.4	250	7.50	4.05	3.30
925-7001	TN53	5	0.8	75	50	0.5	100	1.10	.85	.57
925-7007	TN59	5	0.8	40	100	0.4	100	.88	.65	.45
925-7008	TN60	18	0.5	40	100	0.4	100	.88	.65	.45
925-7009	TN61	5	0.8	40	50	0.4	100	.75	.60	.40

SILICON SEPT PLANAR SWITCHES, AMPLIFIERS, CHOPPERS

Stock No.	Type No.	S	Case TO-	†	BV_{EBO} V	h_{FE} @ I_C min	max	mA	rs Ω	EACH 1-9	10-99	100-Up
587-2944	2N2944	PNP	46	15	15	80	450	1	20	5.50	5.50	3.68
587-2946	2N2946	PNP	46	40	40	30	150	1	45	5.50	5.50	3.68
587-3217	2N3217	PNP	46	15	15	40	.....	1	20	2.55	2.55	1.70
587-3218	2N3218	PNP	46	25	25	30	.....	1	35	2.25	2.55	1.50
587-3219	2N3219	PNP	46	40	40	20	.....	1	45	2.55	2.55	1.70

SILICON SEPT NPN PLANAR LOW-LEVEL LOW-NOISE AMPLIFIERS

Stock No.	Type No.	Case TO-	†	BV_{EBO} V	h_{FE} @ I_C Min.	μA	NF dB	C_{ob} pF	EACH 1-9	10-99	100-Up
587-4383	2N4383	5	40	5	100	10	2	8	1.38	1.05	.70
587-4384	2N4384	18	40	5	100	10	2	8	1.38	1.05	.70

GERMANIUM MADT PNP FOR UHF APPLICATIONS

*Min.-Max. †Conversion Gain. ‡Power output, mW. BV_{CEO}, 20 V.

Stock No.	Type No.	Case TO-	f_{Max} (min) (MHz)	PG @ f dB (min.)	MHz	NF (max) (dB)	EACH 1-9	10-99	100-Up
587-2360	2N2360	12	980	14-19*	200	5.5	6.00	3.95	2.75
587-2361	2N2361	12	.....	14†	200-44	12	4.87	3.30	2.20
587-2362	2N2362	12	.....	1.5‡	257	.....	3.50	2.10	1.55
587-2398	2N2398	12	1200	16-22*	200	4.5	6.65	3.90	2.95

SILICON SEPT PNP PLANAR EPITAXIAL TRANSISTORS

BV_{CBO}, 40 V. f_T, 100 MHz. C_{ob} 8, pF

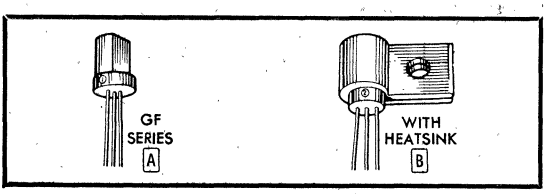
Stock No.	Type No.	Case TO-	Pd W	h_{FE} @ I_C-150 mA	$V_{CE(sat)}$	EACH 1-9	10-99	100-Up
925-7034	TQ-59	5	3	100	.2	1.38	.99	.68
925-7039	TQ-60	18	1.8	100	.2	1.63	.99	.68
925-7041	TQ-61	5	3	50	.2	1.13	.86	.58

SMALL-SIGNAL AUDIO AMPLIFIERS (NPN, *PNP)

Stock No.	Type No.	$V_{(BR)}$ CEO V	h_{FE} min. max.	EACH 1-9	10-99	100-999	1000-Up
587-2711	2N2711	18	30/90	.23	.23	.15	.12
587-2712	2N2712	18	75/225	.25	.24	.16	.13
587-2923	2N2923	25	90/180	.25	.25	.17	.14
587-2924	2N2924	25	150/300	.27	.27	.18	.15
587-2925	2N2925	25	235/470	.3	.33	.22	.18
587-2926	2N2926	18	35/470	.24	.24	.16	.13
587-3391	2N3391	25	250/500	.39	.39	.26	.21
588-3391	2N3391A	25	250/500	.45	.45	.30	.24
587-3392	2N3392	25	150/300	.25	.25	.17	.14
587-3393	2N3393	25	90/180	.25	.25	.17	.14
587-3394	2N3394	25	55/110	.25	.25	.17	.14
587-3395	2N3395	25	150/500	.33	.33	.22	.18
587-3396	2N3396	25	90/500	.25	.25	.17	.14
587-3397	2N3397	25	55/500	.24	.24	.16	.13
587-3398	2N3398	25	55/800	.24	.24	.16	.13
587-3721	2N3721	18	60/660	.24	.24	.16	.13
587-5172	2N5172	25	100/500	.21	.19	.12	.10
587-3900	2N3900	18	250/500	.36	.36	.24	.19
588-3900	2N3900A	18	250/500	.39	.39	.26	.21
925-7046	TZ-81	30	100/500	.42	.42	.28	.22
925-7047	TZ-82	30	40/500	.38	.38	.25	.20
925-7048	TZ-581*	30	100/500	.51	.51	.34	.27
925-7049	TZ-582*	30	40/500	.45	.45	.30	.24

LARGE SIGNAL AMPLIFIERS AND SWITCHES (NPN, *PNP)

Stock No.	Type No.	Fig.	$V_{(BR)}$ CEO V	h_{FE} min./ max.	EACH 1-9	10-99	100-999	1000-Up
587-2713	2N2713	A	18	30/90	.38	.38	.26	.21
587-2714	2N2714	A	18	75/225	.36	.36	.24	.19



LARGE SIGNAL AMPLIFIERS AND SWITCHES (Cont'd)

Stock No.	Type No.	Fig.	$V_{(BR)}$ CEO V	h_{FE} min./ max.	EACH 1-9	10-99	100-999	1000-Up
587-3402	2N3402	B	25	75/225	.33	.33	.22	.18
587-3403	2N3403	B	25	180/540	.35	.35	.23	.19
587-3404	2N3404	B	50	75/225	.50	.50	.33	.26
587-3405	2N3405	B	50	180/540	.60	.60	.40	.32
587-4425	2N4425	A	40	180/540	.43	.43	.29	.23
587-3414	2N3414	A	25	75/225	.28	.28	.19	.16
587-3415	2N3415	A	25	180/540	.30	.30	.20	.17
587-3416	2N3416	A	50	75/225	.55	.45	.30	.24
587-3417	2N3417	A	50	180/540	.55	.55	.37	.30
587-4424	2N4424	A	40	180/540	.39	.39	.26	.21
925-7019	TP3638*	A	25	30/—	.42	.42	.28	.22
925-7020	TP3638*	A	25	100/—	.42	.45	.30	.24
925-5022	D29A4*	A	25	30/90	.42	.42	.28	.21
925-5023	D29A5*	A	25	75/225	.45	.45	.30	.23
587-3975	2N3975	A	30	35/100	.38	.38	.26	.21
587-3976	2N3976	A	30	55/200	.41	.41	.27	.23

HIGH-VOLTAGE INDICATOR DRIVERS (NPN)

Stock No.	Type No.	$V_{(BR)}$ CEO V	h_{FE} min./ ma.	EACH 1-9	10-99	100-999	1000-Up
587-3877	2N3877	70	20/250	.45	.45	.30	.24
588-3877	2N3877A	85	20/250	.49	.49	.33	.26

HIGH-FREQUENCY AMPLIFIER/OSCILLATORS (NPN)

Stock No.	Type No.	h_{FE} min./ max.	$V_{(BR)}$ CEO V	f_t MHz min.	EACH 1-9	10-99	100-999	1000-Up
588-3854	2N3854A	35/70	30	100	.32	.32	.21	.18
588-3855	2N3855A	60/120	30	130	.34	.34	.23	.19
588-3856	2N3856A	100/200	30	140	.36	.36	.24	.20
587-3854	2N3854	35/70	18	100	.30	.29	.20	.17
587-3855	2N3855	60/120	18	130	.32	.32	.21	.18
587-3856	2N3856	100/200	18	140	.34	.34	.23	.19
588-3843	2N3843A	20/40	30	60	.43	.43	.29	.24
588-3844	2N3844A	35/70	30	90	.45	.45	.30	.25
588-3845	2N3845A	60/120	30	126	.47	.47	.32	.26
587-3843	2N3843	20/40	30	60	.41	.41	.27	.23
587-3844	2N3844	35/70	30	90	.43	.43	.29	.24
587-3845	2N3845	60/120	30	126	.45	.45	.30	.25
587-3858	2N3858	60/120	30	90	.25	.25	.17	.14
587-3859	2N3859	100/200	30	90	.27	.27	.18	.15
587-3860	2N3860	150/300	30	90	.32	.32	.21	.17
588-3858	2N3858A	60/120	60	90	.33	.33	.22	.18
588-3859	2N3859A	100/200	60	90	.36	.36	.24	.19

DIFFERENTIAL AMPLIFIERS (NPN/NPN, *PNP/PNP)

Stock No.	Type No.	$V_{(BR)}$ CBO V	$V_{(BR)}$ CEO V	H_{FE} @100μA min.	h_{FE1}/h_{FE2} min./max. @ 100 μA	EACH 1-9	10-99	100-Up
925-6900	TD-100	60	30	120	0.9/1.0	2.56	2.25	1.50
925-6902	TD-101	60	30	120	0.9/1.0	1.75	1.50	1.00
925-6920	TD-400*	40	30	120	0.9/1.0	3.38	3.00	2.00
925-6921	TD-401*	40	30	120	0.9/1.0	2.38	1.95	1.30

DUAL TRANSISTORS

Stock No.	Type No.	Structure	$V_{(BR)}$ CBO V	$V_{(BR)}$ CEO V	EACH 1-9	10-99	100-Up
925-6903	TD-102	NPN/NPN	60	30	1.62	1.35	.90
925-6924	TD-402	PNP/PNP	40	30	2.12	1.80	1.20
925-6937	TD-602	NPN/PNP	40	30	1.75	1.50	1.00
925-6980	TD-2219	NPN/NPN	60	30	2.62	2.25	1.50
925-6990	TD-2905	PNP/PNP	60	40	2.88	2.55	1.70

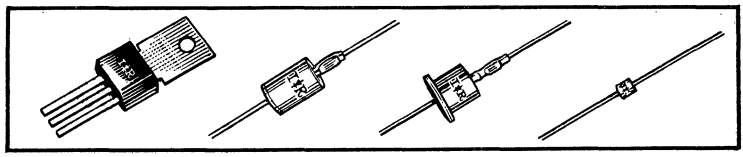
COMPLEMENTARY PAIRS (NPN/PNP)

Stock No.	Type No.	$V_{(BR)}$ CBO V	$V_{(BR)}$ CEO V	Features	EACH 1-9	10-99	100-Up
925-6935	TD-600	40	30	h_{FE1}/h_{FE2} 0.9/1.0	3.12	2.70	1.80
925-6936	TD-601	40	30	V_{off} = 2mV @I_B 2 mA	1.88	1.65	1.10

Silicon Controlled Rectifiers

POWER LOGIC TRIACS AND RECTIFIERS

SCR's from 2-470 amps, avg. 25-1700 V. Also 12 logic-triacs from 60-200 amps, 400-1000 V. New economy IR122 8 amp (RMS) plastic series with minimum dv/dt of 50 V/μsec at 110°C—eliminates any chance of erratic "turn-on" due to false triggering. The only plastic SCR's that boast a minimum dv/dt specification.



SILICON CONTROLLED RECTIFIERS—25-400 VOLTS

Amps RMS	4.0	8.0	25	25	25	25	25	25	35	35	35	35	63	110	110	110	110
Case	...	...	...	...	...	...	TO-48	TO-48	TO-48	TO-48	TO-48	TO-48	TO-65	TO-49	TO-49	TO-49	TO-49
VRM (V)	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type	Mfr's Type
25	...	...	IR30U	IR31U	IR32U	IR33U	...	...	2N681	...	IR140U	...	...	...	...	...	...
30	IR106Y1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
50	IR106F1	IR122F	IR30F	IR31F	IR32F	IR33F	...	...	2N682	...	IR140F	IR141F	...	2N1792	...	...	...
100	IR106A1	IR122A	IR30A	IR31A	IR32A	IR33A	...	10RC10A	2N683	16RC10A	IR140A	IR141A	40RCS10	2N1793	...	2N2025	71RC10B
150	...	...	...	...	...	...	1N1845	...	2N684	...	...	...	...	2N1794	...	...	...
200	IR106B1	IR122B	IR30B	IR31B	IR32B	IR33B	IN1846	10RC20A	2N685	16RC20A	IR140B	IR141B	40RCS20	2N1795	2N1913	2N2027	71RC20B
250	...	...	...	...	...	...	...	...	2N686	...	...	...	...	...	...	2N2028	71RC21B
300	IR106C1	IR122C	IR30C	IR31C	IR32C	IR33C	IN1848	10RC30A	2N687	...	IR140C	IR141C	40RCS30	...	...	...	...
400	...	IR122D	IR30D	IR31D	IR32D	IR33D	IN1849	10RC40A	2N688	16RC40A	IR140D	IR141D	40RCS40	2N1798	2N1916	...	...

HIGH VOLTAGE SCR'S

Amps RMS	25	35	63	110
Case	TO-48	TO-48	TO-63	TO-94
VRM (V)	Type	Type	Type	Type
500	2N689	...	40RCS50	...
600	2N690	16RC60A	...	2N3091
700	2N691	...	40RCS70	2N3092
800	2N692	16RC80A	40RCS80	2N3093
900	...	...	40RCS90	2N3094
1000	...	...	40RCS100	2N3095
1100	...	...	40RCS110	2N3096
1200	...	...	40RCS120	2N3097
1300	...	...	...	2N3098

SCR PRICE LIST

Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up	Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up
817-7758	IR106Y1	.78	.74	.49	817-7714	IR31A	7.58	5.19	3.46
817-7757	IR106F1	.80	.77	.51	817-7716	IR31B	8.73	5.99	3.99
817-7754	IR106A1	.83	.80	.53	817-7718	IR31C	10.18	6.98	4.65
817-7755	IR106B1	.89	.89	.59	817-7720	IR31D	11.48	7.86	5.24
817-7756	IR106C1	1.65	1.65	1.12	817-7738	IR32U	4.93	3.35	2.25
817-7768	IR122F	1.23	1.20	.80	817-7736	IR32F	5.48	3.75	2.50
817-7760	IR122A	1.45	1.35	.90	817-7728	IR32A	6.18	4.23	2.82
817-7762	IR122B	1.58	1.50	1.00	817-7730	IR32B	7.23	4.95	3.30
817-7764	IR122C	1.75	1.75	1.20	817-7732	IR32C	8.53	6.43	4.29
817-7768	IR122D	2.00	2.00	1.35	817-7734	IR32D	9.73	7.33	4.88
817-7710	IR30U	5.48	3.75	2.50	817-7752	IR33U	5.48	3.75	2.50
817-7708	IR30F	6.03	4.10	2.75	817-7750	IR33F	6.03	4.10	2.75
817-7700	IR30A	6.95	4.77	3.10	817-7742	IR33A	6.78	4.65	3.10
817-7702	IR30B	8.00	5.49	3.66	817-7744	IR33B	7.95	5.45	3.63
817-7704	IR30C	9.33	6.39	4.26	817-7746	IR33C	7.88	6.43	4.29
817-7706	IR30D	10.50	7.20	4.80	817-7748	IR33D	10.68	7.33	4.88
817-7724	IR31U	6.03	4.00	2.75	817-7214	10RC10A	6.53	4.37	2.92
817-7722	IR31F	6.58	4.50	3.00	817-7216	10RC20A	8.33	5.55	3.71

POWER LOGIC-TRIACS

When properly gated, IR logic-triacs will control AC power to the load using only one gate and one firing-circuit connection. Epitaxially structured—can be turned-on by overvoltage or high dv/dt, in either direction, without damage. Suitable for AC line-voltage control, motor drives and AC motor speed control.

Amps RMS	60				10.0			
Case	TO-94				TO-94			
Volts	Stock No.	Type	1-9	10-24	Stock No.	Type	1-9	10-24
400	817-7472	60AC40	45.00	40.00	817-7528	100AC40	163.00	112.00
600	817-7474	60AC60	53.00	47.00	817-7530	100AC60	258.00	164.00
800	817-7476	60AC80	80.00	53.00	817-7532	100AC80	315.00	230.00
1000	817-7480	60AC100	122.00	83.00	817-7534	100AC100	416.00	278.00

LOW CURRENT RECTIFIERS

Current (A)	0.75	0.75	0.75	0.85	1.0	1.0	1.0	1.0	1.0	1.3
Surge (A)	15	15	15	30	50	50	50	50	30	15
Case	...	...	...	...	DO-39	DO-39	...	...	...	...
50 V	...	...	IN536	...	...	...	...	IN4001	...	...
100 V	IN440B	IN1487	...	IN2610	...	...	...	IN4002	10C1	10B1
200 V	IN441B	IN1488	IN538	IN2611	IN2069	10D2	5A2	IN4003	10C2	10B2
300 V	IN442B	IN1489	IN539	IN2612	...	10D3	5A3	...	10C3	10B3
400 V	IN443B	IN1490	...	IN2613	IN2070	10D4	5A4	IN4004	10C4	10B4
500 V	...	IN1491	...	IN2614	...	10D5	5A5	...	...	10B5
600 V	...	IN1492	IN547	IN2615	IN2071	10D6	5A6	IN4005	10C6	10B6
800 V	...	...	...	...	...	10D8	5A8	IN4006	10C8	10B8
1000 V	...	...	...	...	...	10D10	5A10	IN4007	10C10	10B10

SCR PRICE LIST (CONTINUED)

Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up	Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up
817-7218	10RC30A	9.55	6.40	4.25	817-7412	40RCS30	22.13	14.70	10.00
817-7220	10RC40A	11.68	7.85	5.20	817-7414	40RCS40	23.75	15.80	10.75
579-0681	2N681	4.38	2.95	1.95	817-7416	40RCS50	26.50	17.60	11.90
579-0682	2N682	5.35	3.58	2.38	817-7420	40RCS70	36.50	24.25	16.20
579-0683	2N683	7.00	4.73	3.12	817-7422	40RCS80	45.50	30.25	20.30
579-0684	2N684	8.18	5.45	3.63	817-7426	40RCS90	57.00	38.00	25.50
579-0685	2N685	8.83	5.85	3.93	817-7428	40RCS100	68.75	45.75	30.50
579-0686	2N686	9.25	6.25	4.15	817-7430	40RCS110	79.50	53.00	35.50
579-0687	2N687	10.00	6.70	4.45	817-7432	40RCS120	88.75	59.25	40.00
579-0688	2N688	12.25	8.25	5.45	579-1792	2N1792	25.50	19.00	11.95
579-0689	2N689	15.08	8.70	6.70	579-1793	2N1793	27.50	20.50	12.60
579-0690	2N690	17.25	9.85	7.95	579-1794	2N1794	30.00	21.50	13.80
579-0691	2N691	22.50	12.80	10.60	579-1795	2N1795	32.75	24.60	15.20
579-0692	2N692	30.63	17.50	14.35	579-1798	2N1798	48.25	37.50	22.30
817-7234	16RC10A	7.00	4.73	3.12	579-3091	2N3091	63.75	50.00	30.00
817-7238	16RC20A	8.83	5.85	3.93	579-3092	2N3092	78.75	62.00	37.00
817-7242	16RC40A	12.25	8.25	5.45	579-3093	2N3093	95.00	74.00	44.00
817-7246	16RC60A	18.75	12.75	8.50	579-3094	2N3094	107.50	85.00	51.00
817-7250	16RC80A	30.63	17.50	14.35	579-3095	2N3095	132.50	104.00	62.00
817-7788	IR140F	15.00	10.20	6.70	579-3096	2N3096	155.00	120.00	73.00
817-7780	IR140A	16.25	11.05	7.30	579-3097	2N3097	180.00	140.00	84.00
817-7782	IR140B	23.00	15.85	10.50	579-3098	2N3098	200.00	155.00	94.00
817-7784	IR140C	35.00	23.75	15.80	579-1913	2N1913	31.25	23.75	14.25
817-7786	IR140D	42.50	28.50	19.15	579-1916	2N1916	47.50	35.50	21.25
817-7800	IR141F	15.75	10.65	7.05	579-2025	2N2025	38.75	29.50	17.75
817-7792	IR141A	17.00	11.55	7.70	579-2027	2N2027	43.75	33.50	20.25
817-7794	IR141B	24.25	16.40	11.05	579-2028	2N2028	46.25	34.50	21.25
817-7796	IR141C	36.00	24.85	16.55	817-7520	71RC10B	38.75	29.50	17.75
817-7798	IR141D	45.00	29.75	20.65	817-7522	71RC20B	43.75	33.50	20.25
817-7408	40RCS10	19.88	13.40	8.75	817-7524	71RC25B	46.25	34.50	21.25
817-7410	40RCS20	20.75	12.75	9.40	...	...	...	...	...

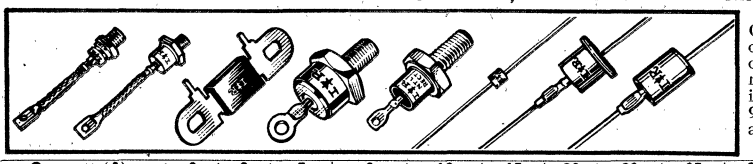
RECTIFIER PRICE LIST

577-0440	IN440B	.88	.66	.44	817-7100	5A2	.63	.32	.28
577-0441	IN441B	.93	.69	.46	817-7102	5A3	.73	.37	.32
577-0442	IN442B	1.05	.79	.53	817-7105	5A4	.78	.41	.35
577-0443	IN443B	1.30	.97	.65	817-7110	5A5	.85	.45	.38
577-0536	IN536	.45	.45	.30	817-7114	5A6	1.00	.50	.44
577-0538	IN538	.58	.52	.34	817-7118	5A8	1.70	.85	.75
577-0539	IN539	.78	.59	.39	817-7122	5A10	2.30	1.20	1.02
577-0547	IN547	1.25	.95	.60	817-7159	10B1	.78	.50	.37
577-1487	IN1487	.65	.49	.32	817-7164	10B2	.85	.55	.40
577-1488	IN1488	.73	.52	.34	817-7168	10B3	1.08	.65	.51
577-1489	IN1489	.80	.59	.39	817-7170	10B4	1.35	.80	.64
577-1490	IN1490	.93	.67	.44	817-7172	10B5	1.60	.95	.75
577-1491	IN1491	1.08	.75	.50	817-7174	10B6	1.88	1.10	.88
577-1492	IN1492	1.50	.95	.70	817-7176	10B8	2.63	1.60	1.28
577-2069	IN2069	1.20	.32	.28	817-7178	10B10	3.38	2.05	1.64
577-2070	IN2070	1.25	.41	.35	817-7179	10C1	.60	.32	.29
577-2071	IN2071	1.38	.50	.44	817-7180	10C2	.68	.35	.32
577-2610	IN2610	.85	.55	.40	817-7181	10C3	.75	.38	.36
577-2611	IN2611	.93	.62	.45	817-7182	10C4	.80	.42	.38
577-2612	IN2612	1.05	.70	.50	817-7184	10C6	.95	.32	.29
577-2613	IN2613	1.18	.79	.56	817-7186	10C8	1.38	.75	.65
577-2614	IN2614	1.35	.89	.63	817-7188	10C10	2.50	1.70	1.20
577-2615	IN2615	1.48	1.00	.70	817-7190	10D2	.32	.32	.28
577-4001	IN4001	.39	.39	.26	817-7191	10D3	.73	.37	.32
577-4002	IN4002	.44	.44	.29	817-7192	10D4	1.38	.41	.35
577-4003	IN4003	.50	.50	.33	817-7193	10D5	.85	.45	.38
577-4004	IN4004	.56	.56	.37	817-7194	10D6	.50	.50	.44
577-4005	IN4005	.66	.66	.45	817-7196	10D8	1.70	.85	.75
577-4006	IN4006	.99	.99	.65	817-7198	10D10	1.20	1.20	1.02
577-4007	IN4007	1.49	1.49	.99	...	...	...	...	...

See Directory Pages for Case Configuration and Dimensions

Silicon Rectifiers and Bridges

RECTIFIERS, BRIDGES AND CLIPCELLS



Choose from a wide range of famous IR silicon power rectifiers a variety of industrial or military applications. Available in current ratings from 2-250 amps at 50-1000 volts, including the new 1-amp IN4001 series, page 95, and the 20-amp DO-4 packaged 20F series as well as the widely-used "Hockey-Puks".

Current (A)	2	3	5	6	12	15	20	20	25	35	40	60	70	100	250
Surge (A)	50	170	150	150	240	250	400	300	400	500	500	900	1200	1600	4500
Case			DO-4	DO-4	DO-4	DO-5			DO-9	DO-5	DO-5	DO-5	DO-5	DO-8	DO-9
VRM (V)	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
50	20A05	.....	1N1612	1N1341A	1N1199A	.....	20F5	21PT5	1N2154	1N1183	40HF5	1N2128A	.....	.....	.....
100	20A1	30S1	1N1613	1N1342A	1N1200A	1N3209	20F10	21PT10	1N2155	1N1184	.....	1N2129A	70H10A	.....	.....
200	20A2	30S2	1N1614	1N1344A	1N1202A	1N3210	20F20	21PT20	1N2156	1N1186	40HF20	1N2131A	70H20A	1N3289	.....
250	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1N2132A	70H25A	.....	.....
300	20A3	30S3	.....	1N1345A	1N1203A	1N3211	20F30	.....	1N2157	1N1187	40HF30	1N2133A	70H30A	1N3290	.....
350	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1N2134A	.....	.....	.....
400	20A4	30S4	1N1615	1N1346A	1N1204A	1N3212	20F40	21PT40	1N2158	1N1188	40HF40	1N2135A	70H40A	1N3291	.....
500	20A5	30S5	.....	1N1347A	1N1205A	1N3213	20F50	.....	1N2159	1N1189	40HF50	1N2137A	70H50A	1N3292	.....
600	20A6	30S6	1N1616	1N1348A	1N1206A	1N3214	20F60	21PT60	1N2160	1N1190	40HF60	1N2138A	70H60A	1N3293	1N3740
800	20A8	30S8	.....	1N3988	1N3671A	.....	.....	.....	.....	1N3766	40HF80	.....	.....	1N3294	1N3741
1000	20A10	30S10	.....	1N3990	1N3673A	.....	.....	.....	.....	1N3768	40HF100	.....	.....	1N3295	1N3742

Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up
817-7300	20A05	.73	.45	.32
817-7304	20A1	.78	.50	.35
817-7306	20A2	.88	.55	.39
817-7308	20A3	.98	.60	.43
817-7310	20A4	1.13	.70	.50
817-7312	20A5	1.25	.80	.56
817-7314	20A6	1.43	.90	.63
817-7316	20A8	2.05	1.30	.91
817-7318	20A10	2.48	1.60	1.10
817-7352	30S1	.55	.55	.32
817-7354	30S2	.60	.60	.40
817-7356	30S3	1.03	.70	.48
817-7358	30S4	.86	.86	.58
817-7360	30S5	1.38	.95	.65
817-7362	30S6	1.17	1.17	.78
817-7364	30S8	2.70	1.80	1.28
817-7366	30S10	2.50	2.50	1.77
577-1612	1N1612	1.07	1.07	.72
577-1613	1N1613	1.20	1.20	.80
577-1614	1N1614	1.87	1.87	1.25
577-1615	1N1615	3.71	3.71	2.48
577-1616	1N1616	5.36	5.36	3.50
578-1341	1N1341A	1.70	1.12	.82
578-1342	1N1342A	1.84	1.22	.89
578-1344	1N1344A	2.73	1.86	1.36
578-1345	1N1345A	4.15	2.74	1.99
578-1346	1N1346A	5.30	3.50	2.54

Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up
578-1347	1N1347A	6.39	4.21	3.06
578-1348	1N1348A	7.65	5.02	3.65
577-3988	1N3988	11.88	8.25	5.60
577-3990	1N3990	13.25	9.50	6.25
577-1199	1N1199A	1.66	1.09	.79
577-1200	1N1200A	1.91	1.25	.91
578-1202	1N1202A	3.50	2.28	1.66
578-1203	1N1203A	4.80	3.17	2.30
578-1204	1N1204A	6.25	4.04	2.94
578-1205	1N1205A	7.30	4.82	3.50
578-1206	1N1206A	8.60	5.66	4.12
578-3671	1N3671A	12.43	8.70	5.85
578-3673	1N3673A	14.03	9.50	6.60
577-3209	1N3209	1.80	1.25	.85
577-3210	1N3210	2.50	1.70	1.20
577-3211	1N3211	3.25	2.05	1.55
577-3212	1N3212	4.00	2.85	1.90
577-3213	1N3213	9.38	6.65	4.40
577-3214	1N3214	10.13	7.30	4.80
817-7293	20F5	1.05	.75	.50
817-7294	20F10	1.23	.85	.57
817-7295	20F20	1.65	1.15	.77
817-7296	20F30	1.93	1.35	.90
817-7297	20F40	2.20	1.56	1.02
817-7298	20F50	3.35	2.50	1.67
817-7299	20F60	4.85	3.40	2.27
817-7324	21PT5	1.63	1.10	.82

Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up
817-7328	21PT10	1.75	1.20	.90
817-7332	21PT20	1.95	1.30	.98
817-7336	21PT40	2.50	1.70	1.27
817-7340	21PT60	3.38	2.25	1.70
577-2154	1N2154	5.17	5.17	3.73
577-2155	1N2155	7.75	7.75	4.65
577-2156	1N2156	11.10	11.10	6.68
577-2157	1N2157	15.00	15.00	9.00
577-2158	1N2158	17.75	17.75	10.65
577-2159	1N2159	24.80	24.80	14.85
577-2160	1N2160	38.95	38.95	19.58
577-1183	1N1183	2.75	1.95	1.30
577-1184	1N1184	3.38	2.19	1.60
577-1186	1N1186	5.75	3.17	2.30
577-1187	1N1187	6.69	4.41	3.20
577-1188	1N1188	8.19	5.88	4.08
577-1189	1N1189	9.93	6.55	4.76
577-1190	1N1190	11.78	7.72	5.62
577-3766	1N3766	24.98	17.58	11.25
577-3768	1N3768	27.10	19.13	12.75
817-7368	40HF5	2.33	1.55	1.10
817-7370	40HF20	4.28	2.85	2.02
817-7372	40HF30	5.48	3.65	2.58
817-7374	40HF40	6.68	4.45	3.14
817-7376	40HF50	7.88	5.25	3.71
817-7378	40HF60	9.00	6.00	4.23
817-7382	40HF80	11.63	7.75	5.47

Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up
817-7400	40HF100	15.25	9.90	7.20
578-2128	1N2128A	3.60	3.60	2.60
578-2129	1N2129A	3.80	3.80	2.70
578-2131	1N2131A	5.05	5.05	3.53
578-2132	1N2132A	8.40	5.60	3.96
578-2133	1N2133A	9.25	6.15	4.36
578-2134	1N2134A	10.05	6.70	4.74
578-2135	1N2135A	10.85	7.25	5.12
578-2137	1N2137A	12.60	8.40	5.95
578-2138	1N2138A	13.00	9.50	6.70
817-9050	70H10A	5.70	3.80	2.70
817-9055	70H20A	7.50	5.05	3.53
817-9060	70H25A	8.40	5.60	3.96
817-9065	70H30A	9.25	6.15	4.36
817-9070	70H40A	10.88	7.25	5.12
817-9075	70H50A	12.63	8.40	5.95
817-9080	70H60A	14.25	9.50	6.70
577-3289	1N3289	34.38	22.83	16.15
577-3290	1N3290	42.13	27.98	19.85
577-3291	1N3291	48.50	32.20	22.80
577-3292	1N3292	54.00	35.86	25.50
577-3293	1N3293	59.00	39.18	27.80
577-3294	1N3294	80.50	53.45	37.80
577-3295	1N3295	122.50	81.34	57.50
577-3740	1N3740	85.00	56.44	40.00
577-3741	1N3741	116.75	77.52	55.00
577-3742	1N3742	140.00	92.96	66.00

HIGH VOLTAGE RECTIFIERS

Voltage (KV)	Miniature Axial Lead	Standard Ferrule Mnt.	Voltage (KV)	Standard Ferrule Mnt.	Molded Rectifiers
1.8	.....	1N1135, 67D018H55FNN	5.0	67D050H55FNN	67D050H04TNN
2.0	67D020H53PNN	.....	7.5	.....	67D075H04TNN
2.4	.....	1N1137, 67D024H55FNN	10.0	.....	67D100H04TNN
3.0	67D030H53PNN	.....	12.0	.....	67D120H04TNN
3.6	.....	1N1140, 67D036H55FNN	15.0	.....	67D150H04TNN
4.8	.....	1N1142, 67D048H55FNN	30.0	.....	67D300H04TNN

Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up
817-7506	67D020H53PNN	10.25	6.80	4.95
817-7508	67D030H53PNN	11.25	7.47	5.40
577-1135	1N1135	7.00	3.75	3.35
577-1137	1N1137	9.40	5.00	4.50
577-1140	1N1140	10.50	5.65	5.10
577-1142	1N1142	15.60	8.35	7.50
817-7505	67D018H55FNN	7.00	4.65	3.35
817-7507	67D024H55FNN	9.38	6.23	4.50
.....	.....	.....	.....	.....

Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up
817-7509	67D036H55FNN	10.50	6.97	5.10
817-7511	67D048H55FNN	15.63	10.38	7.50
817-7512	67D050H55FNN	16.25	10.79	7.85
817-7513	67D050H04TNN	9.50	6.31	4.50
817-7514	67D075H04TNN	14.25	9.46	6.75
817-7515	67D100H04TNN	19.13	12.70	9.00
817-7516	67D120H04TNN	23.00	15.27	10.80
817-7517	67D150H04TNN	28.75	19.09	13.50
817-7518	67D300H04TNN	57.50	38.18	27.00

SILICON RECTIFIER BRIDGES

Bridges and cartridges with lead configurations that vary from axial lead wire to cable-eyelet or stud-pierced types.

RECTIFIER SELECTION TABLE

I_F	1-0	1.8	3.75	6.0	10
I_{FM}		40	700	150	300
VRP	Type	Type	Type	Type	Type
50	.....	.....	.....	60FB05L	100PB05P
100	10DB1P	.....	50FB1L	60FB1L	100PB01P
200	10DB2P	18DB2A	50FB2L	60FB2L	100PB02P
300	10DB3P	.....	.....	60FB3L	100PB03P
400	10DB4P	.....	.....	60FB4L	100PB04P
600	.....	18DB6A	.....	60FB6L	100PB06P
1000	.....	18DB10A	.....	.....	.....

RECTIFIER PRICE TABLE

Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up
817-7200	10DB1P	1.80	1.80	1.30
817-7206	10DB2P	1.90	1.90	1.40
817-7207	10DB3P	2.50	2.00	1.50
817-7208	10DB4P	2.10	2.10	1.60
817-7258	18DB2A	5.95	2.38	2.14
817-7266	18DB6A	4.38	2.90	2.75
817-7270	18DB10A	7.63	5.12	4.95
817-7440	50FB1L	4.13	2.75	2.05
817-7442	50FB2L	4.75	3.20	2.40
817-7446	50FB3L	5.38	3.60	2.70
817-7482	60FB05L	4.38	3.20	2.45

Stock No.	Mfr's Type	EACH 1-9	10-99	100-Up
817-7484	60FB1L	4.88	3.45	2.65
817-7486	60FB2L	5.50	4.25	3.20
817-7488	60FB3L	7.00	4.70	3.50
817-7492	60FB4L	7.50	5.70	4.25
817-7500	60FB6L	9.50	7.00	5.25
817-7538	100PB05P	6.88	4.05	3.25
817-7542	100PB1P	7.13	4.30	3.35
817-7544	100PB2P	8.75	5.15	4.15
817-7546	100PB3P	9.50	5.55	4.50
817-7548	100PB4P	10.88	6.35	5.15
817-7552	100PB6P	17.00	9.95	8.00

SELENIUM RECTIFIERS AND ASSEMBLIES

Designed for widest possible application. From low-voltage to 30KV stacks—include power rectifier and "battery-charging" types (single-plate for trickle chargers).

*Half Wave Rectifiers; †Full Wave Bridges

Stock No.	Mfr's Type	Max. AC Input (V)	Max. DC Output (mA)	EACH 1-9	10-99	100-Up
817-7660	A1H*	36	100	.63	.43	.30
817-7664	B1H*	36	150	.53	.40	.28
817-7678	C1H*	36	250	.55	.42	.29
817-8976	Q1B†	36	100	.70	.41	.33
817-8977	Q4B†	130	100	2.00	1.56	.94
817-7658	A1B†	36	180	1.65	1.22	.82
817-7662	B1B†	36	300	1.73	1.28	.86
817-7676	C1B†	36	600	2.00	1.46	1.00
817-8974	M1B†	36	1200	2.00	1.72	1.03

FAMOUS IR SELENIUM STACKS

Stock No.	Mfr's Type	Output DC (V)	Output DC Amps	Input AC (V)	EACH 1-9	10-99	100-Up
817-8915	J14C1	0-14	1.5	36	2.38	1.58	1.25
817-8916	J14C5	0-14	5.0	36	6.00	3.98	3.30
817-8917	J14C8	0-14	10.0	36	8.25	5.48	4.50
817-8920	J29B04	0-29	0.5	36	2.50	1.70	1.40
817-8918	J29B1	0-29	1.5	36	3.75	2.40	2.10
817-8921	J29B5	0-29	5.0	36	11.00	7.00	5.90
817-8919	J29B8	0-29	10.0	36	15.25	9.70	8.20
817-8923	J58B1	0-58	1.5	72	7.75	4.90	4.15
817-8924	J58B5	0-58	5.0	72	22.00	14.61	11.80
817-8925	J58B8	0-58	10.0	72	30.75	20.41	16.40
817-8926	J116B04	0-116	0.5	144	9.50	6.00	5.15
817-8927	J116B1	0-116	1.5	144	14.00	8.90	7.50
817-8928	J116B5	0-116	5.0	144	42.00	27.88	22.40

Stock No.	Mfr's Type	Output DC(V)	Output DC Amps	Input AC(V)	EACH 1-9	10-99	100-Up
817-8929	J116B8	0-116	10.0	144	58.75	39.01	31.40
817-8931	J135B04	0-135	0.5	180	11.75	7.70	6.20
817-8930	J135B1	0-135	1.5	180	17.25	10.80	9.10
817-8932	J135B5	0-135	5.0	180	51.75	32.70	27.50
817-8933	J135B8	0-135	10.0	180	72.50	48.14	38.80
817-8934	J135B17	0-135	20.0	180	114.50	76.03	61.00

BATTERY CHARGERS

Stock No.	Mfr's Type	Output DC Amps	Input AC (V)	EACH 1-9	10-99	100-Up
817-7674	BCR100	50-100	33	11.25	8.95	5.30
817-7672	BCR60	30-60	33	8.50	6.85	4.00
817-7668	BCF100	50-100	33	11.25	8.95	5.30
817-7670	BCF60	30-60	33	8.50	6.85	4.00

IOR Silicon Zeners and Reference Elements

Huge assortment of zeners from International Rectifier. Ranging from 250 mW "Glass" devices to 50 watt units in stud-mount and "diamond" case. In addition, IR offers reference devices from 5.9 to 49.6 V with 0.015 to 0.0005%/°C tolerances.

SILICON ZENER SELECTION TABLE

Watts	.250	.400	.400	1.0	1.0	1.0	1.0	5.0	10	50	Watts	1.0	1.0	5.0	10
Case	DO-7	DO-7	DO-7	B	DO-13	DO-13	C	B	DO-4	E	Case	DO-13	C	B	DO-
Vz	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Vz	Type	Type	Type	Type
2.4		1N4370									36		1N4753	1N5365	1N2991
2.7	1N702	1N4371									39		1N4754	1N5366	1N2992
3.0		1N4372									43	1N3035	1N4755	1N5367	1N2993
3.3	1N703	1N746		1N3821			1N4728	1N5333			45				1N2994
3.6		1N747		1N3822			1N4729	1N5334			47	1N3036	1N4756	1N5368	1N2995
3.9	1N074	1N748		1N3823			1N4730	1N5335			50				1N2996
4.3		1N749		1N3824			1N4731	1N5336			51	1N3037	1N4757	1N5369	1N2997
4.7	1N705	1N750		1N3825			1N4732	1N5337			52				1N2998
5.1		1N751		1N3826			1N4733	1N5338			56		1N4758	1N5370	1N2999
5.6	1N706	1N752		1N3827	1N1765		1N4734	1N5339			60			1N5371	
6.0								1N5340			62		1N4759	1N5372	1N3000
6.2	1N707	1N753		1N3828	1N1766		1N4735	1N5341			68	1N3040	1N4760	1N5373	1N3001
6.8		1N754	1N957	1N3829	1N1767	1N3016	1N4736	1N5342	1N2970	1N3305	75	1N3041	1N4761	1N5374	1N3002
7.5	1N711	1N755	1N958		1N1768	1N3017	1N4737	1N5343	1N2971		82		1N4762	1N5375	1N3003
8.2	1N712	1N756	1N959		1N1769	1N3018	1N4738	1N5344	1N2972		87			1N5376	
8.7								1N5345			91		1N4763	1N5377	1N3004
9.1	1N713	1N757	1N960		1N1770	1N3019	1N4739	1N5346	1N2973	1N3309	100	1N3044		1N5378	1N3005
10	1N714	1N758	1N961		1N1771	1N3020	1N4740	1N5347	1N2974		105				1N3006
11	1N715		1N962		1N1772		1N4741	1N5348	1N2975		110	1N3045			1N3007
12		1N759	1N963		1N1773	1N3022	1N4742	1N5349	1N2976	1N3311	120				1N3008
13			1N964		1N1774	1N3023	1N4743	1N5350	1N2977		130	1N3047			1N3009
14								1N5351	1N2978	1N3313	140				1N3010
15	1N718		1N965		1N1775	1N3024	1N4744	1N5352	1N2979	1N3314	150				1N3011
16			1N966		1N1776		1N4745	1N5353	1N2980		160				1N3012
17								1N5354	1N2981		175				1N3013
18			1N967			1N3026	1N4746	1N5355	1N2982		180				1N3014
20	1N721		1N968			1N3027	1N4747	1N5357	1N2984		200	1N3051			1N3015
22	1N722		1N969			1N3028	1N4748	1N5358	1N2985						
24	1N723		1N970			1N3029	1N4749	1N5359	1N2986	1N3321					
25								1N5360	1N2987						
27			1N971			1N3030	1N4750	1N5361	1N2988	1N3323					
30			1N972			1N3031	1N4751	1N5363	1N2989	1N3324					
33			1N973			1N3032	1N4752	1N5364	1N2990						

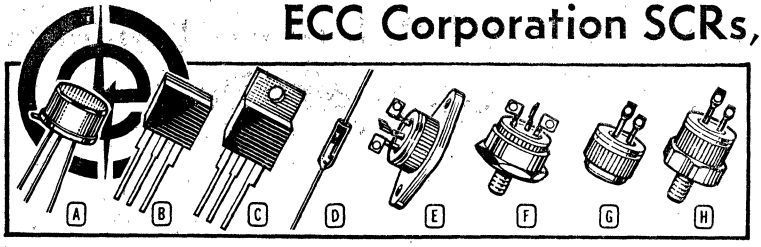
ZENER PRICE TABLE

Stk. No.	Type	1-99	100-Up	Stk. No.	Type	1-99	100-Up	Stk. No.	Type	1-99	100-Up	Stk. No.	Type	1-99	100-Up	Stk. No.	Type	1-99	100-Up	Stk. No.	Type	1-99	100-Up
577-0702	1N702	1.70	1.00	817-0962	1N962	1.70	1.00	817-3022	1N3022	4.13	2.45	817-5336	1N5336	3.00	2.00	577-2981	1N2981	5.13	3.00	817-5366	1N5366	3.00	2.00
577-0703	1N703	1.70	1.00	817-0963	1N963	1.70	1.00	817-3023	1N3023	4.13	2.45	817-5337	1N5337	3.00	2.00	817-2982	1N2982	5.13	3.00	817-5367	1N5367	3.00	2.00
577-0704	1N704	1.70	1.00	817-0964	1N964	1.70	1.00	817-3024	1N3024	4.13	2.45	817-5338	1N5338	3.00	2.00	817-2984	1N2984	5.13	3.00	817-5368	1N5368	3.00	2.00
577-0705	1N705	1.70	1.00	817-0965	1N965	1.70	1.00	817-3026	1N3026	4.13	2.45	817-5339	1N5339	3.00	2.00	817-2985	1N2985	5.13	3.00	817-5369	1N5369	3.00	2.00
577-0706	1N706	1.70	1.00	817-0966	1N966	1.70	1.00	817-3027	1N3027	4.13	2.45	817-5340	1N5340	3.00	2.00	817-2986	1N2986	5.13	3.00	817-5370	1N5370	3.00	2.00
577-0707	1N707	1.70	1.00	817-0967	1N967	1.70	1.00	817-3028	1N3028	4.13	2.45	817-5341	1N5341	3.00	2.00	817-2987	1N2987	5.13	3.00	817-5371	1N5371	3.00	2.00
577-0709	1N709	1.70	1.00	817-0968	1N968	1.70	1.00	817-3029	1N3029	4.13	2.45	817-5342	1N5342	3.00	2.00	817-2988	1N2988	5.13	3.00	817-5372	1N5372	3.00	2.00
577-0711	1N711	1.70	1.00	817-0969	1N969	1.70	1.00	817-3030	1N3030	4.13	2.45	817-5343	1N5343	3.00	2.00	817-2989	1N2989	5.13	3.00	817-5373	1N5373	3.00	2.00
577-0712	1N712	1.70	1.00	817-0970	1N970	1.70	1.00	817-3031	1N3031	4.13	2.45	817-5344	1N5344	3.00	2.00	817-2990	1N2990	5.13	3.00	817-5374	1N5374	3.00	2.00
577-0713	1N713	1.70	1.00	817-0971	1N971	1.70	1.00	817-3032	1N3032	4.13	2.45	817-5345	1N5345	3.00	2.00	577-3305	1N3305	7.24	4.75	817-5375	1N5375	3.00	2.00
577-0714	1N714	1.70	1.00	817-0972	1N972	1.70	1.00	577-4728	1N4728	1.88	1.25	817-5346	1N5346	3.00	2.00	577-3309	1N3309	7.24	4.75	817-5376	1N5376	3.00	2.00
577-0715	1N715	1.70	1.00	817-0973	1N973	1.70	1.00	577-4729	1N4729	1.88	1.25	817-5347	1N5347	3.00	2.00	577-3311	1N3311	7.24	4.75	817-5377	1N5377	3.00	2.00
577-0718	1N718	1.70	1.00	577-3821	1N3821	3.40	2.00	577-4730	1N4730	1.88	1.25	817-5348	1N5348	3.00	2.00	577-3313	1N3313	7.24	4.75	817-5378	1N5378	3.00	2.00
577-0721	1N721	1.70	1.00	577-3822	1N3822	3.40	2.00	577-4731	1N4731	1.88	1.25	817-5349	1N5349	3.00	2.00	577-3314	1N3314	7.24	4.75	817-2991	1N2991	5.13	3.00
577-0722	1N722	1.70	1.00	577-3823	1N3823	3.40	2.00	577-4732	1N4732	1.88	1.25	817-5350	1N5350	3.00	2.00	577-3321	1N3321	7.24	4.75	817-2992	1N2992	5.13	3.00
577-0723	1N723	1.70	1.00	577-3824	1N3824	3.40	2.00	577-4733	1N4733	1.88	1.25	817-5351	1N5351	3.00	2.00	577-3323	1N3323	7.24	4.75	817-2993	1N2993	5.13	3.00
577-4370	1N4370	1.70	1.00	577-3825	1N3825	3.40	2.00	577-4734	1N4734	1.88	1.25	817-5352	1N5352	3.00	2.00	577-3324	1N3324	7.24	4.75	817-2994	1N2994	5.13	3.00
577-4371	1N4371	1.70	1.00	577-3826	1N3826	3.40	2.00	577-4735	1N4735	1.88	1.25	817-5353	1N5353	3.00	2.00	817-3035	1N3035	3.13	2.45	817-2995	1N2995	5.13	3.00
577-4372	1N4372	1.70	1.00	577-3827	1N3827	3.40	2.00	577-4736	1N4736	1.88	1.25	817-5354	1N5354	3.00	2.00	817-3036	1N3036	3.13	2.45	817-2996	1N2996	5.13	3.00
577-0746	1N746	1.70	1.00	577-3828	1N3828	3.40	2.00	577-4737	1N4737	1.88	1.25	817-5355	1N5355	3.00	2.00	817-3037	1N3037	3.13	2.45	817-2997	1N2997	5.13	3.00
577-0747	1N747	1.70	1.00	577-3829	1N3829	3.40	2.00	577-4738	1N4738	1.88	1.25	817-5357	1N5357	3.00	2.00	817-3040	1N3040	3.13	2.45	817-2998	1N2998	5.13	3.00
577-0748	1N748	1.70	1.00	577-1765	1N1765	3.59	2.55	577-4739	1N4739	1.88	1.25	817-5358	1N5358	3.00	2.00	817-3041	1N3041	3.13	2.45	817-2999	1N2999	5.13	3.00
577-0749	1N749	1.70	1.00	577-1766	1N1766	3.59	2.55	577-4740	1N4740	1.88	1.25	817-5359	1N5359	3.00	2.00	817-3044	1N3044	3.13	2.45	577-3000	1N3000	5.13	3.00
577-0750	1N750	1.70	1.00	577-1767	1N1767	3.59	2.55	577-4741	1N4741	1.88	1.25	817-5360	1N5360	3.00	2.00	817-3045	1N3045	3.13	2.45	577-3001	1N3001	5.13	3.00
577-0751	1N751	1.70	1.00	577-1768	1N1768	3.59	2.55	577-4742	1N4742	1.88	1.25	817-5361	1N5361	3.00	2.00	817-3047	1N3047	3.13	2.45	817-3002	1N3002	5.13	3.00
577-0752	1N752	1.70	1.00	577-1769	1N1769	3.59	2.55	577-4743	1N4743	1.88	1.25	817-5363	1N5363	3.00	2.00	817-3051	1N3051	3.13	2.45	817-3003	1N3003	5.13	3.00
577-0753	1N753	1.70	1.00	577-1770	1N1770	3.59	2.55	577-4744	1N4744	1.88	1.25	817-5364	1N5364	3.00	2.00	577-4753	1N4753	1.88	1.25	817-3004	1N3004	5.13	3.00
577-0754	1N754	1.70	1.00	577-1771	1N1771	3.59	2.55	577-4745	1N4745	1.88	1.25	817-2970	1N2970	5.13	3.00	577-4754	1N4754	1.88	1.25	817-3005	1N3005	5.13	3.00
577-0755	1N755	1.70	1.00	577-1772	1N1772	3.59	2.55	577-4746	1N4746	1.88	1.25	817-2971	1N2971	5.13	3.00	577-4755	1N4755	1.88	1.25	817-3006	1N3006	5.13	3.00
577-0756	1N756	1.70	1.00	577-1773	1N1773	3.59	2.55	577-4747	1N4747	1.88	1.25	817-2972	1N2972	5.13	3.00	577-4756	1N4756	1.88	1.25	817-3007	1N3007	5.13	3.00
577-0757	1N757	1.70	1.00	577-1774	1N1774	3.59	2.55	577-4748	1N4748	1.88	1.25	817-2973	1N2973	5.13	3.00	577-4757	1N4757	1.88	1.25	817-3008	1N3008	5.13	3.00
577-0758	1N758	1.70	1.00	577-1775	1N1775	3.59	2.55	577-4749	1N4749	1.88	1.25	817-2974	1N2974	5.13	3.00	577-4758	1N4758	1.88	1.25	817-3009	1N3009	5.13	3.00
577-0759	1N759	1.70	1.00	577-1776	1N1776	3.59	2.55	577-4750	1N4750	1.88	1.25	817-2975	1N2975	5.13	3.00	577-4759	1N4759	1.88	1.25	577-3010	1N3010	5.13	3.00
817-0957	1N957	1.70	1.00	817-3016	1N3016	4.13	2.45	577-4751	1N4751	1.88	1.25	817-2976	1N2976	5.13	3.00	577-4760	1N4760	1.88	1.25	817-3011	1N3011	5.13	3.00
817-0958	1N958	1.70	1.00	817-3017	1N3017	4.13	2.45	577-4752	1N4752	1.88	1.25	817-2977	1N2977	5.13	3.00	577-4761	1N4761	1.88	1.25	577-3012	1N3012	5.75	3.40
817-0959	1N959	1.70	1.00	817-3018	1N3018	4.13	2.45	817-5333	1N5333	3.00	2.00	817-2978	1N2978	5.13	3.00	577-4762	1N4762	1.88	1.25	817-3013	1N3013	5.75	3.40
817-0960	1N960	1.70	1.00	817-3019	1N3019	4.13	2.45	817-5334	1N5334	3.00	2.00	817-2979	1N2979	5.13	3.00	577-4763	1N4763	1.88	1.25	817-3014	1N3014	5.75	3.40
817-0961	1N961	1.70	1.00	817-3020	1N3020	4.13	2.45	817-5335	1N5335	3.00	2.00	817-2980	1N2980	5.13	3.00	817-5365	1N5365	3.00	2.00	817-3015	1N3015	5.75	3.40

VOLTAGE REFERENCES *Indicates maximum voltage deviation per °C

Power Rating	250 mW					400 mW					400 mW					400 mW					400 mW					500 mW				
Vz Zener Volts	5.9 to 6.5					5.9 to 6.5					6.2 to 6.9					6.3 to 6.7					8.0 to 8.8					8.55 to 9.45				
Case	DO-7					DO-7					DO-7					DO-7					DO-7					DO-7				
*	Stock No.	Type 1N-	1-9	10-99	100-Up	Stock No.	Type 1N-	1-9	10-99	100-Up	Stock No.	Type 1N-	1-9	10-99	100-Up	Stock No.	Type 1N-	1-9	10-99	100-Up	Stock No.	Type 1N-	1-9	10-99	100-Up	Stock No.	Type 1N-	1-9	10-99	100-Up
0.015																577-3779	3779	7.50	4.50	3.75										
0.01						577-0821	821	2.30	2.30	1.85						577-3780	3780	13.70	8.25	6.90	577-3154	3154	3.75	2.20	1.75	577-0935	935	1.60	1.60	1.45
0.005	577-3496	3496	5.25	3.70	2.50	577-0823	823	3.05	3.05	2.45						577-3781	3781	18.10	10.90	9.10	577-3155	3155	5.00	2.95	2.35	817-0936	936	1.90	1.90	1.70
0.002	577-3497	3497	9.50	5.75	4.50	577-0825	825	5.65	3.35	2.65	577-0826	826	11.00	6.60	5.25	577-3782	3782	23.50	16.80	14.10	577-3156	3156	8.75	5.20	4.15	577-0937	937	3.70	3.70	3.30
0.001	577-3498	3498	14.80	9.00	7.00	577-0827	827	8.70	7.25	3.40	577-0828	828	18.38	11.04	9.00	577-3783	3783	41.70	24.50	20.50	577-3157	3157	11.35	6.50	5.20	577-0938	938	4.80	4.80	4.30
0.005	577-3499	3499	32.87	19.00	7.00	577-0829	829	24.00	14.05	11.25																577-0939	939	12.40	12.40	11.15

ECC Corporation SCRs, Triacs, Diacs



CASE DESCRIPTIONS: Fig. A, TO-5 metal for 1.6A devices; Fig. B, clipped thermotab for 1.6A devices; Fig. C, thermotab for 3-16A devices; Fig. D, diac case; Fig. E, TO-3 press-fit for 40A devices; Fig. F, press fit with insulated stud; Fig. G, press fit; Fig. H, stud mount. ECC has SCRs, triacs and diacs to fit all of your solid-state control needs.

HIGH VOLTAGE, HIGH CURRENT SCR's AND TRIACS

Molded package with isolated heat sink mtg. plate; ¼″ QC term.; ½″ spacing between live and dead parts. 440 V rms line voltage.

Lead (kW)	TRIACS Stock No.	TRIACS Type No.	TRIACS EACH 1-9	TRIACS EACH 10-99	SCRs Stock No.	SCRs Type No.	SCRs EACH 1-9	SCRs EACH 10-99
6.6	779-4816	Q8016U	14.00	11.70	779-5816	S8016U	8.10	6.75
6.6	779-5116	Q10016U	18.00	15.00	779-5916	S10016U	11.70	9.75
11	779-4825	Q8025U	16.70	13.80	779-5825	S8025U	14.00	11.71
11	779-5125	Q10025U	27.00	22.50	779-5925	S10025U	19.70	16.43
17.6	779-4840	Q8040U	26.40	22.00	779-5835	S8035U	18.70	15.61
17.6	779-5140	Q10040U	36.00	30.00	779-5935	S10035U	22.35	18.61
550 VOLTS RMS LINE VOLTAGE								
8.3	779-5216	Q12016U	25.10	21.00	779-6016	S12016U	15.30	12.75
13.8	779-5225	Q12025U	36.00	30.00	779-6025	S12025U	24.90	20.81
22	779-5240	Q12040U	46.80	39.00	779-6035	S12035U	29.70	24.81

LOGIC TRIACS

Direct interfacing with MOS and bi-polar IC outputs to operate peripheral equipment. TO-5 metal can. *I_{gt} on all 4 quads.

I_{gt} mA*	120 V rms Line, 150 Watts Stock No.	Type No.	EACH 1-9	EACH 10-99	240 V rms Line, 300 Watts Stock No.	Type No.	EACH 1-9	EACH 10-99
3	779-5303	L2000M3	2.06	1.72	779-5343	L4000M3	2.48	2.07
5	779-5305	L2001M5	1.90	1.58	779-5345	L4001M5	2.28	1.90
10	779-5307	L2001M7	1.69	1.41	779-5347	L4001M7	1.91	1.59
25	779-5309	L2001M9	1.44	1.20	779-5349	L4001M9	1.57	1.31

For light dimming, heating controls, line switching, etc. Heavy glass chip passivation. *Case isolated for direct mtg. †Max. On-State I_T; for 80°C, multiply 60° C rating by .66. V_{gt}=3V max. #Available in Press-Fit case G; ‡available with Stud Type case F; §available with built-in Trigger Diode; **See Directory for Stock and Type No.**

Stock No.	Type No.	Case	I_T† (RMS) 60°C	V_{DROM} Min. Volts	I_{gt} mA max.	Surge I_{TSM} A	EACH 1-9	EACH 10-99	EACH 100-Up
779-4390	Q2000KS	B	1.2A	200	10	20	1.52	1.27	.85
779-4618	Q4000KS	B	1.2A	400	10	20	1.61	1.34	.89
779-4204	Q-15§	A	2.3A	200	3	20	2.14	1.78	1.30
779-2152	A03004§	B*	2.3A	400	25	20	1.54	1.29	.86
779-2004	A01001§	C*	4.3A	200	10	20	1.90	1.59	1.06
779-2012	A01003§	C*	4.3A	400	10	20	1.99	1.66	1.11
779-2028	A01021§	C*	6.4A	200	25	60	1.69	1.41	.94
779-2032	A01022§	C*	6.4A	400	25	60	1.98	1.65	1.10
779-2052	A01061§	C*	9.2A	200	25	80	1.80	1.50	1.00
779-2056	A01062§	C*	9.2A	400	25	80	2.08	1.74	1.16
779-2060	A01064	C*	9.2A	600	25	80	3.88	3.24	2.16
779-4426	Q2006H#	H	9.2A	200	50	80	3.60	3.00	2.00
779-4640	Q4006H#	H	9.2A	400	50	80	4.32	3.60	2.40
779-2076	A01101§	C*	12A	200	25	100	2.12	1.77	1.18
779-2080	A01102	C*	12A	400	25	100	2.37	1.98	1.32
779-4430	Q2008H#	H	12A	200	50	100	3.68	3.07	2.05
779-4646	Q4008H#	H	12A	400	50	100	4.50	3.75	2.50
779-2100	A01141§	C*	14A	200	25	110	2.34	1.95	1.30
779-2104	A01142§	C*	14A	400	25	110	2.88	2.40	1.60
779-2108	A01144	C*	14A	600	25	110	4.68	3.90	2.80
779-4434	Q2010H#	H	14A	200	50	110	3.66	3.30	2.20
779-4649	Q4010H#	H	14A	400	50	110	4.78	3.98	2.65
779-2124	A01181§	C*	16A	200	50	180	3.24	2.70	1.80
779-2128	A01182§	C*	22 5A	400	50	180	4.22	3.52	2.35
779-4438	Q2015H#	H	22.5A	200	50	150	4.56	3.80	2.53
779-4440	Q2025C	E*	35A	200	50	230	7.44	6.20	4.13
779-4660	Q4025C	E*	35A	400	50	230	10.38	8.65	5.76
779-4458	Q2025H#	H	35A	200	50	230	6.20	5.17	3.45
779-4468	Q2040PFC‡	E*	57A	200	100	300	9.52	7.95	5.30
779-4672	Q4040PFC‡	E*	57A	400	100	300	14.34	11.95	7.95
779-4780	Q6040PFC‡	E*	57A	600	100	300	19.74	16.45	10.95
779-4465	Q2040H#	H	57A	200	100	300	7.65	6.38	4.25
779-4673	Q4040H#	H	57A	400	100	300	9.07	7.57	5.05

TRIGGER DIACS (Fig. D—DO-7 Glass Pkg.)

Stock No.	Type No.	V_{BO}	EACH 1-9	EACH 10-99	EACH 100-Up
779-3920	GT-22	22 V (±4 V)	.82	.68	.45
779-3930	GT-32	32 V (±4 V)	.72	.60	.40
779-3940	GT-40	43 V (±5 V)	.72	.60	.40
779-3956	GT-60	60 V (±5 V)	.72	.60	.40

SENSITIVE GATE SCR's

Sensitive gates, load capability from 800 mA to 10 amps, 30-600 volts peak. Excellent for simple feedback circuits in universal and DC motor speed controls, hand tool and heating controls. Available in thermopak, thermotab isolated and non-isolated package; or TO-5 metal can. *Case isolated. †Max. on State I_T; for 80°C, multiply 60°C rating by .66. V_{gt}=1 V max. I_{HO}=6 mA max.

Stock No.	Type No.	Case	I_T† (RMS) 60°C	V_{DROM} Min. Volts	I_{gt} Max. μA	Surge I_{TSM}	EACH 1-9	EACH 10-99	EACH 100-Up
779-2851	S0301KS2	.....	1.2A	30	200	50A	.72	.60	.40
779-2901	S0501KS2	.....	1.2A	50	200	50A	.74	.62	.43
779-5402	S1001KS2	.....	1.2A	100	200	50A	.83	.69	.46
779-5501	S2001KS2	.....	1.2A	200	200	50A	.88	.73	.49
779-5701	S4001KS2	.....	1.2A	400	200	50A	1.25	1.04	.69
779-2701	S0301JS1	B*	2.3A	30	50	50A	.84	.71	.47
779-3140	EC106Y2	B*	2.3A	30	200	50A	.82	.68	.45
779-3133	S0501JS1	B*	2.3A	50	50	50A	.92	.77	.51
779-3144	EC106F2	B*	2.3A	50	200	50A	.89	.74	.49
779-3136	S1001JS1	B*	2.3A	100	50	50A	.96	.80	.53
779-3148	EC106A2	B*	2.3A	100	200	50A	.92	.77	.51
779-3116	S2001JS1	B*	2.3A	200	50	50A	1.18	.90	.60
779-3120	EC106B2	B*	2.3A	200	200	50A	1.03	.86	.57
779-3124	S4001JS1	B*	2.3A	400	50	50A	1.80	1.50	1.00
779-3128	EC106D2	B*	2.3A	400	200	50A	1.68	1.40	.94
779-3052	S0303LS1	C*	4.3A	30	50	50A	.85	.71	.47
779-3064	EC106Y1	C*	4.3A	30	200	50A	.82	.68	.45
779-3056	S0503LS1	C*	4.3A	50	50	50A	.92	.77	.51
779-3068	EC106F1	C*	4.3A	50	200	50A	.89	.74	.49
779-3060	S1003LS1	C*	4.3A	100	50	50A	.96	.80	.53
779-3072	EC106A1	C*	4.3A	100	200	50A	.93	.77	.51
779-3004	S2003LS1	C*	4.3A	200	50	50A	1.18	.90	.60
779-3008	EC106B1	C*	4.3A	200	200	50A	1.03	.86	.57
779-3012	S4003LS1	C*	4.3A	400	50	50A	1.80	1.50	1.00
779-3016	EC106D1	C*	4.3A	400	200	50A	1.68	1.40	.94
779-3076	S0306LS2	C*	8.6A	30	200	100A	1.26	1.05	.70
779-3080	S0506LS2	C*	8.6A	50	200	100A	1.36	1.13	.75
779-3084	S1006LS2	C*	8.6A	100	200	100A	1.44	1.20	.80
779-3020	S2006LS2	C*	8.6A	200	200	100A	1.62	1.35	.90
779-3024	S4006LS2	C*	8.6A	400	200	100A	2.16	1.80	1.20
779-3086	S0308LS2	C*	12.2A	30	200	100A	1.36	1.13	.75
779-3092	S0508LS2	C*	12.2A	50	200	100A	1.44	1.20	.80
779-3100	S1008LS2	C*	12.2A	100	200	100A	1.54	1.28	.85
779-3028	S2008LS2	C*	12.2A	200	200	100A	1.72	1.43	.95
779-3032	S4008LS2	C*	12.2A	400	200	100A	2.26	1.88	1.25

NON-SENSITIVE SCR's

For applications where line transients, high line noise and sympathetic firing are problems. *Case isolated. †Max. on State I_T; for 80°C rating, multiply 60°C rating by .66. V_{gt}=1.5 V max.

Stock No.	Type No.	Case	I_T† (RMS) 60°C	V_{DROM} Min. Volts	I_{gt} Max. mA	Surge I_{TSM}	EACH 1-9	EACH 10-99	EACH 100-Up
779-2751	S0301K	B	1.2A	30	10	50A	.59	.49	.33
779-2771	S0501K	B	1.2A	50	10	50A	.74	.62	.41
779-2791	S1001K	B	1.2A	100	10	50A	.78	.66	.44
779-2801	S2001K	B	1.2A	200	10	50A	.84	.70	.47
779-4101	S4001K	B	1.2A	400	10	50A	1.01	.84	.56
779-3401	S2001M	A	2.3A	200	10	50A	1.56	1.30	.87
779-4301	S4001M	A	2.3A	400	10	50A	1.68	1.40	.94
779-3303	S2003L	C*	4.3A	200	10	50A	1.56	1.30	.87
779-4203	S4003L	C*	4.3A	400	10	50A	1.68	1.40	.94
779-2606	S0506H	H	8.6A	50	15	100A	1.22	1.02	.68
779-2656	S1006H	H	8.6A	100	15	100A	1.36	1.14	.76
779-2686	S2006H	H	8.6A	200	15	100A	1.52	1.27	.85
779-4006	S4006H	H	8.6A	400	15	100A	1.80	1.50	1.00
779-2608	S0508H	H	12.2A	50	15	100A	1.80	1.50	1.00
779-2658	S1008H	H	12.2A	100	15	100A	2.05	1.71	1.14
779-2688	S2008H	H	12.2A	200	15	100A	2.30	1.91	1.27
779-4008	S4008H	H	12.2A	400	15	100A	2.70	2.25	1.50
779-2610	S0510H	H	14.3A	50	15	100A	2.07	1.73	1.15
779-2660	S1010H	H	14.3A	100	15	100A	2.32	1.94	1.29
779-2690	S2010H	H	14.3A	200	15	100A	2.61	2.18	1.45
779-4010	S4010H	H	14.3A	400	15	100A	3.07	2.56	1.71
779-2616	S0516H	H	22.5A	50	15	150A	3.27	3.00	2.00
779-2666	S1016H	H	22.5A	100	15	150A	4.10	3.75	2.50
779-2696	S2016H	H	22.5A	200	15	150A	4.90	4.50	3.00
779-4016	S4016H	H	22.5A	400	15	150A	6.12	5.62	3.75

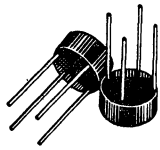
Allied Electronics Offers the Best Percentage of Order Handling in the Country

Varo Bridge Rectifiers

EXPLANATION OF COLUMN HEADINGS

V_{BR}, avalanche voltage. V_R, DC blocking voltage. V_{RM}, working peak reverse voltage. PIV, peak inverse voltage. I_O, average output, rectified current. V_F, forward voltage. t_{rr}, reverse recovery time.

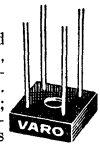
1-AMP EPOXY BRIDGE RECTIFIERS



Types W110, W111, VE18, VE28, VE48, and VE68 are for use in non-controlled avalanche applications. Types VE27, VE47, and VE67 are controlled avalanche rectifiers. All units have .025" diameter leads. Ratings: peak surge current, 4 amps maximum, 1 second at 60 Hz, ambient temperature of 25° C. Peak one-cycle surge current at 60 Hz, 25 amps maximum (non-recurrent). Continuous reverse power dissipation: 1 watt. Operating and storage temperature range, −50° to +150°C

Stock No.	Type No.	V(BR) (V) min.	V(BR) (V) max.	V_R VDC	V_R rms	V_{RM} (wkg)	EACH 1-9	EACH 10-99	EACH 100-Up
976-3200	W110	...	.....	25	17	25	1.42	.91	.81
976-3201	W111	...	.....	50	35	50	1.47	.95	.85
976-2010	VE18		.....	100	70	100	1.57	1.00	.90
976-2019	VE27	250	700	200	140	200	1.92	1.20	1.10
976-2020	VE28	..	.....	200	140	200	1.75	1.10	1.00
976-2042	VE47	450	900	400	280	400	2.10	1.30	1.20
976-2050	VE48	.	.....	400	280	400	1.92	1.20	1.10
976-2074	VE67	650	1100	600	420	600	2.52	1.59	1.45
976-2090	VE68		.....	600	420	600	2.35	1.49	1.35

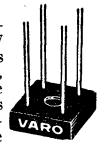
2-AMP EPOXY BRIDGE RECTIFIERS



Cont. reverse power dissipation, 1 watt. Operating and storage temperature, −50° to +150° C. Types VS-247, 447, and 647 are for use in controlled avalanche applications; types VS-248, 448, and 648 are for non-controlled. Peak surge current: 8 amps max. (1 second at 60 Hz; ambient temperature 25° C). Peak 1-cycle surge current at 60 Hz: 50 amps max (non-recurrent). Types VS-X are not-controlled avalanche; have 200 nanosecond reverse recovery time. Peak 1-cycle surge current at 60 Hz: 35 amps max (non-recurrent). Peak surge current: 6 amps max (1 second at 60 Hz). All units have .040" D. leads.

Stock No.	Type No.	BV_R (V) (min)	BV_R (V) (max)	V_R (VDC)	V_R (rms)	V_{RM} (wkg)	EACH 1-9	EACH 10-99	EACH 100-Up
976-3130	VS 247	250	700	200	140	200	2.00	1.20	1.10
976-3140	VS 447	450	900	400	280	400	2.25	1.30	1.20
976-3131	VS 248	.....	.....	200	140	200	1.75	1.10	1.00
976-3141	VS 448	.....	.....	400	280	400	2.00	1.20	1.10
976-3148	VS 647	650	1100	600	420	600	2.67	1.60	1.50
976-3152	VS 648	.....	.....	600	420	600	2.50	1.50	1.40
976-3114	VS 148X	.....	.....	100	70	100	2.62	1.65	1.50
976-3144	VS 248X	.....	.....	200	140	200	2.87	1.81	1.65
976-3153	VS 448X	.....	.....	400	280	400	3.17	1.98	1.81

6-AMP EPOXY BRIDGE RECTIFIERS



Types VH148, VH248, VH448 and VH648 are for non-controlled avalanche applications; Types VH247, VH447 and VH667 are controlled avalanche rectifiers. All units have .040" diameter leads. Ratings: peak surge current, 25 amps max., 1 second at 60 Hz, ambient temperature of 25° C. Peak 1-cycle surge current at 60 Hz, 100 amps max. (non-recurrent). Continuous reverse power dissipation, 2 watts. Operating and storage temperature range, −50 to +150° C.

Stock No.	Type No.	V_{BR} min.	(V) max.	V_R VDC	V_{RM} rms	V_{RM} (wkg)	EACH 1-9	EACH 10-99	EACH 100-Up
976-2850	VH148	.....	....	100	70	100	2.77	1.93	1.58
976-2852	VH247	250	700	200	140	200	3.22	2.25	1.85
976-2853	VH248	.....	.....	200	140	200	3.05	2.15	1.75
976-2854	VH447	450	900	400	280	400	3.72	2.59	2.13
976-2856	VH448	.....	.....	400	280	400	3.55	2.49	2.03
976-2858	VH647	650	1100	600	420	600	4.27	2.98	2.45
976-2860	VH648	.....	.....	600	420	600	3.50	2.88	2.35

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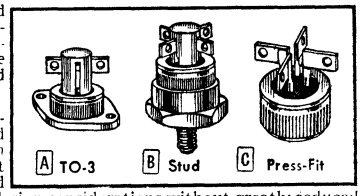
INTEGRATED BRIDGE RECTIFIERS



Single-phase integrated full-wave bridge rectifiers in compact, welded packages. Available in choice of TO-3, stud and press-fit mounts.

10- and 25-Amp. Avalanche Series. Specified maximum/minimum characteristics permit selection of decreased PRV safety factors in design considerations without greatly reduced transient voltage vulnerability.

10-Amp Fast Recovery Series. Not controlled avalanche, has 200 nanoseconds recovery time to permit reliable operation in high frequency and low RF interference applications.

10-AMP FAST RECOVERY SERIES

Average forward current, 10 amps max. at 100° C case temperature. Forward current (surge), 75 amps/leg. Reverse recovery time, 200 nanoseconds max. Junction temp. range, −65° to +150°C.

Stock No.	Type No.	Mtg.	V_{RM} (V)	Max V_R (V)	t_{rr} nsec max	EACH 1-9	EACH 10-99	EACH 100-Up
976-3049	VR100X/F	C	100	100	200	10.00	6.30	5.05
976-3051	VR100X/T/F	A	100	100	200	10.37	6.55	5.25
976-3050	VR100X/S/F	B	100	100	200	10.50	6.70	5.35
976-3100	VR200X/F	C	200	200	200	11.87	7.45	5.95
976-3102	VR200X/T/F	A	200	200	200	12.25	7.70	6.15
976-3101	VR200X/S/F	B	200	200	200	12.37	7.85	6.25
976-3110	VR400X/F	C	400	400	200	15.50	10.90	8.00
976-3112	VR400X/T/F	A	400	400	200	15.87	11.15	8.20
976-3111	VR400X/S/F	B	400	400	200	16.00	11.30	8.30

25-AMP FAST RECOVERY SERIES

Average forward current, 25 amps maximum at 100° C case temperature. Forward current (surge) 150 amps/leg. Reverse recovery time, 200 nanoseconds max. Junction temperature range, −65° to +150° C.

Stock No.	Type No.	Mtg.	V_{RM} (V)	Max V_R (V)	t_{rr} nsec (max)	EACH 1-9	EACH 10-99	EACH 100-Up
976-3183	VY100X	C	100	100	200	12.92	8.16	6.54
976-3185	VY100X/T	A	100	100	200	13.30	8.41	6.74
976-3184	VY100X/S	B	100	100	200	13.42	8.56	6.84
976-3186	VY200X	C	200	200	200	15.40	9.60	7.70
976-3188	VY200X/T	A	200	200	200	15.77	9.85	7.90
976-3187	VY200X/S	B	200	200	200	15.90	10.00	8.00
976-3189	VY400X	C	400	400	200	20.50	14.00	10.60
976-3191	VY400X/T	A	400	400	200	20.87	14.25	10.80
976-3190	VY400X/S	B	400	400	200	21.00	14.40	10.95

10-AMP CONTROLLED AVALANCHE SERIES

Forward current (surge), 100 amps/leg. Continuous power dissipation in V_{BR} region, 4 watts at case temperature of 50°C. Junction temperature range. −65°C to +160°C. *Press-fit style without flag terminals.

Stock No.	Type No.	Mtg.	V_{RM} (V)	V_{BR} (V) min.	V_{BR} (V) max.	Max. V_R (V)	EACH 1-9	EACH 10-99	EACH 100-Up
976-0200	1N4436	C*	200	250	500	250	5.87	4.15	3.05
976-0205	1N4436/F	C	200	250	500	250	5.87	4.15	3.05
976-0220	1N4436/T/F	A	200	250	500	250	6.25	4.40	3.25
976-0210	1N4436/S/F	B	200	250	500	250	6.37	4.55	3.35
976-0230	1N4437	C*	400	450	700	450	7.75	5.45	4.00
976-0235	1N4437/F	C	400	450	700	450	7.75	5.45	4.00
976-0250	1N4437/T/F	A	400	450	700	450	8.12	5.70	4.20
976-0240	1N4437/S/F	B	400	450	700	450	8.25	5.85	4.30
976-0260	1N4438	C*	600	650	900	650	10.62	7.45	5.45
976-0265	1N4438/F	C	600	650	900	650	10.62	7.45	5.45
976-0280	1N4438/T/F	A	600	650	900	650	11.00	7.70	5.65
976-0270	1N4438/S/F	B	600	650	900	650	11.12	7.85	5.75

25-AMP CONTROLLED AVALANCHE SERIES

Forward current (surge), 250 amps/leg. Continuous power dissipation in V_{BR} region, 4 watts at case temperature of 50°C. Junction temperature range, −65°C to +180°C.

Stock No.	Type No.	Mtg.	V_{RM} (V)	V_{BR} (V) min.	V_{BR} (V) max.	Max. V_R (V)	EACH 1-9	EACH 10-99	EACH 100-Up
976-3160	VT200	C	200	250	700	200	7.62	5.35	3.95
976-3162	VT200/T	A	200	250	700	200	8.00	5.60	4.15
976-3161	VT200/S	B	200	250	700	200	8.12	5.75	4.25
976-3170	VT400	C	400	450	900	400	10.25	7.00	5.30
976-3172	VT400/T	A	400	450	900	400	10.62	7.25	5.50
976-3171	VT400/S	B	400	450	900	400	10.75	7.40	5.60
976-3180	VT600	C	600	650	1100	600	13.87	9.85	7.10
976-3182	VT600/T	A	600	650	1100	600	14.25	10.10	7.30
976-3181	VT600/S	B	600	650	1100	600	14.37	10.25	7.40

Varo Rectifiers

HIGH VOLTAGE DIFFUSED POWER RECTIFIERS

Offer high voltage ranges in minimum-sized epoxy-encapsulated packages with low leakage current. All ratings are obtained without the use of special heat sinks or mounting techniques. I_{FM} at 60 Hz, 3 amps. I_R at PIV and 25°C, 1 μA. **Series VF:** I_R at PIV and 100° C, μA. T_R, −55° to +150°C. **Fast Recovery Series VFX:** I_R at PIV and 85° C, 60 μA. T_A, −55° to +85° C. t_{rr}, 250 nanosecs. Case A: 1″ L. x .250″ D. Case B: 2″ x .300″. Case C: 3″ x .300″.

SERIES VF

Stock No.	Type No.	I_c mA	PIV kV	V_F V	Case	EACH 1-9	10-99	100-Up
976-2600	VF5-5	5	5	12	A	2.37	1.60	1.36
976-2610	VF5-7	5	7	12	A	2.52	1.71	1.45
976-2620	VF5-10	5	10	18	A	2.90	1.96	1.66
976-2630	VF5-12	5	12	18	A	3.30	2.22	1.88
976-2640	VF5-15	5	15	35	B	3.40	2.30	1.95
976-2650	VF5-20	5	20	35	B	4.40	2.97	2.52
976-2660	VF5-25	5	25	35	B	5.50	3.72	3.15
976-2670	VF5-30	5	30	50	C	6.62	4.46	3.78
976-2680	VF5-40	5	40	50	C	8.82	5.95	5.04
976-2686	VF10-5	10	5	12	A	2.62	1.77	1.50
976-2688	VF10-7	10	7	12	A	2.80	1.89	1.60
976-2690	VF10-10	10	10	18	A	3.20	2.16	1.83
976-2692	VF10-12	10	12	18	A	3.62	2.44	2.07
976-2694	VF10-15	10	15	35	B	3.75	2.54	2.15
976-2696	VF10-20	10	20	35	B	4.85	3.27	2.77
976-2698	VF10-25	10	25	35	B	6.07	4.09	3.47
976-2700	VF10-30	10	30	50	C	7.27	4.91	4.16
976-2702	VF10-40	10	40	50	C	9.70	6.54	5.54
976-2704	VF25-5	25	5	12	A	2.87	1.95	1.65
976-2706	VF25-7	25	7	12	A	3.07	2.08	1.76
976-2708	VF25-10	25	10	18	A	3.52	2.38	2.02
976-2710	VF25-12	25	12	18	A	3.97	2.68	2.27
976-2612	VF25-15	25	15	35	B	4.15	2.80	2.37
976-2714	VF25-20	25	20	35	B	5.32	3.60	3.05
976-2716	VF25-25	25	25	35	B	6.67	4.51	3.82
976-2718	VF25-30	25	30	50	C	8.00	5.39	4.57
976-2720	VF25-40	25	40	50	C	10.67	7.20	6.10

SERIES VFX (FAST RECOVERY)

Stock No.	Type No.	I_c mA	PIV kV	V_F V	Case	EACH 1-9	10-99	100-Up
976-2605	VF5-5X	5	5	15	A	2.62	1.77	1.50
976-2615	VF5-7X	5	7	15	A	2.80	1.89	1.60
976-2625	VF5-10X	5	10	30	A	3.20	2.16	1.83
976-2635	VF5-12X	5	12	30	A	3.62	2.44	2.07
976-2645	VF5-15X	5	15	60	B	3.75	2.54	2.15
976-2655	VF5-20X	5	20	60	B	4.85	3.27	2.77
976-2665	VF5-25X	5	25	60	B	6.07	4.09	3.47
976-2675	VF5-30X	5	30	90	C	7.27	4.91	4.16
976-2685	VF5-40X	5	40	90	C	9.70	6.54	5.54
976-2687	VF10-5X	10	5	15	A	2.87	1.95	1.65
976-2689	VF10-7X	10	7	15	A	3.07	2.08	1.76
976-2691	VF10-10X	10	10	30	A	3.52	2.38	2.02
976-2693	VF10-12X	10	12	30	A	3.97	2.68	2.27
976-2695	VF10-15X	10	15	60	B	4.15	2.80	2.37
976-2697	VF10-20X	10	20	60	B	5.32	3.60	3.05
976-2699	VF10-25X	10	25	60	B	6.67	4.51	3.82
976-2701	VF10-30X	10	30	90	C	8.00	5.39	4.57
976-2703	VF10-40X	10	40	90	C	10.67	7.20	6.10
976-2705	VF25-5X	25	5	15	A	3.17	2.14	1.81
976-2707	VF25-7X	25	7	15	A	3.40	2.29	1.94
976-2709	VF25-10X	25	10	30	A	3.87	2.62	2.22
976-2711	VF25-12X	25	12	30	A	4.35	2.94	2.49
976-2713	VF25-15X	25	15	60	B	4.57	3.08	2.61
976-2715	VF25-20X	25	20	60	B	4.12	3.95	3.35
976-2717	VF25-25X	25	25	60	B	7.35	4.96	4.20
976-2719	VF25-30X	25	30	90	C	8.80	5.94	5.03
976-2721	VF25-40X	25	40	90	C	11.72	7.91	6.70

HIGH-VOLTAGE/CURRENT RECTIFIERS

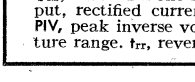
Diffused high voltage, high current silicon rectifiers for industrial and commercial uses. Epoxy encapsulated package. ¼″ spade terminals. Max. DC reverse current at 25° C and rated PIV is 1.0 μA; at 125° C, 1 mA. Peak 1-cycle surge current at 60 Hz, 50 amps (non-recurrent). Ambient operating and storage temperature range, −50 to +125° C. Overall size, 3x¾x¾″.

Stock No.	Type No.	PIV (V)	I_o (A)	V_F (V)	EACH 1-9	10-99	100-Up
976-1500	VC20	2000	2	4	7.00	5.20	4.00
976-1510	VC30	3000	2	6	7.42	5.52	4.25
976-1520	VC40	4000	2	8	7.87	5.85	4.50
976-1530	VC50	5000	1.5	10	8.30	6.18	4.75
976-1540	VC60	6000	1.5	12	8.75	6.50	5.00
976-1550	VC70	7000	1.5	12	9.17	6.82	5.25
976-1560	VC80	8000	1	14	9.62	7.15	5.50

EXPLANATION OF COLUMN HEADINGS

I_{FM}, maximum one-half cycle surge current. I_o, average output, rectified current. I_R, maximum DC reverse current. **PIV**, peak inverse voltage. T_A, ambient operating temperature range. t_{rr}, reverse recovery time. V_F, forward voltage.

HIGH-VOLTAGE DIFFUSED SILICON RECTIFIERS



Series 7715. High-voltage diffused silicon rectifiers designed for industrial and commercial applications requiring high reliability at an economical cost. Epoxy-encapsulated package provides a dielectric strength of 400 volts/mil and an electrical insulation resistance of $3x10^{12}$ ohms at 95° C and 95% relative humidity. Tinned copper leads allow easy soldering with high electrical and thermal conductance. Withstand 500g shock, vibration of 100 cycles, and peak acceleration of 10g. Maximum DC reverse current at 25° C and rated V_R, I_R, 1.0 μA. DC reverse current at 125° C, 100.0 μA. Peak one-half cycle surge current, at 25° C and 60 Hz, 1.5 amps. Ambient operating and storage temperature range, −55° C to +125° C. Ratings obtained without special heat sinks or mountings.

Series 7715X. High-voltage diffused silicon rectifiers featuring fast reverse recovery time for critical applications. Reverse recovery time at I_f and I_R of 2 mA, 300 nsec max.; at I_f of 20 mA, I_R of 2 mA, 1000 nsec max. Other specifications and characteristics same as series 7715, except reverse current at 125° C, 150.0 μA, and peak one-half cycle surge current, 1.0 amp.

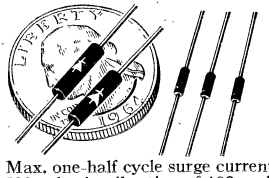
SERIES 7715

Stock No.	Type No.	PRV (V)	I_o (mA)	V_F (V)	EACH 1-9	10-99	100-Up
976-1001	7715-3	3000	75	6.0	3.35	2.20	1.80
976-1003	7715-5	5000	50	10.0	4.25	2.75	2.25
976-1005	7715-6	6000	50	12.0	4.67	3.03	2.48
976-1006	7715-7	7000	50	14.0	4.95	3.30	2.70
976-1008	7715-10	10,000	25	20.0	6.20	4.40	3.60
976-1010	7715-15	15,000	25	30.0	9.62	6.60	5.40
976-1012	7715-20	20,000	25	40.0	11.12	7.70	6.30
976-1014	7715-30	30,000	25	60.0	16.57	9.90	8.10
976-1016	7715-40	40,000	25	80.0	19.25	12.10	9.90
976-1018	7715-50	50,000	25	100.0	25.25	15.40	12.60

SERIES 7715X

Stock No.	Type No.	PRV (V)	I_o (mA)	V_F (V)	EACH 1-9	10-99	100-Up
976-1002	7715-3X	3000	50	8.0	6.17	4.06	3.32
976-1004	7715-5X	5000	30	12.0	7.85	5.07	4.15
976-1007	7715-7X	7000	30	18.0	9.12	6.08	5.00
976-1009	7715-10X	10,000	20	24.0	11.50	8.10	6.65
976-1011	7715-15X	15,000	20	36.0	17.75	12.20	9.95
976-1013	7715-20X	20,000	20	52.0	20.50	14.20	11.60
976-1015	7715-30X	30,000	15	75.0	25.00	18.27	11.90
976-1017	7715-40X	40,000	15	100.0	35.52	22.32	18.27
976-1019	7715-50X	50,000	15	125.0	46.57	28.41	23.25

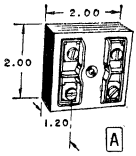
VB SERIES HV DIFFUSED SILICON RECTIFIERS



Suffix X in Type No. and Type 1N-4441, are *fast recovery series. Max. reverse recovery time at I_f and I_R of 2 mA, 300 nsec. Electrical characteristics; Max. DC reverse current at PIV and 25° C, .05 μA. *0.3 μA; at PIV and 100° C, 5.0 μA, *60 μA. Ambient operating temperature range, −55° to +150° C. Max. one-half cycle surge current at 60 Hz, 3 amps. All withstand 500g shock, vibration of 100 cycles, and peak acceleration of 10g. Epoxy encapsulated packages. 0.4″ long by .100″ dia.

Stock No.	Type No.	PIV (V)	I_o @ 40° C (mA)	V_F (V) 25° C and I_o	EACH 1-9	10-99	100-Up
976-1400	VB10	1000	100	5	2.30	1.41	1.07
976-1402	VB15	1500	100	5	2.45	1.51	1.15
976-1404	VB20	2000	100	5	2.60	1.59	1.20
976-1406	VB25	2500	100	5	2.80	1.72	1.30
976-1408	VB30	3000	50	10	3.05	1.88	1.42
976-1410	VB40	4000	50	10	3.32	2.05	1.56
976-1412	VB50	5000	50	10	3.90	2.40	1.82
976-1414	VB60	6000	50	10	4.25	2.62	1.99
976-1401	VB10X	1000*	50	6	3.07	1.88	1.43
976-1403	VB15X	1500*	50	6	3.27	2.01	1.53
976-1405	VB20X	2000*	50	6	3.47	2.12	1.60
976-1407	VB25X	2500*	25	12	3.72	2.30	1.73
976-1409	VB30X	3000*	25	12	4.07	2.50	1.90
976-1411	VB40X	4000*	25	12	4.42	2.74	2.08
976-1413	VB50X	5000*	25	12	5.20	3.20	2.42
976-0290	IN4441	1500*	25	4	2.97	2.01	1.53

Solid-State Relays



TELEDYNE SOLID STATE

High reliability and maintenance-free operation make relays ideal for traffic control, emergency power systems and so on. Input and output transient protection. Low contact resistance and contacts withstanding overloads of 1000% above ratings. Lack of moving contacts prevent arcing for switching in explosive atmospheres. High contact surge rating for lighting control systems. Only units rated 10 amps or higher need external heat sinking.

HIGH POWER, HIGH INPUT UNITS (Fig. A)

Stock No.	Mfr's Type	Input	Output VAC max.	Output Amps	EACH 1-4	5-9	10-24	25-49
959-2100	61A-14A1-9	3-8 VDC	140	14	40.87	32.70	31.10	29.40
959-2101	61A-14A1-10	7-85 VDC	140	14	47.75	38.20	36.30	34.40
959-2102	61A-14A1-11	90-280 VAC	140	14	43.12	34.50	32.80	31.00
959-2103	61A-14A2-9	3-8 VDC	280	14	44.25	35.40	33.60	31.90
959-2104	61A-14A2-10	7-85 VDC	280	14	51.00	40.80	38.80	36.70
959-2105	61A-14A2-11	90-280 VAC	280	14	46.62	37.30	35.40	33.60
959-2106	61A-21A1-9	3-8 VDC	140	21	44.37	35.50	33.80	32.00
959-2107	61A-21A1-10	7-85 VDC	140	21	51.12	40.90	38.80	36.80
959-2108	61A-21A1-11	90-280 VAC	140	21	46.62	37.30	35.40	33.60
959-2109	61A-21A2-9	3-8 VDC	280	21	47.50	38.00	36.10	34.20
959-2110	61A-21A2-10	7-85 VDC	280	21	54.37	43.50	41.40	39.20
959-2111	61A-21A2-11	90-280 VAC	280	21	50.37	40.30	38.30	36.30

HIGH PERFORMANCE, HIGH INPUT (Fig. B)

959-2155	601-1101	3-8 VDC	140	1	30.00	24.00	21.60	19.20
959-2156	601-1102	3-8 VDC	140	3	31.87	25.50	22.95	20.40
959-2157	601-1103	3-8 VDC	140	5	33.75	27.00	24.30	21.60
959-2158	601-1104	3-8 VDC	140	7	35.62	28.50	25.65	22.80
959-2159	601-1105	3-8 VDC	140	10	38.12	30.50	27.45	24.40
959-2160	601-1106	3-8 VDC	280	1	31.25	25.00	22.50	20.00
959-2161	601-1107	3-8 VDC	280	3	33.12	26.50	23.85	21.20
959-2162	601-1108	3-8 VDC	280	5	35.00	28.00	25.20	22.40
959-2163	601-1109	3-8 VDC	280	7	36.87	29.50	26.55	23.60
959-2164	601-1110	3-8 VDC	280	10	39.37	31.50	28.35	25.20
959-2165	601-1111	7-85 VDC	140	1	30.00	24.00	21.60	19.20
959-2166	601-1112	7-85 VDC	140	3	31.87	25.50	22.95	20.40
959-2167	601-1113	7-85 VDC	140	5	33.75	27.00	24.30	21.60
959-2168	601-1114	7-85 VDC	140	7	35.62	28.50	25.65	22.80
959-2169	601-1115	7-85 VDC	140	10	38.12	30.50	27.45	24.40
959-2170	601-1116	7-85 VDC	280	1	31.25	25.00	22.50	20.00
959-2171	601-1117	7-85 VDC	280	3	33.12	26.50	23.85	21.20
959-2172	601-1118	7-85 VDC	280	5	35.00	28.00	25.20	22.40
959-2173	601-1119	7-85 VDC	280	7	36.87	29.50	26.55	23.60
959-2174	601-1120	7-85 VDC	280	10	39.37	31.50	28.35	25.20
959-2175	601-1121	90-280 VAC	140	1	30.62	24.50	22.05	19.60
959-2176	601-1122	90-290 VAC	140	3	32.50	26.00	23.40	20.80
959-2177	601-1123	90-280 VAC	140	5	34.37	27.50	24.75	22.00
959-2178	601-1124	90-280 VAC	140	7	36.25	29.00	26.10	23.20

HIGH PERFORMANCE, HIGH INPUT (Cont'd)

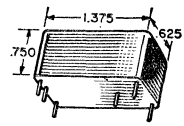
Stock No.	Mfr's Type	Input	Output VAC max.	Output Amps	EACH 1-4	5-9	10-24	25-49
959-2179	601-1125	90-280 VAC	140	10	34.50	27.90	24.80	21.70
959-2180	601-1126	90-280 VAC	280	1	25.50	22.95	20.40	17.85
959-2181	601-1127	90-280 VAC	280	3	30.35	24.30	21.60	18.90
959-2182	601-1128	90-280 VAC	280	5	31.25	25.65	22.80	19.95
959-2183	601-1129	90-280 VAC	280	7	33.75	27.00	24.00	21.00
959-2184	601-1130	90-280 VAC	280	10	35.75	28.80	25.60	22.40

LOW COST COMMERCIAL UNITS (Fig. B)

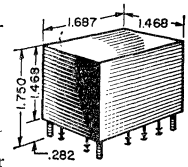
Stock No.	Type 601-	Input	Output VAC max.	Output Amps	EACH 1-4	5-9	10-24	25-49	50-Up
959-2115	1001	3-10 VDC	140	1	17.50	14.00	12.20	11.20	9.90
959-2116	1002		140	3	19.37	15.50	13.50	12.40	10.85
959-2117	1003		140	5	21.25	17.00	15.30	13.60	11.90
959-2118	1004		140	7	23.12	18.50	16.60	14.80	12.95
959-2119	1005		140	10	25.62	20.50	18.45	16.40	14.55
959-2020	1006		280	1	18.43	14.75	13.30	11.80	10.30
959-2121	1007		280	3	20.31	16.25	14.60	13.00	11.40
959-2122	1008		280	5	22.18	17.75	16.00	14.20	12.40
959-2123	1009		280	7	24.06	19.25	17.30	15.40	13.50
959-2124	1010		280	10	26.56	21.25	19.15	17.05	14.90
959-2125	1011	6-32 VDC or 15-45 VAC	140	1	17.50	14.00	12.20	11.20	9.80
959-2126	1012		140	3	19.37	15.50	13.50	12.40	10.85
959-2127	1013		140	5	21.25	17.00	15.30	13.60	11.90
959-2128	1014		140	7	23.12	18.50	16.60	14.80	12.95
959-2129	1015		140	10	25.62	20.50	18.45	16.40	14.55
959-2130	1016		280	1	18.43	14.75	13.30	11.80	10.30
959-2131	1017		280	3	20.31	16.25	14.60	13.00	11.40
959-2132	1018		280	5	22.18	17.75	16.00	14.20	12.40
959-2133	1019		280	7	24.06	19.25	17.30	15.40	13.50
959-2134	1020		280	10	26.56	21.25	19.15	17.05	14.90
959-2135	1021	20-75 VDC or 60-140 VAC	140	1	17.50	14.00	12.20	11.20	9.80
959-2136	1022		140	3	19.37	15.50	13.50	12.40	10.85
959-2137	1023		140	5	21.25	17.00	15.30	13.60	11.90
959-2138	1024		140	7	23.12	18.50	16.60	14.80	12.95
959-2139	1025		140	10	25.62	20.50	18.45	16.40	14.55
959-2140	1026	20-75 VDC or 60-140 VAC	280	1	18.43	14.75	13.30	11.80	10.30
959-2141	1027		280	3	20.31	16.25	14.60	13.00	11.40
959-2142	1028		280	5	22.18	17.25	16.00	14.20	12.40
959-2143	1029		280	7	24.06	19.25	17.30	15.40	13.50
959-2144	1030		280	10	26.56	21.25	19.15	17.05	14.90

STRUTHERS DUNN SOLID STATE RELAYS

AC Null Sensing Relays. Models 14 and 15 are inexpensive highly sensitive AC operated devices for servo/differential control. The 10 watt reed switch output contacts respond to phase reversals of input signal. The internal power supply, continuously energized by the primary 120 VAC power, produces a reference voltage. An unbalance in the signal system produces an AC voltage which is compared with the reference voltage. The phase relationship between the signal and the reference voltage determines which of the output switches will close. At "null" the signal system output is at zero voltage and both switches are open. Wt. 3 oz.

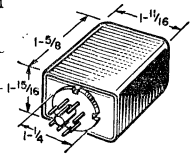


Stock No.	Mfr's Type	Input Impedance	Min. Pull-in Signal	Max Signal Overvoltage	Operational Voltage Range Ratio	Drop-in Drop-out Differential	PRICE EACH 1-24	25-49
929-1434	14	200K	500MV	150 Volts	100:1	10%	24.00	22.80
929-1435	15	20K	5MV	10 Volts	2,000:1	10%	25.00	33.30
929-1401	S15	10K	1MV	10 Volts	10,000:1	10%	37.30	35.50
929-1433	13	Power supply for signal voltage use with 15 and S15 if low voltage supply is not available. Wt. 7 oz.				.....	6.10	5.80



PRECISE SET-POINT RELAYS

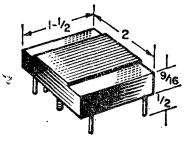
Precise Set-Point Relays. Models 11 and 12 are sensitive monitoring relays which provide a precise set-point control for over or under voltage/current level sensing. Model 11 is a latching type while Model 12 provides on-off control. All units require an 8VAC primary power supply and respond to a DC signal of 1 volt and/or 1 milliampere. Output contacts are long life 10 watt reed switches, Normally Open.



CONTACT POSITION

Model	Primary Power Applied Signal Below Setpoint	Signal Above Setpoint (Min 10 MS)	Signal Drops Below Setpoint	Remove Primary Power
11A	Open	Close	Close	Open
12A	Open	Close	Open	Open

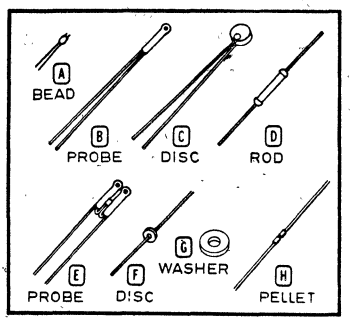
Model	Primary Power Applied Signal Above Setpoint	Signal Below Setpoint (Min. 10MS)	Signal Rises Above Setpoint	Remove Primary Power
11B	Open	Close	Close	Open
12B	Open	Close	Open	Open



Stock No.	Mfr's Type	Description	Weight	Price EACH 1-24	25-49	50-74	75-Up
929-1429	11A	Overvoltage latch	3 oz.	18.10	17.20	16.29	14.48
929-1430	11B	Undervoltage latch	3 oz.	19.80	18.18	17.82	15.84
929-1431	12A	Overvoltage on/off	3 oz.	18.10	17.20	16.29	14.48
929-1432	12B	Undervoltage on/off	3 oz.	19.80	18.81	17.82	15.84
929-1433	13	AC power supply	7 oz.	6.10	5.80	5.49	4.88

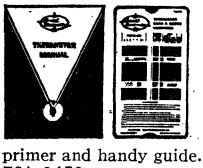
Large Quantity Users Write for Higher Lot Prices

Fenwal Electronics Thermistors



High-reliability precision thermal resistors with high negative coefficient of resistance. As temperature increases, resistance goes down. Use glass coated beads for compact size, fast response, and where temperatures go to 600°. Medium-small glass probes similar to beads, but are more rugged, mount more easily and are useful in liquid media. *Iso-Curve interchangeable glass probe thermistors are curved-matched to close resistance tolerances over large temperature spans. Discs are useful for medium power and time response applications. Rods and washers are used where high power dissipation is required. Discs, washers and rods operate at temperatures to +150° C. See Thermistor Engineering Package, below. Av. shpg. wt., 2 oz.

THERMISTOR ENGINEERING PACKAGE

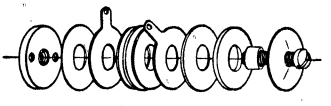


Includes a 5x8" resistance-temperature calculator and a thermistor manual that gives the specifications of over 500 thermistors. Serves as a step-by-step primer and handy guide. Shpg. wt., 4 oz.

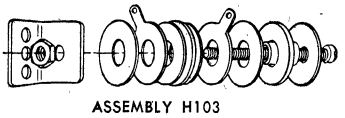
791-0450.....1.00

WASHER MOUNTING HARDWARE KITS

ASSEMBLY H101



ASSEMBLY H102



ASSEMBLY H103

Include bakelite, steel and lead washers plus terminals, sleeves, screws and nuts for thermistor mounting. H101 uses 10-32 screw and hex nut. H102 uses 10-32 screw and tapped aluminum mounting base with two 8-32 mtg. holes. H103 uses 10-32 screw and steel mounting bracket with 10-32 hex nut.

791-0501. Kit H101. Wt., 3 oz. 1-9 Ea. 1.25
10-24.....Each 1.00 25-Up.....Each .82

791-0502. Kit H102. Wt., 3 oz. 1-9 Ea. 1.25
10-24.....Each 1.00 25-Up.....Each .82

791-0503. Kit H103. Wt., 3 oz. 1-9 Ea. 1.25
10-24.....Each 1.00 25-Up.....Each .82

KIT H100. One of H101, 2 and 3 above.
791-0500. 1-9.....Each 2.50
10-24.....Each 2.00 25-Up.....Each 1.63

GLASS COATED BEADS

Stock No.	Mfr's Type	Fig.	Ohms @ 25°C	Tol. ±%	Resis. Ratio 0°C: 50°C	Diss. Const. mW °C	Time Const. (secs)	Dia. In.	EACH 1-9	10-24	25-Up
791-0445	*GD25J1*	A	500	20	5.1:1	.7	2	.043	3.24	2.60	2.11
791-0424	GB31J1	A	1000	20	7.3:1	.7	2	.043	2.70	2.16	1.76
791-0427	*GB32J2*	A	2000	20	7.3:1	.7	2	.043	1.96	1.57	1.28
791-0435	GB35J1	A	5000	20	7.3:1	.7	2	.043	3.24	2.60	2.11
791-0436	*GB41J1*	A	10k	20	7.5:1	.7	2	.043	3.24	2.60	2.11
791-0401	GA42J16	A	15k	20	9.1:1	.7	2	.043	3.24	2.60	2.11
791-0403	*GA45J1*	A	50k	20	9.1:1	.7	2	.043	2.67	2.14	1.74
791-0408	*GA51J1*	A	100k	15	10.3:1	.7	2	.043	1.96	1.57	1.28
791-0414	GA52J16	A	150k	20	10.3:1	.7	2	.043	2.70	2.16	1.76
791-0412	GA52J2	A	200k	20	10.9:1	.7	2	.043	2.70	2.16	1.76
791-0418	*GA55J1*	A	500k	20	11.8:1	.7	2	.043	3.24	2.60	2.11
791-0421	*GA61J1*	A	1000k	20	14.0:1	.7	2	.043	3.78	3.03	2.46

GLASS PROBES

791-0425	*GB31P2*	B	1000	20	7.3.1	1	25	.1	2.00	1.60	1.30
791-0431	*GB32P2*	B	2000	20	7.3:1	1	25	.1	2.00	1.60	1.30
791-0432	GB32P8	B	2000	20	7.3:1	1	25	.1	2.35	1.88	1.53
791-0433	*GB34P2*	B	4000	20	7.3:1	1	25	.1	2.00	1.60	1.30
791-0434	GB34P92	E*	4000	2	7.04:1	1.9	25	.180	40.00	32.00	26.00
791-0437	*GB41P2*	B	10k	20	7.5:1	1	25	.1	2.40	1.92	1.56
791-0441	*GB42P2*	B	20k	20	7.5:1	1	25	.1	2.40	1.92	1.56
791-0400	*GA41P8*	B	10k	20	9.1:1	1	25	.1	3.24	2.60	2.11
791-0402	GA42P18	B	15k	20	9.1:1	1	25	.1	3.29	2.64	2.14
791-0404	*GA45P2*	B	50k	20	9.1:1	1	25	.1	2.20	1.76	1.43
791-0405	GA45P48	B	50k	20	9.1:1	1	25	.1	2.59	2.08	1.69
791-0410	GA51P8	B	100k	15	10.3:1	1	25	.1	2.35	1.88	1.53
791-0417	GA52P48	B	150k	20	10.3:1	1	25	.1	2.60	2.08	1.69
791-0415	GA52P2	B	200k	20	10.9:1	1	25	.1	2.00	1.60	1.30
791-0419	GA55P2	B	500k	20	11.8:1	1	25	.1	2.40	1.92	1.56
791-0420	GA55P8	B	500k	20	11.8:1	1	25	.1	2.82	2.26	1.84
791-0422	GA61P2	B	1000k	20	14.0:1	1	25	.1	2.80	2.24	1.82
791-0423	GA61P8	B	1000k	20	14.1:1	1	25	.1	3.29	2.64	2.14

GLASS DIODE CLOSURES (PELLETS)

791-1103	PB32D1	H	2k	10	6.9:1	2	8	.07	1.80	1.44	1.17
791-1104	PB35D1	H	5k	10	6.9:1	2	8	.07	1.80	1.44	1.17
791-1100	PB41D1	H	10k	10	6.9:1	2	8	.07	1.80	1.44	1.17
791-1101	PA45D1	H	50k	10	9.1:1	2	8	.07	1.80	1.44	1.17
791-1102	PA51D1	H	100k	10	9.1:1	2	8	.07	1.80	1.44	1.17
791-1105	PP55D1	H	500k	10	11.6:1	2	8	.07	1.80	1.44	1.17
791-1106	PP61D1	H	1 meg	10	11.6:1	2	8	.07	1.80	1.44	1.17

DISCS

791-0302	FB31J1	C	1k	10	6.9:1	2	3	.05	1.45	1.16	.95
791-0303	FB32J1	C	2k	10	6.9:1	2	4	.05	1.45	1.16	.95
791-0300	*FA41J1*	C	10k	10	9.1:1	2	3.5	.05	1.45	1.16	.95
791-0301	FA42J1	C	20k	10	9.1:1	2	4.5	.05	1.45	1.16	.95
791-0304	FP52J1	C	200k	10	11.6:1	2	4.5	.05	1.45	1.16	.95
791-0606	JD12J4	C	15	10	4.8:1	3	10	.1	1.00	.80	.65
791-0607	JD21J1	C	100	10	4.8:1	4	10	.1	1.00	.80	.65
791-0604	*JB25J1*	C	500	10	6.9:1	3	10	.1	1.00	.80	.65
791-0605	*JB31J1*	C	1000	10	6.9:1	4	10	.1	1.00	.80	.65
791-0600	JA33J1	C	3000	10	9.1:1	3	10	.1	1.00	.80	.65
791-0601	*JA35J1*	C	5000	10	9.1:1	4	10	.1	1.00	.80	.65
791-0602	JA38J1	C	8000	10	9.1:1	4	10	.1	1.00	.80	.65
791-0603	JA41J1	C	10k	10	9.1:1	4	10	.1	1.00	.80	.65
791-0608	JP43J2	C	25k	10	11.6:1	3	10	.1	1.00	.80	.65
791-0609	JP45J2	C	50k	10	11.6:1	4	8	.1	1.00	.80	.65
791-0610	*JP51J1*	C	100k	10	11.6:1	4	15	.1	1.00	.80	.65
791-0707	KD05J1	C	5	10	4.8:1	4	16	.2	.85	.68	.56
791-0708	KD11J1	C	10	10	4.8:1	4	16	.2	.85	.68	.56
791-0709	KD13J3	C	30	10	4.8:1	8	28	.2	.85	.68	.56
791-0710	KD14J1	C	40	10	4.8:1	6	50	.2	.85	.68	.56
791-0703	*KB21J1*	C	100	10	6.9:1	4	16	.2	.85	.68	.56
791-0704	KB22J1	C	200	10	6.9:1	5	18	.2	.85	.68	.56
791-0705	KB23J1	C	300	10	6.9:1	6	20	.2	.85	.68	.56
791-0706	*KB25J1*	C	500	10	6.9:1	6	25	.2	.85	.68	.56
791-0700	*KA31L1*	F	1000	10	9.1:1	6	20	.2	.85	.68	.56
791-0701	KA33J1	C	3000	10	9.1:1	6	22	.2	.85	.68	.56
791-0702	*KA35J3*	C	5000	10	9.1:1	7	35	.2	.85	.68	.56
791-0712	KP41J2	C	10k	10	11.6:1	4	20	.2	.85	.68	.56
791-0713	KP45J1	C	50k	10	11.6:1	6	50	.2	.85	.68	.56
791-0102	CB13J2	C	30	10	6.9:1	8	28	.3	.85	.68	.56
791-0103	CB21J1	C	100	10	6.9:1	8.5	42	.3	.85	.68	.56
791-0104	CB23J1	C	300	10	6.9:1	9	70	.3	.85	.68	.56
791-0100	CA31J1	C	1000	10	9.1:1	8	48	.3	.85	.68	.56
791-0101	CA33J1	C	3000	10	9.1:1	9	85	.3	.85	.68	.56
791-0808	LD01J1	C	1	10	4.8:1	8	40	.4	.85	.68	.56
791-0809	LD03J5	C	2.5	10	4.8:1	14	25	.4	.85	.68	.56
791-0810	LD11J1	C	10	10	4.8:1	10	150	.4	.85	.68	.56
791-0803	LB12J2	C	18.6	10	6 9:1	6	26	.4	.97	.78	.64
791-0804	LB15J1	C	50	10	6.9:1	7	40	.4	.85	.68	.56
791-0805	LB21J1	C	100	10	6.9:1	8	65	.4	.85	.68	.56
791-0806	LB22J5	C	200	10	6.9:1	11	110	.4	.85	.68	.56

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Fenwal Electronics Thermistors

DISCS (Cont'd)

Stock No.	Mfr's Type	Fig.	Ohms at 25°C	Tol. ±%	Resis. Ratio 0°C to 50°C	Diss. Const. mW °C	Time Const. (secs)	Dia. In.	EACH 1-9	10-24	25-Up
791-0800	LA23J2	C	250	10	9.1:1	6	40	.4	.85	.68	.56
791-0801	LA25L2	C	500	10	9.1:1	8	60	.4	.85	.68	.56
791-0802	LA31J1	C	1000	10	9.1:1	10	70	.4	.85	.68	.56
791-0811	LP32J2	C	2000	10	11.6:1	8	40	.4	.85	.68	.56
791-0812	LP33J1	C	2500	10	11.6:1	14	35	.4	.85	.68	.56
791-0813	LP42J2	C	15k	10	11.6:1	10	150	.4	.85	.68	.56
791-0204	DD05J1	C	5	10	4.8:1	15.5	70	.5	.85	.68	.56
791-0205	DB11J1	C	10	10	6.9:1	17.5	120	.5	.85	.68	.56
791-0201	DB15J1	C	50	10	6.9:1	15.5	70	.5	.85	.68	.56
791-0202	DB21J1	C	100	10	6.9:1	17.5	120	.5	.85	.68	.56
791-0200	DA25J3	C	500	10	9.1:1	16.5	90	.5	.85	.68	.56
791-0206	DP35J1	C	5k	10	11.6:1	16.5	90	.5	.85	.68	.56
791-0901	MB13J1	C	25	10	6.9:1	25	85	.6	.85	.68	.56
791-0203	ND01J1	C	1	10	4.8:1	15	50	.77	.85	.68	.56
791-1002	NB11J1	C	10	10	6.9:1	20	90	.77	.85	.68	.56
791-1000	NA21J1	C	100	10	9.1:1	16	100	.77	.85	.68	.56
791-1001	NA22J1	C	250	10	9.1:1	30	140	.77	.85	.68	.56
791-1004	NP31J2	C	1000	10	11.6:1	15	180	.77	.85	.68	.56
791-1005	NP34J1	C	4000	10	11.6:1	20	300	.77	.85	.68	.56
791-1701	ZB11J1	C	10	10	6.9:1	30	140	1.0	1.25	1.00	.82
791-1700	ZA22J3	C	250	10	9.1:1	37	260	1.0	1.25	1.00	.82

RODS

Stock No.	Mfr's Type	Fig.	Ohms at 25°C	Tol. ±%	Resis. Ratio 0°C to 50°C	Diss. Const. mW °C	Time Const. (secs)	Dia. In.	EACH 1-9	10-24	25-Up
791-1201	QB41J1	D	10k	10	7.1:1	2.5	20	.053	1.25	1.00	.82
791-1200	QA51J1	D	100k	10	9.1:1	2.5	20	.053	1.25	1.00	.82
791-1306	RB41J1	D	10k	5	7.1:1	8	90	.11	2.03	1.63	1.32
791-1307	RA41L1	D	10k	10	9.1:1	6	90	.112	1.20	.96	.78
791-1301	RA43L1	D	31.5k	10	9.1:1	4	70	.11	1.20	.96	.78
791-1302	RA51J1	D	100k	10	9.1:1	10	70	.11	1.20	.96	.78
791-1403	TB35J1	D	5k	10	6.9:1	15	120	.173	1.35	1.08	.88
791-1300	RA42J1	D	20k	10	9.1:1	13	80	.173	1.20	.96	.78
791-1400	TA45J1	D	50k	10	9.1:1	18	120	.173	1.60	1.28	1.04

WASHERS

791-1603	WB11W1	G	10	10	6.9:1	860	12	.77	1.25	1.00	.82
791-1604	WB13W1	....	31.5	10	6.9:1	500	16	.77	1.25	1.00	.82
791-1605	WB14W3	....	36.5	10	6.9:1	500	16	.77	1.25	1.00	.82
791-1600	WA21W1	....	100	10	6.9:1	800	13	.77	1.25	1.00	.82
791-1601	WB23W1	G	315	10	9.1:1	350	18	.77	1.25	1.00	.82
791-1602	WA24W1	....	415	10	9.1:1	300	18	.77	1.25	1.00	.82

ISO-CURVE GLASS COATED INTERCHANGEABLE THERMISTORS

Iso-Curve interchangeable glass coated thermistors are curved-matched to close resistance tolerance over large temperature spans. Resistance tolerance over temperature range, ±2 percent. See table, below, for specific temperature ranges. Bead style, .1 inch diameter with ⅜ inch leads. Miniprobe style, .12" x ½ inch with 1⅜ inch leads. Standard Probe style, .18" x ½ inch with 2-inch leads. Average shpg. wt., 3 oz.

Stock No.	Mfr's Type	Style	Ohms at 25°C	Temp. Range °F	Diss. Const. mW/°C	Time Const. (secs)	EACH 1-9	10-24	25-Up
791-0442	GD24JM1	Bead	370	−50 to +150	0.8	2	30.00	24.00	19.50
791-0426	GB32JM1	Bead	2000	0 to +250	0.8	2	30.00	24.00	19.50
791-0438	GB42JM1	Bead	15k	+50 to +450	0.8	2	30.00	24.00	19.50
791-0406	GA51JM1	Bead	100k	+150 to +600	0.8	2	30.00	24.00	19.50
791 0443	GD24MM2	Miniprobe	370	−50 to +150	1.4	16	30.00	24.00	19.50
791-0428	GB32MM2	Miniprobe	2000	0 to +250	1.4	16	30.00	24.00	19.50
791-0439	GB42MM2	Miniprobe	15k	+50 to +450	1.4	16	30.00	24.00	19.50
791-0407	GA51MM2	Miniprobe	100k	+150 to +600	1.4	16	30.00	24.00	19.50
791-0444	GD24PM2	Std. Probe	370	−50 to +150	1.9	25	30.00	24.00	19.50
791-0430	GB32PM2	Std. Probe	2000	0 to +250	1.9	25	30.00	24.00	19.50
791-0440	GB42PM2	Std. Probe	15k	+50 to +450	1.9	25	30.00	24.00	19.50
791-0409	GA51PM2	Std. Probe	100k	+150 to +600	1.9	25	30.00	24.00	19.50

UNI-CURVE RT CURVE-MATCHED INTERCHANGEABLE THERMISTORS

Uni-curve thermistors completely interchangeable electrically. For temperature control and compensation. Resistance tolerance over temperature range, ±2%. 2 oz.

Stock No.	Mfr's	Ohms at 25°C	Temp. Range °F	Diss. Const. mW/°C	Time Const. (secs)	Lead Lgth. In.	Dia. Dia. In.	EACH 1-9	10-24	25-Up
791-1500	UUA33J1	3k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09
791-1501	UUA35J1	5k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09
791-1502	UUA41J1	10k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09
791-1503	UUT43J1	30k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09
791-1504	UUT45J1	50k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09
791-1505	UUT51J1	100k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09

Thermistor Section—Pages 102-4

THERMISTOR ASSEMBLIES

Matched thermistor assemblies designed for use in gas chromatographic equipment and other thermal conductivity gas analysis instruments. Each bead is mounted in a special hermetically-sealed stem. For maximum sensitivity, the higher resistance units should be used at higher ambient temperatures. 8 oz.

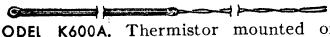
TYPE G126. Ro at 25°C, 2000 ohms ±25%; Ro at 0° C (approx.), 4900 ohms; Ro at 50°C (approx.), 890 ohms; ratio of Ro 0°/50°C, 4.95-6.95; Ro at max. op. temp., 88 ohms; pair matched Ro at 25°C, 5%. Beta nom. at 25°C, 3000°K. Temp. coef. at 25°C, −3.4%/°C. TC, still air, 1 s. DC, still air, 0.16 mW/°C; DC helium, 0.5 mW/°C. Pwr. rating, air, 15 mW; pwr. rating, helium, 60 mW.

TYPE G112. Ro at 25°C, 8000 ohms ±20%. Ro at 0°C (approx.), 23,200 ohms; Ro at 50°C (approx.), 3,200 ohms; ratio of Ro 0°/50°C, 6.56-7.99; Ro at max. op. temp., 25 ohms; pair matched Ro at 25°C, 2%. Beta nom. at 25°C, 3495°K. Temp. coef. at 25°C, −3.9%/°C. TC, still air, 1 s. DC, still air, 0.16 mW/°C; DC, helium, 0.5 mW/°C. Pwr. rating air, 45 mW; pwr. rating, helium, 140 mw.

TYPE G128. Ro at 25°C, 100,000 ohms ±20%; Ro at 0°C (approx.), 355,000 ohms; Ro at 50°C (approx.), 34,000 ohms; ratio of Ro 0°/50°C, 9.45-11.20; Ro at max. op. temp., 110 ohms; pair matched Ro at 25°C, 5%. Beta nom. at 25°C, 4115°K. Temp. coef. at 25°C, −4.6%/°C. TC, still air, 1 s. DC, still air, 0.16 mW/°C; DC, helium, 0.5 mW/°C. Pwr. rating, air, 45 mW; pwr. rating, helium, 140 mW.

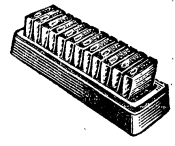
Stock No.	Mfr's Type	Description	EACH 1-9	10-Up
791-0447	G126	2-GC32L3	14.42	11.54
791-0446	G112	2-GC38L1	28.60	22.88
791-0448	G128	2-GA51L2	33.00	26.40

EXPERIMENTER'S THERMISTOR PROBE



MODEL K600A. Thermistor mounted on card, with instructions and schematic for use as a remote temperature indicator, liquid level-control or time-delay relay. Rated 135k at 25°C; 1 mW/°C diss. constant, 25 s; still-air time constant 0.3s in rapidly stirred water.
791-0714. Shpg. wt. 2 oz. 1.00

EXPERIMENTER'S THERMISTOR KITS



MODEL G-200 STANDARD KIT. 12 different thermistors (2 glass probes, 3 beads, 2 discs, 3 rods, 2 washers). Each thermistor is packed with specification sheets showing characteristics.
791-0449. Shpg. wt., 1 lb. 19.95

MODEL G-700 LOW-COST KIT. Includes four glass beads and probes, manual, and computer for a variety of applications. Shpg. wt. 1 lb.
791-0452. ..... 4.95

MODEL G-701 ECONOMY KIT. 10 glass beads and probes, manual, and computer for a wider range of applications than G-700 kit above. Shpg. wt., 1 lb.
791-0453. ..... 9.95

MODEL G-500 UNI-CURVE KIT. Contains 6 standard RT curve-matched interchangeable thermistors (3k, 5k, 10k, 30k, 50k, 100k). Includes complete data sheets with full specifications and DC, TC listings. Shpg. wt., 1 lb.
791-0451. ..... 19.95

Yellow Springs Instrument Precision Thermistors

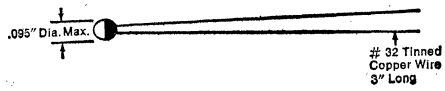


Figure 1

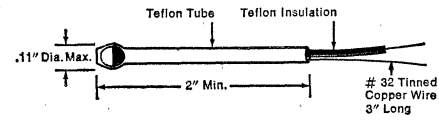


Figure 2

YSI 1% (0.2°C) INTERCHANGEABLE THERMISTORS FROM −80°C to +150°C

YSI precision thermistors are negative temperature coefficient semiconductors which exhibit large changes in resistance for small changes in temperature making them ideal for use as transducers for temperature measurement and control systems, and temperature compensating units for meters and other circuits. Manufactured with interchangeable capability so that each thermistor of a given value will match standard temperature-resistance curves and each other to ±1% (±0.2°C) at 25°C as well as over most of the usable range of −80°C to +150°C. Precision interchangeability permits multiple monitoring from a single circuit and direct dialing of temperature set points and eliminates the need to recalibrate circuits when switching transducers. Time constant for thermistors suspended by their leads in well stirred oil is 1 second max. and 10 sec. max. in still air. Dissipation constant in well stirred oil is 8mW/°C and 1mW/°C min. in still air. Long term stability data shows an aging of only 0.1°C over seven years. Detailed charts giving resistance values at each degree of temperature and tolerance curves are provided with each unit. Thermistors are epoxy encapsulated, color coded and individually packaged. Dimensions are shown in Figure 1. Average shipping weight is approximately ¼ oz.

Stock No.	Mfr's Type	Base Res. Ohms @25°C	Stock No.	Mfr's Type	Base Res. Ohms @25°C
997-2400	*44001*	100	997-2406	44007	5000
997-2401	44002	300	997-2407	*44008*	30K
997-2402	*44003*	1000	997-2410	*44011*	100K
997-2403	*44004*	2251	997-2414	44014	300K
997-2404	*44005*	3000	997-2415	44015	1 meg
997-2405	*44006*	10K	.....	.....	.....

1-9.....Each 4.90 10-29.....Each 4.15 30-Up.....Each 3.50

YSI ½% (0.1°C) INTERCHANGEABLE THERMISTORS

These thermistors offer the same advantages and meet the same specifications as the YSI 1% thermistors, but with the exclusive additional feature of ½% interchangeability. This means they match standard temperature resistance figures and are interchangeable with each other with a maximum error of only ±0.1°C. They are designed for applications requiring precise temperature measurement, control and compensation. Values may be assorted at the established quantity price. Average shipping weight is approximately ¼ oz.

Stock No.	Mfr's Type	Base Res. Ohms @25°C	EACH 1-9	EACH 10-29	EACH 30-Up
997-2440	44030	3000	9.90	8.90	7.75
997-2441	44031	10K	9.90	8.90	7.75
997-2442	44032	30K	9.90	8.90	7.75
997-2443	44033	2252	9.90	8.90	7.75
997-2444	44034	5000	9.90	8.90	7.75

YSI TEFLON ENCASED 1% (0.2°C) INTERCHANGEABLE THERMISTOR PROBE

All YSI 1% thermistors are available encased in chemically impervious Teflon tubes for convenient use as temperature probes in a variety of applications. Interchangeability is the same as YSI 1% thermistors. Probes can be used straight or bent in a more easily used shape. Leads are insulated from each other by a smaller Teflon tube around one lead (Figure 2). Time constant is 2.5 sec. max. in well stirred oil and 10 sec. max. in still air. Units are individually packaged and shipped with temperature-resistance figures, instructions and other data. Values may be assorted at quantity prices. Average shipping weight is 2 oz.

Stock No.	Mfr's Type	Base Res. Ohms @25°C	Stock No.	Mfr's Type	Base Res. Ohms @25°C
997-2700	44101	100	997-2707	44107	5000
997-2701	44102	300	997-2710	44108	30K
997-2702	44103	1000	997-2714	44111	100K
997-2704	44104	2252	997-2717	44114	300K
997-2705	44105	3000	997-2718	44115	1 meg
997-2706	44106	10K	.....	.....	.....

1-9.....Each 9.90 10-29.....Each 8.90 30-Up.....Each 7.75

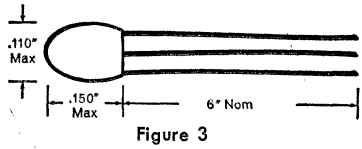


Figure 3

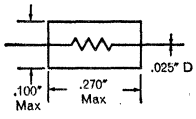


Figure 4

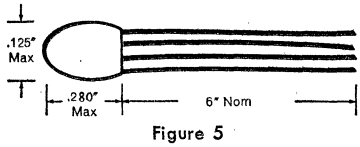


Figure 5

YSI LINEAR OUTPUT THERMILINEAR® THERMISTOR NETWORKS

Two thermistors packaged together and used in conjunction with two precision resistors to produce a varying voltage or resistance linear with temperature change. Voltage can be made to correspond directly to temperature, correct even as to sign, thus +376.2 mV equals +37.62°C, etc. Devices are useful in applications requiring accurate linear information. Linearity deviations are as little as 2 parts in 1000 from 0 to 100°C with sensitivities of 20 mV/°C or more, 400 times that of an IC thermocouple. Time constant in well stirred oil is 1 sec. Accuracy and interchangeability between sensors is ±0.15°C. A Thermilinear component includes a thermistor composite (fig. 3) and two resistors of the size shown in fig. 4. *Additional thermistor composites may be ordered separately for replacement or multiplexing with a single set of resistors. Av. wt. 1 oz.

Stock No.	Mfr's Type	Range	Linearity	EACH 1-9	EACH 10-29	EACH 30-Up
997-3000	*44201*	0° to +100°C	±.2°C	10.50	9.80	9.10
997-3001	*44202*	−5° to +45°C	±.1°C	10.50	9.80	9.10
997-3002	*44203*	−30° to +50°C	±.2°C	10.50	9.80	9.10
997-3003	44204	30° to +100°F	±.055°F	10.50	9.80	9.10
997-2417	*44018**	−30° to +100°C	.....	7.50	6.90	6.30
997-3010	44211	−55° to +85°C	±1.1°C	10.50	9.80	9.10
997-2418	44019*	−55° to +85°C	.....	7.50	6.90	6.30

YSI HIGH ACCURACY LINEAR OUTPUT THERMILINEAR THERMISTOR NETWORKS

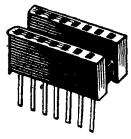
YSI Thermilinear component 44212 is a new type of linear thermistor temperature transducer for use over the general environmental range of −50° to +50°C. Similar to above Thermilinear components, but uses three thermistors in the composite (Fig. 5) and three resistors as in fig. 4. The advantage is measurements with complete accuracy, linearity and interchangeability of less than 0.25°C over entire range. Even better results obtained with extra resistor selection.

Stock No.	Manufacturer's Type	Range	EACH 1-9	EACH 10-29	EACH 30-Up
997-3012	44212 Component	−50° to +50°C	19.80	18.75	17.40
997-2420	44020 Composite	−50° to +50°C	16.80	15.40	14.30

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Integrated Circuit and Transistor Sockets

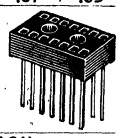
CINCH-JONES DUAL IN-LINE IC SOCKETS



D.I.P. SERIES. Bowed contacts provide .006 ohm maximum resistance. Accepts standard 14, 16 or 24 lead dual in-line IC pkg. with round or flat leads. 14-DIP, 16-DIP, 24-DIP have electrotin plated beryllium copper contacts; phenolic body; types with suffix -1 have gold plated beryllium copper contacts; diallyl phthalate. Current, 1 amp; 1800 V rms between adjacent contacts. −65° to +150°C. 14-contact, .770x.424x31/32" incl. leads; 16-cont., .870x.424x31/32"; 24-cont., 1.296x.746x31/32". 1 oz.

Stock No.	Mfr's Type	No. Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-1040	14-DIP	14	.82	.66	.55	.44	.42
750-1041	14-DIP-1	14	1.07	.86	.71	.57	.54
750-1044	16-DIP	16	.91	.73	.61	.49	.46
750-1045	16-DIP-1	16	1.17	.94	.78	.63	.60
750-1050	24-DIP	24	1.36	1.10	.92	.74	.71
750-1051	24-DIP-1	24	1.61	1.29	1.08	.87	.83

CINCH-JONES LOW PROFILE D.I.P. SOCKETS

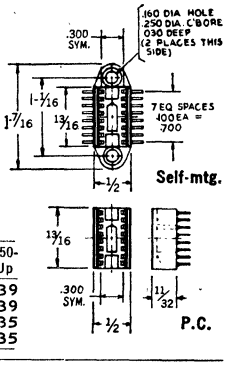


Accept IC packages with flat or rolled leads and variation in thickness or diameter, .014/.019". Maximum lead insertion depth, 0.170". Dielectric housing of glass nylon (*black; †white). Phosphor-bronze contacts. 2 oz.

Stock No.	Mfr's Type	Contacts	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0236	14-W-DIP	14*	Electro-Tin	.80	.64	.54	.43	.41
750-0237	14-W-DIP-1	14†	Electro-Tin	.80	.64	.54	.43	.41
750-0238	14-W-DIP-2	14*	Gold-Plated	1.04	.83	.69	.55	.52
750-0251	14-W-DIP-3	14†	Gold-Plated	1.04	.83	.69	.55	.52
750-0258	16-W-DIP	16*	Electro-Tin	.98	.78	.65	.52	.49
750-0259	16-W-DIP-1	16†	Electro-Tin	.98	.78	.65	.52	.49
750-0272	16-W-DIP-2	16*	Gold-Plated	1.22	.98	.82	.65	.62
750-0273	16-W-DIP-3	16†	Gold-Plated	1.22	.98	.82	.65	.62

H. H. SMITH

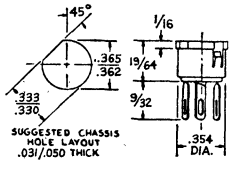
DUAL IN LINE INTEGRATED CIRCUIT SOCKETS



For 14 and 16 pin in-line hybrid packages having .100"x.300" grid spacing. Accepts round or flat pins. Body of general purpose phenolic. 6250. 14-pin self-mounting. 6251. 16-pin self-mounting. 6252. 14-pin printed circuit mounting. 6253. 16-pin printed circuit mounting.

Stock Number	Type	Contacts	Body	1-49	50-99	100-249	250-Up
920-6250	6250	14	Self mtg	.67	.50	.45	.39
920-6251	6251	16	Self mtg	.67	.50	.45	.39
920-6252	6252	14	P.C.	.60	.45	.40	.35
920-6253	6253	16	P.C.	.60	.45	.40	.35

H. H. SMITH TRANSISTOR SOCKETS



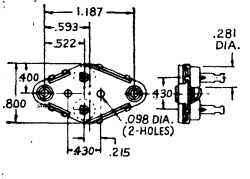
Snap-in type transistor sockets for TO-5 and TO-18 cases. Phosphor bronze, cadmium-plated contacts with a polysulfone body. Fits in "D" shape hole.

920-6264. Type 6264. TO-18
1-99 . . Ea. .13 100-249 . . Ea. .10
250-999 Ea. .09 1000-Up Ea. .085

920-0265. Type 6265. TO-5.
1-99 . . Ea. .13 100-249 . . Ea. .10
250-999 Ea. .09 1000-Up Ea. .085

H. H. SMITH

POWER TRANSISTOR SOCKET

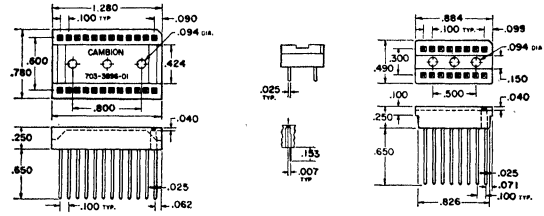


Designed for use with transistors having a TO-3 case. Body is made of general purpose phenolic with contacts made of phosphor bronze, gold over silver plated. The mounting plate has 6-32 tapped holes.

920-6266. Type 6266.
1-49 . . . Ea. .32 50-99 . . . Ea. .25
100-249 Ea. .225 250-999 Ea. .19
1000-Up . . . . . Ea. .175

CAMBION DUAL IN-LINE IC SOCKETS

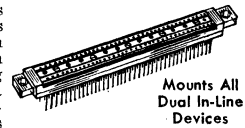
Molded diallyl phthalate insulators withstand high temperatures and provide excellent mechanical stability. May be permanently mounted individually with rivets or screws, or press-mounted into PC boards or panels for production or breadboarding uses. Spring-tempered phosphor bronze contacts accept round or flat pins up to .024" in diameter. Terminations on .100"x.300" grid (14, 16 and 18-pin sockets); .100"x.600" (24 and 36-pin sockets). Type nos. 3777 are one-piece molded glass-filled Nylon, with anti-moisture bosses. *Solder-tab, .04" electro-tin terminals; others have wire-wrap .03" gold plating over copper. See Fig. C for terminal dimensions; Figs. A or B for length and on-centers dimensions. Wt. ½ oz.



24-pin Wire-Wrap [A] Solder Tab [B] 16-pin Wire-Wrap [C]

Stock No.	Mfr's Type 703-	Fig.	No. Contacts	EACH 1-9	10-49	50-99	100-249	250-Up
746-0896	3777-01-0312	B, C	14*	1.12	1.01	.90	.67	.62
746-0898	3777-01-0412	B, C	14*	.83	.75	.66	.50	.46
746-0904	3788-01-0416	B, C	14*	1.13	1.02	.90	.68	.57
746-0915	3897-01-0316	B	14	1.16	1.04	.93	.70	.64
746-0916	3898-01-0316	B	16	1.29	1.16	1.03	.77	.71
746-0905	3789-01-0416	B, C	16*	1.23	1.11	.98	.74	.61
746-0902	3787-01-0416	B, C	18*	1.27	1.14	1.02	.76	.70
746-0912	3895-01-0316	B	18	1.54	1.39	1.23	.92	.85
746-0906	3790-01-0416	A, C	24*	2.06	1.85	1.65	1.24	1.13
746-0914	3896-01-0316	A	24	2.32	2.09	1.86	1.39	1.28
746-0907	3791-01-0416	A, C	36*	2.68	2.42	2.15	1.61	1.48
746-0911	3893-01-0316	A	36	2.93	2.64	2.34	1.76	1.61

CAMBION 80-PIN DUAL IN-LINE SOCKET STRIP

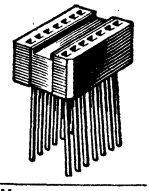


For mounting all dual in-line devices without a printed circuit board. Offers unusual convenience to the design engineer. Molded diallyl body with .025" sq. wire-wrap posts and spring contacts, electro tin plated. Flanges at ends provide for independent mounting, or into Cambion mounting frames or relay rack drawers. Pins are replaced by removing screw down covers. Socket strips accept five 14-pin dips or four or five 16-pin dips. Wider MSI or LSI dips can be mounted by bridging between two properly placed strips. Type 703-1000-01-04-00.

746-0870. 1-9 . . . . Ea. 6.65 10-49 . . . . Ea. 6.00 50-99 . . . . Ea. 5.30

ELCO IC SOCKETS

DUAL IN-LINE PACKAGE RECEPTACLES



For 14-lead dual in-line packages having .100x .300" grid spacing. Accepts round or flat leads, any length. Low-profile, diallyl phthalate, glass-filled insulator per MIL-M-14F, type SDGF. Gold-over-nickel plated, spring-temper phosphor bronze contacts. .025" tails (.642" long) for wire-wrap terminations (Type 383). Closed entry contact holes. Mount on .500x.800" centers. Use with either 1/16" or 3/32" PC board. Suffix 001, black; suffix 002, white. Av. shpg. wt., per pkg., 6 oz.

Stock No.	Type 00-8358-	EACH 1-9	10-24	25-99	100-999	1000-9999	10,000-Up
778-1400	014-383-001	1.15	.95	.76	.68	.61	.52
778-4007	014-383-002	1.15	.85	.76	.68	.61	.52

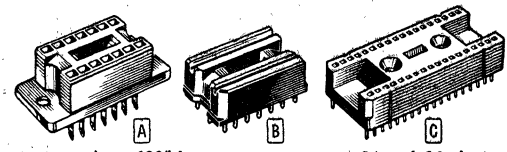
SERIES 8539 WIRE-WRAP DUAL IN-LINE IC RECEPTACLES

For all standard dual in-line IC's with 14 or 16 pins. Only .260" high. Replaceable contacts. Packaging density: inline mounting on .800" centers (14-pin) or .900" centers (16-pin); side-by-side mounting on .500" centers. Rated 2 A. Diallyl phthalate. Black, with white or black lid. Per pkg., 6 oz.

Stock No.	Mfr's Type 00-8359-	Pins	Lid Color	EACH 1-9	10-24	25-99	100-999	1000-9999	10,000-Up
778-1430	014-383-001	14	White	1.30	1.07	.86	.78	.67	.58
778-1434	014-383-002	14	Black	1.30	1.07	.86	.78	.67	.58
778-1438	016-383-001	16	White	1.42	1.18	.95	.86	.75	.64
778-1442	016-383-002	16	Black	1.42	1.18	.95	.86	.75	.64

Dual In-Line IC and Transistor Sockets

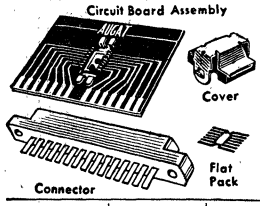
AUGAT DUAL IN-LINE SOCKETS



Contact spacing, .300″ between rows, except 24 and 36-pin types, .600″. .100″ between leads. Contoured entry holes guide leads firmly into socket. Molded diallyl phthalate body, berryllium copper, gold-plated contacts, except *type with phenolic body, tin-plated contacts. PC board or chassis mounting with saddle. Universal terminals. Take all lead dia., flat or round. R suffix, inner rail for easier insertion. Order extractor tool for 24 or 36-pin type from table. **Sockets are sold in multiples of five** except 24. 36-pin. 2 oz. †Wire-wrap Terminals.

Stock No.	Mfr's Type	Fig.	Mounting	Con-tacts	EACH 5-20	25-95	100-495	500-995	1000-Up
718-0129	*314-AG5A-R*	A	PC	14	.83	.70	.61	.53	.47
718-0145	*316-AG5A-R*	A	PC	16	1.08	.93	.81	.71	.63
718-0132	*314-AG5D-2R*	B*	PC	14	.53	.45	.40	.35	.30
718-0130	*314-AG5D-R*	B*	PC	14	.83	.70	.61	.53	.47
718-0146	*316-AG5D-R*	B*	PC	16	1.08	.93	.81	.71	.65
718-0135	*314-AG6A-R*	A	Chassis	14	.95	.81	.71	.62	.55
718-0148	*316-AG6A-R*	A	Chassis	16	1.24	1.06	.93	.81	.71
718-0055	*T114-1*	...	Extractor	....	.....	.....	Each .80		
718-0134	314-AG5F-2R	*†	PC	.14	.86	.73	.64	.56	.59
718-0136	314-AG6F-2R	*†	Chassis	.14	1.19	1.01	.88	.77	.67
718-0147	316-AG5F-2R	*†	PC	.16	.83	.83	.72	.63	.55
718-0149	316-AG6F-2R	*†	Chassis	.16	1.12	1.12	.98	.85	.74

718-0158. 324-AG2D. 24-pin Type. (Fig.C). 1-9 Ea.2.60 10-99. Ea. 2.05
100-499...Each 1.79 500-999...Each 1.56 1000-Up...Each 1.36
718-0165. 336-AG2D. 36-pin Type. (Fig.C). 1-9. Ea.2.92 10-99. Ea. 2.28
100-499...Each 1.99 500-999...Each 1.74 1000-Up...Each 1.51

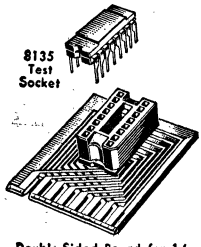


AUGAT 8075 TEST SOCKETS FOR FLAT PACKS

PC test socket for flat packs up to ⅜x⅜″ and 14 leads on .050″ spacing. Cover grips leads to PC contacts. 8075-1G2 with 15-pin PC connector. 8075-1G2 does not have connector.

Stock No.	Mfr's Type	Connector	Shpg. wt.	EACH 1-99	100-499	500-Up
718-0338	8075-1G2	Yes	4 oz.	4.36	3.70	3.13
718-0335	8075-1G1	No	2 oz.	2.20	1.18	1.48

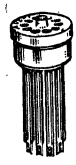
AUGAT DUAL IN-LINE INTEGRATED-CIRCUIT TEST SOCKETS



Double-Sided Board for 14- or 16-Lead Dual In-Line Circuits

Boards take 8-pin dual row, polarized connectors. PC Board: 1/16″ glass epoxy. NEMA Grade 11. Copper circuitry. For all lead sizes. Overall size, 1⅜x1⅝″. Suffix G1, no connector. Shpg. wts.: G2, 4 oz.; G1, 2 oz.

Stock No.	Mfr's Type 8135-	Pins	EACH 1-99	100-499	500-Up
718-0503	DG1	14	3.20	2.64	2.16
718-0504	DG2	16	6.44	5.11	4.28
718-0505	EG1	16	3.41	2.84	2.36
718-0506	EG2	16	6.65	5.31	4.48

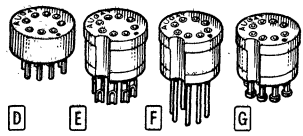


SERIES 8092 TEST SOCKETS FOR TRANSISTORS AND INTEGRATED CIRCUITS

Test sockets with chamfered lead holes for easy insertion, raised boss to prevent sharp lead-bending and for easy component removal. "Push-fit" mounting. Low contact resistance after 50,000 insertions. For minimum ½-in. leads. Teflon® insulator, gold-plated contacts. Rated 2 amps. *Pin circle. †RO-52 outline. **Sold in multiples of five.** 2 oz.

Stock No.	Mfr's Type	Con-tacts	*Dia.	Mtg. Hole	EACH 5-20	25-95	100-495	500-Up
718-0446	8092-1G1	3	.200″	.437″	1.80	1.20	1.05	.92
718-0447	8092-1G2	4	.200″	.437″	2.03	1.44	1.26	1.10
718-0448	8092-1G3	6	.312″	.687″	3.24	2.18	1.90	1.66
718-0449	8092-1G4	†6	.400″	.687″	3.24	2.18	1.90	1.66
718-0450	8092-1G5	8	.400″	.687″	4.18	2.80	2.45	2.14
718-0451	8092-1G6	10	.402″	.687″	4.97	3.33	2.91	2.54
718-0452	8092-1G7	12	.510″	.750″	5.98	4.02	3.51	3.06

AUGAT SERIES 8058 INTEGRATED CIRCUIT SOCKETS



For use with TO-5 type integrated circuits. Closed entry machined beryllium contacts. Teflon insulated. Figs. E, F, G push-fit in .366-.369″ dia.hole. Fig. D. is PC mtg.Chamfered holes. **Sold in Multiples of 5.** *Pin. Wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Con Term.	*Dia.	Con-tacts	EACH 5-20	25-95	100-495	500-Up
718-0301	8058-1G48	D	PC	.200″	6	1.25	1.04	.91	.79
718-0296	8058-1G43	E	Solder	.200″	6	1.25	1.04	.91	.79
718-0295	8058-1G42	F	PC	.200″	6	1.25	1.04	.91	.79
718-0302	*8059-1G49*	D	PC	.200″	8	1.56	1.34	1.18	1.02
718-0292	8058-1G37	G	Turret	.200″	8	1.56	1.34	1.18	1.02
718-0279	*8058-1G19*	E	Solder	.200″	8	1.56	1.34	1.18	1.02
718-0289	*8058-1G32*	F	PC	.200″	8	1.56	1.34	1.18	1.02
718-0303	8058-1G50	D	PC	.230″	8	1.56	1.34	1.18	1.02
718-0300	8058-1G47	G	Turret	.230″	8	1.56	1.34	1.18	1.02
718-0299	*8058-1G46*	E	Solder	.230″	8	1.56	1.34	1.18	1.02
718-0298	*8058-1G45*	F	PC	.230″	8	1.56	1.34	1.18	1.02
718-0291	*8058-1G34*	D	PC	.230″	10	1.94	1.65	1.44	1.26
718-0309	8058-24G1	....	PC	.230″	10	1.97	1.68	1.47	1.28
718-0280	*8058-1G22*	E	Solder	.230″	10	1.94	1.65	1.44	1.26
718-0288	*8058-1G31*	F	PC	.230″	10	1.94	1.65	1.44	1.26
718-0304	8058-1G51	D	PC	.280″	12	2.28	1.94	1.69	1.48
718-0285	*8058-1G28*	E	Solder	.280″	12	2.28	1.94	1.69	1.48

SERIES 8058 MINIATURE TRANSISTOR SOCKETS

Mechanically and electrically dependable 3- and 4-contact TO-5 transistor sockets. Teflon insulated. Long-life beryllium copper contacts per QQ-C-530. Brass terminal sleeve per QQ-B-626. Contacts and terminal sleeve are gold plated .000040″ thick per MIL-G-45204 over nickel plate .00005/.0001″ thick. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Dia.	Con-tacts	EACH 5-20	25-95	100-495	500-Up
718-0281	*8058-1G23*	.406″	3	.72	.61	.53	.46
718-0282	8058-1G24	.406″	4	.88	.75	.66	.57
718-0286	8058-1G29	.406″	3	.72	.61	.53	.46
718-0313	8058-45G1	.406″	3	.72	.61	.53	.46

8060 TO-18 TRANSISTOR SOCKETS

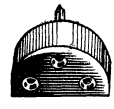
Miniature Teflon® sockets for TO-18 cases. Contacts beryllium copper, closed entry type, gold over nickel—plated. .256″ max. dia. Pin circle, .140″ max. dia. 1 oz. **Sold in multiples of 5.**

Stock No.	Type 8060-	No. Cont.	Contact Type	EACH 5-20	25-95	100-495	500-995	1000-Up
718-0316	IG3	3	Printed circuit	.77	.64	.56	.49	.42
718-0317	IG4	4	Printed circuit	.92	.78	.69	.60	.52
718-0320	IG7	3	Printed circuit	.77	.64	.56	.49	.42
718-0321	IG8	4	Printed circuit	.92	.78	.69	.60	.52
718-0322	IG9	3	Turret	.72	.61	.53	.46	.40
718-0323	IG10	4	Turret	.88	.75	.66	.57	.50

CINCH-JONES 6, 8 AND 10-ICS IC SOCKETS

Socket is designed specially for integrated circuits that mount in 6, 8 or 10-lead, TO-5 cases. Offers exceptionally convenient and simple means for installation and removal of integrated circuits. Also permits in-circuit testing and maintenance. Rugged, durable construction of diallyl phthalate. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	No. of Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0885	6-ICS	6	.58	.46	.39	.32	.30
750-0960	*8-ICS*	8	.69	.56	.47	.37	.36
750-1020	*10-ICS*	10	.77	.61	.51	.42	.39



CINCH-JONES *LO-PROFILE TO-5 SOCKET*

For all TO-5 cases. Features gold-plated sockets of beryllium copper, with integral double springs. Socket height is 0.130″ above the PC board. Plastic body, molded from 20% glass-filled nylon for very high heat resistance. Wt.2 oz.

750-1361. Type 3-LPS-B. 1-24.....Each .22
25-49.....Each .17 50-99.....Each .14
100-249.....Each .112 250-Up.....Each .112

CINCH-JONES *POWER TRANSISTOR SOCKET*

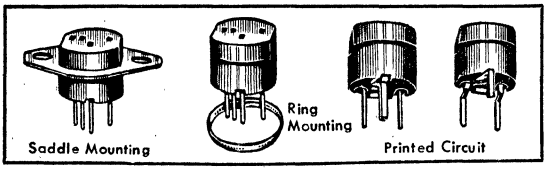
A special-purpose socket with specifications that meet or surpass designer requirements. Has a wax-impregnated XP bakelite. Formed thread for a 6-20 screw. Has 0.104/0.110″ diameter hole in CR plate.

750-0832. Shpg. wt. 3 oz. 1-24.....Each .22
25-49.....Each .11 50-99.....Each .10
100-249.....Each .086 250-Up.....Each .076

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

IC, Tube and Transistor Sockets; PC Boards

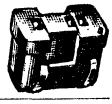
ELCO 3300 .016" DIAMETER TRANSISTOR SOCKETS



Screw-on saddle mtg., printed circuit or mtg. ring types. For 3-pin transistors with inline pins, or 3 and 4-pin transistors with pins on .200" diam. circle of any configuration. Conform to MIL-P-14. Beryllium copper contacts. *Requires ring below. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-99	100-249	250-999	1000-4999	5000-Up
778-2350	05-3301	A	Saddle Mtg.	.33	.282	.254	.212	.169
778-2353	05-3303	A	Printed-Circuit	.26	.23	.207	.173	.138
778-2355	05-3304	A	*Ring Mounting	.26	.228	.205	.171	.137
778-2357	05-3305	A	Printed-Circuit	.26	.23	.207	.173	.138
778-2361	05-3307	B	*Ring Mounting	.37	.274	.247	.206	.164
778-2366	05-3308	B	Printed-Circuit	.31	.27	.243	.203	.162
778-2368	05-3313	C	*Ring Mounting	.36	.32	.288	.24	.192
778-2675	65-0004	....	Ring Only	.05	.05	.041	.035	.028

ELCO PRINTED-CIRCUIT TRANSISTOR SOCKET



Especially designed for printed circuit boards—insulator material of low-loss mica filled phenolic. All contacts are of silver-plated beryllium copper and gold-flashed. 3-pin sockets are for point contact and junction-type transistors. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Pins	EACH 1-99	100-249	250-999	1000-4999	5000-Up
778-2215	05-0786	3	.26	.188	1.69	.141	.113

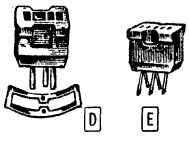
ELCO RETAINER-RING TRANSISTOR SOCKETS

High quality. Designed to hold transistors firmly in place on chassis or mounting board. Assure positive lead contacts. 3-pin types are for point contact or junction type transistors; 4-pin types are for linotetrar type transistors. Av. shpg. wt., 3 oz.

778-2225	05-0799	3	.21	.180	.162	.135	.108
778-2228	05-0803	4	.27	.224	.202	.168	.134

Retainer Ring for above. Type 65-0004-7105. Wt. 3 oz.
778-2594. 1-49.....Each .03
50-249.....Each .024 250-999..Each .022 1000-Up..Each .018

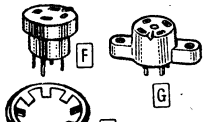
CINCH SUBMINIATURE SOCKETS



Used extensively for hearing aids, pocket radios, and other equipment which requires subminiature tubes. Mica-filled, low-loss bakelite with silver plated beryllium contacts. 2H5 can be used as a transistor socket. All three come with mounting ring. 4-prong tubes use 2H5 socket. High-resistance against thermal conductivity. Heavy-duty construction to prevent cracking or splitting of the base. Av. wt. 1 oz.

Stock No.	Mfr's Type	Fig.	Pins	EACH 1-24	25-49	50-99	100-249	250-Up
750-0819	2H3	D	3	.29	.25	.21	.17	.16
750-0820	2H5	E	5	.25	.20	.17	.15	.14
750-0822	2H7	E	7	.44	.36	.29	.23	.22

GRAYHILL TRANSISTOR SOCKETS



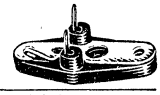
For TO-12 and TO-33 types. Leads fit on 100-mil grid for printed circuits. Terminal numbers molded on bottom of sockets; top faces have key ribs for alignment with transistor tab. Mica-filled phenolic per MIL-M-14. Type MFE. 22-11 (Fig. G) fits 3/8" hole. 22-16-4 (Fig. F) can be soldered in printed circuits or fastened in "D" hole. 1 oz.

Stock No.	Mfr's Type	Fig.	No. of Pins	Mtg.	Loss Factor @ 1 MHz	EACH 1-49	50-Up
801-0471	22-16-4	F	4	Ring	.06	.50	.34
801-0466	22-11	G	4	Screw	.06	.50	.34

H **801-2080. Mounting Ring for 22-16-4 Socket.** For fastening 22-16-4 socket above, in punched "D" hole. Wt., 1 oz.....Each .02

H. H. EBY SOCKETS

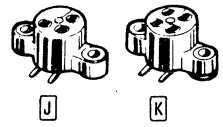
TRANSISTOR SOCKETS FOR TO-3 CASE



One-piece bakelite. Contacts cadmium-plated brass. Special-design mounting plate and terminal assures complete electrical isolation of the base connections from the chassis. 6-32 mounting holes on 1.187" centers. Wt., 1 oz.

Stock No.	Mfr's Type	Description	EACH 1-99	100-249	250-499	500-Up
789-1824	*9866-15-1*	*Standard*	.60	.44	.25	.15
789-1826	9866-15-5	With raised boss	.60	.44	.25	.15

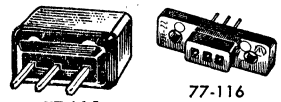
TRANSISTOR SOCKETS



One-piece integral saddle design. Mounts with rivets or #2 screws. Contacts: silver plated beryllium copper with gold flash. Mica-filled phenolic per MIL-M-14. Type 9866-13-6 for TO-5, 9, 11, 16, 29, 31, 39, 43 cases. Type 9866-13-4 for TO-12, 33, 42 cases. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	No. Pins	EACH 1-99	100-249	250-499	500-Up
789-1821	*9866-13-6*	*J*	*3*	.43	.39	.25	.13
789-1819	9866-13-4	K	4	.47	.41	.28	.16

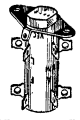
AMPHENOL SOCKETS FOR SCR'S



Three-contact Nylon receptacle accepts I.R. IR106, Motorola MCR 406, G.E. C106. Nickel-silver contacts. Voltage 500 V rms. Current: 5 amps. Contact spacing .200" center. For PC board. *Fits into cut-out, .340/.330x.164/.161". †Two .125" dia. mtg. holes on .625" ctrs. Requires cutout .325x.200". Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-24	25-49	50-249	250-499	500-Up
713-2865	*77-115	Press fit	.26	.21	.171	.141	.121
713-2866	†*77-116*	*Mounting flange*	.26	.21	.71	.14	.12

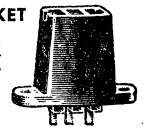
VECTOR TRANSISTOR SOCKET TURRET



Provides single transistor mounting with a place for associated circuit components. Combination transistor socket mounted in end of 1/2" phenolic post with two rings of 12 terminals. Requires a .361" hole for socket and two 1/8" holes 3/4" apart for 4-40 threaded saddle holes. 3 oz.

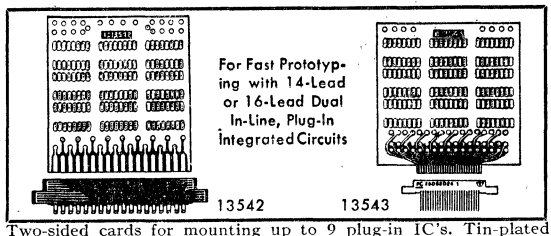
Stock No.	Mfr's Type	Lgth.	Ring Spacing	EACH 1-9	10-49	50-199	200-499	500-Up
977-1106	6-A-12T	1 1/2"	7/8"	1.52	1.22	1.10	.85	.82

POMONA TS-187 TRANSISTOR TEST SOCKET



Heavy-duty molded phenolic construction. 100°-200°C. test temperature. Accepts .017" diameter leads. I.R.: 10^5 megohms at 40% R.H. at 24° C. Beryllium copper contacts. Shpg. wt., 3 oz.
885-0189. 1-24..Ea. 2.10 25-49.....Ea. 1.58
50-99.....Ea. 1.50 100-Up.....Ea. 1.23

TRIAD DUAL IN-LINE BOARDS



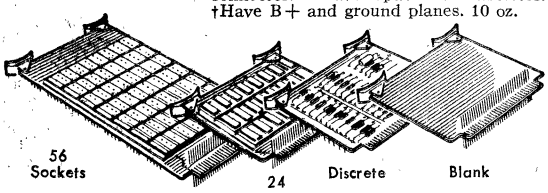
Two-sided cards for mounting up to 9 plug-in IC's. Tin-plated G-10 glass epoxy, 1/16" thick. Holes, .030" dia. Type 13543 mates with 25 contact double-side connector on .050" centers. Type 13542, with 18-contact double-side connector on .156" centers. Wt., 3 oz.

Stock No.	Mfr's Type	Dimensions (Inches)	Contacts	EACH 1-9	10-24	25-49	50-Up
954-4544	13542	2.976x3.273	18	7.60	6.84	6.16	5.73
954-4545	13543	3.000x3.187	25	7.60	6.84	6.16	5.73
954-0225	CO-13542	With Connector	18	10.25	9.23	8.31	7.73
954-0226	CO-13543	With Connector	25	13.60	12.24	11.02	10.25

CAMBION® Circuit Boards and Accessories

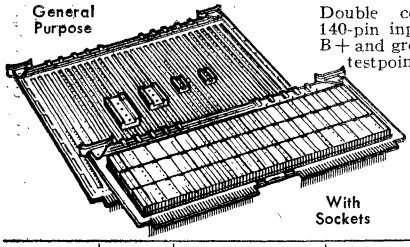
HIGH DENSITY WIRE-WRAP CAMBI-CARDS

Support IC's and discrete components in tight package. 70-pin input/output edge connector. *Have space for discretes. †Have B+ and ground planes. 10 oz.



Stock No.	Type 715-	No. of Sockets	Pins/ Socket	Size, In.	EACH 1-4	5-9	10-Up
746-0978	1013-01	24	14†	4½x4½	60.10	54.10	48.10
746-0977	1011-01	24	16†	4½x4½	62.30	56.10	49.80
746-0975	1005-01	16*	16†	4½x4½	62.30	56.10	49.80
746-0988	1105-01	56*	16†	4½x9¼	110.20	99.20	88.20
746-0974	1004-01	10*	24†	4½x4½	62.20	56.00	49.80
746-0987	1104-01	25*	24†	4½x9¼	107.90	97.10	86.30
746-0980	1015-01	None	.....	4½x4½	29.70	26.70	23.80
746-0981	1016-01	Copper Clad Bd.		4½x4½	21.20	19.10	17.00
746-0991	1115-01	None	.....	4½x9¼	39.20	35.30	31.40
746-0992	1116-01	Copper Clad Bd.		4½x9¼	24.40	22.00	19.50
746-0972	1002-01	Discretes only		4½x4½	39.00	35.10	31.20
746-0986	1102-01	Discretes only		4½x9¼	44.50	40.10	35.60
746-0971	1001-01	Blank Cards for		4½x4½	27.90	25.10	22.30
746-0985	1101-01	Misc. Components		4½x9¼	32.30	29.10	25.80

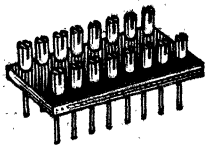
140-PIN WIRE WRAP CAMBI-CARDS



Double connectors have 140-pin input/output with B+ and ground planes. Ten testpoints. Size, 9¾x4½" except *9¾x 9¼". Types 1015 and 1115 are general purpose cards without sockets. 1016 and 1116 are Copper Clad boards with connector. 10 oz.

Stock No.	Type 714-	No. of Sockets	Pins/ Socket	EACH 1-4	5-9	10-Up
746-0950	1011-01	54	16	125.70	113.10	100.60
746-0952	1013-01	54	14	121.30	109.20	97.00
746-0958	1111-01	126*	16	216.60	194.90	173.30
746-0960	1113-01	126*	14	187.00	168.30	149.60
746-0954	1015-01	None	.....	42.30	38.10	33.80
746-0962	1115-01	None*	.....	47.70	42.90	38.20
746-0955	1016-01	Copper Clad Board		26.50	23.90	21.20
746-0963	1116-01	Copper Clad Board*		29.70	26.70	23.80

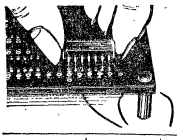
COMPONENT SOCKET ADAPTERS



Plug into standard 14, 16, 24, or 36 pin dual in-line sockets as well as Cambion's integrated socket strip. Larger width sizes for wider components straddle 2 sockets or socket strips. Terminal pairs are on .100" or .200" grid centers for varying component sizes, and are slotted for easy parts mounting. Terminals are brass, QQB-626C copper alloy 360, ½ hard, with .000050" hard gold plating over gold flash per MIL-G-45204 over .0002" copper plate. Board material is .062" type GEE Glass Epoxy MIL-P-18177. Av. wt. 2 oz. *Terminals.

Stock No.	Mfr's Type 702-	Board (In.) W	Board (In.) L	Terminal Ctr. Spacings W	Terminal Ctr. Spacings L	No. of *	EACH 1-9	10-49	50-99	100-249
746-0810	3723-01-03-00	.450	.750	.300	.200	8	.71	.64	.57	.43
746-0811	3724-01-03-00	.950	.750	.800	.200	8	.71	.64	.57	.43
746-0812	3725-01-03-00	.450	.750	.300	.100	14	1.07	.96	.86	.64
746-0813	3726-01-03-00	.950	.750	.800	.100	14	1.07	.96	.86	.64
746-0815	3728-01-03-00	.450	.850	.300	.100	16	1.29	1.16	1.03	.77
746-0817	3730-01-03-00	.950	.850	.800	.100	16	1.29	1.16	1.03	.77
746-0819	3732-01-03-00	.750	1.235	.600	.200	12	.95	.86	.76	.57
746-0821	3734-01-03-00	.750	1.835	.600	.200	18	1.53	1.38	1.22	.92

BREADBOARDS FOR IN-LINE IC SOCKETS

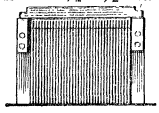


Available in three sizes to accept 16, 32 or 64 standard 1 1/16-pin in-line IC's. Pluggable concept allows interchanging of each IC. Supplied with jacks or terminals for patching or soldering of jumpers. For all IC's except Sylvania (round). 11 oz.

Stock No.	Type 705-	No. of IC's	IC Type	Size, In.	EACH 1-4	5-9	10-Up
746-0920	0264-01	32	14-pin	8x5	158.80	150.90	147.70
746-0926	0364-01	16	14-pin	4½x5	90.90	86.40	84.50
746-0923	0269-01	32	16-pin	6½x11½	176.90	168.10	164.50
746-0929	0369-01	16	16-pin	6½x6¼	102.60	97.50	95.40

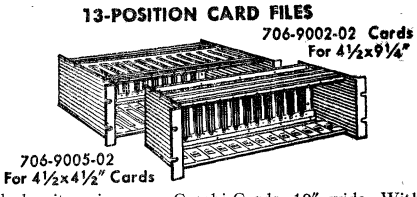
EXTENDERS FOR CAMBI-CARDS

Extend them from normal functional position. Type 715-1000-01. is for 4½x4½" card; type 715-1100-01 is for 4½x9¼" card. 5 oz



Stock No.	Type 715-	EACH 1-4	5-9	10-Up
746-0970	1000-01	37.80	34.00	30.20
746-0984	1100-01	37.80	34.00	30.20

13-POSITION CARD FILES



For high-density wire-wrap Cambi-Cards. 19" wide. With power planes. For automatic or hand-wiring uses. Can hold 832 IC's.

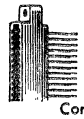
Stock No.	Type 706-	EACH 1-4	5-Up	Stock No.	Type 706-	EACH 1-4	5-Up
746-0943	9005-02	196.40	176.80	746-0940	9002-02	199.40	179.50

PRE-CUT WIRE KIT

(Not illus.) Contains 1050 lengths of pre-cut, stripped, tinned #30 AWG solid copper wire with white Kynar insulation. 100 each: 1", 1½", 2", 2½", 3", 3½", 4½" lengths; 50 each: 5", 6", 7", 8", 9" lengths. Also in individual packets thru 25" size in red, black, white—prices on request. Wt. 6½ oz.

746X1020. 718-1010-01-01-19. 1-9 Ea. 41.30 10-Up..... Ea. 37.20

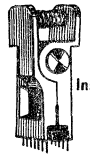
70-PIN WIRE-WRAP CARD CONNECTOR



Flat base provides firm platform for accurate mounting to power planes. Type 7015 has wire-wrap pins; type 7029, solder tab pins. 3 oz.

Stock No.	Type 706-	EACH 1-4	5-9	10-24	25-Up
746-0935	7015-01	7.50	6.75	6.40	6.00
746-0937	7029-01	6.45	5.80	5.50	5.15

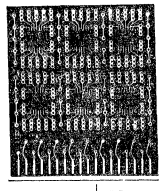
IC INSERTION/EXTRACTION TOOL



Positions IC for insertion or extraction by securely gripping between leads and under body.

746-0933. 706-3739-01. 1-9..... Each 2.00
10-Up..... Each 1.70

TRIAD 2-SIDED IC CARDS

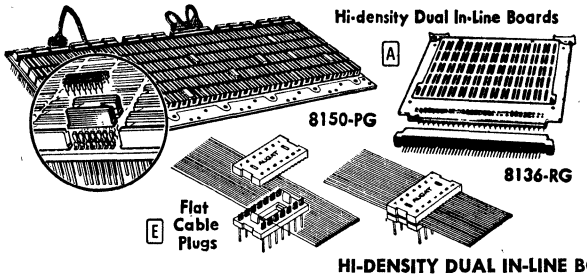


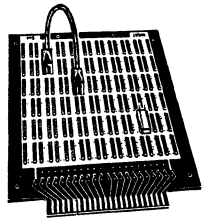
1/16" G-10 glass epoxy, gold plated. 13540 & 13541 have flat pack mtg. tabs on one side, TO-5 pads with .032" hole on other; mount up to 6 TO-5s or flat packs or combos of both. 13540 mates with 25 contact double-side connector on .050" centers. 13541 is 18-contact double-side readout connector with bifurcated contacts on .156" centers. 13544 is for up to 16 8-pin TO-5s. 13545, 13546 have 6 8-pin TO-5 pads on one side, 6 14-pin flat pads on the other, but different connector patterns. 4 oz.

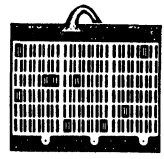
Stock No.	Mfr's Type	Dimensions (Inches)	EACH 1-9	10-24	25-49	50-99	100-Up
954-4541	13540	3.00x3.187"	7.60	6.84	6.16	5.73	5.39
954-4543	13541	2.97x3.273"	7.60	6.84	6.16	5.73	5.39
954-4546	13544	3.00x4.860"	17.65	15.89	14.30	13.29	12.49
954-4548	13545	3.00x3.187"	7.60	6.84	6.16	5.73	5.39
954-4550	13546	2.976x3.273"	7.60	6.84	6.16	5.73	5.39
954-4540	13540 With Connector		15.86	14.25	12.82	11.97	11.40
954-4542	13541 With Connector		10.27	9.22	8.30	7.75	7.38
954-4547	13544 With Connector		25.96	23.33	20.99	19.59	18.66
954-4549	13545 With Connector		15.86	14.25	12.82	11.97	11.40
954-4551	13546 With Connector		10.27	9.22	8.30	7.75	7.38

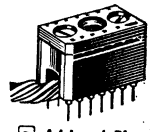
See Page 111 for Cambion Miniature Connectors

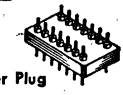
Dual In-Line PC Boards and Accessories AUGAT











HI-DENSITY DUAL IN-LINE BOARDS, ACCESSORIES

B SERIES 8136-KG. For 14-lead flat-pack dual in-line IC's. Patterns on double-sided board with power and ground planes connected to two contacts in each pattern. Large contoured, closed entry contacts for easy insertion. Contacts are positive-retention type, gold over nickel-plated beryllium copper. ⅛″ thick tin-plated glass epoxy PC board with copper circuitry both sides. Temperature range, —65° to +150° C. Gold-plated connector take-off fingers. Type 8136-KG1, 5.850″ wide; 8136-KG130, 5.850″ wide. **SERIES 8136-PG.** Same features as above, but does not have connector fingers. 6.875″ wide. Av. shpg. wt., 1½ lbs.

A SERIES 8136-RG. Above, but —65° to +150° C; 60 patterns. 60-finger connector take-off each side. 7.363x7.010″. 1¼ lbs.

A SERIES 8150-PG. Similar to above, but 30 patterns, without connector fingers. Accepts interface plugs for input/output. 6.875x 2.675″. Wire-Wrap terminals. *No pwr. gnd. pins. 1½ lbs.

Stock No.	Type 8136-	No. Pat.	Lgth., In.	Terminals	EACH Ea.	2-4	5-Up
718-0511	KG1	60	6.938		143.50	130.50	116.50
718-0512	KG1-30	30	4.238	Wire-	83.60	76.00	68.00
718-0518	PG1-30	30	2.675	Wrap	64.35	58.50	52.00
718-0519	PG1-60	60	5.375		124.80	113.50	101.50
718-0520	PG1-90	90	8.075		186.00	169.00	151.00
718-0521	PG1-120	120	10.775	Wire-	246.40	224.00	199.50
718-0522	PG1-150	150	13.475	Wrap	308.00	280.00	249.50
718-0523	PG1-180	180	16.175		367.40	334.00	299.00

UNIVERSAL WIRE WRAP BOARD 8136 SERIES

Same as 8136PG, but accepts comb. of 14, 16, 24 and 36 lead dual-in-line I.C.'s. Each 9-row section accepts 3 inter-facing plugs Double-sided, with power and ground planes outside of contact row.

Stock No.	Type 8136-	No. of Rows	Panel Width +0.25	EACH Ea.	2-4	5-Up
718-0567	UG1-9	9	2.675	69.30	63.00	56.50
718-0568	UG1-18	18	5.375	135.30	123.00	110.00
718-0569	UG1-27	27	8.075	202.40	184.00	164.50
718-0570	UG1-36	36	10.775	269.00	244.50	218.00
718-0571	UG1-45	45	13.475	335.50	305.00	273.00
718-0572	UG1-54	54	16.200	401.50	365.00	326.00

A B BREADBOARD PANELS AND ASSEMBLIES

8128 DUAL IN-LINE BREADBOARD ASSEMBLIES. Single pattern assemblies for use as individual unit or with Series 8130 Breadboard assemblies (also Series 8089 and 8100) to permit stacking. Takes dual in-line integrated circuits with 14 leads in two rows of seven (8128-DG1 takes 16-lead). Accepts all lead diameters. Contact spacing, .300″ between rows, .100″ between leads. Size, 1½x1x¼″. Wt. 2 oz. Usable with all panels and accessories on this page.

8130 DUAL IN-LINE BREADBOARD AND TEST PANELS. Take 25 or 50 dual in-line integrated circuits having 14 leads of any diameter, set in two rows of seven; except 8130-36DG1R-25, for 16-lead IC's. Contact spacing, .300″ between rows, .100″ between leads. Temperature range, —65° to +150° C. Size, 18x7x2″. Packages can be inserted easily without soldering/welding leads. Bus bars provide common power and ground take-offs at each station. Takes standard PC 36-pin .156″ connector. Type 8128 assembly is used for stacking. Wt., 1¼ lbs. Takes all breadboard accessories on this page.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	10-99	100-Up
718-0490	8128-CG1	B	14-Lead Ass'y	5.20	4.56	4.21
718-0491	8128-DG1	B	16-Lead Ass'y	7.25	5.56	4.51
718-0493	8130-36CG1R	A	50-Patt Panel	Ea303.00	2-4Ea	275.50
718-0495	8130-36CG1R-25	A	25-Patt Panel	Ea157.30	2-4Ea	143.00
718-0498	8130-36DG1R-25	A	25-Patt Panel	Ea165.00	2-4Ea	150.00

DUAL IN-LINE EXTRACTOR TOOL T114-1.
718-0055. Wt., 3 oz. 50

CONTACT HARDWARE FOR 8089, 8076, 8100, 8095 (2 oz.)

Stock No.	Mfr's Type	Fig.	Description	PKG. OF 50
718-0370	8076-4G3	G	Jumper terminal	10.05
718-0369	8076-4G2	J	Contact adapter .257″ high	9.20
718-0008	LSG-2AG2-1	H	Contact ass'y .419″ high	7.75
718-0009	LSG-2AG3-1	H	Contact ass'y .607″ high	8.25

718-0419. 8076-18P1 Board Separator Key. Wt. 1 oz.....05

Stock No.	Mfr's Type	No. Pat	Pins/ Pattern	EACH Ea.	2-4	5-Up
718-0561	8136-RG2	60	14	153.00	139.00	124.50
718-0563	8136-RC4	60	16	166.00	150.50	134.50
718-0621	8150-PG1-30	30	14	56.65	51.50	46.00
718-0631	8150-PG3-30	30	14*	58.85	53.50	48.00
718-0637	8150-PG5-30	30	16	62.70	57.00	51.00

14005-1P1 CONNECTOR FOR TYPE 8136-RG. Shpg. wt., 4 oz.
718-0705. 1-4.....Each 13.20 5-Up.....Each 11.80

14005-2P1 CONNECTOR FOR TYPE 8136KG. Shpg. wt., 2 oz.
718-0712. 1-99 ..Each 4.99 100-499.Each 4.37 500-Up..Each 3.80

C 14-LEAD ADAPTER PLUGS. For interposing components and constructions with PC boards and sub-strates. **Sold in multiples of five.** Wt. 2 oz.

Stock No.	Type 8136-	Size	Row Space	EACH 5-95	100-495	500-Up
718-0589	*29G1*	.750x.600x.450″	.300″	1.54	1.21	1.07
718-0596	*30G3*	.750x.600x.950″	.800″	1.57	1.23	1.09

D 1P14-1. 14-LEAD INTERFACING PLUG. Combines patterns on single board. Unassembled, pins self-lock. Accepts *26 AWG (max.) wire. Top, side or end entry of wire. .750x.600x.450″. 1 oz.
718-0075. 1-99...Each 1.26 100-499..Each 1.10 500-Up...Each .96

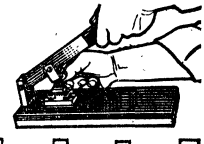
718-0585. *8136-23G1 Socket Terminal Replacement Kit.* Socket, terminal, removal tool. Wt., 4 oz. 1-Up.....Each 6.00

718-0004. LSG-AFG1 Socket Terminal Only.
Pkg. of 100.....Ea. 23.00 2-Up.....Each 18.40

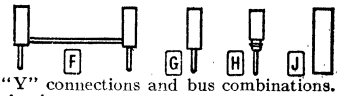
E FLAT 14-PIN CABLE PLUG AND CABLE

Type 2P14-1. Standard IC pattern plug for use with 28 gauge stranded 14 conductor flat cable (Type 14010-IP8 cable listed below). Unique assembly design permits installation of plug either at the ends of the cable or any desired bussing location without stripping wire. For Augat 8136 Series packaging panels, plugs directly into IC panel without soldering. Used for interfacing, input/output connections, testing, and cable termination into PC board.
718-0089. Shpg. wt. 1 oz. 1-9....Each 1.87 10-Up.....Each 1.23
100-499.....Each 1.08 500-Up.....Each .935
Type 14010-IP8, 28-Gauge Stranded 14 Cond. Flat Cable. 100-ft. roll.
718-0721. 2-4 .....Each 19.10 5-9.....Each 17.25
10-49.....Each 13.40 50-Up.....Each 11.40

ASSEMBLY TOOL FOR 14-PIN PLUGS. Use with 14-pin flat cable header assembly. Base is positioned with cable and plug, then simply pressed together. Shpg. wt. 1 lb.
718-0066. Type T2014.....Ea. 56.00
2-Up.....49.00



F JUMPERS



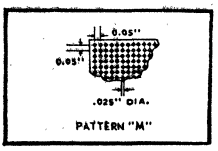
For 8089, 8076, 8100, 8095. Horizontal or vertical-horizontal interconnections—can be stacked for "Y" connections and bus combinations. **Sold in packages of 10 only.** 1 oz.

Stock No.	Mfr's Type	Lgth.	Color	Pkg. 1-3	4-9	10-Up
718-0388	8076-12G 1-4	4″	Black	5.25	4.30	3.70
718-0392	8076-12G 2-4	4″	Red	5.25	4.30	3.70
718-0396	8076-12G 3-4	4″	Blue	5.25	4.30	3.70
718-0400	8076-12G 4-4	4″	Green	5.25	4.30	3.70
718-0404	8076-12G 5-4	4″	Orange	5.25	4.30	3.70
718-0408	8076-12G 6-4	4″	Yellow	5.25	4.30	3.70
718-0411	8076-12G 7-4	4″	Brown	5.25	4.30	3.70
718-0389	8076-12G 1-6	6″	Black	5.40	4.40	3.85
718-0393	8076-12G 2-6	6″	Red	5.40	4.40	3.85
718-0397	8076-12G 3-6	6″	Blue	5.40	4.40	3.85
718-0401	8076-12G 4-6	6″	Green	5.40	4.40	3.85
718-0405	8076-12G 5-6	6″	Orange	5.40	4.40	3.85
718-0409	8076-12G 6-6	6″	Yellow	5.40	4.40	3.85
718-0412	8076-12G 7-6	6″	Brown	5.40	4.40	3.85

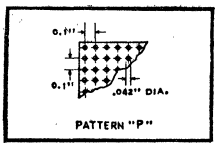
718-0372. 8076-12AS1 Assortment of 140 PC Jumpers. Includes ten 2″ wire, five 4″ wire, five 6″ wire in each color. 6 oz.....60.00

Vector Integrated Circuit Boards and Accessories

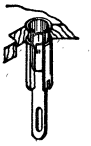
Ideal for "Flat Packs" and Dual In-Line Integrated Circuitry



PATTERN "M"



PATTERN "P"


R23 A Cup Receptacle

MICRO-VECTORBORDS ™, TERMINALS RETAINERS AND TOOLS

Prepunched boards, ideal for mounting "flat packs" and dual in-line integrated circuits. Prepunching and accessories make changes easy. Pattern-M boards, with .025" holes on .05" grid, recommended for "flat packs;" Pattern-P, with .042" holes on .1" grid, for dual in-line devices. Hole patterns correspond to IC lead spacing. Thickness is indicated by last three digits of Mfr's Type. Suffix C1 indicates copper-clad (one-side) epoxy glass per MIL-P-13949 Type FL-GF; other boards are G-10 epoxy glass per MIL-P-18177 Type GEE, except suffix EP, epoxy paper per MIL-P-22324. "Inboard" pins are phosphor bronze, nickel-plated and gold-flashed. Pin pushed into hole gives semi-tight fit. Brass retainer provides tighter fit. Pin holders (tools) are used to install pins and retainers. All boards flame-retardent. Shpg. wt. of Micro-Vectorbord, 2 oz. Wt. of terminals, pins and pin holders, 3½ oz.

Stock No.	Mfr's Type	Size LxW	Pattern	EACH 1-19	20-99	100-199	200-Up
977-1196	59P19/032	6x2"	P	1.06	.80	.75	.60
977-1215	64P44/062EP	6½x4½"	P	2.02	1.52	1.42	1.13
977-1263	169P59/032	17x6"	P	6.94	5.21	4.86	3.88
977-1262	169P59/016	17x6"	P	6.82	5.12	4.78	3.81
977-1264	169P59/032C1	17x6"	P	8.82	6.62	6.17	4.92
977-1260	169P44/062EP	17x4½"	P	4.60	3.45	3.22	2.57
977-1220	76M38/032	4x2"	M	1.06	.80	.75	.60
977-1244	126M76/032	6½x4"	M	2.74	2.06	1.92	1.53
977-1249	166M76/032	8½x4"	M	3.46	2.60	2.43	1.94
977-1277	1336M76/032C1	17x4"	M	8.16	6.12	5.71	4.56

TERMINAL PINS AND CUP RECEPTACLE

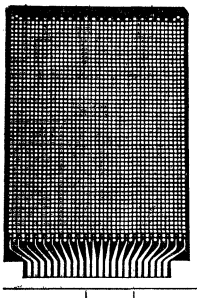
Provide easy-to-wire terminals and test points on Micro-Vectorbord. Knurled shank of pin pushed into prepunched hole gives a semi-tight fit. For tightest fit, a tinned-brass retainer is placed over bottom of pin, pressed against board, soldered to pin. *For 1/16" bd.

Mfr's Type	Pin Lgth.	Fits Holes	Stock No.	Pkg./50 1-4	5-Up	Stock No.	PKG. OF 1000 Ea.	2-4
K24A	⅛"	.040"	977-0575	1.80	1.44	977-0576	25.58	20.59
K27A	⅜"	.025"	977-0587	1.20	.86	977-0588	14.00	11.16
*R23A	5/8"	.140"	977-0758	6.50	4.89	977-0759	81.41	77.70

PIN RETAINERS AND TOOLS

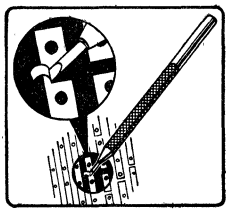
Stock No.	Mfr's Type	Desc.	Used For	PKG./100 1-4	5-Up	Stock No.	Mfr's Type	Used For	Pkg./1000 Ea.	2-Up
977-0980	T102	Ret.	K24A	1.00	.78	977-0981	T102	K24A	5.22	4.16
977-0982	T103	Ret.	K27A	2.45	1.95	977-0983	T103	K27A	17.75	14.22
977-0676	P134A	Holder	K24A	Ea. 1.75	..	977-0674	P132A	K27A	Ea. 1.75	.....
977-0675	P133A	Holder	T102	Ea. 1.75	..	977-0673	P131A	T103	Ea. 1.75	.....

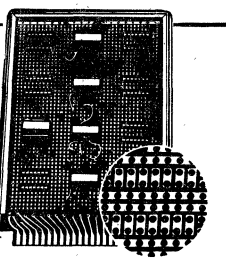
IC AND DISCRETE COMPONENT MOUNTING PLUGBOARDS



TYPE 3662. "P" pattern, measures 4½" wide x 6½" long x 1/16" thick. Provides an overall grid of .042" diameter precision punched holes spaced on .100" centers. Especially useful for mounting DIP's, IC's or any component having leads spaced on multiples of .100". 44 (total 2 sides) independent etched .156"-spaced nickel and gold-plated contacts are provided with identified pad terminations on bottom edge of the board. Material is epoxy glass per MIL-P-13949. TYPE 3673. Similar to above, but measures 8" wide x 9.6" long x 1/16" thick with a total of 80 etched contacts (total 2 sides) spaced on .125" centers.

Stock No.	Type	Description	EACH 1-4	5-19	20-99	100-Up
977-1399	3662	44 contacts (receptacle, Elco 6007, p. 299; Vector R644, p. 352)	8.34	6.95	6.26	5.84
977-1400	3673	80 contacts (matching receptacles, Amphenol Series 261, p. 298)	15.88	13.24	11.91	11.11


P-139 Line Cutter


Plugboard

D.I.P. PLUGBOARDS

For 14-lead dual inline ICs. Have .041" diameter holes punched on 0.1" centers. Boards with X-Y matrix have parallel .070" wide 2-oz. copper lines lengthwise on one side, horizontal on reverse side. All have aluminum "Kardej" frame. Measure 4½x6½"; 1/16" card guides. Board of epoxy paper per MIL-P-22324, Type PEE Nickel-plated gold-flashed contacts. Use K24A terminal pins for connections between front and back. With layout sheets and instructions. *Elco Varicon contacts. See Elco 7000 Series, page 294. Y matrix only, one side. Line cutter tool interrupts etched copper lines. Push-in terminals below. Types 3477-7 and 3477-8 mate with Amphenol 261 Series, page 298. 3 oz.

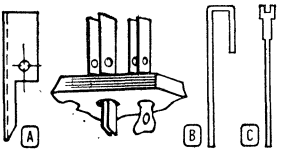
Stock No.	Mfr's Type	X-Y Matrix	Contacts	Spacing	EACH 1-4	5-19	20-99	100-199
977-1387	3474	Yes	44	.156"	12.60	10.50	9.45	8.82
977-1388	3474-2	No	44	.156"	9.54	7.95	7.16	6.68
977-1390	3476	Yes	35*	.1"	13.68	11.40	10.26	9.58
977-1391	3476-2	No	35*	.1"	6.82	5.68	5.11	4.77
977-1396	3477-7	Yes	72	.1"	11.92	9.94	8.95	8.35
977-1397	3477-8	Y†	36	.1"	10.72	8.94	8.05	7.51

977-0682. P-139 Line Cutter Tool... Ea. 2.26 3-Up... Ea. 1.50

UNIVERSAL D.I.P. PLUGBOARDS

Provide universal mounting for D.I.P.'s, IC's, flat packs and transistors. 2 oz. copper clad, on 2 sides of flame retardant .062" thick epoxy glass laminate per MIL-P-13949. Pattern of .042" diameter holes on .1" centers. 32 oval pads (37 on 3677-2). Bus strips are interlaced between pads for easy access to ground and voltage connections. Contacts on .156" centers, 22 each side. Accept standard 44-contact connector. Con-plated with .00003" nickel per QQ-N-290, under .00002" min. gold per MIL-G-45204. All etched circuitry except plug-in tab is solder-coated for easy fabrication. Two .1" diameter holes are provided for attaching card ejectors or nylon pull cords at one end of board. 3 oz.

Stock No.	Mfr's Type	Size, L x W	EACH 1-4	5-19	20-99	100-199	200-Up
977-1402	3677	9⅜x4½"	11.86	9.89	8.90	8.31	6.63
977-1403	3677-2	6½x4½"	10.60	8.84	7.96	7.43	5.92



MICRO-KLIP PUSH-IN MINIATURE TERMINALS FOR .042" DIA. HOLES

T-42-1. Terminals for "P" or "Q" PC boards. Use as mounts for DIP or flat-pack IC leads. Main slot and .025" cross-thru hole, plug .018" hole in tab end. .042" thick. Insertion tool P149A with friction fit below. Wt. 4 oz. K-32 provides wire wrap tail extension for T-42-1. T-44, push-in wire-wrap, use tool A-13.

A 977-0970. T-42-1 Micro-Klips Pkg./100....2.40 3-Up..Ea. 1.82
977-0971. T-42-1 Pkg./1000....Ea. 18.20 2-4.....Ea. 11.70
5-24.....Each 10.50 25-49.....Each 9.95

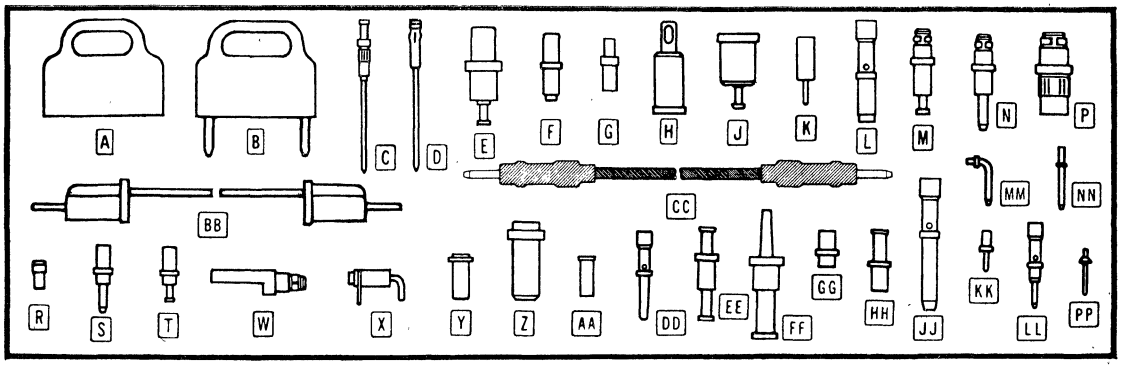
B 977-0595. K-32 Terminals Bag of 100 4 oz. Each 2.00; 1-4. Ea. 1.49
5-19.....Each 1.49 20-99.....Each 1.34
977-0596. K-32 Terminals. Bag of 1000 10 oz. Ea. 18.50 2-4 Ea. 14.50
5-24.....Each 10.35 25-49.....Each 9.32

C 977-0972. T-44 Terminals. Bag of 100 Each 3.90; 5-Up Ea. 2.96
977-0973. T-44 Terminals. Bag of 1000. Each 27.00; 5-Up Ea. 21.48

977-0013. A-13 Insertion Tool. For T-44.....Each 1.69
977-0689. P149 Insertion Tool. Straight type. 3 oz.....Each .80
977-0690. P149A Insertion Tool. Handle type. 3 oz.....Each 2.40

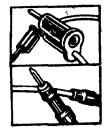
Miniature Connectors and Patch Cords

CAMBION®



Cambion miniature connectors for high-density circuit and packaging applications. Made for reliability and flexibility in interconnecting modern miniaturized components, IC's and PC boards. Available in wide range of styles: jacks, plugs, taper-pin receptacles and combination units, in sizes from .016″ to .080″. Cage-design jacks have beryllium copper contacts. Connectors are in packages of 100 or 25 (Av. shpg. wt. 2 oz.); patch cords are in packages of 10 (Av shpg. wt. 10 oz.). *For 1/16″ PC board; also available for 1/32″ or 3/32″ board. ‡Thru-hole. #For Wire-Wrap connections to in-line integrated circuit.

PATCH CORD KIT



TYPE 3892-01-01. Contains 100 assorted patch cords with .040″ pins Primarily designed for Integrated Circuit patching but can be used for any application requiring .040″ pins. Wt. 1/2 lb.

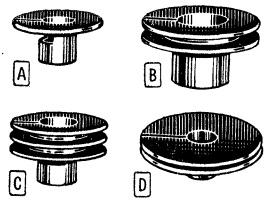
746-1532 ..... **55.00**

Stock No.	Mfr's Type	Fig.	Description	Jack/ Pin Dia.	Pkg. Qty.	PRICE PER PKG. (Sold Only in Pkg. Qty. Indicated) 1-4	5-9	10-Up
746-1483	3775-01-03	A	Shorting Jack; .200″ ctrs. Black	.040″	100	52.00	48.00	43.00
746-1487	3775-01-03	A	Shorting Jack; .200″ ctrs. Red	.040″	100	52.00	48.00	43.00
746-1488	3775-01-03	A	Shorting Jack; .200″ ctrs. Blue	.040″	100	52.00	48.00	43.00
746-1489	3776-01-03	A	Shorting Jack; .400″ ctrs. Black	.040″	100	59.00	54.00	48.00
746-1485	3776-01-03	A	Shorting Jack; .400″ ctrs. Red	.040″	100	59.00	54.00	48.00
746-1486	3776-01-03	A	Shorting Jack; .400″ ctrs. Blue	.040″	100	59.00	54.00	48.00
746-1105	2871-01-03	B	Shorting Plug; .200″ ctrs. Black	.040″	100	30.00	28.00	25.00
746-1106	2871-01-03	B	Shorting Plug; .200″ ctrs. Red	.040″	100	30.00	28.00	25.00
746-1107	2871-01-03	B	Shorting Plug; .200″ ctrs. Blue	.040″	100	30.00	28.00	25.00
746-1476	3771-01-03	B	Shorting Plug; .400″ ctrs. Black	.040″	100	33.00	31.00	27.00
746-1477	3771-01-03	B	Shorting Plug; .400″ ctrs. Red	.040″	100	33.00	30.00	27.00
746-1478	3771-01-03	B	Shorting Plug; .400″ ctrs. Blue	.040″	100	33.00	31.00	27.00
746-1479	3771-02-03	B	Shorting Plug; .500″ ctrs. Black	.040″	100	33.00	31.00	27.00
746-1481	3771-02-03	B	Shorting Plug; .500″ ctrs. Red	.040″	100	33.00	31.00	27.00
746-1481	3771-02-03	B	Shorting Plug; .500″ ctrs. Blue	.040″	100	33.00	31.00	27.00
746-1462	3745-01-03#	D	Comb. Jack; Wire-Wrap term.	.022″	100	25.00	23.00	20.00
746-1495	3844-01-03#	D	Comb. Jack; Wire-Wrap term.	.018x.011″	100	25.00	23.00	20.00
746-1497	3848-01-03#	C	Solder Turret Term.; Wire-Wrap	.025″	500	.....	78.00	70.00
746-1290	3324-02-03*	E	Jack; swage mount	.060-.062″	100	33.00	31.00	27.00
746-1270	3309-01-03*	F	Jack/Jack	.025/.040″	100	35.00	32.00	28.00
746-1375	3394-02-03*	G	Jack; PC swage type	.025″	100	28.00	26.00	23.00
746-1555	4354-01-0319	H	Press-mount Jack; .215″ dia.	.080″	100	37.00	34.00	30.00
746-1570	4355-01-0319	H	Press-mount Jack; .185″ dia.	.080″	100	20.00	18.00	16.00
746-1540	4352-01-0319†	J	Insul. Press-mount Jack; .148″	.040″	100	28.00	26.00	23.00
746-1292	3327-01-03	K	Plug-Jack; non-insulated	.025/.040″	100	18.00	17.00	15.00
746-1236	3289-01-0310	K	Plug-Jack; insulated	.025/.040″	100	32.00	29.00	26.00
746-1295	3367-01-03	L	Jack for patch cords	.040″	100	28.00	26.00	23.00
746-1296	3378-01-0310	L	Above, with insulation tubing	.040″	100	33.00	31.00	27.00
746-1090	2378-01-08*	M	Jack Terminal	.045″	100	28.00	26.00	23.00
746-1094	2650-01-08*	N	Plug-Jack	.045″	100	28.00	26.00	23.00
746-1088	2320-01-08*	P	Printed Circuit Jack	.062″	100	27.00	25.00	22.00
746-1165	3230-01-03	R	PC Jack; dip solder	.025″	100	28.00	26.00	23.00
746-1285	3310-02-03*	S	Plug-Jack; swage mount	.040/.040″	100	33.00	31.00	27.00
746-1300	3320-02-03*	T	Jack/Terminal	.040″	100	33.00	31.00	27.00
746-1095	2655-01-08	W	Side-Mounted Jack	.045″	100	43.00	40.00	35.00
746-1405	3422-01-03	X	Side-Mounted Jack; test point	.040″	100	35.00	32.00	28.00
746-1510	3888-01-03	X	Side-Mounted Jack; test point	.080″	100	60.00	55.00	49.00
746-1330	3388-01-03	Y	PC Jack; dip solder	.040″	100	28.00	26.00	23.00
746-1390	3398-01-03	Z	PC Jack; dip solder	.080″	100	33.00	31.00	27.00
746-1435	*3704-01-03*	AA	PC Jack; dip solder	.040″	100	15.00	13.00	12.00
746-1465	3750-01-03	AA	PC Jack; dip solder	.018x.011″	100	15.00	13.00	12.00
756-1480	3772-01-03	AA	PC Jack; dip solder	.016-.020″	100	15.00	13.00	12.00
746-1420	3703-01-03	AA	PC Jack; dip solder	.025″	100	15.00	13.00	12.00
746-1450	3705-01-03	BB	2″ Piggyback Patch Cord. Black	.040″	10	10.20	10.20	8.70
746-1451	3705-01-03	BB	2″ Piggyback Patch Cord. Red	.040″	10	10.20	10.20	8.70
746-1452	3705-01-03	BB	2″ Piggyback Patch Cord. Blue	.040″	10	10.20	10.20	8.70
746-1240	3306-02-03	CC	4″ Patch Cord. Black	.040″	10	5.40	5.40	4.60
746-1241	3306-02-03	CC	4″ Patch Cord. Red	.040″	10	5.40	5.40	4.60
746-1242	3306-02-03	CC	4″ Patch Cord. Blue	.040″	10	5.40	5.40	4.60
746-1345	3389-02-03	CC	4″ Piggyback Patch Cord. Black	.025″	10	8.50	8.50	7.30
746-1346	3389-02-03	CC	4″ Piggyback Patch Cord. Red	.025″	10	8.50	8.50	7.30
746-1347	3389-02-03	CC	4″ Piggyback Patch Cord. Blue	.025″	10	8.50	8.50	7.30
746-1045	1781-01-03	DD	.061″ Taper Plug	.053″	100	7.30	6.40	5.60
746-1060	2115-03-04‡	EE	.061″ Taper Recept.; feed-thru	.053″	100	7.30	6.40	5.60
746-1047	1799-02	FF	.061″ Taper Plug-Recept.	.053″	100	4.60	4.00	3.50
746-1015	1015-02-04*	GG	.061″ Taper Receptacle	.053″	100	4.10	3.60	3.20
746-1075	2186-02-04*	HH	.061″ Taper Receptacle	.053″	100	5.50	4.80	4.30
746-1315	3369-03-03	JJ	Pin; MS3191 Crimp	.080″	100	10.00	8.70	7.70
746-1150	3220-02-05*	KK	Pin, .188″ Length (.060″ mtg. dia.)	.045″	100	2.50	2.20	1.90
746-1360	3393-02-03*	KK	Pin, .188″ Length (.058″ mtg. dia.)	.025″	100	3.00	2.60	2.30
746-1180	3231-02-03*	KK	Pin, .125″ Length (.040″ mtg. dia.)	.025″	100	4.90	4.30	3.80
746-1255	3308-01-03	LL	Pin; MS3191 Crimp	.050″	100	8.58	7.50	6.67
746-1030	1521-02-03*	MM	Right-Angle PC Pin	.040″	100	7.60	6.67	5.92
746-1120	2970-02-03*	NN	Pin (.300″ pin length)	.040″	100	4.10	3.60	3.20
746-1135	2971-02-03*	NN	Pin (.150″ pin length)	.040″	100	3.40	3.00	2.70
746-1195	3232-02-03*‡	NN	Pin (.300″ pin length)	.040″	100	4.80	4.10	3.70
746-1210	3233-02-03*‡	NN	Pin (.150″ pin length)	.040″	100	4.00	3.50	3.10
746-1225	3241-02-03*‡	NN	Pin (.100″ pin length)	.040″	100	4.90	4.30	3.90
746-1525	3889-01-03	PP	Pin .188″ Length, (.031″ mtg. dia.)	.025″	100	3.80	3.40	3.00

See Wire, Cable, Tubing and Accessories on Pages 269-290

Thermalloy Circuit Board Coolers

- Raised Cooling Fins Take Up No Additional Board Space
- Easy Press-On Installation

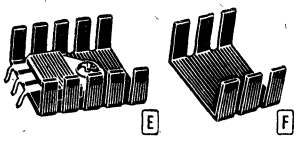


SERIES 2224 LOW-COST PRESS-ON HEAT SINKS

Easily installed heat sinks that don't waste precious space on printed circuit boards; circular convection-cooling flanges extend from top of heat sink. Economical and versatile enough for almost all PC applications. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	Fits Case Style	TR °C/w	Size in Inches O.D.	Size in Inches H	EACH 1-49	EACH 50-99	EACH 100-Up
957-2090	2224B	A	TO-18	72	.50	.235	.25	.24	.17
957-2100	2224C	A	TO-18	75	.50	.235	.23	.21	.15
957-2110	2225B	B	TO-5	52	.75	.40	.28	.25	.18
957-2120	2225C	B	TO-5	55	.75	.40	.25	.23	.16
957-2130	2226B	A	TO-5	56	.75	.22	.25	.24	.17
957-2140	2226C	A	TO-5	59	.75	.22	.23	.21	.15
957-2150	2227B	D	TO-5	27	1.125	.40	.42	.31	.23
957-2160	2227C	D	TO-5	29	1.125	.40	.37	.29	.21
957-2170	2228B	C	TO-5	34	.875	.53	.42	.31	.23
957-2180	2228C	C	TO-5	36	.875	.53	.37	.29	.21
957-2205	2266B	A	TO-8,-66	25	1.25	.32	.42	.33	.27

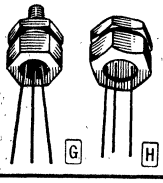
- Ideal For Flat Power Devices
- Dissipate Up to 8 Watts



SERIES 6106 AND 6107 COOLERS FOR FLAT POWER DEVICES

For flat plastic power transistors, silicon-controlled rectifiers, Triacs and Quadracs. Blank except ‡2-hole and †1-hole. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	TR °C/w	Size in Inches L	Size in Inches W	Size in Inches H	EACH 1-49	EACH 50-99	EACH 100-249	EACH 250-Up
957-2730	6106B	E	20	1.18	1.00	.50	.23	.21	.16	.15
957-2740	6106C	E	22	1.18	1.00	.50	.19	.17	.12	.11
957-2750	6106C-13	E‡	20	1.18	1.00	.50	.19	.17	.12	.11
957-2760	6107B	F	26	.71	1.00	.50	.19	.17	.13	.12
957-2280	6107C	F	28	.71	1.00	.50	.16	.12	.10	.09
957-2770	6107B-14	F†	26	.71	1.00	.50	.19	.17	.14	.13
957-2790	6107C-14	F†	28	.71	1.00	.50	.16	.12	.10	.09

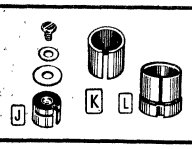


- High Efficiency Conduction Heat Sinks
- A Convenient Mounting Holder

SERIES 1101 AND 1103 CONDUCTION COOLERS

Heat is removed by being transferred to external surfaces. Fit case style TO-5. 1101 has 10-32 stud; 1103 tapped for 4-40 screw. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	TR °C/w	Size in Inches O.D.	Size in Inches H	EACH 1-11	EACH 12-99	EACH 100-499	EACH 500-Up
957-1700	1101A	G	10	.50	.88	1.05	.85	.65	.55
957-1710	1101B	G	10	.50	.88	.95	.75	.55	.50
957-1720	1103A	H	10	.50	.50	1.00	.80	.60	.50
957-1730	1103B	H	10	.50	.50	.90	.70	.50	.40

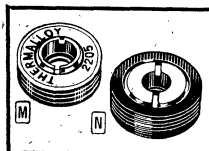


- Tapped For Circuit Board Mounting

SERIES 1115 COMBINATION RETAINERS/HEAT SINKS

1116 is tapped for a 4-40 screw. 1117 consists of a 1116 retainer with pan head steel screw, nylon shoulder washer and B & O insulating washer. All fit case TO-5. Average wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	TR °C/w	Size in Inches O. D.	Size in Inches H	EACH 1-11	EACH 12-99	EACH 100-499	EACH 500-Up
957-1740	1115B	K	68	.38	.40	.23	.13	.11	.10
957-1750	1116A	L	22	.38	.38	.63	.50	.45	.40
957-1760	1116B	L	22	.38	.38	.50	.40	.35	.30
957-1770	1117B	J	22	.38	.46	1.33	1.08	.86	.76

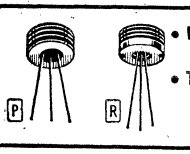


- Highly Effective Cooling Action
- Positive Lead Insulation

SERIES 2205 HIGH-PERFORMANCE CONVECTION COOLERS

Two-piece heat sinks with screw-in teflon inserts hold transistor weld flange tightly to provide maximum conduction path. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	Fits Case Style	TR °C/w	Size in Inches O.D.	Size in Inches H	EACH 1-11	EACH 12-99	EACH 100-499	EACH 500-Up
957-2000	2205B	M	TO-5	25	.81	.34	1.25	1.00	.80	.70
957-2010	2207/PR11	M	TO-5	20	.81	.34	1.55	1.25	1.05	.95
957-2020	2207/PR11A	M	TO-5	20	.81	.34	1.60	1.30	1.10	1.00
957-2050	2212B	M	TO-8	17	1.06	.38	1.95	1.55	1.25	1.05
957-2060	2212B-5	N	TO-5	17	1.06	.38	1.85	1.45	1.15	.95

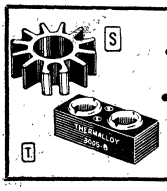


- Low Cost, High Versatility
- Two-Hole Mount Provides Shock Protection

SERIES 2211 CONVECTION COOLERS

Highly versatile circuit board heat sinks with single thru hole and two mounting holes tapped for 2-56 screws. Fit case TO-5. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	TR °C/w	Size in Inches O.D.	Size in Inches H	EACH 1-11	EACH 12-99	EACH 100-499	EACH 500-Up
957-2040	2211B	P	36	.63	.31	.35	.28	.26	.23
957-2030	2211C	P	39	.63	.31	.25	.20	.18	.16
957-2070	2215A	R	25	.75	.38	1.25	1.00	.85	.70
957-2008	2215B	R	25	.75	.38	1.20	.95	.75	.60



- Unique screw boss for mounting ease
- Anodized finish provides electrical insulation

SERIES 2230-5 AND 3005 HEAT SINKS

2230-5 is an aluminum, press-on heat sink. 3005 and 3018 are duosinks to maintain equal case temperatures with electrical insulation. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	Fits Case Style	TR °C/w	Size in Inches L	Size in Inches W	Size in Inches H	EACH 1-11	EACH 12-99	EACH 100-499	EACH 500-Up
957-2190	2230B-5	S	TO-5	52	.75	.75	.25	.27	.17	.15	.13
957-2200	2230C-5	S	TO-5	56	.75	.75	.25	.22	.12	.10	.08
957-2210	3005A	T	TO-5	30	1.25	.50	.38	2.00	1.60	1.30	1.10
957-2220	3018A	T	TO-18	45	1.00	.50	.31	1.95	1.55	1.25	1.05

*NOTE: Finish denoted by suffix letter: A, hard anodize per MIL-F-14072, 400 volts insulation; B, black anodize per MIL-A-8625 Type II; C, gold chromate finish per MIL-C-5541.

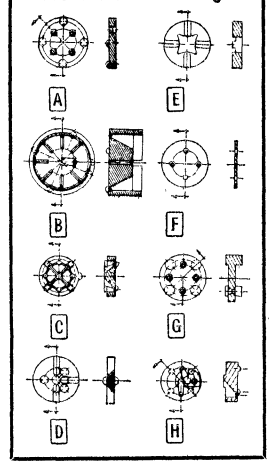
Thermalloy Semiconductor Mtg. Pads, Coolers

MOUNTING PADS, LEAD CONVERSION PADS AND IC PADS

Top-quality nylon mounting pads and conversion pads perform a multitude of functions necessary for the best operation and easiest repair of printed circuit boards. Aid in cooling; prevent short-circuiting. Made of nylon per MIL-M-20593A. IN TABLE BELOW, PADS ARE SOLD IN MULTIPLES OF 100 ONLY, PRICED EACH—WHEN ORDERING, SPECIFY TOTAL NUMBER OF PIECES.

Stock No.	Mfr's Type	Fig.	Case Style	Converts From	Converts To	No. of Leads	Size in Inches O.D. x T	EACH 100-400	EACH 500-900	EACH 1000-Up
957-3640	7717-46	A	TO-18	.....	.....	3 or 4	.200x.060	.065	.040	.030
957-3660	7717-89	A	TO-18	.....	.....	3 or 4	.250x.080	.065	.040	.030
957-3610	7717-22	A	TO-5	.....	.....	3	.344x.075	.065	.040	.030
957-3650	7717-79	A	TO-5	.....	.....	3	.355x.038	.065	.040	.030
957-3520	7717-4	A	TO-5	.....	.....	3 or 4	.375x.075	.065	.040	.030
957-3550	7717-8	A	I/C	.....	.....	.200 8-Pin Circ.	.375x.075	.078	.050	.040
957-3540	7717-7	A	I/C	TO-18	TO-5	3 or 4	.250x.125	.065	.040	.030
957-3690	7717-107	B	I/C	.200 c.	.350 c.	8	.430x.130	.215	.100	.090
957-3590	7717-19	B	I/C	.200 c.	.400 c.	8	.500x.275	.215	.100	.090
957-3600	7717-21	B	I/C	.158 c.	.368 c.	10	.500x.275	.215	.100	.090
957-3710	7717-133	C	TO-18	TO-18	.150 c.	4	.225x.087	.065	.040	.030
957-3700	7717-121	C	TO-18	TO-18	TO-5	3	.300x.100	.065	.040	.030
957-3670	7717-93	C	TO-18	TO-18	.150 c.	3 or 4	.228x.055	.065	.040	.030
957-3630	7717-44	C	TO-18	TO-18	TO-5	3 or 4	.305x.125	.065	.040	.030
957-3620	7717-26	D	TO-18	TO-18	TO-5	3	.343x.120	.065	.040	.030
957-3510	7717-3	E	TO-5	.....	.....	3 or 4	.344x.075	.065	.040	.030
957-3680	7717-94	E	TO-5	.....	.....	3 or 4	.350x.038	.065	.040	.030
957-3570	7717-16	F	TO-18	.....	.....	3 or 4	.200x.020	.065	.040	.030
957-3560	7717-15	F	TO-5	.....	.....	3 or 4	.350x.020	.065	.040	.030
957-3580	7717-18	G	TO-18	.....	.....	3 or 4	.200x.100	.065	.040	.030
957-3530	7717-5	G	TO-5	.....	.....	3 or 4	.350x.125	.065	.040	.030
957-3500	7717-2	H	Epoxy SC	Inline	TO-5	3	.305x.125	.065	.040	.030

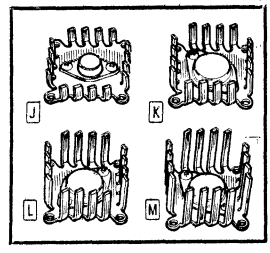
- Prevent Overheating During Soldering
- Provide Free Air Space For Cooling
- Provide Working Room For Easy Repairs
- Prevent Trapped Dirt and Contaminants
- Prevent Solder Bridges



SERIES 6001 HIGH PERFORMANCE PC BOARD COOLERS

All-directional slanted vanes cool more effectively than any other type per unit volume occupied. TR figures are for operation at 10 watts with natural convection. Av. shpg. wt. 1 oz.

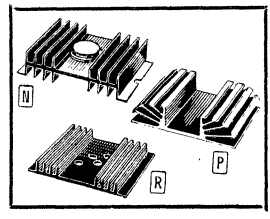
Stock No.	Mfr's Type‡	Fig.	Fits Case Style	TR °C/w	Size in Inches L	Size in Inches W	Size in Inches H	EACH 1-24	EACH 25-99	EACH 100-249	EACH 250-Up
957-2600	6001B-2	J	TO-3	7.9	1.81	1.81	.50	.94	.75	.71	.70
957-2620	6002B-2	K	TO-3	7.2	1.81	1.81	.75	.98	.78	.74	.71
957-2640	6003B-2	L	TO-3	6.5	1.81	1.81	1.00	1.08	.86	.83	.79
957-2650	6004B-2	M	TO-3	6.0	1.81	1.81	1.25	1.12	.90	.86	.83
957-2610	6001B-11	J	TO-66	7.0	1.81	1.81	.50	.94	.75	.71	.70
957-2630	6002B-11	K	TO-66	7.2	1.81	1.81	.75	.98	.78	.74	.71



SERIES 6141, 6500 AND 6601 LOW-PROFILE COOLERS

Low-profile heat sinks for compact designs where optimum performance in a small space is a must. The combination of low cost, small size, and effective design make these coolers ideal for most PC applications. Fit case style TO-3 except *blank. Average shpg. wt. 1 oz.

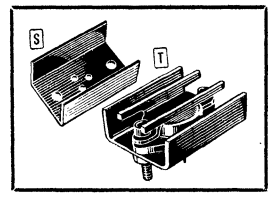
Stock No.	Mfr's Type‡	Fig.	TR °C/w	Size in Inches L	Size in Inches W	Size in Inches H	Device Mtg. Width	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
957-2840	6141B*	R	3.7	3.00	3.75	.50	1.312	1.60	1.05	.80	.75
957-2850	6141B-2	R	3.7	3.00	3.75	.50	1.312	1.80	1.20	.90	.85
957-2890	6169B*	P	3.5	3.00	4.12	1.00	1.30	1.95	1.55	1.20	1.00
957-3070	6500B*	N	2.5	3.00	4.50	1.03	1.38	1.30	1.05	.85	.80
957-3080	6500B-2	N	2.5	3.00	4.50	1.03	1.38	1.50	1.20	.95	.90
957-3120	6601B*	P	5.0	1.50	2.00	.56	.812	1.06	.85	.75	.65



SERIES 6103 AND 6166 TWO-PIECE PC HEAT SINKS

Highly popular two-piece heat sinks for printed circuit board mounting. Have maximum heat transfer mounting configuration; heat is transferred from both top and bottom of semiconductor device. Average shpg. wt. 1 oz.

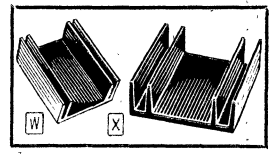
Stock No.	Mfr's Type‡	Fig.	Fits Case Style	TR °C/w	Size in Inches L	Size in Inches W	Size in Inches H	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
957-2700	6103B	T	TO-3	7	1.58	1.25	.50	.56	.45	.45	.41
957-2720	6103C	T	TO-3	8	1.58	1.25	.50	.50	.40	.40	.35
957-2860	6166B	T	TO-66	11	1.32	.87	.63	.51	.41	.41	.38
957-2710	6103B base	S	TO-3	10	1.58	1.25	.50	.30	.25	.25	.22
957-2870	6166B base	S	TO-66	16	1.32	.87	.63	.29	.23	.23	.21



SERIES 6111 AND 6176 CIRCUIT BOARD COOLERS

Features small extrusion for printed circuit boards; low profile permits close board spacing for tight designs. Ideal for stud-mounted semiconductors and TO-3, TO-66 devices. Blank except *fits case style TO-66 and †fits case style TO-3. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type‡	Fig.	TR °C/w	Size in Inches L	Size in Inches W	Size in Inches H	Device Mtg. Width	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
957-2810	6111B	W	10	1.50	1.50	.62	.88	.69	.55	.55	.50
957-2820	6111B-66*	W	10	1.50	1.50	.62	.88	.81	.65	.65	.60
957-2910	6176B	X	4	3.00	1.94	.94	1.30	1.00	.93	.85	.75
957-2920	6176B-2†	X	4	3.00	1.94	.94	1.30	1.15	1.05	.96	.83

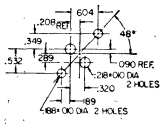


‡NOTE: Finish denoted by suffix letter; A, hard anodize per MIL-F-14072, 400 volts insulation; B, black anodize per MIL-A-8625 Type II; C, gold chromate finish per MIL-C-5541.

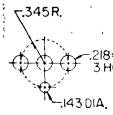
See Performance Curves on Page 115

Thermalloy Heat Sinks and Accessories

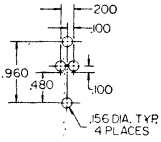
Hole Mounting Patterns and Key To Suffixes Apply to All Thermalloy Semiconductor Coolers



"—2" Hole Pattern TO-3 Case



"—3" Hole Pattern TO-36 Case



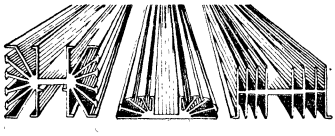
"—11" Hole Pattern TO-66 Case

KEY TO SUFFIXES: A, hard anodize per MIL-F-14072, 400 volts insulation; B, black anodize per MIL-A-8625 Type II; C, gold chromate finish per MIL-C-5541. Numerical suffixes indicate mounting hole patterns, above. **Example:** 6500B-2 has a black anodized finish with a TO-3 hold pattern.

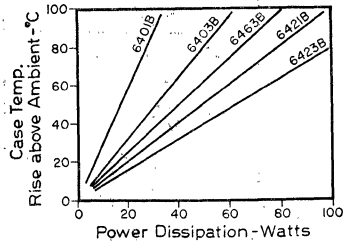
THERMAL JOINT COMPOUND

Grease-like material with high thermal conductivity. Removes air gap insulation between semiconductor case and heat sink.

Stock No.	Type No.	Description	EACH
957-1600	249	1-oz. Tube	1.10
957-1610	250	2-oz. Jar	1.95
957-1620	251	1-lb. Can	8.45



High quality heat sink extrusions in three-foot lengths are ideal for building prototype equipment or for making special application heat sinks for commercial or military equipment. Wide variety of types accommodate most semiconductor devices.



ATTENTION BUYERS

Allied can supply the entire line of Thermalloy heat sinks in production quantities. For price information on larger quantities than shown, contact your nearest Allied facility.

BERYLLIUM OXIDE HEAT SINKS AND INSULATORS

High-purity beryllium oxide heat sinks conduct heat better than aluminum yet insulate better than porcelain and have low capacitance.

A

B

C

D

Stock No.	Mfr's Type	Fig.	For Case Style	Rated Volts	Size in Inches L	W	H	EACH 1-11	12-99	100-499	500-Up
957-2320	4018	A	TO-18	700	.22	.22	.03	.70	.56	.39	.35
957-2310	4005	A	TO-5	700	.36	.36	.03	.75	.60	.42	.40
957-2300	4003	D	TO-3	800	1.56	1.05	.06	1.56	1.25	.98	.92
957-2340	4066	D	TO-66	800	1.25	.70	.06	1.19	.95	.70	.65
957-2330	4036	C	TO-36	800	1.06	1.06	.06	1.40	1.12	.85	.81
957-1100	B-470-235-40	B	10-32 Stud	700	.47	.47	.04	.74	.59	.42	.38
957-1110	B-800-260-62	B	5/16" Stud	800	.80	.80	.06	.96	.77	.58	.55
957-1120	B-800-320-62	B	1/4" Stud	800	.80	.80	.06	.96	.77	58	.55

THERMAFILM SEMICONDUCTOR INSULATORS

Replaces mica washers. Homogenous film will not chip, fracture, peel or break. Dielectric strength, 7000 volts/mil; −260° to +400° C. **Mult. of 100 only.**

Stock No.	Mfr's Type	Fig.	For Case Style	Size in Inches L	W	H	EACH 100-400	500-900	1000-Up
957-1550	43-18-1	A	TO-18	.25	.25	.002	.045	.030	.020
957-1540	43-5-1	A	TO-5	.39	.39	.002	.045	.030	.020
957-1530	43-03-3	D	TO-3	1.65	1.06	.002	.035	.025	.015
957-1570	43-66-1	D	TO-66	1.31	.76	.002	.035	.025	.015
957-1560	43-36-1	C	TO-36	1.06	1.06	.002	.035	.025	.015
957-1500	43-02-10	B	10-32 Stud	.562	.562	.002	.035	.025	.015
957-1510	43-02-25	B	1/4" Stud	.812	.812	.002	.035	.025	.015
957-1520	43-02-50	B	1/2" Stud	1.38	1.38	.002	.045	.030	.020

HARD-ANODIZED SEMICONDUCTOR INSULATORS

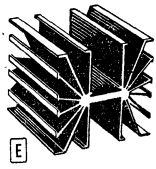
Made of 6061-T4 aluminum anodized per MIL-A-8625 Type III. Thermal resistance is 0.116° C/watt per square inch of area. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type	Fig.	For Case Style	Size in Inches L	W	H	EACH 1-11	12-99	100-249	250-Up
957-2440	4766A	D	TO-66	1.32	.71	.02	.40	.32	.21	.11
957-2400	4726A	D	TO-3	1.80	1.06	.02	.43	.35	.23	.12
957-2410	4710A	B	#10 Stud	.56	.56	.02	.40	.32	.21	.11
957-2420	4725A	B	1/4" Stud	.81	.81	.02	.40	.32	.21	.11
957-2430	4736A	C	TO-36	1.09	1.09	.02	.43	.35	.23	.12
957-2450	4778A	....	Plastic Power	.75	.50	.02	.42	.33	.22	.11

SPECIAL PURPOSE HEAT SINK EXTRUSIONS

Stock No.	Mfr's Type	Size in Inches H	W	Minimum Device Mtg. Width	Shpg. Wt.	EACH 1-4	5-9	10-Up
957-2800	6111	.62	1.50	88	2 lbs.	4.50	3.30	2.75
957-2830	6141	.50	3.75	1.312	3 lbs.	6.10	5.10	4.55
957-2880	6169	1.00	4.12	1.30	4 lbs.	6.75	5.40	4.65
957-2900	6176	.935	1.94	1.30	3 lbs.	5.40	4.05	3.30
957-2930	6401	1.25	4.75	1.30	3 lbs.	7.50	6.30	5.55
957-2960	6421	2.63	4.75	1.32	8 lbs.	12.15	11.55	10.40
957-3030	6450	4.00	4.00	1.25	13 lbs.	25.50	21.60	19.80
957-3060	6500	1.03	4.50	1.38	4 lbs.	6.90	5.70	4.95
957-3130	6660	6.25	6.25	1.812	29 lbs.	53.10	43.50	39.60
957-3090	6560	5.00	5.00	1.312	18 lbs.	31.50	27.75	24.00
957-3010	6441	5.50	4.75	1.312	13 lbs.	19.35	18.00	17.25
957-3023	6442	3.00	4.75	1.33	9 lbs.	14.95	14.05	12.55
957-3045	6463	1.88	4.75	1.33	8 lbs.	14.25	13.30	11.90

TEXAS-SIZE COOLERS FOR HIGH POWER DEVICES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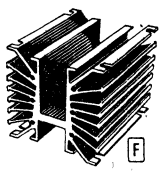

F

Extra-large size coolers for high power diodes and rectifiers. Minimize overheating and deterioration at high current levels. Eliminate the need for additional fans or cooling air in all but extreme cases. Blank mounting accepts stud mount hex from 1/2" to 1 3/4" for maximum versatility. All Texas-size extrusions are made from 6063-T5 Aluminum. Finish is Black Anodize per MIL-A-8625, type II, with the top and bottom surfaces of the center web free of anodize for electrical connection and bussing. Av. wt. 8 oz.

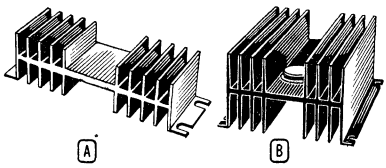
Stock No.	Mfr's Type	Fig.	TR °C/W	Size in Inches L	W	H	Device Mtg. Width	EACH 1-24	25-49	50-99	100-Up
957-3020	6441B	E	.54	4.50	4.75	5.50	1.312	4.85	4.25	3.60	3.15
957-3040	6450B	F	.60	5.00	4.00	4.00	1.250	4.45	4.05	3.69	3.44
957-3050	6470B	F	.45	7.50	4.00	4.00	1.250	5.35	4.85	4.43	4.12
957-3100	6560B	F	.45	6.00	5.00	5.00	1.312	6.90	6.20	5.65	5.28
957-3110	6590B	F	.30	9.00	5.00	5.00	1.312	8.85	7.96	7.25	6.77
957-3140	6660B	F	.36	6.00	6.25	6.25	1.812	9.70	8.65	7.86	7.35
957-3150	6690B	F	.28	9.00	6.25	6.25	1.812	14.00	12.62	11.50	10.75
957-3024	6442B	E	.91	3.00	4.75	3.00	1.33	3.35	3.15	2.90	2.75
957-3025	6443B	E	.73	5.50	4.75	3.00	1.33	4.95	4.45	3.90	3.33

Semiconductor Accessories on Pages 112-117

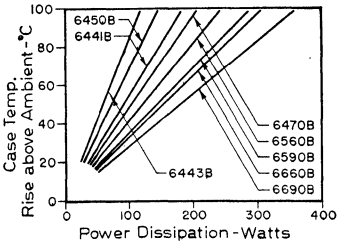
Thermalloy Heat Sinks and Coolers

SERIES 6401, 6403, 6421, 6423 AND 6463 POWER DEVICE COOLERS

Highly popular heat sinks for use with common power transistors, diodes and silicon-controlled rectifiers in commercial, industrial or military applications. Excellent wherever space is at a premium. Cover large surface area to give low thermal resistance and more effective cooling action. Material is extruded aluminum of Type 6036T6. *Indicates thermal resistance. Blank mounting except † which fit TO-3 case. Av. shpg. wt. 4 oz.



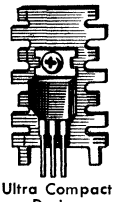
- Highly Efficient Cooling
- Space-Saving Design



Stock No.	Mfr's Type	Fig.	*TR °C/W	Size in Inches L	W	H	Device Mtg. Width	EACH 1-24	25-49	50-49	100-Up
957-2940	6401B	A	2.3	1.50	4.75	1.25	1.30	1.30	1.05	.95	.85
957-2950	6403B	A	1.5	3.00	4.75	1.25	1.30	1.55	1.24	1.10	1.00
957-2970	6421B	B	1.0	3.00	4.75	2.63	1.32	2.28	1.82	1.65	1.50
957-2990	6423B	B	.9	6.00	4.75	2.63	1.32	3.30	2.75	2.50	2.30
957-2980	6421B-2†	B	1.0	3.00	4.75	2.63	1.32	2.50	2.03	1.75	1.60
957-3000	6423B-2†	B	.9	6.00	4.75	2.63	1.32	3.40	2.95	2.60	2.40
957-3046	6463	B	1.3	3.00	4.75	1.88	1.30	2.28	1.95	1.80	1.53

PLASTIC POWER COOLER

For use with today's compact equipment. Unique standup design permits good performance for plastic power device while taking little board space. Contains two feet that add support to soldered leads. Available in black anodized or *nickel-plated for soldering legs. Dimensions in inches: 1.25 high x .250 wide x .875 long. Type 6025B fits plastic case style; Type 6025D fits power case style. TR in chart: case temperature rise above ambient —° C. Wt. 2 oz.



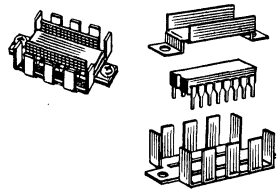
Ultra Compact Design

Stock No.	Mfr's Type	TR in °	PRICE EACH 1-49	50-99	100-249	250-Up
957-2670	6025B	24	.23	.19	.16	.14
957-2671	6025D*	34	.24	.20	.17	.15

DIP HEAT SINKS

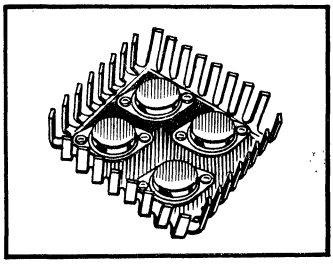
Type 6007A. Completely new two-piece design permits use of both 14 and 16-pin dual inline packages. Two pieces provide positive retention and add to heat dissipation. Features hard anodized insulating finish. Can be used with all popular sockets. Case temperature rise above ambient —° C:23°. Size: .37Hx.75Wx1.24"D.

957-2662. 1-49....Ea..**.59**
50-99...**.49** 100-Up...**.45**

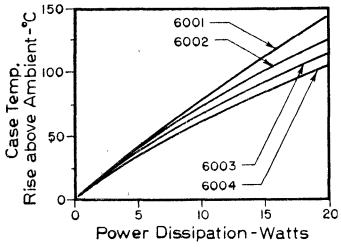


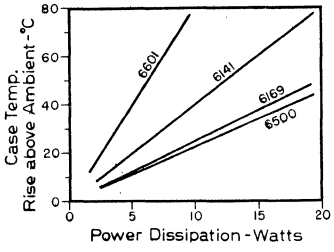
HIGH PERFORMANCE COOLERS FOR MULTIPLE DEVICE MOUNTING

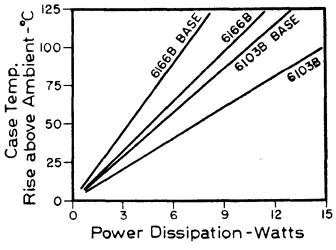
The superior heat dissipation performance of these coolers with their unique slanted fins, compact and lightweight construction permits the elimination of bulky extrusions. Series 6005 will handle up to three popular devices; Series 6006 accepts up to four popular devices. TR: case temperature rise above ambient —°C.

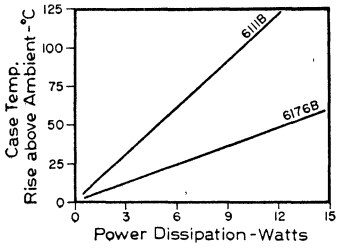


Stock No.	Mfr's Type	Will Take	TR in °	Dimensions H	W	L	EACH 1-49	50-90	100-Up
957-2651	6005B-2-2	2 TO-3	3.4	.90	2.50	2.50	1.35	1.15	.98
957-2652	6005B-11-11	2 TO-66	3.4	.90	2.50	2.50	1.35	1.15	.98
957-2653	6005B-2-2-2	3 TO-3	2.8	.90	2.50	2.50	1.50	1.30	1.13
957-2654	6005B-11-11-11	3 TO-66	2.8	.90	2.50	2.50	1.50	1.30	1.13
957-2655	6006B-2-2	2 TO-3	3.2	1.00	3.125	3.125	1.50	1.30	1.13
957-2656	6006B-11-11	2 TO-66	3.2	1.00	3.125	3.125	1.50	1.30	1.13
957-2657	6006B-2-2-2	3 TO-3	2.8	1.00	3.125	3.125	1.62	1.43	1.22
957-2658	6006B-11-11-11	3 TO-66	2.8	1.00	3.125	3.125	1.62	1.43	1.22
957-2659	6006B-2-2-2-2	4 TO-66	2	1.00	3.125	3.125	1.71	1.54	1.36
957-2660	6006B-11-11-11-11	4 TO-66	2	1.00	3.125	3.125	1.71	1.54	1.36







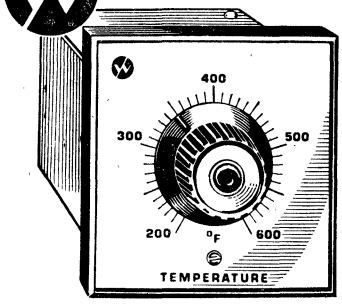


Other Thermalloy Products on Pages 112, 113

Temperature Controls and Coolers

WAYNCO SOLID-STATE TEMPERATURE CONTROLS

- Ideal for Applications Using Solenoids, Contactors and Relays
- Externally Mounted "Fusac" for Quick and Easy Replacement



New panel mount DIN size case having a large, easy-to-read scale; a high resolution potentiometer of unique design giving greater accuracy of set point and a load indicator light in the center of the knob for readily viewed indication. The design of this new controller provides a solid-state, zero-switching "Fusac" output that handles inductive loads as easily as resistive loads and eliminates RFI problems. This makes it ideal for applications using solenoids, contactors or relays. Further, the zero-switching output can be used to trigger external Triacs and SCR's rated up to 200 amperes. The "Fusac" is externally mounted for quick and easy replacement in the event of field shorting or failure. Use this new control concept for application to incubators, baths, ovens, plastic molding and extrusion machines, packaging and medical systems. **Model 32-06-01** for Type J thermocouples and **Model 08-03-01** for thermistor sensors both have outputs rated 100 VA at 115 VAC. Line input is 115 VAC ±10%, 50/60 Hz. Control accuracy, 1.0% full scale. Ambient to +125° F. Thermocouple units require no adjustment to 100-ohm thermocouple. Cold junction compensation and thermocouple break protection provided on **Model 32-06-01**. See table below for sensors for **Model 08-03-01**. Controllers are time proportioning, zero-switching. DIN-size case: 3¹/₈x3¹/₈x4⁹/₁₀". 22 oz.

MODEL 32-06-01 THERMOCOUPLE

Stock No.	Mfr's Type	Temp. Range	Sensor Type	EACH 1-9	EACH 10-Up
998-3210	32-06-01-200/600°F	200/600°F	A	63.00	54.00
998-3205	32-06-01-0/1000°F	0/1000°F	A	63.00	54.00
998-3200	32-06-01-0/1000°C	0/1000°C	B	63.00	54.00

MODEL 08-03-01 THERMISTOR

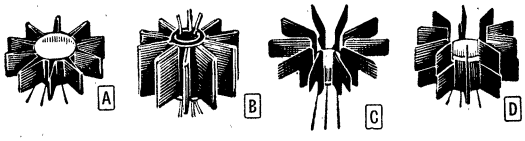
998-0800	08-03-01-(−20)/+60°F	−20/+60°C	A	44.95	38.50
998-0805	08-03-01-50/250°F	50/250°F	A	44.95	38.50
998-0810	08-03-01-200/600°F	200/600°F	B	44.95	38.50

THERMISTER TEMPERATURE CONTROLS

3/16" dia. stainless steel sheath. 18" leads; stainless steel compression fitting w/standard 1/18" NPT thread. Sensor-type column refers to controllers. Lgth. is length below fitting

Stock No.	Mfr's Type	Sensor Type	Base (ohms)	Element Type	Lgth.	EACH 1-9	EACH 10-Up
998-0323	03-0023	A	3K	Thermistor	3"	25.85	15.95
998-0329	03-0029	A	3K	Thermistor	6"	25.85	15.95
998-0321	03-0021	B	100K	Thermistor	3"	25.85	15.95
998-0330	03-0030	B	100K	Thermistor	6"	25.85	15.95

WAKEFIELD FEATHERWEIGHT COOLERS FOR MILLIWATT TRANSISTORS



Fin design permits horizontal or vertical orientation with natural convection in either position. In forced convection applications, the axis of the semiconductor may be oriented either perpendicular or parallel to the direction of air flow. Series 200 coolers are made from a beryllium copper alloy. Black ebonal finish. Meet MIL-C-81021. 1 oz.

RISE (0°) FOR 1 WATT

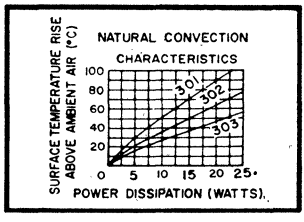
Type	Nat. Conv.	250 Ft./Min.	Fits Jedec Case Styles
201	66	27	TO, 18, 24, 28
203	56	19	(222 accepts
222	56	19	2 cases)
205	61	24	TO 5, 9, 11, 12, 16
207	49	17	29, 33, 39, 42, 43
209	34	10	(224 accepts
224	49	17	2 cases)
211	56	20	
213	44	13	TO 8
215	31	8	

SERIES 200 COOLERS

Stock No.	Mfr's Type	Fig.	Inches Dia.	Inches Lgth.	Fits Case Dia.	EACH 1-99	EACH In Multiples of 100 100-	200-400	1000-Up
982-3201	201CB	A	.64	.19	.161/.24	.21	.14	.13	.12
982-3203	203CB	D	.64	.38	.161/.24	.29	.21	.18	.17
982-3204	204CB	A	.55	.20	.275/.335	.20	.13	.11	.11
982-3205	205CB	A	.72	.19	.275/.370	.21	.14	.13	.12
982-3207	207CB	D	.72	.38	.275/.370	.29	.21	.18	.17
982-3209	209CB	C	1.28	.44	.275/.370	.30	.23	.20	.19
982-3211	211CB	A	.83	.19	.440/.544	.29	.21	.18	.17
982-3213	213CB	D	.83	.38	.440/.544	.30	.23	.20	.19
982-3215	215CB	C	1.40	.44	.440/.544	.30	.23	.20	.19
982-3222	222CB	B	.64	.38	.161/.240	.32	.20	.18	.17
982-3224	224CB	B	.72	.44	.275/.371	.30	.23	.20	.19
982-2045	160 Installation tool for Models 201, 3, 5, 7, 9								2.50
982-2046	161 Installation tool for Models 211, 13, 15								2.50

SERIES 300 RECTIFIER COOLERS

Increases Semiconductor Longevity

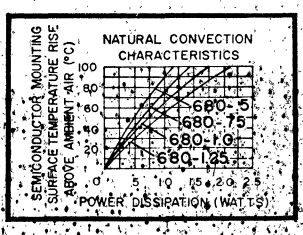


Radial fin. Accommodate stud-mounted (up to 1 1/16") hex case, press-fitted rectifiers. MIL-spec black finish. Use Type 103 Teflon® insulators. Av. shpg. wt. 6 oz.

Stock No.	Mfr's Type	Inches H	Inches W	Inches D	EACH 1-24	25-49	50-99	100-Up
982-4460	301M	.75	2.00	2.00	1.43	1.32	1.28	1.05
982-4461	301N	.75	2.00	2.00	1.43	1.32	1.28	1.05
982-4462	301R	.75	2.00	2.00	1.43	1.32	1.28	1.05
982-4463	301RR	.75	2.00	2.00	1.54	1.43	1.37	1.10
982-4464	302M	1.50	2.00	2.00	1.80	1.65	1.60	1.28
982-4465	302N	1.50	2.00	2.00	1.80	1.65	1.60	1.28
982-4466	302R	1.50	2.00	2.00	1.80	1.65	1.60	1.28
982-4467	302RR	1.50	2.00	2.00	1.90	1.70	1.70	1.36
982-4468	303M	3.00	2.00	2.00	2.60	2.45	2.35	1.88
982-4469	303N	3.00	2.00	2.00	2.60	2.45	2.35	1.88
982-4470	303RR	3.00	2.00	2.00	2.60	2.45	2.35	1.88
982-4471	303RR	3.00	2.00	2.00	2.75	2.55	2.45	1.95

SERIES 680 CIRCUIT BOARD COOLERS

Optimum Natural Convection Cooling Above Circuit Board



For transistor case sizes such as TO-5, TO-36, 2N-1016 or smaller. High thermal conductivity aluminum alloy. 1.81x1.81" mtg. centers. 2 oz.

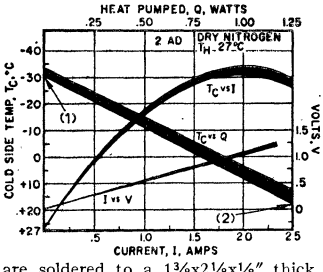
Stock No.	Mfr's Type	Inches H	Inches W	Inches D	EACH 1-49	50-99	100-499	500-Up
982-4485	680-.5A	.50	1.81	1.81	.98	.93	.80	.69
982-4486	680-.5B	.50	1.81	1.81	.98	.93	.80	.69
982-4487	680-.5K	.50	1.81	1.81	.98	.93	.80	.69
982-4488	680-.75A	.75	1.81	1.81	1.00	.95	.82	.70
982-4489	680-.75B	.75	1.81	1.81	1.00	.95	.82	.70
982-4490	680-.75K	.75	1.81	1.81	1.00	.95	.82	.70
982-4491	680-1.0A	1.00	1.81	1.81	1.09	1.03	.88	.77
982-4492	680-1.0B	1.00	1.81	1.81	1.09	1.03	.88	.77
982-4493	680-1.0K	1.00	1.81	1.81	1.09	1.03	.88	.77
982-4494	680-1.25A	1.25	1.81	1.81	1.21	1.07	.91	.79
982-4495	680-1.25B	1.25	1.81	1.81	1.21	1.07	.91	.79
982-4496	680-1.25K	1.25	1.81	1.81	1.21	1.07	.91	.79

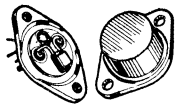
Semiconductor Accessories on Pages 112-117

Nuclear Systems, Inc. Thermo Devices

nsi

THERMOELECTRIC MODULES





Miniature low-current solid-state modules for cooling or temperature stabilization of infrared detectors, integrated circuits, etc. Modules either cool or heat depending on polarity of DC voltages. Basic module is supplied on bases of two different types. Type FP modules are soldered to a 1⅜x2⅛x⅛" thick copper plate. Type TO-3 are soldered to a standard TO-3 header base with a 6-pin accessory feed-through and top enclosure. All modules can be used with any power supply below. Detailed instructions are furnished with each module. Av. shpg. wt. 8 oz. Order from table below.

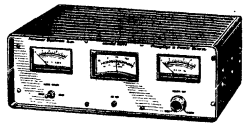
THERMOELECTRIC MODULE SPECIFICATIONS

Type No.	Amps	Volts	Max. ▲T @ Q=0	Max. Q @ ▲T=0	Module Size in Inches Bottom	Top	Ht.
1AB	1	1	55°C	0.7W	.19x.24	.19x.24	.18
2AD	2	1	55°C	1.4W	.16x.16	.16x.16	.13
5AB	5	1	55°C	3W	.35x.43	.35x.43	.18
5HF	5	5	55°C	14W	.75x.75	.75x.75	.18
5AB8	4	1.1	80°C	....	.35x.43	.18x.26	.35
5HF2	4	3.4	80°C	....	.75x.75	.35x.43	.35
5HF28	4	4	92°C	....	.75x.75	.26x.18	.54

PRICES FOR ABOVE

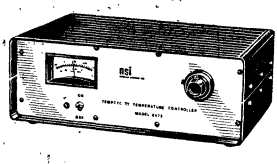
Stock No.	Mfr's Type	Description	1-9, EA.	10-24, EA.
874-1710	1AB-TO-3	TE Module	31.50	28.50
874-1700	1AB-FP	TE Module	30.00	28.00
874-1730	2AD-TO-3	TE Module	26.50	24.00
874-1720	2AD-FP	TE Module	25.00	22.50
874-1750	5AB-TO-3	TE Module	36.50	32.50
874-1740	5AB-FP	TE Module	35.00	31.50
874-1770	5AB8-TO-3	TE Module	85.00	77.00
874-1760	5AB8-FP	TE Module	82.00	74.00
874-1780	5HF-FP	TE Module	49.00	49.00
874-1790	5HF2-FP	TE Module	130.00	116.00
874-1800	5HF28-FP	TE Module	190.00	170.00

0-6 VDC MODULE POWER SUPPLY



MODEL 6471. Highly stable power supply built especially for use with the above modules. Every feature of modern design has been called upon to make this a top-performing unit that will provide, under rugged conditions, a pure, well-filtered DC output compatible with the above modules in every respect. Front-panel-mounted cool-heat mode switch reverses DC voltage polarity. Has 115 VAC, 60 Hz, 20-watt outlet for the HSF heat sink or CPS cold plate. Pyrometer −60°C to +110°C (−75°F to +225°F). Output voltage is variable from 0-6 VDC. Size, 15x10x5½". Comes complete with a 7-ft. cable containing module power leads, two iron-constantan thermocouple leads. For 110 VAC, 60 Hz AC.
874U6471. Shpg. wt. 15 lbs. 1-9...Each 397.00 10-24...Each 365.00

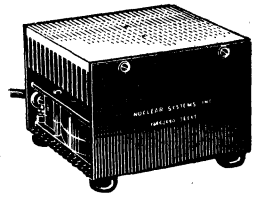
POWER SUPPLY/TEMPERATURE CONTROLLER



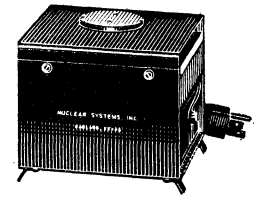
MODEL 6472. Proportional temperature controller designed especially for use with NSI thermoelectric modules. No SCR's. Adjusted by setting a precison 10-turn potentiometer dial. Sense-point temperature is determined by a thermistor mounted at or near the module control surface. A front-panel-mounted pyrometer indicates approximate control-temperature when a thermocouple (Model TC supplied) is mounted on the control surface. The desired range determines which thermistor (also supplied) is applicable. Thermistor ranges are: Type A, 0°C to +70°C; Type B, −35°C to +35°C; Type C, −60°C to 0°C. Typical control capability with CPA cold plate after calibration, set-point accuracy ±0.5°C. Range of control, 0°C to +70°C. Output voltage, 8 VDC maximum. Output current, 6 amps maximum. Size, 15x10x5¼". For 110 volts, 60 Hz AC.
874U6472. Shpg. wt. 17 lbs. 1-9...Each 558.00 10-24...Each 520.00

Semiconductor Accessories on Pages 101, 105-117

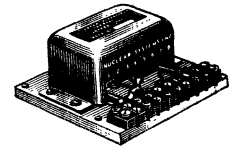
HEAT-SINK AND COLD-PLATE ASSEMBLIES



MODEL HSF. Provides room-temperature mounting surface for heat-dissipating devices such as thermoelectric modules. Two tapped holes are located on the flat surface, allowing Type FP modules to be fastened to the heat sink. Two through-holes are located in the copper plate of the Type FP modules. Can be plugged into conventional 115 VAC, 60 Hz AC outlet. Thermal resistance, 0.2°C/watt. 5x5½x4½". Shpg. wt. 5 lbs.
874-1050. 1-9.....Each 83.00 10-24.....Each 75.00



MODEL CPA. Provides adjustable cooling and heating of a 2" diameter aluminum plate. Surface temperature may be maintained at any selected value between −5°C and +80°C. Heat exchanger will maintain the module base temperature near room temperature. Unit includes a connector for convenience in making electrical connections to the thermoelectric module. Maximum input voltage, 5 volts DC at 5 amps. Can be plugged into conventional 115-VAC, 60 Hz AC outlet. 5x5½x5".
874-1000. Shpg. wt. 5 lbs. 1-9...Each 149.00 10-24...Each 134.00



MODEL TC-400. Used to cool or temperature-stabilize individual components such as transistors while eliminating convection currents. Components are mounted to a support block attached to the thermoelectric module inside the chamber. Capable of maintaining mounting plate at any selected temperature between −15°C and +80°C. Maximum input power to thermoelectric module is 5 VDC at 5 amps. May be mounted on HSF heat sink with the following capacities: heat pumped 4 watts, temperature depression 20°C; heat pumped 2 watts, temperature depression 40°C. Active chamber size, 2x1x1". Overall size, 4½x4x2". Shpg. wt. 3 lbs.
874-1600. 1-9.....Each 168.00 10-24.....Each 154.00

MODEL VH-20. (Not illus.) Round flange enclosure for housing any standard NSI thermoelectric module. Sapphire window and flange are completely removable for easy access to pin connection when mounting devices that are to be cooled. Final seal is made by soldering the flange to the base with NSI low-temperature solder (NSI-70). Eight available pin connections. Sapphire window is 1" dia. x ⅛" thick. Flange diameter, 2⅝". Overall height, 1½".
874-1675. Shpg. wt. 1 lb. 1-9...Each 280.00 10-24...Each 250.00

ACCESSORIES

NSI-BG THERMAL COMPOUND. Increases heat transfer between components and mounting surfaces. Eliminates air-gap between pressure-contacted surfaces. Thermal conductivity 4 times greater than silicon grease.
874-1204. BG-4. 4-oz. size.....4.50
874-1212. BG-12. 12-oz. size.....8.00

NSI-70, NSI-96, NSI-117 LOW-MELTING EUTECTIC SOLDERS. (Not illus.) Used where heat-sensitive components must be mechanically bonded. Bonds modules to heat exchangers or thermocouples. Melting point is indicated in degrees centrigrade in product number: 70°C, 96°C, 117°C. Shpg. wt. ½ lb.

Stock No.	Mfr's Type	Quan.	EACH	Stock No.	Mfr's Type	Quan.	EACH
874-1305	NSI-70-5	5 gm	7.00	874-1450	NSI-96-50	50 gm	38.50
874-1325	NSI-70-25	25 gm	28.50	874-1505	NSI-117-5	5 gm	7.00
874-1350	NSI-70-50	50 gm	38.50	874-1525	NSI-117-25	25 gm	28.50
874-1405	NSI-96-5	5 gm	7.00	874-1550	NSI-117-50	50 gm	38.50
874-1425	NSI-96-25	25 gm	28.50	.....	.....	.....	.....

NSI-AB SOLDERING FLUX. For use with NSI eutectic solders. Soluble in water. Maximum shpg. wt. 1½ lbs.
874-1101. NSI-AB-1. 1-oz. Size.....5.70
874-1104. NSI-AB-4. 4-oz. Size.....10.00
874-1116. NSI-AB-16. 16-oz. Size.....18.00

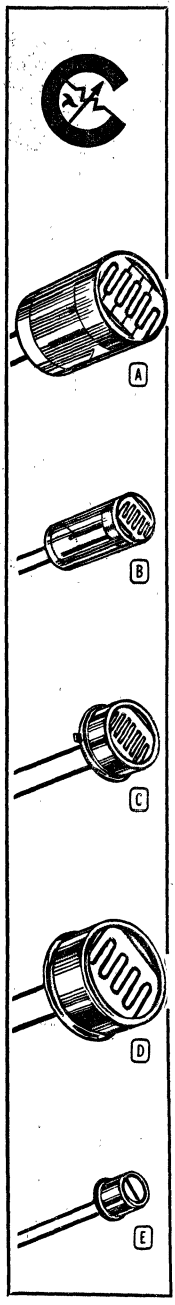
NSI-TC IRON-CONSTANTAN THERMOCOUPLE WIRE. For use with TM-100 temperature indicating meter. Length, 7 feet.
874-1220. Maximum shpg. wt. ½ lb.....7.50

TM-100 THREE-INCH INDICATING PYROMETER. Mounted in instrument case. Temperature range, −60°C to +100°C (−75°F to +225°F).
874-1650. Shpg. wt. 1 lb.....95.00

Clairex Photocells

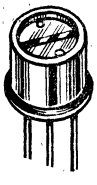
CdS AND CdSe PHOTOCELLS

*Res. @ 2 fc ±33⅓%. †Res. ratio from 2 fc to dark within 5 seconds. ‡at 25°C. (mW). §With/without heat sink. Av. shpg. wt., 2 oz.



Stock No.	Mfr's Type	Fig.	Description	Dia. x L	*Resist. @ 2 fc	†Max. Res. Ratio	Max. Volt.	‡Power Dissip.	EACH 1-9	10-99	100-Up
751-1300	CL5M2	D	Type 2 CdS, Peak resp. 5150 A., bluest response photosensitive material; high stability, low temp. error. Use with fluorescent and incandescent lamps.	.55x.18	55k	1:100	250	2000/500§	2.90	2.00	1.55
751-1700	CL602	B		.25x.5	1 meg	1:100	300	75	2.05	1.50	1.15
751-1901	CL702	C		.36x.18	1 meg	1:100	300	125	2.90	2.00	1.55
751-2401	CL902	E		.21x.15	1 meg	1:100	250	50	2.90	2.00	1.55
751-1400	CL503	A	Type 3 CdSe, peak spectral reponse 7350 angstroms, fast reponse, and very high light-to-dark resistance ratio. Can be used for high-speed switching or counting. Sensitive to near infra red. For use with incandescent or neon lamps.	.5x.5	7.2k	1:10,000	250	500/250§	2.43	1.50	1.25
751-1301	CL5M3	D		.55x.18	7.2k	1:10,000	250	2000/500§	2.43	1.50	1.25
751-1701	CL603	B		.25x.5	133k	1:10,000	300	75	2.88	1.75	1.50
751-1702	CL603A	B		.25x.5	75k	1:10,000	300	75	2.88	1.75	1.50
751-1703	CL603AL	B		.25x.5	3.5k	1:10,000	170	75	2.88	1.75	1.50
751-1902	CL703	C		.35x.18	133k	1:10,000	300	125	2.43	1.50	1.25
751-1903	CL703A	C		.36x.18	67k	1:10,000	300	125	2.43	1.50	1.25
751-1904	CL703L	C		.36x.18	2.7k	1:10,000	100	125	2.43	1.50	1.25
751-2404	CL903	E		.21x.15	133k	1:10,000	250	50	2.43	1.50	1.25
751-2402	CL903A	E		.21x.15	67k	1:10,000	250	50	2.43	1.50	1.25
751-2403	CL903L	E		.21x.15	6k	1:10,000	100	50	2.43	1.50	1.25
751-1402	CL504	A	Type 4 CdSe, peak spectral reponse 6900 angstroms, very low resistance photocells. Can be used for "on-off" applications when low resistance is desired. For use with either incandescent or neon lamps.	.5x.5	1.5k	1:1000	250	500/250§	2.43	1.50	1.25
751-1302	CL5M4	D		.55x.18	1.5k	1:1000	250	2000/500§	2.43	1.50	1.25
751-1403	CL504L	A		.5x.5	0.25k	1:1000	170	500/250§	2.43	1.50	1.25
751-1303	CL5M4L	D		.55x.18	0.25k	1:1000	170	2000/500§	2.43	1.50	1.25
751-1704	CL604	B		.25x.5	30k	1:1000	300	75	2.88	1.75	1.50
751-1705	CL604L	B		.25x.5	1.5k	1:1000	170	75	2.88	1.75	1.50
751-1907	CL704	C		.36x.18	30k	1:1000	300	125	2.43	1.50	1.25
751-1908	CL704L	C		.36x.18	0.6k	1:1000	100	125	2.43	1.50	1.25
751-2406	CL904	E		.21x.15	30k	1:1000	250	50	2.43	1.50	1.25
751-2405	CL904L	E		.21x.15	2k	1:1000	100	50	2.43	1.50	1.25
751-1404	CL505	A	Type 5 CdS, peak spectral reponse 5500 angstroms (closely matches the human eye), stable, low memory photocell. Can be used in light measuring applications and precision low speed switching. For use with incandescent, fluorescent or neon lamps.	.5x.5	9k	1:100	250	500/250§	2.23	1.50	1.15
751-1304	CL5M5	D		.55x.18	9k	1:100	250	2000/500§	2.23	1.50	1.15
751-1405	CL505L	A		.5x.5	1.5k	1:100	170	500/250§	2.23	1.50	1.15
751-1305	CL5M5L	D		.55x.18	1.5k	1:100	170	2000/500§	2.23	1.50	1.15
751-1706	CL605	B		.25x.5	166k	1:100	300	75	2.23	1.50	1.15
751-1707	CL605L	B		.25x.5	7.5k	1:100	170	75	2.23	1.50	1.15
751-1911	CL705	C		.36x.18	166k	1:100	300	125	2.90	2.00	1.55
751-1913	CL705L	C		.36x.18	3.3k	1:100	100	125	2.23	1.50	1.15
751-2410	CL905	E		.21x.15	166k	1:100	250	50	2.23	1.50	1.15
751-2409	CL905L	E		.21x.15	10k	1:100	100	50	2.23	1.50	1.15
751-1912	CL705HL	C	Type 5H CdS, peak response 5500A Uniform color temp. response. For speed switching, hi stability measuring; incandescent, fluorescent, neon lamps.	.36x.18	28k	1:1000	100	125	2.90	1.50	1.35
751-2407	CL905HL	E		.21x.15	100k	1:1000	100	50	2.60	1.50	1.35
751-2408	CL905HN	E		.21x.15	700k	1:1000	100	50	2.60	1.50	1.35
751-1406	CL507	A	Type 7 CdS, peak spectral reponse 6150 angstroms, moderate speed and ratio. Can be used in general beam breaking applications. For use with incandescent, neon or fluorescent lamps.	.5x.5	7.2k	1:1000	250	500/250§	2.23	1.50	1.15
751-1306	CL5M7	D		.55x.18	7.2k	1:1000	250	2000/500§	2.23	1.50	1.15
751-1708	CL607	B		.25x.5	133k	1:1000	300	75	2.23	1.50	1.15
751-1916	CL707	C		.36x.18	133k	1:1000	300	125	2.23	1.50	1.15
751-1920	CL707L	C		.36x.18	2.7k	1:1000	100	125	2.60	1.50	1.15
751-2417	CL907	E		.21x.15	133k	1:1000	250	50	2.23	1.50	1.15
751-2416	CL907N	E		.21x.15	66k	1:1000	100	50	2.23	1.50	1.15
			DUAL ELEMENT								
751-1906	CL703/2	C	Type 3 CdSe Photocells contain two separate elements with two separate leads and one common lead.	.36x.18	50k	1:10,000	300	125	3.80	2.30	1.95
751-1905	CL703L/2	C	Type 3 CdSe	.36x.18	6.5k	1:10,000	100	125	3.80	2.30	1.95
751-1909	CL704/2	C	Type 4 CdSe	.36x.18	17k	1:1000	300	125	2.43	1.80	1.55
751-1910	CL704L/2	C	Type 4 CdSe	.36x.18	1.5k	1:1000	100	125	2.43	1.80	1.55
751-1915	CL705/2	C	Type 5 CdSe	.36x.18	166k	1:100	300	125	2.23	2.30	1.95
751-1914	CL705L/2	C	Type 5 CdS	.36x.18	7.5k	1:100	100	125	2.23	1.80	1.45
751-1917	CL707H	C	Type 7H CdS Peak Spectral reponse 6150 angstroms. Very fast decay time coupled with low resistance and high linearity. Ideal for beam breaking applications.	.36x.18	500k	1:1000	300	125	2.60	1.50	1.35
751-1919	CL707HM	C		.36x.18	100k	1:1000	250	125	2.60	1.50	1.35
751-1918	CL707HL	C		.36x.18	10k	1:1000	100	125	2.60	1.50	1.35
751-2413	CL907H	E		.21x.15	600k	1:1000	250	50	2.23	1.50	1.35
751-2415	CL907HN	E		.21x.15	300k	1:1000	100	50	2.23	1.50	1.35
751-2414	CL907HL	E		.21x.15	24k	1:1000	100	50	2.23	1.50	1.35
751-1396	CL502	A	Type 2 CdS	.5x.5	55k	1:100	250	500/250	2.91	2.00	1.55
751-1398	CL502L	A	Type 2 CdS	.5x.5	9k	1:100	170	500/250	2.91	2.00	1.55
751-1298	CL5M2L	D	Type 2 CdS	.55x.18	9k	1:100	170	2000/500	2.91	2.00	1.55
751-1690	CL604M	B	Type 4 CdSe	.25x.5	7.5k	1:400	250	75	2.88	1.75	1.50
751-1712	CL607L	B	Type 7 CdS	.25x.5	3.5k	1:300	170	75	2.23	1.50	1.15
751-1901	CL702L	C	Type 2 CdS	.36x.18	20k	1:100	100	125	2.91	2.00	1.55
751-1890	CL702L/2	C	Type 2 CdS Dual	.36x.18	46k	1:100	100	125	2.43	1.50	1.15
751-1895	CL703M	C	Type 3 CdSe	.36x.18	30k	1:10,000	250	125	2.43	1.50	1.25
751-2390	CL902L	E	Type 2 CdS	.21x.15	67k	1:100	100	50	2.91	2.00	1.55
751-2420	CL903N	E	Type 3 CdSe	.12x.15	66k	1:10,000	100	50	2.43	1.50	1.25
751-2424	CL904N	E	Type 4 CdSe	.21x.15	15k	1:400	100	50	2.43	1.50	1.25
751-2428	CL905N	E	Type 5 CdS	.21x.15	83k	1:100	100	50	2.91	2.00	1.55
751-2432	CL907L	E	Type 7 CdS	.21x.15	6k	1:300	100	50	2.23	1.50	1.15
751-2415	CL907HN	E	Type 7 CdS	.21x.15	300k	1:1000	100	50	2.61	1.50	1.35
751-2414	CL907HL	E	Type 7 CdS	.21x.15	24k	1:1000	100	50	2.61	1.50	1.35

PHOTOCHOPPER CELLS



Maintain high efficiency over wide temperature range and eliminate warmup time. Efficiency levels, in spite of SPDT configuration: 72% at 1 kHz, 93% at 400 kHz, 98% at 60 Hz. Efficiency change from 28°C to 60°C less than 15%. Range, −50° to +75°C. Rated 50 mW at 25°C. Conductive glass windows and third lead grounded to case for shielding. Size, .210 x .150". Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Res. ON Ohms	Res. OFF Ohms	EACH 1-9	10-99	100-Up
751-2412	CL906CS	82k	8 megs	3.66	2.54	1.91
751-2411	CL906CLS	2.75k	.27 meg	3.66	2.54	1.91

DESIGNER'S PHOTOCELL KIT

A Selection of Five CdS and CdSe Photocells for Many Projects

Five CdS and CdSe cells. CdS types include: CL505, which closely matches human eye response; CL707, for general beam-breaking; CL902, for linear response vs. light-level response (smallest hermetically sealed unit). CdSe types include: CL603A, high speed; CL704L, sensitive—66 ohm resistance @ 100 fc. Wt. 5 oz.

751-3300. 1-9 Ea. 18.75 10-Up 10.00

Clairex Phototransistors; Sigma Relays

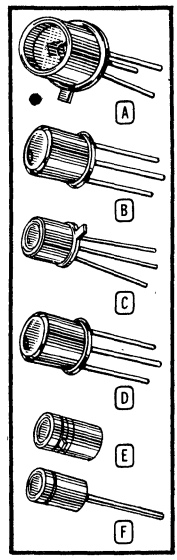
CLAIREX NPN PLANAR SILICON PHOTOTRANSISTORS

CLT2000, CLT2100. Hermetically sealed TO-18 phototransistors with base lead available. For beam breakers, signal recognition, photo switching, counters, sorters, processing and control. **CLR Series.** Darlington types with initial stage base lead available. For low light levels. *H = 5mW/cm² †H = .2mW/cm² §H = .02mW/cm².

Stock No.	Mfr's Type	Fig.	Window or Lens	I_L @ 5V min/max	BV_{ceo} V	I_D @ 10V nA	P_d @ 25°C mW	t_r Typ µsec	t_f Typ µsec	EACH 1-9	10-99	100-Up
751-2010	CLT2010	A	W	.2mA/.6mA*	50	25	250	3	3	2.23	1.89	1.22
751-2020	CLT2020	A	W	.4mA/1.2mA*	30	25	250	3	3	2.38	2.02	1.31
751-2030	CLT2030	A	W	1mA/3mA*	15	25	250	3	3	2.68	2.28	1.47
751-2130	CLT2130	B	L	.6mA/1.8mA*	50	25	250	3	3	2.50	2.14	1.38
751-2140	CLT2140	B	L	1.2mA/3.6mA*	40	25	250	3	3	2.68	2.28	1.47
751-2150	CLT2150	B	L	2.4mA/7.2mA*	40	25	250	3	3	2.83	2.42	1.56
751-2160	CLT2160	B	L	4mA/12mA*	30	25	250	3	3	3.00	2.56	1.65
751-2050	CLR2050	C	W	.6mA/1.8mA†	40	50	250	.....	.....	3.48	2.49	1.92
751-2060	CLR2060	C	W	1.4mA/4mA†	40	50	250	.....	.....	3.84	2.74	2.11
751-2170	CLR2170	D	L	.2mA/.5mA§	40	50	250	.....	.....	3.71	2.64	2.03
751-2180	CLR2180	D	L	.4mA/.8mA§	40	50	250	.....	.....	4.09	2.91	2.25

CLT3000-CLT4000 Series. Silicon phototransistors for high-density mounting in card and tape readers, pattern and character recognition equipment, encoders. t_r typ, 1.5 µsec. t_f typ, 1.5 µsec. Flat window. .06" dia.

Stock No.	Mfr's Type	Fig.	Window or Lens	I_L @ 5V H=5mW/cm²	I_L @ 5V H=20mW/cm²	BV_{ceo} V	I_D @ 10V nA	P_d @ 25°C mW	EACH 1-9	10-99	100-Up
751-3020	CLT3020	E	W	.10mA min.	.4mA min/1.2mA max	50	10	50	4.52	3.60	2.43
751-3030	CLT3030	E	W	.25mA min.	1mA min/3mA max	40	10	50	5.22	3.87	2.61
751-3160	CLT3160	E	L	.50mA min.	2mA min/7mA max	50	10	50	4.52	3.60	2.43
751-3170	CLT3170	E	L	.2mA min.	7mA min/	40	10	50	5.10	3.70	2.55
751-4020	CLT4020	F	W	.10mA min.	.4mA min/1.2mA max	50	10	50	3.92	2.91	2.24
751-4030	CLT4030	F	W	.25mA min.	1mA min/3mA max	40	10	50	4.46	3.23	2.49
751-4160	CLT4160	F	L	.50mA min.	2mA min/7mA max	50	10	50	3.76	2.82	2.17
751-4170	CLT4170	F	L	2mA min.	2mA min/	40	10	50	4.46	3.23	2.49



PHOTOMOD® PHOTOCELL-LAMP MODULE

Stock No.	Type CLM-	Max. ON Res. in Ohms	Rise Time Seconds	Lamp †Volt.	mA	EACH 1-9	10-Up
751-0200	3006 A	160	.060	6V	40	4.50	3.25
751-0400	4006 A	55	.080	6V	40	4.50	3.25
751-0206	3012 A	160	.080	12V	40	4.50	3.25
751-0406	4012 A	30	.080	12V	40	4.50	3.25
751-0300	3120 A	1150	.005	120V	2.5*	4.50	3.25
751-0500	4120 A	160	.005	120V	2.5*	4.50	3.25
751-0600	5H10A	3000	.120	10V	17	4.60	3.50
751-1100	7H16A	550	.090	16V	17	4.60	3.50

Clairex high stability photocells in photocell-lamp modules. Ideal for use in automation and data processing systems. Rugged potted package. For maximum efficiency, the cells are optically coupled to the lamps. Operating temperature, 20° C to 75° C. Maximum power dissipation 50 mW at 25° C. Maximum cell volts, 120 volts with lamp off. †Maximum voltage for 5000-hour life. *Neon lamps are of the "high-brightness" type. Their brightness, on an equal life basis is approximately ten times that of the standard brightness. In table at left, Rise Time is the time-required to reach 100% of on-resistance from off condition; tested after lamp has been on 24 hours. Size, 1⅛" long by ⅜" diameter. Shpg. wt. 1 oz.

DATACEL® SERIES 301 1, 2 AND 4-POLE OPTO-ELECTRONIC RELAYS

SIGMA

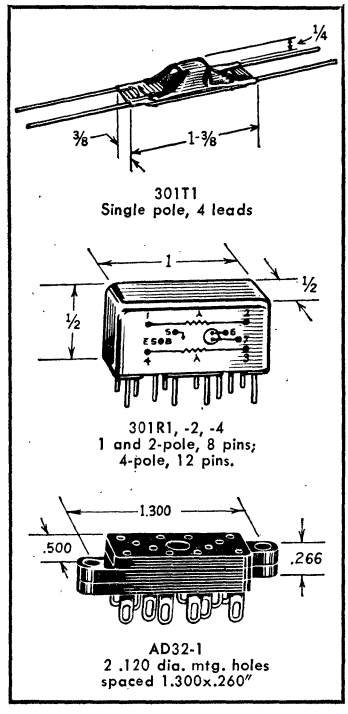
- For High-Density Printed Circuit Packaging
- On-Off Indication in Plug-In Models
- High Isolation Between Input and Output
- For AC or DC Input and Output
- For Logic Circuits, Data Sampling, Audio Switching, Data Processing, Many Other Uses

Solid-state opto-electronic relays for AC or DC use. Signal applied to the input is coupled by means of light to one, two, or four independent photoconductive cells. Type 301T is lead-type; Type 301R for high-density printed circuit packaging or solder terminal mounting with AD32-1 socket. High-reliability switching in data processing, logic circuits. Applications in noiseless audio level control, tremolo circuits, RC oscillator tuning, low frequency modulation, step-less potentiometer, triac and SCR drivers, and test equipment. Temperature range: −40°C to +50°C. Output voltage rating: 250 V AC or DC peak. 301R1, 301R2 have 8 pins; 301R4 has 12 pins. *6, 12, and 24-volt inputs are incandescent lamps. 120, 150 volt inputs are neon. Sizes, 301R, 1x½x½"; 301T, 1⅜x ¼x⅜". †Use 33k ohm resistor in series with Input. #Use 47k ohm. Wt. ¼ oz.

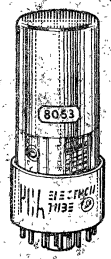
Stock No.	Mfr's Type	Lamp Input* V	mA	Max. "On" R_L Ohms	Diss. Each Cell mW	Poles	EACH 1-9	10-49	50-74	75-99	100-Up
917-1403	301R1-6	6	40	400	500	1	3.20	2.90	2.76	2.61	2.32
917-1404	301R1-12	12	19	500	500	1	3.20	2.90	2.76	2.61	2.32
917-1405	*301R1-24*	24	40	200	175	1	3.20	2.90	2.76	2.61	2.32
917-1406	301R1-150†	150	2	500	500	1	3.20	2.90	2.76	2.61	2.32
917-1407	301R2-6	6	40	400	400	2	5.00	4.50	4.28	4.05	3.06
917-1408	301R2-12	12	19	500	400	2	5.00	4.50	4.28	4.05	3.06
917-1409	301R2-24	24	40	200	175	2	5.00	4.50	4.28	4.05	3.06
917-1410	301R2-150†	150	2	500	400	2	5.00	4.50	4.28	4.05	3.06
917-1412	301R4-12	12	38	1000	175	4	7.20	6.35	6.03	5.72	5.08
917-1413	301R4-24	24	40	500	75	4	7.20	6.35	6.03	5.72	5.08
917-1417	301T1-6B1	6	50	400	400	1	1.25	1.00	.95	.90	.80
917-1418	301T1-12B1	12	24	400	400	1	1.25	1.00	.95	.90	.80
917-1415	301T1-120A1#	120	1.3	1200	400	1	1.25	1.00	.95	.90	.80
917-1416	301T1-150A1†	150	2	500	400	1	1.25	1.00	.95	.90	.80
917-1423	301T2-6B1	6	50	1000	200	2	1.86	1.50	1.43	1.35	1.20
917-1424	301T2-12B1	12	24	1000	200	2	1.86	1.50	1.43	1.35	1.20
917-1421#	301T2-120A1	120	1.3	3000	200	2	1.86	1.50	1.43	1.35	1.20
917-1422†	301T2-150A1	150	2	1200	200	2	1.86	1.50	1.43	1.35	1.20

AD32-1 Socket. For 301 Series. 12 solder terminals. Mtg. holes on 1.3" ctrs. ¼ oz.

917-0065. 1-24 . . Ea. 1.00 25-49 . . Ea. .80
50-74 . Ea. .76 75-99 . Ea. .72 100-Up . Ea. .64



Special-Purpose Tube Directory



- Over 800 Types
- 14 Manufacturers

GUIDE TO MANUFACTURERS

Amperex Elect. Corp.
Bomac
Dumont
Eimac (Div. of Varian)
Electrons, Inc.
Machlett Lab.
National Electronics, Inc.
National Union
Radio Corp. of America
Raytheon Mfg. Co.
Sylvania Electric
Thermosen, Inc.
Varian
Victoreen Instrument

- Dependable
- Highest Quality

Complete selection of high-reliability tubes for almost every purpose. Suffix "MP" in tube type no. indicates matched pair.

Purchases of tube types are always billed at lowest current OEM price.

Tube Type	Socket No.	EACH 1-4	5-18	19-49	50-Up
OA2	.....	1.61	1.45	1.38	1.31
OA2WA	.....	See 6626/OA2WA			
OA3	.....	1.93	1.74	1.65	1.57
OA3A	.....	1.93	1.74	1.65	1.57
OA4G	.....	2.76	2.30	2.19	2.07
OB2	.....	1.77	1.59	1.51	1.43
OB2WA	.....	2.98	2.68	2.55	2.41
OB3	.....	2.61	2.35	2.23	.....
OC2	.....	1.97	1.75	1.66	1.58
OC3	.....	1.84	1.66	1.58	1.49
OC3A	.....	1.85	1.66	1.58	1.49
OD3	.....	1.82	1.64	1.56	1.49
OD3A	.....	1.85	1.64	1.56	1.48
1AD4	.....	4.27	3.85	3.66	...
1AG4	.....	9.82	8.85	8.41	7.97
ELC1A	.....	15.49	13.95	13.25	.....
ELC1B	.....	19.76	17.80	.....	.....
1B85	.....	18.09	16.30	15.49	14.67
EL1C	.....	16.65	15.00	.....	.....
1C21	.....	5.76	4.85	4.61	4.37
1D21/SN4	.....	16.93	15.25	14.49	.....
1EH1	.....	37.80	34.05	32.35	30.65
1EP2	.....	15.54	14.00	13.30	12.60
1EP11	.....	39.35	35.45	33.68	31.91
C1K/6014	.....	14.19	12.30	11.69	11.07
1L4	.....	1.85	1.67	1.59	1.50
1M3/DM70	.....	3.66	3.30	3.14	2.97
1P21	.....	63.71	57.40	54.53	51.66
1P22	1	22.09	19.90	18.91	.....
1P28	1	26.75	24.10	22.90	.....
1P28V1	1	34.97	31.50	29.93	.....
1P28A	1	32.19	29.00	27.55	26.10
1P28AV1	1	51.28	46.20	43.89	41.58
1P29	14	11.71	10.55	10.02	9.50
1P37	14	9.32	8.40	7.98	7.56
1P39	13	5.11	4.60	4.37	4.14
1P40	13	7.94	7.15	6.79	6.44
1P41	11	9.38	8.45	8.03	7.61
1P42	12	22.48	20.25	19.24	18.23
2-01C	.....	24.42	22.00	.....	.....
2AP1A	.....	27.58	24.85	23.61	22.37
2AS15A	.....	12.21	11.00	10.45	9.90
2BP1	.....	18.65	16.80	15.96	.....
2C39A	.....	23.03	20.75	.....	.....
2C39A/V1	.....	31.08	28.00	.....	.....
2C39WA	.....	31.08	28.00	.....	.....
2C43	.....	28.64	25.80	.....	.....
2C51	.....	5.38	4.85	4.61	.....
2C52 (COM)	.....	9.99	9.00	8.55	.....
2C53 (JAN)	.....	9.71	8.75	8.31	.....
2D21	.....	1.65	1.49	1.42	1.34
2D21W	.....	Use 5727			
2E24	.....	9.66	8.70	8.27	7.83
2E26	.....	5.16	4.65	4.42	4.19
2J42	.....	208.13	187.50	178.13	168.75
2J51	.....	749.25	675.00	641.25	607.50
2J55	.....	416.25	375.00	356.25	337.50
2K25	.....	55.00	.....	.....	.....
2K26	.....	75.48	.....	.....	.....
2SM8B	.....	13.32	12.00	11.40	10.80
2X2A	.....	5.44	4.90	4.66	4.41
DH3-91	.....	32.19	29.00	.....	.....
3-400Z/8163	.....	39.96	.....	.....	.....
3-500Z	.....	39.96	36.00	34.20	.....
3A4	.....	2.61	2.16	2.05	1.94
3A5	.....	2.82	2.31	2.20	2.08
3AP1A	.....	54.17	48.40	46.36	43.92
3AQP1	.....	38.13	34.35	32.83	30.92
3BWA	.....	7.03	6.33	6.01	5.70
3BW	.....	11.71	10.55	.....	.....

Tube Type	Socket No.	EACH 1-4	5-18	19-49	50-Up
3B24WB	.....	7.08	6.38	6.06	.....
3B28	.....	10.71	9.65	9.17	8.69
3BP1A	.....	37.63	33.90	32.21	30.51
EL3C	.....	19.15	17.25	.....	.....
EL3C/L	.....	23.75	21.40	.....	.....
3C23	.....	12.67	11.98	11.38	10.78
3C45	.....	28.58	.....	.....	.....
3CX100A5	.....	28.86	26.00	.....	.....
3CX2500F3	.....	234.21	.....	.....	.....
3CX3000A1/8238	.....	267.51	.....	.....	.....
3CX3000A7	.....	308.58	.....	.....	.....
3CX10000A7	.....	643.80	.....	.....	.....
3D22A	.....	50.23	45.25	42.99	40.73
3E29	.....	26.03	23.45	22.28	.....
C3J/5632	.....	15.15	13.65	12.97	.....
C3J-A/5684	.....	15.60	14.05	13.35	.....
C3J/L	.....	17.51	15.05	14.30	13.55
3JP1	.....	28.19	25.40	24.13	22.86
3JP7	.....	34.58	31.15	29.59	28.04
3KP1	.....	39.63	35.70	33.92	32.13
3RP1	.....	23.31	21.00	19.95	18.90
3RP1A	.....	42.62	38.40	.....	.....
3RP7A	.....	45.73	.....	.....	.....
3WP1	.....	47.90	43.15	.....	.....
3WP7	.....	42.18	38.00	.....	.....
4-65A	.....	Use 8165/4-65A			
4-65A/8165	.....	36.08	32.50	.....	.....
4-125A	.....	48.84	.....	.....	.....
4-125A/4D21	.....	48.84	44.00	41.80	39.60
4-250A/5D22	.....	53.28	48.00	45.60	43.20
4-400A/8438	.....	53.28	48.00	.....	.....
4-1000A/8166	.....	149.85	.....	.....	.....
4B32	.....	16.65	.....	.....	.....
4CX250B	.....	39.52	35.60	33.82	32.04
4CX250B/7203	.....	39.52	35.60	.....	.....
4CX250F/7204	.....	42.62	.....	.....	.....
4CX250K/8245	.....	77.70	70.00	.....	.....
4CX250R/7580W	.....	49.40	44.50	.....	.....
4CX300A/8167	.....	66.60	60.00	.....	.....
4CX350A/8321	.....	53.84	48.50	.....	.....
4CX1500B/8660	.....	227.55	.....	.....	.....
4CX5000A/8170	.....	549.45	.....	.....	.....
4CX10000D/8171	.....	638.25	.....	.....	.....
4CX15000A/8281	.....	771.45	.....	.....	.....
4D32	.....	82.47	74.30	.....	.....
4E27A/5-125B	.....	55.50	50.00	47.50	45.00
ELC4H-2	.....	39.18	35.30	.....	.....
ELC4H-3	.....	39.18	35.30	.....	.....
4PR60B/8252	.....	127.65	.....	.....	.....
4X150A/7034	.....	25.70	23.15	.....	.....
4X500A	.....	142.64	.....	.....	.....
5ABP1	.....	61.11	.....	.....	.....
5ABP7	.....	55.17	49.70	.....	.....
5ADP1	.....	61.11	55.05	.....	.....
5ADP2	.....	57.05	.....	.....	.....
5ADP7	.....	57.05	51.40	.....	.....
5ADP31	.....	56.67	51.05	.....	.....
5AQP1A	.....	63.60	57.30	.....	.....
5BHP2AM	.....	85.00	.....	.....	.....
5BP1A	.....	52.39	.....	.....	.....
5CP1A	.....	52.73	.....	.....	.....
5CP7A	.....	49.23	.....	.....	.....
5FP7A	.....	50.39	45.40	.....	.....
5LP1A	.....	53.28	.....	.....	.....
5R4GYA	.....	2.50	2.25	2.14	2.03
5R4GYB	.....	2.66	2.40	2.28	2.16
5R4WGA	.....	11.71	10.55	10.02	9.50
5R4WGB	.....	17.21	15.50	14.73	13.95
5UP1	.....	24.86	.....	.....	.....
5UP7	.....	37.30	33.60	31.92	30.24

New Tube Types Are Added As Soon As Released by Manufacturers

Special-Purpose Tube Directory (Cont'd)

Tube Type	Socket No.	EACH 1-4	5-18	19-49	50-Up
5UP11	.....	26.09	23.50	22.33	.....
5UP31	.....	31.08	28.00	26.60	.....
5WP11	.....	152.90	137.75	130.87	.....
GB5Y3WGTA	.....	4.50	4.05	3.84	.....
5ZP16	.....	144.30	130.00	123.50	117.00
6AC7W	.....	6.48	.....	.....	.....
6AG7Y	.....	3.64	3.11	2.96	2.80
6AH6WA	.....	8.44	7.60	7.22	6.84
6AK6	.....	1.70	1.40	1.33	1.26
6AN5	.....	4.66	4.20	3.99	3.78
6AR6	.....	6.60	6.00	.....	.....
6AS6	.....	4.33	3.90	3.71	3.51
6AS7G	.....	5.83	5.25	4.99	4.73
6AS7GA	.....	5.47	4.93	4.68	4.44
6AU6WB	.....	3.59	3.22	3.06	2.99
EL6B	.....	28.53	25.70	.....	.....
EL6B/L	.....	29.53	26.60	.....	.....
ELC6C	.....	70.49	.....	.....	.....
EL6C	.....	29.53	26.60	.....	.....
6D4	.....	4.01	3.20	3.04	2.88
6DJ8/ECC88	.....	2.46	1.89	1.80	1.70
6EH7/EF183	.....	4.27	3.85	3.66	3.47
6EJ7/EF184	.....	3.94	3.55	3.37	3.20
EL6F	.....	29.53	26.60	.....	.....
6F4	.....	15.98	14.40	13.68	12.96
ELC6H-1	.....	33.86	29.10	.....	.....
ELC6H-2	.....	35.11	30.25	.....	.....
ELC6H-3	.....	35.11	30.25	.....	.....
ELC6J	.....	32.79	28.10	.....	.....
C6J/5C21	.....	32.30	29.10	.....	.....
ELC6J/A	.....	31.41	28.30	.....	.....
ELC6J/F	.....	33.30	30.00	.....	.....
ELC6J/K	.....	33.86	29.10	.....	.....
ELC6J/KL	.....	33.58	30.25	.....	.....
ELC6J/L	.....	33.70	29.40	.....	.....
6J4	.....	5.01	4.51	4.29	4.06
6J6WA	.....	6.12	5.51	5.24	4.96
6Q5G	.....	11.66	.....	.....	.....
6SJ7Y	.....	3.13	2.82	2.68	2.54
6SL7WGT	.....	3.50	3.15	.....	.....
6X4W	.....	2.91	1.67	1.59	1.50
7JP1/7VP1	.....	56.94	.....	.....	.....
7TP4	.....	81.20	.....	.....	.....
7VP1	.....	34.19	.....	.....	.....
7VP31	.....	34.19	30.80	29.26	27.72
8HP4	.....	67.49	60.80	57.76	54.72
8NP4	.....	66.05	59.50	56.53	.....
8QP4	.....	69.93	63.00	59.85	56.70
10SP4	.....	110.28	99.35	.....	.....
12A6	.....	4.59	3.73	3.54	3.36
12AT7WA	.....	3.18	2.86	2.72	2.57
12AT7WB	.....	3.36	3.03	2.88	2.73
12AU7WA/6189	.....	Use 6189			
12SW7	.....	2.17	1.95	1.85	1.76
X-13	.....	446.22	.....	.....	.....
ELC16H	.....	70.49	63.50	.....	.....
ELC16J	.....	58.28	52.50	.....	.....
C16J/5665	.....	70.49	63.50	.....	.....
17DWP4	.....	66.60	60.00	.....	.....
NLKY21A	.....	41.92	33.70	32.03	.....
RX21A	.....	40.34	32.40	30.78	.....
21EYP4	.....	54.95	49.50	47.03	44.55
25T	.....	47.73	43.00	.....	.....
26A6	.....	4.27	3.85	3.68	3.47
26A7GT	.....	8.92	8.04	7.64	7.24
26C6	.....	3.63	.....	.....	.....
26D6	.....	3.57	.....	.....	.....
27GB5	.....	4.11	.....	.....	.....
28D7	.....	5.50	4.95	4.70	4.46
EL34/6CA7	.....	5.94	5.35	5.08	.....
EL34/6CA7 MP	.....	12.43	.....	.....	.....
GZ34/5AR4	.....	4.72	4.25	4.04	3.83
EL37	.....	12.04	10.85	10.31	9.77
EF40	.....	8.44	7.60	7.22	6.84
58AVP	.....	649.35	.....	.....	.....
V-58	.....	470.64	.....	.....	.....
DM70(1M3)	.....	Use 1M3/DM70			
Z70U/7710	.....	1.67	.....	.....	.....
75C1	.....	5.65	.....	.....	.....
E80CC	.....	Use 6085			
E80CF	.....	Use 7643			
EABC80(6AK8)	.....	3.66	3.30	3.14	2.97
EBP80(6N8)	.....	5.44	4.90	4.66	4.41
ECF90(6BL8)	.....	3.00	2.70	2.57	2.43
EF80(6BX6)	.....	3.39	3.05	2.90	2.75
EZ80(6V4)	.....	1.72	1.55	1.47	1.40
ECC81(12AT7)	.....	3.94	3.55	3.37	3.20
ECH81(6AJ8)	.....	3.05	2.75	1.66	3.28
EZ81/6CA4	.....	4.16	3.75	4.35	2.38

Tube Type	Socket No.	EACH 1-4	5-18	19-49	50-Up
ECC82(12AU7A)	.....	3.44	3.10	2.95	2.79
ECF82	.....	8.49	7.65	7.27	6.89
ECL82(6BM8)	.....	3.22	2.90	2.76	2.61
UCL82(50BM8)	.....	4.83	4.35	4.13	3.92
83	.....	2.92	2.31	2.20	2.08
ECC83(12AX7A)	.....	3.11	2.80	2.66	2.52
EL84(6BQ5)	.....	4.33	3.90	3.71	3.51
EL84MP(6BQ5)	.....	11.27	10.15	9.64	9.14
EM84(6FG6)	.....	3.66	3.30	3.14	2.97
UL84(45B-5)	.....	3.11	2.80	2.66	2.52
85A1/OE3	.....	8.05	7.25	6.89	6.53
85A2/OG3	.....	2.55	2.30	2.19	2.07
ECC85(6AQ8)	.....	3.30	3.00	2.85	2.70
EF85(6BY7)	.....	3.72	3.35	3.18	3.02
ECL86	.....	3.39	3.05	2.90	2.75
EF86(6267)	.....	3.11	2.80	2.66	2.52
EL86(6CW5)	.....	3.05	2.75	2.61	2.48
UF86	.....	2.94	2.65	2.52	2.39
E88CC	.....	Use 6922			
ECC88(6DJ8)	.....	See 6DJ8/ECC88			
EBF89(6DC8)	.....	3.39	3.05	2.90	2.75
EF89(6DA6)	.....	4.66	4.20	3.99	3.78
90C1	.....	2.50	2.25	2.14	2.03
90NB3	.....	32.00	.....	.....	.....
EZ90(6X4)	.....	3.77	3.40	3.23	3.06
EF91	.....	7.83	7.05	6.70	6.35
EF95(6AK5)	.....	5.00	4.50	4.28	4.05
EL95(6DL5)	.....	3.28	2.95	2.80	2.66
100TH	.....	28.86	26.00	.....	.....
102A	.....	205.35	.....	.....	.....
105	.....	65.49	59.00	56.05	53.10
AX105/FG105	.....	126.54	114.00	108.30	.....
FG105	.....	69.72	59.00	.....	.....
175A	.....	66.00	60.00	.....	.....
E180F	.....	Use 6688			
VA218	.....	223.11	.....	.....	.....
VA218B	.....	209.79	.....	.....	.....
VA220C	.....	216.45	.....	.....	.....
VA221C	.....	223.11	.....	.....	.....
VA221E	.....	223.11	.....	.....	.....
VA222E	.....	223.11	.....	.....	.....
VA222F	.....	223.11	.....	.....	.....
254W	.....	51.06	46.00	.....	.....
264/8576	.....	420.00	.....	.....	.....
290	.....	470.00	.....	.....	.....
HF300	.....	42.18	.....	.....	.....
304TL	.....	92.13	83.00	.....	.....
SA309	.....	24.86	.....	.....	.....
356/5771	.....	Use 5771			
NL393A	.....	16.27	14.00	.....	.....
407A	.....	6.55	5.90	5.61	5.31
GB407A	.....	6.55	5.90	5.61	5.31
408A	.....	5.60	4.95	4.70	4.23
GB408A	.....	5.50	4.95	4.70	4.23
417A	.....	Use 5842/417A			
Z502S	.....	16.37	14.75	.....	.....
CK510AX	.....	6.33	5.70	5.42	5.13
CK512AX	.....	5.27	4.75	4.51	4.28
CK526AX	.....	8.80	8.00	7.60	.....
QKK531	.....	83.25	.....	.....	.....
CK533AX	.....	5.33	4.80	4.56	.....
QKK549	.....	83.25	.....	.....	.....
Z550M	.....	Use 2M1050/8453			
575A	.....	24.90	20.75	22.42	.....
579B	.....	23.20	20.90	19.86	.....
592/3-200A3	.....	69.93	63.00	.....	.....
NL604	.....	17.51	15.05	.....	.....
604/7014	.....	16.65	15.00	14.25	13.50
NL604L	.....	19.09	16.40	.....	.....
NL606	.....	28.05	24.05	.....	.....
NL606L	.....	30.54	26.20	.....	.....
NL615	.....	12.77	11.50	10.93	10.35
615/7018	.....	11.16	10.05	9.55	9.05
NL616	.....	15.36	13.25	.....	.....
NL623	.....	18.54	16.70	.....	.....
627	.....	32.06	.....	.....	.....
632B	.....	41.92	35.50	32.92	31.19
NL635L/7020	.....	17.43	15.70	.....	.....
NL635P/6930	.....	20.08	17.30	.....	.....
NL649/5834	.....	15.77	13.60	12.92	.....
NL660L/7786	.....	21.91	18.85	.....	.....
NL664L	.....	40.17	34.50	32.78	.....
672A	.....	45.95	41.40	.....	.....
673	.....	41.92	35.50	.....	.....
676	.....	75.48	.....	.....	.....
677	.....	75.48	.....	.....	.....
NL678	.....	61.01	52.00	49.40	.....
NL710/6011	.....	14.60	13.15	12.49	.....
710/6011	.....	15.19	13.15	12.49	11.84

Contact Nearest Branch for Prices in Larger Quantities

Special-Purpose Tube Directory (Cont'd)

Tube Type	Socket No.	EACH 1-4	5-18	19-49	50-Up
NL710L/7518	.....	16.95	15.05	14.30	13.55
NL714	.....	12.78	11.00	.....	.....
714/7021	.....	11.66	10.00	9.50	9.00
NL716	.....	14.61	12.50	.....	.....
NL740L/7022	.....	30.39	25.00	.....	.....
NL740P/6857	.....	30.39	25.00	.....	.....
NL760	.....	32.98	28.10	.....	.....
760/6858	.....	32.98	28.10	26.70	2529.
NL760L	.....	33.90	29.40	.....	.....
NL760P	.....	35.07	29.80	.....	.....
NL770L	.....	61.42	52.20	.....	.....
NL803	.....	11.56	9.00	.....	.....
807	.....	6.11	5.50	5.23	4.95
NL809	.....	20.41	17.35	.....	.....
810	.....	43.42	36.40	.....	.....
811A	.....	10.27	.....	.....	.....
812A	.....	8.44	.....	.....	.....
813	.....	30.81	25.85	24.56	.....
816	.....	5.27	.....	.....	.....
828	.....	44.17	37.00	.....	.....
829B	.....	25.05	21.00	19.95	.....
832A	.....	21.13	17.70	16.82	.....
833A	.....	88.15	73.15	69.49	65.84
836	.....	17.52	14.70	13.97	13.23
NL840/8754	.....	10.29	8.00	.....	.....
NL841	.....	10.79	8.40	.....	.....
845	.....	42.00	35.20	.....	.....
866A	.....	4.94	4.45	4.23	.....
868	.....	8.60	7.75	7.36	.....
869B	.....	205.01	.....	.....	.....
869BL	.....	187.88	.....	.....	.....
872A	.....	13.43	.....	.....	.....
884	.....	4.15	3.74	3.11	2.77
891R	.....	684.70	453.00	430.35	.....
NL900	.....	11.56	9.00	.....	.....
NL901	.....	12.48	9.75	.....	.....
902A	.....	29.31	.....	.....	.....
917	14	12.32	11.10	10.55	9.99
918	14	8.55	7.70	7.32	6.93
919	14	14.10	12.70	.....	.....
920	15	19.31	17.40	16.53	15.66
921	.....	7.60	6.85	.....	.....
922	.....	5.44	.....	.....	.....
923	15	6.88	6.20	.....	.....
925	13	7.49	6.75	.....	.....
926	.....	6.88	6.20	.....	.....
927	11	10.10	9.10	.....	.....
929	13	5.94	5.35	.....	.....
930	13	7.27	6.55	6.22	5.90
931A	1	15.15	13.65	.....	.....
931VA	.....	15.87	14.30	.....	.....
934	11	9.55	8.60	.....	.....
935	13	18.20	15.30	.....	.....
955	.....	7.83	7.05	.....	.....
959	.....	15.69	13.85	13.16	12.47
991	.....	2.36	2.10	2.00	1.89
1000T	.....	245.94	.....	.....	.....
XP1010	.....	205.41	.....	.....	.....
CK1020	.....	22.96	20.69	19.66	18.62
CK1021	.....	22.96	20.69	19.66	18.72
CK1026	.....	5.33	4.80	4.56	4.32
XP1030	.....	248.00	.....	.....	.....
ZM1030	.....	13.36	9.95	9.45	8.96
ZM1050/8453	.....	16.10	14.50	.....	.....
XP1110	.....	180.36	.....	.....	.....
R1131C	.....	28.89	25.65	24.37	.....
1236C	.....	18.32	16.50	15.68	14.85
GB1252/6U8A	.....	2.38	2.00	.....	.....
1612	.....	8.35	6.84	.....	.....
1613	.....	3.92	3.53	3.35	3.18
1614	.....	7.10	5.84	5.55	5.26
1616	.....	21.29	17.85	.....	.....
1619	.....	7.95	7.16	.....	.....
1620	.....	9.60	8.64	8.21	7.78
1621	.....	4.93	4.05	.....	.....
1622	.....	7.10	6.16	5.85	5.54
1624	.....	13.88	12.50	11.88	11.25
1625	.....	7.33	6.60	6.27	5.94
1629	.....	3.51	2.86	2.72	2.57
1635	.....	5.57	5.02	.....	.....
1946	.....	19.29	.....	.....	.....
1947	.....	56.03	47.00	44.65	42.30
1949	.....	28.31	23.75	22.56	.....
2022	.....	7.05	.....	.....	.....
2050	.....	2.75	2.48	2.36	2.23
2050A	.....	2.54	2.29	2.18	2.06
2050W	.....	9.94	8.95	8.50	8.06
2076/5R4GYB	.....	2.46	2.05	1.95	1.85
ZB3200	.....	948.56	.....	.....	.....

Tube Type	Socket No.	EACH 1-4	5-18	19-49	50-Up
NL-4021	.....	See NL8052/4021			
4028A	.....	44.84	37.60	35.72	33.84
4055	.....	52.44	43.95	41.75	39.56
4058	.....	16.10	14.50	13.78	13.05
4065	.....	42.57	38.35	36.43	.....
4152	.....	13.03	9.20	.....	.....
CT4251/8035	.....	See 8035/CT4251			
4409	13	6.49	5.85	5.56	5.27
4471	1	24.55	20.60	19.57	18.54
4472	1	30.39	25.50	24.23	22.95
4473	1	75.48	63.00	59.85	.....
4478	.....	49.27	46.60	44.30	.....
4490	.....	43.00	36.05	34.25	32.45
4491	.....	47.51	39.85	.....	.....
4499	.....	33.40	28.00	.....	.....
4510	.....	42.59	36.70	33.92	32.13
4526	.....	559.45	.....	.....	.....
4604	.....	10.93	.....	.....	.....
4621	.....	150.30	125.00	118.75	112.50
4652/8042	.....	13.93	11.65	11.08	10.49
4654	.....	9.60	7.75	.....	.....
4654/5762	.....	584.50	430.00	.....	.....
4662	.....	6.01	5.00	4.75	.....
4699	.....	10.77	8.20	7.79	.....
5544	.....	51.77	.....	.....	.....
5545	.....	104.38	.....	.....	.....
5550	.....	71.38	.....	.....	.....
5551A	.....	91.30	.....	.....	.....
5552A	.....	137.78	.....	.....	.....
5553B	.....	360.22	.....	.....	.....
5556	.....	95.19	.....	.....	.....
5557	.....	11.40	9.50	9.03	.....
5558	.....	20.46	17.50	.....	.....
5559	.....	28.81	.....	.....	.....
5560	.....	36.66	33.00	31.35	.....
5561	.....	71.64	.....	.....	.....
5563A	.....	69.31	.....	.....	.....
5575/100	.....	260.85	.....	.....	.....
5581	13	8.55	7.70	7.32	6.93
5582	.....	9.82	8.85	8.41	7.97
5583	11	11.54	10.40	9.88	.....
5604	.....	663.78	.....	.....	.....
5606	.....	329.67	.....	.....	.....
5636	.....	6.77	6.10	5.80	5.49
5639	.....	5.83	5.25	4.99	4.73
5642	.....	3.99	3.53	.....	.....
5651	.....	2.12	1.78	1.69	1.60
5651A	.....	2.18	1.95	1.85	1.76
5651WA	.....	4.39	3.95	3.75	.....
5652	13	10.88	9.80	9.31	8.82
5653	13	6.72	6.05	5.75	5.45
5654	.....	3.03	2.73	2.59	2.46
CK5656	.....	21.76	19.60	.....	.....
5663	.....	2.94	2.65	2.52	2.39
5665/C16J	.....	61.09	52.50	.....	.....
5667	.....	427.35	.....	.....	.....
5670	.....	3.22	2.90	2.76	2.61
5671	.....	4008.00	.....	.....	.....
CK5672	.....	3.30	2.97	.....	.....
5672	.....	2.75	2.48	2.36	2.23
5675	.....	10.27	9.25	8.79	8.33
CK5656	.....	4.20	3.78	.....	.....
5678	.....	3.42	2.48	2.36	2.23
NL5684/C3J/A	.....	16.45	14.05	.....	.....
5685/C6JA	.....	Use C6JA/5685			
5686	.....	4.41	3.97	3.77	3.57
5687	.....	4.87	4.39	4.17	3.95
CK5687WA	.....	6.83	6.15	5.84	5.54
5691	.....	10.33	9.31	8.85	8.38
5692	.....	9.97	8.98	8.53	8.08
5693	.....	8.04	7.24	6.88	6.52
5696	.....	2.84	2.36	2.24	2.15
CK5702	.....	5.06	4.56	.....	.....
CK5702WA	.....	8.55	7.70	.....	.....
CK5703	.....	4.27	3.85	.....	.....
CK5703WA	.....	9.49	8.55	.....	.....
5718	.....	4.16	3.65	.....	.....
5719	.....	3.50	3.15	2.99	2.84
RK5721	.....	133.20	.....	.....	.....
5725	.....	3.77	3.40	3.23	4.06
5725/6AS6W	.....	3.77	3.40	3.23	3.06
5726	.....	2.43	2.19	2.08	1.97
5727	.....	3.39	3.05	2.90	2.75
5734	.....	26.72	22.05	20.95	19.85
5736	.....	360.22	.....	.....	.....
5749	.....	3.36	3.03	2.88	2.73
5750	.....	4.55	4.10	3.90	3.69
5751	.....	3.32	2.99	2.84	2.69
5751WA	.....	3.32	2.99	2.84	2.69

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Special-Purpose Tube Directory (Cont'd)

Tube Type	Socket No.	EACH 1-4	5-18	19-49	50-Up
CK5755	.....	12.48	11.24	.....	.....
5762	.....	345.69	.....	.....	.....
5763	.....	2.99	2.69	2.56	2.42
5771	.....	986.97	700.00	.....	.....
5783	.....	4.65	4.19	3.98	3.77
CK5784	.....	6.60	6.00	.....	.....
5814A	.....	3.06	2.76	2.62	2.48
5819	5	105.21	86.95	.....	.....
5823	.....	2.04	1.84	1.75	1.66
5824	.....	5.08	4.58	4.35	4.12
5825	.....	39.41	.....	.....	.....
RK5837	.....	99.00	.....	.....	.....
5840	.....	5.94	5.35	5.08	4.82
5841	.....	13.32	.....	.....	.....
5842	.....	11.10	10.00	9.50	9.00
5842/417A	.....	9.19	7.35	6.98	6.62
5844	.....	3.02	2.72	2.58	2.45
5845	.....	11.85	9.95	9.45	.....
5847	.....	11.66	10.50	9.98	.....
5847/404A	.....	10.60	9.55	9.07	.....
5855	.....	134.87	.....	.....	.....
5861/EC55	.....	50.10	.....	.....	.....
5866A	.....	Use 7986/5866A			
5867A	.....	40.50	.....	.....	.....
5868	.....	91.85	.....	.....	.....
5869	.....	44.09	.....	.....	.....
5870	.....	163.66	.....	.....	.....
5876A	.....	10.47	9.45	8.98	8.51
CK5879	.....	2.17	1.95	1.85	.....
5881	.....	3.44	3.10	2.95	2.79
CK5886	.....	6.44	5.80	.....	.....
CK5889	.....	23.87	21.50	20.43	19.35
5893	.....	24.22	20.30	19.29	18.27
5894	.....	34.69	.....	.....	.....
5894B/8737	.....	38.57	34.75	.....	.....
5896	.....	4.64	3.80	3.61	3.42
5899	.....	6.16	5.55	5.27	5.00
5902	.....	5.33	4.80	4.56	4.32
5915	.....	2.21	1.99	1.89	1.79
5924A	.....	501.00	360.00	.....	.....
GB-5933	.....	14.75	12.35	.....	.....
5946	.....	217.10	.....	.....	.....
5963	.....	1.64	1.48	1.41	1.33
5964	.....	2.29	2.03	1.93	1.83
5965	.....	2.49	2.24	2.13	2.02
CK5965A	.....	2.34	2.11	2.01	1.90
RK5976	.....	83.25	.....	.....	.....
NL5992	.....	17.48	15.75	.....	.....
6005	.....	4.14	3.73	3.54	3.36
6007	.....	4.01	3.00	2.85	2.70
6008	.....	4.26	.....	.....	.....
6012	.....	9.11	8.21	7.80	7.39
6014		(Use C1K/6014)			
6021	.....	3.89	3.50	3.33	3.15
6072	.....	4.71	4.24	4.03	3.82
CK6072A	.....	4.71	4.24	4.03	3.82
6073	.....	3.92	3.53	.....	.....
6073/OA2	.....	4.37	3.94	3.74	3.55
6074	.....	4.46	4.02	3.82	.....
6074/OB2	.....	4.65	4.19	3.98	3.77
6076	.....	492.65	.....	.....	.....
6080	.....	6.11	5.50	5.23	4.95
6080WA	.....	12.34	.....	.....	.....
6082	.....	6.48	5.84	.....	.....
6083	.....	36.32	.....	.....	.....
6084	.....	6.31	.....	.....	.....
6085	.....	6.31	.....	.....	.....
CK6087/5Y3WGTB	.....	6.94	6.25	5.94	5.63
CK6088	.....	4.21	3.79	3.60	3.41
6095	.....	(Use 6005/5W/6095)			
6101	.....	6.67	6.01	.....	.....
6111	.....	4.11	3.70	3.52	3.33
6112	.....	4.61	4.15	3.94	3.74
6130/3C45	.....	33.23	.....	.....	.....
6136	.....	3.61	3.25	3.09	.....
6146A	.....	4.88	4.40	4.18	3.96
6146B/8298A	.....	6.05	5.45	5.18	4.91
6146W	.....	7.33	6.60	6.27	5.94
6155	.....	57.62	42.20	.....	.....
6155U	.....	56.78	51.00	.....	.....
6159B	.....	5.61	5.05	4.80	4.55
6159W	.....	9.99	9.00	8.55	8.10
6161	.....	225.45	170.00	.....	.....
6166	.....	1294.25	.....	.....	.....
6166A/7007	.....	1503.00	.....	.....	.....
6173	.....	19.04	.....	.....	.....
6181	.....	2087.50	.....	.....	.....
6186/6AG5WA	.....	5.11	4.60	.....	.....
6189	.....	4.65	.....	.....	.....

Tube Type	Socket No.	EACH 1-4	5-18	19-49	50-Up
6197	.....	3.18	2.86	2.72	2.57
6199	.....	69.30	58.10	.....	.....
6201	.....	3.64	3.28	3.12	2.95
6202	.....	2.99	2.69	2.56	2.42
6211	.....	3.01	2.71	2.58	2.44
6211A	.....	3.77	3.40	3.23	3.06
6216	.....	4.72	4.00	3.80	3.60
6217	.....	106.05	.....	.....	.....
6227	.....	8.01	.....	.....	.....
6252	.....	50.60	35.75	33.96	32.18
6263A	.....	17.20	14.45	13.73	13.01
6264A	.....	17.20	14.45	13.73	13.01
CK6265	.....	4.55	4.10	3.90	3.69
6267/EF86	.....	1.50	1.30	1.24	1.17
6279	.....	118.90	.....	.....	.....
6291	.....	96.03	.....	.....	.....
6292	.....	96.03	.....	.....	.....
6293	.....	6.83	6.15	5.84	5.54
6312	.....	275.55	.....	.....	.....
6328	2	18.29	15.35	14.58	12.28
6336A	.....	22.03	19.85	18.86	17.87
6342A	5	82.67	.....	.....	.....
6350	.....	2.66	2.37	2.25	2.13
6354	.....	3.51	.....	.....	.....
6360A	.....	7.62	6.25	5.94	5.63
6362	.....	192.05	.....	.....	.....
6363	.....	192.05	.....	.....	.....
6375/DC70	.....	9.32	.....	.....	.....
6386	.....	10.55	9.50	9.03	8.55
6397	.....	12.21	11.00	10.45	9.90
6405/1640	14	11.43	10.30	9.79	9.27
6417	.....	3.92	3.53	3.35	3.18
CK6418	.....	5.27	4.75	4.51	4.28
6442	.....	43.29	.....	.....	.....
6463	.....	3.84	2.75	2.61	2.48
6467	.....	96.03	.....	.....	.....
6472	.....	19.27	.....	.....	.....
6476A	.....	20.79	.....	.....	.....
CK6485	.....	2.28	.....	.....	.....
6508	.....	198.73	.....	.....	.....
6521	.....	1035.40	.....	.....	.....
6521/R	.....	1035.40	.....	.....	.....
6524	.....	37.57	31.50	29.93	28.35
CK6528	.....	28.97	26.10	24.80	23.49
6550	.....	6.66	6.00	5.70	5.40
6550VI	.....	15.97	.....	.....	.....
6569	.....	70.14	49.00	.....	.....
6570	14	15.87	14.30	13.59	12.87
6626/OA2WA	.....	Use Rec. Tube OAZWA			
6655A	.....	83.00	69.00	.....	.....
6660/6BA6	.....	Use Rec. Tube 6BA6			
6661/6BH6	.....	Use Rec. Tube 6BH6			
6662/6BJ6	.....	Use Rec. Tube 6BJ6			
6663/6AL5	.....	Use Rec. Tube 6AL5			
6664/6AB4	.....	Use Rec. Tube 6AB4			
6669/6AQ5A	.....	Use Rec. Tube 6AQ5A			
6676/6CB6A	.....	Use Rec. Tube 6CB6A			
6677/6CL6	.....	Use Rec. Tube 6CL6			
6678/6U8A	.....	Use Rec. Tube 6U8A			
6679/12AT7	.....	Use Rec. Tube 12AT7			
6680/12AU7A	.....	Use Rec. Tube 12AU7A			
6681/12AX7A	.....	Use Rec. Tube 12AX7A			
6686	.....	8.18	.....	.....	.....
6688	.....	9.44	6.80	6.46	.....
6688A	.....	8.77	6.80	6.46	6.12
6688B	.....	20.04	.....	.....	.....
6689	.....	6.71	.....	.....	.....
6696A	.....	1394.45	.....	.....	.....
6697A	.....	1663.32	.....	.....	.....
ML-6771	.....	79.81	.....	.....	.....
6775	.....	86.01	60.00	.....	.....
6802	.....	15.90	.....	.....	.....
6807	.....	44.40	.....	.....	.....
6810A	7	325.65	.....	.....	.....
6816	.....	66.97	.....	.....	.....
6842 (USAF)	.....	.....	.....	.....	.....
6842 (COM)	.....	16.32	.....	.....	.....
6842	.....	15.82	.....	.....	.....
NL6844A	.....	26.47	17.60	.....	.....
6850	.....	33.40	.....	.....	.....
6883	.....	5.50	4.95	4.70	4.46
6883B/8032A/8552	.....	6.72	6.05	5.75	5.45
6884	.....	46.93	.....	.....	.....
6887	.....	1.62	1.46	1.39	1.31
6894	.....	32.04	26.05	.....	.....
6895	.....	32.04	26.05	.....	.....
NL6895	.....	32.23	26.05	24.75	23.45
6897	.....	45.52	36.35	.....	.....
6907	.....	41.33	36.00	34.20	32.40

Special-Purpose Tube Directory (Cont'd)

Tube Type	Socket No.	EACH 1-4	5-18	19-49	50-Up
CK6909	.....	18.15	.....	.....	.....
6910	.....	14.84	.....	.....	.....
6922/E88CC	.....	5.41	4.87	4.62	4.38
6939	.....	14.61	11.37	10.80	10.23
6953	13	10.93	9.85	9.36	8.87
6960	.....	274.38	.....	.....	.....
6977	.....	2.75	2.48	2.36	2.23
6979	.....	61.46	.....	.....	.....
NL6989/C6J/KL	.....	35.32	30.25	.....	.....
NL6989-NE	.....	43.59	35.50	.....	.....
7007	.....	1130.50	.....	.....	.....
NL7009	.....	24.37	.....	.....	.....
7025	.....	3.11	2.80	2.66	2.52
NL7037	.....	33.99	26.00	.....	.....
7038	.....	233.80	.....	.....	.....
7044	.....	3.46	3.11	2.96	2.80
7054	.....	2.09	1.68	1.60	1.51
7055	.....	1.59	1.18	.....	.....
7056	.....	1.42	1.02	.97	.92
7057	.....	2.93	2.17	2.06	1.95
7058	.....	2.00	1.50	1.43	1.35
7059	.....	2.59	1.65	1.57	1.49
7060	.....	3.07	2.08	1.97	1.87
7061	.....	2.51	1.66	1.58	.....
7062	.....	5.01	3.75	.....	.....
7094	.....	54.28	.....	.....	.....
NL7094	.....	57.52	.....	.....	.....
7102	3	144.46	.....	.....	.....
7117	2	16.43	14.80	.....	.....
7119	.....	6.05	4.95	4.70	4.46
7136	.....	110.22	79.50	75.53	71.55
NL7153	.....	18.55	14.50	.....	.....
7167	.....	1.85	1.67	1.59	1.50
7189	.....	4.27	3.85	3.66	3.47
7213	.....	584.50	430.00	.....	.....
7234	.....	22.20	20.00	.....	.....
7235	.....	11.93	10.75	10.21	.....
7258	.....	2.56	2.28	2.17	2.05
7262A	.....	258.85	.....	.....	.....
7263A	.....	399.60	.....	.....	.....
7265	7	559.45	.....	.....	.....
7271	.....	53.49	.....	.....	.....
7289/3CX100A5	.....	(See 3CX100A5)			
7308	.....	8.68	5.20	4.94	4.68
7325	.....	230.29	.....	.....	.....
7326	.....	517.70	.....	.....	.....
7360	.....	5.43	3.77	3.58	3.39
7377	.....	36.30	.....	.....	.....
7457	.....	76.24	63.90	60.71	57.51
7459	.....	434.20	310.00	.....	.....
7534	.....	35.07	.....	.....	.....
7551	.....	4.43	3.67	3.49	.....
7554	.....	48.43	40.60	.....	.....
7558	.....	4.10	3.69	3.51	3.32
7580W/4CX250R	.....	51.77	44.50	42.28	.....
7586	.....	4.18	3.65	3.47	3.29
7587	.....	6.11	5.50	5.23	4.95
7609	.....	42.59	31.50	.....	.....
7643	.....	8.60	.....	.....	.....
7649	.....	158.65	.....	.....	.....
7650	.....	375.75	.....	.....	.....
7651	.....	367.40	.....	.....	.....
7693	.....	5.81	.....	.....	.....
7694	.....	5.17	.....	.....	.....
7698	.....	49.95	.....	.....	.....
7699	.....	25.05	.....	.....	.....
7717/6CY5	.....	1.56	1.39	1.32	1.25
7722/E280F	.....	11.66	.....	.....	.....
NL7723-NE	.....	18.12	14.85	.....	.....
7724/14GTB	.....	1.68	1.48	1.41	1.33
7735	.....	133.60	.....	.....	.....
7735A	.....	200.40	.....	.....	.....
7735B	.....	233.80	.....	.....	.....
7737	.....	10.93	.....	.....	.....
7767	.....	180.36	.....	.....	.....
NL7786-NE	.....	25.55	.....	.....	.....
7788	.....	19.21	11.25	10.69	10.13

Tube Type	Socket No.	EACH 1-4	5-18	19-49	50-Up
7843	.....	41.92	35.15	33.39	31.64
7854	.....	56.61	.....	.....	.....
7895	.....	4.11	3.70	3.52	3.33
7898	.....	2.17	1.57	1.49	1.41
7900	.....	567.80	.....	.....	.....
7905	.....	4.50	4.05	3.85	3.65
7963	.....	10.55	9.50	.....	.....
NL7977/4032	.....	24.37	.....	.....	.....
7984	.....	5.94	5.35	5.08	4.82
7986/5866A	.....	41.33	.....	.....	.....
8000	.....	34.65	29.05	27.60	26.15
8005	.....	25.05	.....	.....	.....
8008	.....	13.76	12.40	11.78	11.16
8008A	.....	14.70	12.40	11.78	.....
8013A	.....	25.55	21.45	20.38	19.31
8020	.....	28.06	23.50	.....	.....
8020AX	.....	41.75	.....	.....	.....
8032	.....	5.72	5.15	4.89	4.64
8035	.....	12.32	.....	.....	.....
NL8037/5031	.....	18.55	15.75	.....	.....
8042	.....	15.45	.....	.....	.....
8055	.....	207.92	155.00	.....	.....
8056	.....	5.72	5.15	4.89	4.64
8058	.....	17.54	15.80	15.01	14.22
8072	.....	26.05	.....	.....	.....
8077/7054	.....	1.88	1.54	1.46	1.39
NL8091	.....	28.84	.....	.....	.....
8117A	.....	76.05	.....	.....	.....
8121	.....	40.41	.....	.....	.....
8122	.....	42.08	.....	.....	.....
8134	.....	267.20	.....	.....	.....
8134/V1	.....	410.70	.....	.....	.....
8163	.....	53.44	.....	.....	.....
8164/3-1000Z	.....	125.25	.....	.....	.....
8165/4-65A	.....	38.41	32.50	30.88	.....
8166/4-1000A	.....	(See 4-1000A/8166)			
8167/4CX300A	.....	70.14	60.00	57.00	54.00
8168/4CX1000A	.....	267.20	200.00	190.00	180.00
8170/4CX5000A	.....	701.40	495.00	.....	.....
8171/4CX10000D	.....	768.20	575.00	.....	.....
8203	.....	4.73	4.03	3.82	3.61
8223	.....	7.93	.....	.....	.....
8226	.....	96.86	3.805	76.05	72.05
8228	.....	3.22	2.90	2.76	2.61
8233	.....	16.32	14.70	13.97	.....
8239/3X3000F1	.....	325.25	.....	.....	.....
8254/EC1000	.....	38.41	.....	.....	.....
8255/E88C	.....	9.01	6.70	6.37	.....
8270	.....	192.05	.....	.....	.....
8281/4CX15000A	.....	985.30	695.00	660.25	.....
8295A	.....	280.65	.....	.....	.....
8353	.....	14.75	.....	.....	.....
8393	.....	4.00	3.60	3.42	3.24
NL8421/5092	.....	18.55	.....	.....	.....
NL8422/5991	.....	18.55	.....	.....	.....
NL8423/6091	.....	24.38	19.00	.....	.....
8432	.....	247.16	.....	.....	.....
8436/EC158	.....	501.00	.....	.....	.....
8438/4-400A	.....	57.50	.....	.....	.....
8458	.....	14.63	.....	.....	.....
8462	.....	64.30	.....	.....	.....
8480	.....	1085.50	.....	.....	.....
8480/V1	.....	.....	.....	.....	.....
NL8502/4021	.....	42.33	33.00	.....	.....
8507A	.....	255.51	.....	.....	.....
8560A	.....	56.86	51.25	48.69	46.13
8572A	.....	236.56	215.00	.....	.....
8621/4CX250FG	.....	67.64	.....	.....	.....
8627A	.....	66.27	57.90	.....	.....
8632	.....	22.20	20.00	19.00	18.00
8673/S	.....	3006.00	.....	.....	.....
9001	.....	5.97	5.38	5.11	4.84
9002	.....	5.21	4.33	4.11	3.90
9003	.....	6.60	5.67	5.39	5.10
9005	.....	9.06	8.05	7.65	7.25
9006	.....	3.86	2.70	2.57	2.43
NL50911	.....	18.55	15.75	.....	.....

ALLIED GIVES YOU HUGE SELECTION, FAST SERVICE, SPECIAL QUANTITY DISCOUNTS

Allied maintains complete stocks of special-purpose tubes from 14 famous manufacturers. When you place your tube order at Allied, you get these advantages: Complete one-order service—you buy all you need from a single source; immediate delivery—all tubes are ready for shipment; lowest cost and you get OEM prices and quantity discounts.

Photomultipliers and Photodiodes RCA

RCA QUANTACON PHOTOMULTIPLIERS

RCA's breakthrough in the use of 111/V compounds as photocathode and/ or secondary emission materials in phototubes will unfold a whole new generation of QUANTACON photomultiplier tubes.

The 111/V compound, gallium phosphide provides up to an order of magnitude increase in secondary-emission ratio over conventional materials. When gallium phosphide is used for the first dynode of a QUANTACON, this high secondary-emission ratio provides a pulse-height resolving capability that permits discrimination of single, double, triple and quadruple electron events at the photocathode. When gallium phosphide is used for all the dynodes of a photomultiplier, the additional advantages of smaller size and reduced anode-pulse rise time are achieved.

The use of 111/V compounds, such as gallium arsenide and gallium-arsenide-phosphide, for photocathodes opens new vistas in broad spectral response photomultipliers with low noise performance.

With GaP First Dynode

Higher Secondary-Emission Ratio . . . an order of magnitude higher; Better Electron Resolution . . . to easily distinguish single, double, triple, and quadruple photoelectron events; Lower Noise in Signal Current . . . as a result of negligible noise contribution from the first dynode stage.

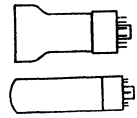
With All GaP Dynodes

Smaller Size . . . as a result of reduced number of multiplier stages; Faster Rise Time . . . with fewer multiplier stages, 1 nanosecond, or less.

With GaAs and Ga-As-P Photocathodes

Broad Spectral Response . . . with low noise performance.

RCA PHOTODIODES



Vacuum Photodiodes have excellent response to pulsed light, good stability, and are characterized by photocurrent response which is linear over a wide range of incident light level. These tubes are frequently used for light comparison measurements. **Typical Applications:** Photometry, Colorimetry, Spectrophotometry, Industrial Controls, Facsimile.

Gas Photodiodes have a response to pulsed light that covers the audio frequency range. They are 3 to 5 times more sensitive than vacuum photodiodes. **Typical Applications:** Industrial Controls, Sound Reproduction.

Preliminary Selection Guide for Photodiodes

Spectral Response	Construction	Type	RCA Type(s)
S-1	Single Unit	Vacuum	917, 919, 922, 925, 6570
		Gas	1P40, 1P41, 868, 918, 921, 923, 927, 930, 6405/1640, 6953
	Twin Unit	Gas	920
S-3	Single Unit	Vacuum	926
		Gas	1P29
S-4	Single Unit	Vacuum	1P39, 929, 934, 5653, 7043
		Gas	1P37, 4409, 5581, 5582, 5583
	Composite Anode/Cathode	Vacuum	5652
S-5	Single Unit	Vacuum	935
S-9	Single Unit	Vacuum	1P42

Preliminary Selection Guide for RCA Photomultiplier Tubes

Nom. Tube Diam. Inches	Spectral Response	Photocathode Configuration	Cage Structure	RCA Type No.
½	102(S-4)	S	C	8571
	104(S-5)	S	C	C70129H
	123	S	C	C70129C
		S	C	C70129G
¾	101(S-1)	H	I	C70102B
	107(S-11)	H	I	4460
		H	I	7764
		H	I	7767
		H	I	C31005B
		H	I	C70102E
	110(S-20)	H	I	8644
		H	I	8645
	114	H	I	C70042D
	115	H	I	4516
		H	I	C70102M
	121	H	I	C31005
	124	H	I	C70102N
	125	H	I	C70128
	131	H	I	C70042K
	132	H	I	C70042R
	133	H	I	C70042J
1	115	H	C	C31016A
		H	C	C31016B*
1⅛	101(S-1)	S	C	C31004A
	102(S-4)	S	C	1P21
		S	C	931A
		S	C	4471
		S	C	4472
		S	C	4473
		S	C	6328
		S	C	6472
		S	C	7117
		S	C	C7075J
	103	S	C	1P28/V1
		S	C	1P28A/V1
	104(S-5)	S	C	1P28
		S	C	1P28A
	105(S-8)	S	C	1P22
	109(S-19)	S	C	7200

Nom. Tube Diam. Inches	Spectral Response	Photocathode Configuration	Cage Structure	RCA Type No.
1⅛ Cont.	123	S	C	C31022
	128	S	C	C31025C
		S	C	C31025E
	129	S	C	C31025B
		S	C	C31025D
	134	S	C	C31025A
	135	S	C	C31025
1½	101(S-1)	H	C	7102
		H	C	C70114D
	107(S-11)	H	C	2060
		H	C	2067
		H	C	4438
		H	C	4439
		H	C	4440
		H	C	4441
		H	C	4441A
		H	C	4461
		H	C	6199
		H	C	C7151N
		H	C	C70132B
	110(S-20)	H	C	C70114C
	111	DW	C	4526
	112	H	C	C70114E
	115	H	C	4517
		H	C	C70114F
		H	C	C7151Q
		H	C	C70132A*
	117	H	C	C70114J
	127	H	C	C7151U
2	101(S-1)	H	I	C70007A
	106(S-10)	H	C	6217
	107(S-11)	H	C	2020
		H	C	2061
		H	C	2052
		H	V	2063
		H	C	5819
		H	C	6342A
		H	C	6655A
		H	I	6810A

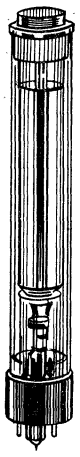
Nom. Tube Diam. Inches	Spectral Response	Photocathode Configuration	Cage Structure	RCA Type No.
2 Cont.	107(S-11) Cont.	H	I	7264
		H	I	7746
		H	I	7850
		H	V	8053
	108(S-13)	H	C	6903
	110(S-20)	H	I	4459
		H	V	4463
		H	I	7265
		H	I	7326
	113	H	I	C31000A
		H	I	C31000B
	114	H	I	C7268
		H	V	C70109E
	115	H	C	4518
		H	V	4523
	116	H	I	8575
		H	I	8850
		H	I	8851
	119	H	I	C31000E
		H	I	C31000F
	120	H	V	8664
		H	V	8664/V1
	126	H	I	C31024
	130	H	C	C7164R
3	107(S-11)	H	V	2064B
		H	V	8054
	110(S-20)	H	V	4464
	112	S	I	C70045C
	115	H	V	4524
	117	S	I	C70045D
	122	H	V	4521
5	107(S-11)	H	V	2065
		H	V	8055
	110(S-20)	H	V	4465
	115	H	V	4525
	118	H	I	4522
		H	I	C70133B

Photocathode configurations: H, head on; S, side on; and DW, dormer window. *Ruggedized type
Cage structures: C, circular cage; I, in line; and V, venetian blind.

For more information refer to the product line catalog and manual: RCA Photomultiplier Tubes, Image-Converter Tubes, Photodiodes, PIT-700A—58 pages. Provides tabulated data and preliminary selection chart on Photodiodes. RCA Phototubes and Photocells, Technical Manual PT-61. Provides theory, measurements, construction, and principles of operation.

SEE PAGES 120 THROUGH 124 FOR PRICES

LEAD-OXIDE TARGET CAMERA TUBES



The Vistacon. The RCA Vistacon is a direct replacement for the lead-oxide target camera tube you may now be using. It has direct interchangeability, with exactly the same performance characteristics. And equally important, it's fully compatible with any mix of tubes. For example, you can put a Vistacon 4592/G in a camera with XQ1020L,

TUBE FOR TUBE REPLACEMENT...

RCA TYPE	REPLACES
4592/R, G, B, L	XQ1020R, G, B, L
4591/R, G, B, L	55875R, G, B, L

R and B tubes. Next time you need a replacement, try an RCA Vistacon. Then maybe you won't think about interchangeability any more—you'll go RCA all the way. **When Ordering RCA Vistacons Specify Your Present Camera's Type No. and Serial No.** This is necessary to provide you with the right tube for your application.

Stock No.	Type	EA.	Stock No.	Type	EA.
900-4590	4591B	2880.00	900-4606	4592B	2880.00
900-4594	4591R	2880.00	900-4610	4592R	2880.00
900-4598	4591G	2950.00	900-4614	4592G	2950.00
900-4602	4591L	2950.00	900-4618	4592L	2950.00

IMAGE ORTHICONS

- Non-Stick Longer-Life Capabilities
- Superior Overall Color
- Can Replace 80 Different Types

When replacing your present image orthicon and when designing new camera equipment, think RCA Bialkon* (Bialkali photocathode electronically conducting glass targer) image orthicons. Introduced in 1967, this line of 5 tube types has already proven its merit. Broadcasters have acclaimed the non-stick, longer-life capabilities and the superior overall color and black-and-white telecasting performance of these tubes. The 5 types making up this line can replace 80 different image orthicons with little or no required camera modifications. RCA continues to retain many of its long established image-orthicon types due to the individual preference for the many special features of these different tubes and to insure complete coverage of all possible applications in broadcast, commercial, industrial, educational, and military TV pickup.

Stock No.	Type	EACH	Stock No.	Type	EACH
900-4702	4492	2700.00	900-4735	8673*	3050.00
900-4706	4536	3250.00	900-4740	8673/S*	3050.00
900-4710	5820A	1666.00	900-4745	8674*	3050.00
900-4715	5820A/L	3050.00	900-4750	8674/S*	3050.00
900-4720	7295B	2295.00	900-4755	8748*	3050.00
900-4725	7295C	3050.00	900-4760	8749*	3050.00
900-4730	7398C	3050.00	900-4765	8775*	3050.00

RCA VIDICONS FOR HIGH DEPENDABILITY

The RCA vidicons described here are designed for use in commercial, educational, industrial, and military TV systems. Each vidicon tube type is designed for a particular type of service and has operational, performance, and mechanical characteristics best suited for that intended service. The Table is intended as a very preliminary selection guide. The different vidicon types shown are grouped into specific categories of focus and deflection method, mesh-electrode connections, and heater power. The choices within these three categories are briefly described in the table below.

Choose from these Categories

FOCUS AND DEFLATION METHOD. Magnetic-focus, magnetic-deflection vidicons provide highest center and corner resolution but require the most electrical power and result in TV cameras having the most weight. Electrostatic-focus, magnetic-deflection vidicons have intermediate resolution capability, require intermediate electrical power, and find use in compact lightweight cameras.
SEPARATE MESH ELECTRODE. RCA Vidicons are available with separate mesh connection or with conventional mesh connection. Separate mesh connection vidicons provide higher and more uniform resolution and signal output when operated at high voltage then do comparable size vidicons having mesh and wall electrodes connected.
HEATER POWER. RCA Vidicons are available with conventional 3.8 Watt Heaters, with 1.9 Watt Heaters, and with 0.6 Watt "Dark Heaters" for transistorized TV cameras.
TUBE DIAMETER. Larger Tube diameter provides more TV lines per picture height, which results in clearer reproduction.

Stock No.	Type	Diameter	Mesh-Wall Connection	Focus	Deflection	Heater Watts	EACH 1-4	EACH 5-9	EACH 10-Up
HIGH-PERFORMANCE BROADCAST-QUALITY FOR STUDIO FILM PICKUP SERVICE									
900-1056	7038	1"	Conventional	Magnetic	Magnetic	3.8	233.80	221.50	210.50
900-4733	8572A	1"	Separate	Magnetic	Magnetic	3.8	236.56	224.00	213.00
900-2088	8051	1½"	Separate	Magnetic	Magnetic	3.8	818.00	775.00	736.00
900-3012	8134/V1	1"	Separate	Electrostatic	Magnetic	0.6	410.70	395.00	375.00
900-3057	8480	1½"	Separate	Electrostatic	Magnetic	0.6	1085.50	1029.00	976.00
900-3059	8480/V1	1½"	Separate	Electrostatic	Magnetic	0.6	1625.00	1540.00	1465.00
HIGH-PERFORMANCE BROADCAST AND INDUSTRIAL APPLICATIONS									
900-2004	7262A	1"	Conventional	Magnetic	Magnetic	0.6	258.85	245.00	233.00
900-3068	8573A	1"	Separate	Magnetic	Magnetic	0.6	284.00	269.00	255.50
900-2053	7735B	1"	Conventional	Magnetic	Magnetic	3.8	133.60	126.50	121.00
900-3063	8507A	1"	Separate	Magnetic	Magnetic	0.6	255.51	242.50	230.00
900-3065	8541A	1"	Separate	Magnetic	Magnetic	0.6	255.51	242.50	230.00
900-4703	4493*	1"	Separate	Electrostatic	Magnetic	0.6	1570.00	1490.00	1415.00
900-4704	4494*	1"	Separate	Electrostatic	Magnetic	0.6	1570.00	1490.00	1415.00
900-4705	4495*	1"	Separate	Electrostatic	Magnetic	0.6	1570.00	1490.00	1415.00
900-3010	8134	1"	Separate	Electrostatic	Magnetic	0.6	267.00	244.50	231.50
GENERAL CLOSED-CIRCUIT APPLICATIONS									
900-2049	7735	1"	Conventional	Magnetic	Magnetic	3.8	133.60	126.70	120.20
900-2050	7735A	1"	Conventional	Magnetic	Magnetic	3.8	200.40	193.20	183.50
NON-CRITICAL CLOSED-CIRCUIT APPLICATIONS									
900-0577	4478†	1"	Conventional	Magnetic	Magnetic	3.8	49.27	46.60	44.30
HIGH-PERFORMANCE VIDICONS FOR SPACE, MILITARY, AND SPECIAL INDUSTRIAL SERVICE									
900-0587	4500	1"	Conventional	Magnetic	Magnetic	3.8	650.00	616.00	586.00
900-0593	4542	1"	Conventional	Magnetic	Magnetic	0.6	585.00	554.00	527.00
900-3064	8521	1½"	Separate	Magnetic	Magnetic	3.8	867.00	822.00	781.00
900-3057	8480	1½"	Separate	Electrostatic	Magnetic	0.6	1085.00	1029.00	977.00
900-0545	2048‡	1"	Conventional	Magnetic	Magnetic	0.6	1025.00	972.00	922.00
900-2007	7236A‡	1"	Conventional	Magnetic	Magnetic	0.6	399.60	378.50	359.00
900-0588	4503A‡	1"	Separate	Magnetic	Magnetic	1.9	635.00	600.20	572.00
900-3067	8567‡	1"	Separate	Electrostatic	Magnetic	0.6	1420.00	1345.00	1280.00

*Trio for chroma channels of live pickup color cameras.

†Direct, low-cost replacement for entire 7735 family of vidicons

‡Ruggedized types

National Industrial Tubes

Thyratrons, Ignitrons and Rectifiers

THYRATRONS

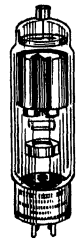
Grid controlled rectifiers for power ranges below ignitrons. For welders, motor controls, variable power supplies.

HIGH VOLTAGE THYRATRONS

Stock No.	Mfr's Type	Replaces	Anode Amps	Inverse Volts	EACH 1-5	EACH 6-19
866-0250	NL-KY21A	.....	0.75	11,000	41.92	33.70
866-0275	NL-FG-105*	FG-105	6.4	10,000	69.72	59.00
866-0750	NL-678*	678	1.6	15,000	61.01	52.00
866-5050	NL-5563A*	5563A	2.5	20,000	69.31	.....

STANDARD THYRATRONS

866-0203	NL-C3J/L	C3J/L	2.5	1250	17.51	15.05
866-0205	NL-C3J/AL	C3J/AL	2.5	1250	18.01	15.50
866-0208	NL-C3J/AL-NE	5684, C3J/AL	2.5	1250	23.74	19.50
866-0215	NL-3C23	GL-3C23 WL-3C23 311	1.5	1250	12.67	11.98
866-0220	NL-C6H-1	EL-6CH-1, GL-6807	6.4	1700	33.86	29.10
866-0222	NL-C6H-2	EL-C6H-2, GL-6808	6.4	1700	35.11	30.25
866-0224	HL-C6H-3	EL-C6H-3, GL-6809	6.4	1700	35.11	30.25
866-0226	NL-C6J	C6J	6.4	1250	32.79	28.10
866-0228	NL-C6J/L	C6J/L	6.4	1250	33.70	29.40
866-0230	NL-C6J/P	.....	6.4	1250	33.28	30.00
866-0232	NL-C6J/K	GL-6807, C6J/K, GL-5545	6.4	1250	33.86	29.10
866-0234	NL-C6J/K-Ne	GL-6807, NL-760 C6J/K, C6J/A	6.4	1250	42.16	34.50
866-0236	NL-C6J/KP	C6J/KF, GL6808, C6J/F	6.4	1250	35.11	30.25
866-0290	NL-323B	323A, 323B, UE323B	1.5	1250	16.27	14.00
866-0390	NL-393A	393A, GL393A	1.5	1250	16.27	14.00
866-0670	NL-632B†	WL-632A, GL632B WL-632B, 632B	2.5	1500	41.92	35.50
866-0820	NL-710/6011	(C3J), (C3J/A), GL6011 (5632), (5684)	1.6	1500	15.19	13.15
866-0826	NL-710L	GL7518 (EL-C3J/L), (EL-C3J/AL)	2.5	1500	16.95	15.05
866-0822	NL-710A	GL7725	2.5	1500	22.08	17.60
866-0824	NL-710AL	GL7726	2.5	3500	26.06	22.50
866-0832	NL-714/7021	.....	2.5	3500	12.78	11.00
866-0835	NL-716	(C1J), (C1K), (C1J/K)	1	1250	14.61	12.50
866-0840	NL-732	.....	1	1250	199.20	153.50
866-0842	NL-734/5544	5544, NL-730	30	1500	31.54	27.00
866-0846	NL-734L	.....	3.2	1500	33.95	29.00
866-0848	NL-740/6856	(C4J/A), GL6856	3.2	1500	29.38	24.25
866-0855	NL-740P/6857	(C4J/F), GL6857	4	1500	29.38	24.25
866-0850	NL-740L/7022	.....	2.5	1500	30.39	25.00
866-0880	NL-760	(C6J), (5685), (GL6807), GL6858	.....	1500	32.98	28.10
866-0890	NL-760P	(C6J/A), (5545), (C6J/F) (C6J/AF) (GL6808), GL6859	6.4	1500	35.07	29.80
866-0885	NL-760L	(C6J/L), (C6J/KL) GL6860, (GL6809)	6.4	1500	33.90	29.40
866-0905	NL-770P	.....	6.4	1500	67.56	57.10
866-0900	NL-770L	.....	10	1500	61.42	52.20
866-0920	NL-780	C16J/A	18,16	1700	112.26	98.60
866-5040	NL-5557/FG17/715	FG-17, WL-17, 976 309, TT-17, WT272	.5	5000	11.04	9.50
866-5044	NL-5559/FG-57*	FG-57, 5559 GL5559/FG57, WL5559/FG57	2.5	1000	28.81	.....
866-5046	NL-5560/FG-95*	FG-95, 5560, GL5560 WL5560	2.5	1000	39.18	33.80
866-5140	NL-5632/C3J	5632, C3J	2.5	.....	15.95	13.65
866-5175	NL-5665/C16J	EL-C16J, 5665	18,16	1250	61.09	52.50
866-5085	NL-5684/C3J/A	5684, C3J/A	2.5	1250	16.45	14.05
866-5095	NL-5684-Ne	C3J, C3J/A	2.5	1250	21.83	17.85
866-5100	NL-5684A-Ne	C3J, 6011, NL-710	2.5	1500	23.41	19.20
866-5200	NL-6014/C1K	C1J, C1J/K, C1K, 6014	1	1250	14.19	12.30
866-6120	NL-6989/C6J/KL	6CJ/KL, GL6809	6.4	1250	35.11	30.25
866-6125	NL-6989-Ne	6989, 6807, 7298 C6J/KL, C6J/AL	6.4	1250	43.59	35.50
866-7190	NL-7556A-Ne	C3J/L, 7556A, C3J/AL 7918, NL-710L	2.5	1500	25.40	20.80



National Tubes are made with the finest materials and construction and carry the longest warranties in the industry. Offer outstanding performance and very conservative design—not as susceptible to permanent damage from certain types of overload as many solid-state devices. They are widely used by manufacturers of high quality equipment because of their renowned dependability.

IGNITRONS

National Ignitrons have the most advanced cooling design which gives greatest production efficiency and water economy. Ideal for welder, motor and phase control and circuit protection.

WELDING IGNITRONS

Stock No.	Mfr's Type	Replaces	Max KVA	Max DC A	EACH 1-5	EACH 6-19
866-2100	NL-1005A	NL-1005	600	56	151.06	107.00
866-2110	NL-1009A	7681	1800	220	224.10	170.00
866-2120	NL-1022A	(6511), 5822A	.....	.....	157.37	125.00
866-2130	NL-1031	.....	600#	56	100.20	71.00
866-2132	NL-1032	.....	1200#	140	151.06	107.00
866-2150	NL-1051A**	(6346), 5551A	600	56	91.30	71.00
866-2155	NL-1052A**	(6347), 5552A	1200	140	138.61	107.00
866-2160	NL-1053A	NL-1053	3000	400	423.30	300.00
866-2165	NL-1054A	7151, NL-1054	4800	900	1178.60	840.00
866-2170	NL-1061**	7669	600	56	91.30	71.00
866-2175	NL-1062**	7671	1200	140	137.78	107.00
866-2180	NL-1063	.....	3000	400	423.30	300.00
866-2185	NL-1064	8205	4800	900	1220.10	866.00
866-2195	NL-1069**	7998	1800	220	235.72	170.00
866-2200	NL-1081**	.....	1000	75	118.52	84.00
866-2205	NL-1082**	.....	2000	150	163.10	119.15
866-2220	NL-1091**	.....	1000	75	118.52	84.00
866-2225	NL-1092**	.....	2000	150	163.10	119.15
866-4950	NL-5550	5550	300	22.4	71.38	.....
866-5000	NL-5551A**	(6346), 5551A	600	56	91.30	.....
866-5005	NL-5552A**	5552A	1200	140	137.78	.....
866-5010	NL-5553B**	(6348), 5553A	2400	355	360.22	.....
866-7200	NL-7669**	7669	600	56	91.30	71.00
866-7210	NL-7671**	7671	1200	140	138.61	107.00
866-7215	NL-7673**	7673	2400	355	373.50	265.00

**Available with Plastic Coating

SWITCHING IGNITRONS

Stock No.	Mfr's Type	Replaces	Pk Anode V KV	Peak Current KV	EACH 1-5	EACH 6-19
866-2135	NL-1036	7171	15	35	104.08	78.00
866-2136	NL-1036H				91.30	65.00
866-2138	NL-1037	.....	20	100	197.54	140.00
866-2139	NL-1037H					
866-2142	NL-1038	.....	**	100	486.80	345.00
866-2144	NL-1039	.....	20	100	196.13	139.00
866-2145	NL-1040	.....	50	65	1516.83	1075.00
866-2167	NL-1059A	.....	20	100	498.00	345.00
866-7180	NL-7171	7171	15	35	91.30	65.00
866-7185	NL-7171H					
866-7240	NL-7703	7703	20	100	265.60	190.00
866-7242	NL-7703H	.....	20	100	265.60	190.00

POWER RECTIFIER IGNITRONS

Stock No.	Mfr's Type	Replaces	Peak Anode V	Peak Amps	Av. Cont. DC	EACH 1-5	EACH 6-19
866-5015	NL-5555	5555	900	1800	250	480.99	350.00
866-5018	NL-5555A	5555A	2100	1200	150	480.99	350.00
866-5290	NL-6228	6228	20,000	900	150	5312.00	3700.00

RECTIFIERS

Gas-filled tubes used for AC to DC conversion. Handle higher currents than vacuum tubes.

FULL WAVE RECTIFIERS

Stock No.	Mfr's Type	Replaces	Peak Inverse V	Peak Anode A	Av. Anode Amps	EACH 1-5	EACH 6-19
866-0610	NL-604	(EL-3C)	900	10	2.5	17.51	15.05
866-0615	NL-604L	(EL-3CL)	900	25.6	6.4	19.09	16.04
866-0620	NL-606	(EL-6C)	920	30	2.5	28.05	24.05
866-0625	NL-606L	(EL-6CL)	2000	10	2.5	30.54	26.20

HIGH VOLTAGE RECTIFIERS

866-1070	NL-869B*	869B	20,000	20	2.5	205.01	.....

HIGH VOLTAGE HALF WAVE RECTIFIERS

866-0250	NL-RX21A	.....	11,000	3	0.75	40.34	32.40
866-0475	NL-575A*	575A	15,000	10	2.5	24.90	20.75
866-0745	NL-673	673	15,000	10	5.0	25.23	21.25
866-6085	NL-6894	6894	20,000	11.5	2.5	32.04	26.05
866-6090	NL-6895	6895	20,000	11.5	2.5	32.04	26.05

Suffix Ne denotes indicator tube that changes color of vapor at end of life.
Suffix L: Lug Mounted.

Suffix P. Panel Mounted.
Filaments: 2.5 V except *: 5.0 V; †: 2.0 V

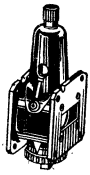
HALF WAVE RECTIFIERS

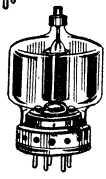
Stock No.	Mfr's Type	Replaces	Peak Inverse V	Peak Anode A	Av. Anode Amps	EACH 1-5	EACH 6-19
866-0635	NL-610/7723	.....	920	30	2.5	14.53	12.50
866-0640	NL-615	CE-213	2000	10	2.5	12.77	11.50
866-0645	NL-616	.....	1250	30	2.5	15.36	13.25
866-0647	NL-617†	CE-205	1000	20	5.0	17.00	17.00
866-0650	NL-619†	CE-206	300	20	6.0	11.30	11.30
866-0660	NL-623	CE-203, CE-215	500	45	15	18.54	16.70
866-0665	NL-625	CE-202 & B	900	45	15	51.13	41.00
866-0668	NL-627	CE-207, RX-212	1000	120	20	53.44	44.00
866-0675	NL-635/7019	(EL-6B)	1000	77	6.4	17.43	15.00
866-0680	NL-635L/7020	(EL-6B/L)	1000	77	6.4	17.43	15.70
866-0685	NL-635P/6930	(EL-6F)	1000	77	6.4	20.08	17.30
866-0695	NL-643	.....	700	90	15	15.52	14.85
866-0700	NL-649/5834	249R&S, 5834	900	10	2.0	15.77	13.60
866-0710	NL-653/5835	BR-3, 5835	900	12	3.0	22.66	19.50
866-0720	NL-660	EL-6B	920	80	6.4	20.34	17.50
866-0725	NL-660L/7786	EL-6B/L	920	80	6.4	21.91	18.85
866-0730	NL-660P	EL-6F	920	80	6.4	22.91	19.70
866-0735	NL-664L	.....	1000	120	10	40.17	34.50
866-0740	NL-664P	.....	1000	120	10	49.80	42.50
866-7250	NL-7723-Ne	NL-610, 3B	920	30	2.5	18.12	14.85
866-7300	NL-7786-Ne	NL-660L	920	80	6.4	25.55	.....

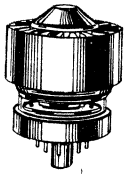
Allied Tubes on Page 129 Offer *Twice* the Standard Warranty

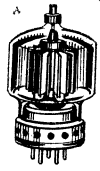
Calvert Tubes for Radar and Broadcast

Specifications shown are a quick reference for design, use and replacement applications in radar, communications and broadcast equipment. It is always advisable to consult detailed tube data for complete characteristics, ratings and performance when designing equipment or making substitutions.









BROADCAST EQUIPMENT TUBES

POWER TETRODES

*Double tetrode. †With sections in push-pull. ‡Triode.

Stock No.	Type	Anode Diss. (W)	Output Power (W)	Max. Anode V	Max. Screen V	Freq. (MHz)	Amp. Factor (grid-screen)	EACH
744-5850	4D32	50	140	750	350	60	10.0	82.47
744-7875	813	100	275	2000	400	30/120	8.5	30.81
744-8515	5894*	2x20	90	600	300	250/500	8.0	34.69
744-6125	4-125A	125	375	3000	400	120/200	6.2	48.84
744-6135	4-250A	250	1000	4000	600	75/120	5.1	53.28
744-2000	C1134*	2x10	48†	600	300	150/600	8.0	46.00
744-6145	4-400A	400	1100	4000	600	110	5.1	53.28
744-2055	C1158	90	.....	800	300	.....	4.5‡	67.25
744-8680	6076	2000	2700	5000	800	110	8.5	492.65

FORCED AIR COOLED POWER TETRODES

744-5800	4CX250B	250	390	2000	.....	150	.....	39.52
744-5830	4CX1000A	1000	1600	3000	400	110	.....	20.04
744-5950	4X150A	250	390	2000	.....	150	.....	25.70
744-5980	4X500A	500	835	4000	.....	120	.....	142.64
744-2200	CR176	3500	6000	7500	1500	30	4.4	1644.95

POWER TRIODES

Stock No.	Type	Anode Diss. (W)	Output (kW)	Anode (kV)	Freq. (MHz)	Filament (V)	Filament (A)	EACH
744-5700	3CX2500F3	2500	10.0	6.0	30	7.5	50	234.21
744-7000	100TH	0.1	0.4	3.0	40	5.0	6.3	28.86
744-7250	250TH	0.25	1.0	4.0	40	5.0	10.5	45.93
744-7910	833A	450	1.6	4.0	100	10	10	88.15
744-7950	889RA	7500	12.0	9.0	65	11	120	325.65
744-8500	5762	3000	6.0	6.2	30/220	12.6	29	345.69

BEAM POWER TUBES

Stock No.	Type	Filament (V)	Filament (A)	Maximum Plate Ratings (V DC)	Maximum Plate Ratings (mA DC)	Maximum Plate Ratings Diss. (W)	EACH
744-7850	805	10.0	3.3	1500	90	125	21.63
744-7855	807	6.3	0.9	600	100	25	6.11
744-7860	810	10.0	4.5	2000/2250	250/275	125/150	43.42
744-7865	811A	6.3	4.0	1250/1500	175/175	45/65	10.27
744-7870	812A	6.3	4.0	1250/1500	175/175	45/65	8.44
744-7880	814	10.0	3.3	1250	60	50	14.20
744-7885	815	6.3	0.75	400	150	50	25.05
744-7895	829B	12.6	1.5	600	.....	40	25.05
744-7905	832A	12.6	1.5	600	.....	40	21.13
744-8505	5763	6.0	0.75	300	.....	12	2.99
744-8705	6146A	6.3	1.25	600	.....	20	4.88
744-8800	6360A	6.3	0.82	300	.....	2x15	7.62

MOBILE COMMUNICATIONS TUBES

RF power tubes except *RF driver/multiplier, †modulator.

Stock No.	Type	Filament Series (V)	Filament Series (A)	Filament Parallel (V)	Filament Parallel (A)	Plate (V)	Plate (mA)	Dissip. (W)	Freq. Max Rating	EACH
744-8515	5894	12.6	0.9	6.3	1.8	600	2x350	2x40	250	34.69
744-8750	6146A	6.3	1.25	....	....	250	100	....	60	4.88
744-8800	6360†	....	....	....	....	300	2x50	2x7	....	7.62
744-8850	6883	12.6	0.625	....	....	250	100	....	60	5.50
744-8870	6907	12.6	0.65	6.3	1.3	....	....	2x10	....	41.33
744-8890	6939*	12.6	0.3	6.3	....	150	2x25	....	500	12.62
744-8950	8042	....	....	....	....	600	160	35	175	15.45
744-8990	8463	....	....	....	....	300	40	8	50	8.35
744-9050	8552	....	....	....	....	200	100	40	30	6.26
744-9180	8580	....	....	....	....	500	140	14	500	23.80

RADAR TUBES FOR MARINE, AIRCRAFT AND STATIONARY RADAR EQUIPMENT

PULSE MODULATORS

Stock No.	Type	Anode Diss. (Max. W)	Pulse Output (KW)	Anode KV DC	Pulse Anode (Amps)	Heater (V)	EACH
744-5890	4PR60WB	60	330	20.0	18	26.0	127.65
744-0430	A2426	15	.....	6.0	7.5	6.3	37.50
744-1050	A3042	12	.....	3.0	4.0	6.3	43.50
744-2020	C1148	40	130	14.0	12	6.3	105.85
744-2025	C1149/1	60	330	20.0	18	26.0	115.00
744-2030	C1150/1	60	205	17.5	15	26.0	132.30
744-2070	C1166	60	205	17.5	15	6.3	123.50

HYDROGEN TRIODE THYRATRONS (PULSE MODULATOR)

Stock No.	Type	Peak Output (mW)	Heating Factor Max.	Peak Forw. kV	Peak Anode Amps	Mean Anode Amps	EACH
744-5680	3C45	.....	.....	3.0	35	0.045	2.56
744-5775	4C35	0.36	2.0×10^9	8.0	90	0.1	62.63
744-6222	5C22	.....	.....	16.0	325	0.25	50.10
744-2400	FX227	0.05	0.3×10^9	3.0	35	0.05	77.00
744-2500	FX2505	0.5	2.8×10^9	10.0	100	0.125	137.00

LOCAL OSCILLATOR KLYSTRONS

Stock No.	Type	Tuning Range, MHz Mechanical	Tuning Range, MHz Elec.	Output (mW)	Beam V	EACH
744-5625	2K25	8500-9660	.....	.....	330	55.00
744-8650	6043	2950-3275	20	150	300	225.45
744-3020	KS9-20D	8500-9660	.....	.....	300	48.25
744-3040	KS9-40D/K3003	9350-9550	50	55	300	183.86

TUNABLE RADAR CELLS

Stock No.	Type	Frequency Range (MHz)	Peak Power (kW)	Max. VS WR	Max. Insert. Loss	Max. Recov. to −6 dB	EACH
744-1500	BS452	9310-9510	100	1.3	0.8	4.0 μS	123.50
744-1900	BS810	9250-9550	75	1.4	0.8	4.0 μS	116.65
744-4950	QF41	9250-9550	75	1.4	0.8	4.0 μS	116.65
744-4960	QF45	9250-9550	75	1.4	0.8	4.0 μS	116.65

PULSE MAGNETRONS (X-Band, 7.0-11.5 GHz; Fixed Frequency)

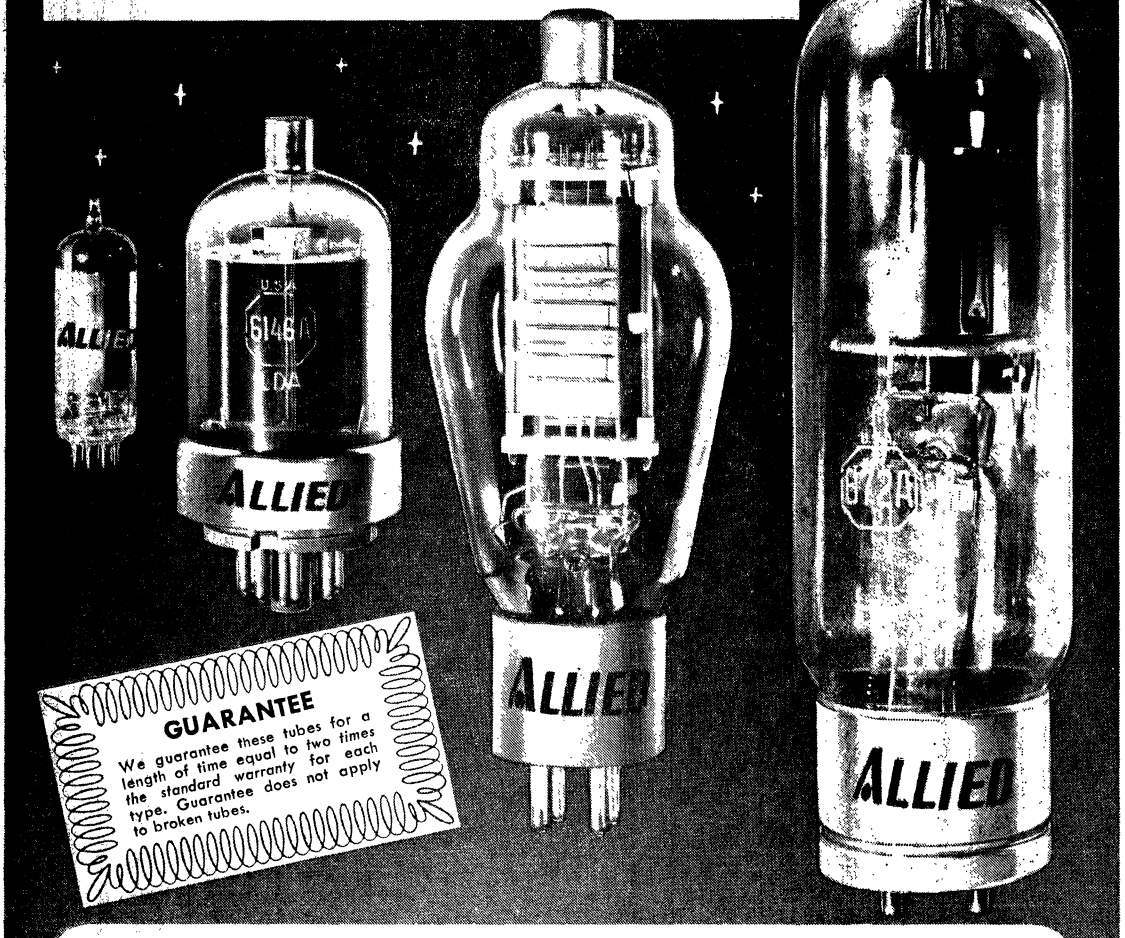
Stock No.	Type	Frequency Range (MHz)	Peak Out. (kW)	Pulse Lgth. (us)	Pulse Repet. (p.p.s.)	EACH
744-5550	2J42	9345-9405	8	1.0	2000	125.25
744-5570	2J55	9345-9405	50	1.0	1000	317.30
744-5585	2J70A	3025-3075	25	2.0	1000	427.52
744-5870	4J52A	9350-9400	80	1.0	1000	718.43
744-7825	725A	9345-9405	50	1.0	1000	278.40
744-8630	6027	9345-9405	20	1.0	1000	230.46
744-8635	6027H	9345-9405	20	2.5	400	345.00
744-2800	JP9-2.5D/M599A	9415-9475	3	0.1	2000	Use M599A
744-2820	JP9-2.5E/M599B	9415-9475	3	0.1	2000	Use M599B
744-2840	JP9-7/2J42	9345-9405	8	1.0	2000	Use 2552
744-2860	JP9-15/MS13B	9345-9405	22	1.0	500	Use M513B
744-2880	JP9-50A/2J55	9345-9405	50	1.0	1000	Use 2J55
744-4105	M503A	9345-9405	9	0.5	1000	275.07
744-4110	M505	9360-9460	45	1.0	1000	375.00
744-4115	M506A	9360-9460	50	1.0	1000	415.00
744-4125	M513A	9345-9405	22	1.0	500	348.00
744-4130	M513B	9345-9405	22	1.0	500	277.65
744-4135	M515	9380-9440	25	1.0	500	321.00
744-4200	M575	9345-9405	80	1.0	1000	800.65
744-4215	M581	9415-9475	65	0.5	1250	590.00
744-4235	M596/L3219	9370-9430	80	1.0	1000	718.94
744-4240	M597	9380-9440	10	0.5	1000	241.00
744-4245	M598B	9380-9440	22	1.0	500	280.00
744-4255	M599B	9415-9475	3	0.1	2000	147.00
744-4820	M5019	9345-9405	8	0.25	1500	226.00
744-4830	M5022	9415-9475	30	1.0	500	330.00
744-4835	M5023	9345-9405	.....	.....	.....	366.00
744-4850	M5039	9345-9405	25	2.0	1000	330.00
744-4870	M5043	9380-9440	5.8	1.0	2000	235.00
744-5110	YJ1110/M5023	9345-9405	.....	.....	.....	Use M5013B
744-5130	YJ1120/M515	9380-9440	25	1.0	500	Use M515

ELECTROSTATIC FOCUS CATHODE RAY TUBES

Stock No.	Type	Face Dia.	Screen	Neck Dia.	Scan Angle	Each
744-2600	F16-10LD	6″	P33	1⅛″	37°	158.00
744-6340	7ABP33A	7″	P33	1½″	50°	116.90
744-1100	AL-22-10	9″	P33	1⅜″	58°	167.00
744-6510	16ADP7A	16″	P7	1 7/16″	53°	141.95

Contact Your Nearest Allied Branch for Complete Quantity Prices

Allied Long-Life Industrial and Special Purpose Tubes



GUARANTEE

We guarantee these tubes for a length of time equal to two times the standard warranty for each type. Guarantee does not apply to broken tubes.

Super-Quality Tubes for Communications and Industry

The tubes listed below have been selected and tested to pass Allied's most rigid specifications. They have been manufactured under the highest standards of precision and adherence to specifications. This careful control assures quality performance with maximum reliability and longer life in their respective applications.

Stock No.	Tube Type	Tube Life	EACH 1-4	5-18	19-49	50-Up
702-5009	0A3A	2 Yrs.	2.61	2.35	2.22	2.09
702-5018	0C2	2 Yrs.	2.63	2.37	2.24	2.10
702-5022	0C3A	2 Yrs.	2.49	2.14	2.12	1.99
702-5027	0D3	2 Yrs.	2.46	2.21	2.09	1.97
702-5032	0G3/ 85A2	2 Yrs.	2.76	2.48	2.35	2.20
702-5251	807	3 Yrs.	8.25	7.43	7.01	6.60
702-5278	866A	3 Yrs.	6.68	6.01	5.68	5.34
702-5290	872A	3 Yrs.	18.15	16.34	15.43	14.52
702-5297	927	3 Yrs.	13.65	12.29	11.60	10.92
702-5303	929	3 Yrs.	8.03	7.23	6.83	6.42
702-5442	5642	2 Yrs.	5.30	4.77	4.51	4.24
702-5489	5696	2 Yrs.	3.54	3.19	3.01	2.83
702-5514	5751	2 Yrs.	4.49	4.04	3.82	3.59

Stock No.	Tube Type	Tube Life	EACH 1-4	5-18	19-49	50-Up
702-5523	5763	2 Yrs.	4.04	3.64	3.43	3.23
702-5539	5814A	2 Yrs.	4.14	3.73	3.52	3.31
702-5552	5881	2 Yrs.	4.65	4.19	3.95	3.72
702-5579	5963	2 Yrs.	2.22	2.00	1.89	1.78
702-5584	5965	2 Yrs.	3.36	3.02	2.86	2.69
702-5612	6012	2 Yrs.	12.32	11.09	10.47	9.86
702-5631	6080	2 Yrs.	8.25	7.43	7.01	6.01
702-5686	6146B/ 8298A	3 Yrs.	8.18	7.36	6.95	6.54
702-5733	6201	2 Yrs.	4.92	4.43	4.18	3.94
702-5742	6267/ EF86	2 Yrs.	3.15	2.84	2.68	2.53
702-5817	6922	2 Yrs.	7.31	6.58	6.21	5.85

ALLIED® and RCA Receiving Tubes

- World's Largest Stocks of Tubes
- We Can Fill Any OEM-Size Tube Order
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Be sure of full satisfaction when you order tubes from Allied. ***Full two-year guarantee on Allied tubes only: We replace any tube that does not provide efficient performance for 24 months from date of purchase.** (Does not apply to broken tubes.) New tube types are placed in stock and ready for immediate delivery as soon as they are released from the manufacturer. Tubes can be furnished in production quantities and are billed at current OEM prices.

CHOICE OF FREE MANUAL WITH 15 OR MORE TUBES

RCA TUBE MANUAL. Typical operating conditions and curves, applications, dimensions and installation of all current RCA receiving and picture tubes. 902-0230. 1¼ lb 2.00

TUBE SUBSTITUTION HANDBOOK. By Howard Sams Eng'g. Staff. Lists over 10,000 direct substitutions. European tube section. 128 pp. 5½x8½". 949-0150. 5 oz. 1.75

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
OZ4	3.45	2.79	2.33	2.07
OZ4A	3.45	2.79	2.33	2.07
1A3	5.35	4.82	4.01	3.57
1A5GT	3.20	2.88	2.40	2.14
1AD2	3.43	2.79	2.33	2.07
1AY2	2.85	2.57	2.14	1.90
1B3GT		Use 1G3GT/1B3GT		
1BC2	2.63	2.36	1.97	1.75
1BH2	2.43	2.18	1.82	1.62
1G3GT/1B3GT	3.38	2.84	2.36	2.10
1K3/1J3	3.38	2.84	2.36	2.10
1L6	10.20	9.09	7.58	6.75
1N5GT	3.93	3.53	2.94	2.62
1R5	4.75	3.74	3.11	2.77
1RK23	2.03	1.82	1.52	1.35
1S2A/DY87	2.03	1.82	1.52	1.35
1S4	3.28	2.95	2.46	2.19
1S5	2.73	2.45	2.04	1.82
1T4	3.58	2.79	2.33	2.07
1U4	3.68	2.79	2.33	2.07
1U5	3.60	2.45	2.04	1.82
1V2	2.03	1.82	1.52	1.35
1X2A	3.28	2.95	2.46	2.19
1X2B/1X2A	3.28	2.95	2.46	2.19
2A3	8.65	7.13	5.94	5.29
2AF4B/2DZ4	3.93	2.95	2.46	2.19
2AH2	3.10	2.79	2.33	2.07
2AS2	3.10	2.79	2.33	2.07
2AV2	2.75	2.25	1.88	1.67
2BJ2	3.68	3.02	2.51	2.24
2BN4A	3.45	2.57	2.14	1.90
26N3A	3.80	2.95	2.46	2.19
2CW4	3.93	3.53	2.94	2.63
2CY5	3.90	3.51	2.93	2.61
2DS4	4.70	3.53	2.94	2.62
2DV4	5.18	4.66	3.88	3.46
2DZ4/2AF4B	3.28	2.95	2.46	2.19
2EG4	5.48	3.53	2.94	2.62
2EN5	2.55	2.30	1.91	1.70
2ER5	2.98	2.68	2.23	1.99
2FH5	2.98	2.68	2.23	1.99
2FQ5A	3.38	3.04	2.53	2.26
2FS5	4.23	3.49	2.91	2.59
2GK5/2FQ5A	3.38	3.04	2.54	2.26
2GU5	3.60	3.24	2.70	1.90
2HA5	3.08	2.77	2.31	2.05
2HQ5	3.08	2.77	2.31	2.05
3A2	4.40	3.96	3.30	2.94
3A3B	2.73	2.45	2.04	1.82
3AF4A/3DZ4	3.83	2.95	2.46	2.19
3AL5	2.58	1.94	1.61	1.44
3AT2	2.98	2.68	2.23	1.99
3AU6	2.38	2.14	1.78	1.59
3AV6	2.38	2.14	1.78	1.59
3AW2A	3.23	2.90	2.42	2.15
3AW3	2.73	2.45	2.04	1.82
3B2	2.73	2.45	2.04	1.82
3BA6	1.85	1.67	1.39	1.24
3BC5/3CE5	2.73	2.14	1.78	1.59
3BL2	3.58	3.22	2.68	2.39
3BL2A	3.58	3.22	2.68	2.39
3BM2	2.90	2.61	2.18	1.94
3BN2	3.20	2.88	2.40	2.14
3BN4A	2.73	2.45	2.04	1.82
3BN6	4.43	3.42	2.85	2.54
3BS2A		Use 3BW2/3BS2A/3BT2		
3BW8/3GS8	4.15	3.53	2.94	2.62
3BW2/3BS2A/3BT2	3.95	3.04	2.53	2.26
3BY6	2.40	2.16	1.80	1.60
3BZ6/3CF6	3.28	2.68	2.23	1.99
3CA3	3.40	2.68	2.23	1.99
3CB6/3CF6	2.38	2.14	1.78	1.59
3CE5	2.38	2.14	1.78	1.59

Items in ITALICS Are Fast Moving—Extra Quantities on Hand

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
3CF6	2.28	2.14	1.78	1.59
3CN3B	3.68	2.95	2.46	2.19
3CS6	3.78	2.68	2.23	1.99
3CU3A	4.63	3.53	2.94	2.62
3CX3	2.76	2.50	2.08	1.85
3CY3	3.58	3.22	2.68	2.39
3CY5	3.13	2.81	2.34	2.09
3CZ3	4.15	3.15	2.63	2.34
3DB3/3CY3	3.80	3.22	2.68	2.39
3DC3	4.68	3.33	2.78	2.47
3DF3	3.70	3.04	2.53	2.26
3DG4	5.10	4.28	3.56	3.17
3DJ3	3.68	3.08	2.57	2.29
3DK6	2.85	2.57	2.14	1.90
3DT6A	2.98	2.36	1.97	1.75
3DZ4	3.28	2.95	2.46	2.19
3EH7/XF183	2.05	1.85	1.54	1.37
3EJ7/XF184	2.05	1.85	1.54	1.37
3ER5	4.15	3.22	2.68	2.39
3FH5	2.60	2.34	1.95	1.74
3FS5	3.80	3.11	2.59	2.31
3GK5	3.38	3.04	2.53	2.26
3GS8	3.93	3.53	2.94	2.62
3HM5/3HA5	3.08	2.77	2.31	2.05
3HQ5	5.00	4.07	3.39	3.02
3JC6A	4.75	3.65	3.04	2.71
3KT6	3.30	2.75	2.29	2.04
3Q4	2.68	2.41	2.01	1.79
3Q5GT	4.70	4.23	3.53	3.14
3S4	2.73	2.45	2.04	1.82
3V4	3.58	3.22	2.68	2.39
4AU6	3.10	2.79	2.33	2.07
4AV6	2.38	2.14	1.78	1.59
4BC8	3.93	2.88	2.40	2.14
4BL8/XCF80	1.90	1.71	1.43	1.27
4BN6	3.25	2.93	2.44	2.17
4BQ7A	3.93	3.53	2.94	2.62
4BS8	3.40	3.06	2.55	2.27
4BZ6	3.28	2.68	2.23	1.99
4BZ7	3.93	3.53	2.94	2.62
4CB6	2.25	2.03	1.69	1.50
4CS6	3.10	2.79	2.33	2.07
4DE6	2.38	2.14	1.78	1.59
4DK6	3.20	2.45	2.04	1.82
4DT6A	3.45	2.79	2.33	2.07
4EH7/LF183	2.85	2.57	2.14	1.90
4EJ7/LF184	2.85	2.57	2.14	1.90
4ES8/XCC189	4.40	3.96	3.30	2.94
4EW6	2.30	2.07	1.73	1.54
4GK5	3.10	2.77	2.33	2.07
4GM6	1.73	1.55	1.30	1.15
4GS8	3.58	3.22	2.68	2.39
4GX7	4.75	3.31	2.76	2.46
4HA5/PC900	1.85	1.67	1.39	1.24
4HA7/4HC7	3.43	3.08	2.57	2.29
4HC7	3.43	3.08	2.57	2.29
4HM6	3.18	2.25	1.88	1.67
4HQ5	4.15	3.31	2.76	2.46
4HS8	4.00	2.66	2.21	2.00
4JC6A	4.40	3.65	3.04	2.71
4JD6	4.05	3.31	2.76	2.46
4JH6	3.20	2.45	2.04	1.82
4KE8	5.68	4.39	3.66	3.26
4KT6	4.15	2.99	2.49	2.22
4LJ8	4.70	3.17	2.64	2.36
4RHH2	3.93	3.53	2.94	2.62
4KN8/4RHH8	5.95	5.36	4.46	3.98
5AM8	4.53	3.53	2.94	2.62
5AN8	4.63	3.74	3.11	2.77
5AQ5	3.28	2.68	2.23	1.99
5AR4/GZ34	3.40	3.06	2.55	2.27
5AS4A	2.75	2.48	2.06	1.84
5AS8	3.55	3.20	2.66	2.37
5AT8	3.85	3.22	2.68	2.39
5AU4	3.05	2.75	2.29	2.04
5AV8	3.22	2.90	2.42	2.15
5AZ4	4.25	3.83	3.19	2.84

ALLIED and RCA Receiving Tubes (Cont'd)

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
5B8	4.40	3.96	3.30	2.94
5BC3A	3.20	2.45	2.04	1.82
5BE8	2.50	2.25	1.88	1.67
5BK7A	3.33	2.99	2.49	2.22
5BQ7A	4.05	3.11	2.59	2.31
5BR8/5FV8	5.53	3.53	2.94	2.62
5BT8	2.48	2.23	1.86	1.65
5BW8	3.45	3.11	2.59	2.31
5CG8	3.63	2.88	2.40	2.14
5CL8A	4.78	3.53	2.94	2.62
5CQ8	3.28	2.95	2.46	2.19
5CZ5	3.58	3.22	2.68	2.39
5DJ4	2.85	2.57	2.14	1.90
5EA8	4.53	4.07	3.39	3.02
5ES8/YCC189	4.40	3.96	3.30	2.94
5EU8	4.20	2.88	2.40	2.14
5EW6	3.20	2.88	2.40	2.14
5FG7	3.68	3.31	2.76	2.46
5FV8	3.93	3.53	2.94	2.62
5GH8A	3.93	3.53	2.94	2.62
5GJ7		Use 5GJ7/LCF801		
5GJ7/LCF801	2.38	2.14	1.78	1.59
5GM6	2.98	2.36	1.97	1.75
5GS7	2.93	2.63	2.19	1.95
5GX6	1.98	1.78	1.48	1.32
5GX7	3.68	3.31	2.76	2.46
5HA7	3.43	3.08	2.57	2.29
5HB7	2.73	2.45	2.04	1.82
5HG8/LCF86	2.98	2.68	2.23	1.99
5HZ6	2.63	2.36	1.97	1.75
5J6	2.98	2.68	2.23	1.99
5JK6	3.35	2.77	2.31	2.05
5JL6	3.35	2.77	2.31	2.05
5KD8	2.00	1.80	1.50	1.34
5KE8	5.65	4.39	3.66	3.26
5KZ8	3.43	2.57	2.14	1.90
5LJ8	3.53	3.17	2.64	2.36
5MB8	2.93	2.63	2.19	1.95
5MHH3	2.98	2.68	2.23	1.99
5T8	3.58	3.22	2.68	2.39
5U4G	2.75	1.98	1.65	1.47
5U4GB	2.75	2.21	1.84	1.64
5U8	4.48	3.38	2.81	2.51
5U9/LCF201	2.38	2.14	1.78	1.59
5V3A/5AC4	3.55	2.75	2.29	2.04
5V4GA	4.08	3.11	2.59	2.31
5V6GT	2.98	2.68	2.23	1.99
5X8	3.33	2.99	2.49	2.22
5Y3GT	2.73	2.14	1.78	1.59
5Y4GA	1.95	1.76	1.46	1.30
5Y4GT	2.73	2.45	2.04	1.82
5Z3	3.58	3.22	2.68	2.39
5Z4	2.38	2.14	1.78	1.59
6A7	6.43	5.78	4.82	4.29
6A8	5.68	5.11	4.26	3.79
6AB4	3.20	2.59	2.16	1.92
6AC7	5.93	4.14	3.45	3.07
6AC10	4.63	3.06	2.55	2.27
6AD10	7.13	5.87	4.89	4.36
6AF3	3.23	2.90	2.42	2.15
6AF4	3.93	3.53	2.94	2.62
6AF4A	3.93	3.53	2.94	2.62
6AF6G	6.05	4.55	3.79	3.37
6AF9	2.85	2.57	2.14	1.90
6AF11	4.18	3.76	3.13	2.79
6AG5	3.45	3.11	2.59	2.31
6AG7	6.18	5.56	4.63	4.13
6AG9	5.00	4.43	3.69	3.29
6AG11	4.83	4.10	3.41	3.04
6AH4GT	2.63	2.36	1.97	1.75
6AH6	4.65	4.19	3.49	3.11
6AH9	3.80	3.42	2.85	2.54
6AK5/EF95	3.80	3.42	2.85	2.54
6AK8/EABC80	2.63	2.36	1.97	1.75
6AL3/EY88	2.08	1.87	1.56	1.39
6AL5	2.38	2.14	1.78	1.59
6AL7GT	5.50	5.00	4.16	3.71
6AL11	5.35	4.10	3.41	3.04
6AM4	5.78	5.20	4.33	3.86
6AM8A	4.05	3.31	2.76	2.46
6AN4	4.95	4.46	3.71	3.31
6AN8A	4.40	3.74	3.11	2.77
6AQ5A	2.98	2.45	2.04	1.82
6AQ6	3.10	2.36	1.97	1.75
6AQ7GT	3.78	3.40	2.83	2.52
6AQ8/ECC85	2.40	2.16	1.80	1.60
6AR5	3.50	3.15	2.63	1.75
6AR8	4.75	4.28	3.56	3.17
6AR11	4.28	3.85	3.21	2.86
6AS5	3.58	2.88	2.40	2.14
6AS8	4.28	3.85	3.21	2.86
6AS11	4.85	4.23	3.53	3.14

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
6AT6	1.90	1.71	1.43	1.27
6AT8A	4.53	3.74	3.11	2.77
6AU4GTA	4.15	3.51	2.93	2.61
6AU5GT	5.20	3.74	3.11	2.77
6AU6A	2.63	2.14	1.78	1.59
6AU8A	5.05	4.07	3.39	3.02
6AV5GA	5.20	3.74	3.11	2.77
6AV6	2.38	1.94	1.61	1.44
6AV11	3.98	3.17	2.64	2.36
6AW8A	3.93	3.22	2.68	2.39
6AX3	3.03	2.45	2.04	1.82
6AX4GTB	3.35	2.68	2.23	1.99
6AX5GT	3.48	2.79	2.33	2.07
6AX8	2.78	2.50	2.08	1.85
6AY3B	3.35	2.68	2.23	1.99
6AY11	4.73	4.10	3.41	3.04
6AZ8	4.83	3.96	3.30	2.94
6B8	5.50	4.95	4.13	3.67
6B10	4.25	3.22	2.68	2.39
6BA3	2.43	2.18	1.82	1.62
6BA6/EF93	3.00	2.36	1.97	1.75
6BA7	4.70	4.23	3.53	3.14
6BA8A	4.15	3.74	3.11	2.77
6BA11	4.50	3.53	2.94	2.62
6BC4	4.75	3.96	3.30	2.94
6BC5/6CE5	3.00	2.36	1.97	1.75
6BC7	2.88	2.59	2.16	1.92
6BC8/6BZ8	4.30	3.53	2.94	2.62
6BD6	1.88	1.69	1.41	1.25
6BD11	4.93	4.23	3.53	3.14
6BE3/6BZ3	4.25	3.22	2.68	2.39
6BE6	3.05	2.45	2.04	1.82
6BF5	2.68	2.41	2.01	1.79
6BF6	2.63	2.03	1.69	1.51
6BF11	4.60	3.65	3.04	2.71
6BG8G	5.76	5.18	4.31	3.84
6BH3A	2.23	2.00	1.69	1.49
6BH6	3.58	2.88	2.40	2.14
6BH8	4.68	3.31	2.76	2.46
6BH11	3.78	3.40	2.83	2.52
6BJ3	2.63	2.36	1.97	1.75
6BJ6	3.58	2.90	2.42	2.15
6BJ7	2.38	2.14	1.78	1.59
6BJ8	3.80	3.22	2.68	2.39
6BK4B		Use 6BK4C/6EL4A		
6BK4C/6EL4A	6.30	5.56	4.63	4.13
6BK5	2.78	2.50	2.08	1.85
6BK7B	4.18	3.53	2.94	2.62
6BL7GTA	4.88	4.39	3.66	3.26
6BL8/ECF80	2.15	1.94	1.61	1.44
6BM8/ECL82	2.30	2 07	1.73	1.54
6BN4A	3.20	2.88	2.40	2.14
6BN6/6KS6	4.33	3.24	2.70	2.41
6BN8	3.45	3.11	2.59	2.31
6BN11	4.28	3.85	3.21	2.86
6BQ5/EL84	3.10	2.79	2.33	2.07
6BQ6GTB/6CU6	4.33	3.89	3.24	2.89
6BQ7A/6BZ7/6BSA	4.28	3.62	3.02	2.69
6BR3/6RK19	3.63	3.26	2.72	2.42
6BR8A	4.15	3.74	3.11	2.77
6BS3A	3.35	2.68	2.23	1.99
6BS8		Use 6BQ7A/6BZ7/6BS8		
6BU8	4.48	3.65	3.04	2.71
6BV8	2.63	2.36	1.97	1.75
6BV11	4.35	3.58	2.98	2.66
6BW4	2.18	1.96	1.63	1.45
6BW8	3.78	3.40	2.83	2.52
6BW11	4.28	3.85	3.21	2.86
6BX7GT	5.35	4.28	3.56	3.17
6BY5GA	3.85	3.47	2.89	2.57
6BY6	3.55	2.45	2.04	1.82
6BY8	2.15	1.94	1.61	1.44
6BZ6	2.73	2.23	1.86	1.65
6BZ7		Use 6BQ7A/6BZ7/6BS8		
6BZ8		Use 6BC8/6BZ8		
6C4	3.33	2.68	2.23	1.99
6C5	4.75	3.85	3.21	2.86
6C6	6.30	5.67	4.73	4.21
6C9	4.40	3.96	3.30	2.94
6C10	3.58	2.68	2.23	1.99
6CA4	3.03	2.72	2.27	2.02
6CA5	2.40	2.16	1.80	1.60
6CA7/EL34	4.28	3.85	3.21	2.86
6CB5A	7.93	7.13	5.94	5.29
6CB6A/6CF6	2.88	2.36	1.97	1.75
6CD6GA	6.10	4.82	4.01	3.57
6CE3		Use 6CG3/6CE3/6CD3/6BW3		
6CE5		Use 6BC5/6CE5		
6CF6		Use 6CB6A/6CF6		

Items in ITALICS Are Fast-Moving—Extra Quantities on Hand

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ALLIED and RCA Receiving Tubes (Cont'd)

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
6CG3/6CE3/6CD3 6BW3	3.13	2.81	2.34	2.09
6CG7		Use 6FQ7/6CG7		
6CG8A	3.85	3.11	2.59	2.31
6CH8	4.50	4.05	3.38	3.01
6CJ3/6CH3	3.28	2.68	2.23	1.99
6CK3		Use 6CL3/6CK3		
6CK4	2.85	2.57	2.14	1.90
6CL3	3.28	2.45	2.04	1.82
6CL6	4.18	3.42	2.85	2.52
6CLP*A*	3.93	3.31	2.76	2.46
6CM3	4.20	3.53	2.94	2.62
6CM6	3.78	2.77	2.33	2.07
6CM7	3.65	2.99	2.49	2.22
6CM8	3.23	2.90	2.42	2.15
6CN7	4.35	3.22	2.68	2.39
6CQ4		Use 6DE4/6CQ4		
6CQ8	3.68	3.31	3.76	2.46
6CR6	2.35	2.16	1.76	1.57
6CS6	3.28	2.95	2.46	2.19
6CS7	3.58	2.72	2.27	2.02
6CU5	3.55	2.88	2.40	2.14
6CU6		Use 6BQ6GTB/6CU6		
6CU8	4.50	3.31	2.76	2.46
6CW4	4.75	4.07	3.39	3.02
6CW5/EL86	2.20	1.98	1.65	1.47
6CX8	4.50	3.74	3.11	2.77
6CY5	3.90	3.51	2.93	2.61
6CY7	2.43	2.18	1.82	1.62
6CZ5	4.18	3.42	2.85	2.54
6D10	3.73	3.35	2.79	2.49
6DA4		Use 6DM4A/6DA4		
6DB5	4.00	3.60	3.00	2.67
6DC6	3.55	2.79	2.33	2.07
6DC8/EBF89	2.43	2.18	1.82	1.62
6DE4/6CQ4	3.33	2.99	2.49	2.22
6DE6	3.03	2.36	1.97	1.75
6DE7	4.45	3.22	2.68	2.39
6DG6GT	3.68	2.79	2.33	2.07
6DK6	2.85	2.57	2.14	1.90
6DL4/EC88	6.38	5.74	4.78	4.26
6DL5/EL95	2.38	2.14	1.78	1.59
6DM4A/6DA4	3.35	2.68	2.23	1.99
6DN3	3.28	2.95	2.46	2.19
6DN6	5.63	5.06	4.22	3.76
6DN7	4.60	3.31	2.76	2.46
6DQ5	6.75	5.87	4.89	4.36
6DQ6B		Use 6GW6/6DQ6B		
6DR7	4.70	3.65	3.04	2.71
6DS4	4.75	4.07	3.39	3.02
6DS5	2.93	2.63	2.19	1.95
6DT5	2.83	2.54	2.12	1.89
6DT6A	2.85	2.36	1.97	1.75
6DT8	3.58	2.70	2.25	2.00
6DV4	5.48	4.66	3.88	3.46
6DW4B	5.98	2.68	2.23	1.99
6DX8/ECL84	2.33	2.09	1.74	1.55
6DZ4	3.93	3.53	2.94	2.62
6E5	5.13	4.07	3.39	3.02
6EA5		Use 6CY5		
6EA7		Use 6EM7/6EA7		
6EA8	3.45	2.81	2.34	2.09
6EB8	4.53	4.07	3.39	3.02
6EH4A	6.58	5.92	4.93	4.39
6EH5	3.30	2.57	2.14	1.90
6EH7/EF183	3.06	2.77	2.31	2.05
6EH8	2.80	2.52	2.10	1.84
6EJ4A	7.50	6.75	5.63	5.01
6EJ7/EF184	2.85	2.57	2.14	1.90
6EL4		Use 6BK4C/6EL4A		
6EM5	3.93	3.22	2.68	2.39
6EM7/6EA7	4.90	4.12	3.43	3.06
6EQ7	2.38	2.14	1.78	1.59
6ER5	3.70	3.04	2.53	2.26
6ES5	2.28	2.05	1.71	1.52
6ES8/ECC189	4.38	3.94	3.28	2.92
6ET7	3.20	2.88	2.40	2.14
6EU7	3.55	2.84	2.36	2.10
6EU8	3.55	2.66	2.21	1.97
6EV5	3.43	3.08	2.57	2.29
6EV7	2.63	2.36	1.97	1.75
6EW6	3.10	2.57	2.14	1.90
6EW7	5.23	4.70	3.92	3.49
6EZ5	4.63	3.65	3.04	2.71
6EZ8	2.85	2.57	2.14	1.90
6F5	4.23	4.23	3.53	3.14
6F6	5.40	4.43	3.69	3.29
6F6GT	4.65	4.19	3.49	3.11
6F8G	6.78	6.10	5.08	4.53
6FA7	2.38	2.14	1.78	1.59

Tube Types in ITALICS Are Fast-Moving—Extra Quantities on Hand

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
6FD7	4.98	4.10	3.41	3.04
6FE5	2.73	2.45	2.04	1.82
6FG6/EM84	2.65	2.39	1.99	1.77
6FG7	4.05	3.31	2.76	2.46
6FH5	4.00	3.60	3.00	2.67
6FH8	3.53	3.17	2.64	2.36
6FJ7	3.93	2.99	2.49	2.22
6FM7	4.48	3.31	2.76	2.46
6FM8	3.15	2.84	2.36	2.10
6FQ5A		Use 6GK5/6FQ5A		
6FQ7/6CG7	2.63	2.14	1.78	1.59
6FS5	3.63	2.95	2.46	2.19
6FV6	4.30	3.22	2.68	2.39
6FV8A		Use 6BR8A/6FV8A		
6FW5	3.95	3.33	2.78	2.47
6FY5/EC97	2.18	1.96	1.63	1.45
6FY7	2.80	2.52	2.10	1.87
6G11	4.83	4.34	3.62	3.22
6GB5/EL500	3.05	2.75	2.29	2.04
6GC5	4.53	4.07	3.39	3.02
6GE5	5.03	4.10	3.41	3.04
6GF5	3.05	2.75	2.29	2.04
6GF7A	4.53	3.85	3.21	2.86
6GH8A	2.58	2.32	1.93	1.72
6GJ5A	5.35	4.43	3.69	3.29
6GJ7/ECF801	2.48	2.23	1.86	1.65
6GK5/6FQ5A	4.05	3.31	2.76	2.46
6GK6	2.98	2.68	2.23	1.99
6GL7	4.63	4.16	3.47	3.09
6GM5	2.43	2.18	1.82	1.62
6GM6	3.40	2.79	2.33	2.07
6GN8	4.53	4.07	3.39	3.02
6GQ7	3.00	2.70	2.25	2.00
6GS7	3.03	2.72	2.27	2.02
6GT5A	5.08	4.57	3.81	3.39
6GU5	3.28	2.95	2.46	2.19
6GU7	3.58	2.99	2.49	2.22
6GV5	3.30	2.97	2.48	2.20
6GV8/ECL85	3.68	3.31	2.76	2.46
6GW6/6DQ6B	4.28	3.85	3.21	2.86
6GW8/ECL86	2.43	2.18	1.82	1.62
6GX6	2.78	2.50	2.08	1.85
6GX7	4.75	3.31	2.76	2.46
6GY5	3.68	3.31	2.76	2.46
6GY6	2.78	2.30	1.91	1.70
6GY8	4.10	3.69	3.08	2.74
6H6	4.63	4.16	3.47	3.09
6HA5		Use 6HM5/6HA5		
6HA6		Use 6HB6/6HA6		
6HB5	4.05	3.31	2.76	2.46
6HB6/6HA6	3.58	3.22	2.68	2.39
6HB7	3.80	3.11	2.59	2.31
6HE5	4.45	3.33	2.78	2.47
6HF5	7.00	6.30	5.25	4.68
6HF8	4.75	4.28	3.56	3.17
6HG5	2.98	2.45	2.04	1.82
6HL8/ECF86	2.98	2.68	2.23	1.99
6HJ8	2.50	2.25	1.88	1.67
6HK5	3.10	2.79	2.33	2.07
6HL8	2.45	2.21	1.84	1.64
6HM5/6HA5	3.08	2.77	2.31	2.05
6HM6	2.38	2.14	1.78	1.59
6HQ5	4.45	3.65	3.04	2.71
6HR5	2.05	1.85	1.54	1.37
6HR6	2.98	2.68	2.23	1.99
6HS5	6.23	5.61	4.67	4.16
6HS6	2.98	2.68	2.23	1.99
6HS8	4.15	3.42	2.85	2.54
6HU6/EM87	3.88	3.49	2.91	2.59
6HU8/ELL80	4.95	3.92	3.26	2.91
6HV5	6.23	5.61	4.67	4.16
6HZ6	2.55	2.30	1.91	1.70
6J5	4.05	3.31	2.76	2.46
6J5GT	4.05	2.95	2.46	2.19
6J6A	3.93	3.22	2.68	2.39
6J7	5.08	4.57	3.81	3.39
6J10		Use 6Z10/6J10		
6J11	4.60	4.14	3.45	3.07
6JB6A	5.80	4.59	3.83	3.41
6JC6A	3.80	3.22	2.68	2.39
6JC8	2.65	2.39	1.99	1.77
6JD6	3.68	3.31	2.76	2.46
6JE6A		Use 6LQ6/6JE6C		
6JE8	2.98	2.68	2.23	1.99
6JF6	5.83	5.24	4.37	3.89
6JG6A	5.95	4.70	3.92	3.49
6JH6	3.33	2.59	2.16	1.92
6JH8	4.75	3.96	3.30	2.94
6JK6	3.35	2.77	2.31	2.05
6JK8	3.22	2.91	2.42	2.15
6JM6A	5.03	4.10	3.41	3.04
6JN6	4.70	3.85	3.21	2.86
6JN8	3.83	2.63	2.19	1.95

ALLIED and RCA Receiving Tubes (Cont'd)

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
6JQ6	4.15	2.79	2.33	2.07
6JR6	5.10	4.59	3.83	3.41
6JS6C	6.30	5.40	4.50	4.01
6JT6A	4.70	4.23	3.53	3.14
6JT8	4.05	3.22	2.68	2.39
6JU6	5.58	5.02	4.18	3.72
6JU8A	3.80	3.20	2.66	2.37
6JV8	4.05	3.20	2.66	2.37
6JW8/ECF802	2.50	2.25	1.88	1.67
6JZ6	3.70	3.33	2.78	2.47
6JZ8	3.58	2.54	2.12	1.89
6K6GT	3.20	2.88	2.40	2.14
6K7	4.75	4.28	3.56	3.17
6K8	6.18	5.56	4.63	4.12
6K11/6Q11	3.58	2.75	2.29	2.04
6KA8	4.28	3.56	2.96	2.63
6KD6	7.13	6.41	5.34	4.76
6KD8		Use 6U8A/6KD8		
6KE8	5.40	4.39	3.66	3.26
6KL8	2.38	2.14	1.78	1.59
6KM6	7.13	6.41	5.34	4.76
6KM8	2.75	2.48	2.06	1.84
6KN8	2.75	2.48	2.06	1.84
6KN8/6RHH8	5.95	5.36	4.46	3.98
6KR8	3.40	3.06	2.55	2.27
6KS6		Use 6BN6/6KS6		
6KT6	3.93	3.53	2.94	2.62
6KT8	4.75	3.89	3.24	2.89
6KU8	3.85	3.47	2.89	2.57
6KV6A	5.85	5.27	4.39	3.91
6KV8	5.28	4.23	3.53	3.14
6KY8A	6.53	5.56	4.63	4.13
6KZ8	3.58	2.93	2.44	2.17
6L6	8.20	7.38	6.15	5.48
6L6GC	5.35	4.28	3.56	3.17
6L7	5.50	5.00	4.16	3.71
6LB6	7.13	6.41	5.34	4.76
6LB8	3.75	3.38	2.81	2.51
6LC8	4.55	3.42	2.85	2.54
6LE8	5.35	4.50	3.75	3.34
6LF6	6.78	6.10	5.08	4.53
6LF8	4.53	3.67	3.06	2.72
6LH6A		Use 6LJ6A/6LH6A		
6LJ6		Use 6LJ6A/6LH6A		
6LJ6A/6LN6A	6.65	5.99	4.99	4.22
6LJ8	4.15	3.17	2.64	2.36
6LM8	4.28	3.53	2.94	2.62
6LN8/LCF80	1.93	1.73	1.44	1.29
6LQ6/6JE6C	7.05	6.23	5.19	4.63
6LQ8	5.05	4.01	3.34	2.97
6LR6	7.13	5.87	4.89	4.36
6LR8	3.83	3.44	2.87	2.56
6LT8	3.80	2.88	2.40	2.14
6LU8	3.83	3.44	2.87	2.56
6LX8/LCF802	2.08	1.87	1.56	1.39
6LY8	3.58	2.79	2.33	2.07
6M11	4.63	4.16	3.47	3.09
6MB8	2.93	2.63	2.19	1.95
6MD8	4.63	3.85	3.21	2.86
6ME8	5.00	4.07	3.39	3.02
6MF8	3.83	3.44	2.87	2.56
6MG8	1.95	1.76	1.46	1.30
6MJ8	4.05	3.33	2.78	2.47
6MK8	3.93	3.11	2.59	2.31
6MN8	3.83	3.44	2.87	2.56
6MQ8	3.58	2.75	2.29	2.04
6MU8	4.75	3.74	3.11	2.77
6N7	4.05	3.65	3.04	2.71
6N7GT	4.75	4.28	3.56	3.17
6Q7	4.75	4.28	3.56	3.17
6RK19		Use 6BR3/6RK19		
6S4A	2.98	2.68	2.23	1.99
6SA7	4.75	4.28	3.56	3.17
6SA7GT	3.53	3.17	2.64	2.36
6SB7Y	4.78	4.30	3.58	3.19
6SC7	4.75	3.87	3.23	2.87
6SF5	4.03	3.62	3.02	2.69
6SF7	5.03	4.52	3.77	3.36
6SG7	4.50	4.05	3.38	3.01
6SH7	4.95	4.46	3.71	3.31
6SJ7	4.75	3.85	3.21	2.86
6SK7	4.70	3.60	3.00	2.67
6SK7GT	4.40	3.96	3.30	2.94
6SL7GT	4.75	3.53	2.94	2.62
6SN7GTB	4.33	2.88	2.40	2.14
6SQ7	4.78	3.58	2.98	2.67
6SR7	3.93	3.53	2.94	2.62
6T4	4.10	3.69	3.08	2.74
6T8A	4.28	3.40	2.83	2.52
6T9	3.55	3.20	2.66	2.37
6T10	4.75	4.01	3.34	2.97
6U5	5.95	5.36	4.46	3.98

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
6U8A/6KD8	3.13	2.81	2.34	2.08
6U9/ECF201	2.33	2.09	1.74	1.55
6U10	3.58	2.93	2.44	2.17
6V3A	3.65	3.29	2.74	2.44
6V6	5.95	4.91	4.09	3.64
6V6GTA	3.93	3.22	2.68	2.39
6W4GT	2.63	2.36	1.97	1.75
6W6GT	3.68	3.31	2.76	2.46
6X4	3.03	2.45	2.04	1.82
6X5GT	3.15	2.57	2.14	1.90
6X8A	3.58	3.22	2.68	2.39
6X9/ECF200	2.33	2.09	1.74	1.55
6Y6GA/6Y6G	3.98	3.58	2.98	2.66
6Y6GT		Use 6Y6GA/6Y6G		
6Y9/ELF200	2.35	2.12	1.76	1.57
6Z4		Use 6AT6Z4		
6Z10/6J10	5.35	4.50	3.75	3.34
7AU7	2.48	2.23	1.86	1.65
7C5	3.78	2.39	1.99	1.89
7C7	2.70	2.43	2.03	1.80
7EY6	2.95	2.66	2.21	1.97
7F7	6.03	5.42	4.52	4.03
7F8	6.63	5.96	4.97	4.43
7GS7	3.78	3.40	2.83	2.52
7HG8/PCF86	2.20	1.98	1.65	1.47
7KY6	4.33	3.11	2.59	2.31
7N7	5.70	5.13	4.28	3.81
8AC10	4.05	3.65	3.04	2.71
8AR11	4.28	3.85	3.39	3.02
8AU8	3.08	2.77	2.31	2.05
8AW8A	4.70	3.85	3.21	2.86
8B8	4.38	3.94	3.28	2.92
8B10	3.53	3.17	2.64	2.36
8BA8A	2.75	2.48	2.06	1.84
8BA11	4.88	3.96	3.30	2.94
8BH8	2.68	2.41	2.01	1.79
8BM11	3.75	3.38	2.81	2.51
8BN8	2.98	2.68	2.23	1.99
8BN11	3.50	3.15	2.63	2.34
8BQ5	3.55	2.70	2.25	2.00
8BQ11	3.80	3.42	2.85	1.90
8BU11	4.00	3.60	3.00	2.67
8CG7		Use 8FQ7/8CG7		
8CM7	2.15	1.94	1.61	1.44
8CN7	2.43	2.18	1.82	1.62
8CS7	3.18	2.86	2.38	2.12
8CW5/XL86	2.03	1.82	1.52	1.35
8CX8	3.53	3.17	2.64	2.36
8EB8		Use 8GN8/8EB8		
8EM5	3.28	2.95	2.46	2.19
8ET7	3.33	2.99	2.49	2.22
8FQ7/8CG7	2.63	2.14	1.78	1.59
8GJ7/PCF801	2.30	2.07	1.73	1.54
8GN8/8EB8	3.33	2.99	2.49	2.22
8GU7	2.55	2.30	1.91	1.70
8JU8A	2.95	2.41	2.01	1.79
8JV8	4.05	3.65	3.04	2.03
8KA8	4.30	3.35	2.79	2.49
8LC8	4.55	3.44	2.87	2.56
8LT8	3.70	2.88	2.40	2.14
9A8/PCF80	2.13	1.91	1.59	1.42
9AH9	4.05	3.42	2.85	2.54
9AU7	2.38	2.14	1.78	1.59
9BJ11	4.28	3.85	3.21	2.86
9BR7	2.53	2.27	1.89	1.69
9GH8A	3.28	2.95	2.46	2.19
9GV8/XCL85	2.73	2.45	2.04	1.82
9KC6	3.50	3.15	2.63	2.34
9KX6	3.33	2.99	2.49	2.22
9KZ8	2.38	2.14	1.78	1.59
9LA6	3.35	3.02	2.51	2.24
9U8A	2.48	2.23	1.86	1.65
10AL11	3.63	3.26	2.72	2.42
10BQ5	2.20	1.98	1.65	1.47
10C8	4.85	4.37	3.64	3.24
10CW5/LL86	2.03	1.82	1.52	1.35
10DE7	4.33	3.53	2.94	2.62
10DR7	3.58	3.22	2.68	2.39
10DX8/LCL84	2.18	1.96	1.63	1.45
10EG7	3.50	3.15	2.63	2.34
10EM7	3.93	3.53	2.94	2.62
10EW7	4.23	3.81	3.17	2.82
10GF7A	4.38	3.94	3.28	2.92
10GK6	3.58	3.22	2.68	2.39
10GN8	4.40	3.53	2.94	2.62
10HF8	4.75	3.87	3.23	2.87
10JA8/10LZ8	3.93	2.99	2.49	2.22
10JT8	3.78	3.40	2.83	2.52
10JY8	3.50	2.63	2.19	1.95

Tube Types in ITALICS Are Fast-Moving—Extra Quantities on Hand

CONTINUED ON NEXT PAGE

ALLIED and RCA Receiving Tubes (Cont'd)

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
10KR8	3.75	3.06	2.55	2.27
10KU8	3.90	3.51	2.93	2.61
10LB8	3.75	3.38	2.81	2.51
10LE8	4.75	4.28	3.56	3.17
10LW8	4.25	3.83	3.19	2.84
10LZ8		Use 10JA8/10LZ8		
10Z10	4.93	3.96	3.30	2.94
11AF9	2.50	2.25	1.88	1.67
11AR11	4.28	3.85	3.21	2.86
11BM8	4.70	4.23	3.53	3.14
11BQ11	5.20	3.85	3.21	2.86
11BT11	5.23	4.70	3.92	3.49
11CA11	6.03	5.42	4.52	4.03
11CY7	3.70	3.33	2.78	2.47
11DS5	3.68	3.31	2.76	2.46
11FY7	2.98	2.68	2.23	1.99
11HM7	4.68	4.21	3.51	3.12
11JE8	3.08	2.77	2.31	2.05
11KV8	5.23	4.70	3.92	3.49
11LQ8	4.73	4.25	3.54	3.16
11LT8	3.20	2.88	2.40	2.14
11Y9/LFL200	2.98	2.68	2.23	1.99
12AB5	3.63	2.79	2.33	2.07
12AC6	1.68	1.51	1.26	1.12
12AC10A	4.05	3.65	3.04	2.71
12AD6	3.23	2.52	2.10	1.87
12AE6A	2.50	2.25	1.88	1.67
12AE10	4.63	4.16	3.47	3.09
12AF3/BR3/RK19	3.40	3.06	2.55	2.31
12AF6	2.53	2.27	1.89	1.69
12AL5	2.80	1.96	1.63	1.45
12AL8	4.95	4.46	3.71	3.31
12AL11	4.53	4.97	3.39	3.02
12AQ5	3.08	2.50	2.08	1.85
12AT6	2.63	1.98	1.65	1.47
12AT7/ECC81	2.83	2.54	2.12	1.89
12AU6	3.10	2.57	2.14	1.90
12AU7A/ECC82	2.50	2.25	1.88	1.67
12AV5GA	4.38	3.94	3.28	2.92
12AV6	2.15	1.66	1.39	1.24
12AV7	4.28	3.31	2.76	2.46
12AW6	2.85	2.57	2.14	1.90
12AX3	2.98	2.16	1.80	1.60
12AX4GTB	2.98	2.39	1.99	1.77
12AX7A/ECC83	2.23	2.00	1.67	1.49
12AY3A	2.33	2.09	1.74	1.55
12AY7	5.18	4.66	3.88	3.46
12AZ7A	3.58	2.88	2.40	2.14
12B4A	3.66	2.88	2.40	2.14
12BA6	2.50	2.03	1.69	1.50
12BA7	4.75	4.28	3.56	3.17
12BD6	1.85	1.67	1.39	1.24
12BE3	3.35	2.48	2.06	1.84
12BE6	2.73	2.18	1.82	1.62
12BF6	1.85	1.67	1.39	1.24
12BF11	4.35	4.16	3.47	3.09
12BH7A	3.45	2.79	2.33	2.07
12BK5	3.03	2.72	2.27	2.02
12BL6	3.40	2.68	2.23	1.99
12BN6	2.93	2.63	2.19	1.95
12BQ6GTB/12CU6	3.58	3.22	2.68	2.39
12BR7	2.43	2.18	1.82	1.62
12BS3A/12DW4A	2.98	2.68	2.23	1.99
12BT3	2.75	2.48	2.06	1.84
12BV7		Use 12BV7A/12BV7/12DQ7		
12BV11	3.85	3.47	2.89	2.57
12BW4	2.65	2.39	1.99	1.77
12BY7A/12BV7/12DQ7	3.33	2.57	2.14	1.90
12BZ6	1.90	1.71	1.43	1.27
12BZ7	3.33	2.99	2.49	2.22
12C5		See 12CU5/12C5		
12CA5	3.68	2.84	2.36	2.10
12CL3	2.80	2.52	2.10	1.87
12CN5	2.63	2.36	1.97	1.75
12CR6	2.35	2.12	1.76	1.57
12CT3	2.63	2.36	1.97	1.75
12CU5/12C5	3.80	3.11	2.59	2.31
12CU6		Use 12BQ6GTB/12CU6		
12CX6	2.18	1.96	1.63	1.45
12D4	2.43	2.18	1.82	1.62
12DB5	2.10	1.89	1.58	1.40
12DK6	1.83	1.64	1.37	1.22
12DQ6B		Use GW6/12DQ6B		
12DQ7		Use 12BV7A/12BV7/12DQ7		
12DS7	4.33	3.89	3.24	2.89
12DT5	2.73	2.23	1.86	1.65
12DT8	3.20	2.88	2.40	2.14
12DW4A		Use 12BS3A/12DW4A		
12DW7	2.45	2.21	1.84	1.64
12DY8	6.38	5.74	4.78	4.26
12DZ6	2.90	2.61	2.18	1.94

Tube Types in ITALICS Are Fast-Moving—Extra Quantities on Hand

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
12ED5	2.15	1.94	1.61	1.44
12EK6	2.85	2.57	2.14	1.90
12EQ7	2.18	1.96	1.63	1.45
12F8	2.63	2.37	1.97	1.75
12FK6	2.03	1.82	1.52	1.37
12FM6	2.08	1.87	1.56	1.39
12FQ7	2.95	2.67	2.21	1.97
12FQ8	4.15	3.74	3.11	2.77
12FV7	2.73	2.45	2.04	1.82
12FX5	2.98	2.37	1.97	1.75
12GC6	4.23	3.81	3.17	2.82
12GE5	4.75	3.74	3.11	2.77
12GJ5A	3.93	3.53	2.94	2.62
12GN7A	4.53	4.07	3.39	3.02
12GT5	4.28	3.85	3.21	2.86
12GW6/12DQ6B	4.28	3.85	3.21	2.86
12H6	3.58	3.22	2.68	2.39
12HE7	5.48	4.93	4.11	3.66
12HG7/126N7A	4.75	4.07	3.39	3.02
12HL7	4.28	3.53	2.94	2.62
12J5GT	3.85	3.47	2.89	2.57
12J8	3.50	3.15	2.63	2.34
12JB6A	5.58	4.50	3.75	3.34
12JN6	3.10	2.79	2.33	2.07
12JN8	2.95	2.66	2.21	1.97
12JQ6	3.58	3.22	2.68	2.39
12JT6A	3.98	3.58	2.98	2.66
12K5	2.75	2.48	2.06	1.84
12KL8	1.95	1.76	1.46	1.30
12L6GT	2.83	2.54	2.12	1.89
12MD8	3.90	3.51	2.93	2.61
12R5	2.65	2.39	1.99	1.77
12SA7	4.75	4.28	3.56	3.17
12SC7	4.15	3.74	3.11	2.77
12SF5	3.10	2.79	2.33	1.67
12SF7	5.00	4.50	3.75	3.34
12SG7	3.75	3.38	2.81	2.51
12SH7	4.35	3.92	3.26	2.91
12SJ7	3.45	3.11	3.59	2.31
12SK7	4.23	3.81	3.17	2.82
12SK7GT	3.58	3.22	2.68	2.39
12SL7GT	3.98	3.58	2.98	2.66
12SN7GTA	3.93	3.11	2.59	2.31
12SQ7	4.40	3.58	2.99	2.66
12T10	4.75	3.35	2.79	2.49
12V6GT	4.15	3.22	2.68	2.39
12W6GT	4.53	3.53	2.94	2.62
12X4	1.78	1.60	1.33	1.19
13CW4	4.75	3.65	3.04	2.71
13DE7	4.75	3.44	3.87	2.56
13DR7	4.75	4.12	3.43	3.06
13EM7/15EA7	5.15	4.64	3.86	3.44
13FD7	4.23	3.80	3.17	2.82
13FM7/15FM7	3.58	2.88	2.40	2.14
13GB5/XL500	3.50	2.68	2.23	1.99
13GF7A	4.55	3.74	3.11	2.77
13J10		Use 13Z10/13J10		
13JZ8	4.05	3.65	3.04	2.71
13V10	5.35	4.28	3.56	3.17
13Z10/13J10	5.70	4.50	3.75	3.34
14BL11	5.88	5.29	4.41	3.92
14BR11	4.65	4.19	3.49	3.11
14GT8	2.75	2.48	2.06	1.84
14JG8	2.50	2.25	1.88	1.67
15AF11	3.83	3.44	2.87	3.06
15BD11A	4.40	3.96	3.30	2.94
15CW5/PL84	1.98	1.78	1.48	1.32
15DQ8/PCL84	2.73	2.46	2.04	1.82
15FM7		Use 13FM7/15FM7		
15FY7	3.10	2.79	2.33	2.07
15KY8A	5.58	4.57	3.81	3.39
15LE8	6.13	5.51	4.59	4.09
15MF8	4.08	3.44	2.87	2.56
16A8/PCL82	2.73	2.46	2.04	1.82
16AK9	5.48	4.93	4.11	3.66
16AQ3/XY88	2.15	1.94	1.61	1.44
16BQ11	4.28	3.85	3.21	2.86
16BX11	5.00	4.50	3.75	3.34
16GK6	2.43	2.18	1.82	1.62
16GY5	3.88	3.49	2.91	2.59
17AB10/17X10	5.35	3.96	3.30	2.94
17AX3	2.08	1.87	1.56	1.39
17AX4GTA	2.98	2.68	2.23	1.99
17AY3A	3.35	2.68	2.23	1.99
17BB14	8.43	7.58	6.32	5.63
17BE3/17BZ3	3.35	2.68	2.23	1.99
17BF11	5.35	4.28	3.56	3.17
17BH3	2.28	2.05	1.71	1.52
17BQ6GTB	4.18	3.76	3.13	2.79
17BR3/17RK19	2.98	2.41	2.01	1.79
17BS3A/17DW4A	3.35	2.68	2.23	1.99
17BW3	2.58	2.32	1.93	1.72
17BZ3		Use 17BE3/17BZ3		
17C5		Use 17CU5/17C5		
17C9	5.75	5.18	4.31	3.84

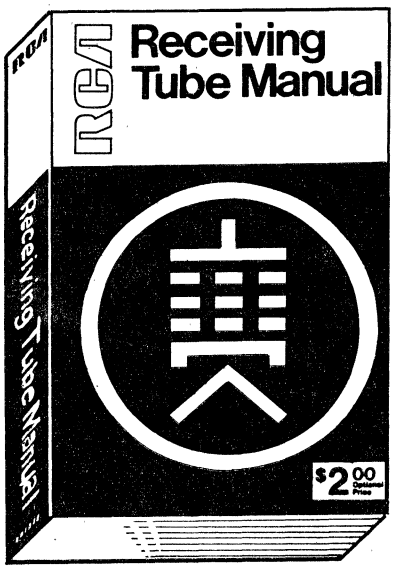
ALLIED® and RCA Receiving Tubes (Cont'd)

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
17CK3	2.83	2.54	2.12	1.89
17CT3	2.98	2.14	1.78	1.59
17CU5/17C5	2.98	2.23	1.86	1.65
17D4	3.58	2.90	2.42	2.15
17DE4	2.93	2.63	2.19	1.95
17DM4A	3.23	2.90	2.42	2.15
17DQ6B		Use 17GW6/17DQ6B		
17DW4A		Use 17BS3A/17DW4A		
17EW8/HCC85	2.18	1.96	1.63	1.45
17GE5	3.46	3.13	2.61	2.32
17GJ5A	5.35	4.37	3.64	3.24
17GT5A	5.35	4.01	3.34	2.97
17GV5	3.35	3.02	2.51	2.20
17GW6/17DQ6B	4.45	4.01	3.34	2.97
17HB25	6.58	5.92	4.93	4.39
17JB6A	5.05	4.23	3.53	3.14
17JF6	5.95	4.93	4.11	3.66
17JG6A	5.05	4.55	3.79	3.37
17JM6A	5.35	4.28	3.56	3.17
17JN6	4.75	3.85	3.21	2.86
17JQ6	4.15	3.22	2.68	2.39
17JT6A	5.00	4.05	3.38	3.01
17JZ8	3.43	2.57	2.14	1.90
17KV6A	6.90	6.21	5.18	4.61
17LD8		Use 15KY8A		
17X10		Use 17AB10/17X10		
17Z3/PY81	3.55	3.20	2.66	2.37
18AJ10	4.73	4.25	3.54	3.16
18FW6A	1.98	1.78	1.48	1.32
18FX6A	2.38	2.14	1.78	1.59
18FY6A	2.38	2.14	1.78	1.59
18GB5/LL50	4.13	3.71	3.09	2.76
18CD6A	2.38	2.14	1.78	1.59
18GUB/PCL85	3.73	3.35	2.79	2.49
19AU4GTA	3.48	3.13	2.61	2.32
19BG6GA	5.35	4.82	4.01	3.57
19CG3	3.38	2.61	2.18	1.94
19CL8A		Use 19JN8/19CL8A		
19EA8	3.58	3.22	2.68	2.39
19EZ8	3.60	3.24	2.70	2.41
19FX5	3.58	2.57	2.14	1.90
19GQ7	3.05	2.75	2.29	2.04
19HR6	1.98	1.78	1.48	1.32
19HS6	1.90	1.71	1.43	1.27
19HV8	3.75	3.38	2.81	2.51
19J6	2.98	2.68	2.23	1.99
19JN8/19CLBA	2.55	2.30	1.91	1.70
19KG8	2.50	2.25	1.88	1.67
19MR9		Use 18GD6A		
19T8	4.75	3.53	2.94	2.62
19X8	3.28	2.95	2.46	2.19
20AQ3/LY88	2.63	2.36	1.97	1.75
20EZ7	2.73	2.45	2.04	1.82
20LF6	6.83	6.14	5.12	4.56
21GY5	3.70	3.33	2.78	2.47
21HB5A	4.75	3.44	2.87	2.56
21JS6A		Use 23JS6A		
21JV6	3.70	3.33	2.78	2.47
21JZ6	3.90	3.51	2.93	2.61
21KA6	3.58	3.22	2.68	2.39
21LG6A	7.20	6.48	5.40	4.81
12LR8	3.83	3.44	2.87	2.56
21LU8	3.83	3.44	2.87	2.56
22BH3A	2.98	2.22	1.88	1.67
22BW3	3.58	2.99	2.49	2.22
22DE4	3.80	3.02	2.51	2.24
22JF6	6.18	5.24	4.37	3.89
22JG6A	5.43	4.88	4.07	3.62
22JR6	5.48	4.93	4.11	3.66
22JU6	5.48	4.93	4.11	3.66
22KM6	7.13	5.92	4.93	4.39
22KV6A	6.30	5.27	4.39	3.91
23JS6A	10.73	9.65	8.04	7.16
23Z9	3.78	3.40	2.83	2.52
24BF11	4.18	3.76	3.13	2.79
24JE6A		Use 24LQ6/24JE6C		
24JZ8	3.60	3.24	2.70	2.41
24LQ6/24JE6C	7.05	6.23	5.19	4.63
25AV5GA	4.53	4.07	3.39	3.02
25AX4GT	2.43	2.18	1.82	1.62
25BK5	2.73	2.45	2.04	1.82
25BQ6GTB/25CU6	3.53	3.17	2.64	2.36
25C5	3.33	2.68	2.23	1.99
25CA5	2.90	2.61	2.18	1.94

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
25CD6GB	5.13	4.61	3.84	3.42
25CG3;25CK3	2.70	2.43	2.03	1.80
25CT3	2.38	2.14	1.78	1.59
25CU6		Use 25B 6GTB/25CU6		
25DN6	5.30	4.77	3.98	3.54
25E5/PL36	5.33	4.79	3.99	3.56
25EC6	4.93	4.43	3.69	3.29
25EH5	3.58	2.66	2.21	1.97
25F5A	3.08	2.77	2.31	2.05
25JZ8	4.63	4.16	3.47	3.09
25L6GT/25W6GT	4.15	2.68	2.23	2.08
25W4GT	2.98	2.63	2.23	1.99
25W6GT		Use 25L6GT/25W6GT		
25Z6GT	3.10	2.79	2.33	2.07
26HU5	9.70	8.73	7.28	6.48
27GB5/PL500	2.98	2.68	2.23	1.99
29KQ6/PL521	9.45	8.51	7.09	6.31
30AE3/PYBB	2.63	2.36	1.97	1.75
30JC6	4.95	4.46	3.71	3.31
30KD6	6.48	5.83	4.86	4.33
31AL10	5.08	4.57	3.81	3.39
31JS6C	6.13	5.27	4.39	3.91
31LQ6	7.05	6.14	5.12	4.56
32ET5A	1.93	1.73	1.44	1.29
32HQ7	6.20	5.58	4.65	4.14
33GT7	5.95	5.02	4.18	3.72
33GY7A	5.58	4.64	3.86	3.44
33JV6	3.70	3.33	2.78	2.47
34CE3	3.58	2.81	2.34	2.09
34GD5A	2.38	2.14	1.78	1.59
34R3	5.63	5.06	4.22	3.76
35B5	2.55	2.30	1.91	1.70
35C5	3.10	2.23	1.93	1.72
35EH5	3.58	2.45	2.04	1.82
35L6GT	3.93	2.79	2.33	2.07
35LR6	7.13	5.87	4.89	4.36
35W4	1.78	1.42	1.18	1.05
35Y4	3.60	3.24	2.70	2.41
35Z4GT	2.03	1.82	1.52	1.35
35Z5GT	2.70	2.43	2.03	1.80
36AM3B	2.63	1.82	1.52	1.35
36KD6	7.10	6.39	5.33	4.74
38HE7	6.43	5.24	4.37	3.89
38HK7	6.43	5.13	4.28	3.81
40KD6		Use 36KD6/40KD6		
42	3.88	3.49	2.91	2.59
42KN6	6.43	5.22	4.35	3.87
43	5.78	5.20	4.33	3.86
50A5	4.70	4.23	3.53	3.14
50B5	2.38	2.14	1.78	1.59
50BM8/UCL82	3.48	3.13	2.61	2.32
50C5	2.78	2.18	1.82	1.62
50DC4	1.90	1.69	1.43	1.27
50EH5	3.13	2.57	2.14	1.90
50FE5	3.58	3.22	2.68	2.39
50FK5	1.73	1.55	1.29	1.15
50GY7A	7.93	7.13	5.94	5.29
50CH6	2.85	2.57	2.14	1.90
50KH6	1.70	1.53	1.28	1.14
50JY6	5.63	5.06	4.22	3.76
50L6GT	4.53	3.22	2.68	2.39
50Y6GT	3.48	3.13	2.61	2.32
53HK7	6.73	6.05	5.04	4.49
60FX5	2.38	2.14	1.78	1.59
80	3.85	3.47	2.89	2.57
117L7/GT	11.88	10.69	8.91	7.93
117N7/GT	10.30	9.27	7.73	6.88
117Z3	3.60	3.24	2.70	2.41
5879	4.28	3.85	3.21	2.86
6973	4.05	3.65	3.04	2.71
7025	2.50	2.25	1.88	1.67
7027A	5.95	5.36	4.46	3.98
7189	3.53	3.17	2.64	2.36
7199	4.53	4.07	3.39	3.02
7247	3.25	2.93	2.44	2.17
7355	2.93	2.63	2.19	1.95
7408	2.65	2.39	1.99	1.77
7543	2.63	2.36	1.97	1.75
7581A	4.93	4.43	3.69	3.29
7591A	2.23	2.00	1.67	1.49
7695	3.55	3.20	2.66	2.37
7868	4.53	4.07	3.39	3.02
8417	4.53	4.07	3.39	3.02
EM84/6FG6		Use 6FG6/EM84		

Tube Types in ITALICS Are Fast-Moving—Extra Quantities on Hand

Allied Electronics is "the" complete source for Receiving Tubes. New types are placed in stock, ready for immediate shipment, just as soon as they are released by the manufacturer. Production-quantity pricing is available—contact your nearest Allied Electronics facility for quick service.



Receiving Tube Manual

- A Full 672 Pages of Updated Information on RCA Tubes
- Clearly Illustrated with Schematics and Pictorials
- Groupings of Related Types for Simplified Reference

RC-27. Newest revised edition. Contains all the latest information for over 1400 tube types. Full technical data on all current RCA electron tubes; basic data for replacement and discontinued RCA tubes. Schematics on AM and FM radio, intercom, shortwave receiver, amplifiers, treble and base control stage, voltohmmeter. With detailed application guide for receiving tubes; thirty-six circuits complete with parts lists and write-ups of functions and operations; plus groupings of related tube types.

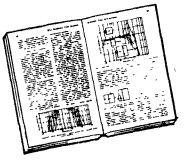
Sections include: Electrons, Electrodes and Electron Tubes; Electron Tube Characteristics and Applications, Installation; Interpretation of Tube Data; Application Guide for RCA Receiving Tubes; Technical Data for RCA Tube Types; RCA Types for Replacement Use; Picture-Tube Characteristics Chart; RCA Voltage-Regulator and Voltage-Reference Tubes; Electron Tube Testing; Resistance-Coupled Amplifiers; Outlines; Circuits. Numerous charts, diagrams and schematics make this manual especially helpful to instructors and students. Contains 672 pages. Size, 5¼x8¼". Shpg. wt. 1¼ lbs.

902-0230 ..... 2.00

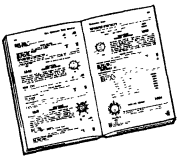
Complete, Up-to-Date Reference Source Containing Data for Over 1400 Receiving and Special-Purpose Tubes—an Indispensable Aid for Students, Engineers, Technicians and Training Programs . . . Full Technical Data, Numerous Charts, Diagrams and Schematics.

EACH SECTION FILLED WITH VALUABLE INFORMATION

TUBE THEORY
Detailed discussion of electrons, electrodes and electron tube characteristics

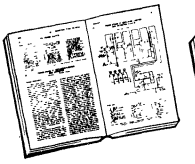


TUBE APPLICATIONS
Receiving, CRT, plus color and black-and-white tube applications and installation

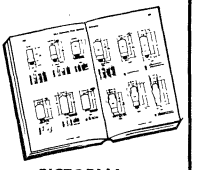


TECHNICAL DATA
How to interpret data—covers all current RCA types, many older types

BASE DIAGRAMS
Shows plate, grid, screen, pin configuration and spacing of RCA types

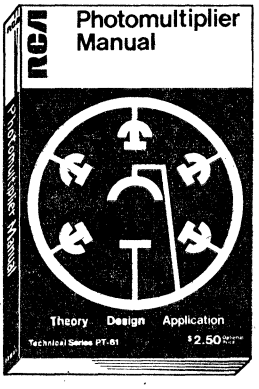


CIRCUIT SECTION
Illustrates the use of RCA tubes in practical circuit applications.



PICTORIAL OUTLINES
Show physical characteristics and actual dimension of metal and glass types

PHOTOMULTIPLIER MANUAL

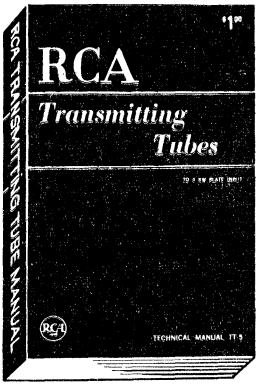


- Complete Information on Construction, Operation, Applications
- Clearly Written, Illustrated

PT-61. Helps designers and users of electro-optical equipment using modern photomultiplier tubes achieve a better understanding of these devices. Includes information on the construction and theory of operation of photomultipliers together with discussions of photomultiplier characteristics and the methods used to measure them. Data on sources, spectra, noise and all RCA photomultipliers combined with a wide variety of diagrams and illustrations. Sections include: Photoemission; Secondary Emission; Principles of Photomultiplier Design; Statistical Fluctuations and Noise; Applications of Photomultipliers; Voltage-Divider Considerations; Photometry; Radiant Energy and Sources; Spectral Response; Source-Detector Matching. Also contains special sections on Technical Data; Outlines; Basing Diagrams. A total of 192 fact-filled pages makes this an invaluable addition to any electronics library. Size, 5¼x8¼". Shpg. wt. 1 lb.

902-2020 ..... 2.50

TRANSMITTING TUBES MANUAL



- Comprehensive Revised Edition
- More Than 180 Power Tubes Described in 320 Pages

TT-5. Prepared for those who work or experiment with transmitting tubes or circuits. Useful to engineers, technicians, educators, radio amateurs, students and others concerned with transmitting tubes. Comprehensively revised and updated to include newest advances in power-tube technology. Information on the latest RCA transmitting tubes, including new or improved cermolox, ceramic-and-metal, pencil and pulse-rated types. New material has also been provided for application tables, single-sideband information (new ratings, linear rf power amps, calculations for two-tone modulation) and typical transmitting and industrial circuits. Sections include: Power-Tube Fundamentals; Construction and Materials; Power-Tube Applications; Circuit Design Considerations; Operating Conditions and Adjustments; Power-Tube Installation; Rectifier Considerations; Interpretation of Data. Many illustrations. 320 pages. Size, 5¼x8¼". Wt. 1 lb.

902-2230 ..... 1.00

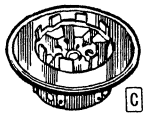
See Tube Sockets on the Following Pages, 137-140

Special Purpose Tube Sockets

EIMAC TUBE SOCKETS, CHIMNEYS, CONNECTORS

A

B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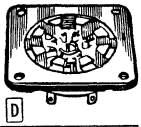

D

TUBE SOCKETS. Maintain a free-moving air-stream for cooler operation, longer tube life. Types SK600 and SK610 have built-in 2700 pF, 400-volt screen grid bypass capacitors; all other types are without bypass capacitors. For correct chimney to use with air-system tube sockets, see listing below. Av. wt., 15 oz.

Stock No.	Mfr's Type	Fig.	For Tube Types	EACH
776-5034	SK410	A	4-250A, 4-400A, 4-125A, 3-4002, 3-400Z	10.70
776-5042	SK510	B	3-1000Z	10.70
776-5046	SK600	C	4CX250B/F, 4CX250A/F, 4X150A/D, 7580	12.00
776-5050	SK610	C	Same as SK600; cathode gnd. contact.	13.60
776-5053	SK640	D	Same as SK600.	10.00

CHIMNEYS. (Not illus.) For use with air-system tube sockets shown above. Av. shpg. wt., 8 oz.

Stock No.	Type	For Socket	EACH
776-5032	SK406	SK410	6.50
776-5040	SK506	SK510	12.00
776-5048	SK606	SK600, SK610, SK640	4.60

HEAT-DISSIPATING CONNECTORS. Provide maximum heat dissipation. Permit longer tube life through cooler plate and grid seal operation. Machined from solid dural rod; with screws. Fit tube types listed below. Av. shpg. wt., 2 oz.

Stock No.	Type	For Tube Types	EACH
776-5025	HR-6	2-150D, 2-240A, 4-65A, 4D21/4-125A, 5D22/4-250A, 4-400A, 100TH-TL plate, 250TH-TL plate, 250R plate, 304TH-TL grid	2.20
776-5027	HR-8	2-450A, 2-2000A, 253, 3-1000Z, 4-1000A, 4PR60A, 6C21, 450TH-TL, 750TL, 866A, 872A, 1500T, 2000T, 8020 (100R) plate	3.25

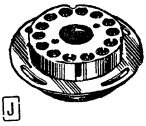
CINCH SPECIAL-PURPOSE SOCKETS

E

F

G

H


J

E CHASSIS-MOUNTING AC SOCKET

Socket has lug terminals. Rated 10 amps at 250 volts, or 15 amps at 125 volts. Mounting hole, 25/64x25/32". 1½x1½" overall. Wt. 1 oz.

Stock No.	Mfr's Type	Description	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
750-0829	2R2	AC Socket	.22	.18	.16	.14	.13	.12

F CETRON TUBE SOCKET

Black bakelite socket accepts CE701 and CE702 Cetron tubes. Has special alloy spring-brass contacts. Shpg. wt. 1 oz.

750-0815	2B2	Socket	.83	.66	.56	.44	.42	.42

G MAGNAL SOCKET

Mica-filled bakelite, 11-prong socket for cathode ray and television tubes. Accepts 5BP1, 2AP1, 1P21, and 3KP1 tubes. Less mounting ring (see table, below). Av. shpg. wt. 4 oz.

750-0855	3M11	Socket	6.29	5.02	4.19	3.35	3.17	3.17
750-0858	3R11	Steel mtg. ring	.81	.64	.53	.43	.41	.34

H DUODECAL CRT SOCKET

Mica-filled, phenolic socket has 12 prongs. Accepts 10BP4, 2BP1, 5TP4, etc.; RCA 6199. Meets JETEC B12-43 specs. Wt. 4 oz.

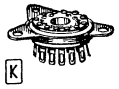
750-0856	3M12	Socket	2.54	2.03	1.69	1.35	1.29	1.29

J DIHEPTAL CRT SOCKETS

Black bakelite or mica-filled 14-prong sockets. Accept RCA 6217 and 5819 photo tubes. Meets JEDEC B12-37. Less mounting ring (order from table, below). Av. shpg. wt. 5 oz.

750-0841	3B14	Black	2.21	1.77	1.48	1.18	1.11	1.11
750-0857	3M14	Mica-filled	2.33	1.85	1.55	1.24	1.18	1.18
750-0859	3R14	Steel mtg. ring	.91	.72	.61	.48	.47	.41

E. F. JOHNSON TUBE SOCKETS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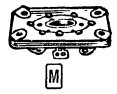
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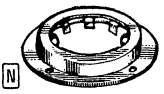
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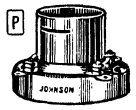


P

Glazed steatite bases, DC-200 treated. Contacts: .0005 silver-plated beryllium copper on bayonet sockets. .0005 silver-plated phosphor bronze with beryllium copper springs on wafer sockets. Shells and shields are aluminum. Iridite treated. Fungus resistant cushion washers under contacts.

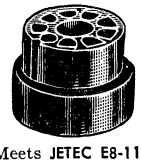
SPECIAL SOCKET TYPES Av. shpg. wts.: *½ lb.; †¾ lb.

Stock No.	Mfr's Type	Fig.	Pins	Description	EACH 1-9	10-49	50-Up
828-0427	122-244-1*	M	4	Steatite. For "super jumbo" tubes, Type 8008 or rectifier types with E.I.A. Base No's A4-15, A4-16, and A4-18.	3.00	2.02	1.79
828-0438	122-275-1†	M	5	Steatite. For giant 5-pin base tubes, 4-125A, 4-250A, RK-48 with E.I.A. Base	3.56	2.75	2.34
828-0400	122-101-100*	L	7	Steatite with base-shield and retainer springs. For tubes 826, 832, 4D32, PL-6549, PL-177A, Y-65.	4.88	3.80	3.38
828-0494	124-311-100*	K	11	Silicone base. For 8072, 8121, 8462, other UHF tubes.	1.57	1.30	1.15

BAYONET SOCKETS Av. shpg. wts.: *½ lb.; †¾ lb.; §1 lb.

Stock No.	Mfr's Type	Fig.	Pins	Description	EACH 1-9	10-49	50-Up
828-0447	123-209-1†	P	4	For "UX" base tubes. 4 mtg. holes 2 5/16" centers.	3.02	2.11	1.87
828-0456	123-211-1§	P	4	Porcelain base. For "jumbo" tubes. 2 13/16" mtg. centers.	3.90	2.77	2.46
828-0481	124-113-1*	M		1450 pF screen bypass capacitor. 1000 VDC. For 124 series sockets.	7.52	5.30	4.70

CINCH VIDICON SOCKETS



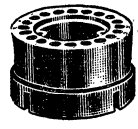
TYPE 7VT. 7-contact socket designed for RCA vidicon camera tubes 6198 and 7038. Mica base with silver-plated phosphor bronze contacts. Meets JETEC E8-11. Shpg. wt. 3 oz.

750-0947. 1-24...Ea. 2.73 25-49.....Ea. 2.17
50-99. Ea. 1.82 100-249. Ea. 1.46 250-Up.Ea. 1.39

TYPE 8VT. 8-contacts. For RCA vidicon camera tubes. Silver-plated phosphor bronze contacts. Meets JETEC E8-11 specs. Shpg. wt. 3 oz.

750-0978. 1-24.....Ea. 2.73 25-49.....Ea. 2.17
50-99.....Ea. 1.82 100-249.....Ea. 1.46
250-Up.....Ea. 1.39

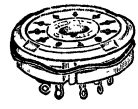
TYPE 20-PM PHOTOMULTIPLIER TUBE SOCKET



20-contact socket for RCA photomultiplier tubes. Accepts 6810, C7187A, C7122, 7265, or others with similar bases. Durable MAI-60 alkyd glass fibre base. Meets JETEC 20-102. Shpg. wt. 2 oz.

750-1049. 1-24..Ea. 5.76 25-49.....Ea. 5.58
50-99.....Each 4.65 100-249....Each 3.73
250-Up.....Each 3.54

AMPHENOL MAGNAL SOCKET



TYPE 49-SS11L. Has 1 1/16" pin circle to accept 11-prong CR tubes. Low-loss steatite. 1⅝" mtg. hole. With retaining ring. Shpg. wt., 7 oz.

713-0017. 1-24..Each 2.01 25-49....Each 1.61
50-99.....Each 1.35 100-249..Each 1.21
250-499.....Each .94 500-Up...Each .94

A Full Line of Sockets is Available Through Your Allied Electronics Representative. For Higher Quantity Prices and Prompt Price and Delivery Information, Contact Your Local Allied Office. In Fact, Make Allied Electronics Your Complete Source for All Eimac and E. F. Johnson Sockets.

Multi-Purpose Tube Sockets

AMPHENOL STANDARD SOCKETS

A TYPE MIP. Bakelite body with molded-in steel plate. *Require 1⅛" hole; mounting centers, 1⁵⁄₁₆"; others have 1½" mtg. ctrs. §Requires 1⁵⁄₃₂" hole. ‡Mica-filled bakelite. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Prongs	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-2800	77MIP4§	4	.27	.24	.20	.18	.14	.14
713-2803	77MIP5§	5	.30	.27	.22	.20	.15	.15
713-2805	77MIP6§	6	.32	.29	.24	.22	.17	.17
713-2810	77MIP8§	Octal	.34	.31	.26	.23	.18	.18
713-3700	88-8*	Octal	.31	.29	.24	.24	.17	.17
713-3703	88-8X*	Loctal	.63	.44	.36	.33	.25	.25
713-2809	77MIP8T§‡	Octal	.31	.28	.24	.21	.165	.165
713-2813	77MIP9§	9	.33	.30	.25	.23	.175	.175
713-2815	77MIP11§	11	.35	.31	.26	.23	.18	.18
713-2816	77MIP11T‡	11	.41	.37	.31	.28	.216	.216
713-2818	77MIP12§	12	.40	.36	.30	.27	.208	.208
713-2821	77MIP20§	20	.78	.70	.59	.53	.41	.41

B TYPE S. High-dielectric molded bakelite body. Units are same as Type RS, but without mounting plate; mount with retainer ring, supplied. All require 1¹¹⁄₆₄" keyed hole. Av. shpg. wt., 5 oz.

713-2926	78S4	4	.27	.25	.21	.19	.14	.14
713-2928	78S5	5	.28	.27	.22	.20	.15	.15
713-2930	78S6	6	.31	.29	.24	.22	.17	.17
713-2934	78S8	Octal	.27	.25	.21	.19	.14	.14
713-2938	78S9	9	.31	.28	.24	.21	.17	.17
713-2939	78S11	11	.34	.33	.28	.24	1.9	.19

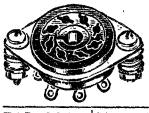
C TYPE RS. Have removable mounting plate. All of the units listed below mount in 1¹¹⁄₆₄" hole. Slotted mounting holes to fit centers from 1½ to 1⅞". Av. shpg. wt., 4 oz.

713-2910	78RS4	4	.34	.31	.26	.23	.18	.18
713-2911	78RS5	5	.35	.33	.28	.25	.19	.19
713-2912	78RS6	6	.37	.35	.30	.26	.20	.20
713-2914	78RS8	Octal	.36	.34	.28	.25	.19	.18
713-2923	78RS11	11	.49	.44	.37	.33	.26	.26

C TYPE RSS. Ultra-low-loss steatite body. Excellent for use in high-frequency transmitting equipment. All are universal type; have removable mounting plate with slotted holes 1½ to 1⅞". Mounting hole required, 1¼" except Type 49RSS7L, 1²¹⁄₆₄". Av. wt., 5 oz.

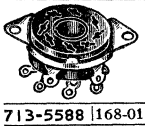
713-1311	49RSS4	4	1.05	.95	.80	.71	.55	.55
713-1312	49RSS5	5	1.19	.96	.80	.72	.56	.56
713-1314	49RSS7L	7 Large	2.28	1.84	1.64	1.38	1.07	1.07
713-1316	49RSS8	Octal	1.30	1.05	.87	.78	.61	.61

OCTAL SOCKETS



TYPE 77-MIP8FK FLOATING OCTAL. Live-rubber grommets in enlarged mounting holes of sturdy steel plate. Mounts in 1³⁄₁₆" hole with two ¼" holes on 1½" centers. With grommets, mounting screws, nuts, washers. Shpg. wt., 5 oz.

713-2812	77-MIP8FK	3	.51	.410	.341	.286	.245	.218



TYPE 168-015 SADDLE OCTAL. Constructed with sturdy steel plate and molded bakelite body. For 1" diameter hole; ⁹⁄₆₄" mounting holes on 1⁵⁄₁₆" centers. Has 4 solder lugs, spaced 90° apart. Mount from below chassis. Shpg. wt., 5 oz.

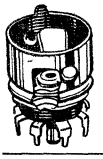
713-5588	168-015	4	.40	32	.27	.24	.19	.19

ACS SOCKET-SHELL

TYPE 23-1S. Lightweight aluminum for Types "RRS," "RS," and "S" tube sockets, except for 7-pin large tube sockets, such as Type 49RSS7L. Sockets extend 1³⁄₁₆" above or below chassis surface. Body diameter of shell, 1¹¹⁄₁₆". Requires 1¾" diameter mounting hole. Less socket. Av. shpg. wt., 5 oz.

713-0501	23-1S	.....	.28	.26	.22	.20	.16	.16

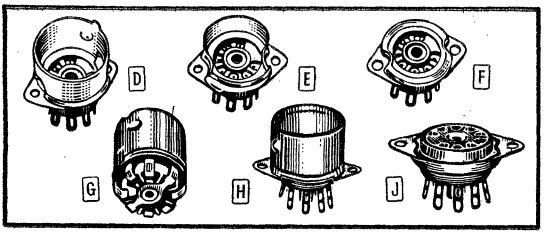
CINCH PRINTED CIRCUIT SOCKETS WITH SHIELD BASES



Printed circuit sockets have attached bayonet-type shield base with ground tab. For use with ⅟₁₆" printed circuit boards. Low-loss mica-filled phenolic castings with phosphor bronze contacts. Center shield and ground tab are hot-tinned brass for easy soldering. Nickel-plated brass base. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Prongs	EACH 1-24	25-49	50-99	100-249	250-499
750-0919	7PC-M2	7	1.04	.83	.69	.56	.54
750-1001	9PC-M2	9	1.16	.92	.78	.62	.60

ELCO "E-Z MATE", PC, TUBE SOCKETS



MIL "E-Z MATE" SOCKETS

MIL-S-12883A. Special tube sockets have positioning key for unerring accuracy. No time wasted, no pin damage. Great for designers. All have center shield. Hardware, brass, tin lead plated. Contact material, phosphor bronze, silver plated, tin dipped. All have .128" mounting holes. Ceramic or mica types; ceramic types do not have E-Z Mate feature. Av. wt., 2 oz. **Contact Allied for prices on quantities of 5000 or more.**

D 9-PIN BASE SHIELD TYPE

Stock No.	Military Number	Mfr's Type	Insulating Material	EACH 1-99	100-249	250-999	1000-Up
778-2268	TS103C01	05-0915-04	Ceramic	.49	.44	.398	.332
778-2265	TS103P01	05-0915-02	Mica	.34	.31	.279	.23

E 7-PIN BASE SHIELD TYPE

778-1078	TS102P01	05-0715-01	Mica	.30	.27	.247	.206

F 7-PIN SADDLE—TOP MOUNTING

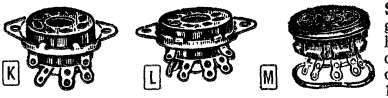
778-2211	TS102C02	05-0711-04	Ceramic	.26	.24	.216	.18
778-1074	TS102P02	05-0711-03	Mica	.41	.37	.337	.281

E-Z MATE 7 AND 9-PIN COMMERCIAL SOCKETS

All sockets (except figure G), ceramic, have E-Z Mate positioning-key. Virtually eliminates all pin damage. Permits the proper positioning of tubes, with unerring accuracy. Contacts: *Beryllium copper/tin lead plated; ‡phosphor bronze copper plating; §phosphor bronze silver-plated tin dipped. Rated at 1 amp. and 500 volts rms. Maximum contact resistance is a low .003 ohm. Insulation resistance is rated at 1000 megohms minimum. Av. wt. 2 oz.

Stock No.	Mfr's Type 05-	Fig.	Description and Mounting	EACH 1-99	100-249	250-999	1000-Up
778-2280	0965-01*	G	9-pin for ⅟₁₆" PC	1.29	1.17	1.06	.881
778-1065	0705-02‡	H	7-pin shielded top	.24	.21	.193	.161
778-2248	0901-03§	J	9-pin RMA saddle, top	.19	.17	.151	.126

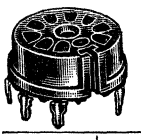
CINCH BAKELITE AND CERAMIC OCTAL SOCKETS



Saddle types have 4 ground lugs. Fig. K have 1½" centers, clinch-on steel saddle; 1⅛" dia. Fig. L 1⁵⁄₁₆" centers, press-on saddle; 1" dia. Fig. M: 1¹¹⁄₆₄" dia. have keyway and retaining ring 8RO, extra ring. 8AP permits rivet mtg. of Fig. M types (slotted 1½" to 1⅞" centers). "Mtg." column is rivet-hole dia. or chassis thickness. Retainer ring and adapter plate for use with these sockets are listed at bottom of table below. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Description	Mtg.	EACH 1-24	25-49	50-99	100-Up
750-0955	8EB	K	Black	.143"	.16	.12	.11	.10
750-0956	8EM	K	Mica-filled	.143"	.19	.14	.13	.12
750-0950	8AB	L	Black	.136"	.16	.12	.11	.10
750-0951	8AM	L	Mica-filled	.136"	.19	.14	.13	.12
750-0965	8R1	M	Black	⅟₁₆"	.23	.19	.16	.14
750-0967	8R3	M	Mica-filled	⅟₁₆"	.27	.23	.20	.16
750-0971	8RO	....	Retainer ring		.12	.11	.10	.08
750-0952	8AP	....	Adapter plate		.13	.12	.11	.10

CINCH STAND-OFF SOCKETS FOR PRINTED CIRCUITS



Stand-off sockets rest on shoulder of the contact tail—provide air gap for cooling and eliminating possibility of a moisture trap. Designed for ⅟₁₆" printed circuit boards having bottom circuitry. All are constructed of general-purpose black phenolic casting with hot tinned brass contacts. Type 7PC-B1 is for 7-pin miniature tubes, 9PC-B1 for 9-pin miniature tubes. 1 oz.

Stock No.	Mfr's Type	Pins	EACH 1-24	25-49	50-99	100-249	250-Up
750-0916	7PC-B1	7	.11	.10	.09	.08	.07
750-0998	9PC-B1	9	.15	.12	.11	.10	.088

Miniature Tube and Crystal Sockets

A

B

AMPHENOL BAKELITE AND MICA-FILLED MINIATURE SOCKETS

High-grade miniature type for a multitude of industrial applications. 147 series mount in ⅝″ chassis hole; ⅞″ mounting centers, with ⅛″ screw holes. 59 series mount in ¾″ chassis hole and have 1⅛″ mounting centers with .095 rivet holes (with the exception of 59-403, which has a .125 hole). ‡indicates black bakelite. †indicates mica-filled bakelite. Average shipping weight, 1 ounce.

A WITHOUT TUBE SHIELD BASE

Stock No.	Mfr's Type	Fig.	Contacts	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-5050	‡147-500	A	7	.48	.38	.32	.28	.22	.22
713-5052	†147-505	A	7	.49	.39	.33	.29	.23	.23
713-5056	†147-913	B	7	.58	.46	.38	.34	.27	.27

B WITH TUBE SHIELD BASE

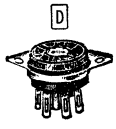
Stock No.	Mfr's Type	Fig.	Contacts	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-1909	‡59-409	A	9	.55	.44	.37	.33	.26	.26
713-1910	†59-410	A	9	1.29	1.03	.86	.77	.59	.59
713-1903	†59-403	B	9	.90	.72	.60	.54	.42	.42
713-1907	†59-407	B	9	.64	.51	.43	.38	.30	.30

"S" TYPE MINIATURE 9-PIN TUBE SOCKET

Type 78-A9P. High dielectric phenolic. Designed to mount quickly and easily, without screws or rivets, on panel or chassis up to .050″ thick in 1 11/64″ keyed hole. With retaining ring. Av. wt., 5 oz.

713-2902. 1-49 ..... Each .45
50-99 ..... Each .38 100-249 ..... Each .36
250-499 ..... Each .26 500-Up ..... Each .26

C



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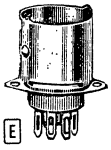


E

F

CINCH MINIATURE TUBE SOCKETS, SHIELDS AND BASES

Socket saddles, shield base, shields are steel. 7-pin sockets, shield bases mount on ⅞″ ctrs.; sockets require ⅝″ hole. 9-pin sockets, shield bases mount on 1⅛″ ctrs.; sockets require ¾″ hole. Strap nuts are curved strips with 2 threaded holes that take place of 2 nuts in mounting miniature sockets. Diameter of rivet holes: †.125″, §.098″. *JAN/MIL type. Socket made to MIL-12883-A; shield made to JAN-S-23A. Brass base, cadmium plated with a chromate treatment. Silver plated contacts; tails hot tin dipped. Molded castings are type MFE material. Phosphor bronze contacts. Meet JAN/MIL TS-102P01. Wt., 1 oz., except sockets, 2 oz.

C TOP-MOUNTING SOCKETS

Stock No.	Mfr's Type	Description	EACH 1-24	25-49	50-99	100-Up
750-0900	7AB1	§7-pin black bakelite	.19	.12	.11	.10
750-0980	9AB	§9-pin black bakelite	.19	.12	.11	.10
750-0981	9AM	§9-pin mica-filled bakelite	.21	.14	.13	.11

D BOTTOM-MOUNTING SOCKETS

750-0902	7EB	§7-pin black bakelite	.16	.11	.10	.08
750-0904	7EM	§7-pin mica-filled bakelite	.19	.12	.11	.10
750-0983	9EB	§9-pin black bakelite	.19	.12	.11	.10
750-0984	9EM	§9-pin mica-filled bakelite	.21	.14	.13	.12

E TOP-MOUNT SHIELD BASE SOCKETS ("J" Slot)

750-0941	7XB1	†7-pin black bakelite	.21	.14	.13	.12
750-0942	7XC	†7-pin ceramic	.55	.39	.34	.25
750-0943	7XM1	†7-pin mica-filled bakelite	.26	.19	.16	.14
750-0912	7JM-2	7-pin JAN/MIL*	.34	.24	.21	.17
750-1014	9XB	§9-pin black bakelite	.26	.19	.16	.14
750-1015	9XC	§9-pin ceramic	.45	.30	.25	.21
750-1016	9XM	§9-pin mica-filled bakelite	.29	.21	.17	.15

F TUBE SHIELDS ("J" Slot)

750-0923	7S3	1¾″ high, 7-pin	.26	.19	.15	.14
750-0924	7S4	2¼″ high, 7-pin	.35	.28	.24	.19
750-1005	9S2	1 15/16″ high, 9-pin	.32	.25	.21	.17
750-1006	9S3	2⅜″ high, 9-pin	.62	.47	.40	.31

CINCH SUBMINIATURE NUVISTOR 5-PIN TUBE SOCKETS

Constructed of type MFE, low-loss phenolic insulation; saddle of cold rolled steel, cadmium-plated. Contacts are copper alloy cadmium-plated for easy soldering. Shpg. wt., 1 oz.

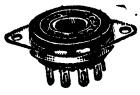
G

H

J

Stock No.	Mfr's Type	Fig.	Mount	1-24	25-49	50-99	100-249	250-Up
750-0878	5NS-1	G	Screw	.33	.22	.19	.16	.15
750-0879	5NS-2	H	Printed circuit	.53	.38	.32	.25	.23
750-0877	5NS	J	Ring type	.23	.15	.13	.12	.11

CINCH NOVAR TUBE SOCKETS



Meet or surpass EIA standards. Molded from high dielectric black bakelite or mica-filled low-loss bakelite. Have cadmium-plated brass contacts. Provide maximum fatigue strength and mating force with tube pins. Same dimensions as octal sockets—layouts and cutouts for octal sockets will accommodate novar sockets. 1½″ mtg. centers. 1 oz.

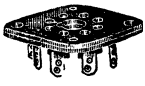
Stock No.	Mfr's Type	Bakelite	EACH 1-24	25-49	50-99	100-Up
750-0993	9NS-B	Black	.17	.13	.12	.11
750-0995	9NS-M	Mica-filled	.20	.15	.13	.12

ELCO UHF PC STANDOFF TUBE SOCKETS

Printed circuit standoff sockets for 7 and 9-pin miniature tubes for UHF applications—low-loss mica filled insulator. Contacts are made of silver-plated, tin-dipped phosphor bronze. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Pins	EACH 1-99	100-249	250-999	1000-4999	5000-Up
778-1090	05-0730-02	7	.37	.33	.30	.251	.20
778-2210	05-0930-02	9	.37	.33	.295	.246	.197

CINCH AND PERMONITE WAFER-TYPE SOCKETS



Sturdily constructed, laminated bakelite tube sockets. All are equipped with solder-coated brass contacts. †Permonite. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Mtg. Ctrs.	Contacts	EACH 1-24	25-49	50-99	100-Up
891-2091	8W1†	1 5/16″	8 (octal)	.18	.15	.13	.11
750-1012	9W1	1⅛″	9 (min.)	.18	.13	.12	.11

AUGAT CRYSTAL SOCKETS

Resists vibration; permits easy crystal insertion and removal. Take HC-6/U, HC-13/U crystals, except *takes HC-18U crystals. †Anti-rotation tab. 1 oz.

Stock No.	Mfr's Type	Description	Insul.	EACH 1-9	10-99	100-499	500-999	1000-Up
718-0180	8000-AG2	Horiz. or	Teflon®	.95	.70	.65	.60	.47
718-0185	8000-AG6	vert. mtg.	Nylon	.53	.40	.36	.32	.29
718-0181	8000-AG3†	Horiz.	Teflon	.95	.70	.65	.60	.47
718-0187	8000-AG7†	PC mtg.	Nylon	.53	.40	.36	.32	.29
718-0198	8000-DG1†	PC mtg. rd.	Teflon	1.30	1.00	.95	.88	.82
718-0199	8000-DG2	con. tails	Nylon	1.30	1.00	.95	.88	.82
718-0207	8004-IG1*†	Horiz. mtg.	Teflon	.96	.65	.60	.55	.42
718-0213	8004-IG7*†	PC mtg.	Nylon	.49	.37	.33	.29	.26

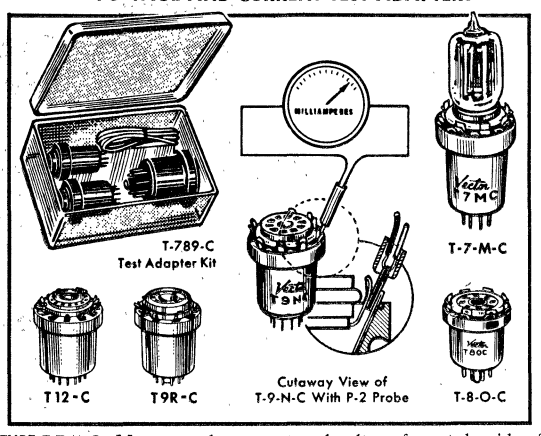
H. H. EBY CRYSTAL SOCKET

TYPE 9748-16-10. Molded crystal socket for use with all standard HC-6/U crystals having .050″ pins. One-piece design, general purpose phenolic insulating material. Contacts are cadmium-plated brass. Specially well suited for use where shock or vibration are problems. Rated at 500 volts. Current, 1 ampere. Operating temperature: 100°C. Dielectric withstanding voltage, 1200 volts rms. Maximum individual contact resistance, .03 ohms. Shpg. wt., 1 oz.

547-1810. 1-49 ..... Each .63 50-99 ..... Each .50
100-249 ..... Each .33 250-999 ..... Each .32 1000-Up Each .31

Vector Adapters, Turrets, Breadboard Sockets

VOLTAGE AND CURRENT TEST ADAPTERS



TYPE T-7-M-C. Measure tube current and voltage from tube side of equipment. Fits shield-base of 7-pin min. socket. Dual-contact test tabs on adapter break circuit when optional dual-contact probe (below) is inserted. Current is read on meter to which the two leads of the probe have been connected. Voltage is measured by connecting both probe leads in parallel to same voltmeter terminal. Cap., approx. 1 pF. Flashover voltage, over 1500 VDC. Phenolic body, 1.47" long (less prongs). Shpg. wt., ¾ oz.

TYPE T-8-O-C. Fits standard 8-pin octal tube clamps. Same specifications as T-7-M-C above except length, less prongs is 1.5". 1½ oz.

TYPE T-9-N-C. Fits into shield base for 9-pin miniature types. Same specifications as T-7-M-C above. Shpg. wt., ¾ oz.

TYPE T-9-R-C. Fits 9-pin Novar socket. Lgth., 1.81". 2 oz.

TYPE T-12-C. Fits 12-pin Compactron socket. Lgth., 1.81". 2 oz.

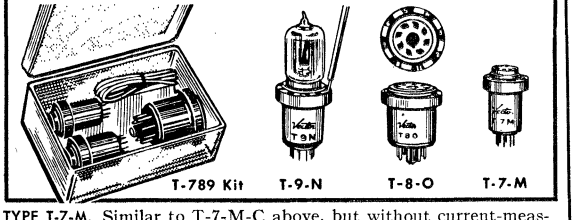
Stock No.	Mfr's Type	Socket	Shell Body Dia.	Shell Skirt Dia.	EACH 1-19	20-99	100-Up
977-0911	T-7-M-C	7-Pin Min.	.74"	1.03"	3.64	2.74	2.55
977-0915	T-8-O-C	8-Pin Oct.	1.26"	1.56"	4.70	3.45	3.22
977-0919	T-9-N-C	9-Pin Min.	.87"	1.16"	3.90	2.92	2.72
977-0921	T-9-R-C	9-Pin Novar	1.26"	1.56"	4.34	3.29	3.07
977-0935	T-12-C	12-Pin Comp.	1.26"	1.56"	4.75	3.56	3.32
977-0637	P-2	Dual Side Plug-in Probe			1.09	.98	.92

COMPLETE SOCKET ADAPTER KITS

T912C. T-12-C, T-9-R-C Adapters; P-2 Probe; plastic case. 6 oz.
977-0999. 1-19..Ea. 9.89 20-99..Ea. 8.90 100-Up.....Ea. 8.31

T-789-C. T-7-M-C, T-8-O-C, T-9-N-C Adapters; P-2 Probe; plastic case. Shpg. wt., 6 oz.
977-0996. 1-19..Ea. 11.69 20-99..Ea. 10.52 100-Up.. ..Ea. 9.82

VOLTAGE-TEST TUBE-SOCKET ADAPTERS and KIT



TYPE T-7-M. Similar to T-7-M-C above, but without current-measuring feature. Fits 7-pin miniature tube socket. Tabs on adapter designed to grip optional P-1 Probe, listed in table. Flashover voltage, in excess of 1500 VDC. Length, less prongs, 1.5". ½ oz.

TYPE T-8-O. Fits standard 8-pin octal tube clamps. Same specifications as T-7-M listed above. Shpg. wt., ¾ oz.

TYPE T-9-N. Fits into shield base for 9-pin miniature types. Same specifications as T-7-M listed above. Shpg. wt., ½ oz.

Stock No.	Mfr's Type	Socket	Shell Body Dia.	Shell Skirt Dia.	EACH 1-19	20-99	100-Up
977-0910	T-7-M	7-Pin Min.	.75"	1.03"	2.21	1.67	1.55
977-0914	T-8-O	8-Pin Oct.	1.25"	1.56"	2.43	1.76	1.64
977-0918	T-9-N	9-Pin Min.	.87"	1.16"	2.43	1.76	1.64
977-0636	P-1	Plug-in Probe			.65	.47	.44

TYPE T-789 COMPLETE 3-SOCKET KIT

Includes all 3 adapters, and P-1 Probe, in plastic case. 6 oz.
977-0995. 1-19..Ea. 7.30 20-99..Ea. 5.64 100-Up...Ea. 5.27

SOCKET TURRETS

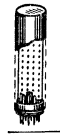
Dependable terminal structures for limited space applications. Simplify construction of electronic equipment. Components mount on phenolic form. Turrets are ½" dia. Octal units fit 1" hole; 7-pin miniature, ⅝" hole; 9-pin min., ¾" hole. Av. 3 oz.

Stock No.	Mfr's Type	Socket	EACH 1-9	10-49	50-199	200-499	500-Up
2½" TURRETS. Have 9 terminals in two rings, spaced 1⅜" apart.							
977-1139	10-0-9T	Octal	.90	.72	.65	.50	.48
2" TURRETS. 9 terminals in two rings, spaced 1" apart.							
977-1123	8-O-9T	Octal	.85	.68	.61	.48	.46
977-1119	8-M-9T	7-Pin Min.	.98	.79	.71	.55	.53
977-1121	8-N-9T	9-Pin Min.	.98	.79	.71	.55	.53
1½" TURRETS. Have 6 terminals in one ring only.							
977-1109	6-M-6T	7-Pin Min.	.90	.72	.65	.50	.48
977-1111	6-O-6T	Octal	.76	.61	.55	.43	.41
977-1110	6-N-6T	9-Pin Min.	.90	.72	.65	.50	.48

OCTAL PLUG. Phenolic octal plug crimped into base. Base has two .136" holes spaced diagonally 1.6" apart. Can size: 2" square, 3" high. Av. wt. 5 oz.

Stock No.	Mfr's Type	EACH 1-9	10-49	50-199	200-499	500-Up
977-0218	*C-12-K1.02*	1.37	1.10	.99	.77	.74
977-1282	511 Wall	.86	.69	.62	.47	.46

ROUND PLUG-IN CANS



For packaging hand-wired, printed, and miniature transistorized modules. Complete with case, plugs, and vertical terminal-wall secured to base. Easily removable aluminum case provides excellent shielding. Side-screws at bottom of can screw into threaded bushings in plug to hold components securely. 2" long. Shpg. wt., 5 oz.

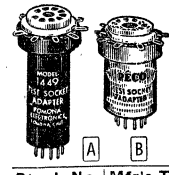
Stock No.	Mfr's Type	Socket	Dia.	EACH 1-9	10-49	50-199	200-499	500-Up
977-0459	G2.1-8-4	9-Pin Min.	¾"	2.90	2.30	2.07	1.61	1.54
977-0463	G2.2-8-4	7-Pin Min.	⅝"	2.85	2.28	2.05	1.60	1.53

TERMINAL TURRETS

Simplify design and construction of electronic equipment and conserve chassis space. Two rings with 12 terminals, top and bottom ground lugs on ½" dia. phenolic form. Mounts 6 or more resistors and capacitors. Turrets bolt to chassis through 0.150" dia. mount hole by means of 6-32 screw, extends through turret length. Wt., 3 oz.

Stock No.	Mfr's Type	Length	Space Between Rings	EACH 1-9	10-49	50-199	200-499	500-Up
977-1116	8-12	2"	1"	.83	.66	.59	.46	.44
977-1135	10-12	2½"	1⅜"	.88	.70	.63	.49	.47

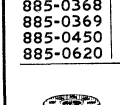
POMONA TEST-SOCKET TUBE ADAPTERS



For measurement of voltage, resistance, audio and video signals from tube-side of chassis. Long test-tabs for easy connection. Types TVS are low-loss mica-filled molded phenolic per MIL-M-14 MFE; power factor less than .010 at 10 MHz. Types 1447, 1449, 2610 are used with captive or telescoping tube shields; 1²¹⁄₃₂" (2610, 2.42") high. Insul. res. 500,000 megs; breakdown exceeds 1700 VAC or DC. Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	Fig.	Pins	Description	1-9	10-Up
885-0195	TVS-7	B	7	Miniature	2.50	1.85
885-0196	TVS-8	B	8	Octal	2.86	2.15
885-0197	TVS-9	B	9	Miniature	2.62	1.95
885-0198	TVS-12	B	12	Compactron	3.40	2.55
885-0368	1447	A	7	Miniature	2.62	1.95
885-0369	1449	A	9	Miniature	2.86	2.15
885-0450	1779	.....	9	Novar	3.00	2.25
885-0620	2610	A	10	Decal	3.40	2.55

BREADBOARD SOCKETS


XS-8

Surface-mount breadboard sockets for experimental design, use in enclosed units to eliminate double chassis construction. Insulated base with numbered connections. Phosphor bronze spring contacts. Standard center-to-center mtg. holes. 7- and 9-pin mount in center or on side, 8-pin mounts on side. 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-49	50-99	100-Up
885-0201	XS-7	7-pin miniature	.81	.65	.59	.55
885-0202	XS-8	8-pin octal	1.06	.85	.77	.72
885-0203	XS-9	9-pin miniature	.93	.75	.68	.64

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

TRW/IRC, Airco Speer Carbon Resistors

ESTABLISHED RELIABILITY—SPECIFICATION: MIL-R-39008A

5 REASONS FOR SWITCHING TO 5-BAND RESISTORS

1) You Get Documented Reliability Beyond That Offered With MIL-R-11 Resistors

2) It Costs You Nothing Extra

3) Every Resistor Factory Fresh

4) You Get Resistors That Are Not Obsolete

5) High-Quality Foil Pack Assures Longer Shelf Stability, Greater Moisture Protection

Meet rigid requirements of military specification MIL-R-39008A, which is the established reliability specification for fixed composition resistors. Resistors are delivered to an isolated holding area, in which a statistical sample is taken on each inspection lot produced during a 1-month period. These samples are accumulated and placed on life test, once a month, for a full 10,000-hour period. Any resistor that changes in resistance of more than 15% during the 10,000-hour test is considered a failure.

The highest standards of quality, service and reliability have been maintained by applying the most modern techniques available in manufacturing control. This is to ensure that these components are thoroughly reliable. A continual investment in the newest equipment for quality control in mass-production is being made as it becomes available. As an example of this, the most sophisticated electronic data processing system is being used as the heart of an established reliability program.

This technique of computerized test procedures is established at in-process points throughout the plant, from raw materials to final shipping inspection. This not only provides a high speed method of testing, but provides greater accuracy than the best human operator can achieve. The data is transmitted to the computer where actual comparison with secondary standards were made. The results are calculated and recorded in a memory bank and on paper for the permanent record. This computerized test complex means reliability and assurance to purchasers.

10% TOLERANCE INSULATED RCR

TYPE RCR 10% FIXED COMPOSITION—AVAILABLE ONLY IN VALUES WITH*

Stock No.	MIL Equiv.	Watts	Values See Table Below	EACH 10-99	100-499	500-999	1000-2499	2500-Up
824-2XXX	RCR07	¼	2.7 Ω to 22 meg	.07	.06	.05	.04	.03
824-4XXX	RCR20	½	2.7 Ω to 22 meg	.07	.06	.05	.04	.03
824-6XXX	RCR32	1	10 Ω to 22 meg	.09	.07	.06	.05	.04
720-8XXX	RCR42	2	10 Ω to 22 meg	.15	.13	.11	.10	.09

5% TOLERANCE INSULATED RCR TYPES

TYPE RCR 5% FIXED COMPOSITION—ALL VALUES WITHIN SPECIFIED RANGE AVAILABLE

Stock No.	MIL Equiv.	Watts	Values See Table Below	EACH 10-99	100-499	500-999	1000-2499	2500-Up
824-1XXX	RCR07	¼	2.7 Ω to 22 meg	.09	.08	.07	.06	.05
824-3XXX	RCR20	½	2.7 Ω to 22 meg	.09	.08	.07	.06	.05
824-5XXX	RCR32	1	10 Ω to 22 meg	.12	.11	.10	.09	.08
720-7XXX	RCR42	2	10 Ω to 22 meg	.27	.23	.20	.17	.16

STANDARD RESISTANCE VALUES

TO COMPLETE ALLIED STOCK NO., INSERT 3 DIGIT NO. SHOWN IN XXX COLUMN AFTER VALUE DESIRED, IN PLACE OF XXX IN STOCK NO.

Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Megs	XXX	Megs	XXX
.10	001	.47	019	2.2	039	10*	060	47*	153	220*	248	1000*	356	4700*	461	22k*	585	100k*	717	470k*	825	2.0	905	9.1	923
.11	002	.51	021	2.4	040	11	064	51	160	240	255	1100	361	5100	467	24k	592	110k	722	510k	830	2.2*	907	10.0*	924
.12	003	.56	022	2.7*	041	12*	068	56*	166	270*	263	1200*	366	5600*	473	27k*	603	120k*	727	560k*	836	2.4	908	11.0	926
.13	004	.62	023	3.0	042	13	073	62	173	300	270	1300	372	6200	482	30k	611	130k	732	620k	844	2.7*	909	12.0*	927
.15	005	.68	024	3.3*	043	15*	081	68*	178	330*	276	1500*	380	6800*	489	33k*	617	150k*	740	680k*	850	3.0	911	13.0	928
.16	006	.75	026	3.6	045	16	084	75	185	360	283	1600	383	7500	498	36k	630	160k	743	750k	856	3.3*	912	15.0*	929
.18	007	.82	027	3.9*	046	18*	092	82*	190	390*	288	1800*	393	8200*	504	39k*	636	180k*	751	820k*	861	3.6	913	16.0	931
.20	008	.91	028	4.3	048	20	098	91	197	430	296	2000	400	9100	514	43k	642	200k	759	910k	871	3.9*	914	18.0*	933
.22	009	1.0	029	4.7*	049	22*	102	100*	202	470*	302	2200*	405	10k*	522	47k*	650	220k*	765	Megs		4.3	915	20.0	935
.24	011	1.1	031	5.1	051	24	108	110	206	510	308	2400	412	11k	528	51k	657	240k	775	1.0*	877	4.7*	916	22.0*	937
.27	012	1.2	032	5.6*	053	27*	117	120*	212	560*	315	2700*	421	12k*	533	56k*	666	270k*	783	1.1	881	5.1	917	....	....
.30	013	1.3	033	6.2	054	30	123	130	218	620	324	3000	427	13k	538	62k	677	300k	790	1.2*	886	5.6*	918	....	....
.33	014	1.5	034	6.8*	055	33*	130	150*	226	680*	330	3300*	433	15k*	550	68k*	685	330k*	796	1.3	890	6.2	919	....	....
.36	016	1.6	036	7.5	056	36	136	160	230	750	338	3600	441	16k	555	75k	694	360k	805	1.5*	900	6.8*	920	....	....
.39	017	1.8	037	8.2*	057	39*	140	180*	237	820*	343	3900*	446	18k*	565	82k*	703	390k*	811	1.6	901	7.5	921	....	....
.43	018	2.0	038	9.1	058	43	147	200	243	910	351	4300	453	20k	575	91k	712	430k	817	1.8*	903	8.2*	922	....	....

DIMENSIONS

Mil Type	Rating in Watts	Diameter (Inches)	Length (Inches)	Wire Size A.W.G.	Nom. Dia. Lead (Inches)	Lead Length (Inches)
RCR07	¼	.090 ± .008	.250 ± .031	#22	.025	1½ ± ⅛
RCR20	½	.138 ± .007	.390 ± .025	#20	.032	1½ ± ⅛
RCR32	1	.225 ± .010	.562 ± .030	#18	.040	1½ ± ⅛
RCR42	2	.312 ± .010	.688 ± .030	#17	.045	1½ ± ⅛

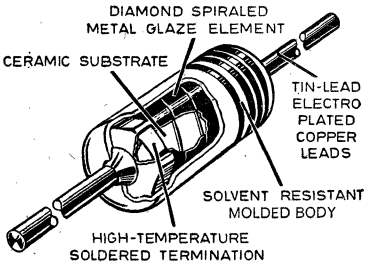
TYPE BWH 5% 2-WATT FIXED WIREWOUND—SPECIFY VALUES WANTED—TO 2400 OHMS ONLY

Stock No.	Mfr's Type	MIL Equiv.	Watts	Values See Table Above	EACH 10-99	100-249	250-499	500-999	1000-Up
823-1XXX	BWH	.....	2	.10Ω to 9.1Ω	.477	.285	.189	.143	.076
823-1XXX	BWH	.....	2	10Ω to 1000Ω	.300	.180	.120	.090	.056
823-1XXX	BWH	.....	2	1100Ω to 1500Ω	.330	.198	.132	.099	.062
823-1XXX	BWH	.....	2	1600Ω to 2400Ω	.430	.260	.172	.130	.080

Resistors: Carbon, 141—Metal Glaze, 142—Metal Film, 143-5—Wirewound, 146-9

TRW ELECTRONIC COMPONENTS Metal-Glaze Resistors To Mil R-22684

LOW-COST MOLDED METAL-GLAZE 2% AND 5% TOLERANCE RESISTORS



- Extremely Durable Uniform Molded Body
- Impervious to Environmental Extremes

ATTENTION BUYERS

At Our Option We Will Ship 2% Resistors Instead of 5% Resistors At the 2% Price.

Molded Metal-Glaze precision resistors provide stability, reliability, longer load life. Metal Glaze film is up to 100 times thicker than conventional resistor films. Tough, uniform molded body is extremely rugged, resists solvents, mechanical abuse of automatic handling equipment. Offer excellent temperature coefficients across a wide resistance range. Load life stability is four times better than MIL allowance. Average resistance changes less than 0.6% after 1000 hours, full load at 70°C. Derated to 0 at 150°. Average wt./100 6 oz. Additional data at left and below.

MOLDED METAL-GLAZE PRECISION RESISTORS

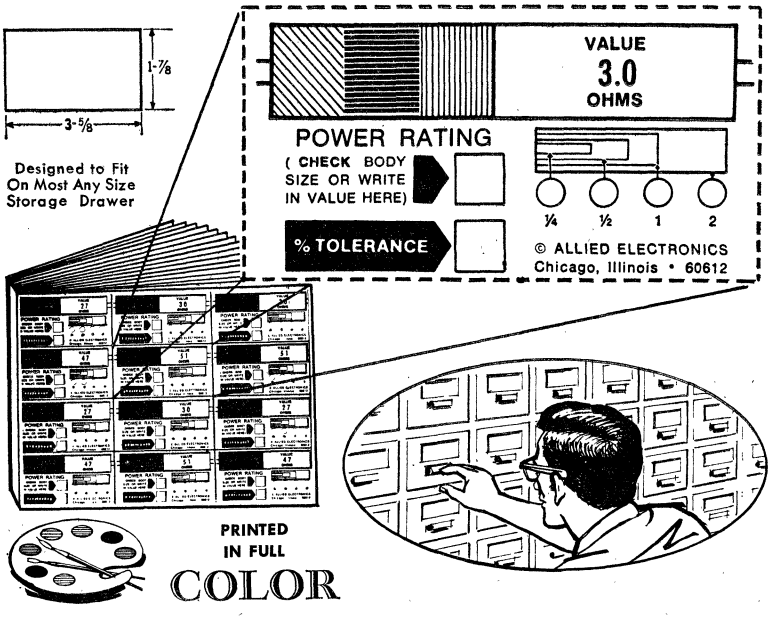
Metal Glaze resistors feature a unique diamond-spiraled, thick-film resistance element composed of glass and special metal alloys. Resists temperature, moisture, shock and vibration. Withstands overloads. Tin-lead electroplated copper leads. Meet or exceed all MIL-R-22684 requirements. Perform better than MIL-R-39008A resistors. **Resistance Values in Ohms Table (below) NOTE:** *To complete Allied stock number, insert numeric code (XXX) shown opposite ohm value in place of XXX in stock number.*

2%-TOLERANCE RESISTORS

Stock No.	Mfr's Type	Watts	Stock Values—See Table Below	EACH 10-49	50-99	100-249	250-499	500-Up
963-5XXX	RG07	¼	51 ohms to 150k	.27	.22	.18	.15	.12
963-7XXX	RG20	½	51 ohms to 150k	.25	.20	.16	.13	.10
5%-TOLERANCE RESISTORS								
963-6XXX	RG07	¼	51 ohms to 150k	.25	.20	.16	.13	.10
963-8XXX	RG20	½	51 ohms to 150k	.24	.19	.15	.12	.09

Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX
51	160	240	255	1100	361	5600	473	27K	603	120K	727
56	166	270	263	1200	366	6200	482	30K	611	130K	732
62	173	300	270	1300	372	6800	489	33K	617	150K	740
68	178	330	276	1500	380	7500	498	36K	630	.....	.....
75	185	360	283	1600	383	8200	504	39K	636	.....	.....
82	190	390	288	1800	393	9100	514	43K	642	.....	.....
91	197	430	296	2000	400	10K	522	47K	650	.....	.....
100	202	470	302	2400	412	11K	528	51K	657	.....	.....
110	206	510	308	2700	421	12K	533	56K	666	.....	.....
120	212	560	315	3000	427	13K	538	62K	677	.....	.....
130	218	620	324	3300	433	15K	550	68K	685	.....	.....
150	226	680	330	3600	441	16K	555	75K	694	.....	.....
160	230	750	338	3900	446	18K	565	82K	703	.....	.....
180	237	820	343	4300	453	20K	575	91K	712	.....	.....
200	243	910	351	4700	461	22K	585	100K	717	.....	.....
220	248	1000	356	5100	467	24K	592	110K	722	.....	.....

NEW! ALLIED PRE-PRINTED, FULL-COLOR RESISTOR BIN LABELS



LETS YOU FIND ALL YOUR RESISTORS IN NO TIME AT ALL— A NECESSITY WHERE RESISTORS ARE USED OR STORED

- Saves You Time and Trouble
- Ideal For All Service Centers
- Contains 167 Values—All 5%—From 2.7 Ohms to 22 Megohms
- 16 Sheets to the Package

One of this year's biggest time-saving, trouble saving ideas—and it's new from Allied Electronics! Card illustrated (at left) is actual size. Each tag has the correct resistor color codes and the value in ohms . . all in numerical figures. It's positively "goof-proof" labeling for all applications by distributors, production lines, assemblers—anywhere resistors are stored or in constant use. Also the perfect tool for radio and TV service centers, hi-fi repair shops, etc. Your package contains 167 values (from 2.7 ohms all the way up to 22.0 megohms) . . each value color-coded and with ohms in numerical figures. Packaged sixteen sheets to the package—each sheet with 16 tags, perforated and with gummed back. Tags may also be either taped or stapled to your comparments or bins for easiest-to-find accessibility. Includes blank tags. Shpg. wt. 10 oz.

707-9999. PER SET.....12.88

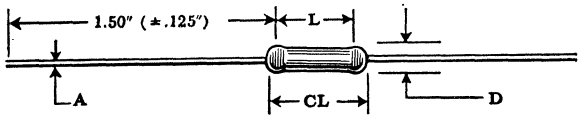
Resistors: Carbon, 141—Metal Glaze, 142—Metal Film, 143-5—Wirewound, 146-9

Precision Resistors

METAL FILM RESISTORS

TRW ELECTRONIC COMPONENTS

MIL-R-55182D ESTABLISHED RELIABILITY METAL FILM RESISTORS



CONFORMALLY COATED (C)

MIL Type	MIL Char.	Failure Rate	IRC Type	Resistance Range Ohms	Watts at 125°C.	Voltage Rating	EACH 1-4	5-24	25-49	50-99	100-249	250-499	500-Up
RNR50 & RNC50	K (T0)	M	MMC	49.9-100k	1/20	200	3.10	1.90	1.45	1.01	.77	.71	.67
		P, R					3.90	2.40	1.85	1.26	1.01	.94	.89
		S					4.75	2.95	2.30	1.54	1.27	1.18	1.11
	H (T2)	M	MMC	49.9-100k			3.20	2.05	1.60	1.17	.83	.74	.70
		P, R					4.00	2.55	2.00	1.42	1.07	.97	.92
		S					4.85	3.10	2.45	1.70	1.33	1.21	1.14
	J (T9)	M	MMC	49.9-100k			3.96	3.61	2.42	2.36	1.62	1.41	1.39
		P, R					4.76	4.11	2.82	2.61	1.86	1.64	1.61
		S					5.61	4.66	3.27	2.89	2.12	1.88	1.83
RNR55 & RNC55	K (T0)	M	CCM	49.9-200k	1/10	200	2.80	1.65	1.01	.79	.60	.53	.49
		P, R					3.60	2.15	1.41	1.04	.84	.76	.71
		S					4.45	2.70	1.86	1.32	1.10	1.00	.93
	H (T2)	M	CCM	49.9-200k			2.95	1.78	1.10	.87	.64	.56	.50
		P, R					3.75	2.28	1.50	1.12	.88	.79	.72
		S					4.60	2.83	1.95	1.40	1.14	1.03	.94
	J (T9)	M	CCM	49.9-200k			3.10	2.01	1.41	1.18	.90	.72	.66
		P, R					3.90	2.51	1.81	1.43	1.14	.95	.88
		S					4.75	3.06	2.26	1.71	1.40	1.19	1.10
RNR60 & RNC60	K (T0)	M	CCA	49.9-499k	1/8	250	2.58	1.60	.99	.71	.58	.52	.48
		P, R					3.38	2.10	1.39	.96	.82	.75	.70
		S					4.23	2.65	1.84	1.24	1.08	.99	.92
	H (T2)	M	CCA	49.9-499k			2.75	1.67	1.05	.80	.62	.54	.49
		P, R					3.55	2.17	1.45	1.05	.86	.77	.71
		S					4.40	2.72	1.90	1.33	1.12	1.01	.93
	J (T9)	M	CCA	49.9-499k			2.88	1.84	1.26	1.08	.71	.66	.63
		P, R					3.68	2.34	1.66	1.33	.95	.89	.85
		S					4.53	2.89	2.11	1.61	1.21	1.13	1.07
RNR65 & RNC65	K (T0)	M	CCB	49.9-1 meg	1/4	300	2.58	1.60	.99	.71	.58	.52	.48
		P, R					3.38	2.10	1.39	.96	.82	.75	.70
		S					4.23	2.65	1.84	1.24	1.08	.99	.92
	H (T2)	M	CCB	49.9-1 meg.			2.75	1.67	1.05	.80	.62	.54	.49
		P, R					3.55	2.17	1.45	1.05	.86	.77	.71
		S					4.40	2.72	1.90	1.33	1.12	1.01	.93
	J (T9)	M	CCB	49.9-1 meg.			2.88	1.84	1.26	1.12	.77	.66	.63
		P, R					3.68	2.34	1.66	1.33	.95	.89	.85
		S					4.53	2.89	2.11	1.61	1.21	1.13	1.07
Close Tolerance		B (±0.1%)					1.36	.94	.65	.45	.38	.30	.26
Adders for:		D (±0.5%)					.29	.24	.20	.17	.15	.12	.10

FAILURE RATE. At 60% confidence level.

Type	Failure Rate
M	1.0% per 1000 hrs.
P	0.1% per 1000 hrs.
R	0.01% per 1000 hrs.
S	0.001% per 1000 hrs.

PHYSICAL DIMENSIONS

Same as IRC type MIL-R-10509.

VOLTAGE COEFFICIENT

Less than 0.5 ppm/V. MIL-R-55182 permits maximum of 50 ppm/V.

RELIABILITY

Based on over 170 million government monitored test hours, these resistors have a failure rate level of 0.0006%/1000 hrs. Change in resistance during 10,000 hr. life test has averaged 0.30%.

TEMPERATURE COEFFICIENTS

MIL Char.	IRC TC Code	Temperature Coefficient
K	T0	±100 ppm/° C
H	T2	±50 ppm/° C
J	T9	±25 ppm/° C

LEADS

RNR (solderable) and RNC (solderable/weldable—Type C of MIL-STD-1276) standard. RNN (Type N-2 weldable) available.

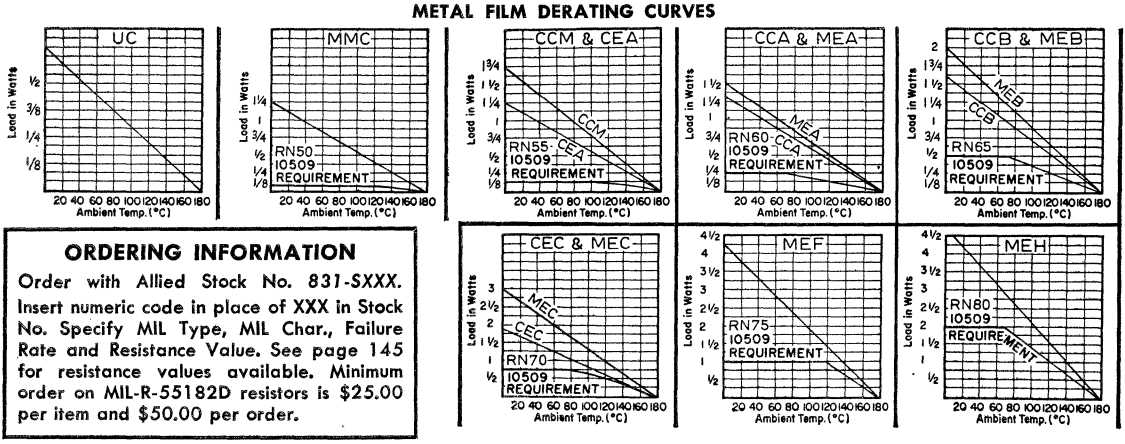
FREQUENCY RESPONSE

High. Essentially flat to 5 MHz.

ELECTRICAL NOISE

Low and intermediate resistance values have noise level below 0.05 mV/V (-30 dB) while higher ranges average 0.10 mV/V (−20 dB) over a decade of frequency.

METAL FILM DERATING CURVES

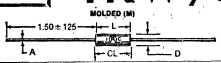


ORDERING INFORMATION

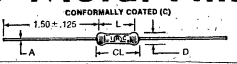
Order with Allied Stock No. 831-SXXX. Insert numeric code in place of XXX in Stock No. Specify MIL Type, MIL Char., Failure Rate and Resistance Value. See page 145 for resistance values available. Minimum order on MIL-R-55182D resistors is $25.00 per item and $50.00 per order.

Prices on Larger Quantities Available on Request

TRW/IRC MIL-R-10509 Metal Film Resistors



Molded—Body Style M



Conformally Coated —Body Style C

Stock No.	Mfr's Type	MIL Style	MIL Char.	IRC T.C. Code	Resistance Range, Ohms	Watts at 70° C IRC	Watts at 70° C MIL	Watts at 125° C IRC	Watts at 125° C MIL	Volts MIL Max.	Body Style	Maximum Size, Inches L	D	CL	AWG	EACH 10-24	25-99	100-249	250-Up
832-S	UC	.....	.....	T0	50-10k	¼	.....	⅛	.....	200	C	.145	.057	.150	#30*	2.50	1.50	1.00	.90
			.....	T2	50-10k	¼	.....	⅛	.....						(.010)	4.00	3.00	1.50	1.35
832-5XXX	MMC	RN50	.....	T0	10-100k	½	.....	¼	.....	200	C	.172	.075	.200	#26†	2.00	1.00	.43	.34
832-6XXX			C	T2	49.9-100k	½	⅛	¼	1/20						(.016)	2.00	1.00	.48	.39
831-S			E	T9	49.9-100k	½		¼								2.50	1.50	.93	.76
831-5XXX	CEA	RN55	D	T0	10-499k	½	⅛	¼	1/10	200	C	.281	.100	.325	#22	1.34	.67	.21	.14
831-6XXX			C	T2	30.1-499k	½	⅛	¼	1/10						(.025)	2.00	1.00	.28	.17
831-S			E	T9	30.1-499k	½	⅛	¼	1/10							2.50	1.50	.65	.45
831-S	CCM	RN55	D	T0	20-301k	¾	⅛	⅜	1/10	200	C	.281	.098	.325	#22	2.00	1.00	.39	.18
831-S			C	T2	49.9-301k	¾	⅛	⅜	1/10						(.025)	2.00	1.00	.45	.24
831-S			E	T9	49.9-301k	¾	⅛	⅜	1/10							2.50	1.50	.89	.47
831-1XXX	CCA	RN60	D	T0	10-1 meg	½	¼	¼	⅛	250	C	.431	.160	.545	#22	1.34	.67	.21	.14
831-2XXX			C	T2	49.9-1 meg	½	¼	¼	⅛						(.025)	2.00	1.00	.31	.21
831-S			E	T9	49.9-1 meg	½	¼	¼	⅛							2.50	1.50	.65	.45
832-S	MEA	RN60	D	T0	10-1 meg	¾	¼	⅜	⅛	250	M	.421	.140	.545	#22	2.00	1.00	.28	.16
832-S			C	T2	30.1-499k	¾	¼	⅜	⅛						(.025)	2.00	1.00	.40	.32
832-S			E	T9	30.1-499k	¾	¼	⅜	⅛							2.50	1.50	.80	.58
832-3XXX	MEB	RN65	D	T0	10-1 meg	1	½	½	¼	300	M	.609	.218	.733	#22	2.00	1.00	.24	.16
832-4XXX			C	T2	49.9-1 meg	1	½	½	¼						(.025)	2.00	1.00	.30	.21
832-S			E	T9	49.9-1 meg	1	½	½	¼							2.50	1.50	.75	.45
832-S	CCB	RN65	D	T0	10-1.5 meg	1	½	½	¼	350	C	.625	.200	.734	#22	2.00	1.00	.25	.16
832-S			C	T2	49.9-1.5 meg	1	½	½	¼						(.025)	2.00	1.00	.43	.21
832-S			E	T9	49.9-1.5 meg	1	½	½	¼							2.50	1.50	.75	.45
832-S	MEC	RN70	D	T0	10-1.5 meg	1½	¾	¾	½	350	M	.739	.281	.863	#20	2.00	1.00	.24	.16
832-S			C	T2	24.9-1.5 meg	1½	¾	¾	½						(.032)	2.00	1.00	.30	.21
832-S			E	T9	24.9-1.5 meg	1½	¾	¾	½							2.50	1.50	.75	.45
831-7XXX	CEC	.....	.....	T0	10-1.5 meg	1	.....	½	.....	350	C	.625	.200	.734	#20	2.00	1.00	.23	.15
831-8XXX			.....	T2	24.9-1.5 meg	1	.....	½	.....							2.00	1.00	.29	.19
831-S			.....	T9	24.9-1.5 meg	1	.....	½	.....							2.50	1.50	.75	.45
832-S	MEF	RN75	B	T0	49.9-1.5 meg	....	.....	1	1	500	M	1.125	.415	1.253	#20	2.50	1.50	.67	.54
832-S			C	T2	49.9-1.5 meg	....	.....	1	1							2.50	1.50	1.00	.75
832-S			E	T9	49.9-1.5 meg	....	.....	1	1							5.00	3.00	2.20	2.00
832-S	MEH	RN80	B	T0	100-1.5 meg	2	2	.....	.....	750	M	2.274	.415	2.378	#20	2.50	2.00	.97	.89
832-S			.....	T2	100-1.5 meg	2	2	.....	.....							5.00	3.00	1.23	1.05
832-S			.....	T9	100-1.5 meg	2	2	.....	.....							5.00	3.00	2.57	2.05
														Close Tolerance	±0.1%	.50	.40	.35	.30
															±0.25%	.35	.30	.25	.20
														Adders for:	±0.5%	.20	.15	.15	.10

*Gold plated Dumet leads, 1.00″. †Lead length, 1.00″.

Larger quantity prices on request.

ORDERING INFORMATION

At our option, we will ship the T2 resistor (50PPM/°C) in place of the TO resistor (100PPM/°C) at the same price as the TO. See table on page 145 for resistance values.

TEMPERATURE COEFFICIENTS

These high-stability evaporated metal film resistors are available in eleven temperature coefficient tolerances.

MIL-R-10509 Char.	IRC T.C. Code	Temperature Coefficient†	Temperature Range
D*	T0	0±100PPM/°C	−55°C to +165°C
C*	T2	0±50PPM/°C	−55°C to +175°C
E*	T9	0±25PPM/°C	−55°C to +175°C
	T3	0 to +100PPM/°C	−55°C to +165°C
	T4	0 to −100PPM/°C	−55°C to +165°C
	T5	0±25PPM/°C	+25°C to +145°C
	T6	0 to +50PPM/°C	−55°C to +165°C
	T7	0 to −50PPM/°C	−55°C to +165°C
	T8	0±25PPM/°C 0±35PPM/°C	+25°C to +165°C −55°C to +25°C
	TR	0 to +100PPM/°C 0 to −250PPM/°C	−55°C to +165°C
	TE	0 to +100PPM/°C 0 to −500PPM/°C	−55°C to +165°C

*Standard types. All others are special.
†Parts per million per degree centrigrade (100PPM equals 0.01%)
T.C. code marking is combined with the code for date of manufacture.

EXTENDED RESISTANCE RANGES

Resistance values to between 3 and 10 times MIL maximum (depending on style) are available in Metal Film resistors with temperature coefficients of TO, T2 and T9 and tolerance to ±0.1%. Substantially higher values (to 450 megohms) also available in TR or TE temperature coefficients and ±1.0% tolerance only.

VOLTAGE COEFFICIENT

Voltage coefficient when measured between 1/10 and full rated voltage is typically less than 0.5PPM/volt for all values. On low and medium values, voltage coefficient is essentially zero.

ELECTRIC NOISE

All Metal Film resistors demonstrate inherently low noise levels due to minute size of individual particles which comprise the film. Average 0.10 μV per volt (−20 dB) over standard resistance ranges for a decade of frequency, with low and intermediate values below 0.05 μV per volt (−30 dB). Recently developed techniques permit substantial improvement in higher ranges; on special order only.

APPLICATIONS

Particularly suited for applications requiring low electrical noise, stability under load, precise temperature coefficients and tolerances, uniform performance and repeatability. Applications include: precision instrumentation; computer peripherals and main-frames; missile and aircraft systems; sensing and measuring devices. Matching of temp. coefficients, tolerances and ratios available between pairs or sets, and between different values and styles.

FREQUENCY RESPONSE

High frequency response, essentially flat to 5 MHz. Non-Helixed units available for higher frequencies, on special order.

Comparison of MIL-R-10509 and MIL-R-55/82 environmental tests with typical performance of TRW/IRC Metal Film resistors.

Environmental Condition	MIL-R-55182 MIL Max. (K, H, J Char.)	MIL-R-55182 IRC Typ.	MIL-R-10509 MIL Max. (D Char.)	MIL-R-10509 IRC Typ.	MIL-R-10509 MIL Max. (C, E Char.)	MIL-R-10509 IRC Typ.
Temperature Cycling	±0.20%	0.02%	±0.5%	0.02%	±0.25%	0.02%
Low Temperature Operation	±0.15%	0.03%	±0.5%	0.03%	±0.25%	0.03%
Short Time Overload	±0.20%	0.05%	±0.5%	0.05%	±0.25%	0.05%
Dielectric Withstanding Voltage	±0.15%	0.05%	±0.5%	0.05%	±0.25%	0.05%
Resistance to Soldering Heat	±0.10%	0.02%	±0.5%	0.10%	±0.10%	0.05%
Moisture Resistance	±0.40%	0.15%	±1.5%	0.25%	±0.5%	0.15%
Shock, Medium Impact	±0.20%	0.05%	±0.5%	0.05%	±0.25%	0.05%
Vibration, High Frequency	±0.20%	0.02%	±0.5%	0.02%	±0.25%	0.02%
1000 Hour Life	.....	.....	±1.0%	0.05%	±0.5%	0.15%
2000 Hour Life	±0.5%	0.10%	.....	.....	.....	.....
10,000 Hour Life	±2.00%	0.30%	.....	.....	.....	.....
High Temperature Exposure	±0.5%	0.10%	.....	.....	.....	.....

Specify Stock No., Mfr's Type and Resistance Value When Ordering

TRW ELECTRONIC COMPONENTS

Precision Resistors

METAL FILM RESISTORS

SPECIAL PRODUCTS

LOW TC, TIGHT TOLERANCE

Ultra stable metal film resistors are available in temperature coefficients of ±15, ±10 and ±5 ppm/° C with standard tolerances of ±1.0%, ±0.5%, ±0.25%, ±0.1%, ±0.05%, ±0.02% and ±0.01%. The "AR" series of resistor is designed and built to be a no-compromise replacement for precision wire-wound resistors. Possessing all of the characteristics formerly available only in precision wire-wound resistors (that is, low temperature coefficients, non-measurable noise, low voltage coefficient and stability under stress), the series also maintains all of the unique characteristics of metal film (i.e., high frequency performance, reliability, pulse stability and resistance/size ratio). Available on special order in the following wattage/maximum resistance ratings: 1/20 watt/100k; 1/16 watt/250k; 1/8 watt/500k and 1/4 watt/1 meg. Matching available to ±0.001% tolerance and ±0.5 ppm TCR track.

PRECISION POWER

The "BR" series of resistors is designed to replace wire-wounds in the areas of low power (1 to 3 watts) and semi-precision (±1.0% to ±0.1% tolerance and ±100 ppm to ±25 ppm/° C TC). Maintaining the unique advantages of metal film (i. e., high frequency performance, reliability, pulse stability and resistance/size ratio), this series offers much higher resistance values, much higher voltages, smaller sizes and more uniform heat dissipation (no 350° hot spots) than comparably rated wire-wounds.

HIGH TEMPERATURE, HIGH VOLTAGE

For use in design application area where both high temperature and high voltage are present (to 340° C and 15,000 volts), the "CR" series resistor provides an answer. It employs a proprietary carbon alloy film of such hardness that no protective coating is necessary; consequently there is no out-gassing or contamination of any operating environment, whether it be vacuum, oil, inert or air. Although the resistor derates at somewhere above 340° C, it will withstand operating environment temperatures to 1600° F (870°C) and return to within 10% of its original resistance value when the environment cools. Available to wattage ratings of 3 watts at 200° C, resistance values to 200 megs and ±5% tolerance.

NETWORKS AND LADDERS

Subminiature, precision TaNFilm* flat resistor networks and ladders are available in a variety of standard designs and packages including dual-in-line pack, flat pack, conformal coated or unencapsulated for wirebonding or beam lead attachment. TaNFilm is deposited by continuous sputtering process resulting in a very uniform film so that resistors track within 5 ppm/° C over the full temperature range. TaNFilm is immune to electrolytic attack since the manufacturing process passivates each resistor with an anodized surface layer. Tolerance from ±1.0% to ±0.03%; TCR of 0 to −80 ppm/° C; resistance values from 20-100k ohms.
*Registered TRW Inc. TM.

TABLE A—MIL-R-55182D AND MIL-R-10509 METAL FILM RESISTANCE VALUES

To complete Allied Stock Number, insert numeric code (XXX—shown to right of ohms value) in place of XXX in Stock Number 831-5XXX. The resistance range for each type is shown in the price listings on pages 143 and144.

Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX
10.0	060	44.2	150	196	242	866	347	3920	447	17.4k	561	76.8k	696	340k	800
10.2	061	45.3	151	200	243	887	348	4020	450	17.8k	562	78.7k	698	348k	801
10.5	062	46.4	152	205	245	909	350	4120	451	18.2k	566	80.6k	701	357k	803
10.7	063	47 5	155	210	246	931	352	4220	452	18.7k	567	82.5k	705	365k	806
11.0	064	48.7	156	215	247	953	353	4320	455	19.1k	571	84.5k	706	374k	808
11.3	065	49.9	157	221	250	976	355	4420	456	19.6k	572	86.6k	708	383k	810
11.5	066	51.1	161	226	251	1000	356	4530	458	20k	575	88.7k	710	392k	812
11.8	067	52.3	162	232	252	1020	357	4640	460	20.5k	576	90.9k	711	402k	814
12.1	069	53.6	163	237	253	1050	358	4750	462	21k	580	93.1k	713	412k	815
12.4	071	54.9	165	243	256	1070	360	4870	463	21.5k	581	95.3k	715	422k	816
12.7	072	56.2	167	249	257	1100	361	4990	465	22.1k	586	97.6k	716	432k	818
13.0	073	57.6	168	255	260	1130	362	5110	468	22.6k	588	100k	717	442k	820
13.3	074	59.0	170	261	261	1150	363	5230	470	23.2k	590	102k	719	453k	822
13.7	076	60.4	171	267	262	1180	365	5360	471	23.7k	591	105k	720	464k	824
14.0	077	61.9	172	275	265	1210	367	5490	472	24.3k	593	107k	721	475k	826
14.3	078	63.4	175	280	266	1240	368	5620	475	24.9k	594	110k	722	487k	827
14.7	079	64.9	176	287	267	1270	371	5760	476	25.5k	597	113k	723	499k	828
15.0	081	66.5	177	294	268	1300	372	5900	477	26.1k	600	115k	725	511k	831
15.4	082	68.1	180	301	271	1330	373	6040	480	26.7k	602	118k	726	523k	832
15.8	083	69.8	181	309	272	1370	375	6190	481	27.5k	604	121k	728	536k	833
16.2	086	71.5	182	316	273	1400	376	6340	483	28k	606	124k	729	549k	835
16.5	087	73.2	183	324	275	1430	377	6490	485	28.7k	607	127k	731	562k	837
16.9	088	75.0	185	332	277	1470	378	6650	487	29.4k	610	130k	732	576k	838
17.4	090	76.8	186	340	278	1500	380	6810	490	30.1k	612	133k	733	590k	840
17.8	091	78.7	187	348	280	1540	381	6980	492	30.9k	613	137k	735	604k	842
18.2	093	80.6	188	357	282	1580	382	7150	495	31.6k	615	140k	736	619k	843
18.7	095	82.5	191	365	285	1620	385	7230	497	32.4k	616	143k	737	634k	846
19.1	096	84.5	192	374	286	1650	386	7500	498	33.2k	618	147k	738	649k	847
19.6	097	86.6	193	383	287	1690	387	7680	500	34k	619	150k	740	665k	848
20.0	098	88.7	195	392	290	1740	390	7870	501	34.8k	621	154k	741	681k	851
20.5	099	90.9	196	402	292	1780	392	8060	502	35.7k	626	158k	742	698k	852
21.0	100	93.1	198	412	293	1820	395	8250	505	36.5k	631	162k	745	715k	854
21.5	101	95.3	200	422	295	1870	396	8450	507	37.4k	632	165k	746	732k	855
22.1	103	97.6	201	432	297	1910	397	8660	509	38.3k	635	169k	747	750k	856
22.6	104	100	202	442	298	1960	398	8870	511	39.2k	637	174k	748	768k	857
23.2	106	102	203	453	300	2000	400	9090	513	40.2k	638	178k	750	787k	859
23.7	107	105	204	464	301	2050	401	9310	516	41.2k	640	182k	752	806k	860
24.3	110	107	205	475	303	2100	402	9530	518	42.2k	641	187k	753	825k	862
24.9	111	110	206	487	305	2150	403	9760	520	43.2k	643	191k	756	845k	864
25.5	113	113	207	499	306	2210	406	10k	522	44.2k	645	195k	757	866k	865
26.1	115	115	210	511	310	2260	408	10.2k	523	45.3k	647	200k	759	887k	867
26.7	116	118	211	523	311	2320	410	10.5k	524	46.4k	649	205k	760	909k	869
27.5	118	121	213	536	312	2370	411	10.7k	526	47.5k	651	210k	761	931k	873
28.0	120	124	215	549	313	2430	413	11k	528	48.7k	653	215k	762	953k	874
28.7	121	127	217	562	316	2490	415	11.3k	530	49.9k	655	221k	766	976k	875
29.4	122	130	218	576	317	2550	417	11.5k	531	51.1k	658	226k	767	1.00M	877
30.1	125	133	220	590	319	2610	418	11.8k	532	52.3k	660	232k	770	1.02M	879
30.9	126	137	221	604	322	2670	420	12.1k	535	53.6k	662	237k	771	1.05M	880
31.6	127	140	222	619	323	2750	422	12.4k	536	54.9k	664	243k	776	1.10M	881
32.4	128	143	223	634	326	2800	423	12.7k	537	56.2k	667	249k	777	1.13M	882
33.2	131	147	225	649	327	2870	425	13k	538	57.6k	669	255k	780	1.15M	883
34.0	132	150	226	665	328	2940	426	13.3k	540	59k	671	261k	781	1.18M	884
34.8	133	154	227	681	331	3010	428	13.7k	541	60.4k	673	267k	782	1.21M	887
35.7	135	158	228	698	333	3090	430	14k	545	61.9k	675	275k	784	1.24M	888
36.5	137	162	231	715	335	3160	431	14.3k	546	63.4k	679	280k	786	1.27M	889
37.4	138	165	232	732	336	3240	432	14.7k	547	64.9k	681	287k	787	1.30M	890
38.3	139	169	233	750	338	3320	435	15k	550	66.5k	683	294k	788	1.33M	891
39.2	140	174	235	768	339	3400	436	15.4k	551	68.1k	686	301k	791	1.37M	892
40.2	143	178	236	787	340	3480	437	15.8k	552	69.8k	688	309k	792	1.40M	894
41.2	145	182	238	806	342	3570	440	16.2k	556	71.5k	690	316k	793	1.43M	895
42.2	146	187	240	825	345	3740	443	16.5k	557	73.2k	692	324k	795	1.47M	896
43.2	148	191	241	845	346	3830	445	16.9k	558	75k	694	332k	797	1.50M	900

DALE

WIREWOUND RESISTORS

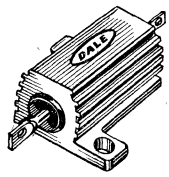
MIL Wirewound Power Resistors

MIL-R-18546D ALUMINUM-HOUSED RESISTORS—1% TOLERANCE

MIL NO. EXPLANATION RE65 (1) — G (2) — 1001 (3)

This specification covers power wirewound, fixed resistors using the principle of heat dissipation through metal mounting surface. Initial resistance tolerance of ±1% and resistance-temp. characteristic of ±0.0030% per °C (30 parts per million) for values of 2000 ohms and up; ±0.0050% per °C (50 ppm) for values under 2000 ohms.

1. **Style**—Fixed wirewound.
2. **Characteristic**—G, inductive winding; 275° C max. cont. oper.
   N, non-inductive; 275° C max. cont. oper.
3. **Resistance Value**—First three digits are significant digits and last digit represents number of zeroes to follow, unless there is an "R" in the series; if so, the "R" represents a decimal point and all numbers represent significant digits.



Dale gold anodized aluminum housed resistors provide the industry with a high power density precision resistor. These resistors are manufactured to assure precision stability and complete environmental protection. Specifications for these resistors meet or exceed MIL-R-18546D specifications. Stock values and prices are for 1% tolerance units. Also available in .05% through 5% tolerances. For more information ask for the Dale catalog. Wt./100, 3¼ lb.

MIL Style	Dale Type*	MIL Watts Free Air	MIL Watts Chassis	MIL Style	Dale Type*	MIL Watts Free Air	MIL Watts Chassis
RE60	RH-5	3	5	RE70	RH-25	8	20
RE65	RH-10	6	10	RE75	RH-50	10	30

*Also NH-5, NH-10, NH-25 and NH-50.

TYPE RH-5—7.5-WATT

MIL Type RE60—QPL to 3320 Ohms (Complete Range .1Ω to 24.5k)

Stock No.	Values—See Table "A" on p. 147	EACH 1-9	10-24	25-49	50-Up
767-51 RC	1 ohm to 1000 ohms	2.92	2.00	1.60	1.50
767-51 RC	1400 to 5000	3.05	2.10	1.68	1.58
767-51 RC	6000 to 10K	3.32	2.29	1.83	1.72
767-5184	15K	3.97	2.73	2.18	2.05
767-5186	20K	4.25	2.93	2.68	2.44

TYPE RH-10—12.5-WATT

MIL Type RE65—QPL to 5620 Ohms (Complete Range .008Ω to 47.1k)

Stock No.	Values—See Table "A" on p. 147	EACH 1-9	10-24	25-49	50-Up
767-53 RC	1 to 1000	2.92	2.00	1.60	1.50
767-53 RC	1400 to 5000	3.05	2.10	1.68	1.58
767-53 RC	6000 to 10K	3.32	2.29	1.83	1.72
767-5384	15K	3.97	2.73	2.18	2.05
767-53 RC	20K and 25K	4.25	2.93	2.68	2.44
767-5390	30K	4.70	3.25	2.97	2.70

TYPE RH-25—25-WATT

MIL Type RE70—QPL to 12,100 Ohms (Complete Range .01Ω to 95.2k)

Stock No.	Values—See Table "A" on p. 147	EACH 1-9	10-24	25-49	50-Up
767-5601	.5 ohm	4.47	2.73	2.46	2.24
767-56 RC	1 to 1000	2.92	2.00	1.60	1.50
767-56 RC	1400 to 5000	3.05	2.10	1.68	1.58
767-56 RC	6000 to 10K	3.32	2.29	1.83	1.72
767-5684	15K	3.97	2.73	2.18	2.05
767-56 RC	20K and 25K	4.25	2.93	2.68	2.44
767-5690	30K	4.70	3.25	2.97	2.70
767-5695	50K	5.17	3.57	3.26	2.96

TYPE RH-50—50-WATT

MIL Type RE75—QPL to 39,200 Ohms (Complete Range .01Ω to 273k)

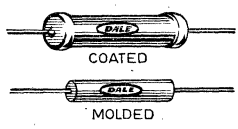
Stock No.	Values—See Table "A" on p. 147	EACH 1-9	10-24	25-49	50-Up
767-5801	.5 ohm	4.95	2.91	2.65	2.43
767-58 RC	1 to 5	4.40	2.73	2.48	2.20
767-58 RC	6 to 1000	3.57	2.45	1.96	1.84
767-58 RC	1400 to 5000	3.75	2.56	2.06	1.94
767-58 RC	6000 to 10K	4.05	2.78	2.22	2.08
767-58 RC	15K to 20K	4.47	3.08	2.46	2.31
767-58 RC	25K to 50K	4.87	3.36	2.68	2.51

MIL-R-26E SERIES RS 1% MINIATURE POWER RESISTORS

MIL NO. EXPLANATION RW79 (1) — U (2) — 49R9 (3) — F (4)

This specification covers power type wirewound, fixed resistors. Included are general purpose styles of 5% initial resistance with power ratings from 3 to 240 watts at 25° C, derated to zero at 350° C (Char. V) and precision axial lead types of .1, .5 and 1% initial resistance tolerance with power ratings from 1 to 10 watts at 25° C, derated to zero at 275° C (Char. U).

1. **Style**—Fixed wirewound.
2. **Characteristic**—U, max. continuous operating temp. is 275° C T.C. ±30 ppm, 10 ohms and over; ±50 ppm, 1-10 ohms; ±90 ppm, under 1 ohm. V, max. cont. oper. temperature is 350° C T.C. ±400 ppm under 20 ohms; ±260 ppm, 20 ohms and over.
3. **Resistance Value**—First two or three digits represent first two or three significant digits of value; last digit represents number of zeroes to follow; an "R" in the series represents a decimal point, with all numbers representing significant digits.
4. **Tolerance**—F, ±1%.



Dale Type RS resistors are designed for use in precision applications where reliability under severe environmental conditions is vitally important. They have proven failure rate of .006% per 1000 hours, where failure is defined as ±1% resistance change. Types RS-½-1A and 1B are molded models. Larger models have a conformal coating. Precision construction includes high purity ceramic core and stainless steel end caps Meet or exceed precision requirements of MIL-R-26E. Temperature coefficients are per the MIL specification. Stock values and prices are for 1% tolerance units. Available in tolerances of .05% through 5%—for more information ask for Dale catalog. Shpg. wt/100, 2 oz.

MIL Style	Dale Type	MIL Watts	MIL Style	Dale Type	MIL Watts	MIL Style	Dale Type	MIL Watts
	RS-½	½	RW79U	RS-2B	3		RS-10	10
RW70U	RS-1A	1		RS-5	5	RW78U	RS-10-38	10
	RS-1B	1	RW74U	RS-5-69	5	RW69V	CW-2C-1	3

MINIATURE POWER RESISTORS

RS-½ (½ Watt) Stock No.	RS-1A (1 Watt) MIL RW70U Stock No.	RS-1B (1 Watt) Stock No.	Values (Ohms)—See Table "B" on p. 147	EACH 1-9	10-24	25-49	50-99	100-Up
767-7901	767-8101	767-8301	0.5	2.10	1.68	1.48	1.25	1.05
767-79 RC	767-81 RC	767-83 RC	1 to 1000	1.55	1.08	.85	.80	.75
767-79 RC	767-81 RC	767-83 RC	1200 to 3000	1.70	1.19	.95	.89	.83
767-7971	767-8171	767-8371	4000	1.70	1.19	.95	.89	.83
767-79 RC	767-81 RC	767-83 RC	4500 to 7500	1.92	1.36	1.06	1.01	.93

MIL TYPE RW79, RW78 AND RW74 RESISTORS

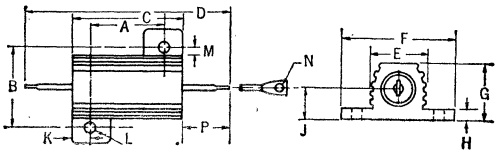
RS-2B (3 Watts) MIL RW79U Stock No.	RS-5 (5 Watts) Stock No.	RS-5-69 (5 Watts) MIL RW74U Stock No.	RS-10 (10 Watts) Stock No.	RS-10-38 (10 Watts) MIL RW78U Stock No.	Values (Ohms)—See Table "B" p. 147	EACH 1-9	10-24	25-49	50-Up
767-89 RC	767-93 RC	767-95 RC	767-97 RC	767-99 RC	1 to 1000	1.17	.83	.65	.62
767-89 RC	767-93 RC	767-95 RC	767-97 RC	767-99 RC	1200 to 5000	1.30	.91	.73	.68
767-89 RC	767-93 RC	767-95 RC	767-97 RC	767-99 RC	6000 to 10k	1.37	.95	.75	.70
767-89 RC	767-93 RC	767-95 RC	767-97 RC	767-99 RC	12k to 15k	1.42	.99	.78	.74
767-8986	767-9386	767-9586	767-9786	767-9986	20k	1.47	1.03	.83	.77
767-89 RC	767-93 RC	767-95 RC	767-97 RC	767-99 RC	22.5k to 27.5k	1.60	1.10	.87	.83
767-8990	767-9390	767-9590	767-9790	767-9990	30k	1.60	1.10	.87	.83
767-89 RC	767-93 RC	767-95 RC	767-97 RC	767-99 RC	35k to 40k	1.60	1.10	.87	.83
767-89 RC	767-93 RC	767-95 RC	767-97 RC	767-99 RC	47k to 50k	1.67	1.18	.95	.88
767-8996	767-9396	767-9596	767-9796	767-9996	60k	1.92	1.30	1.03	.97

Resistors: Carbon, 141—Metal Glaze, 142—Metal Film, 143-5—Wirewound, 146-9

Dale Resistors; IRC Power Resistors

MIL-R-18546D

FIXED WIREWOUND POWER TYPE, CHASSIS MOUNTED



DIMENSIONS

MIL	A(±)	B(±)	C(±)	D(±)	F(±)	F(±)	G(±)	H(±)	J(±)	K(±)	L(±)	M(±)	N(±)	P(±)
RE60	.444 .005	.490 .005	.600 .031	1.125 .062	.334 .015	.646 .015	.320 .015	.065 .010	.133 .010	.078 .010	.093 .005	.078 .015	.050 .005	.262 .062
RE65	.562 .005	.625 .005	.750 .031	1.375 .062	.420 .015	.800 .015	.390 .015	.075 .010	.165 .010	.093 .010	.093 .005	.102 .015	.086 .005	.312 .062
RE70	.719 .005	.781 .005	1.062 .031	1.938 .062	5.50 .015	1.080 .015	.546 .015	.088 .010	.231 .010	.172 .010	.125 .005	.115 .015	.086 .005	.438 .062
RE75	1.563 .005	.844 .005	1.968 .031	2.781 .062	6.30 .015	1.140 .015	.610 .015	.088 .010	.260 .010	.196 .010	.125 .005	.107 .015	.086 .005	.406 .062

TABLE A—DALE MIL-R-18546D STOCK VALUES

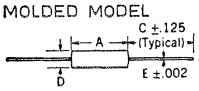
To complete Allied Stock No. select values desired and place resistance code shown below (RC) in place of RC in Stock No.

Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC
.5	01	30	18	225	36	1750	62
1	02	35	19	250	37	1800	63
1.5	03	40	20	300	40	2000	64
2	04	50	22	350	41	2500	68
2.5	05	60	23	375	42	3000	69
3	06	70	24	400	43	3500	70
4	07	75	25	470	45	4000	71
4.5	08	80	26	500	46	5000	73
5	09	85	27	560	47	6000	74
6	10	100	29	600	48	10k	80
7.5	11	125	30	700	50	15k	84
8	12	150	31	750	51	20k	86
10	13	175	32	900	53	25k	88
15	15	180	33	1000	54	30k	90
20	16	200	34	1400	59	50k	95
25	17	220	35	1500	60	.....	.....

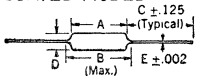
MIL-R-26E

FIXED WIREWOUND POWER TYPE RESISTORS

MOLDED MODEL



COATED MODEL



DIMENSIONS

Type	A	B	C	D	E
RS-½	.312"†	.....	1.500"	.078"‡	.020"
RS-1A	.422"†	.....	1.500"	.093"	.020"
RS-1B	.575"†	.....	1.500"	.093"	.020"
RS-2B	.560"	.622"	1.500"	.187"	.032"
RS-5	.875"	1.000"	2.000"	.312 "	.040"
RS-5-69	.875"	.937"	2.000"	.312"	.040"
RS-10	1.780"	1.875"	2.000"	.375"	.040"
RS-10-38	1.780"	1.842"	2.000"	.375"	.040"
CW-2C-1*	.500"	.....	1.500"	.218"	.032"

*On special order. †Molded types; ±.015"; other "A" dim., ±.062". ‡‡.015"; other "D" dimensions, ±.031-.032".

TABLE B—DALE MIL-R-26E STOCK VALUES

To complete Allied Stock No. select values desired and place resistance code shown below (RC) in place of RC in Stock No.

Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC
.5	01	60	23	650	49	7000	76
1	02	70	24	750	51	7500	77
1.5	03	75	25	800	52	10k	80
2	04	80	26	900	53	12k	81
2.5	05	90	28	1000	54	12.5k	82
3	06	100	29	1200	56	13k	83
4	07	125	30	1300	58	15k	84
5	09	150	31	1500	60	20k	86
6	10	200	34	1600	61	22.5k	87
8	12	220	35	1750	62	25k	88
10	13	225	36	1800	63	27.5k	89
12	14	250	37	2000	64	30k	90
15	15	270	39	2200	66	35k	91
20	16	300	40	2500	68	40k	92
25	17	350	41	3000	69	47k	94
30	18	400	43	4000	71	50k	95
35	19	450	44	4500	72	60k	96
40	20	470	45	5000	73	.....	.....
45	21	500	46	6000	74	.....	.....
50	22	600	48	6800	75	.....	.....

IRC AS 1% TOLERANCE POWER RESISTORS

Miniature wirewound resistors incorporating "Thermocoat"—a solvent-resistant silicone coating formulation with high dielectric strength and heat capabilities. Carry full power even at 215°C ambients, expanding circuit design limits significantly. Welded connections. Meet MIL V (MIL-R-26E). Temperature coefficient less than 20 ppm/°C. Maximum working voltages: AS-2, 150V; AS-5A, 400V. Wt. 1 oz.

1%—TYPE AS-2 2-WATT (½x¼")

Stock No.	Val. Avail. in Ohms See Table Below	EACH 1-9	10-24	25-49	50-99	100-Up
962-4XXX	1.0 to 1000	.98	.73	.57	.54	.50
962-4XXX	1100 to 4700	1.07	.81	.64	.60	.55
962-4XXX	5100 to 10k	1.10	.84	.66	.62	.57
962-4550	15k	1.12	.86	.68	.64	.60
962-4XXX	16k to 20k	1.19	.90	.72	.67	.63

1%—TYPE AS-5A 5-WATT (5/16x1 1/32")

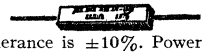
962-6XXX	1.0 to 1000	1.00	.75	.59	.56	.52
962-6XXX	1100 to 4700	1.09	.83	.66	.62	.57
962-6XXX	5100 to 10k	1.12	.86	.68	.64	.59
962-6550	15k	1.14	.88	.70	.66	.62
962-6XXX	16k to 20k	1.21	.92	.74	.69	.65
962-6XXX	22k to 39k	1.28	.98	.78	.74	.68
962-6657	51k	1.39	1.05	.85	.79	.74

AS VALUES AVAILABLE FROM STOCK

Specify value and complete Allied Stock No. by placing numeric code (XXX) shown opposite value in place of XXX in Stock No.

Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX
1.0	029	18	092	270	263	3300	433
1.2	032	20	098	300	270	3600	441
1.5	034	22	102	330	276	3900	446
2.0	038	24	108	360	283	4300	453
2.2	039	30	123	450	296	4700	461
2.4	040	33	130	510	308	5100	467
2.7	041	39	140	560	315	5600	473
3.0	042	51	160	620	324	6200	482
3.5	043	56	166	680	330	6800	489
4.7	049	68	178	750	338	7500	498
5.1	051	75	185	820	343	8200	504
5.6	053	82	190	910	351	10k	522
6.2	054	91	197	1000	356	15k	550
6.8	055	100	202	1100	361	16k	555
7.5	056	120	212	1500	380	18k	565
8.2	057	130	218	1600	383	20k	575
9.1	058	150	226	1800	393	22k	585
10	060	160	230	2000	400	27k	603
12	068	180	237	2200	405	30k	611
13	073	200	243	2400	412	36k	630
15	081	220	248	2700	421	39k	636
16	084	240	255	3000	427	51k	657

TYPES PW-5 AND PW-10 POWER RESISTORS



Compact axial-lead resistors. Precisely-wound element has glass fiber core, and is sealed in rectangular ceramic case. Tolerance is ±10%. Power ratings are at 25°C ambient. 1½" leads.

Type PW-5 5-Watt. Size, 7/8x3/8x1 1/32". Shpg. wt. 2 oz.

962-8XXX. 1-99 ..... Each .31
100-499 ..... Each .21 500-Up ..... Each .11

PW-5 VALUES AVAILABLE. Specify value wanted and complete Allied Stock No. by placing numeric code (XXX) shown opposite value in place of XXX in Stock No.

Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX
1	029	30	123	350	281	1500	380
2	038	50	158	400	291	1750	391
3	042	75	185	500	307	2000	400
4	047	100	202	600	321	2250	407
5	050	120	212	700	334	2500	416
7.5	056	125	216	750	338	3000	427
10	060	150	226	800	341	4000	448
15	081	200	243	1000	356	4500	457
20	098	250	258	1200	366	5000	466
25	112	300	270	1250	370	6000	478

Type PW-10 10-Watt. Size, 1 7/8x3/8x1 1/32". Shpg. wt. 2 oz.

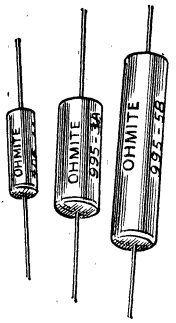
962-9XXX. 1-99 ..... Each .36
100-499 ..... Each .25 500-Up ..... Each .14

PW-10 VALUES. Substitute XXX code in Allied Stock No.

Ohms	XXX	Ohms	XXX	Ohms	XXX	Ohms	XXX
1	029	25	112	300	270	3500	438
2	038	30	123	500	307	5000	466
3	042	40	142	600	321	6000	478
4	047	50	158	750	338	10k	522
5	050	75	185	1000	356	12k	533
7.5	056	100	202	1200	366	20k	575
10	060	150	226	1500	380	25k	596
15	081	200	243	2000	400	.....	.....
20	098	250	258	3000	427	.....	.....

Ohmite/Memcor Wirewound Resistors

SERIES 99 VITREOUS-ENAMELED MOLDED RESISTORS



- Withstand Very High Temperatures
- Resist Chipping and Breaking
- Uniform Size for Assembly Ease
- High Voltage Insulation

These wirewound resistors feature molded vitreous enamel coating for excellent insulation characteristics and heat dissipation. Uniform size—mount in metal clips for heat-sink effect allowing up to 100% wattage increase. Uniform insulation thickness for 1000 VAC breakdown rating. Identifying markings fired right onto coating. Consistent size and shape—ideal for automated assembly. With stand high humidity, immersion in salt solution. 1½" tinned leads. Tolerance, ±5%. Meet MIL-R-26 for RW57, RW58, RW59, RW77, RW68, RW69. Av. shpg. wt. per 25, 4 oz.

STYLE 995-3A—3¼-WATT 35/64x1 3/64"

Stock No.	Stock Values (Ohms) See Table "A" Below	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
880-4XXX	1 to 1000	.68	.58	.48	.37	.31	.29
880-4XXX	1100 to 5000	.74	.63	.52	.41	.33	.31
880-4XXX	5100 to 10k	.76	.65	.53	.42	.34	.32

STYLE 995-5B—5-WATT 15/16x1 3/64"

880-5XXX	1 to 1000	.74	.63	.52	.41	.53	.31
880-5XXX	1100 to 5000	.76	.65	.53	.42	.34	.32
880-5XXX	5100 to 10k	.84	.71	.59	.46	.38	.35
880-5XXX	11k to 20k	.92	.78	.64	.51	.41	.39
880-5XXX	22k to 25k	1.05	.89	.74	.58	.47	.44

STYLE 995-10A—11-WATT 1 25/32x5/16"

880-6XXX	1 to 1000	.79	.67	.55	.43	.36	.33
880-6XXX	1100 to 5000	.89	.76	.62	.49	.40	.37
880-6XXX	5100 to 10k	1.10	.85	.70	.55	.45	.42
880-6XXX	11k to 20k	1.10	.94	.77	.61	.50	.46
880-6XXX	22k to 40k	1.15	.98	.81	.63	.52	.48
880-6XXX	43k to 51k	1.30	1.11	.91	.72	.59	.55

TABLE "A" STOCK VALUES—FOR STYLE 995

To complete Allied Stock No. insert 3 digit number, shown in XXX column after value, in place of XXX in Allied Stock No.

Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX
1.0	004	3.3	044	8.2	084	25	124	56	164	180	207	430	250	820	290	2200	337	4700	380	9100	420	24k	464	50k	504
1.1	007	3.6	047	9.1	087	27	127	62	167	200	210	450	254	900	294	2400	344	5000	384	10k	424	25k	467	51k	507
1.2	010	3.9	050	10	090	30	130	68	170	220	214	470	257	910	297	2500	347	5100	387	11k	427	27k	470	....	.....
1.3	014	4.0	054	11	094	33	134	75	174	240	220	500	260	1000	300	2700	350	5600	390	12k	430	30k	474	....	.....
1.5	017	4.3	057	12	097	35	137	82	177	250	224	510	264	1100	304	3000	354	6000	394	13k	437	33k	477	....	.....
1.6	020	4.7	060	13	100	36	140	91	180	270	227	560	267	1200	307	3300	357	6200	397	14k	440	35k	480	....	.....
1.8	024	5.0	064	15	104	39	144	100	184	300	230	600	270	1300	314	3500	360	6800	400	15k	444	36k	484	....	.....
2.0	027	5.1	067	16	107	40	147	110	187	330	234	620	274	1400	317	3600	364	7000	404	16k	447	39k	487	....	.....
2.2	030	5.6	070	18	110	43	150	120	190	350	237	680	277	1500	320	3900	367	7500	407	17k	450	40k	490	....	.....
2.4	034	6.2	074	20	114	47	154	130	197	360	240	700	280	1600	324	4000	370	8000	410	18k	454	43k	494	....	.....
2.7	037	6.8	077	22	117	50	157	150	200	390	244	750	284	1800	330	4300	374	8200	414	20k	457	45k	497	....	.....
3.0	040	7.5	080	24	120	51	160	160	204	400	247	800	287	2000	334	4500	377	9000	417	22k	460	47k	500	....	.....

MOUNTING CLIPS FOR STYLE 99 RESISTORS

Stock No.	Type	For Resistor	1-99	100-499	500-Up	Stock No.	Type	For Resistor	1-99	100-499	500-Up
880-9900	5900	995-1A (1½-Watt)	.26	.20	.16	880-9906	5906	995-5B (5-Watt)	.26	.20	.16
880-9904	5904	995-3A (3¼-Watt)	.26	.20	.16	880-9908	5908	995-10A (11-Watt)	.26	.20	.16

TYPE 200 "BROWN DEVIL" WIREWOUND RESISTORS

Designed for applications such as voltage dropping, bias supplies, bleeders. Have thick vitreous enamel coating for excellent heat conduction and insulation. Fully protected against humidity and moisture. Tolerance, ±5%. Overall sizes (excluding leads); 3-watt, 7/16x1 3/64"; 5¼-watt, ⅝x¼"; 8-watt, 1x5/16"; 12-watt, 1¾x5/16"; 20-watt 2x7/16". 1½" leads. Specify values from Tables "B" or "C" below. Av. shpg. wt., per 25, 8 oz.

STYLE 200-3—3-WATT (Values to 10K) See Table "B" Below

Stock No.	Stock Values (Ohms) See Table "B" Below	1-9	10-49	50-99	100-249	250-499	500-Up
877-4XXX	1 to 1000	.63	.54	.44	.35	.28	.26
877-4XXX	1100 to 4700	.71	.60	.50	.39	.32	.30
877-4XXX	5100 to 10k	.74	.63	.52	.41	.33	.31

STYLE 200-5¼—5¼-WATT (Values to 20K) See Table "B" Below

877-5XXX	1 to 1000	.66	.56	.46	.36	.30	.28
877-5XXX	1100 to 4700	.74	.63	.52	.41	.33	.31
877-5XXX	5100 to 10k	.76	.65	.53	.42	.34	.32
877-5XXX	11k to 20k	.84	.71	.59	.46	.38	.35

TABLE "B" STOCK VALUES—FOR 3 AND 5¼ WATT STYLES

Insert 3 digit number in place of XXX in Allied Stock No.

Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX
1.0	004	5.6	070	33	134	180	207	1000	300	5600	390		
1.1	007	6.2	074	36	140	200	210	1100	304	6200	397		
1.2	010	6.8	077	39	144	220	214	1200	307	6800	400		
1.3	014	7.5	080	43	150	240	220	1300	314	7500	407		
1.5	017	8.2	084	47	154	270	227	1500	320	8200	414		
1.6	020	9.1	087	51	160	300	230	1600	324	9100	420		
1.8	024	10	090	56	164	330	234	1800	330	10k	424		
2.0	027	11	094	62	167	360	240	2000	334	11k	427		
2.2	030	12	097	68	170	390	244	2200	337	12k	430		
2.4	034	13	100	75	174	430	250	2400	344	13k	437		
2.7	037	15	104	82	177	470	257	2700	350	15k	444		
3.0	040	16	107	91	180	510	264	3000	354	16k	447		
3.3	044	18	110	100	184	560	267	3300	357	18k	454		
3.6	047	20	114	110	187	620	274	3600	364	20k	457		
3.9	050	22	117	120	190	680	277	3900	367	....	.....		
4.3	057	24	120	130	197	750	284	4300	374	....	.....		
4.7	060	27	127	150	200	820	290	4700	380	....	.....		
5.1	067	30	130	160	204	910	297	5100	387	....	.....		

STYLE 200-8—8-WATT (Values to 10K) See Table "C" Below

Stock No.	Stock Values (Ohms) See Table "C" Below	1-9	10-49	50-99	100-249	250-499	500-Up
877-6XXX	1 to 1000	.71	.60	.50	.39	.32	.30
877-6XXX	1100 to 5000	.76	.65	.53	.42	.34	.32
877-6XXX	6000 to 10k	.87	.74	.61	.48	.39	.37

STYLE 200-12—12-WATT (Values to 50K) See Table "C" Below

877-7XXX	1 to 1000	.74	.63	.52	.41	.33	.32
877-7XXX	1100 to 5000	.79	.67	.55	.43	.36	.33
877-7XXX	6000 and 10k	.89	.79	.62	.49	.40	.37
877-7XXX	12.5 k to 20k	1.05	.89	.74	.58	.47	.44
877-7XXX	25k and 30k	1.10	.94	.77	.61	.50	.46
877-7XXX	50k	1.20	1.02	.84	.66	.54	.50

STYLE 200-20—20-WATT (In All Values Except * in Table "C")

877-8XXX	1 to 1000	.87	.74	.61	.48	.39	.37
877-8XXX	1200 to 5000	.89	.76	.62	.49	.40	.37
877-8XXX	6000 to 10k	1.10	.94	.77	.61	.50	.46
877-8XXX	12.5k to 20k	1.15	.98	.81	.63	.52	.48
877-8XXX	25k and 30k	1.25	1.06	.88	.69	.56	.53
877-8XXX	50k and 60k	1.45	1.23	1.02	.80	.65	.61
877-8XXX	100k	2.00	1.70	1.40	1.10	.90	.84

TABLE "C" STOCK VALUES—FOR 8, 12 AND 20 WATTS

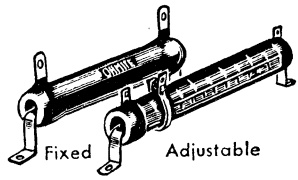
Insert 3 digit number, shown in XXX column, in place of XXX in Stock No.

Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX	Ohm	XXX
1	004	25	124	250	224	1000	300	4000	370	20k	457
1.5*	017	30*	130	300	230	1100*	304	4500	377	25k	467
2	027	35*	137	350	237	1200	307	5000	384	30k	474
3	040	40*	147	400	247	1250	310	6000	394	50k	504
4	054	50	157	450*	254	1500	320	7000	404	60k	514
5	064	75	174	500	260	1750	327	7500	407	100k	537
7.5*	080	100	184	600*	270	2000	334	8000	410	....	.....
10	090	125*	194	700	280	2250	340	9000	417	....	.....
12*	097	150	200	750	284	2500	347	10k	424	....	.....
15*	104	200	210	800	287	3000	354	12.5k	434	....	.....
20*	114	225*	217	900	294	3500	360	15k	444	....	.....

Resistors: Carbon, 141—Metal Glaze, 142—Metal Film, 143-5—Wirewound, 146-9

Wirewound Power Resistors by Memcor/Ohmite

FIXED TYPES. For use as voltage droppers, bias resistors, and bleeders in applications where resistance need not be varied. Resistance tolerance, ±5% for values 1 ohm or higher; ±10% for values below 1 ohm. **Adjustable Types.** For voltage dividing networks, power supplies—anywhere adjustable resistance is required. Feature fine alloy wire, wound on quality ceramic cores and insulated by vitreous enamel coatings. Tolerance ±10%. With slider and mounting brackets. Wattage rating applies only when entire resistance is in circuit; with center lug at intermediate point, rating is reduced in same proportion. Wattage ratings are for free air mounting. **See table "A" when ordering.** Av. shpg. wt., 5-50 watts, 4 oz.; 100 watts and up, 1 lb.



FIXED POWER RESISTORS

STYLE 270-12—12 WATTS—1¾-5/16"

Stock No.	Resistance (Ohms)	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
880-20XX	1.0, 1.5, 10, 15, 18, 33, 39, 47, 56, 68, 82, 100, 120, 150, 180, 220, 470, 560, 820, 1000	.74	.63	.52	.41	.33	.31
880-20XX	1200, 1500, 2200, 3300, 3900, 4700	.79	.67	.55	.43	.36	.33
880-2073	10k	.89	.76	.62	.49	.40	.37
880-20XX	12k, 15k, 51	1.05	.89	.74	.58	.47	.44
880-2079	22k	1.10	.94	.77	.61	.50	.46
880-2085	51k	1.20	1.02	.84	.66	.54	.50

STYLE 270-25—25 WATTS—2x9/16"

Stock No.	Resistance (Ohms)	1-9	10-49	50-99	100-249	250-499	500-Up
880-21XX	1, 2, 3, 4, 5, 10, 15, 25, 50, 75, 100, 150, 200, 250, 500, 750, 800, 1000	.92	.78	.64	.51	.41	.39
880-21XX	1500, 2000, 2500, 3000, 4000, 5000	.95	.81	.67	.52	.43	.40
880-21XX	6000, 7500, 10k	1.15	.98	.81	.63	.52	.48
880-21XX	15k, 20k	1.20	1.02	.84	.66	.54	.50
880-21XX	25k, 30k	1.30	1.11	.91	.72	.59	.55
880-21XX	50k, 60k	1.55	1.32	1.09	.85	.70	.65
880-2188	70k	1.80	1.53	1.26	.99	.81	.76
880-2192	100k	2.05	1.74	1.44	1.13	.92	.86

STYLE 270-50—50 WATTS—4x9/16"

Stock No.	Resistance (Ohms)	EACH 1-9	10-49	50-99	100-Up
880-2201	1	1.95	1.66	1.37	1.07
880-22XX	2, 3, 4, 5, 10, 25, 50, 75, 100, 150, 200, 250, 500, 750, 800, 1000	1.45	1.23	1.02	.80
880-22XX	1500, 2000, 2500, 5000	1.45	1.23	1.02	.80
880-2273	10k	1.55	1.32	1.09	.85
880-2278	20k	1.70	1.45	1.19	.94
880-2280	25k	1.95	1.66	1.37	1.07
880-2284	50k	2.20	1.87	1.54	1.21
880-2292	100k	2.70	2.30	1.89	1.49

STYLE 270-100—100 WATTS—6½x¾"

Stock No.	Resistance (Ohms)	1-9	10-49	50-99	100-Up
880-23XX	1, 2, 3	2.80	2.38	1.96	1.54
880-23XX	4, 5, 10, 25, 50, 75, 100, 125, 150, 250, 500, 1000	2.00	1.70	1.40	1.10
880-23XX	1500, 2000, 2500	2.05	1.74	1.44	1.13
880-23XX	7500, 10k	2.20	1.87	1.54	1.21
880-2378	20k	2.35	2.00	1.65	1.29
880-2384	50k	2.80	2.38	1.96	1.54
880-2392	100k	3.45	2.93	2.42	1.90

STYLE 270-175—175 WATTS—8½x1⅛"

Stock No.	Resistance (Ohms)	1-9	10-49	50-99	100-Up
880-24XX	3, 5	4.20	3.57	2.94	2.31
880-24XX	10, 25, 50, 75, 100, 125, 150	3.00	2.55	2.10	1.65
880-2473	10k	3.35	2.85	2.35	1.84
880-2490	75k	4.00	3.40	2.80	2.20
880-2492	100k	4.25	3.61	2.98	2.34

STYLE 270-225—225 WATTS—10½x1⅛"

Stock No.	Resistance (Ohms)	1-9	10-49	50-99	100-Up
880-25XX	1, 2, 3, 4, 5	4.70	4.00	3.29	2.59
880-25XX	10, 25, 50, 75, 100, 150, 250, 500, 1000	3.30	2.81	2.31	1.82
880-25XX	2000, 2500, 3000, 5000	3.35	2.85	2.35	1.84
880-2573	10k	3.75	3.19	2.63	2.06
880-25XX	15k, 20k	3.80	3.23	2.66	2.09
880-2584	50k	4.05	3.44	2.84	2.23
880-2592	100k	4.20	3.57	2.94	2.31

DIVIDOHM ADJUSTABLE RESISTORS

STYLE 210-12—12 WATTS—1¾x5/16"

Stock No.	Resistance (Ohms)	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
880-10XX	1, 2, 3, 5, 7.5, 10, 15, 20, 25, 50, 75, 100, 150, 250, 300, 400, 500, 750, 1000	1.50	1.28	1.05	.83	.68	.63
880-10XX	1250, 1500, 2000, 2500, 3000, 3500, 5000	1.55	1.32	1.09	.85	.70	.65
880-10XX	7000, 7500, 8000, 10k	1.70	1.45	1.19	.94	.77	.71

880-7115. Extra Slider for 12-Watt Types (#2115) 1-9.....Ea .30

STYLE 210-25—25 WATTS—2x9/16"

Stock No.	Resistance (Ohms)	1-9	10-49	50-99	100-249	250-499	500-Up
880-11XX	1, 2, 3, 5, 10, 15, 20, 25, 50, 75, 100, 150, 250, 300, 400, 500, 750, 1000	1.65	1.40	1.16	.91	.74	.69
880-11XX	1500, 2000, 2500, 3000, 5000	1.70	1.45	1.19	.94	.77	.71
880-11XX	7500, 10k	1.80	1.53	1.26	.99	.81	.76
880-11XX	15k, 20k	1.90	1.62	1.33	1.05	.86	.80
880-1180	25k	2.05	1.74	1.44	1.13	.92	.86

STYLE 210-50—50 WATTS—4x9/16"

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-Up
880-1201	1	2.80	2.38	1.56	1.54
880-12XX	2, 3, 4, 5, 10, 25, 50, 75, 100, 150, 200, 250, 300, 400, 500, 750, 1000	2.20	1.87	1.54	1.21
880-12XX	1500, 2000, 2500, 4000, 5000	2.25	1.91	1.58	1.24
880-1273	10k	2.30	1.96	1.61	1.27
880-12XX	15k, 20k	2.40	2.04	1.68	1.32
880-12XX	25k, 30k, 40k	2.70	2.30	1.89	1.49
880-1284	50k	2.90	2.47	2.03	1.60
880-1292	100k	3.45	2.93	2.42	1.90

STYLE 210-75—75 WATTS—6x9/16"

Stock No.	Resistance (Ohms)	1-9	10-49	50-99	100-Up
880-13XX	1, 2	3.15	2.68	2.21	1.73
880-13XX	5, 10, 15, 25, 50, 100, 200, 250, 300, 1000	2.55	2.17	1.79	1.40
880-1354	2000	2.55	2.17	1.79	1.40

880-7121. Extra Slider 25, 50 and 75-Watt Types (2121) 1-4.Ea .30

STYLE 210-100—100 WATTS—6½x¾"

Stock No.	Resistance (Ohms)	1-9	10-49	50-99	100-Up
880-14XX	1, 2, 3	3.60	3.06	2.52	1.98
880-14XX	4, 5, 10, 25, 50, 100, 250, 500, 1000	2.80	2.38	1.96	1.54
880-1467	5000	2.85	2.42	2.00	1.57
880-14XX	25k, 40k	3.55	3.02	2.49	1.95
880-1492	100k	4.35	3.70	3.05	2.39

880-7125. Extra Slider for 100-Watt Types (#2125). 1-4.....Ea. .30

STYLE 210-225—225 WATTS—10½x1⅛"

Stock No.	Resistance (Ohms)	1-9	10-49	50-99	100-Up
880-15XX	1, 2, 3, 4, 5	6.00	5.10	4.20	3.30
880-15XX	10, 25, 50, 100, 250, 500, 1000	4.60	3.91	3.22	2.53
880-1567	5000	4.70	4.00	3.29	2.54
880-1573	10k	4.95	4.21	3.47	2.72

880-7133. Extra Slider for 225-Watt Types (#2133). 1-4.....Ea. .45

EXTRA MOUNTING BRACKETS FOR RESISTORS

Stock No.	Type No.	For Resistor Core O.D.	Watts	PKG. OF 100 1-2	3-4	5-Up
877-3005	5	5/16"	12	6.25	5.00	4.55
877-3009	9	9/16"	25, 50, 75	5.57	4.46	4.05
877-3012	12	¾"	100	11.15	8.90	8.10
877-3018	18	1⅛"	175, 225	11.15	8.92	8.10

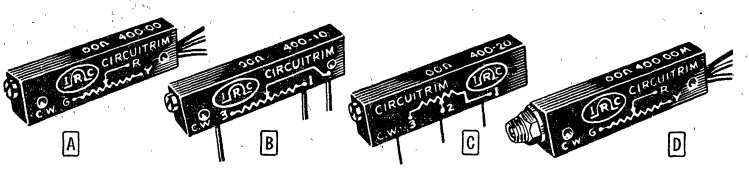
ORDER INFORMATION—TABLE A

To complete Allied Stock No. insert 2 digit number, shown in XX column after value, in place of XX in Allied Stock No.

Ohms	XX	Ohm	XX	Ohm	XX	Ohm	XX	Ohm	XX	Ohm	XX	Ohm	XX	Ohm	XX
.51	00	15	09	68	21	220	33	820	46	3300	60	8000	71	50k	84
1.0	01	18	10	75	22	250	34	1000	48	3500	61	10k	73	51k	85
1.5	02	20	11	82	23	300	36	1200	50	3900	62	12k	75	60k	86
2.0	03	25	12	100	24	400	38	1250	51	4000	63	15k	77	70k	88
3.0	04	33	13	120	26	470	39	1500	53	4700	65	20k	78	75k	90
4.0	05	39	15	125	27	500	40	2000	54	5000	67	22k	79	100k	92
5.0	06	47	17	150	29	560	42	2200	56	6000	68	25k	80	.....	.....
7.5	07	50	18	180	31	750	44	2500	57	7000	69	30k	81	.....	.....
10.0	08	56	19	200	32	800	45	3000	59	7500	70	40k	82	.....	.....

Trimmer Potentiometers

SERIES 400 WIREWOUND TRIMMER POTENTIOMETERS



MIL-R-27208. Absolute min. resistance, 1 ohm or 0.2%. Tol. ±5%. 1 W at 70° C. 22 turns. .1 oz.-in. to 8 oz.-in. −65°C to +150°C; coefficient, ±50 PPM/°C. Insul. res., 1000 meg. Diel. strength, 1000 VAC. Type 00-3 #30 AWG Teflon insul. leads; Type 10-in-line PC pins (MIL RT-12); Type 20-staggered pins (MIL-RT-11). 1.25x.190x.315". Two .093" diameter mounting holes. Wt. 2 oz.
Important—See Table A Below Before Ordering.

Stock No.	Mfr's Type	Fig.	Resistance Values (Ohms) Specify Value	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-44 RC	400-00	A	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	7.50	6.00	5.45	5.00	4.62	4.29	4.00
822-44 RC	400-00	A	20k only	8.25	6.60	6.00	5.50	5.08	4.71	4.40
822-44 RC	400-00	A	50k only	9.02	7.22	6.56	6.02	5.55	5.16	4.81
822-46 RC	400-10	B	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	7.50	6.00	5.45	5.00	4.62	4.29	4.00
822-46 RC	400-10	B	20k only	8.25	6.60	6.00	5.50	5.08	4.71	4.40
822-46 RC	400-10	B	50k only	9.02	7.22	6.56	6.02	5.55	5.16	4.81
822-47 RC	400-20	C	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	7.50	6.00	5.45	5.00	4.62	4.29	4.00
822-47 RC	400-20	C	20k only	8.25	6.60	6.00	5.50	5.08	4.71	4.40
822-47 RC	400-20	C	50k only	9.02	7.22	6.56	6.02	5.55	5.16	4.81

SERIES 450 CERMET TRIMMER POTENTIOMETERS

TYPES 450-00, 450-10, and 450-20. Infinite resolution. Power rating is .75 watt at 85°C. Operates from −55°C to +150°C. Meet MIL-R 22097. Size RJ-12. Has 24-turn leadscrew adjustment, humidity-proof construction. Excellent high frequency characteristics. Insulation resistance, 1000 megohms; dielectric strength, 900 volts, 300 working volts, AC or DC. **Type 450-00** has three 10" Teflon insulated leads. **Type 450-10 and 450-10** have .028" diameter pins ½" long. PC pin placement for **450-10** is per RJ-12 MIL style and for **450-20** pins is per RJ-11 MIL style. Mounting holes .093" diameter on 1" centers. 1.25x.190x.315". Precision made for reliable service under conditions specified. **Important—See Table A Below Before Ordering.** Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Res. Tol.	Terminal Style	Resistance Values (Ohms) Specify Values Wanted	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-48 RC	450-00	A	10%	Tef. leads	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg	8.13	6.50	5.91	5.42	5.00	4.64	4.33
822-52 RC	450-10	B	10%	PC pins		7.38	5.90	5.36	4.92	4.54	4.21	3.93
822-49 RC	450-00	A	20%	Tef. leads		7.05	5.64	5.13	4.70	4.34	4.03	3.76
822-53 RC	450-10	B	20%	PC pins		6.25	5.00	4.55	4.17	3.85	3.57	3.33
822-54 RC	450-20	C	10%	PC pins		7.38	5.90	5.36	4.92	4.54	4.21	3.93
822-55 RC	450-20	C	20%	PC pins		6.25	5.00	4.55	4.17	3.85	3.57	3.33

SERIES 600 WIREWOUND TRIMMER POTENTIOMETERS

MIL-R-27208. Dimensions per MIL-RT-11, 1.25x.275x.315". Rated 1 watt at 70°C. Electrical travel, 22 turns with stops and slip clutch. Temperature range: −65°C to +150°C. Coefficient, ±50 PPM/°C. Absolute minimum resistance is 1 ohm or 0.2%, whichever is greater. Insulation resistance, 1000 megohms. Dielectric strength, 1000 volts, AC. Torque, 0.1 oz.-in. min., 8-oz.-in. maximum. Available in two styles: **Type 600-00** has three No. 30 AWG flexible Teflon insulated leads; **Type 600-20** has three staggered printed circuit pins as per MIL RT-11. †In Type No. indicates panel mtg., others have two .093" diameter holes. Wirewound for slightly greater power handling capacity. **Important—See Table A Below Before Ordering.** Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Resistance Values (Ohms) Specify Value	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-60 RC	600-00	A	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	7.50	6.00	5.45	5.00	4.62	4.29	4.00
822-60 RC	600-00	A	20k only	8.25	6.60	6.00	5.50	5.08	4.71	4.40
822-60 RC	600-00	A	50k only	9.02	7.22	6.56	6.02	5.55	5.16	4.81
822-62 RC	600-20	C	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	7.50	6.00	5.45	5.00	4.62	4.29	4.00
822-62 RC	600-20	C	20k only	8.25	6.60	6.00	5.50	5.08	4.71	4.40
822-62 RC	600-20	C	50k only	9.02	7.22	6.56	6.02	5.55	5.16	4.81
822-61 RC	600-00M†	D	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	8.73	6.98	6.70	6.06	5.50	5.04	4.68
822-61 RC	600-00M†	D	20k only	9.48	7.58	7.25	6.56	5.96	5.46	5.08
822-61 RC	600-00M†	D	50k only	10.25	8.20	7.81	7.08	6.43	5.91	5.49

SERIES 650 CERMET POTENTIOMETERS

Metal glaze version of series 600 above. Provides infinite resolution output, low reactance in high frequency applications. Meets specifications of MIL-R-22097C. Power rating: ¾ watt at 85°C. Temperature range, −55°C to +175°C. Temperature coefficient, ±250 PPM/°C. Dielectric strength, 1000 VAC. Insulation resistance, 1000 megohms. Contact resistance variation, ±3% or 20 ohm, whichever is greater. End resistance, 2 ohms maximum. 650-00, three #30 AWG Teflon leads, .093" mounting holes. 650-20, staggered PC pins, per RJ-11 Mil Style. Types with "M" in Mfr's Type No. indicate panel mounting. 35/64x25/64x15/16". Same reliable service as models above. **Important—See Table A Below Before Ordering.** Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Res. Tol.	Terminal Style	Resistance Values (Ohms Specify Values Wanted)	EACH 1-2	3-4	5-9	10-24	25-49	50-99
822-63 RC	650-00	A	10%	Teflon® leads	100, 200, 500, 1000,	8.13	6.50	5.91	5.42	5.00	4.64
822-65 RC	650-20	C	10%	PC pins	2k, 5k, 10k, 20k, 50k,	7.38	5.90	5.36	4.92	4.54	4.21
822-64 RC	650-00M	D	10%	Panel mount Tef. leads	100k, 200k, 500k, 1 Meg	9.35	7.48	7.16	6.48	5.88	5.39

TABLE A—IMPORTANT ORDERING INFORMATION

HOW TO ORDER: Complete the Stock No. Shown By Placing the Designated Resistance Code For Ohms Value Where RC Appears in the Stock No. Each Particular Listing Shows What Ohm Values Are Available For Each Series.

VALUE Ohms	RC	VALUE Ohms	RC	VALUE Ohms	RC	VALUE Ohms	RC	VALUE Ohms	RC	VALUE Ohms	RC
10	01	125	17	2000	32	25k	47	125k	62	450k	77
20	04	200	20	2500	35	30k	50	180k	65	500k	80
50	07	250	23	5000	38	50k	53	200k	68	600k	83
75	10	500	26	10k	41	75k	56	250k	71	1 Meg	87
100	13	1000	29	20k	44	100k	59	300k	74	2 Meg	90

205 AND 255 SERIES CIRCUITRIM SUBMINIATURE TRIMMER POTENTIOMETERS

205 SERIES. ½" square precision miniature wirewound trimmers, rated 1 watt at 70° C. **RT22C2P** (205-10) and **RT22C2L** (205-00) styles meet all requirements of **MIL-R-27208.** 25-turn, self-locking anti-backlash construction provides outstanding settability. Diallyl phthalate cases completely sealed with compression-loaded Teflon® and epoxy seals. Precious metal alloy contacts. Resistance tolerance, ±5%. Dielectric strength, 900 VAC. Temperature coefficient, ±50 PPM/°C maximum over operating temperature range of −65°C to +175°C. MIL rating of ¾ watt at 85°C.

SERIES 255. Infinite resolution Cermet element. MIL rating of ¾ watt at 70°C. Better high-frequency characteristics. Contact resistance variation, 3% or 20 ohms, whichever is greater. Tolerance, ±10%. Operating temperature range, −55°C to +150°C. Temperature cofficient: ±100 PPM/°C. Dielectric strength, 900 VAC. 25-turn self-locking, anti-backlash construction. Precious metal alloy contacts. Diallyl phthalate cases, compression loaded Teflon® and epoxy seals. **Important—See Table A on Previous Page for Information on How to Order.**

FLEXIBLE-LEAD MINIATURE TRIMMERS

205-00. Precision miniature trimmers for a wide variety of applications in military and industrial devices. Correspond to **MIL Style RT22C2L.** Compact, diallyl phthalate case with compression-loaded Teflon and epoxy seals. Precious metal alloy contacts for long dependable operation. Resistance tolerance, ±5%. MIL rating of ¾ watt at 85° C. Other specifications above. Three #30 AWG Teflon insulated leads, 6" long. Two .093" diameter through-holes on .523" centers for fast, easy mounting. Screwdriver slot adjustment for accurate settings. Size, ½x½x3/16". Av. shpg. wt. 2 oz. **Important—See Table A on Previous Page For Information On How to Order.**

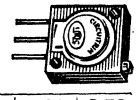
Stock No.	Mfr's Type	Resistance Values (Ohms) Specify Values Wanted		EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-34 RC	205-00	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	Mil Style RT22C2L	7.10	5.68	4.72	4.48	4.25	4.01	3.78
822-34 RC	205-00	20k only		7.83	6.26	5.18	4.92	4.66	4.40	4.14
822-34 RC	205-00	50k only	50 ohms thru 20k	8.75	7.00	5.65	5.37	5.09	4.80	4.52

FLAT-MOUNTING PRINTED-CIRCUIT POTENTIOMETERS

205-10. Same as **MIL Style RT22C2P.** Printed circuit pins arranged for mounting on flat side. Pins are located on 0.1 inch radius for mounting in conventional transistor sockets. Thru holes of .075 inch dia. on .523 inch centers for mounting. Screwdriver slot adjustment for resistance value. Overall size, ½x½x¼". **255-10.** MIL Style **RJ22BP.** Infinite resolution metal glaze element. Pins are located on flat side on 0.1 inch radius for transistor socket mounting. .075 inch diameter mounting holes. Overall size, ½x½x¼". Wt. 2 oz. ±10%. **See Table A on Previous Page For Ordering.**

822-35 RC	205-10	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	Mil Style RT22C2P	7.10	5.68	4.72	4.48	4.25	4.01	3.78
822-35 RC	205-10	20k only		7.83	6.26	5.18	4.92	4.66	4.40	4.14
822-35 RC	205-10	50k only		8.75	7.00	5.65	5.37	5.09	4.80	4.52
822-38 RC	255-10	100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg		8.13	6.50	5.62	5.35	5.06	4.77	4.50

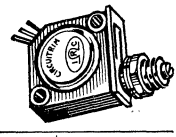
EDGE MOUNTING PRINTED-CIRCUIT POTENTIOMETERS



205-208. Precision wirewound potentiometer with 205 Series specs described above. Printed circuit pins on end to permit edge mounting. Three ½" long pins are in-line .0.1" apart. 2 mounting holes on .523" centers. Screwdriver slot adjustment. Size, ½x½x3/16". **255-208.** MIL Style **RJ22BW.** Metal glaze element. Same pin arrangement as 205-208. ½x½x3/16". Av. shpg. wt. 2 oz. ±10%. **Important—See Table A on Previous Page For Ordering Information.**

822-37 RC	205-208	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	Mil Style RT22C2W	7.10	5.68	4.72	4.48	4.25	4.01	3.78
822-37 RC	205-208	20k only		7.83	6.16	5.18	4.92	4.66	4.40	4.14
822-37 RC	205-208	50k only		8.75	7.00	5.65	5.37	5.09	4.80	4.52
822-40 RC	255-208	100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg		8.13	6.50	5.62	5.35	5.06	4.77	4.50

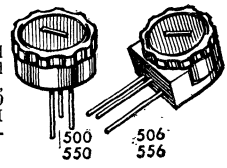
PANEL MOUNTING POTENTIOMETERS



255-60. MIL Style **RJ22BL.** Infinite resolution metal glaze pots. Ideal when entire circuitry must be vacuum encapsulated and still allow trimmer adjustment from exterior. Encapsulant cannot penetrate trimmer housing or seals. See specifications above. One-piece header and side flange is sealed to case. Only .276 by .558 inches, with depth behind panel of .550 inches. Mount by a ¼-inch long, 10-32 bushing. Mounting hardware included. Screwdriver-type slotted shaft for quick-adjustment. 10" long. Teflon-insulated leads for standard point-to-point wiring. Sh. wt. 2 oz. ±10%. **See Table A on Previous Page For Ordering.**

822-39 RC	255-60	100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg	11.55	9.24	8.57	8.00	7.42	6.85	6.28

SERIES 500 AND 506 TRIMMER POTENTIOMETERS



CIRCUITRIM 500. ½" round single turn trimmer. Industrial unit passes many MIL tests. Cover designed for fingertip or screwdriver control. Top adjusted. Gold plated PC pins on .1" radius. 320° adjustment, positive stops. 1 watt at 70°C derates to 0 watt at 150°C. Temperature coefficient: ±100 PPM/°C. Tolerance ±10%. Wt. 2 oz.

CIRCUITRIM 506. Same as Circuitrim 500 but designed for front adjustment, Stands ⅝" above board. Gold plated pins on .1" radius. Positive 30 oz-in. stops, 320° electrical angle. 1 watt at 70°C, derates to 0 watts at 150°C. Temperature coefficient: ±100 PPM/°C. Tolerance ±10%. Wt. 2 oz. **See Table A on Previous Page For Ordering Information.**

CIRCUITRIM 500 AND 506 ½"-ROUND WIREWOUND COMMERCIAL/INDUSTRIAL TRIMMERS

Stock No.	Mfr's Type	Resistance Values (Ohms) Specify Values Wanted	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-56 RC	500	10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k	3.00	2.40	2.18	2.00	1.85	1.71	1.60
822-56 RC	500	20k only	3.30	2.62	2.40	2.20	2.03	1.89	1.76
822-56 RC	500	50k only	3.77	3.02	2.75	2.52	2.32	2.16	2.01
822-57 RC	506	10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k	3.92	3.14	2.85	2.62	2.42	2.24	2.09
822-57 RC	506	20k only	4.32	3.46	3.15	2.88	2.66	2.47	2.31
822-57 RC	506	50k only	4.92	3.94	3.58	3.28	3.02	2.81	2.63

SERIES 550 AND 556 CERMET TRIMMER POTENTIOMETERS

TYPE 550. Same as series 500 above, but ½" round cermet. Offers essentially infinite resolution and excellent high-frequency characteristics. Molded terminals. High-static stop strength. Rated ¾ watt at 70°C. Temperature range is from −25°C to +150°C. Tolerance, ±30%. Standard mount, ½x15/64x½" dia. Average shpg. wt. 2 oz. TYPE 556. Same as 550, but vertical mount. ½x5/16x9/16". Wt. 2 oz. **Important—See Table A on Previous Page For Ordering Information.**

Stock No.	Mfr's Type	Resistance Values (Ohms) Specify Values Wanted	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-58 RC	550	50, 100, 200, 500, 1k, 2k, 10k, 20k, 50k, 100k, 500k, 1 meg, 2 meg	3.02	2.42	2.20	2.02	1.86	1.73	1.61
822-59 RC	556	10, 20, 50, 100, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 500k, 1 meg, 2 meg	3.95	3.16	2.87	2.63	2.43	2.26	2.11

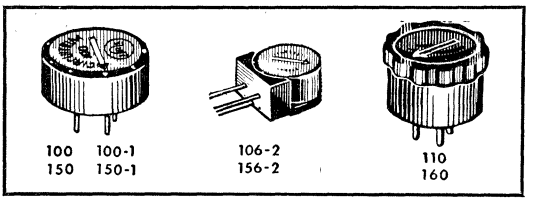
See Table A on Preceding Page Before Ordering

Precision Trimmer Potentiometers

TABLE A IMPORTANT ORDERING INFORMATION

TO ORDER: COMPLETE THE STOCK NUMBER SHOWN BY PLACING THE DESIGNATED RESISTANCE CODE FOR OHM VALUE WHERE RC APPEARS IN THE STOCK NUMBER. EACH PARTICULAR LISTING SHOWS WHAT OHM VALUES ARE AVAILABLE FOR EACH SERIES.

VALUE	RC	VALUE	RC	VALUE	RC	VALUE	RC	VALUE	RC	VALUE	RC
10	01	125	17	2K	32	25K	47	125K	62	450K	77
20	04	200	20	2.5K	35	30K	50	180K	65	500K	80
50	07	250	23	5K	38	50K	53	200K	68	600K	83
75	10	500	26	10K	41	75K	56	250K	71	1 Meg	87
100	13	1K	29	20K	44	100K	59	300K	74	2 Meg	90



SERIES 100 WIREWOUND. Direct trimming action for close, fast response. Unaffected by mechanical or thermal shock. Platinum-palladium or gold alloy moving contacts and sliders. Gold-plated PC pins or wire leads. Teflon® ins. flexible leads. Tol., ±5%; rated 1 watt at 50°C; temp. range, −55°C to +150°C; temp. coeff., ±70 PPM/°C; mechanical and electrical rotation, 320°. Meet MIL-R-27208A environ. req. Diallyl phthalate moisture-sealed cases meet MIL-STD-202B.

SERIES 150 CERMET. Above, but infinite resolution metal glaze element fused on ceramic. Rated ¾ watt at 70°C; resistance tol., ±10%; contact res. variation, 3% or 20 ohms, whichever is greater; temp. range, −55°C to +150°C; temp. coeff., ±150 PPM/°C. Meet MIL-R-22097B environ. req.

MODEL 100 AND 100-1 WIREWOUND, 150 AND 150-1 CERMET ½" ROUND TRIMMER POTENTIOMETERS

Moisture-sealed diallyl phthalate case, screwdriver-slot rotor. Models 150, 150-1 feature simplified design and close, fast response. Models 100, 100-1 have precision wirewound elements. Models 100 and 150 pins are .187" long for standard PC socket; 100-1 and 150-1 are .300" long for inserting into PC board and crimping. All pins on .100" radius. .225" above board. Av. wt., 2 oz.

IMPORTANT—SEE TABLE A ABOVE BEFORE ORDERING

Stock No.	Mfr's Type No.	Terminal Style or Mounting	Resistance Values (Ohms) Specify Values Wanted	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-12RC	100	Tr. Socket	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	4.38	3.50	3.30	3.00	2.70	2.45	2.30
822-12RC	100	Tr. Socket	20k only	5.63	4.50	4.10	3.75	3.46	3.22	3.00
822-12RC	100	Tr. Socket	50k only	6.45	5.16	4.40	4.00	3.65	3.40	3.20
822-13RC	100-1	PC	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	4.38	3.50	3.30	3.00	2.70	2.45	2.30
822-13RC	100-1	PC	20k only	5.63	4.50	4.10	3.75	3.46	3.22	3.00
822-13RC	100-1	PC	50k only	6.45	5.16	4.40	4.00	3.65	3.40	3.20
822-26RC	150	Tr. Socket	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 Meg	4.50	4.50	4.50	4.05	3.75	3.52	3.38
822-27RC	150-1	PC	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 Meg	4.50	4.50	4.50	4.05	3.75	3.52	3.38

MODEL 106-2 WIREWOUND AND 156-2 CERMET VERTICAL-MOUNT PC PIN TRIMMER POTENTIOMETERS

Models 106-2, 156-2 vertical-mount PC pin trimmers are similar to models 100 and 150. Designed for printed circuit applications where boards are stacked and adjustment from edge of board is required. In moisture-sealed diallyl phthalate case. Size, 9/16x½x 5/16" deep when mounted. Gold-plated pins, .020" dia. on .100" spacing. Screwdriver-slot adjustment. Av. shpg. wt., 2 oz.

IMPORTANT: SEE TABLE A ABOVE BEFORE ORDERING

Stock No.	Mfr's Type No.	Terminal Style or Mounting	Resistance Values (Ohms) Specify Values Wanted	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-18RC	106-2	PC	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	4.75	3.80	3.80	3.42	3.17	2.98	2.85
822-18RC	106-2	PC	20k only	6.25	5.00	4.40	3.96	3.67	3.45	3.30
822-18RC	106-2	PC	50k only	6.75	5.40	5.00	4.50	4.17	3.92	3.75
822-29RC	156-2	PC	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 Meg	5.00	5.00	5.00	4.50	4.17	3.92	3.75

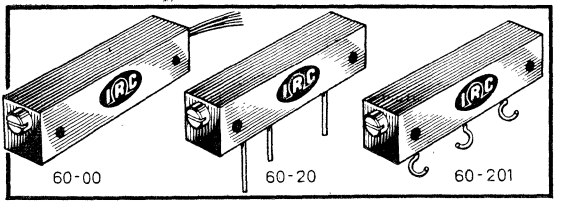
MODEL 110 WIREWOUND AND 160 CERMET FINGERTIP-ADJUST TRIMMER POTENTIOMETERS

Same as Models 100 and 150 except have round 9/16" knurled knob rotor in addition to screwdriver-slot adjustment. Wt., 2 oz.

IMPORTANT—SEE TABLE A ABOVE BEFORE ORDERING

Stock No.	Mfr's Type No.	Terminal Style or Mounting	Resistance Values (Ohms) Specify Values Wanted	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-22RC	110	PC	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	4.75	3.80	3.80	3.42	3.17	2.98	2.85
822-22RC	110	PC	20k only	6.25	5.00	4.40	3.86	3.67	3.45	3.30
822-22RC	110	PC	50k only	6.75	5.40	5.00	4.50	4.17	3.92	3.75
822-30RC	160	PC	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 Meg	5.00	5.00	5.00	4.50	4.17	3.92	3.75

TYPE 60 LOW COST WIREWOUND TRIMMERS



- Dependable Performance
- Economical Prices
- Built-in Reliability
- Immediate Availability

Rated 1 watt at 70° C, with temperature range of −55° C to +125° C. Tolerance, ±10%. Rotation, 22 turns (±5). Shaft torque, 8 oz. in. maximum. Temperature coefficient, ±70 PPM/° C. 60-00 has three #30 AWG Teflon® insulated leads; 60-20 has three staggered PC pins; 60-201 has two pins and one hook terminal. Meets load life, humidity, shock, vibration, seal tests. 1.250 x .275 x .315". Panel mount type available. Values: 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k. 2 oz.

Stock No.	Mfr's Type	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-06RC	60-00	5.50	4.40	4.00	3.67	3.38	3.14	2.93
822-08RC	60-20	4.00	3.20	2.90	2.65	2.45	2.28	2.13
882-10RC	60-201	5.50	4.40	4.00	3.67	3.38	3.14	2.93

Trimmers, 150-160—Linears, 160-171—Mil, 172—Controls, 174-5—Coils, 176-9—Rheostats, 180

Precision Trimmers and Potentiometers

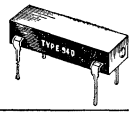
TRIMMERS SECTION

TRW ELECTRONIC COMPONENTS

TYPE 940 AND 990 TRIMMERS IN DUAL-IN-LINE PACKAGE

Lead-screw activated 18-turn wirewound trimmer in new dual in-line package for simplified PC board layout. Activating screw is flush mounted so the trimmer can be handled by the same automatic assembly equipment which is now used on dual in-line integrated circuits. Trimmers are tested to meet MIL-R-27208. Stands just .200" maximum off printed circuit board. Tolerance, ±10%.

Rated 1 watt at 40° C. Temperature range: −65° to +125° C. Coefficient: ±50 PPM/° C maximum: Dielectric strength: 500 volts AC. Shaft torque: 8-oz.-inches. **Important—See Table A Ordering Information on Previous Page Before Ordering. Av. shpg. wt., 1 oz.**



Stock No.	Mfr's Type	Resistance Values in Ohms (Specify Values Wanted)	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-79 RC	940	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	5.25	4.20	3.75	3.35	3.00	2.80	2.60

TYPE 990 CERMET TRIMMERS IN DUAL-IN-LINE PACKAGE

Dual-in-line in package same as wirewound type 940. Cermet element provides essentially infinite resolution and permits higher resistance ranges. Tested to meet many of Mil-R-22097 specs. Rated ¾ w. @ 40°C derates to 0 W @ 150°C. Isolation 500VAC. 1 oz.

822-84 RC	990	10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 Meg, ±10%	5.25	4.20	3.75	3.35	3.00	2.80	2.60

TYPES 700 AND 750 ⅜" SQUARE MINIATURE TRIMMERS

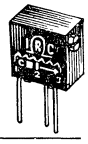
700 SERIES. Rated 1 watt at 70° C. ¾ watt at 85° C. Meet environmental and life requirements of MIL-R-27208. 21 (±2) turns; torque, 5.0 oz.-in. max. Tol., ±5%. Temp. range; −65° to +175° C; Coefficient; ±50 PPM/° C. Ins. resistance: 1000 meg at 500 VDC. Dielectric strength: 900 VAC. 700-10 (RT 24C2P), PC pins arranged for mounting on flat side. 700-307, PC pins for edge-mounting; side adjustment; 700-308-PC pins; top adjustment. 1 oz.*

822-67 RC	700-10	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	9.88	7.90	7.18	6.58	6.08	5.64	5.27
822-67 RC	700-10	20k only	11.17	8.94	8.13	7.45	6.88	6.39	5.96
822-67 RC	700-10	50k only	14.45	11.56	10.51	9.63	8.89	8.26	7.71
822-68 RC	700-307	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	9.88	7.90	7.18	6.58	6.08	5.64	5.27
822-68 RC	700-307	20k only	11.17	8.94	8.13	7.45	6.88	6.39	5.96
822-68 RC	700-307	50k only	14.45	11.56	10.51	9.63	8.89	8.26	7.71
822-69 RC	700-308	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	9.88	7.90	7.18	6.58	6.08	5.64	5.27
822-69 RC	700-308	20k only	11.17	8.94	8.13	7.45	6.88	6.39	5.96
822-69 RC	700-308	50k only	14.45	11.56	10.51	9.63	8.89	8.26	7.71

750 SERIES. Infinite resolution metal glaze version of 700 series above. 19 (±2) turns; torque, 5 oz.-in. maximum. Meet environmental and life requirements of MIL-R-22097, **Characteristic "B"**. Temperature range: −65° to +150° C. Rated ½ watt at 70° C, 0 at 150° C. TYPE 750-10 (RJ 24BP) has PC pins arranged for flat mounting; Type 750-307 has PC pins for edge mounting with side adjustment; Type 750-308 has PC pins with top adjustment. Tolerance: ±10%. **Important—See Table A on Previous Page Before Ordering.** 1 oz.

822-70 RC	750-10	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg	9.88	7.90	6.50	6.18	5.85	5.72	5.52
822-71 RC	750-307	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg	9.88	7.90	6.50	6.18	5.85	5.72	5.52
822-72 RC	750-308	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg	9.88	7.90	6.50	6.18	5.85	5.72	5.52

TYPE 800 AND 850 5/16" SQUARE SUBMINIATURE TRIMMERS



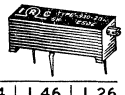
800 SERIES. Precision wirewound subminiature trimmer rated 0.6 watt at 70° C. Meets following environmental tests of MIL-R-27208 rotational life; load life; moisture; shock; vibration. Total of 15 (±2) turns. Torque, 3.0 oz.-inches maximum. Tolerance, ±5%. Operating temperature range: −65° to +150° C. Temperature coefficient: ±50 PPM/° C maximum. Insulation resistance: 1000 megohms at 500 VDC. Dielectric strength: 900 VAC. PC pins for edge-mounting, screw adjustment on side. **Important—See Table A on Previous Page Before Ordering.** 1 oz.

Stock No.	Mfr's Type	Resistance Values in Ohms (Specify Values Wanted)	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-73 RC	800-20	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	7.38	5.90	5.36	4.92	4.54	4.21	3.93
822-73 RC	800-20	20k only	8.75	7.00	6.36	5.83	5.00	4.67	4.12

850 SERIES. Infinite resolution metal glaze version of Series 800. Rated ½ watt at 70° C. 13 (±2) turns; torque; 3 oz.-inches-maximum. Meets the following environmental tests of MIL-R-22097: rotational life; load life; moisture; shock and vibration. Temperature range; −65° to +125° C, PC pins for edge-mounting, screw adjustment on side. Tolerance, ±10%. Average wt., 1 oz.*

822-74 RC	850-20	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg	7.38	5.90	5.36	4.92	4.54	4.21	3.93

TYPE 910 SERIES—¾" RECTANGULAR TRIMMER

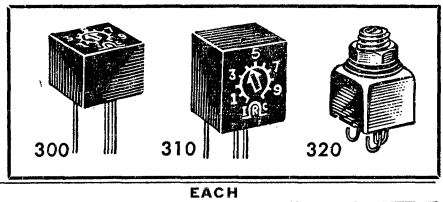


Two body sizes: 910-20 is .16" wide with pins .05" each side center line. Case is .75"x.16"x.31". Type 930-20 has .26" thick case. Pins are .1" each side of center. 1 Watt @ 40°C. Meets Mil-Std-202. Temp. range. −5° to +125°C. 1 oz.*

822-77 RC	910-20	Std. Res. Values ±10% (ohms)	2.10	1.85	1.85	1.71	1.54	1.46	1.26
822-78 RC	930-20	10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k	2.10	1.85	1.85	1.71	1.54	1.46	1.26

300, 310 AND 320 WIREWOUND SUBMINIATURE TRIMMING POTENTIOMETERS

MODELS 300, 310. Single-turn, slotted rotor printed circuit controls, direct slider response. Sealed construction; positive stops. Electrical angle, 280°; rotation, 300°; temp. range, −55°C to +150°C; rated .6 watt at 60°C. Tolerance, ±5%. .016" pins on 0.1" grid. 300 has top screwdriver adjust; 5/16" square by 15/64" high. 310, side adjust; 19/64" square by 11/32" high. **Model 320.** Like above, but panel mount. Rated 1 watt at 60°C. .016" dia. dumet leads spaced .1". 10-32 bushing, ¼" long with screwdriver slot. ⅜" square by ⅝" long. **All meet applicable environmental specs of MIL-R 27208A.** Shpg. wt., 2 oz.*



Stock No.	Mfr's Type	Screwdriver Adjust	Resistance Values (Ohms)	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-41 RC	300	Top	50, 100, 200, 500, 1000, 2000, 5000	5.50	4.40	3.80	3.42	3.17	2.98	2.85
822-41 RC	300	Top	10k only	7.00	5.60	4.80	4.32	4.00	3.76	3.60
822-41 RC	300	Top	20k only	8.43	6.74	5.80	5.21	4.83	4.54	4.35
822-42 RC	310	Side	50, 100, 200, 500, 1000, 2000, 5000	5.73	4.58	3.95	3.56	3.29	3.10	2.96
822-42 RC	310	Side	10k only	7.18	5.74	4.95	4.45	4.12	3.88	3.71
822-42 RC	310	Side	20k only	8.65	6.92	5.95	5.36	4.95	4.67	4.47
822-43 RC	320	Shaft	50, 100, 200, 500, 1000, 2000, 5000	12.15	9.72	8.35	7.52	6.96	6.55	6.26
822-43 RC	320	Shaft	10k only	12.15	9.72	8.35	7.52	6.96	6.55	6.26
822-43 RC	320	Shaft	20k only	12.15	9.72	8.35	7.52	6.96	6.55	6.26

*Important—See Table A on Previous Page Before Ordering

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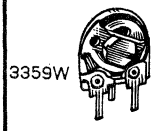
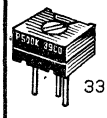
274	156	3012	158	3099	155	3290	159	3369	154	3520	165	H04	164	H26S	164	H492	165	.....	

3359P


3359W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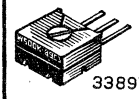
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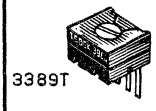
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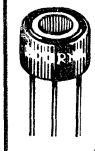
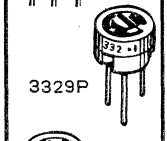

3305P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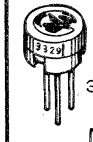
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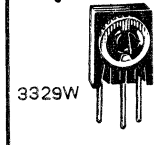
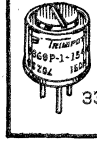

3329W


3369P

SINGLE TURN COMMERCIAL POTENTIOMETERS

MODELS 3359P, 3359W SINGLE-TURN CERMET POTENTIOMETERS

Low-priced 3/8-in. diameter, single-turn, commercial cermet element. Extended temperature range of −65°C to +125°C. Rated 0.5 W at 70°C, 0.75°C at 40°C. Temperature coefficient to 1k, 0 to +300 ppm/°C. Both P and W types have side adjustment. **Values available from stock: 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 100k, 200k, 500k, 1 meg. See Table A, below, for complete ordering information.** Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Terminal Connections	Ohm Values	EACH§ 1-4	5-9	10-24	25-49	50-99	100-Up
528-98 RC	3359P	PC Pins	100-1 meg	1.05	.95	.85	.75	.70	.65
528-99 RC	3359W	PC Pins	100-1 meg	1.10	.98	.88	.78	.72	.67

MODELS 3389P, 3389T AND 3389W SINGLE-TURN CERMET POTENTIOMETERS

Exceptionally low-priced commercial Palarium® cermet single-turn potentiometers for a wide variety of applications. Space-saving size of .390x.360-in.; 240-in. high. Low temperature coefficient, ±150 ppm/°C. Power rating of 0.5 W at 70°C. Extended temperature range of −55°C to +125°C. **Values available: 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg, 2 meg. See Table A, below, for ordering information.** 2 oz.

Stock No.	Mfr's Type	Terminal Connections	Ohm Values	EACH§ 1-4	5-9	10-24	25-49	50-99	100-Up
529-80 RC	3389P	PC Pins	100-2 meg	1.99	1.52	1.42	1.35	1.31	1.14
529-81 RC	3389T	PC Pins	100-2 meg	1.99	1.52	1.42	1.35	1.31	1.14
529-82 RC	3389W	PC Pins	100-2 meg	1.99	1.52	1.42	1.35	1.31	1.14

MODELS 3305P, 3305W COMMERCIAL SINGLE-TURN POTENTIOMETERS

Meet MIL-STD-202B humidity insulation. Sealed to prevent contamination. Silverweld termination alloys with multiple resistance wires. Stops provided at each end of travel. Mfr's type 3305P, printed circuit pins; type 3305W (not illustrated), printed circuit pins, is side adjustable Operating range of −55°C to +125°C. Power rating of 0.5 watt at 25°C. Tolerance, ±5%. **See Table A for ordering information.** 2 oz.

Stock No.	Mfr's Type	Terminal Connections	Ohm Values	EACH§ 1-4	5-9	10-24	25-49	50-99	100-Up
529-46 RC	3305P	PC pins	50 ohms-5k	2.77	1.75	1.68	1.61	1.56	1.47
529-46 RC	3305P	PC pihs	10k	3.17	2.00	1.92	1.84	1.78	1.68
529-46 RC	3305P	PC pins	20k	3.97	2.50	2.40	2.30	2.23	2.10
529-47 RC	3305W	PC pins	50 ohms-5k	3.57	2.25	2.16	2.07	2.00	1.89
529-47 RC	3305W	PC pins	10k	3.97	2.50	2.40	2.30	2.23	2.10
529-47 RC	3305W	PC pins	20k	4.75	3.00	2.88	2.76	2.67	2.52

MODELS 3329H, 3329P AND 3329W SINGLE-TURN CERMET POTENTIOMETERS

Low-priced Palarium® cermet single-turn potentiometers meet MIL-R-22097. Extended temperature range of −55 to 150°C. Rated 0.5 W at 70°C. Sealed to withstand soldering and immersion process. Temperature coefficient: ±100 ppm/°C. "H" and "P" styles are .25" dia. by .18" h. "W" side-mount is .245x.290x .375". **Values: 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 500k, 1 meg. See Table A.** 1 oz.

Stock No.	Mfr's Type	Terminal Connections	Ohm Values	EACH§ 1-4	5-9	10-24	25-49	50-99	100-Up
529-48 RC	3329H	Std. PC pins	10 ohms to 1 meg	2.75	1.75	1.66	1.57	1.50	1.45
529-49 RC	3329P	Std. PC pins	10 ohms to 1 meg	2.75	1.75	1.66	1.57	1.50	1.45
529-50 RC	3329W	Std. PC pins	10 ohms to 1 meg	3.92	2.50	2.38	2.25	2.15	2.07

MODEL 3369P HALF-INCH SINGLE-TURN POTENTIOMETERS

Provides highest power rating available in a compact half-inch diameter case—1.0 watt at +125°C. High stability and low noise. Tolerance, ±10%. Temperature coefficient, ±150 ppm/°C. **Values available from stock: 100, 250, 500, 1k, 2.5k, 5k, 10k, 25k, 50k, 100k, 250k, 500k, 1 meg, 2.5 meg, 5 meg. See Table A, below, for complete ordering information. Quantity prices are for one resistance value only.** Wt. 1 oz.

Stock No.	Mfr's Type	Terminal Connections	Ohm Values	EACH§ 1-4	5-9	10-24	25-49	50-99	100-Up
529-67 RC	3369P	PC Pins	100-5 meg	3.20	3.30	2.20	1.70	1.60	1.50

TABLE A HOW TO COMPLETE ALLIED STOCK NUMBER

To complete Allied Stock No., insert Resistance code (RC shown to the right of Ohm Values) for value wanted in place of RC in Stock No. Individual listings show values available for various models.

Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC
10	04	100	16	1000	25	10k	34	50k	46	200k	58	1 meg	70
20	07	200	19	2000	28	20k	37	100k	49	250k	61	2 meg	73
25	10	250	20	2500	29	25k	40	125k	52	500k	64	2.5 meg	75
50	13	500	22	5000	31	30k	43	150k	55	750k	67	5 meg	76

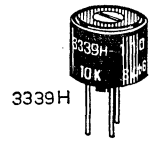
NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

MULTI-TURN COMMERCIAL POTENTIOMETERS

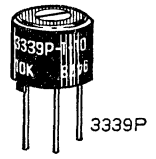
MODELS 3339H, 3339P FOUR-TURN CERMET POTENTIOMETERS

Unique planetary drive offers precise wiper setting of a multi-turn in a single turn package size. Low cost commercial Palarium® cermet four-turn has 0.30-in. dia.; 0.25-in. high. Temperature coefficient, ±100 ppm/°C. Rated 0.5 watt at 85°C. Values available from stock: 10, 20, 50, 100, 200, 500, 1k, 2k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg. See Table A, page 154, for complete ordering information. 2 oz.

Stock No.	Mfr's Type	Mounting	Ohm Values	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
529-51 RC	3339H	PC	10-1 meg	3.65	2.50	2.38	2.25	2.15	2.07
529-52 RC	3339P	PC	10-1 meg	3.65	2.50	2.38	2.25	2.15	2.07



3339H

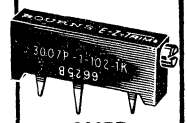


3339P

MODELS 3005P, 3007P TWENTY-TURN SUBMINIATURE E-Z TRIM® POTS

Have 20-turn mechanical screwdriver adjust. Wiper assembly idles at both ends of travel. Sealed to prevent contamination. Silverweld® termination. Meet MIL-STD-202 humidity specs. Resistance tolerance, ±10%. Insulation resis., 500 VDC, 100 megohm minimum. Resolution: 0.2 to 1.7%. Power rating: 40°C ambient at 1.0 watt; −55°C to 125°C. Temperature coefficient, 50 ppm/°C, nominal; 100 ppm/°C, maximum. .75x.16x.31". Ohm values available from stock: 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 25k. See Table A, bottom of page 154, for complete ordering information. Quantity prices for one type and value only. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Mounting	Ohm Values	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
528-72 RC	3005P	PC	10-25k	3.05	2.00	1.85	1.75	1.72	1.65
528-73 RC	3007P	PC	.....	2.50	1.75	1.62	1.46	1.39	1.30

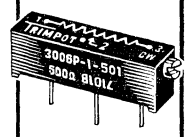


3007P

MODEL 3006P MULTI-TURN CERMET ELEMENT POTENTIOMETER

Values available from stock: 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg, 2 meg, See Table A, bottom of page 154 for complete ordering information. Quantity prices for one value only. Av. wt. 2 oz.

Stock No.	Mfr's Type	Mounting	Ohm Values	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
528-19 RC	3006P	PC	10-2 meg	2.13	1.40	1.30	1.21	1.19	1.15

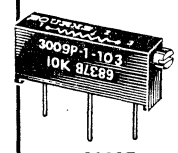


3006P

MODELS 3009P, 3009Y TWENTY-TURN COMPACT E-Z TRIM® POTS

Infinite resolution Cermet element with ±0.05% settability. Only .75x.19x.35". Tinned .021" dia. pins. Mil-Spec immersion seal. 0.75 W at 25°C. ±100 ppm/°C max. Tol., ±10%. 3009P, .30" between pin 1 and 2, .20" between 2 and 3; 3009Y, .40" between pin 1 and 2, .30" between 2 and 3. Values: 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg, 2 meg —see Table A, page 154. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Mounting	Ohm Values	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
528-74 RC	3009P	Std. PC pins	10-2 meg	3.02	1.94	1.84	1.75	1.71	1.65
528-75 RC	3009Y	RJ11 PC pins	10-2 meg	3.02	1.94	1.84	1.75	1.71	1.65

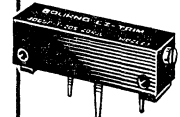


3009P

MODEL 3065P HUMIDITY-PROOF WIREWOUND POTENTIOMETER

Values: 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k. See Table A, page 154, for complete ordering information. Wt. 1 oz.

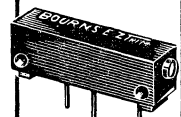
Stock No.	Mfr's Type	Mounting	Ohm Values	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
529-01 RC	3065P	PC	50-20k	2.92	2.00	1.85	1.67	1.58	1.48


3065P

MODELS 3067, 3068 FIFTEEN-TURN E-Z TRIM® POTENTIOMETERS

Type 3067 ½-watt 15-turn and 3068 1/5-watt 15-turn pots for commercial applications. 3068 has a Resiston® carbon resistance element, ±20% tolerance. Type 3067 has wirewound element, ±10% tolerance. Wipers idle at both ends of travel. Mounting centers, 53/64". Size, 3/8x1x9/32". Values available: 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg—see Table A, page 154. Shpg. wt. 2 oz.

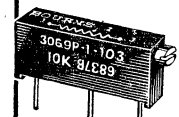
Stock No.	Mfr's Type	Mounting	Ohm Values	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
529-03 RC	3067-S	Solder lugs	50-20k	2.67	1.85	1.71	1.54	1.46	1.37
529-02 RC	3067-P	PC pins	50-20k	2.67	1.85	1.71	1.54	1.46	1.37
529-05 RC	3068-S	Solder lugs	20k-1 meg	2.67	1.85	1.71	1.54	1.46	1.37
529-04 RC	3068-P	PC pins	20k-1 meg	2.67	1.85	1.71	1.54	1.46	1.37


3067/68

MODEL 3069P COMMERCIAL E-Z TRIM® POTENTIOMETER

As Model 3009 above, but slightly larger (.75x.35x.25"). Values: 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 25k, 50k, 100k, 200k, 500k, 1 meg, 2 meg. See Table A, page 154, before ordering. 1 oz.

Stock No.	Mfr's Type	Mounting	Ohm Values	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
529-06 RC	3069P	PC pins	10-2 meg	3.02	1.94	1.84	1.75	1.71	1.65

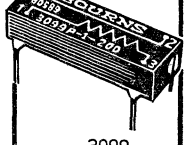


3069P

MODEL 3099 DUAL IN-LINE CERMET ELEMENT POT

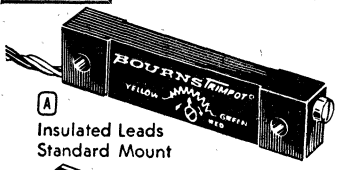
DIP size (TO-116) meets MIL-R-22097. Infinite resolution with ±05% settability. Low temp. coeff. of ±100 ppm/°C. Sealed for temp. and humidity stability. Rated 0.75 W at 25°C. −55 to 125°C. Can be used in IC DIP sockets; installation with IC equip. Gold-plated IC PC pins. .20x.30x.75". Values: 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg, 2 meg—see Table A, page 154. Shpg. wt. 1 oz.

Stock No.	Mfr's Type	Mounting	Ohm Values	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
529-08 RC	3099	IC PC pins	10-2 meg	5.42	3.75	3.35	3.00	2.80	2.60

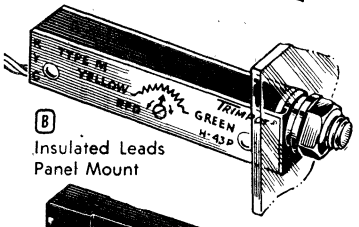

3099

NOTE: §QUANTITY PRICES ARE FOR ONE RESISTANCE VALUE AND TYPE ONLY

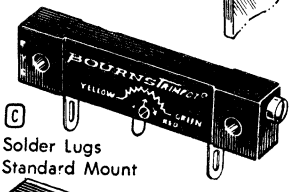
BOURNS Precision Potentiometers



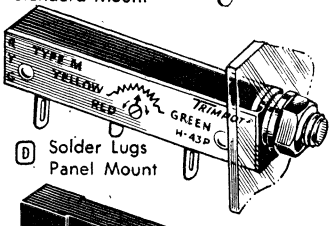
A
Insulated Leads
Standard Mount



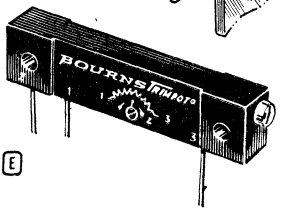
B
Insulated Leads
Panel Mount



C
Solder Lugs
Standard Mount



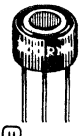
D
Solder Lugs
Panel Mount



E

F

G



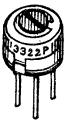
H

3300 W
3301 W

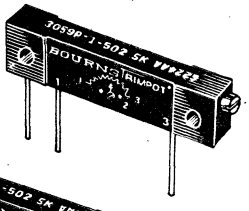
3300 S
3301 S

3300 P
3301 P

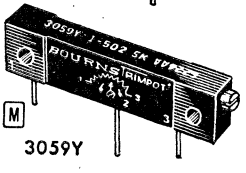
K
3059L



J



L
3059P



M
3059Y

TRIMIT® SUBMINIATURE POTENTIOMETERS

Low cost pots—body is only 9/32x5/16x1 1/4". Power rating is 25°C. Operating range, −55 to +105°C. Panel mounting requires .288" hole with max thickness. Values available: 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 750k, 1 meg, 2 meg, 5 meg. **See ordering table below before ordering.**

1/2-WATT WIREWOUND TYPE Size: 5/16x1/4x1 1/4". Tolerance: ±10%

Stock No.	Mfr's Type	Fig.	Terminal Connection	Mtg.	Values See Table A	§EACH 1-4	5-9	10-24	25-49	50-99	100-Up
528-57 RC	271	A	Insul. leads	Std.	50 ohms-10k	4.62	3.19	2.95	2.66	2.52	2.36
528-5737	271	A	Insul. leads	Std.	20k only	6.27	4.32	4.00	3.60	3.42	3.20
528-56 RC	271	B	Insul. leads	Panel	50 ohms-10k	5.80	4.00	3.70	3.34	3.16	2.96
528-5637	271	B	Insul. leads	Panel	20k only	7.45	5.13	4.75	4.28	4.06	3.80
528-61 RC	273	C	Solder lugs	Std.	50 ohms-10k	4.62	3.19	2.95	2.66	2.52	2.36
528-6137	273	C	Solder lugs	Std.	20k only	6.27	4.32	4.00	3.60	3.42	3.20
528-60 RC	273	D	Solder lugs	Panel	50 ohms-10k	5.80	4.00	3.70	3.34	3.16	2.96
528-6037	273	D	Solder lugs	Panel	20k only	7.45	5.13	4.75	4.28	4.06	3.80
528-64 RC	275	E	PC pins	PC	50 ohms-10k	4.62	3.19	2.95	2.66	2.52	2.36
528-6437	275	E	PC pins	PC	20k only	6.27	4.32	4.00	3.60	3.42	3.20

1/5-WATT CARBON TYPE Size: 9/32x5/16x1 1/4". Tolerance: ±20%

528-59 RC	272	A	Insul. leads	Std.	5000 ohms-5 meg	5.50	3.78	3.50	3.15	2.99	2.80
528-58 RC	272	B	Insul. leads	Panel		6.67	4.59	4.25	3.83	3.63	3.40
528-63 RC	274	C	Solder lugs	Std.		5.50	3.78	3.50	3.15	2.99	2.80
528-62 RC	274	D	Solder lugs	Panel		6.67	4.59	4.25	3.83	3.63	3.40
528-65 RC	276	E	PC pins	PC		5.50	3.78	3.50	3.15	2.99	2.80

MODEL 3255 SUBMINIATURE WIREWOUNDS

Subminiature size (.5x.5x.187"). Power dissipation 1.0 W @ 50°C. Values avail.: 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k. **See ordering table below before ordering.**

528-66 RC	3255L	....	PC pins	.....	10-10k	4.63	3.19	2.95	2.66	2.52	2.36
528-67 RC	3255P	....	PC pins	.....	10-10k	4.63	3.19	2.95	2.66	2.52	2.36
528-68 RC	3255W	....	PC pins	.....	10-10k	4.63	3.19	2.95	2.66	2.52	2.36
528-69 RC	3255W-66	....	PC pins	.....	10-10k	4.63	3.19	2.95	2.66	2.52	2.36

1-TURN MICROMINIATURE TRIMPOT® POTENTIOMETERS

TYPE 3300. Humidity-proof wirewound pots. Power rating: 1/2-watt at 70°C ambient; 1/4-watt at 100° ambient. Meet MIL-R-27208A. Low residual end setting resistance (0-1.0%). Continuity is maintained through full mechanical range. Silverweld® termination eliminates vulnerable single-wire termination. Res. tol., ±5%. Elec. adjust. slot .025" wide. 3300P has No. 26 gold-plated PC pins. 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k. **See ordering table below before ordering.** Av. shpg. wt. 2 oz.

529-40 RC	3300P	H	PC pins	.....	10 ohms-10k	8.62	5.94	5.50	4.95	4.70	4.40
529-4037	3300P	H	PC pins	.....	20k only	10.97	7.56	7.00	6.30	5.98	5.60
529-42 RC	3300W	F	PC pins	.....	10 ohms-10k	8.62	5.94	5.50	4.95	4.70	4.40
529-4237	3300W	F	PC pins	.....	20k only	10.97	7.56	7.00	6.30	5.98	5.60
529-41 RC	3300S	G	Solder lugs	.....	10 ohms-10k	12.92	8.91	8.25	7.43	7.05	6.60
529-4137	3300S	G	Solder lugs	.....	20k only	15.30	10.53	9.75	8.78	8.33	7.80

MODEL 3322P 1-TURN CERMET POTENTIOMETERS

Meets MIL-R-22097 requirements. Space-saving size; 0.25" diameter x 0.24" high. Low temperature coefficient: ±100 ppm/°C over entire temperature and resistance range. 0.5 watt power rating at 85°C. Extended temperature range of −65° to +175°C. Mil Spec seal. Avail. in 10, 20, 50, 100, 200, 500, 1k, 2k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg. **See ordering table below before ordering.**

529-83 RC	3322P	J	PC pins	.....	10-1 meg	8.52	5.50	5.22	4.90	4.66	4.35

MODEL 3059 HIGH-TEMPERATURE POTENTIOMETERS

Meet or exceed MIL-R-22097, Characteristic C, Style RJ 12. Infinite resolution with Palirum® Cermet element. Power rating: 1.0 watt at 70°C, derated to zero at 150°C. Temp. Coefficient: ±150 ppm/° C. Tol: ±10%. No of turns: 22 (±5). End settings: 2 ohms max. PC pin spacing: 3059P. Size: 1.25x.19x.32". Two mtg. holes for #2 screw on 1.000 ctrs. Values avail.: 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 25k, 50k, 100k, 200k, 500k, 1 meg, 2 meg. **See ordering table below before ordering.**

Stock No.	Mfr's Type	Fig.	Terminal Connections	Mtg.	Values See Table A	§EACH 1-4	5-9	10-24	25-49	50-99	100-249
528-95 RC	3059L	K	Insul. leads	.....	10 ohms-2 meg	4.70	3.00	2.85	2.70	2.57	2.43
528-96 RC	3059P	L	Std. PC pins	.....	10 ohms-2 meg	4.70	3.00	2.85	2.70	2.57	2.43
528-97 RC	3059Y	M	RJ11 PC pins	.....	10 ohms-2 meg	4.70	3.00	2.85	2.70	2.57	2.43

TABLE A: VALUES

To complete Allied Stock No., insert numeric code (RC shown to right of ohm value) in place of RC in stock number, individual listings show values available.

Ohm	RC	Ohm	RC	Ohm	RC	Ohm	RC	Ohm	RC	Ohm	RC	Ohm	RC
10	04	100	16	1000	25	10k	34	50k	46	200k	58	1 Meg	70
20	07	200	19	2000	28	20k	37	100k	49	250k	61	2 Meg	73
25	10	250	20	2500	29	25k	40	125k	52	500k	64	2.5 Meg	75
50	13	500	22	5000	31	30k	43	150k	55	750k	67	5 Meg	76

NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

Trimpot Potentiometers BOURNS

WIREWOUND POTENTIOMETERS

Precision-made, multi-turn, subminiature potentiometers. Self-locking screwdriver adjustments. 22 to 25-turn adjustments. Panel mounts require panel thickness max. .13" with .228" hole. Std. mounts have two #2 holes on 1" centers. L suffix, insulated leads. Resistance tolerance of wirewound models is ±10%. **Quantity prices are for one resistance and one type only. See Table A on Page 156 before ordering.** Av. shpg. wt. 2 oz.

½-WATT GENERAL-PURPOSE WIREWOUND. 1¼x¼x5/16". —65°C to +125°C

Stock No.	Mfr's Type	Fig.	Term. Conn.	Mtg.	Values (Ohms) See Table A	§ EACH 1-4	5-9	10-24	25-49	50-99	100-Up
528-21 RC	200L	A	Leads	Std.	10 ohms-10k	7.05	4.86	4.50	4.05	3.84	3.60
528-21 RC	200L	A	Leads	Std.	20k, 25k	9.40	6.48	6.00	5.40	5.12	4.80
528-2146	200L	A	Leads	Std.	50k only	10.97	7.56	7.00	6.30	5.98	5.60
528-2149	200L-2	A	Leads	Std.	100k only	13.32	9.18	8.50	7.65	7.26	6.80
528-20 RC	200L	B	Leads	Panel	10 ohms-10k	8.22	5.67	5.25	4.73	4.48	4.20
528-20 RC	200L	B	Leads	Panel	20k, 25k	10.57	7.29	6.75	6.08	5.76	5.40
528-2046	200L	B	Leads	Panel	50k only	12.15	8.37	7.75	6.98	6.62	6.20
528-2049	200L-2	B	Leads	Panel	100k only	14.50	9.99	9.25	8.33	7.90	7.40
528-24 RC	200S	C	Lugs	Std.	10 ohms-10k	7.05	4.86	4.50	4.05	3.84	3.60
528-24 RC	200S	C	Lugs	Std.	20k, 25k	9.40	6.48	6.00	5.40	5.12	4.80
528-2466	200S	C	Lugs	Std.	50k only	10.97	7.56	7.00	6.30	5.98	5.60
528-23 RC	200S	E	Lugs	Panel	10 ohms-10k	8.22	5.67	5.25	4.73	4.48	4.20
528-23 RC	200S	E	Lugs	Panel	20k, 25k	10.57	7.29	6.75	6.08	5.76	5.40
528-2346	200S	E	Lugs	Panel	50k only	12.15	8.37	7.75	6.98	6.62	6.20
528-22 RC	200P	D	PC pins	PC	10 ohms-10k	7.05	4.86	4.50	4.05	3.84	3.60
528-22 RC	200P	D	PC pins	PC	20k, 25k	9.40	6.48	6.00	5.40	5.12	4.80
528-2246	200P	D	PC pins	PC	50k only	10.97	7.56	7.00	6.30	5.98	5.60

4/5-WATT HUMIDITY-PROOF WIREWOUND 23/64x19/64x1 11/32". — 55°C to +135°C.

528-47 RC	236L	A	Leads	Std.	10 ohms-10k	10.20	7.02	6.50	5.85	5.55	5.20
528-47 RC	236L	A	Leads	Std.	20k, 25k	12.55	8.64	8.00	7.20	6.83	6.40
528-4746	236L	A	Leads	Std.	50k only	13.32	9.18	8.50	7.65	7.26	6.80
528-4749	236L-2	A	Leads	Std.	100k only	16.47	11.34	10.50	9.45	8.97	8.40
528-46 RC	236L	B	Leads	Panel	10 ohms-10k	11.37	7.83	7.25	6.53	6.19	5.80
528-46 RC	236L	B	Leads	Panel	20k, 25k	13.72	9.45	8.75	7.88	7.47	7.00
528-4646	236L	B	Leads	Panel	50k only	14.50	9.99	9.25	8.33	7.90	7.40
528-4649	236L-2	B	Leads	Panel	100k only	17.65	12.15	11.25	10.13	9.61	9.00
528-50 RC	236S	C	Lugs	Std.	10 to 10k	10.20	7.02	6.50	5.85	5.55	5.20
528-50 RC	236S	C	Lugs	Std.	20k, 25k	12.55	8.64	8.00	7.20	6.83	6.40
528-5046	236S	C	Lugs	Std.	50k only	13.32	9.18	8.50	7.65	7.26	6.80
528-49 RC	236S	E	Lugs	Panel	10 to 10k	11.37	7.83	7.25	6.53	6.19	5.80
528-49 RC	236S	E	Lugs	Panel	20k, 25k	13.72	9.45	8.75	7.88	7.47	7.00
528-4956	236S	E	Lugs	Panel	50k only	14.50	9.99	9.25	8.33	7.90	7.40
528-48 RC	236P	D	PC pins	PC	10 to 10k	10.20	7.02	6.50	5.85	5.55	5.20
528-48 RC	236P	D	PC pins	PC	20k, 25k	12.55	8.64	8.00	7.20	6.83	6.40
528-4846	236P	D	PC pins	PC	50k only	13.32	9.18	8.50	7.65	7.26	6.80

1-WATT HIGH-TEMPERATURE WIREWOUND 5/16x9/32x1¼". —55°C to +175°C.

528-52 RC	260L	A	Leads	Std.	10 ohms-10k	8.62	5.94	5.50	4.95	4.70	4.40
528-52 RC	260L	A	Leads	Std.	20k, 25k	10.97	7.56	7.00	6.30	5.98	5.60
528-5246	260L	A	Leads	Std.	50k only	11.75	8.10	7.50	6.75	6.41	6.00
528-5249	260L-2	A	Leads	Std.	100k only	14.10	9.72	9.00	8.10	7.68	7.20
528-51 RC	260L	B	Leads	Panel	10 ohms-10k	9.80	6.75	6.25	5.63	5.34	5.00
528-51 RC	260L	B	Leads	Panel	20k, 25k	12.15	8.37	7.75	6.98	6.62	6.20
528-5146	260L	B	Leads	Panel	50k only	12.92	8.91	8.25	7.43	7.05	6.60
528-5149	260L-2	B	Leads	Panel	100k only	15.27	10.53	9.75	8.78	8.32	7.80
528-55 RC	260S	C	Lugs	Std.	10 ohms-10k	8.62	5.94	5.50	4.95	4.70	4.40
528-55 RC	260S	C	Lugs	Std.	20k, 25k	10.97	7.56	7.00	6.30	5.98	5.60
528-5546	260S	C	Lugs	Std.	50k only	11.75	8.10	7.50	6.75	6.41	6.00
528-54 RC	260S	E	Lugs	Panel	10 ohms-10k	9.80	6.75	6.25	5.63	5.34	5.00
528-54 RC	260S	E	Lugs	Panel	20k 25k	12.15	8.37	7.75	6.98	6.62	6.20
528-5446	260S	E	Lugs	Panel	50k only	12.92	8.91	8.25	7.43	7.05	6.60
528-53 RC	260P	D	PC pins	PC	10 ohms-10k	8.62	5.94	5.50	4.95	4.70	4.40
528-53 RC	260P	D	PC pins	PC	20k, 25k	10.97	7.56	7.00	6.30	5.98	5.60
528-5346	260P	D	PC pins	PC	50k only	11.75	8.10	7.50	6.75	6.41	6.00

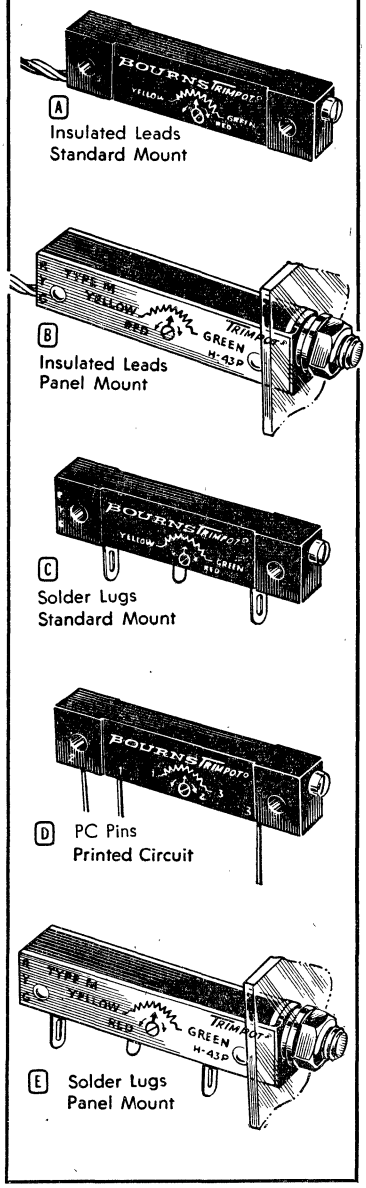
1-WATT HUMIDITY-PROOF WIREWOUND

For initial or occasional adjustment, or where non-standard value is required. Subminiature. Sealed in high-temp. plastic case. High dissipation: 1 W @ 70°C, 0.5 W @ 125°C; Std mounts have two #2 holes. **See Table A on P. 156 before ordering.**

528-39 RC	224L	A	Leads	Std.	10 ohms-10k	10.20	7.02	6.50	5.85	5.55	5.20
528-39 RC	224L	A	Leads	Std.	20k, 25k	12.55	8.64	8.00	7.20	6.83	6.40
528-3946	224L	A	Leads	Std.	50k only	13.32	9.18	8.50	7.65	7.26	6.80
528-3949	224L-2	A	Leads	Std.	100k only	16.47	11.34	10.50	9.45	8.97	8.40
528-38 RC	224L	B	Leads	Panel	10 ohms-10k	11.37	7.83	7.25	6.53	6.19	5.80
528-38 RC	224L	B	Leads	Panel	20k, 25k	13.72	9.45	8.75	7.88	7.47	7.00
528-3846	224L	B	Leads	Panel	50k only	14.50	9.99	9.25	8.33	7.90	7.40
528-3849	224L-2	B	Leads	Panel	100k only	17.65	12.15	11.25	10.13	9.61	9.00
528-42 RC	224S	C	Lugs	Std.	10 ohms-10k	10.20	7.02	6.50	5.85	5.55	5.20
528-42 RC	224S	C	Lugs	Std.	20k, 25k	12.55	8.64	8.00	7.20	6.83	6.40
528-4246	224S	C	Lugs	Std.	50k only	13.32	9.18	8.50	7.65	7.26	6.80
528-4249	224S-2	C	Lugs	Std.	100k only	16.47	11.34	10.50	9.45	8.97	8.40
528-41 RC	224S	D	Lugs	Panel	10 ohms-10k	11.37	7.83	7.25	6.53	6.19	5.80
528-41 RC	224S	D	Lugs	Panel	20k, 25k	13.72	9.45	8.75	7.88	7.47	7.00
528-4146	224S	D	Lugs	Panel	50k only	14.50	9.99	9.25	8.33	7.90	7.40
528-4149	224S-2	D	Lugs	Panel	100k only	17.65	12.15	11.25	10.13	9.61	9.00
528-40 RC	224P	E	PC pins	PC	10 ohms-10k	10.20	7.02	6.50	5.85	5.55	5.20
528-40 RC	224P	E	PC pins	PC	20k, 25k	12.55	8.64	8.00	7.20	6.83	6.40
528-4046	224P	E	PC pins	PC	50k only	13.32	9.18	8.50	7.65	7.26	6.80
528-4049	224P-2	E	PC pins	PC	100k only	16.47	11.34	10.50	9.45	8.97	8.40

TABLE A—VALUES (IN OHMS)

10	500	20k	500k
20	1000	25k	750k
50	2000	50k	1 meg
100	5000	100k	2 meg
200	10k	200k	5 meg



A Insulated Leads Standard Mount

B Insulated Leads Panel Mount

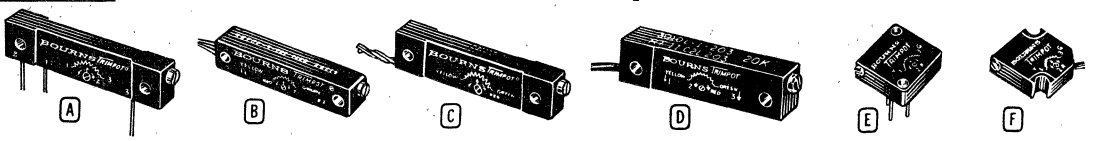
C Solder Lugs Standard Mount

D PC Pins Printed Circuit

E Solder Lugs Panel Mount

NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

BOURNS Trimpot® Potentiometers



MODELS 3012 AND 3052 1-WATT PALIRIUM®-ELEMENT POTENTIOMETERS

Non-wirewound, infinite-resolution Palirium® resistance element. Humidity-proof. 25 turns. Meets MIL-R-22097B. Maximum operating temperature, 175° C. Tolerance, ±10%. End settings, 0.1% maximum. Power rating, 1 watt at 70°C. Temperature coefficient: 25°C to 175°C. ±100 ppm/°C. **Available in 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 25k, 50k, 100k, 200k, 500k, 750k, 1 meg—see Ordering Table on page 159 before ordering.** Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Terminal Connections	Mtg.	Values	§EACH 1-4	5-9	10-24	25-49	50-99	100-Up
528-82 RC	3012L	A	Insul. leads	Std.	10 ohms-1 meg	8.62	5.94	5.50	4.95	4.70	4.40
528-81 RC	3012L	B	Insul. leads	Panel		9.80	6.75	6.25	5.63	5.34	5.00
528-83 RC	3012P	C	PC pins	PC		8.62	5.94	5.50	4.95	4.70	4.40
528-84 RC	3012P	...	PC pins	Panel		9.80	6.75	6.25	5.63	5.34	5.00
528-92 RC	3052L	A	Insul. leads	Std.	10 ohms-1 meg	8.62	5.94	5.50	4.95	4.70	4.40
528-91 RC	3052L	B	Insul. leads	Panel		9.80	6.75	6.25	5.63	5.34	5.00
528-93 RC	3052P	C	PC pins	PC		8.62	5.94	5.50	4.95	4.70	4.40
528-94 RC	3052P	D	PC pins	Panel		9.80	6.75	6.25	5.63	5.34	5.00

MODEL 3010 1-WATT HUMIDITY PROOF WIREWOUND

Meet MIL specs for humidity, shock, vibration, acceleration stability. 22 to 25 turns, zero to full value. Rated 1-watt at 50-70°C. Temperature range: −65°C to +175°C. Resistance tolerance: ±5%. Resolution: 2% at 10 ohms to 0.17% at 100,000 ohms. Standard mount types have two #2 holes on 1″ ctrs. 1¼x5/16x9/32″. **Available in 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 25k, 50k, 100k, 200k, 500k, 750k, 1 meg—see Ordering Table on page 159 before ordering.** Av. shpg. wt. 2 oz.

528-77 RC	3010L	D	Insul. leads	Std.	10 ohms-10k	10.20	7.02	6.50	5.85	5.55	5.20
528-77 RC	3010L	D	Insul. leads	Std.	20k, 25k	12.55	8.64	8.00	7.20	6.83	6.40
528-7746	3010L	D	Insul. leads	Std.	50k only	13.32	9.18	8.50	7.65	7.26	6.80
528-7749	3010L-2	D	Insul. leads	Std.	100k only	16.35	11.34	10.50	9.45	8.97	8.40
528-76 RC	3010L	C	Insul. leads	Panel	10 ohms-10k	11.37	7.83	7.25	6.53	6.19	5.80
528-76 RC	3010L	C	Insul. leads	Panel	20k, 25k	13.72	9.45	8.75	7.88	7.47	7.00
528-7646	3010L	C	Insul. leads	Panel	50k only	14.50	9.99	9.25	8.33	7.90	7.40
528-7649	3010L-2	C	Insul. leads	Panel	100k only	17.65	12.15	11.25	10.13	9.61	9.00
528-78 RC	3010P	C	PC pins	PC	10 ohms-10k	10.20	7.02	6.50	5.85	5.55	5.20
528-78 RC	3010P	C	PC pins	PC	20k, 25k	12.55	8.64	8.00	7.20	6.83	6.40
528-7846	3010P	C	PC pins	PC	50k only	13.32	9.18	8.50	7.65	7.26	6.80
528-7849	3010P-2	C	PC pins	PC	100k only	16.47	11.34	10.50	9.45	8.97	8.40

MODEL 3250 ½″ SQUARE HUMIDITY-PROOF WIREWOUND

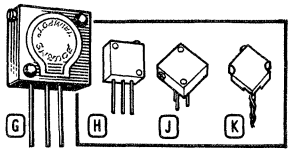
25-turn. Temp. to 175°C. Rated 1 watt at 70°C. Resolution: 1.09 to 0.10%, 10-50k ohms. Tol., ±5%. MIL-R-27208B, MIL-R-22097C. *Side-mounted leads. ½x½x3/16″. **Available in 10, 20, 50, 100, 200, 500, 1000, 2k, 5k, 10k, 20k, 25k, 30k, 50k, 100k, 200k, 250k, 500k, 750k, 1 meg—see Ordering Table on page 159 before ordering.** 2 oz.

529-09 RC	3250L	F	Insul. leads	Std.	10 ohms-10k	9.75	6.71	6.22	5.59	5.31	4.97
529-09 RC	3250L	F	Insul. leads	Std.	20k, 25k	10.98	7.56	7.00	6.30	5.98	5.60
529-0946	3250L	F	Insul. leads	Std.	50k only	14.52	10.00	9.27	8.34	7.91	7.41
529-12 RC	3250P	E	PC	PC	10 ohms-10k	10.48	7.23	6.69	6.02	5.71	5.35
529-12 RC	3250P	E	PC	PC	20k, 25k	11.57	7.97	7.38	6.64	6.30	5.90
529-1246	3250P	E	PC	PC	50k only	15.30	10.53	9.75	8.78	8.33	7.80
529-10 RC	3250W	...	PC	*	10 ohms-10k	10.48	7.23	6.69	6.02	5.71	5.35
529-10 RC	3250W	...	PC	*	20k, 25k	11.57	7.97	7.38	6.64	6.30	5.90
529-1046	3250W	...	PC	*	50k only	15.30	10.53	9.75	8.78	8.33	7.80

TABLE A—STOCK VALUES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
10	100	1000	10k	50k	500k
20	200	2000	20k	100k	1 meg
50	500	5000	25k	200k	2 megs

Model 3252 with Cermet Element



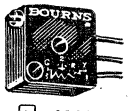
SERIES 3252 CERMET POTENTIOMETERS

Precision potentiometers have Eutectbond™ process terminal pins and sealed plastic case for reliable performance under adverse conditions. Meet MIL-R-22097. Low temperature coefficient of ±100 ppm/°C. High power dissipation: 1 watt at 70°C. Maximum contact resistance variation is only 1.6%. Size of shaft head permits easy adjustment with standard screwdriver. .5x.5x.19″. Series "L" has wire leads. Series "W" and "X" are side-mounted types. Series "P" is flat-mounted type. Wt. 0.1 oz. **Stock Values at left—see Ordering Table on page 159 before ordering.**

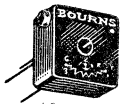
Stock No.	Mfr's Type	Fig.	Terminal Connections	Values (See Table "A")	§EACH 1-4	5-9	10-24	25-49	50-99	100-Up
529-18 RC	3252X	G	Std. PC pins	10 ohms to 2 megs	8.45	5.62	5.35	5.06	4.77	4.50
529-17 RC	3252W	H	Std. PC pins	10 ohms to 2 megs	8.45	5.62	5.35	5.06	4.77	4.50
529-16 RC	3252P	J	Std. PC pins	10 ohms to 2 megs	8.45	5.62	5.35	5.06	4.77	4.50
529-15 RC	3252L	K	Stranded wire	10 ohms to 2 megs	8.45	5.62	5.35	5.06	4.77	4.50

TABLE B—STOCK VALUES

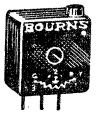
Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
10	100	1000	10k	50k	500k
20	200	2000	20k	100k	750k
50	500	5000	25k	200k	1 meg



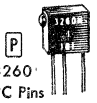
L 3280 L
Insulated Leads



M 3280 P
PC Pins



N 3280 W
PC Pins



P 3260
PC Pins

MICROMINIATURE HUMIDITY PROOF POTENTIOMETERS

Model 3280. Wire-wound Trimpot with relatively high power rating in package only ⅜″ square. Rated 1 watt at 70°C, ½ watt at 125°C. Usable to 175°C. Resolution, 1.25% to 0.11% from 10 to 50k ohms. 25-turn screwdriver adjustment with positive end stops. Meets MIL-R-27208B specs for humidity, shock, vibration, dielectric strength. ⅜″ sq. x .150″ thick. **See Ordering Table on page 159 before ordering.** 2 oz.

Stock No.	Mfr's Type	Fig.	Mounting	Values—See Table B, Left	§EACH 1-4	5-9	10-24	25-49	50-99	100-Up
529-22 RC	3280L	L	Std.	10 ohms-10k	10.97	7.56	7.00	6.30	5.98	5.60
529-22 RC	3280L	L	Std.	20k, 25k	13.32	9.18	8.50	7.65	7.26	6.80
529-2246	3280L	L	Std.	50k only	14.10	9.72	9.00	8.10	7.69	7.20
529-23 RC	3280P	M	PC	10 ohms, 10k	10.97	7.56	7.00	6.30	5.98	5.60
529-23 RC	3280P	M	PC	20k, 25k	13.32	9.18	8.50	7.65	7.26	6.80
529-2346	3280P	M	PC	50k only	14.10	9.72	9.00	8.10	7.69	7.20
529-24 RC	3280W	N	PC	10 ohms-10k	10.97	7.56	7.00	6.30	5.98	5.60
529-24 RC	3280W	N	PC	20k, 25k	13.32	9.18	8.50	7.65	7.26	6.80
529-2446	3280W	N	PC	50k only	14.10	9.72	9.00	8.10	7.69	7.20

Model 3260. Provides resistance values up to 20k in a package only ¼″ square. Plastic sealed case protects against liquids and potting compounds. 11 turns. Rated 0.2 watt at 70°C. Temperature range, −65° to +175°C. Meets MIL-R-27208A. Tolerance, ±5%. Resolution, 1.68% at 10 ohms to .23% at 20k. Size, .25x.25x.25″. **See Ordering Table on page 159 before ordering.** Av. shpg. wt. 2 oz.

529-19 RC	3260H	P	PC	10-1000	11.07	7.50	6.95	6.25	5.93	5.56
529-19 RC	3260H	P	PC	2000, 5000	12.17	8.25	7.64	6.88	6.53	6.11
529-19 RC	3260H	P	PC	10k and 20k	15.45	10.50	9.72	8.75	8.31	7.78

NOTE: §QUANTITY PRICES ARE FOR ONE RESISTANCE VALUE AND TYPE ONLY

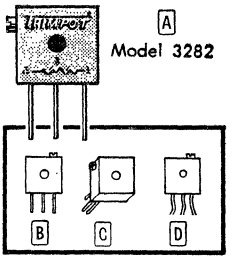
Trimpot® Potentiometers BOURNS

TRIMMERS SECTION

MODEL 3282 MICROMINIATURE PALIRIUM ELEMENT POTENTIOMETER

3/8" square. Stable, infinite resolution. Rated 1 watt at 85°C. Max. operating temp., 175°C. Meets MIL-R-22097. Single mounting hole; printed circuit pins or insulated leads. Tol., ±10%. Available in 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 500k, 1 meg—see Ordering Table before ordering. 2 oz.

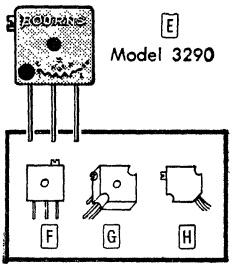
Stock No.	Mfr's Type	Fig.	Terminal Connections	Values	§EACH 1-4	5-9	10-24	25-49	50-99	100-Up
529-28RC	3282H	A	PC pins	10 ohms-1 meg	10.20	6.50	6.18	5.85	5.72	5.52
529-31RC	3282W	B	PC pins	(Except 200k,	10.20	6.50	6.18	5.85	5.72	5.52
529-30RC	3282P	C	PC pins	750k)	10.20	6.50	6.18	5.85	5.72	5.52
529-29RC	3282L	D	Insul. wire		10.20	6.50	6.18	5.85	5.72	5.52



MODEL 3290 MICROMINIATURE WIRE-WOUND POTENTIOMETER

Humidity-proof. .150" thick, 3/8" square. Rated 1 watt at 70°C. Max. operating temperature, 175°C. Meets MIL-R-27208. Single center mounting hole. Tol., ±5%. Available in 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 25k, 50k—see Ordering Table before ordering. 2 oz.

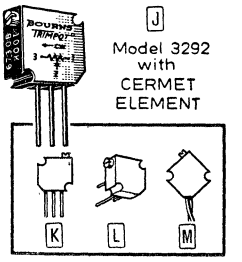
529-32RC	3290H	E	PC pins	10 ohms-10k	10.80	7.33	6.79	6.11	5.80	5.43
529-32RC	3290H	E	PC pins	20k, 25k	12.90	8.75	8.10	7.30	6.92	6.48
529-3246	3290H	E	PC pins	50k only	14.90	10.10	9.35	8.42	7.99	7.48
529-33RC	3290L	H	Insul. wire	10 ohms-10k	10.80	7.33	6.79	6.11	5.80	5.43
529-33RC	3290L	H	Insul. wire	20k, 25k	12.90	8.75	8.10	7.30	6.92	6.48
529-3346	3290L	H	Insul. wire	50k only	14.90	10.10	9.35	8.42	7.99	7.48
529-34RC	3290P	G	PC pins	10 ohms-10k	10.80	7.33	6.79	6.11	5.80	5.43
529-34RC	3290P	G	PC pins	20k, 25k	12.90	8.75	8.10	7.30	6.92	6.48
529-3446	3290P	G	PC pins	50k only	14.90	10.10	9.35	8.42	7.99	7.48
529-35RC	3290W	F	PC pins	10 ohms-10k	10.80	7.33	6.79	6.11	5.80	5.43
529-35RC	3290W	F	PC pins	20k, 25k	12.90	8.75	8.10	7.30	6.92	6.48
529-3546	3290W	F	PC pins	50k only	14.90	10.10	9.35	8.42	7.99	7.48



MODEL 3292 MICROMINIATURE CERMET ELEMENT POTENTIOMETERS

Infinite resolution Palirium cermet element. Rated 1/2-watt at +85°C. Operates to +175°C. Temperature coefficient: ±100 ppm/°C. max. Meets MIL-R-22097characteristic C. Tolerance: ±10%. Withstands 30G vibration, 100G shock. Insulation resistance: 1000 megohms minimum. Humidity-proof plastic case. 3/8" sq.x.150". Available in 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 25k, 50k, 100k, 200k, 500k, 1 meg—see Ordering Table before ordering. Wt. 1 oz.

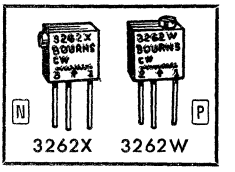
529-39RC	3292X	J	PC pins	10 ohms to 1 meg	10.20	6.50	6.18	5.85	5.72	5.52
529-38RC	3292W	K	PC pins	10 ohms to 1 meg	10.20	6.50	6.18	5.85	5.72	5.52
529-37RC	3292P	L	PC pins	10 ohms to 1 meg	10.20	6.50	6.18	5.85	5.72	5.52
529-36RC	3292L	M	Insul. leads	10 ohms to 1 meg	10.20	6.50	6.18	5.85	5.72	5.52



SERIES 3262 MICROMINIATURE CERMET ELEMENT POTENTIOMETERS

Meet MIL-R-22097. Rated 0.25 W at 85°C. Extended temperature range of −65 to 175°C. Temperature coefficient: ±100 ppm/°C. 12 turns nominal. "X" has adjustment screw on side. "W" has it on top. .25x.25x.17". Shpg. wt. 0.1 oz. Same values as 3292 above.

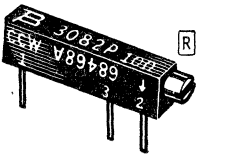
529-21RC	3262X	N	PC pins	10 ohms to 1 meg	10.20	7.00	6.50	5.84	5.55	5.20
529-20RC	3262W	P	PC pins	10 ohms to 1 meg	10.20	7.00	6.50	5.84	5.55	5.20



MODEL 3082P MICROMINIATURE CERMET POTENTIOMETER

World's smallest palirium cermet LSAP meets MIL-R-22097. Rated 0.3 W at 85°C. Range: −65 to 150°C. Ten turns. #26 PC pins are .016" dia.; .40" space from pins 1 and 2, .30" from 1 and 3, .10" from 2 and 3. Size, .10x.15x.50". Available in 10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 750k, 1 meg, 2 megs—see Ordering Table before ordering. Shpg. wt. 1 oz.

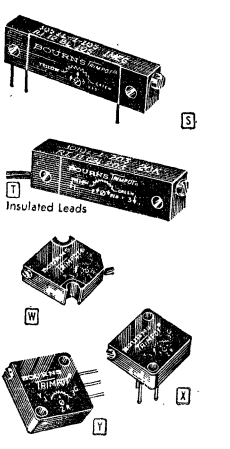
529-07RC	3082P	R	PC pins	10 ohms to 2 megs	11.27	7.70	7.13	6.42	6.09	5.71



MIL-R-27208 WIRE-WOUND MULTI-TURN POTENTIOMETERS

Rated 3/4-watt at 85°C. Maximum operating temperature, 150°C. Temperature coefficient, ±50 PPM/°C, referred to an ambient of 25°C. Tolerance, ±5%. RT10, microminiature, 3/4" mounting centers. RT11, RT12, submin. 1" mtg. centers. RT22 square, .52" mtg. center on lead type. In 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k—see Ordering Table before ordering. 2 oz.

528-10RC	RT10C2L	T	Insul. wire	100 ohms-10k	12.92	8.64	8.00	7.20	6.83	6.40
528-11RC	RT11C2L	T	Insul. wire	10 ohms-10k	7.97	5.56	5.13	4.71	4.34	4.03
528-1137	RT11C2L	T	Insul. wire	20k only	8.77	6.11	5.64	5.18	4.77	4.43
528-12RC	RT11C2P	S	PC pins	10 ohms-10k	7.97	5.56	5.13	4.71	4.34	4.03
528-1237	RT11C2P	S	PC pins	20k only	8.77	6.11	5.64	5.18	4.77	4.43
528-13RC	RT12C2L	T	Insul. wire	10 ohms-10k	7.97	5.56	5.13	4.71	4.34	4.03
528-1337	RT12C2L	T	Insul. wire	20k only	8.77	6.11	5.64	5.18	4.77	4.43
528-14RC	RT12C2P	S	PC pins	10 ohms-10k	7.97	5.56	5.13	4.71	4.34	4.03
528-1437	RT12C2P	S	PC pins	20k only	8.77	6.11	5.64	5.18	4.77	4.43
528-15RC	RT22C2L	W	Insul. wire	100 ohms-10k	8.40	5.27	5.01	4.74	4.48	4.22
528-1537	RT22C2L	W	Insul. wire	20k only	9.17	5.75	5.46	5.18	4.89	4.60
528-16RC	RT22C2P	X	PC pins	100 ohms-10k	7.35	4.72	4.48	4.25	4.00	3.78
528-1637	RT22C2P	X	PC pins	20k only	8.27	5.20	4.94	4.68	4.42	4.16
528-17RC	RT22C2W	Y	PC pins	100 ohms-10k	7.35	4.72	4.48	4.25	4.00	3.78
528-1737	RT22C2W	Y	PC pins	20k only	8.27	5.20	4.94	4.68	4.42	4.16
528-18RC	RT22C2X	.....	PC pins	100 ohms-10k	7.35	4.72	4.48	4.25	4.00	3.78
528-1837	RT22C2X	.....	PC pins	20k only	8.27	5.20	4.94	4.68	4.42	4.16



ORDERING INFORMATION TABLE

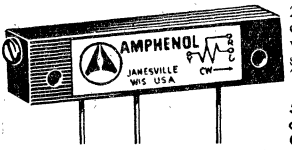
To complete Allied Stock No., insert resistance code (RC shown to right of ohm value) in place of RC in Stock No. Individual listings show values available.

Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC
10	04	100	16	1000	25	10k	34	50k	46	200k	58	1 meg	70
20	07	200	19	2000	28	20k	37	100k	49	250k	61	2 megs	73
25	10	250	20	2500	29	25k	40	125k	52	500k	64	2.5 megs	75
50	13	500	22	5000	31	30k	43	150k	55	750k	67	5 megs	76

NOTE: §QUANTITY PRICES ARE FOR ONE RESISTANCE VALUE AND TYPE ONLY

BUNKER RAMO AMPHENOL Micropot Trimmer Potentiometers

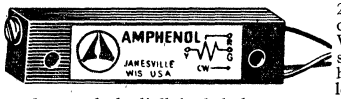
SERIES 992P WIREWOUND MICROPOT TRIMMERS



22-turn pot with ratcheting clutch mechanism, shiftproof wiper. Meets MIL-STD-202 steady-state humidity specs. Tol., ±5%. Temp., −55°C to +105°C. Values: 50, 100, 200 500, 1000, 2000, 5000, 10k ohms—See Table A below right. Gold-plated PC pins. 2 oz.

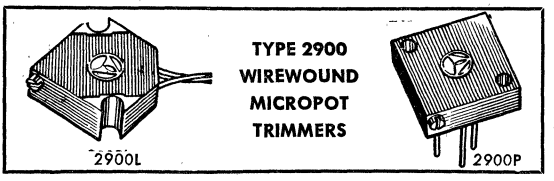
714-42RC. 1.....Each 4.10 2-9.....Each 2.95
10-24.....Each 2.73 25-49.....Each 2.46
50-99.....Each 2.33 100-249....Each 2.18 250-499....Each 2.07

SERIES 2850 WIREWOUND MICROPOT TRIMMERS



22-turn pot meets and exceeds MIL-R-27208, RT11. Window design case and silicon "O" ring seals out humidity and dust. Extra-long high temperature ceramic mandrel, diallyl phthalate case. −65°C to +175°C. Tol., ±5%. *Suffixes: P, printed circuit pins; L, Teflon insulated stranded leads; SL, solder lugs. Values: 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k—See Table A below right. Shpg. wt. 2 oz.

Stock No.	*Mfr's Type	EACH 1-2	3-9	10-24	25-49	50-99	100-249	250-499
714-53RC	2850P	7.25	5.21	4.83	4.53	4.27	4.04	3.78
714-51RC	2850L	7.25	5.21	4.83	4.53	4.27	4.04	3.78
714-55RC	2850SL	7.25	5.21	4.83	4.53	4.27	4.04	3.78

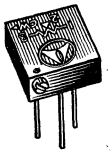


TYPE 2900 WIREWOUND MICROPOT TRIMMERS

Precision 25-turn trimmer with non-slip wiper adjustment. Minimum number of internal components for increased reliability. Humidity-proof. Meets or exceeds MIL-R-27208, RT22. Tol., ±5%. Temp. range, −65°C to +175°C. ½" square. *Suffixes: L, color-coded Teflon insulated leads; P, gold-plated PC pins; Values: 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k—See Table A below right. Av. shpg. wt. 2 oz.

Stock No.	*Mfr's Type	EACH 1-2	3-9	10-24	25-49	50-99	100-249	250-499
714-60RC	2900L	6.87	5.43	5.04	4.72	4.45	4.21	3.94
714-61RC	2900P	5.97	4.87	4.52	4.24	3.98	3.77	3.53

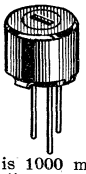
SERIES 2300 SQUARE MICROPOT TRIMMERS



Microminiature ⅜", 25-turn trimmer meets MIL-R-2720S, Style RT 24. Humidity proof. Tol., ±5%. Temp. range, −65°C to +150°C. Power rating, ¾ watts at 85°C. Insulation resistance per MIL-R-27208. *Suffixes: P, gold-plated PC pins; W, uninsulated gold-plated leads; X, Values: 10, 20, 50, 100, 200, 500, 1000, 2000. 5000, 10k, 20k—See Table A, below right. Av. shpg. wt. 2 oz.

Stock No.	*Mfr's Type	EACH 1-2	3-9	10-24	25-49	50-99	100-249	250-499
714-97RC	2300P	8.87	6.90	6.35	5.80	5.43	5.16	4.88
714-98RC	2300W	8.87	6.90	6.35	5.80	5.43	5.16	4.88
714-99RC	2300X	8.87	6.90	6.35	5.80	5.43	5.16	4.88

SERIES 6203P CERMET ELEMENT TRIMMER

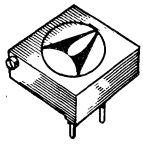


- A Low Cost, High Quality General Purpose Trimmer
- Extra Length Mandrel Provides Optimum Resolution

Commercial ¼" round single turn Cermet element trimmer with solvent resistant nylon cover. Has extra length mandrel for optimum resolution. Quick, easy-to-set top adjustment. Power rating, ¼ watt at 70°C. Temperature coefficient, 100 PPM/°C. Temperature range, 25°C to +125°C. Resistance tolerance, ±20%. Corrosion proof gold plated circuit pins. Insulation resistance is 1000 megohms minimum. Continuity is continuous and unidirectional, maintained for full mechanical range. Infinite resolution. Resistance values available: 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 25k, 50k, 100k, 250k, 500k, 1000k, 2000k—See Table A at right. Av. shpg. wt. 2 oz.

714-95RC. 1-2.....Each 2.23 3-9.....Each 1.75
10-24.....Each 1.62 25-49.....Each 1.46
50-99....Each 1.39 100-249....Each 1.30 250-499....Each 1.23

SERIES 3600 WIREWOUND MICROPOT TRIMMER

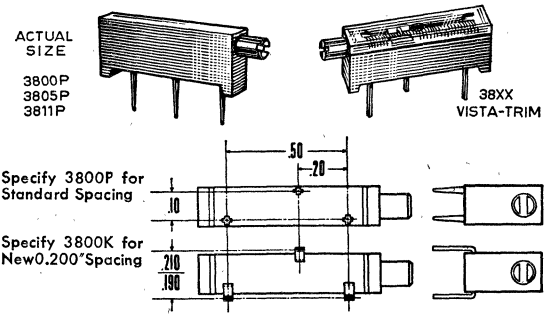


Precision 23-turn trimmer with printed circuit pins. Low-mass shock and vibration proof wiper. Up to 85% better resolution than specified by MIL-R-27208B, RT24. Circuit pins silver brazed and gold plated for corrosion proofing. Damage proof ratcheting clutch mechanism. Res. tol: ±10%. Electrical output: linear with shaft adj. Values: 100, 200, 500, 1000, 2000, 5000, 10k, 20k ohms. See Table A below for ordering information. Wt. 2 oz.

Stock No.	Mfr's Type	EACH 1-2	3-9	10-24	25-49	50-99	100-249	250-499
714-75RC	3600P	3.97	2.95	2.73	2.46	2.33	2.18	2.07

SERIES 3800 MICROPOT COMMERCIAL TRIMMER

TYPE 3800 WIREWOUND MICROPOT TRIMMERS



Commercial ¾" rectangular style with solvent resistant nylon case or new Vista-Trin (Suffix -2 in Type) with semi-transparent top—makes element and contact carrier fully visible for approximate settings. *Indicates 0.100" pin spacing; †new 0.200" pin spacing. Power rating, 1 watt at 40°C. Temp. range, −65°C to +125°C. Tol., ±10%. Resolution: .22 to 1.78%. Values: 10, 20, 30, 100, 200, 500, 1000, 5000, 10k, 20k—See Table A below. Wt. 2 oz.

Stock No.	Mfr's Type	EACH 1-2	3-9	10-24	25-49	50-99	100-249	250-499
714-77RC	*3800P	2.37	1.75	1.62	1.46	1.39	1.30	1.23
714-78RC	*3800P-2	2.37	1.75	1.62	1.46	1.39	1.30	1.23
714-74RC	†3800K	2.37	1.75	1.62	1.46	1.39	1.30	1.23
714-76RC	†3800K-2	2.37	1.75	1.62	1.46	1.35	1.30	1.23

TYPE 3805 CERMET ELEMENT MICROPOT TRIMMER

Commercial ¾" rectangular style Cermet-element trimmer offers infinite resolution. 15-turn shaft adjustment. Carbon-tipped precious metal contact reduces CRV to a minimum and enhances rotational life. Solvent-resistant nylon case or new Vista-Trim (Suffix -2 in Type) with semi-transparent top as described above. *Indicates 0.100" pin spacing; †new 0.200" pin spacing. Tol., ±10%. Temperature range, −55°C to +125°C. Power rating, ¾-watt at 40°C derated to zero at 125°C. Dielectric strength, 900 volts rms at room temp. Shaft torque, 8.0 oz. in. maximum. Values: 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 500k—see Table A below for ordering information. Av. shpg. wt. 2 oz.

714-79RC	*3805P	2.50	1.92	1.77	1.64	1.53	1.43	1.34
714-81RC	*3805P-2	2.50	1.92	1.77	1.64	1.53	1.43	1.34
714-82RC	†3805K	2.50	1.92	1.77	1.64	1.53	1.43	1.34
714-83RC	†3805K-2	2.50	1.92	1.77	1.64	1.53	1.43	1.34

TYPE 3811P METAL-FILM ELEMENT MICROPOT TRIMMERS

100% metallic element offers infinite resolution with excellent low noise characteristics; performance characteristics compatible with other metal film components. ¾" rectangular solvent-resistant nylon case. Silicon "O" ring seals out dust and humidity. Popular PC pin spacing. Tolerance, ±10%. Temperature range, −55°C to +125°C. 15 turns. Shaft torque, 8.0 oz. in. max. Values: 50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k—see Table A below. Wt. 2 oz.

714-80RC. 3-9.....Each 2.94 10-24.....Each 2.77
25-49.....Each 2.59 50-99.....Each 2.44
100-249...Each 2.31 250-499...Each 2.16 500-Up....Each 1.95

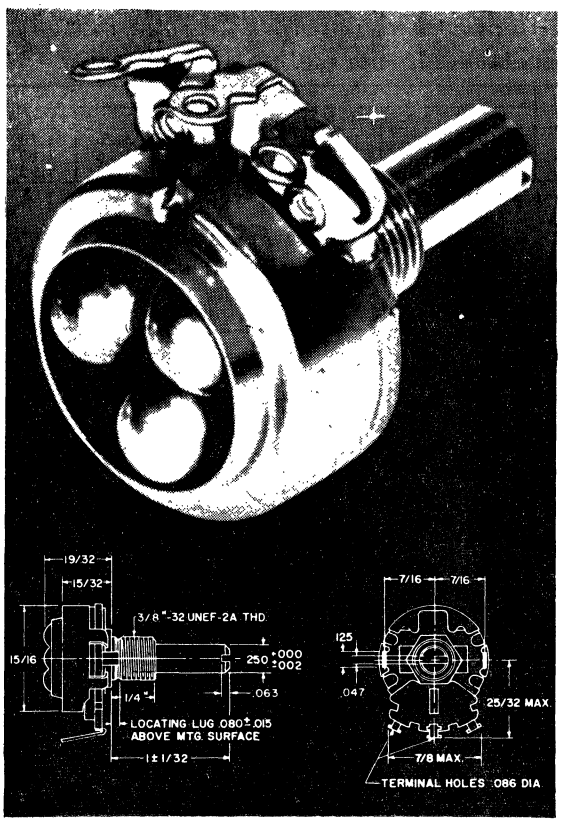
TABLE A

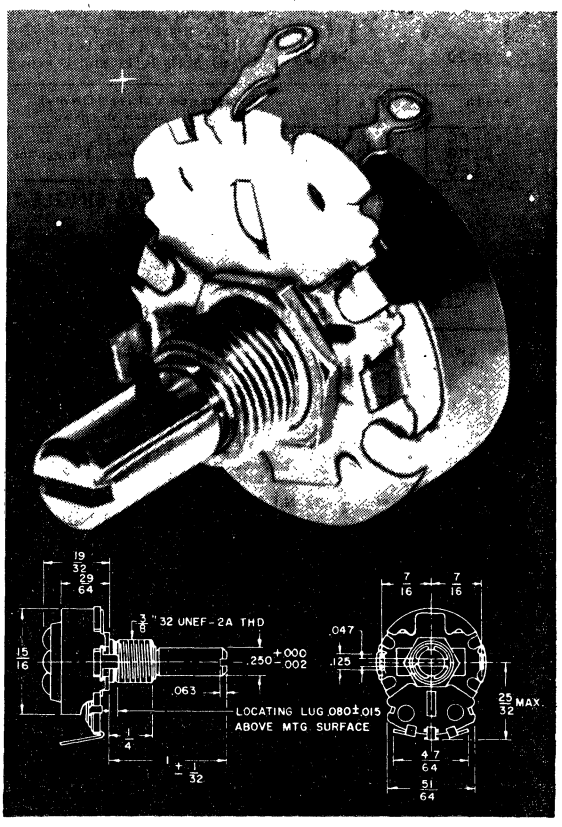
To complete Allied Stock No., insert Resistance code (RC) shown opposite Ohms in place of RC in Stock No. Each listing states which values are available for that particular series.

Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC
10	05	100	20	2000	38	25k	55	200k	67	2.5M	83
20	10	200	25	5000	40	30k	57	250k	70	5M	87
25	13	500	30	10k	45	50k	60	500k	75	10M	90
50	15	1000	35	20k	50	100k	65	1M	80	.....	...

Be Sure to See Table A, Above, Before Ordering

LOW-COST, Multi-Turn Vernier-Adjust Potentiometers





½-WATT CARBON OR 5-WATT WIREWOUND

TYPE VA-45 ½-WATT CARBON

- Rated ½ Watt (Up to 10k Ohms) at 55°C
- Compact Size, Only 1 5/16" Diameter
- 10-¼ Turns
- Resolution: Near Infinite
- Independent Linearity, ±10%
- Resistance Tolerance ±10%

Designed for applications requiring low power and sensitive setability. Excellent replacement for backlash units. Used for CRT display position control, gain control, null control, bushing-mounted trimmer-type control, DC balance control and many other applications where critical setability is necessary. Voltage Rating: Bushing to terminals, 1000 VAC at high pot test for 1 minute, 500 VAC operating maximum; 500 VAC across end terminals. Turn ratio of 10-¼ turns is achieved by coupling the shaft to the rotor through a unique ball bearing arrangement and three-ball planetary drive. Shpg. wt. approx. 4 oz.

Stock No.	Ohms	Stock No.	Ohms
540-2015	100	540-2050	20k
540-2020	200	540-2055	30k
540-2025	500	540-2060	50k
540-2030	1000	540-2065	100k
540-2035	2000	540-2070	200k
540-2040	5000	540-2075	500k
540-2045	10k	540-2080	1 megohm

TYPE VA-AW 5-WATT WIREWOUND

- High Power Dissipation, 5 Watts at 25°C
- Compact Size, Only 1 5/16" Diameter
- 8-¾ Turns
- Resistance Tolerance, ±10%
- Independent Linearity, ±5%
- Resolution .518% to .144% from 20 Ohms to 20K Respectively

Designed for applications requiring high power and better temperature coefficient and stability than available with carbon controls. Excellent replacement for backlash units. Use for CTR display position control, gain control, null control, bushing-mounted trimmer-type control, DC balance control and many other applications where critical setability is necessary. Turn ratio of 8-¾ turns is achieved by coupling the shaft to the rotor through a unique ball bearing arrangement and three-ball planetary drive Voltage Rating: Bushing to terminals, 1000 VAC on high pot test for 1 minute, 750 VAC operating maximum; 500 VAC across end terminals. Shpg. wt. approx. 4 oz.

Stock No.	Ohms	Stock No.	Ohms
540-1005	20	540-1030	1000
540-1010	50	540-1035	2000
540-1015	100	540-1040	5000
540-1020	200	540-1045	10k
540-1025	500	540-1050	20k

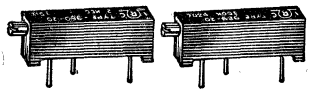
PRICES

Mfr's Type	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
VA-AW	5.52	5.20	4.75	4.30	3.90	3.45	3.25
VA-45	3.60	3.15	2.80	2.53	2.29	2.10	1.68

Specify Stock No., Mfr's Type and Resistance Value When Ordering

Trimmer Potentiometers

TYPE 960, 980, 989 ¾″ RECTANGULAR CERMETS



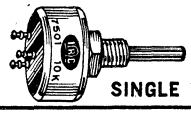
960-20 989-20

Popular ¾″ rectangular Cermet trimmers available in 2 body styles and 3 pin placements. Type 96-20 is same size and pin spacing as wirewound 910-20. Type 980-20 is same size and pin spacing as wirewound 930-20. Type 989-20 has case size of .75x.16x.31″ with same pin spacing as MIL RJ11 and is economical substitute for many 1¼″ units using this spacing. Specifications for all units: Rated ¾ W @ 25° C, derate to O W @ 125° C. T.C. is ±150 PPM/° C standard. ±10% tolerance. 20 turns adjustment and wiper idles at end of travel. Insulation 100 megohms @ 500 VDC. Dielectric strength 1000 VAC. Gold-plated PC pins. 1 oz.

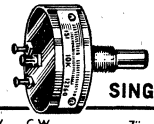
Stock No.	Mfr's Type	Resistance Values (Ohms) Specify Values Wanted	EACH 1-4	5-9	10-24	25-49	50-99	100-249	250-499
822-81 RC	960-20	10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 megohm	2.10	1.85	1.71	1.54	1.46	1.26	1.10
822-82 RC	980-20		2.10	1.85	1.71	1.54	1.46	1.26	1.10
822-83 RC	989-20		2.75	1.95	1.84	1.75	1.71	1.65	1.55

5001, 7501, 151 PRECISION SINGLE-TURN PANEL-MOUNT ROTARY TRIMMERS

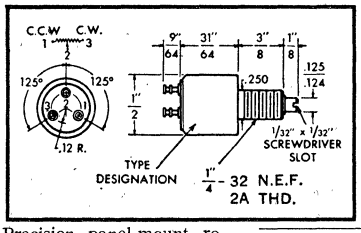
SINGLE TURN 5001

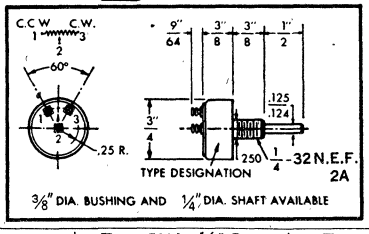


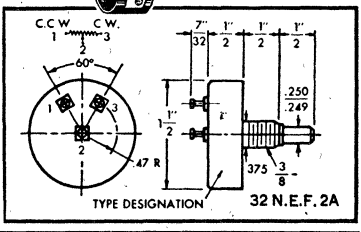
SINGLE TURN 7501



SINGLE TURN 151







Precision panel-mount rotary trimmers are designed for severe environmental or high temperature conditions. Single-turn. Tolerance: ±5%. Torque: 2 oz. in. max. Type 5001 has ¼″ bushing and screwdriver adjustment. 7501 has ¼″ bushing, ⅛″ shaft. 151 has ⅜″ bushing, ¼″ shaft.

Specifications	Type 5001—½″ Dia.	Type 7501—¾″ Dia.	Type 151—1½″ Dia.
Power Rating at 40°C	2 watts	2¼ watts	3½ watts
Temperature Range	−55°C to 150°C	−55°C to 150°C	−55°C to 125°C
Derates to Zero	150°C	150°C	125°C
Resistance Range (Ohms)	10 to 50K	50 to 75K	100 to 100K
Linearity	±5%	±1%	±0.5%
Insulation Resistance	500 meg. min.	1000 meg. min.	1000 meg. min.
Mechanical Rotation	320° (±5°) Stops Std.,	Continuous (stops available)	Continuous (stops available)
Electrical Rotation	320° ±5°	345° ±5°	350° ±5°
Weight	.27 oz.	1 oz.	2 oz.

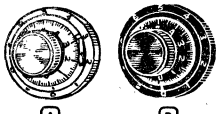
Stock No.	Mfr's Type	Resistance Values (Ohms) Important—See Table A Below	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249
822-90 RC	5001	10, 50, 100, 500, 1000, 5000, 10k, 50k	20.00	11.50	11.00	10.50	10.00	9.50	9.00
822-94 RC	7501	50, 100, 250-500, 1000, 5000, 10k, 50k	17.50	10.00	9.50	9.00	8.50	8.00	7.75
822-28 RC	151	100, 500, 1000, 2500, 5000, 10k, 25k, 100k	22.50	13.00	12.25	11.50	11.00	10.50	10.00

TABLE A—IMPORTANT ORDERING INFORMATION

To Order: Complete the Stock Number shown by placing the designated Resistance code for Ohms Value where RC appears in the Stock Number. Each particular listing shows what ohm values are available for each series.

Value	RC	Value	RC	Value	RC	Value	RC	Value	RC	Value	RC
10	01	125	17	2K	32	25K	47	125K	62	450K	77
20	04	200	20	2.5K	35	30K	50	180K	65	500K	80
50	07	250	23	5K	38	50K	53	200K	68	600K	83
75	10	500	26	10K	41	75K	56	250K	71	1 meg	87
100	13	1K	29	20K	44	100K	59	300K	74	2 meg	90

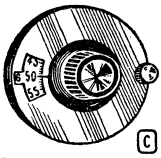
REVODEX DIALS FOR PRECISION POTENTIOMETERS



A B

SERIES 400

1″ dia. turn-counting dial for controls with shafts of ⅛″ or ¼″ diameter. Optional brake system allows positive locking without dial shift. Body mounts on panel; knob attaches to shaft extension up to .8″ from panel. Calibrated 000-999. Anodized aluminum. 3 oz.



C

SERIES RD-1 AND RD-6

1⅞″ dials with numbers grouped for easy reading. Calibrated 000-999. With zero backlash—locks without shift of dial setting. Mtg. plate fastens to pot mtg. nut; knob fastens with setscrew to pot shaft. Black or clear anodized aluminum finish. Use on ¼″ dia. shafts up to 1″ long from front of panel. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type With Brake	Mfr's Type Without Brake	Fig.	Fits Shaft	Finish	EACH 1-2	3-4	5-9	10-24	25-49	50-99
822-0401	RD-1	....	C	¼″	Black	10.05	5.75	5.46	5.18	4.89	4.60
822-0406	RD-6	....	C	¼″	Clear	10.05	5.75	5.46	5.18	4.89	4.60
822-0411	....	RD-411	B	¼″	Black	14.37	8.25	7.70	7.20	6.80	6.50
822-0412	RD-412	....	A	¼″	Black	15.45	8.75	8.25	7.62	7.30	6.85
822-0421	....	RD-421	B	⅛″	Black	15.62	9.40	8.35	7.80	7.35	7.10
822-0422	RD-422	....	A	⅛″	Black	16.88	10.00	9.00	8.45	7.95	7.70
822-0461	....	RD-461	B	¼″	Clear	14.37	8.25	7.70	7.20	6.80	6.50
822-0462	RD-462	....	A	¼″	Clear	15.45	8.75	8.25	7.62	7.30	6.85
822-0471	....	RD-471	B	⅛″	Clear	15.62	9.40	8.35	7.80	7.35	7.10
822-0472	RD-472	....	A	⅛″	Clear	16.88	10.00	9.00	8.45	7.95	7.70

Specify Stock No., Mfr's Type and Resistance Value When Ordering Controls

Trimmer Potentiometers

TRW ELECTRONIC COMPONENTS

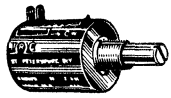
TYPE 7300 COMMERICAL/INDUSTRIAL POT

20" Winding Provides Better Resolution, Increased Reliability

Miniature 10-turn wirewound pot rated two watts at 40°C. Brass bushing and front plate, black mirror-finish phenolic case. Precision drawn alloy wire wound on copper mandrel. Moving contacts are made of precious metal alloys. 1½" long by ¾" diameter. 15/64" rear terminals and ⅜"-32 by 5/16" long bushing save front panel space, allow greater packaging density. ¼x½" long screwdriver shaft. Resistance tolerance, ±.25%; linearity, ±.5% (100-2000 ohms), ±.25% (5000 ohms and up). Temp. range, −50°C to +85°C. Stop-mechanism, independent of mechanical elements. **Resistances Available:** 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k ohms. IMPORTANT—SEE TABLE "A" AT RIGHT. Shpg. wt. 4 oz.

822-92RC. 1-2..Ea. 13.12 3-4..Ea. 11.00
5-9.....Ea. 10.00 10-24.....Ea. 9.00

TYPE 8400 PRECISION 10-TURN POTENTIOMETER



Projects Only 1⅛" Behind Panel, Features Precision Molded Nylon Housing and End Plates

Miniature wirewound pot has only ⅞" diameter. Grooved interior for 0.25% independent linearity. 20" winding. Precious metal wiper, gold-plated center terminal contact. Ribbon welded, multi-wire terminals. Screwdriver adjustment. Retaining "C"-ring. Rated 3 watts at 40°C ambient. Tolerance, ±5%. Temp. range, −55°C to +105°C. Temp. coefficient, ±70 PPM/°C. Resolution, .070 to .013%. Takes 10g vibration, 55-2000 cycles; 55g shock. **Specify Resistance:** 100, 200, 500 ohms, 1000, 2000, 5000, 10k, 20k, 50k, 100k. IMPORTANT—SEE TABLE "A" AT RIGHT. 2 oz.

822-96RC. 1-2.....Each 11.75
3-4.....Ea. 8.25 5-9.....Ea. 7.50
10-24.....Ea. 6.60 25-49.....Ea. 6.25
50-99.....Each 5.95

TABLE A—IMPORTANT ORDERING INFORMATION

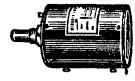
To Order: Complete the Stock Number shown by placing the designated Resistance code for Ohms Value where RC appears in the Stock Number. Each particular listing shows what ohm values are available for each series.

Value	RC	Value	RC	Value	RC
10	01	2K	32	125K	62
20	04	2.5K	35	180K	65
50	07	5K	38	200K	68
75	10	10K	41	250K	71
100	13	20K	44	300K	74
125	17	25K	47	450K	77
200	20	30K	50	500K	80
250	23	50K	53	600K	83
500	26	75K	56	1 meg	87
1K	29	100K	59	2 meg	90

LABORATORY AND INSTRUMENT POTENTIOMETERS

TYPE HD-150. Highly stable, critical adjustment control meets requirements of industrial, military, and computer instrumentation. 10-turn, 5 watt controls featuring high resolution and availability in high precision linearity up to ±0.1%. Power rating based on 40°C ambient. Operating temperature range, −55°C to +100°C. Resistance tolerance, ±3%. Patented metal-to-metal stop system with mounting bushing prevents damage if excessive force is applied against stops. Torque, 2 oz.-in. maximum. Phenolic case is 1½" diameter x 2" long; ¼" diameter nickel-plated brass shaft extends ½" beyond ⅜"-32x3/16"-long bushing. Av. shpg. wt. 4 oz.

Stock No.	Linearity	Resistance Values (Ohms) Important—See Table A Above	EACH 1-2	3-4	5-9	10-24	25-49	50-99
822-02RC	±0.25%	500, 1000, 2000, 5000, 10k, 20, 30k, 50k, 100k, 200k	17.50	10.00	9.50	9.00	8.50	8.00
822-01RC	±0.1%	1000, 2000, 5000, 10k, 20,k 30k, 50k, 100k, 200k	20.00	13.50	12.50	11.80	11.10	10.45



HD-150

METAL-CASED POTENTIOMETERS

TYPES 5000, 7500, 1000. Extraordinarily rugged, metal encased 10-turn controls designed specifically for use in airborne and mobile equipment that is subject to extreme shock and vibration. Feature one-piece bushing and front header of nickel-plated brass with moisture and dust-resistant bonding of case to headers. Shaft is moisture sealed by means of an "O" ring. Patented metal-to-metal stop system prevents damage at ends of travel of contactor. Separate electrical and mechanical sections assure long rotational life. Gold-plated turret terminals for high reliability, excellent conductivity, and ease of soldering. Operating temp. range, −55°C to +125°C. Maximum starting and running torque is 2 oz.-in. Power ratings based on 40°C ambient. Shpg. wt. 4 oz.

TYPE 5000

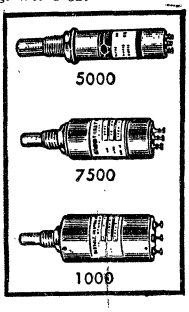
10-turn potentiometer with 1½-watt power rating. ½" dia. by 1 15/32" long. Res. tol. ±5%, linearity, ±0.5%. ¼" shaft extends ½" beyond ⅜-32x½" bushing.

TYPE 7500

10-turn potentiometer with 3-watt power rating. ¾" dia. by 1 21/32" long. Resistance tolerance ±5%. ¼" dia shaft extending ½" beyond ⅜-32 bushing. ½" bushing and linearity is ±.5%. Has ¼" dia. shaft extending ½" beyond ⅜"-32 bushing. Bushing is ½" long.

TYPE 1000

10-turn potentiometer with 3-watt power rating. 1" diameter by 1 11/32" long. Resistance tolerance is ±5%



5000

7500

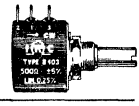
1000

Stock No.	Mfr's Type	Resistance Values (Ohms) Important—See Table A Above	EACH 1	2-3	4-5	6-9	10-24	25-49
822-89RC	5000	100, 500, 1000, 5000, 10k, 25k, 50k	25.00	20.00	14.50	13.50	12.75	12.00

Stock No.	Mfr's Type	Resistance Values (Ohms) Important—See Table A Above	EACH 1	2-3	4-5	6-9	10-24
822-93RC	7500	100, 250, 500, 1000. 5000, 10k, 25k, 50k, 100k	25.00	20.00	14.50	13.50	12.75
822-85RC	1000	500, 1000, 2500, 5000, 10k, 25k, 50k, 100k, 200k					

TYPE 8403 ⅞" WIREWOUND POTENTIOMETER

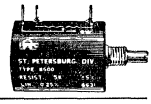
TYPE 8403 THREE-TURN. ⅝" deep behind panel. Tolerance, ±5%. Rated 2 watts at 40°C, 1 watt at 105°C. Operating temperature range: −55°C to +105°C. Coefficient; ±70 PPM/°C. Has screwdriver adjustment slot; ¼" diameter shaft with ⅜" bushing. Torque, 1 oz.-in. maximum. Insulation resistance at 500 VDC-1000 megohms. Turret-type terminals are molded in, gold plated for easy soldering. Av. shpg. wt. 2 oz.



Stock No.	Mfr's Type	Resistance Values in Ohms Important—See Table A Above	EACH 1-2	3-4	5-9	10-24	25-49	50-99
822-97RC	8403	50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 30k, 50k	13.12	11.00	10.00	9.00	8.00	7.00

TYPE 8500 10-TURN WIREWOUND POTENTIOMETER

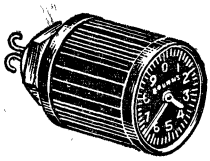
TYPE 8500 10-TURN. For wide industrial and commercial applications. "Heated core" winding prohibits turn shifting. Tolerance, ±5%. Rated 3.0 watts at 25°C ambient. Temperature range: −55°C to +105°C. Coefficient: ±70 PPM/°C maximum. Screwdriver adjustment slot, .030" wide by .045" deep on ⅛" diameter shaft. 5/64" diameter holes in gold-plated terminals. Torque: 1 oz.-in. max. Insul. res. at 500 VDC, 1000 meg min. 2 oz.



Stock No.	Mfr's Type	Resistance Values in Ohms Important—See Table A Above	EACH 1-2	3-4	5-9	10-24	25-49	50-99
822-98RC	8500	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k	19.25	12.50	12.00	11.00	10.00	9.00

Potentiometers, Accessories BOURNS

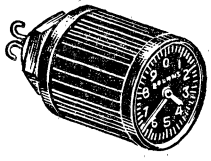
TYPE 3600S KNOBPOT® POTENTIOMETER



This 10-turn unit has a readout dial with small hand that indicates number of completed turns and a large hand that cycles once every turn. Clock face has excellent readability with settings repeatable within a 0.1% voltage ratio. Phasing of readout to pot is ±0.5%. Requires virtually no back-of-panel space —only bushing and terminals are located behind panel. Front panel space required is only ¾″ diameter by 1″ deep. Unit uses only two holes for mounting—13/32″ hole for bushing and 5/64″ hole for locking pin. Power ratings: 1½ watts at 25°C and ¾ watt at 75°C. Meets MIL-STD-202B specs for humidity, dielectric strength. **Quantity prices are for one resistance value only. See Table A below before ordering.**

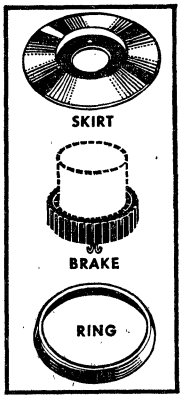
Stock No.	Mfr's Type	Values Available (Specify Value Wanted)	EACH§ 1-2	3-4	5-9	10-24	25-Up
529-72RC	3600S	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k ohms	36.80	29.44	23.00	21.30	19.17
529-72RC	3600S	200k, 250k ohms	54.00	43.20	34.00	31.48	28.34

TYPE 3640S KNOBPOT SENIOR POTENTIOMETER



Ten-turn pot, knob and readout dial in one small package. Repeatability, ±0.05% voltage ratio. Dial setting accuracy (including linearity) ±0.20% for 100 and 200 ohms; ±0.15%, 500-2k; ±0.10%, 10k to 500k. Tol. ±3%. Rotation, 3600°. 1000-megohm insulation res. at 500 VDC. Ambient temp. range, −65°C to +85°C. Rated 2½ watts at 25° Centigrade Silverweld® terminations. Self-locking for stability during vibration. 1¼″ dia., 1½″ long. Requires 13/32″ hole for bushing, 5/64″ for locking pin. Hook terminals. Meet MIL-STD-202B specs for humidity and dielectric strength. Also meet military specs for vibration, shock, load life. **Quantity prices are for one resistance value only. See Table A.**

Stock No.	Mfr's Type	Values Available (Specify Value Wanted)	EACH§ 1-2	3-4	5-9	10-24	25-Up
529-73RC	3640S	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 250k ohms	36.80	29.44	23.00	21.30	19.17
529-73RC	3640S	500k only	54.00	43.20	34.00	31.48	28.34



ACCESSORIES FOR 3600S KNOBPOT

H-93 Color Snap-Rings. Shpg. wt. 2 oz.

Stock No.	Color	EACH 1-4	5-9
528-0043	Red	.60	.48
528-0045	Yellow	.60	.48
528-0039	Blue	.60	.48
528-0041	Green	.60	.48
528-0047	White	.60	.48

H-103 Brake. For use with 3600S Knobpot listed above. Locks control setting. Snaps on easily —prevents control from slipping or shifting out of adjustment. Wt., 2 oz.

528-0065. 1-4.....Each 2.25
5-9.....Each 1.80

H-95 Skirt. For use with 3600S Knobpot listed above. Highly polished, stainless steel skirt lends highly attractive appearance to assembly. 1½″ diameter. Wt., 2 oz.

528-0049. 1-4.....Each 2.40
5-9.....Each 1.92

ACCESSORIES FOR 3640S KNOBPOT

H-99 Color Snap-Rings. Shpg. wt. 2 oz.

Stock No.	Color	EACH 1-4	5-9
528-0059	Red	.60	.48
528-0061	Yellow	.60	.48
528-0055	Blue	.60	.48
528-0057	Green	.60	.48
528-0063	White	.60	.48

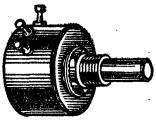
H-97 Brake. For use with 3640S Knobpot potentiometers listed above. Locks control setting in any desired position. Easy to install—prevents control setting from slipping or shifting out of adjustment. Wt., 2 oz.

528-0051. 1-4.....Each 2.25
5-9.....Each 1.80

H-98 Skirt. For use with 3640S Knobpot listed above. Highly polished stainless steel. Imparts an attractive modern appearance to panel. Mounts securely through bushing and locking pin. 2½″ diameter. Wt., 2 oz.

528-0053. 1-4.....Each 6.60
5-9.....Each 5.28

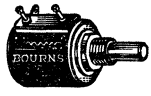
TYPE 3438 SINGLE TURN POT



Precision pot has Infinitron® element for essentially infinite resolution. Power: 1 watt at 40°C. Tolerance: ±20%. Operating temp: −15° to +105°C. Temp. coeff.: 200PPM/°C max. Size: 1 1/16″ dia. x .71″; shaft, ⅞″ including ⅜-32 bushings ⅜″ long. Gold plated turret terminals. **Available in 100, 200, 500, 1000, 2000, and 5000 ohms; 10k, 20k and 50k ohms. Quantity prices are for one resistance value only. See Table A below before ordering.**

Stock No.	Mfr's Type	Values (See Copy)	EACH§ 1-2	3-4	5-9	10-24	25-49	50-Up
529-63RC	3438S	100 ohms-50k	18.55	13.75	12.50	11.25	10.00	9.50

TYPE 3501 10-TURN POT



Infinitron® element for essentially infinite resolution. Meets MIL-R-39023 humidity cycling requirements. Power: 2 watts at 70°C. Tolerance: ±10%. Operating temp.: −55° to +125°C. Temp. coeff.: 200PPM/°C max. Size: ⅞″ dia.x 15/16″. Gold-plated turret terminals. **Available in values of 1000, 2000, and 5000 ohms; 10k, 20k, 50k, 100k, 200k and 500k ohms. Quantity prices are for one resistance value only. See Table A below before ordering.**

Stock No.	Mfr's Type	Values (See Copy)	EACH§ 1-2	3-4	5-9	10-24	25-49	50-Up
529-66RC	3501S	1000 ohms-500k	26.45	16.50	15.00	14.25	13.50	12.75

MOUNTING ACCESSORIES Av. shpg. wt., 1 oz.

Stock No.	Type	Used with These Types	Description	1-4	5-9	10-Up
528-0001	H-01	All types	1½″, 2-56 round head screws; for mtg., 4 or 5 units	.025	.025	.02
528-0003	H-02	All types	12″ long, 2-56 stainless rod; for group mtg., any number unit	1.75	1.40	.80
528-0005	H-04	3250, 3251, 3280, 3281	#1-72x1″ machine screw for mounting	.05	.04	.03
528-0007	H-05	3250, 3251, 3280, 3281	Hex nut for use with above screw	.10	.06	.05
528-0009	H-11E	200, 207, 208, 209, 215, 224, 235, 236,	End mounting bracket for types having 1″ mtg. ctrs.	.25	.23	.20
528-0011	H-12S	260, 271-274, 3010-3012, 3051-3053	Side mounting bracket for types having 1″ mtg. ctrs.	.25	.23	.20
528-0013	H-15S	3067, 3068	Side mounting bracket	.25	.23	.20
528-0015	H-21E	220	End mounting bracket for types having ¾″ mtg. ctrs.	.25	.23	.20
528-0017	H-22S	220	Side mounting bracket for types having ¾″ mtg. ctrs.	.25	.23	.20
528-0019	H-25	3250, 3251	Stainless stacking straps. For ½″ square types.	.075	.06	.05
528-0021	H-26S	3250, 3251	Stainless side mounting bracket. For ½″ square types.	.25	.23	.20
528-0037	H-90	All types	Screwdriver for setting panel-mount models. With clip.	.625	.50	.35

TABLE A—ORDERING INFORMATION

To complete Allied Stock No. insert Resistance code (RC—shown to right of ohms value in table below) in place of RC in Stock No.

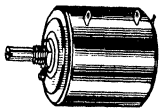
Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC
10	04	100	16	1000	25	10k	34	50k	46	200k	58	1 megohm	70
20	07	200	19	2000	28	20k	37	100k	49	250k	61	2 megohm	73
25	10	250	20	2500	29	25k	40	125k	52	500k	64	5 megohm	76
50	13	500	22	5000	31	30k	43	150k	55	750k	67	.....	.....

NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

Trimmers, 150-160—Linears, 160-171—Mil, 172—Controls, 174-5—Coils, 176-9—Rheostats, 180

BOURNS Precision Controls

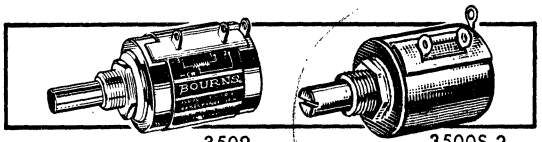
3400S BUSHING-MOUNT 10-TURN POT



Excellent wiper stability, resolution. Silverweld® wire termination. Moisture-resistant Rated 5 watts at 40°C. Temp. range —65 to +105°C. Meets MIL-R-12934C humidity cycling. 1 13/16″ dia. body is 1 3/4″ long. 1/4″ shaft. 3/8″-32 bushing. Solder lug terms. **Quantity prices for one value and type only. See Table A on previous page before ordering.** Wt. 7 oz.

Stock No.	Ohms (Specify Value Wanted)	EACH § 1-2	3-4	5-9	10-24	25-Up
529-59 RC	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k	17.62	11.00	10.00	9.50	9.00
529-59 RC	500k only	35.57	20.90	19.00	18.05	17.10

10-TURN PRECISION WIREWOUND POTS



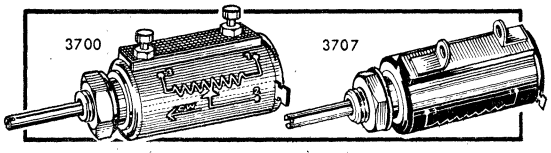
3509 3500S-2

Type 3500S-2. Steady-state humidity proof. Rated 2 watts at 70°C. Operating temperature range, —65° to +125°C. Resist shock, vibration, sand, dust, fungus. Resistance tolerance, ±3%; linearity, 0.2%. Molded all-plastic case with shaft seal. Resolution: .049% to .005%—50 ohms to 500k, respectively. Has 1 3/16″ shaft with bushing. 1/4″ shaft dia. Bushing. 3/8-22. Body, 1x7/8″ dia. Silverweld® terminations. Solder lug terminals.

Type 3509S-1-RC. Precision 10-turn pot has excellent wiper stability. Rated 2 watts at 25°C. Operating range, —55° to +105°C. Resolution. .044 to .006% from 100 ohms to 100k, respectively. Tolerance, ±5%. Body, 1 1/8x7/8″ dia. Non-metallic screwdriver-slot shaft measures 1 3/16″ long with bushing. Silverweld® terminations. Solder terminals. **Quantity prices are for one value only. See Table A on previous page before ordering.** Shpg. wt. 4 oz.

Stock No.	Mfr's Type	Ohms (Specify Value Wanted)	EACH § 1-2	3-4	5-9	10-24	25-Up
529-65 RC	3500S-2	50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 125k	17.62	11.00	10.00	9.50	9.00
529-65 RC	3500S-2	150k, 200k, 250k	34.75	20.90	19.00	18.05	17.10
529-65 RC	3500S-2	500k only	52.12	30.80	28.00	26.60	25.20
529-68 RC	3509S-1	100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k	10.25	6.55	5.95	5.66	5.36

SERIES 3700S AND 3707S—1/2″ 10-TURN POTENTIOMETERS



Miniature 10-turn bushing mount pots. Resolution, .072% to .014% from 100 to 100k respectively. Type 3700 rated 1 watt at 70°C and is steady-state humidity-resistant; Type 3707 rated 1 watt at 40°C. Operating temperature range; Type 3700, —65° to +125°C; Type 3707, —55° to +105°C. Resistance tolerance, ±5%. Independent linearity: Type 3700 ±0.59%; Type 3707 ±1.0%. Molded all-plastic case with shaft seal and solder lugs. Silverweld® multiple resistance wires eliminate single wire terminations. **Quantity prices for one value and type only. See Table A on previous page before ordering.** Shpg. wt. 4 oz.

TYPE 3700S

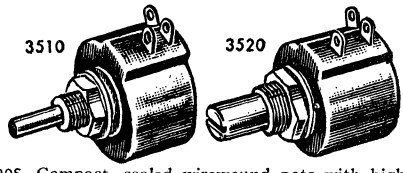
Stock No.	Ohms (Specify Value Wanted)	EACH § 1-2	3-4	5-9	10-24	25-49	50-Up
529-77 RC	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k	42.75	26.95	24.50	23.27	22.05	20.82

TYPE 3707S

529-78 RC	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k and 100k	30.00	18.98	17.25	16.39	15.53	14.67

3 AND 5-TURN BUSHING-MOUNT POTS

- Humidity Resistant
- Temp. Range —65° to +125°C
- Individually Inspected

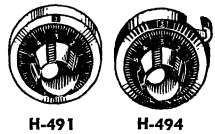


Types 3510S, 3520S. Compact, sealed wirewound pots with high humidity resistance. Meet MIL-STD-202 for steady-state humidity, vibration and shock; meet MIL-E-5272C for sand, dust, fungus. Individual inspection of each potentiometer is carried out to guarantee physical and electrical characteristics.

Type 3510S is a 3-turn pot rated @ 1 watt to 70°C. Resolution is .1 to .019% from 200-ohm to 100k models respectively. 7/8″ dia. body is .557″ long with 1 1/16″ long bushing and shaft. 1/8″ dia. shaft with 1/4″ bushing. Type 3520S is a 5-turn pot rated @ 1 1/2 watts to 70°C. Resolution is .077 to .012 up to 250k models. 7/8″ diameter body is .678″ long with 1 3/16″ long bushing and shaft. 1/4″ dia. shaft with 3/8″ bushing. Tol. ±3%. Solder lugs. **Quantity prices are for one resistance and type only. See Table A on p. 164 before ordering.** 3 oz.

Stock No.	Mfr's Type	Ohms (Specify Value Wanted)	EACH § 1-2	3-4	5-9	10-24	25-49	50-99
529-69 RC	3510S	25, 50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k	26.25	16.50	15.00	14.25	13.50	12.75
529-69 RC	3510S	100k only	57.50	36.30	33.00	31.35	29.70	28.05
529-70 RC	3520S	50, 100, 200, 500, 1000, 5000, 10k, 20k, 50k, 75k	23.62	14.85	13.50	12.82	12.15	11.47
529-70 RC	3520S	100k only	39.25	24.75	22.50	21.37	20.25	19.12
529-70 RC	3520S	250k only	55.00	34.65	31.50	29.92	28.35	26.77

30-TURN COUNTING DIALS

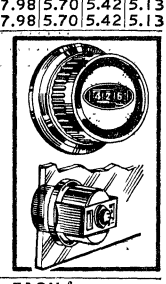


H-491 H-494

For Bourns or other potentiometers rotating up to 30 turns. Easy-to-read white numerals on black background—even on types with clear anodized body. Read one part in 1000 for ten turns. Requires only 1″ dia. panel space. Mount directly to potentiometer shaft to eliminate backlash. Locking device on units with brake secures dial without shift in setting. Fit 1/4″ diameter bushing except H-491-3, H-492-3, H-493-3 and H-494-3 fit 3/8″ bushing. 1″ diameter. **Quantity prices are for one type only.** Shpg. wt. 4 oz.

Stock No.	Mfr's Type: With Brake	Mfr's Type: No Brake	Fits Shaft Dia.	Finish	EACH § 1-2	3-4	5-9	10-24	25-Up
528-0071	.....	H-491-1	3/32″	Clear	11.85	9.48	7.05	6.70	6.35
528-0077	H-492-1	.....	3/32″	Clear	12.20	9.76	7.25	6.89	6.53
528-0083	.....	H-493-1	3/32″	Black	12.20	9.76	7.25	6.89	6.53
528-0089	H-494-1	.....	3/32″	Black	12.42	9.94	7.40	7.03	6.66
528-0073	.....	H-491-2	1/8″	Clear	11.85	9.48	7.05	6.70	6.35
528-0079	H-492-2	.....	1/8″	Clear	12.20	9.76	7.25	6.89	6.53
528-0085	.....	H-493-2	1/8″	Black	12.20	9.76	7.25	6.89	6.53
528-0091	H-494-2	.....	1/8″	Black	12.42	9.94	7.40	7.03	6.66
528-0075	.....	H-491-3	1/4″	Clear	10.62	8.50	6.75	6.41	6.08
528-0081	H-492-3	.....	1/4″	Clear	11.70	9.36	6.95	6.60	6.26
528-0087	.....	H-493-3	1/4″	Black	11.70	9.36	6.95	6.60	6.26
528-0093	H-494-3	.....	1/4″	Black	12.02	9.62	7.15	6.79	6.44
528-0095	H-510-1	.....	1/8″	Clear	9.97	7.98	5.70	5.42	5.13
528-0096	H-510-2	.....	1/4″	Clear	9.97	7.98	5.70	5.42	5.13

3650S 10-TURN DIGITAL KNOBPOT®



- Integral Digital Readout, Knob and Pot
- Accuracy—Output Within 0.1% of Reading
- Repeatability—Within 0.05% Voltage Ratio

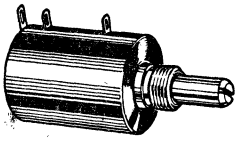
MIL-R-12934 for dielectric strength, vibration, etc. MIL-R-5272 for sand, dust, fungus. Silverweld® term. Panel, solder lugs. Tol., ±3%. Res., .053 for 100 ohms to .004% for 500k ohms. 2.5 watts at 25°C. 1 1/4″ knob; 1 3/4″ flange. For panels 1/32-1/4″. Panel hole, 1.39″. **Quantity prices are for one resistance value only. See Table A on prev. pg. before ordering.** 4 oz.

Stock No.	Ohms (Specify Value Wanted)	EACH § 1-2	3-4	5-9	10-24	25-Up
529-74 RC	100, 200, 500, 1000, 2000 5000, 10k, 20k, 50k, 75k 100k, 125k, 200k, 250k	45.60	36.48	28.50	26.39	23.75
529-74 RC	500k only	62.52	50.02	39.25	36.35	32.71

NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

BUNKER RAMO AMPHENOL Potentiometers and Dials

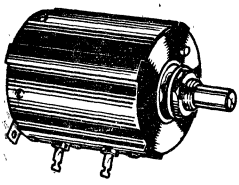
SERIES 4101B 7/8" DIA. TEN-TURN 2-WATT MICROPOT



High-performance wirewound Micropot has backlash-free wiper drive mechanism for precise repeat settings. Precious metal wiper and pickup contacts eliminate noise and corrosion problems. Resistance element is welded directly to the gold-plated terminal lugs. Rated 2 watts at 40°C for 1000 hours. Tolerance, ±5%. Temperature range, −55°C to +125°C. Rotational life, 200,000 revolutions. Starting torque, 1.5 oz. in.; running torque, 1.0 oz. in. Size: 7/8" dia., 1 3/16" length. Values: 100, 200, 1000, 2000, 5000, 10k, 20k, 50k, 100k ohms—Wt. 3 oz. **See Table A at Upper Right For Ordering Information.**

714-90RC.....Each 9.95 2-9.....Each 5.95
10-24.....Each 5.65 25-49.....Each 5.35 50-99....Each 5.05

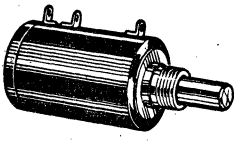
SERIES 205 1 3/4" DIA. TEN-TURN 5-WATT MICROPOT



Wirewound linear pots have resistance proportional to shaft rotation. 0.1% zero-based linearity. Extra-long resistance element for up to 64% better resolution. Anti-backlash drive mechanism. Rated 5 watts at 40°C. Tolerance, ±3%, except *±10%. Temperature range, −55°C to +105°C. Rotational life, 1,000,000 revs. Torque: starting, 3 oz. in.; running, 1.5 oz. in. Size: 1 3/4" dia., 2 1/8" length. Values: *25, 50, 100, 500, 1000, 5000, 10k, 20k, 50k, 100k. Av. shpg. wt. 5 oz. **See Table A at Upper Right For Ordering Information.**

714-40RC.....Each 29.95 2-9.....Each 19.42
10-24....Each 18.42 25-49.....Each 17.48 50-99.....Each 12.48

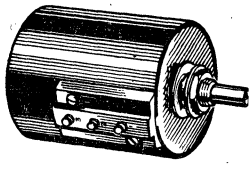
SERIES 2151B 7/8" DIA. TEN-TURN 3-WATT MICROPOT



Ten-turn potentiometer has wirewound resistance element inside high-temperature molded phenolic case. Special wiper drive mechanism eliminates backlash. Terminations are welded directly to the gold-plated terminal lugs. 1/4" common shaft assures unit-to-unit indexing accuracy and high reliability when ganging. Rated 3 watts at 40°C. Tolerance, ±3%. Temperature range, −55°C to +105°C. Rotational life, 2,000,000 revolutions. 7/8" dia., 1 1/2" length. Values: 100, 500, 1000, 5000, 10k, 30k, 50k, 100k. Wt. 5 oz. **See Table A at Upper Right For Ordering Information.**

714-45RC.....Each 17.75 2-9.....Each 10.50
10-24.....Each 9.97 25-49.....Each 9.45
50-99.....Each 8.92 100-249.....Each 8.40

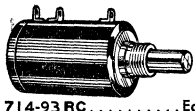
SERIES 2201B 1 13/16" DIA. TEN-TURN 5-WATT MICROPOT



Precision extra-long life 10-turn potentiometer has wirewound element wrapped around center core under maximum tension for absolute wiper-to-element concentricity. Dual brass bearing shaft support. Anti-backlash carrier. Rated 5 watts at 40°C. Tolerance, ±3%, except *±5%. Temp. range, −55°C to +105°C. Rotational life, 5,000,000 revs. 1 13/16" dia. 2 1/8" length. Values: *25, *50, 100, 500, 1000, 5000, 10k, 20k, 50k, 100k, *200k. 5 oz. **See Table A at Upper Right For Ordering Info.**

714-47RC.....Each 17.75 2-9.....Each 10.50
10-24.....Each 9.97 25-49.....Each 9.45
50-99.....Each 8.92 100-249.....Each 8.40

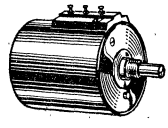
4301B 10-TURN MICROPOT



Metal shaft and bushing. High temperature molded phenolic case. Linearity is 0.25%. 2,000,000 revolution life with zero backlash. Resistance tolerance 5%. Values: 25, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k. **See Table A For Ordering Information.**

714-93RC.....Each 11.75 2-9.....Each 6.95
10-24.....Each 6.43 25-49.....Each 6.20 50-99....Each 5.90

4401B 10-TURN POTENTIOMETER



Rugged dual bearing unit. Temp. and humidity range meets MIL-R-12934C. Specs., same as above. Values: 25, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k. **See Table A at Upper Right For Ordering.**

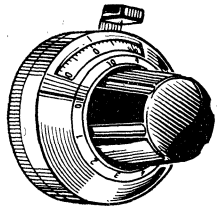
714-94RC...Each 11.75 2-9.....Each 6.95
10-24 Ea. 6.43 25-49 Ea. 6.20 50-99..Ea. 5.90

TABLE A—ORDERING INFORMATION

To Complete Allied Stock Number Insert Numerical Code Shown in () Opposite Desired Value in Place of RC in Stock Number. Each Value Indicated is Available if it is Listed Under the Series Listing.

Value	RC	Value	RC	Value	RC	Value	RC	Value	RC
10	(05)	200	(25)	10k	(45)	100k	(65)	1 Meg	(80)
20	(10)	500	(30)	20k	(50)	200k	(67)	2.5 Meg	(83)
25	(13)	1000	(35)	25k	(55)	250k	(70)	10 Meg	(90)
50	(15)	2000	(38)	30k	(57)	500k	(75)	.....	.....
100	(20)	5000	(40)	50k	(60)	.....	.....	.....	.....

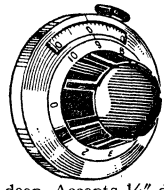
SERIES 1370 MINIATURE CONCENTRIC MICRODIAL



Modern miniature dial styling is compatible with today's compact panel design. Only 7/8" diameter, yet has large, easy-to-read concentric scale. Indicates angular position of potentiometers and multi-turn devices of 10 turns or less with 1000:1 indexing accuracy. Epicyclic gears provide smooth, stepless operation. Vernier dial mounts directly to shaft, eliminating backlash. Positive fingertip disk brake. 15/16" deep. Accepts 1/4" shaft dia. With mtg. hardware. Wt. 2oz.

714-4370.....Each 11.00 2-9.....Each 6.50
10-24.....Each 6.17 25-49.....Each 5.85
50-99.....Each 5.53 100-249.....Each 5.20

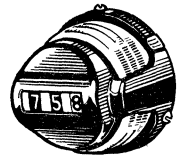
SERIES 1350 TEN-TURN CONCENTRIC MICRODIALS



Precision counting dial indicates angular position of potentiometers and multi-turn devices of 10 turns or less with 1000:1 indexing accuracy. Inner dial counts turns, large, easily readable outer vernier dial indicates hundredths. Epicyclic gear movement. Internal gear of turn dial meshes with eccentric-driven spur gear for smooth, stepless operation. Vernier dial locks rigidly onto shaft to prevent backlash. Fingertip brake holds shaft position until released. 1 13/16" diameter; 1" deep. Accepts 1/4" dia. shafts. With all mounting hardware, Allen wrench, instructions. Wt. 2 oz.

714-4350.....Each 9.72 2-9.....Each 5.75
10-24.....Each 5.46 25-49.....Each 5.18 50-99....Each 4.89

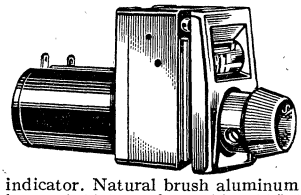
SERIES 1300 DIRECT-READING MICRODIALS



In-line digital-type dials for Micropots and other rotary devices. Displays large, easy-to-read numerals. Indexed accuracy is 1 part in 1000. Mount directly to shaft to eliminate backlash. Exceeds MIL-E-5272C. 3-digit types are 1 21/32x1 13/16" dia.; 4-digit types are 1 5/8x2 1/16" dia. Accepts 1/8" to 5/16" dia. shafts. For use with panels up to 3/16" thick. Type 1309 includes fingertip brake. Wt. 4 oz.

Stock No.	Mfr's Type	Digits	Turns	EACH 1	2-9	10-24	25-49	50-99
714-4309	1309	3	10	27.65	16.38	15.54	14.75	13.91
714-4310	1310	3	10	25.67	15.22	14.43	13.70	12.91
714-4304	1304	4	100	35.42	21.00	19.95	18.90	17.85
714-4314	1314	4	100	38.07	22.75	21.42	20.31	19.16

SERIES 3100 DIGITAL MINIATURE MICRODIAL



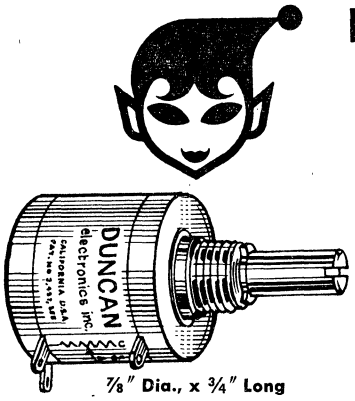
10-turn Microdial with direct-reading, miniature digital readout to 999. Convex lens provides clear reading at a distance. Dial is extremely precise; indexing accuracy is 1 part in 1000. Push knob in to apply brake, out to release. Can be used with any 10-turn pot with a 1/4" or 1/8" shaft, or as panel indicator. Natural brush aluminum finish. Mounts in 1x1 1/2" hole in panel thickness from 1/16" to 3/16". 3120 Series takes 1/8" dia. shaft. 3140 Series takes 1/4" dia. shaft. 12 1/32x1 1/8" (HxW). Wt. 5 oz.

Stock No.	Mfr's Type	Shaft Dia.	Light	EACH 1	2-9	10-24	25-49	50-99
714-7321	3121	1/8"	None	23.02	13.00	12.35	11.70	11.05
714-7341	3141	1/4"	None	21.25	12.00	11.40	10.80	10.20
714-7342	3141-2	1/4"	White	24.27	13.75	13.05	12.40	11.65

See Table A (Top of Page), For Ordering Information

Duncan 10-Turn Potentiometer and Dials

LINEARS SECTION



7/8" Dia., x 3/4" Long

DUNCAN PIXIEPOT®

10-TURN PRECISION WIREWOUND POTENTIOMETER

- Compact Size—Only 7/16" Diameter, 3/4" Long
- 3/8"-32 Bushing Mount with Nut and Lock Washer
- Long Life—500,000 Shaft Revolutions
- Stainless Steel 1/4" Slotted Shaft
- Welded Terminations for Maximum Reliability
- Can Be Used With All Dials Shown Below

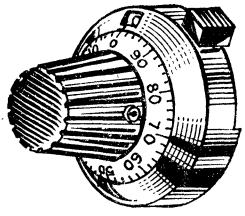
MODEL 3253. The ultimate in a low-cost, precision 10-turn potentiometer. All new design gives extremely smooth, long life performance. Resolution is comparable to 10-turn potentiometers that are four times larger. High impact Polysulfone plastic case with glass-filled Polysulfone front and rear lids. Plastic case positively resists heat of soldering iron, even direct contact. Enclosed interlocking construction is designed for positive humidity and dust protection. Terminations are welded for maximum reliability. Has 1/4" stainless steel slotted shaft and anti-rotation pin. Actual electrical travel: 3600° (±10°, −0°). Resistance tolerance: ±5%. Power rating: 2 watts at 20° C, 0 at 85° C. End resistance; 0.25% of total resistance or 1.0 ohm, whichever is greater. Dielectric strength; 1000 V rms. Insulation resistance; 1000 megohms min. at 500 VDC max. Total mechanical travel: 3600° (+15°, −0°). Mechanical life: 500,000 shaft revolutions. Torque: 1.0 oz.-in. max. Stop strength: 50 oz.-in. Temperature range: −25°C to +85° C. Vibration: 10G to 2000 Hz. Shock: 50G. Size, 7/8" dia. x 3/4"; 3/8"-32 bushing mount. Weight, 0.5 oz.

Ohms	Stock No.	Ohms	Stock No.	Ohms	Stock No.
100	530-4005	2000	530-4030	50K	530-4060
200	530-4010	5000	530-4035	100K	530-4070
500	530-4025	10K	530-4040	.....	.....
1000	530-4025	20K	530-4050	.....	.....

EACH (Prices for one resistance value only)					
1-9	10-24	25-49	50-99	100-249	250-499
5.35	4.75	4.50	4.35	4.15	3.90

MODEL 61 MINIATURE TURNS-COUNTING DIAL

- Reading Accuracy of One Part in One Thousand
- Positive, Quick-Action Lever Lock
- Two Concentric Scales for Easy Reading



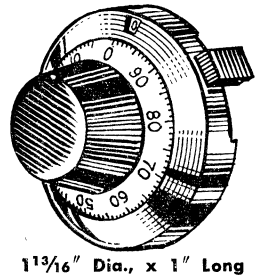
7/8" Dia., x .795" Long

Numerals are large and easily visible from any angle. Shaft rotation is read directly from two concentric scales: inner scale is graduated in fiftieths of a turn; outer scale in full turns from 0 to 9. Black scale readings on satin finish aluminum with black nylon knob and locking handle. Fits 1/4" shaft, 3/8" bushing pots. Dial is secured to potentiometer shaft by a set screw for no-slip action. Size, 7/8" dia. x .795" long overall.

Stock No.	Mfr's Type	Turns	EACH 1-9	10-24	25-49	50-99	100-249
530-1061	61	10	6.50	6.40	6.30	6.15	5.80

MODEL 81 PRECISION TURNS-COUNTING DIAL

- 10-Turn Counter Indicates Full Turns, 100-Division Dial Indicates Hundredths
- Reading Accuracy, One Part in One Thousand
- Positive Locking Device



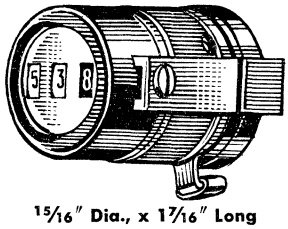
1 13/16" Dia., x 1" Long

Dial can be read to accuracy of one part in a thousand. Mounting set screw connects the 100-division inner dial directly to shaft of device being positioned, eliminating backlash. Ten-turn counter indicates the number of full turns completed; outer dial indicates hundredths. Rugged die-cast construction; nylon knob and locking handle. Fits 1/4" shaft. Size, 1 13/16" dia. x 1" overall.

Stock No.	Mfr's Type	Turns	EACH 1-9	10-24	25-49	50-99	100-249
530-1081	81	10	5.76	5.46	5.18	4.89	4.60

MODEL 71 DIGITAL TURNS-COUNTING DIAL

- 3-Digit Readout Has Magnifying Face Lens for Easy Reading
- Only 15/16" Diameter for Minimum Spacing; 1 7/16" Lg.



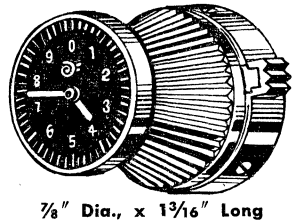
15/16" Dia., x 1 7/16" Long

Designed for applications demanding maximum readability. Extremely smooth action allows numerical transfer with no catching or binding. High impact black plastic case with metal turning cylinder and quick action, position braking lever. For use with 3/8"-32 bushing mount 1/4" shaft potentiometer. Set screw to shaft mounting eliminates backlash. Magnifying face lens for easy reading; a real aid for rapid comprehension.

Stock No.	Mfr's Type	Turns	EACH 1-9	10-24	25-49	50-99	100-249
530-1071	71	10	9.00	8.60	8.10	7.60	7.20

MODEL 76 CLOCKFACE TURNS-COUNTING DIAL

- Only 7/8" Dia.; Ideal for Minimum Space Applications
- Excellent Readability to Fiftieths of a Turn

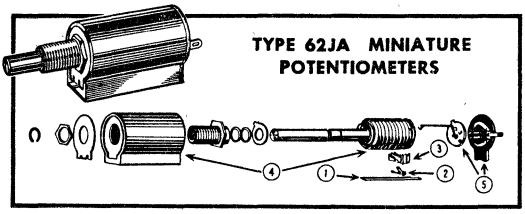


7/8" Dia., x 1 3/16" Long

Small dial (only 7/8" dia.) of polished aluminum with black plastic turn knob which allows rapid adjustment; excellent readability to fiftieths of a turn. Both clock hands and integers are finished with a glow orange enamel making readout possible from any angle, even in minimal light. Positive, easy operating locking lever. Set screw secures dial to shaft for no-slip action. Use with 3/8" bushing mount 1/4" shaft pot. Size, 7/8" dia. x 1 3/16" overall.

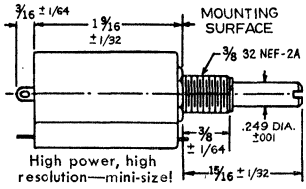
Stock No.	Mfr's Type	Turns	EACH 1-9	10-24	25-49	50-99	100-249
530-1076	76	10	9.00	8.60	8.10	7.60	7.20

Clarostat Potentiometers, Controls



EXTRA-QUALITY FEATURES DIAGRAMMED ABOVE:

- (1) Collector rail of gold-plated alloy
- (2) High conductivity, low noise contact
- (3) 4-finger carrier reduces wobble
- (4) Tough, thermal plastic construction for Case, Contact Carrier and Drum
- (5) Slip rings have 2 contact fingers at 180° position for positive contact



Precision ten-turn potentiometers offer electrical characteristics comparable to far more expensive models. Feature high power dissipation and high resolution in a miniature package design. Rated power dissipation: 2 watts @ 25°C; derated to 0 @ 85°C. Dielectric strength rated at 1000 volts AC. Absolute linearity rated ±0.25%; except 100, 200 and 250 ohm units whose linearity is rated at ±0.5%. Resistance tolerance: ±5%. Temperature coefficient: ±20 ppm/°C. Insulation resistance rated at 1000 megohms. Life expectancy: 100,000 shaft revolutions. Bearing type: sleeve bushing. Overall length measures 2 11/16" with 3/8" mounting bushing, 3/8-32 threaded. Shafts measure 1/4" in diameter by 9/16" length. Models fit Clarodials listed below. Available in resistances up to 100,000 ohms. Average shipping weight, 1 1/2 ounces.

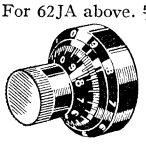
RESISTANCES AVAILABLE

Ohms	Stock No.	Ohms	Stock No.	Ohms	Stock No.
100	753-4123	1000	753-4147	20k	753-4163
200	753-4127	2000	753-4151	30k	753-4169
250	753-4129	5000	753-4159	50k	753-4173
500	753-4135	10k	753-4161	100k	753-4175

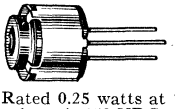
1-4.....Each 11.87 5-9.....Each 7.50
10-24.....Each 6.50 25-99.....Each 6.50

CLARODIALS

For 62JA above. 5/8" knob, 1" dial. Shpg. wt. 5 oz.



Stock No.	Mfr's Type	EACH 1-2	3-4	5-Up
753-5411	411	12.30	10.27	7.75
753-5412	412	14.30	11.94	8.95
753-5461	461	13.20	11.02	8.25
753-5462	462	15.12	12.62	9.45



SERIES 63M POTENTIOMETERS

Low profile design permits extremely close printed-circuit board-to-board, spacing. Metal shaft and faceplate with wire terminal leads for excellent flexible mounting facilities. Rated 0.25 watts at 70°C. Resistance tolerance: ±20%. Working voltage is 350 VDC, voltage breakdown, 750 VAC. Shpg. wt. 4 oz.

RESISTANCES AVAILABLE

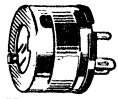
Ohms	Stock No.	Ohms	Stock No.	Ohms	Stock No.
100	753-4323	10k	753-4361	150k	753-4377
250	753-4329	15k	753-4363	200k	753-4379
500	753-4335	25k	753-4367	250k	753-4381
1000	753-4347	50k	753-4373	500k	753-4383
2500	753-4353	100k	753-4375	1 Meg	753-4387
5000	753-4359				

1-9.....Ea. 3.52 10-49.....Ea. 2.60 50-99.....Ea. 1.56
100-249....Ea. 1.35 25-499.....Ea. 1.25 500-Up.....Ea. 1.14

MODEL 53C1 2-WATT POTENTIOMETER

See table of values for Series 371 above right. For values place RC numeric code in place of RC suffix in Stock No. below.

Stock No.	Mfr's Type	EACH 1-4	5-9	10-49	50-Up
753-35RC	53C1	2.82	1.95	1.60	1.50



SERIES 371 MOLDED POTENTIOMETERS

- Economy Hot-Molded Construction
- Rated 3/8-Watt • 20% Tolerance
- Pressure Spring and Cover

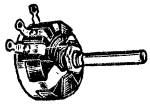
Have hot-molded carbon element, carbon contact brush, pressure spring and cover. Rating, 3/8-watt at 70°C, derating to zero at 120° C. Tol. ±20%. Wkg. V, 350 VAC. Diel. strength, 750 V rms. Torque, 6 oz.-inch max. operating; 1 lb.-inch stop. Rotation, 290° (±5°). Resistance range, 100 ohms to 1 meg. Av. shpg. wt. 2 oz.

VALUES AVAIL. PUT "RC" SHOWN HERE IN STOCK NUMBER

Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC
100	23	2500	53	25k	67	200k	79
250	29	5000	59	50k	73	250k	81
500	35	10k	61	100k	75	500k	83
1000	47	15k	63	150k	77	1 Meg	87

Stock	Leads	EACH 1-9	10-49	50-99	100-249
753-46RC	Solder Lugs	2.37	1.70	1.02	.88
753-48RC	Wire Leads	2.37	1.70	1.02	.88

TYPE 58 4-WATT WIREWOUND CONTROLS



Designed to provide extremely smooth, quiet operation as voltage dividers, bias controls, etc. Have linear windings; resistance tolerance of ±10%. Insulation tested to 1000 VAC. Control size: 25/32x1 21/32" dia. Shaft size: 2"x1/4" dia. Molded phenolic body. Shpg. wt., 4 oz.

VALUES AVAIL. INSERT RC BELOW IN STOCK NO.

Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC
1	01	30	17	500	35	20k	65
4	03	50	19	1000	47	25k	67
10	09	100	23	2000	51	30k	69
15	11	200	27	5000	59	40k	71
20	13	300	31	10k	61	50k	73

Stock No.	Mfr's Type	Resistances Available	EACH 1-4	5-9
753-39RC	58	1 ohm to 10k	3.55	2.36
753-39RC	58	20k and 25k	4.02	2.68
753-39RC	58	30k, 40k, 50k	4.72	3.15

TYPE 43C2 2-WATT WIREWOUND POTENTIOMETERS

Available in a wide range of resistances Have corrosion-proof finish, moisture and dust-proof construction. Resistance tolerance is ±5%. Linearity is ±2%. Require 15/32" O.D.; 5/8" depth behind mounting surface. With 1/4" slotted shaft and 3/8" dia., 1/2" long locking bushing. Shpg. wt. 5 oz.

RESISTANCES AVAILABLE—SPECIFY WHEN ORDERING

Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC
5	05	150	25	1000	47	5000	59
10	09	200	27	1500	49	10k	61
20	13	300	31	2000	51	15k	63
25	15	400	33	2500	53	20k	65
50	19	500	35	3000	55	25k	67
75	21	750	43	4000	57	50k	73
100	23						

Stock No.	Mfr's Type	Resistances Available (See Table "E" Above)	EACH 1-4	5-9
753-32RC	43C2	5 ohms to 10k	3.95	2.63
753-32RC	43C2	15k to 25k	4.40	2.95
753-32RC	43C2	50k	5.20	3.47

SERIES U39 "HUMDINGER" CONTROLS

2-watt wirewound controls for above chassis or PC mounting have linear taper. Resistance tolerance: ±20%. Slot for screwdriver adjustment. 3/4" diameter; 1 1/4" long; 1" mtg. centers. Insulated mounting plate. Wt. 2 oz.

RESISTANCES AVAILABLE

Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC
5	05	125	24	600	37	1500	49
8	07	150	25	650	39	2000	51
50	19	200	27	700	41	3000	55
75	21	300	31	800	45	4000	57
100	23	500	35	1000	47	5000	59

Stock No.	Type	Ohms	EACH 1-4	5-9
753-30RC	U39	5 to 5000	.95	.63

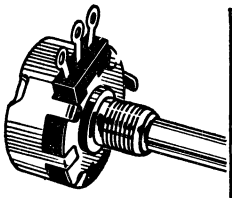
Trimmers, 150-160—Linears, 160-171—Mil, 172—Controls, 174-5—Rheostats, 180

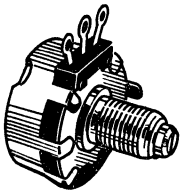
Clarostat Pots and Centralab Controls

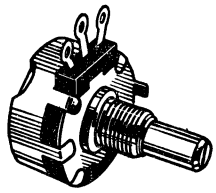
LINEARS SECTION

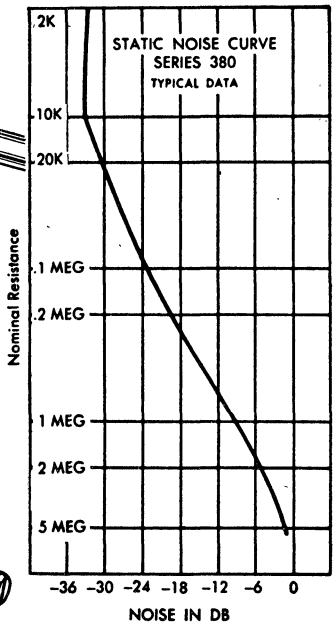
CLAROSTAT

"QUIET ONE" 2-WATT SERIES 380 POTS





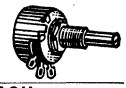




Two-watt pots with stainless-steel shaft and reliable, strain-free resistant element with 1% dynamic noise and 5% independent linearity; precision machine finish. Series 380C1 has 2" round shaft FMS, 3/8"-long bushing with 3/8-32-NEF-2A thread; 380C2, 5/8" screwdriver slotted shaft FMS, 1/2" split locking bushing; 380C3, 7/8" screwdriver slotted shaft FMS, 3/8"-long bushing with 3/8-32-NEF-2A thread. Resistance tolerance: up to 1 megohm, ±10%, above 1 megohm, ±20%. Linear taper. Dielectric strength, 1000 VAC. 1 3/32" maximum diameter x 9/16" deep. *Ohms. Av. shpg. wt. 2 oz.

Stock No.	Type 380-	Allen Bradley Equiv.	*	EACH 1-4	5-9	10-49	50-Up
753-5023	C1-100-S	JA1N200P101UA	100	2.50	1.95	1.75	1.62
753-5029	C1-250-S	JA1N200P251UA	250	2.50	1.95	1.75	1.62
753-5035	C1-500-S	JA1N200P501UA	500	2.50	1.95	1.75	1.62
753-5047	C1-1000-S	JA1N200P102UA	1000	2.50	1.95	1.75	1.62
753-5053	C1-2500-S	JA1N200P252UA	2500	2.50	1.95	1.75	1.62
753-5059	C1-5000-S	JA1N200P502UA	5000	2.50	1.95	1.75	1.62
753-5061	C1-10K-S	JA1N200P103UA	10k	2.50	1.95	1.75	1.62
753-5067	C1-25K-S	JA1N200P253UA	25k	2.50	1.95	1.75	1.62
753-5073	C1-50K-S	JA1N200P503UA	50k	2.50	1.95	1.75	1.62
753-5075	C1-100K-S	JA1N200P104UA	100k	2.50	1.95	1.75	1.62
753-5083	C1-500K-S	JA1N200P500UA	500k	2.50	1.95	1.75	1.62
753-5087	C1-1 Meg-S	JA1N200P105MA	1 meg	2.50	1.95	1.75	1.62
753-5123	C2-100-S	JA1L040S101UC	100	2.75	2.25	2.02	1.87
753-5129	C2-250-S	JA1L040S251UC	250	2.75	2.25	2.02	1.87
753-5135	C2-500-S	JA1L040S501UC	500	2.75	2.25	2.02	1.87
753-5147	C2-1000-S	JA1L040S102UC	1000	2.75	2.25	2.02	1.87
753-5153	C2-2500-S	JA1L040S252UC	2500	2.75	2.25	2.02	1.87
753-5159	C2-5000-S	JA1L040S502UC	5000	2.75	2.25	2.02	1.87
753-5161	C2-10K-S	JA1L040S103UC	10k	2.75	2.25	2.02	1.87
753-5167	C2-25K-S	JA1L040S253UC	25k	2.75	2.25	2.02	1.87
753-5173	C2-50K-S	JA1L040S503UC	50k	2.75	2.25	2.02	1.87
753-5175	C2-100K-S	JA1L040S104UC	100k	2.75	2.25	2.02	1.87
753-5183	C2-500K-S	JA1L040S504UC	500k	2.75	2.25	2.02	1.87
753-5187	C2-1 Meg-S	JA1L040S105MC	1 meg	2.75	2.25	2.02	1.87
753-5223	C3-100-S	JA1N056S101UA	100	2.50	1.95	1.75	1.62
753-5229	C3-250-S	JA1N056S251UA	250	2.50	1.95	1.75	1.62
753-5235	C3-500-S	JA1N056S501UA	500	2.50	1.95	1.75	1.62
753-5247	C3-1000-S	JA1N056S102UA	1000	2.50	1.95	1.75	1.62
753-5253	C3-2500-S	JA1N056S252UA	2500	2.50	1.95	1.75	1.62
753-5259	C3-5000-S	JA1N056S502UA	5000	2.50	1.95	1.75	1.62
753-5261	C3-10K-S	JA1N056S103UA	10k	2.50	1.95	1.75	1.62
753-5267	C3-25K-S	JA1N056S253UA	25k	2.50	1.95	1.75	1.62
753-5273	C3-50K-S	JA1N056S503UA	50k	2.50	1.95	1.75	1.62
753-5275	C3-100K-S	JA1N056S104UA	100k	2.50	1.95	1.75	1.62
753-5283	C3-500K-S	JA1N056S504UA	500k	2.50	1.95	1.75	1.62
753-5287	C3-1 Meg-S	JA1N056S105MA	1 meg	2.50	1.95	1.75	1.62

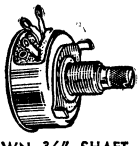
CLAROSTAT SERIES 381 1-WATT 5/8"-DIA. POTS



Made to MIL-R-94 specs. 381N has plain 1/4" long bushing; 1/2" long shaft. 381NS, above with SPST switch rated 1 amp, 125V AC/DC. 381L has 3/8" shaft locking bushing, 1/4-32 NEF-2A thread; 1/16" long, screwdriver-slotted shaft. Wt. 2 oz.

Stock No.	Mfr's Type	Ohms	EACH 1-9	10-49	50-99	100-Up
753-8323	381N-100	100	2.66	2.00	1.71	1.24
753-8329	381N-250	250	2.66	2.00	1.71	1.24
753-8335	381N-500	500	2.66	2.00	1.71	1.24
753-8347	381N-1000	1000	2.66	2.00	1.71	1.24
753-8353	381N-2500	2500	2.66	2.00	1.71	1.24
753-8359	381N-5000	5000	2.66	2.00	1.71	1.24
753-8361	381N-10k	10k	2.66	2.00	1.71	1.24
753-8367	381N-25k	25k	2.66	2.00	1.71	1.24
753-8373	381N-50k	50k	2.66	2.00	1.71	1.24
753-8375	381N-100k	100k	2.66	2.00	1.71	1.24
753-8381	381N-250k	250k	2.66	2.00	1.71	1.24
753-8383	381N-500k	500k	2.66	2.00	1.71	1.24
753-8387	381N-1 meg	1 meg	2.66	2.00	1.71	1.24
753-8390	381N-2.5 meg	2.5 meg	2.66	2.00	1.71	1.24
753-8393	381N-5 meg	5 meg	2.66	2.00	1.71	1.24
753-8523	381NS-100	100	4.06	3.05	2.61	1.89
753-8529	381NS-250	250	4.06	3.05	2.61	1.89
753-8535	381NS-500	500	4.06	3.05	2.61	1.89
753-8547	381NS-1000	1000	4.06	3.05	2.61	1.89
753-8553	381NS-2500	2500	4.06	3.05	2.61	1.89
753-8559	381NS-5000	5000	4.06	3.05	2.61	1.89
753-8561	381NS-10k	10k	4.06	3.05	2.61	1.89
753-8567	381NS-25k	25k	4.06	3.05	2.61	1.89
753-8573	381NS-50k	50k	4.06	3.05	2.61	1.89
753-8575	381NS-100k	100k	4.06	3.05	2.61	1.89
753-8581	381NS-250k	250k	4.06	3.05	2.61	1.89
753-8583	381NS-500k	500k	4.06	3.05	2.61	1.89
753-8587	381NS-1 meg	1 meg	4.06	3.05	2.61	1.89
753-8590	381NS-2.5 meg	2.5 meg	4.06	3.05	2.61	1.89
753-8593	381NS-5 meg	5 meg	4.06	3.05	2.61	1.89
753-8123	381L-100	100	2.86	2.14	1.84	1.33
753-8129	381L-250	250	2.86	2.14	1.84	1.33
753-8135	381L-500	500	2.86	2.14	1.84	1.33
753-8147	381L-1000	1000	2.86	2.14	1.84	1.33
753-8153	381L-2500	2500	2.86	2.14	1.84	1.33
753-8159	381L-5000	5000	2.86	2.14	1.84	1.33
753-8161	381L-10k	10k	2.86	2.14	1.84	1.33
753-8167	381L-25k	25k	2.86	2.14	1.84	1.33
753-8173	381L-50k	50k	2.86	2.14	1.84	1.33
753-8175	381L-100k	100k	2.86	2.14	1.84	1.33
753-8181	381L-250k	250k	2.86	2.14	1.84	1.33
753-8183	381L-500k	500k	2.86	2.14	1.84	1.33
753-8187	381L-1 meg	1 meg	2.86	2.14	1.84	1.33
753-8190	381L-2.5 meg	2.5 meg	2.86	2.14	1.84	1.33
753-8193	381L-5 meg	5 meg	2.86	2.14	1.84	1.33

CENTRALAB 5-WATT WIREWOUND CONTROLS



Rated five-watt wirewound controls that are smaller than two-watt units. Meets most sections of MIL-R-19B. 10% tolerance; 5-watt rating up to 40° C ambient temperature. Dielectric strength: 900 VAC-RMS to ground. Mounting bushing 3/8" long, 3/8" dia., 32 NEF-2A threads, with nut, lock washer. Body, 1 5/32" dia., 9/16" deep. Shaft, 1/4" dia. *Length mounting surface. Shpg. wt. 4 oz.

WN 3/4" SHAFT
WW 3" SHAFT

TYPE WW—3" ROUND SHAFT*

Stock No.	Values (Ohms) Specify from Table	EACH 1-4	5-9	10-24	25-49	50-Up
756-60 RC	2 ohms thru 7500	1.75	1.32	1.19	1.10	1.05
756-60 RC	10k thru 25k	2.25	1.59	1.43	1.33	1.26
756-6086	50k only	2.87	2.01	1.81	1.68	1.59
756-6090	100k only	3.45	2.46	2.22	2.05	1.95

TYPE WN—3/4" KNURLED AND SLOTTED SHAFT*

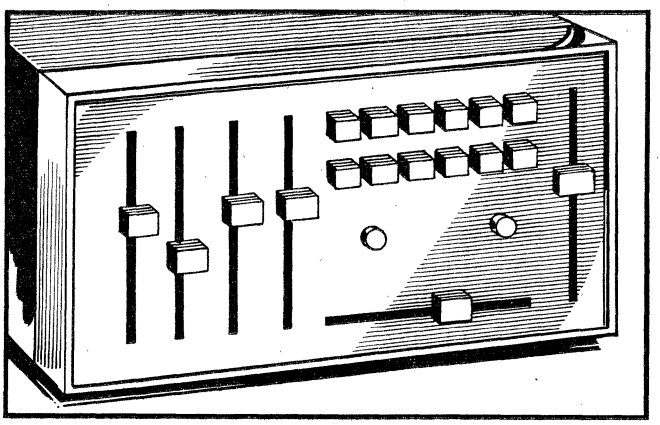
756-50 RC	2 ohms thru 7500	1.75	1.32	1.19	1.10	1.05
756-50 RC	10k thru 25k	2.25	1.50	1.43	1.33	1.26
756-5086	50k only	2.87	2.01	1.81	1.68	1.59
756-5090	100k only	3.45	2.46	2.22	2.05	1.95

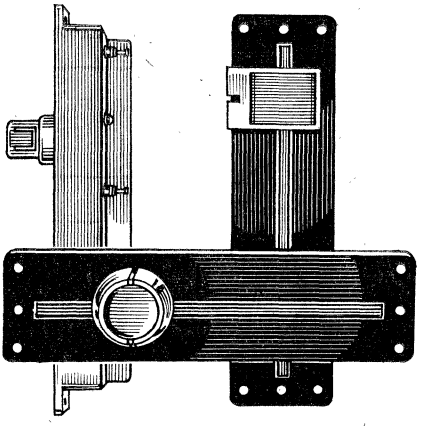
HOW TO ORDER 5-WATT TYPES

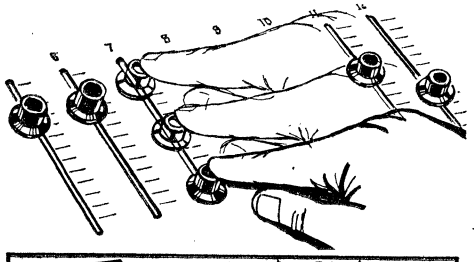
To complete Allied Stock Number, insert the resistance code (RC) shown opposite desired Ohms value in place of RC in Stock Number.

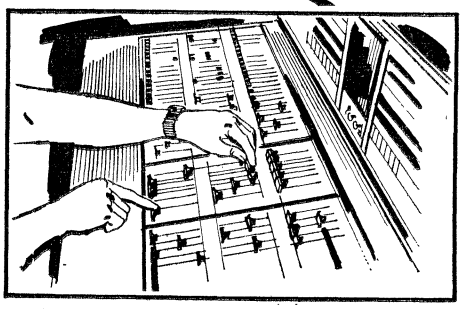
Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC	Ohms	RC
2	02	50	33	500	45	3000	65	25k	83
5	05	75	36	750	50	5000	68	50k	86
10	10	100	39	1000	53	7500	71	100k	90
15	15	200	42	1500	56	10k	74	.....	.....
25	25	300	44	2000	59	15k	77	.....	.....
30	30	400	46	2500	62	20k	80	.....	.....

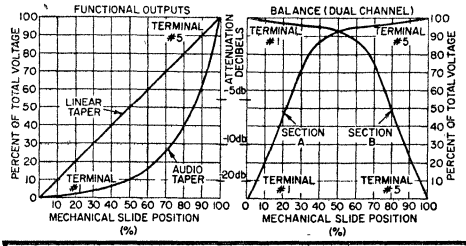
Duncan Slideline® Pots—Guaranteed 3 Years

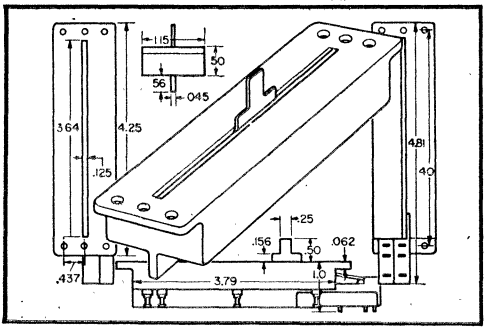












SLIDELINE® Potentiometer

MODEL 201 SLIDE ACTUATED POTENTIOMETERS

- Long Life, Low Noise, Low End Voltage
- 5 Models, with Single or Dual Elements
- Resistance Range, 600 Ohms to 10 Megohms
- Available with Center Tap or Cue Switch

Model 201 slide actuated potentiometers are recommended for industrial and commercial electronic applications where superior performance, extremely long life, ease of operation and in-line motion are desirable characteristics. Designed so the operator can observe at a glance the relative position of the control, and can adjust the setting of several units with a sweep of his hand. Widely accepted by the broadcast and recording industries. Used extensively in commercial sound systems, organ swell pedals, SCR lighting controls and other audio and visual applications. **Guaranteed 3 Years.**

CONSTRUCTION FEATURES

Model 201 potentiometers are stepless, continuously variable thick-film resistive devices. They exhibit infinite resolution characteristics and all curves are smooth and continuous. Active elements are completely encased in irridited and cadmium plated die-cast housing which is provided with overlapping, anti-friction dust seals extending the full length of the slider travel. These seals are made of conductive material to prevent static generation and provide shielding against electrical pick-up. A black mask is supplied to minimize light deflection on the top surface of the housing.

Back and case are roll-swaged together to produce a good electrical path for shielding and to eliminate dust intrusion. A web extends the full length of the case between the two rows of terminals, providing external electrical shielding between the two sections. Resistive element is a thick film deposited on a tempered glass mandrel with overcoated silver termination bands. Wiper contacts are made of a material compatible with the resistive element and the collector strip. This configuration yields low noise and extremely long life. Internal components are solvent resistive and require no cleaning throughout the life of the potentiometer. Miniature high current "Q" switches (on Models 201SQ2Q and 201DA2Q) are lever actuated and externally mounted for ease of adjustment and wiring.

ELECTRICAL CONNECTIONS: All audio potentiometers are designed to have terminal #1 of sections A and B at the low or ground end of the signal source. Terminal #5 is normally used as high end or signal-above-ground input. Offset terminal designated "S" is the slider or wiper output. Since the potentiometer is symmetrical, reverse tapers are obtained by simply reversing the installation.

SPECIFICATIONS

Life: Less than 10% total resistance change with an excess of 1 million traverses; 3-year guarantee. **Noise:** Under 400 ohms equivalent noise resistance after one million traverses. **End Voltage:** Less than .01% on all potentiometers, minimum of 80 dB attenuation. **Resolution:** Infinite. **Resistance Range:** 600 ohms to 10 megohms (±20%). **Travel:** 2¾" full traverse. **Tracking:** Maximum 2 dB error. **Taper Conformity:** ±3 dB for most functions. **Wattage Rating (Free Air):** 3 watts for single element units, 2 watts for dual element units, with flat surface mounted on heat conductive panel. **Termination:** Silver-plated turret terminals integrally molded into resistive element bed of high impact, heat stable epoxy compound. **Shielding:** All elements are completely enclosed in the metal die-cast case. Components of dual units are internally shielded and terminals are externally shielded. **Stop Strength:** Withstands 50 pounds against either stop. **Dielectric Withstanding Voltage:** High potential test, 750 V (rms). **"Q" Switches:** DPDT switches (on Modes 201SA2Q and 201DA2Q) rated 10 amps. **Sealing:** Self-closing dust seal of special anti-friction material. **Elements:** Dual elements and single elements are mounted in identical cases. **Knob:** Any knob with ¼" I.D. mounting hole may be used. **Size:** 4.25x1.5x1.0". **Weight:** 4 ounces.

Trimmers, 150-160—Linears, 160-171—Mil, 172—Controls, 174-5—Coils, 176-9—Rheostats, 180

Duncan Slideline® Pots—Guaranteed 3 Years

MODEL 201SL AND 201DL SLIDE POTS

Model 201 slide pot is available in either single (SL) or dual (DL) element type. Used in broadcast/recording industry, primarily for tone control. Ideal when used with SCR's for stage lighting or any lighting control; may also be used for heating or motor speed control. Elements are linear.

Series	EACH (Prices for One Resistance Only) 1-4	5-9	10-24	25-49	50-99	100-249
201SL	7.50	6.95	6.60	6.25	5.90	5.60
201DL	11.00	8.95	8.60	8.25	7.90	7.60

Ohms	Series 201SL Stock No.	Series 201SL Type No.	Series 201DL Stock No.	Series 201DL Type No.	Ohms	Series 201SL Stock No.	Series 201SL Type No.	Series 201DL Stock No.	Series 201DL Type No.
600	530-2920	201SL-600	530-2120	201DL-600	50k	530-2960	201SL-50K	530-2160	201DL-50K
1000	530-2925	201SL-1K	530-2125	201DL-1K	100k	530-2970	201SL-100K	530-2170	201DL-100K
5000	530-2935	201SL-5K	530-2135	201DL-5K	250k	530-2975	201SL-250K	530-2175	201DL-250K
10k	530-2940	201SL-10K	530-2140	201DL-10K	500k	530-2980	201SL-500K	530-2180	201DL-500K
15k	530-2945	201SL-15K	530-2145	201DL-15K	1.2 meg	530-2990	210SL-1.2M	530-2190	201DL-1.2M
25k	530-2955	201SL-25K	530-2155	201DL-25K	.....	.....	.....	.....	.....

MODEL 201STL AND 201DTL SLIDE POTS

General purpose pots for tone applications, audio instrumentation, servo followers, SCR controls and balance circuits. Sometimes known as a pan pot, for audio source panning; can be used in visual pan controls. Single linear resistive element with center tap (STL) or dual element (DTL) for stereo applications.

Series	EACH (Prices for One Resistance Only) 1-4	5-9	10-24	25-49	50-99	100-249
201STL	9.70	7.75	7.35	7.00	6.65	6.35
201DTL	13.20	10.55	10.10	9.55	9.15	8.30

Ohms	Series 201STL Stock No.	Series 201STL Type No.	Series 201DTL Stock No.	Series 201DTL Type No.	Ohms	Series 201STL Stock No.	Series 201STL Type No.	Series 201DTL Type No.	Series 201DTL Type No.
600	530-3120	201STL-600	530-2320	201DTL-600	50k	530-3160	201STL-50K	530-2360	201DTL-50K
1000	530-3125	201STL-1K	530-2325	201DTL-1K	100k	530-3170	201STL-100K	530-2370	201DTL-100K
5000	530-3135	201STL-5K	530-2335	201DTL-5K	250k	530-3175	201STL-250K	530-2375	201DTL-250K
10k	530-3140	201STL-10K	530-2340	201DTL-10K	500k	530-3180	201STL-500K	530-2380	201DTL-500K
15k	530-3145	201STL-15K	530-2345	201DTL-15K	1.2 meg	530-3190	201STL-1.2M	530-2390	201DTL-1.2M
25k	530-3155	201STL-25K	530-2355	201DTL-25K	.....	.....	.....	.....	.....

MODEL 201SA AND 201DA SLIDE POTS

Model 201SA has a single resistive element with audio curve function where 10% of output voltage is obtained at 50% of travel. Model 201DA is the same, but with two elements. Used extensively in broadcasting and recording industry for monophonic as well as stereo sound reproduction applications.

Series	EACH (Prices for One Resistance Only) 1-4	5-9	10-24	25-49	50-99	100-249
201DA	12.80	10.25	9.75	9.35	8.90	8.45
201SA	9.20	7.35	7.00	6.65	6.30	6.00

Ohms	Series 201SA Stock No.	Series 201SA Type No.	Series 201DA Stock No.	Series 201DA Type No.	Ohms	Series 201SA Stock No.	Series 201SA Type No.	Series 201DA Stock No.	Series 201DA Type No.
600	530-2520	201SA-600	530-1520	201DA-600	50k	530-2560	201SA-50K	530-1560	201DA-50K
1000	530-2525	201SA-1K	530-1525	201DA-1K	100k	530-2570	201SA-100K	530-1570	201DA-100K
5000	530-2535	201SA-5K	530-1535	201DA-5K	250k	530-2575	201SA-250K	530-1575	201DA-250K
10k	530-2540	201SA-10K	530-1540	201DA-10K	500k	530-2580	201SA-500K	530-1580	201DA-500K
15k	530-2545	201SA-15K	530-1545	201DA-15K	1.2 meg	530-2590	201SA-1.2M	530-1590	201DA-1.2M
25k	530-2555	201SA-25K	538-1555	201DA-25K	.....	.....	.....	.....	.....

MODEL 201SA2Q AND 201DA2Q SLIDE POTS WITH CUE SWITCH

Completely isolated DPDT switch on single audio resistive element (SA2Q) or dual element (DA2Q). Ideal for applications where cueing or cue lights are required. Movement of slider to extreme end operates switch with smooth, positive action. Switch rated 10 amps. Also used for transfer of lighting control between panels.

Series	EACH (Prices for One Resistance Only) 1-4	5-9	10-24	25-49	50-99	100-249
201SA2Q	19.50	15.65	14.80	14.20	13.60	13.05
201DA2Q	23.70	19.00	18.10	17.30	16.60	16.00

Ohms	Series 201SA2Q Stock No.	Series 201SA2Q Type No.	Series 201DA2Q Stock No.	Series 201DA2Q Type No.	Ohms	Series 201SA2Q Stock No.	Series 201SA2Q Type No.	Series 201DA2Q Stock No.	Series 201DA2Q Type No.
600	530-2720	201SA2Q-600	530-1720	201DA2Q-600	50k	530-2760	201SA2Q-50K	530-1760	201DA2Q-50K
1000	530-2725	201SA2Q-1K	530-1725	201DA2Q-1K	100k	530-2770	201SA2Q-100K	530-1770	201DA2Q-100K
5000	530-2735	201SA2Q-5K	530-1735	201DA2Q-5K	250k	530-2775	201SA2Q-250K	530-1775	201DA2Q-250K
10k	530-2740	201SA2Q-10K	530-1740	201DA2Q-10K	500k	530-2780	201SA2Q-500K	530-1780	201DA2Q-500K
15k	530-2745	201SA2Q-15K	530-1745	201DA2Q-15K	1.2 meg	530-2790	201SA2Q-1.2M	530-1790	201DA2Q-1.2M
25k	530-2755	201SA2Q-25K	530-1755	201DA2Q-25K	.....	.....	.....	.....	.....

MODEL 201DB SLIDE POT

For audio and lighting control applications. Balance can be easily obtained between stereo channels with one movement. Two audio taper resistive elements are reversed. One channel is attenuated to infinity, the other remains essentially constant.

Series	EACH (Prices for One Resistance Only) 1-4	5-9	10-24	25-49	50-99	100-249
201DB	13.90	11.10	10.55	10.10	9.65	9.25

Ohms	Stock No.	Type No.	Ohms	Stock No.	Type No.	Ohms	Stock No.	Type No.
600	530-1920	201DB-600	15k	530-1945	201DB-15K	250k	530-1975	201DB-250K
1000	530-1925	201DB-1K	25k	530-1955	201DB-25K	500k	530-1980	201DB-500K
5000	530-1935	201DB-5K	50k	530-1960	201DB-50K	1.2 meg	530-1990	201DB-1.2M
10k	530-1940	201DB-10K	100k	530-1970	201DB-100K	.....	.....	.....

EXPLANATION OF PART NUMBERS

201 D T A 2Q 10K

Model Number:
- 201—Has .250″ slider blade, accepts most ¼″ knobs
- 200—Has .375″ slider blade, requires slotted knob (available on special order only)

No. of Selections: D—Dual S—Single

Electrically Tapped (omit if no tap)

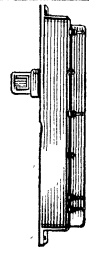
Function: A—Audio L—Linear B—Balance (dual channel)

Cue Switches: Q—SPDT 2Q—DPDT

Resistance Value: Ohms (20-999), Kilohms (1k-999k) or Megohms (1M-10M)

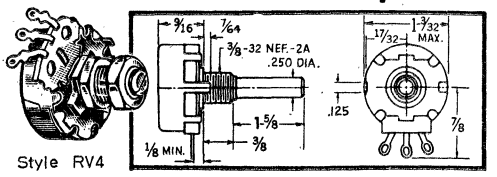
EXAMPLES: 201SA2Q-600 is a standard potentiometer with single resistive element. Follows audio taper curve with 600 ohms total end-to-end resistance; has DPDT cue switch.

201DTL-5K uses same exterior case, but has two resistive elements, each electrically center tapped. Both elements have linear tapers with 5000 ohms total end-to-end resistance. No switch.

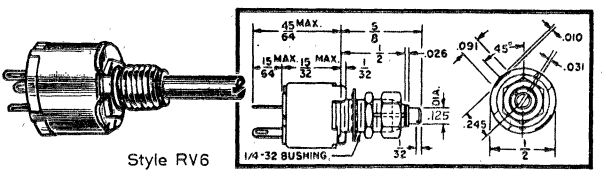


MIL POTS

Clarostate/Ohmite Military Potentiometers



Style RV4



Style RV6

MILITARY APPROVED COMPOSITION AND WIREWOUND POTENTIOMETERS

MIL-R-94B STYLE RV4 2-WATT COMPOSITION

Provides long life, low noise. 1 1/16″ diameter. Rated 2 watts. Completely enclosed construction. Reliable carbon-ceramic element. RV4L designates a 5/8″ screwdriver slotted shaft FMS with a 1/2″ split locking bushing. RV4N is a 7/8″ screwdriver slotted shaft FMS. 3/8″ long bushing with 5/8-32-NEF-2A thrd. 4 oz.

Stock No.	MIL Type RV4LAYSA-	Ohms	Stock No.	MIL Type RV4NAYSD-	Ohms
753-1135	500A	50	753-1435	500A	50
753-1001	101A	100	753-1301	101A	100
753-1030	151A	150	753-1330	151A	150
753-1075	251A	250	753-1375	251A	250
753-1105	351A	350	753-1405	351A	350
753-1140	501A	500	753-1440	501A	500
753-1165	751A	750	753-1465	751A	750
753-1005	102A	1000	753-1405	102A	1000
753-1035	152A	1500	753-1335	152A	1500
753-1055	202A	2000	753-1355	202A	2000
753-1080	252A	2500	753-1380	252A	2500
753-1110	352A	3500	753-1410	352A	3500
753-1145	502A	5000	753-1445	502A	5000
753-1170	752A	7500	753-1470	752A	7500
753-1010	103A	10k	753-1310	103A	10k
753-1040	153A	15k	753-1340	153A	15k
753-1060	203A	20k	753-1360	203A	20k
753-1085	253A	25k	753-1385	253A	25k
753-1115	353A	35k	753-1415	353A	35k
753-1180	503A	50k	753-1450	503A	50k
753-1175	753A	75k	753-1475	753A	75k
753-1015	104A	100k	753-1315	104A	100k
753-1045	154A	150k	753-1345	154A	150k
753-1065	204A	200k	753-1365	204A	200k
753-1090	254A	250k	753-1390	254A	250k
753-1120	354A	350k	753-1420	354A	350k
753-1155	504A	500k	753-1455	504A	500k
753-1180	754B	750k	753-1480	754B	750k
753-1020	105B	1 m	753-1320	105B	1 m
753-1050	155B	1.5 m	753-1350	155B	1.5 m
753-1070	205B	2 m	753-1370	205B	2 m
753-1095	255B	2.5 m	753-1395	255B	2.5 m
753-1100	305B	3 m	753-1400	305B	3 m
753-1125	355B	3.5 m	753-1425	355B	3.5 m
753-1130	405B	4 m	753-1430	405B	4 m
753-1160	505B	5 m	753-1460	505B	5 m
753-1185	755B	7.5 m	753-1485	755B	7.5 m
753-1025	106B	10 m	753-1325	106B	10 m

MIL-R-94B RV6 1/2-WATT COMPOSITION

1/2″ diameter variable resistors. Require only 3/8″ mounting space behind panel. Have 1/8″ diameter slotted shafts and 1/4″ bushings. High resolution highly stable potentiometers for applications requiring miniaturization and reliability. Av. shpg. wt. 4 oz.

Stock No.	MIL Type RV6LAYSA-	Ohms	Stock No.	MIL Type RV6NAYSD-	Ohms
753-1501	101A	100	753-1801	101A	100
753-1545	251A	250	753-1840	251A	250
753-1570	501A	500	753-1865	501A	500
753-1505	102A	1000	753-1805	102A	1000
753-1550	252A	2500	753-1845	252A	2500
753-1575	502A	5000	753-1870	502A	5000
753-1510	103A	10k	753-1810	103A	10k
753-1530	153A	15k	753-1825	153A	15k
753-1555	253A	25k	753-1850	253A	25k
753-1580	503A	50k	753-1875	503A	50k
753-1520	104A	100k	752-1815	104A	100k
753-1535	154A	150k	753-1830	154A	150k
753-1560	254A	250k	755-1855	254A	250k
753-1585	504A	500k	753-1880	504A	500k
753-1525	105B	1 m	753-1820	105B	1 m
753-1540	205B	2 m	753-1835	205B	2 m
753-1565	255B	2.5 m	753-1860	255B	2.5 m
753-1590	505B	5 m	753-1885	505B	5 m

RV4 AND RV6 PRICING

Type	EACH 1-9	10-49	50-99	100-249	250-Up
RV4N	1.95	1.60	1.50	1.25	.92
RV4L	2.25	1.90	1.58	1.33	.99
RV6N	5.00	3.65	2.19	1.90	1.61
RV6L	5.00	3.88	2.33	2.02	1.71

RV4 SPECIFICATIONS

Resistance Tolerance: Up to 1 meg ±10% over 1 meg ±20%
Elect. & Mech. Rotation: 312° ±3° without switch
333° ±3° with switch
End Resistance: Per MIL-R-94
Working Voltage: 500 VDC across end term.

RV6 SPECIFICATIONS

Resistance Tolerance: Up to 250k ±10% over 250k ±20%
Power Rating: 0.5 @ 70°C Derate to 0 @ 120°C
Elect. & Mech. Rotation: 295° ±5°
End Resistance: Per MIL-R-94
Working Voltage: 350 VDC max.

MIL-R-19A RA20 2-WATT WIREWOUND

Wirewound variable resistors in insulated housings. All are 1 17/64″ dia. and require 5/8″ behind panel. Have 1/4″ dia. slotted shafts and 3/8″-32 threaded bushings. *252LT has 5/8″ slotted shaft and 1/2″ locking bushing. †252 has 7/8″ slotted shaft, 3/8″ bushing. 4 oz.

Stock No.	MIL Type RA20LASB-	Ohms	Stock No.	MIL Type RA20NASD-	Ohms
745-1900	100A*	10	745-1910	100A†	10
745-1901	102A*	1000	745-1911	101A†	100
745-1902	103A*	10k	745-1912	102A†	1000
745-1903	201A*	200	745-1913	103A†	10k
745-1904	250A*	25	745-1914	153A†	15k
745-1905	251A*	250	745-1915	201A†	200
745-1906	252A*	2500	745-1916	252A†	2500
745-1907	500A*	50	745-1917	500A†	50
745-1908	501A*	500	745-1918	501A†	500
745-1909	502A*	5000	745-1919	502A†	5000

Series RA20L. 1-9.....Each 2.55 10-49.....Each 2.09 50-99.....Each 1.49 100-249.....Each 1.24 250-Up.....Each .95
Series RA20N. 1-9.....Each 2.55 10-49.....Each 2.01 50-99.....Each 1.41 100-249.....Each 1.16 250-Up.....Each .88

HOW TO READ MIL NUMBERS

MIL-R-19A is the military specification covering wirewound potentiometers and MIL-R-94B is the military specification covering carbon composition potentiometers. Approval to either military specification assures extremely high quality.

"MIL" DESIGNATION FOR RV4-RV6 POTENTIOMETERS PER MIL-R-94

RV( )	N	A	Y	SB	104	B
STYLE	BUSHING	SWITCH	TEMP. & MOISTURE RESIST. CHAR.*	OPERATING SHAFT@	RESISTANCE (OHMS)	RESIST. CHAR. & OVERALL RESIST. TOLERANCE

STYLE: RV4-2 WATT; RV6-0.5 WATT
BUSHING: N-STANDARD; L-LOCKING
SWITCH: A-NONE

TEMP. & MOISTURE RESIST. CHAR.*

Max. Oper.	Ambient Temp.	Max. Resistance Change due to humidity test	Min. Insulation Resistance during humidity test
X	120°C	±14%	50 Megohms
Y	120°C	±10%	100 Megohms

RESIST. CHAR. & OVERALL RESIST. TOLERANCE: A-Linear ±10%
B-Linear ±20%

RESISTANCE (OHMS): First two digits are significant and last one is number of zeros to follow.

OPERATING SHAFT@: 1ST Letter = Style
2ND Letter = Lgth. from mtg. surface

MIL-R-94

Style Symbol	Style	Length Symbol	RV4 Flatted	RV4 Slotted	RV6 Slotted
F	Flatted	A	¼″ Dia.	¼″ Dia.	⅛″ Dia.
S	Slotted	B	—	⅝*	⅝*
		C	—	½**	—
		D	—	⅞	⅞
		G	—	1¼	—
		K	2½	2½	—
		L	—	—	⅜***

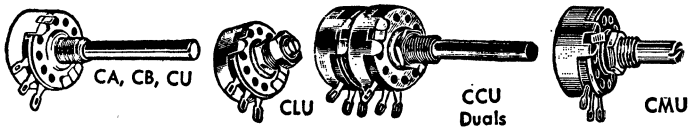
*Used only with RV4L & RV6L Type
**Used only with RV4N Type
***Used only with RV6N Type
Shaft lengths measured from mounting surface.

Trimmers, 150-160—Linears, 160-171—Mil, 172—Controls, 174-5—Coils, 176-9—Rheostats, 180

Ohmite Potentiometers—CTS Trimmers

OHMITE MOLDED COMPOSITION 2-WATT POTENTIOMETERS

Single units are 5/8x1 5/32" dia.; double units are 1 17/64x1 5/32" dia. Mount in 3/8" hole in panels to 1/4" thick. 2" long 1/4" round shafts except CLU, slotted shaft and locking nut; CMU, 7/8" slotted shaft. CU, CCU, CMU and CLU Types linear taper; CA Types, CW log; CB Types, CCW log. ±10% tol. except *±20%. Av. shpg. wt., 3 1/2 oz.



STYLE CA, CB, CU, CCU PRICE LOCATOR

Price Code	EACH 1-4	5-9	10-24	25-49
A	2.20	1.95	1.75	1.70

Price Code	EACH 1-9	10-24	25-49	50-99
B	2.25	2.02	1.97	1.87

Price Code	EACH 1-9	10-24	25-49	50-99
C	5.85	5.26	5.20	5.06

Stock No.	Mfr's Type	Ohms	Code
875-1327	CU5001	50	A
875-1301	CU1011	100	A
875-1306	CU1511	150	A
875-1316	CU2511	250	A
875-1321	CU3511	350	A
875-1328	CU5011	500	A
875-1333	CU7511	750	A
875-1302	CU1021	1000	A
875-1307	CU1521	1500	A
875-1317	CU2521	2500	A
875-1322	CU3521	3500	A
875-1329	CU5021	5000	A
875-1334	CU7521	7500	A
875-1303	CU1031	10k	A
875-1200	CB1031	10k	B
875-1308	CU1531	15k	A

Stock No.	Mfr's Type	Ohms	Code
875-1318	CU2531	25k	A
875-1201	CB2531	25k	B
875-1323	CU3531	35k	A
875-1330	CU5031	50k	A
875-1202	CB5031	50k	B
875-1335	CU7531	75k	A
875-1304	CU1041	100k	A
875-0700	CA1041	100k	B
875-1309	CU1541	150k	A
875-1319	CU2541	250k	A
875-0702	CA2541	250k	B
875-1325	CU3541	350k	A
875-1331	CU5041	500k	A
875-0704	CA5041	500k	B
875-1336	CU7542	750k*	A
875-1305	CU1052	1 meg*	A

Stock No.	Mfr's Type	Ohms	Code
875-0701	CA1052	1 meg*	B
875-1310	CU1552	1.5 meg*	A
875-1315	CU2052	2.0 meg*	A
875-1320	CU2552	2.5 meg*	A
875-0703	CA2552	2.5 meg*	B
875-1326	CU3552	3.5 meg*	A
875-1332	CU5052	5 meg*	A
875-1301	CCU1031	10k	C
875-1304	CCU2531	25k	C
875-1306	CCU5031	50k	C
875-1302	CCU1041	100k	C
875-1305	CCU2541	250k	C
875-1307	CCU5041	500k	C
875-1303	CCU1052	1 meg*	C
.....	.....	.....	.....
.....	.....	.....	.....

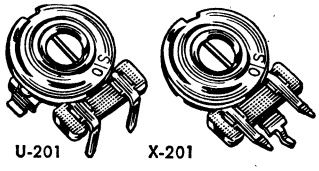
TYPE CS-1 SPST SWITCH FOR CA, CB, CU POTENTIOMETERS

Single-pole single-throw switch for Ohmite potentiometers listed above. For single-unit type potentiometers only. Wt., 2 oz.

875-1250. 1-4.....Each 1.00
10-49.....Each .59
5-99.....Each .66
50-99.....Each .55

CTS U-201 AND X-201 CARBON TRIMMERS

Miniature 1/4-watt carbon trimmers for limited space application. Ideal for printed circuit boards where an occasionally-adjusted variable resistance is required. PC type terminals; easy-to-install, snap in self supporting bracket mount. U-201 mounts with adjusting knob parallel to PC board: X-201 with knob perpendicular to board. Blue nylon knurled knob, 19/32" diameter; slotted for easy front and rear adjustment. Linear taper; 260° ±5% rotation; max voltage 500VDC; ±20% tolerance. Resistance range; 100 ohms through 1 megohm. Has rim to guide screwdriver for easy adjutment. Reliable CTS composition resistance element. Turning torque; 3/4 to 6 inch-ounces. Av. shpg. wt. 2 oz.

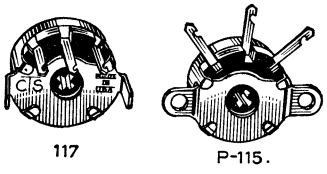


Stock No.	Type U-201	Ohms	Stock No.	Type X-201	Ohms
745-3200	R101B	100	745-3700	R101B	100
745-3325	R251B	250	745-3725	R251B	250
745-3345	R501B	500	745-3745	R501B	500
745-3305	R102B	1000	745-3705	R102B	1000
745-3330	R252B	2500	745-3730	R252B	2500
745-3350	R502B	5000	745-3750	R502B	5000
745-3310	R103B	10k	745-3710	R103B	10k
745-3335	R253B	25k	745-3735	R253B	25k
745-3355	R503B	50k	745-3755	R503B	50k
745-3315	R104B	100k	745-3715	R104B	100k
745-3340	R254B	250k	745-3740	R254B	250k
745-3360	R504B	500k	745-3760	R504B	500k
745-3320	R105B	1 Meg	745-3720	R105B	1 Meg

1-24..Ea. .39 25-49..Ea. .35 50-99..Ea. .29 100-249..Ea. .26

CTS 117, 115 AND P-115 WIREWOUND TRIMMERS

Miniature wirewound trimmers with fully enclosed construction; protect resistance unit and adjustable arm from dust and foreign objects. Assure longer life and silent operation with minimum power loss. Insulated rotor isolates tuning device from shock and prevents external interference or damage to circuit during adjustment. Cross-slot in nylon rotor permits adjustment by screwdriver or adjusting tool. Simple to mount-P-115 is twist-tab mounted; 117 is rivet-ear mounted. Printed circuit type terminals. Linear taper 10% tolerance; rated 2 watts; 270° ±5° rotation; maximum voltage, 500VDC. Long rotational life. Resistance range is 5 through 10,000 ohms. Turning torque is 1/2 to 10 inch-ounces. Stop strength is 4 inch-pounds. Power rating is 2 watts at 55° C. Contactor is insulated from the base and is connected to the center terminal on the insulated construction. 2 oz.



Stock No.	Type 117	Ohms	Stock No.	Type P115	Ohms	Stock No.	Type 115	Ohms
745-5000	R5R0A	5	745-1600	R5R0A	5	745-4900	R5R0A	5
745-5005	R100A	10	745-1601	R100A	10	745-4905	R100A	10
745-5025	R250A	25	745-1715	R250A	25	745-4925	R250A	25
745-5040	R500A	50	745-1730	R500A	50	745-4940	R500A	50
745-5010	R101A	100	745-1701	R101A	100	745-4910	R101A	100
745-5030	R251A	250	745-1720	R251A	250	745-4930	R251A	250
745-5045	R501A	500	745-1735	R501A	500	745-4945	E501A	500
745-5015	R102A	1000	745-1705	R102A	1000	745-4915	R102A	1000
745-5035	R252A	2500	745-1725	R252A	2500	745-4935	R252A	2500
745-5050	R502A	5000	745-1740	R502A	5000	745-4950	R502A	5000
745-5020	R103A	10K	745-1710	R103A	10K	745-4920	R103A	10K

1-24.....Ea. 1.25 25-49.....Ea. 1.00 50-99.....Ea. .75 100-249.....Ea. .60

ATTENTION QUANTITY BUYERS

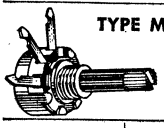
Make Allied your "One-Stop" Headquarters for all your industrial needs. Pay OEM factory prices, slash handling expenses and reduce paperwork in purchasing and receiving. You place one order, receive one shipment, and make one disbursement. Allied Electronics has the best order-filling record in the electronics industry.

Mallory Controls

TYPE R 3-WATT WIREWOUND CONTROLS

For use as voltage dividers and bias controls. Insulated-contact arm type, linear taper. Special dual-contact or mechanism. 900 volts AC insulation between resistance element and chassis. 290° rotation. 1 25/64″ dia. Thumb knurled, screwdriver-slotted stub shaft. 3/8″ bushing. Av. shpg. wt. 4 oz.

Stock No.	Mfr's Type	Ohms	EACH 1-4	5-9	10-49	50-99	100-249
854-6310	R20L	20	1.25	.93	.84	.78	.70
854-6315	R25L	25	1.25	.93	.84	.78	.70
854-6320	R30L	30	1.25	.93	.84	.78	.70
854-6325	R50L	50	1.25	.93	.84	.78	.70
854-6330	R100L	100	1.25	.93	.84	.78	.70
854-6335	R250L	250	1.25	.93	.84	.78	.70
854-6340	R500L	500	1.25	.93	.84	.78	.70
854-6345	R1000L	1000	1.25	.93	.84	.78	.70
854-6350	R1500L	1500	1.25	.93	.84	.78	.70
854-6355	R2500L	2500	1.25	.93	.84	.78	.70
854-6360	R3000L	3000	1.25	.93	.84	.78	.70
854-6370	R5000L	5000	1.25	.93	.84	.78	.70
854-6300	R10ML	10k	1.45	1.08	.97	.90	.81
854-6305	R20ML	20k	1.45	1.08	.97	.90	.81

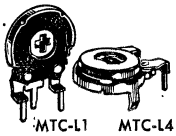


TYPE MRB 3-WATT WIREWOUND CONTROLS

Metal construction, fully enclosed case. Bushing mount: bushings 3/8″-32x1/4″. Shaft: 1/4″ dia.x1 1/4″ long. Wattage: 3 at 40°C. Rotation: 250° mechanical; 248° electrical. Tol.: ±20%. Voltage breakdown: 900 VAC rms. 2 oz.

Stock No.	Mfr's Type	Ohms	EACH 1-4	5-9	10-49	50-99	100-249
854-5900	MR10B	10	1.25	.93	.84	.77	.69
854-5905	MR50B	50	1.25	.93	.84	.77	.69
854-5910	MR100B	100	1.25	.93	.84	.77	.69
854-5915	MR250B	250	1.25	.93	.84	.77	.69
854-5920	MR500B	500	1.25	.93	.84	.77	.69
864-5925	MR1000B	1000	1.25	.93	.84	.77	.69
854-5930	MR2500B	2500	1.25	.93	.84	.77	.69
854-5935	MR5000B	5000	1.25	.93	.84	.77	.69
854-5940	MR10KB	10k	1.45	1.08	.97	.90	.81
854-5945	MR15KB	15k	1.45	1.08	.97	.90	.81

MINIATURE TRIMMER CONTROLS



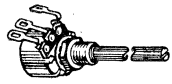
MTC-L1 MTC-L4

Miniature 1/4-watt trimmers designed especially for printed circuits. Can be used in transistorized or tube circuits—wherever an occasionally adjusted, variable resistance is needed. Have flush, open, crossed slot; adjustments can be made with either blade or Phillips type screwdriver. All have linear taper; 270° rotation; 500 V max. rating. All are 9/16″ dia. In 2 types—vertical or horizontal mounting. 3 oz.

Ohms	MTC-L1 Stock No.	MTC-L1 Type	MTC-L4 Stock No.	MTC-L4 Type
100	854-6100	MTC12L1	854-6200	MTC12L4
200	854-6103	MTC22L1	864-6303	MTC22L4
250	854-6107	MTC251L1	854-6207	MTC251L4
300	854-6110	MTC32L1	854-6210	MTC32L4
500	854-6113	MTC52L1	854-6213	MTC52L4
750	854-6117	MTC751L1	854-6217	MTC751L4
1000	854-6120	MTC13L1	854-6220	MTC13L4
1500	854-6123	MTC152L1	854-6223	MTC152L4
2000	854-6127	MTC23L1	854-6227	MTC23L4
3000	854-6130	MTC33L1	854-6230	MTC33L4
5000	854-6133	MTC53L1	854-6233	MTC53L4
6000	854-6137	MTC63L1	854-6237	MTC63L4
6800	854-6140	MTC682L1	854-6240	MTC682L4
10k	854-6143	MTC14L1	854-6243	MTC14L4
15k	854-6147	MTC153L1	854-6247	MTC153L4
20k	854-6150	MTC24L1	854-6250	MTC24L4
25k	854-6153	MTC253L1	854-6253	MTC253L4
50k	854-6157	MTC54L1	854-6257	MTC54L4
100k	854-6160	MTC15L1	854-6260	MTC15L4
120k	854-6163	MTC124L1	854-6263	MTC124L4
180k	854-6167	MTC184L1	854-6267	MTC184L4
250k	854-6170	MTC254L1	854-6270	MTC254L4
325k	854-6173	MTC3253L1	854-6273	MTC3253L4
450k	854-6177	MTC454L1	854-6277	MTC454L1
500k	854-6180	MTC55L1	854-6280	MTC55L4
1 meg	854-6183	MTC16L1	854-6283	MTC16L4
2 meg	854-6187	MTC26L1	854-6287	MTC26L4
3.5 meg	854-6190	MTC355L1	854-6290	MTC355L4

Type	Mount	1-9	10-24	25-49	50-99	100-174
MTC-L1	Vert.	.52	.39	.33	.29	.29
MTC-L4	Hor.	.52	.39	.35	.29	.29

MLC 1/2″ DIAMETER SUBMINIATURE CONTROLS



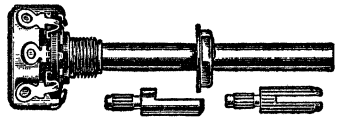
Rated 1/4-W linear, 1/8-W audio. 1/4″-32 bushing, nut. Shaft: steel, 1/8″ dia.x1 7/16″. *Taper No. 1 for audio, antenna shunts. †Taper No. 4 is Linear, for voltage control. Bushing mount. Av. shpg. wt., 1 oz.

Stock No.	Type	Ohms	Taper	Stock No.	Type	Ohms	Taper
854-5800	MLC13L	1000	†4	854-5815	MLC15L	100k	†4
854-5845	MLC252A	2500	*1	854-5820	MLC25L	200k	†4
854-5825	MLC53A	5000	*1	854-5850	MLC254L	250k	†4
854-5830	MLC53L	5000	†4	854-5840	MLC55A	500k	*1
854-5805	MLC14L	10k	†4	854-5870	MLCN55L	500k	†4
854-5835	MLC54L	50k	†4	854-5860	MLCN16A	1 meg	*1
854-5810	MLC15A	100k	†1	854-5865	MLCN16L	1 meg	*1

1-9.....Each 1.55 10-24.....Each 1.14 25-49.....Each 1.03
50-99.....Each .95 100-174.....Each .86 175-299.....Each .81

TYPE 1910K KNOB. For use with type MLC series subminiature control. Size, 3/4″x3/4″. Shpg. wt., 1 oz.
854-7900.....Each .30

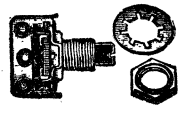
TYPE U METAL-SHAFT MIDGETROL CONTROLS



For audio, tone and similar control circuits in home receivers, audio amplifiers, portables, TV sets, and industrial electronic equipment. Available in a full line of resistances, tapers, and taps. Round, hollow shaft—easily cut to desired length. Two spline-shank knob adapters furnished with each Midgetrol—see illustration above. Taper No. 1: for audio or antenna shunt circuits (1/2 watt). Taper No. 4: Linear (1 watt). For voltage control. With nut and lockwasher. 15/16″ diameter. Brass shaft, 2 3/8″ long, 1/4″ dia. Less switch (below). Av. shpg. wt., 4 oz.

Stock No.	Type	Ohms	Taper	Stock No.	Type	Ohms	Taper
854-7301	U-1	100	4	854-7335	U-35	50k	4
854-7302	U-2	500	4	854-7339	U-39	100k	1
854-7304	U-4	1000	4	854-7341	U-41	100k	4
854-7308	U-8	3000	4	854-7342	U-42	150k	1
854-7312	U-12	5000	1	854-7344	U-44	250k	1
854-7314	U-14	5000	4	854-7346	U-46	250k	4
854-7318	U-18	10k	1	854-7448	U-48	500k	1
854-7320	U-20	10k	4	854-7350	U-50	500k	4
854-7321	U-21	15k	1	854-7353	U-53	1 meg	1
854-7326	U-26	20k	4	854-7354	U-54	1 meg	4
854-7328	U-28A	25k	1	854-7356	U-56	2 meg	4
854-7329	U-29	25k	4	854-7382	U-82	10 meg	4
854-7333	U-33	50k	1	.....	.....	.....	.....

1-9.....Each 1.37 10-24.....Each 1.02 25-49.....Each .92
50-99.....Each .85 100-174.....Each .77 175-299.....Each .73



TYPE SU MIDGETROLS

For use as exact replacements in television sets and special applications. Have 5/8″ long x 1/4″ dia. fixed, knurled and slotted phenolic shaft extending 1/4″ beyond bushing. 15/16″ dia. Rated 1/2-watt. Linear taper. With washer and nut. Av. shpg. wt., 4 oz.

Stock No.	Type	Ohms	Stock No.	Type	Ohms
854-6606	SU-6	1500	854-6641	SU-41	100k
854-6608	SU-8	3000	854-6646	SU-46	250k
854-6614	SU-14	5000	854-6650	SU-50	500k
854-6620	SU-20	10k	854-6654	SU-54	1 meg
854-6629	SU-29	25k	854-6667	SU-67	5 meg
854-6635	SU-35	50k	.....	.....	.....

1-9.....Each 1.25 10-24.....Each .93 25-49.....Each .84
50-99.....Each .78 100-174.....Each .70 175-299.....Each .66

SWITCHES FOR MIDGETROLS (EXCEPT TYPE SU)

"Push-on, stay-on" switches for Midgetrols. Av. wt. 2 oz.

854-7426. US-26 SPST Switch. 1-9.....Each .57
10-24.....Each .42 25-49.....Each .38 50-99.....Each .35
100-174.....Each .32 175-299.....Each .30
854-7427. US-27 DPST Switch. 1-9.....Each .70
10-24.....Each .51 25-49.....Each .46 50-99.....Each .43
100-174.....Each .38 175-299.....Each .36
854-7428. US-28 SPDT Switch. 1-9.....Each .70
10-24.....Each .51 25-49.....Each .46 50-99.....Each .43
100-174.....Each .38 175-299.....Each .36

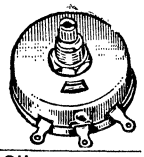
TYPE USB-29 CIRCUIT BREAKER. High-quality combination AC line switch (SPST) and circuit breaker for TV, radio, etc. Carries 1.6 amps, breaks at 2.5 amps. Resets by turning to "OFF" position. Fits all Mallory U type controls. Shpg. wt., 4 oz.
854-7429.....Each 1.86

Trimmers, 150-160—Linears, 160-171—Mil, 172—Controls, 174-5—Coils, 176-9—Rheostats, 180

Mallory Controls and Attenuators

CONTROLS SECTION

TYPE M 4-WATT WIREWOUND CONTROLS



Designed for use as bias controls and voltage dividers. Linear taper. All have power handling capabilities of 4 watts. Arm insulated from shaft, 275° rotation. Knurled 1/4" shaft is 3/8" long, has screwdriver slot. "M" shaft is hollow to accept extension shafts and bushings. All are 1 5/32" diameter by 9/16" deep. Mount in 3/8" hole. Tolerance ±10%. Shpg. wt. 4 oz.

Stock No.	Mfr's Type	Ohms	EACH 1-4	5-9	10-49	50-99	100-249
854-5401	M1PK	1	1.82	1.35	1.22	1.13	1.01
854-5403	M3PK	3	1.82	1.35	1.22	1.13	1.01
854-5406	M6PK	6	1.82	1.35	1.22	1.13	1.01
854-5410	M10PK	10	1.82	1.35	1.22	1.13	1.01
854-5415	M15PK	15	1.82	1.35	1.22	1.13	1.01
854-5420	M20PK	20	1.82	1.35	1.22	1.13	1.01
854-5425	M25PK	25	1.82	1.35	1.22	1.13	1.01
854-5430	M30PK	30	1.82	1.35	1.22	1.13	1.01
854-5440	M40PK	40	1.82	1.35	1.22	1.13	1.01
854-5450	M50PK	50	1.82	1.35	1.22	1.13	1.01
854-5460	M60PK	60	1.82	1.35	1.22	1.13	1.01
854-5465	M100PK	100	1.82	1.35	1.22	1.13	1.01
854-5470	M200PK	200	1.82	1.35	1.22	1.13	1.01
854-5475	M400PK	400	1.82	1.35	1.22	1.13	1.01
854-5480	M500PK	500	1.82	1.35	1.22	1.13	1.01
854-5490	M600PK	600	1.82	1.35	1.22	1.13	1.01
854-5510	M1MPK	1000	1.82	1.35	1.22	1.13	1.01
854-5515	M1.5MPK	1500	1.82	1.35	1.22	1.13	1.01
854-5520	M2MPK	2000	1.82	1.35	1.22	1.13	1.01
854-5525	M2.5MPK	2500	1.82	1.35	1.22	1.13	1.01
854-5530	M3MPK	3000	1.82	1.35	1.22	1.13	1.01
854-5535	M5MPK	5000	1.82	1.35	1.22	1.13	1.01
854-5540	M10MPK	10K	1.82	1.35	1.22	1.13	1.01
854-5545	M15MPK	15K	1.98	1.47	1.32	1.23	1.10
854-5550	M20MPK	20K	1.98	1.47	1.32	1.23	1.10
854-5555	M25MPK	25K	1.98	1.47	1.32	1.23	1.10
854-5560	M50MPK	50K	2.35	1.74	1.57	1.45	1.31
854-5565	M100MPK	100K	3.31	2.46	2.21	2.05	1.85

RHEOSTATS

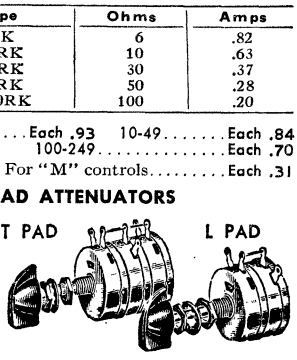
Have open or off position counter-clockwise.

Stock No.	Type	Ohms	Amps
854-5606	M6RK	6	.82
854-5610	M10RK	10	.63
854-5630	M30RK	30	.37
854-5650	M50RK	50	.28
854-5699	M100RK	100	.20

1-4.....Each 1.25 5-9.....Each .93 10-49.....Each .84
50-99.....Each .78 100-249.....Each .70

854-7895. Type 395 Dial Plate. For "M" controls.....Each .31

CONSTANT-LOAD ATTENUATORS



Widely used to control the level of low-impedance audio circuits in sound systems. Rated 4 watts continuous DC; 15 watts, peak audio. Have 2" shafts. 3/8" diameter bushing. With bar knob, 0-10 dial plate. Av. shpg. wt. 7 oz.

T-Pad Attenuators. Present a constant source-impedance as well as constant load. Size, 1 5/8" dia. x 1 11/16".

Ohms	Stock No.	Type	Ohms	Stock No.	Type
4	854-6804	T4	600	854-6820	T600
8	854-6806	T8	1000	854-6825	T1000
15	854-6808	T15	2000	854-6830	T2000
50	854-6810	T50	3000	854-6835	T3000
500	854-6815	T500			

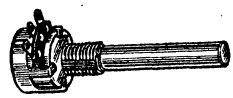
1-4.....Each 4.77 5-9.....Each 3.54
10-24.....Each 3.36 25-49.....Each 3.19
50-99.....Each 2.95 100-249.....Each 2.65

L-Pad Attenuators. Present a constant load-impedance at all control settings. Size, 1 5/8" dia. x 1 1/8" long.

Ohms	Stock No.	Type	Ohms	Stock No.	Type
4	854-5204	L4	600	854-5260	L600
8	854-5208	L8	1000	854-5265	L1000
15	854-5215	L15	2000	854-5270	L2000
50	854-5250	L50	4000	854-5275	L4000
500	854-5255	L500			

1-4.....Each 3.68 5-9.....Each 2.73
10-24.....Each 2.59 25-49.....Each 2.46
50-99.....Each 2.28 100-249.....Each 2.05

TYPE VW 5-WATT WIREWOUND CONTROLS



Miniature 5-watt potentiometers. Very small size for this rating; ideal for limited space applications. Only 3/4" dia., 7/16" deep. Bushing: 3/8x3/8" dia. and length. 1/4" plain round shaft, 2" long from mtg. surface. Linear taper. ±5% tol. 305° mechanical rotation; 275° electrical rotation. High-quality construction. Av. shpg. wt. 4 oz.

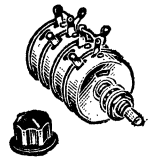
Stock No.	Mfr's Type	Ohms	EACH 1-4	5-9	10-49	50-99	100-249
854-7601	VW-1	1	1.86	1.38	1.24	1.15	1.04
854-7602	VW-2	2	1.86	1.38	1.24	1.15	1.04
854-7603	VW-3	3	1.86	1.38	1.24	1.15	1.04
854-7605	VW-5	5	1.86	1.38	1.24	1.15	1.04
854-7608	VW-8	8	1.86	1.38	1.24	1.15	1.04
854-7610	VW-10	10	1.86	1.38	1.24	1.15	1.04
854-7615	VW-15	15	1.86	1.38	1.24	1.15	1.04
854-7620	VW-20	20	1.86	1.38	1.24	1.15	1.04
854-7625	VW-25	25	1.86	1.38	1.24	1.15	1.04
854-7630	VW-30	30	1.86	1.38	1.24	1.15	1.04
854-7640	VW-40	40	1.86	1.38	1.24	1.15	1.04
854-7650	VW-50	50	1.86	1.38	1.24	1.15	1.04
854-7660	VW-60	60	1.86	1.38	1.24	1.15	1.04
854-7700	VW-100	100	1.86	1.38	1.24	1.15	1.04
854-7720	VW-200	200	1.86	1.38	1.24	1.15	1.04
854-7725	VW-250	250	1.86	1.38	1.24	1.15	1.04
854-7730	VW-300	300	1.86	1.38	1.24	1.15	1.04
854-7740	VW-400	400	1.86	1.38	1.24	1.15	1.04
854-7750	VW-500	500	1.86	1.38	1.24	1.15	1.04
854-7753	VW-1K	1000	1.86	1.38	1.24	1.15	1.04
854-7757	VW-1P5K	1500	1.94	1.44	1.30	1.20	1.08
854-7760	VW-2K	2000	1.94	1.44	1.30	1.20	1.08
854-7763	VW-2P5K	2500	1.94	1.44	1.30	1.20	1.08
854-7767	VW-3K	3000	1.94	1.44	1.30	1.20	1.08
854-7770	VW-4K	4000	1.94	1.44	1.30	1.20	1.08
854-7773	VW-5K	5000	1.94	1.44	1.30	1.20	1.08
854-7777	VW-10K	10K	2.02	1.50	1.35	1.25	1.13
854-7780	VW-15K	15K	2.10	1.56	1.40	1.30	1.17
854-7783	VW-20K	20K	2.10	1.56	1.40	1.30	1.17
854-7787	VW-25K	25K	2.22	1.65	1.49	1.38	1.24

CONTROL MOUNTING ACCESSORIES

Useful accessories include mounting brackets with adjustable mounting centers, in two sizes; extender that extends body of controls 5/8" away from mounting surface; and bushing adapter for 1/4" panel. 2 oz.

Stock No.	Type	Fig.	Description	EACH
854-6410	RB249	A	Mtg. bracket, mtg. ctrs. 2 1/2"	.08
854-6400	RB248	A	Mtg. bracket, mtg. ctrs. 1 3/4"	.08
854-5100	EB248	C	Extender	.19
854-7819	119	B	1/4" bushing (Package of 5)	.65

STEREO L PADS AND MONOPHONIC L, T PADS



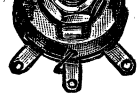
Type "LL" Pads. For low-impedance stereo-audio. Rated 4 watts DC, 15 watts peak. Have 2 "L" pads on common shaft for adjusting 2 channels. 1 5/8x2 13/16". Shpg. wt. 7 oz.

Type "LA" Pads. For level control in monophonic equipment. Rated at 4 watts DC, 15 watts peak. Maintains constant imp. between control and amp. With 1" bushing, 2 nuts, 2 lock washers. 1 5/8x1 1/8". Shpg. wt. 7 oz.

SERIES "LL" AND "LA" L PADS

Stock No.	Mfr's Type	Imp., Ohms	EACH 1-4	5-9	10-24	25-49	50-99	100-249
854-5290	LL8	8	7.69	5.70	5.42	5.13	4.75	4.28
854-5295	LL16	16	7.69	5.70	5.42	5.13	4.75	4.28
854-5280	L8A	8	3.84	2.85	2.71	2.57	2.38	2.14
854-5285	L16A	16	3.84	2.85	2.71	2.57	2.38	2.14

TYPE TSA-10 THEATER SPEAKER CONTROL



Rugged speaker control especially designed for drive-in theaters. Completely weatherproofed to withstand severe climatic conditions. Unit is L-pad type; has durable steel construction. Has 10-ohm input impedance; 4-ohm output impedance. With 1 1/16" diameter case, 1/2" long shaft. Supplied with mounting nut. Av. shpg. wt. 4 oz.

854-6900. 1-4.....Each 1.37 5-9.....Each 1.35
10-24.....Each 1.26 25-49.....Each 1.13
50-99.....Each 1.02 100-249.....Each .97

Nytronics, Inc. Miniature Molded Inductors

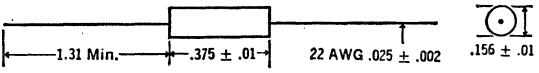
"SUPER-WEE-DUCTOR" MS-90537 SUBMINIATURE SHIELDED RF INDUCTORS

- Only 0.395" by 0.157"
- Meet MIL-C-15305C

Epoxy molded and shielded for minimum coupling in high-density package. Meet electrical and environmental requirements of MIL-C-15305C, Grade 1 (resistance to moisture and immersion). Class B (from −55° to +125° C). For altitudes to 70,000 ft. Tol. ±10%. Less than 3% coupling. Low DC resis. 700 V rms diel. strength. 0.157" dia. 1⅞"; 0.395" AWG #22 leads, internal T termination. Av. wt./100, 3½ oz.

We will ship AIRCO SPEER or NYTRONICS, whichever is in stock at time of order.

MIL Number	Stock No.	NYT. SWD-	Airco Type	Ind. µH	Q @ MHz	
MS-90537-1	871-3000	.10	15S-R10K	.10	50	25
MS-90537-2	871-3005	.12	15S-R12K	.12	51	25
MS-90537-3	871-3010	.15	15S-R15K	.15	51	25
MS-90537-5	871-3020	.22	15S-R18K	.22	49	25
MS-90537-7	871-3030	.33	15S-R33K	.33	46	25
MS-90537-8	871-3035	.39	15S-R39K	.39	44	25
MS-90537-9	871-3040	.47	15S-R47K	.47	44	25
MS-90537-11	871-3050	.68	15S-R68K	.68	42	25
MS-90537-12	871-3055	.82	15S-R82K	.82	40	25
MS-90537-13	871-3060	1.0	15S-1R0K	1.0	47	25
MS-90537-14	871-3065	1.2	15S-1R2K	1.2	46	7.9
MS-90537-15	871-3070	1.5	15S-1R5K	1.5	45	7.9
MS-90537-16	871-3075	1.8	15S-1R8K	1.8	43	7.9
MS-90537-17	871-3080	2.2	15S-2R2K	2.2	45	7.9
MS-90537-18	871-3085	2.7	15S-2R7K	2.7	46	7.9
MS-90537-19	871-3090	3.3	15S-3R3K	3.3	44	7.9
MS-90537-20	871-3095	3.9	15S-3R9K	3.9	44	7.9
MS-90537-21	871-3110	4.7	15S-4R7K	4.7	44	7.9
MS-90537-22	871-3115	5.6	15S-5R6K	5.6	47	7.9
MS-90537-23	871-3120	6.8	15S-6R8K	6.8	50	7.9
MS-90537-24	871-3125	8.2	15S-8R2K	8.2	50	7.9
MS-90537-25	871-3130	10	15S-100K	10	49	7.9
MS-90537-26	871-3135	12	15S-120K	12	55	2.5
MS-90537-27	871-3140	15	15S-150K	15	44	2.5
MS-90537-28	871-3145	18	15S-180K	18	45	2.5
MS-90537-29	871-3150	22	15S-220K	22	46	2.5
MS-90537-30	871-3155	27	15S-270K	27	49	2.5
MS-90537-31	871-3160	33	15S-330K	33	45	2.5
MS-90537-32	871-3165	39	15S-390K	39	53	2.5
MS-90537-33	871-3170	47	15S-470K	47	52	2.5
MS-90537-34	871-3175	56	15S-560K	56	49	2.5
MS-90537-35	871-3180	68	15S-680K	68	51	2.5



µH	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
Values 0.1-15	1.40	1.24	.93	.82	.72	.67	.62
Values 18-6800	1.67	1.44	1.03	.93	.82	.77	.72
Values 10k-100k	2.37	1.55	1.34	1.24	1.18	1.08	1.03

MIL Number	Stock No.	Type SWD-	Airco Type	Ind. µH	Q @ MHz	
MS-90537-36	871-3185	82	15S-820K	82	45	2.5
MS-90537-37	871-3200	100	15S-101K	100	52	2.5
MS-90537-38	871-3195	120	15S-121K	120	57	.79
MS-90537-39	871-3190	150	15S-151K	150	56	.79
MS-90537-40	871-3205	180	15S-181K	180	60	.79
MS-90537-41	871-3210	220	15S-221K	220	58	.79
MS-90537-42	871-3215	270	15S-271K	270	60	.79
MS-90537-43	871-3220	330	15S-331K	330	54	.79
MS-90537-44	871-3225	390	15S-392K	390	67	.79
MS-90537-45	871-3230	470	15S-471K	470	60	.79
MS-90537-46	871-3235	560	15S-561K	560	60	.79
MS-90537-47	871-3240	680	15S-681K	680	60	.79
MS-90537-48	871-3245	820	15S-821K	820	57	.79
MS-90537-49	871-3250	1000	15S-102K	1000	65	.79
MS-90537-50	871-3255	1200	15S-122K	1200	45	.25
MS-90537-51	871-3260	1500	15S-152K	1500	49	.25
MS-90537-52	871-3265	1800	15S-182K	1800	47	.25
MS-90537-53	871-3270	2200	15S-222K	2200	50	.25
MS-90537-54	871-3275	2700	15S-272K	2700	47	.25
MS-90537-55	871-3280	3300	15S-332K	3300	43	.25
MS-90537-56	871-3285	3900	15S-392K	3900	43	.25
MS-90537-57	871-3290	4700	15S-472K	4700	44	.25
MS-90537-59	871-3300	6800	15S-682K	6800	43	.25
MS-90537-61	871-3310	10,000	15S-103K	10,000	39	.25
MS-90537-63	871-3320	15,000	.....	15,000	31	.079
MS-90537-65	871-3330	22,000	.....	22,000	27	.079
MS-90537-67	871-3340	33,000	.....	33,000	27	.079
MS-90537-69	871-3350	47,000	.....	47,000	23	.079
MS-90537-70	871-3355	56,000	.....	56,000	23	.079
MS-90537-71	871-3360	68,000	.....	68,000	23	.079
MS-90537-72	871-3380	82,000	.....	82,000	21	.079
MS-90537-73	871-3390	100,000	.....	100,000	18	.079

DECI-DUCTOR SUBMINIATURE RF INDUCTS

Epoxy molded, unshielded, with extreme inductance-to-size ratio. Designed to meet all environmental requirements of MIL-C-15305C, Grade 1, (resistance to moisture and immersion), Class B (oper. temp.) from −55° to +125° C. Vibration, shock resistant. Operates to 70,000 ft. Tolerance, ±10%. ¼" long x 1/10" diameter. #24 leads. Av. shpg. wt. per hundred, 3 oz.

µH	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
Values 0.1-1	1.04	.83	.66	.58	.53	.48	.45
Values 1.2-27	1.13	.91	.72	.63	.58	.53	.49
Values 33-100	1.20	.96	.76	.67	.61	.56	.53
Values 120-1000	1.25	1.00	.80	.69	.63	.59	.55

Stock No.	Type DD-	Ind. µH	Q @ MHz		Stock No.	Type DD-	Ind. µH	Q @ MHz	
871-2000	.10	.10	40	25	871-2125	12.0	12.0	45	2.5
871-2005	.12	.12	40	25	871-2130	15.0	15.0	47	2.5
871-2010	.15	.15	38	25	871-2135	18.0	18.0	50	2.5
871-2015	.18	.18	38	25	871-2140	22.0	22.0	50	2.5
871-2020	.22	.22	35	25	871-2145	27.0	27.0	50	2.5
871-2025	.27	.27	35	25	871-2150	33.0	33.0	50	2.5
871-2030	.33	.33	32	25	871-2155	39.0	39.0	50	2.5
871-2035	.39	.39	32	25	871-2160	47.0	47.0	50	2.5
871-2040	.47	.47	32	25	871-2165	56.0	56.0	50	2.5
871-2045	.56	.56	32	35	871-2170	68.0	68.0	52	2.5
871-2050	.68	.68	33	25	871-2175	82.0	82.0	52	2.5
871-2055	.82	.82	30	25	871-2180	100	100	50	2.5
871-2060	1.00	1.00	30	25	871-2185	120	120	28	0.79
871-2065	1.20	1.20	30	7.9	871-2190	150	150	28	0.79
871-2070	1.50	1.50	32	7.9	871-2195	180	180	28	0.79
871-2075	1.80	1.80	35	7.9	871-2200	220	220	26	0.79
871-2080	2.20	2.20	35	7.9	871-2205	270	270	26	0.79
871-2085	2.70	2.70	37	7.9	871-2210	330	330	26	0.79
871-2090	3.30	3.30	45	7.9	871-2215	390	390	25	0.79
871-2095	3.90	3.90	45	7.9	871-2220	470	470	27	0.79
871-2100	4.70	4.70	45	7.9	871-2222	560	560	27	0.79
871-2105	5.60	5.60	52	7.9	871-2224	680	680	28	0.79
871-2110	6.80	6.80	52	7.9	871-2226	820	820	28	0.79
871-2115	8.20	8.20	60	7.9	871-2230	1000	1000	28	0.79
871-2120	10.0	10.0	60	7.9	.....	.....	.....	..	....

"SUPER WEE-WEE" FIXED INDUCTOR

Epoxy molded. Shielded. T leads. Meet MIL-C-15305C, Grade 1, Class B. 700 V rms. Wt., 3 oz.

Values in µH	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
.1-.82	2.15	1.78	1.42	1.31	1.18	1.07	.95
1.0-12	2.42	1.88	1.56	1.42	1.31	1.18	1.07
15-1000	2.72	2.19	1.78	1.60	1.48	1.31	1.18
1200-3300	3.50	2.78	2.22	1.93	1.76	1.63	1.51
3900-10,000	4.37	3.48	2.78	2.42	2.20	2.04	1.90

Stock No.	Type SW-W-	Ind. µH	Nom. Q @ MHz		Stock No.	Type SW-W-	Ind. µH	Nom. Q @ MHz	
871-4000	.10	.10	42	25	871-4155	39	39	46	2.5
871-4005	.12	.12	42	25	871-4160	47	47	46	2.5
871-4010	.15	.15	42	25	871-4165	56	56	48	2.5
871-4015	.18	.18	42	25	871-4170	68	68	48	2.5
871-4020	.22	.22	42	25	871-4175	82	82	46	2.5
871-4025	.27	.27	42	25	871-4180	100	100	46	2.5
871-4030	.33	.33	42	25	871-4185	120	120	53	.79
871-4035	.39	.39	42	25	871-4190	150	150	53	.79
871-4040	.47	.47	41	25	871-4195	180	180	53	.79
871-4045	.56	.56	39	25	871-4200	220	220	55	.79
871-4050	.68	.68	36	25	871-4205	270	270	57	.79
871-4055	.82	.82	35	25	871-4210	330	330	57	.79
871-4060	1.0	1.0	38	25	871-4215	390	390	57	.79
871-4065	1.2	1.2	38	7.9	871-4220	470	470	57	.79
871-4070	1.5	1.5	38	7.9	871-4225	560	560	61	.79
871-4075	1.8	1.8	38	7.9	871-4230	680	680	61	.79
871-4080	2.2	2.2	38	7.9	871-4235	820	820	58	.79
871-4085	2.7	2.7	38	7.9	871-4240	1000	1000	58	.79
871-4090	3.3	3.3	38	7.9	871-4245	1200	1200	55	.25
871-4095	3.9	3.9	42	7.9	871-4250	1500	1500	55	.25
871-4100	4.7	4.7	42	7.9	871-4255	1800	1800	55	.25
871-4105	5.6	5.6	42	7.9	871-4260	2200	2200	55	.25
871-4110	6.8	6.8	45	7.9	871-4265	2700	2700	55	.25
871-4115	8.2	8.2	47	7.9	871-4270	3300	3300	55	.25
871-4120	10	10	51	7.9	871-4275	3900	3900	55	.25
871-4125	12	12	51	2.5	871-4280	4700	4700	55	.25
871-4130	15	15	45	2.5	871-4285	5600	5600	55	.25
871-4135	18	18	45	2.5	871-4290	6800	6800	50	.25
871-4140	22	22	45	2.5	871-4295	8200	8200	50	.25
871-4145	27	27	45	2.5	871-4300	10,000	10,000	50	.25
871-4150	33	33	46	2.5	.....	.....	.....	..	.....

Trimmers, 150-160—Linears, 160-171—Mil, 172—Controls, 174-5—Coils, 176-9—Rheostats, 180

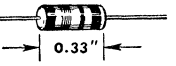
Miniature Molded Inductors

COILS SECTION

Nytronics, Inc.

"WEE WEE DUCTOR" MINIATURE SHIELDED RF INDUCTORS

High inductance. Shielded. Encapsulated, non-flammable. Meet MIL-C-15305C, Grade 1, Class B. Oper. temp., −55° to +125°C. Tol., ±10%. Less than 3% coupling. 0.33x0.133" dia. 1¼"x#24 leads. Av. wt. per hundred, 3oz.



μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
Values 0.1-0.82	1.87	1.55	1.24	1.13	1.03	.93	.82
Values 1-12	2.10	1.65	1.34	1.24	1.13	1.03	.93
Values 15-1000	2.37	1.91	1.56	1.39	1.29	1.13	1.03

Stock No.	Type WEE-WEE-	Ind. μH	Q @ MHz		Stock No.	Type WEE-WEE-	Ind. μH	Q @ MHz	
871-8000	.10	.10	42	25	871-8125	12	12	51	2.5
871-8005	.12	.12	42	25	871-8130	15	15	45	2.5
871-8010	.15	.15	42	25	871-8135	18	18	43	2.5
871-8015	.18	.18	42	25	871-8140	22	22	42	2.5
871-8020	.22	.22	42	25	871-8145	27	27	37	2.5
871-8025	.27	.27	42	25	871-8150	33	33	46	2.5
871-8030	.33	.33	42	25	871-8155	39	39	38	2.5
871-8035	.39	.39	42	25	871-8160	47	47	42	2.5
871-8040	.47	.47	41	25	871-8165	56	56	41	2.5
871-8045	.56	.56	39	25	871-8170	68	68	46	2.2
871-8050	.68	.68	36	25	871-8175	82	82	46	2.5
871-8055	.82	.82	35	25	871-8180	100	100	43	2.5
871-8060	1.0	1.0	42	25	871-8185	120	120	50	.79
871-8065	1.2	1.2	38	7.9	871-8190	150	150	49	.79
871-8070	1.5	1.5	38	7.9	871-8195	180	180	56	.79
871-8075	1.8	1.8	38	7.9	871-8200	220	220	53	.79
871-8080	2.2	2.2	36	7.9	871-8205	270	270	57	.79
871-8085	2.7	2.7	38	7.9	871-8210	330	330	57	.79
871-8090	3.3	3.3	38	7.9	871-8215	390	390	57	.79
871-8095	3.9	3.9	40	7.9	871-8220	470	470	50	.79
871-8100	4.7	4.7	42	7.9	871-8222	560	560	50	.79
871-8105	5.6	5.6	42	7.9	871-8224	680	680	56	.79
871-8110	6.8	6.8	45	7.9	871-8226	820	820	49	.79
871-8115	8.2	8.2	47	7.9	871-8230	1000	1000	49	.79
871-8120	10	10	51	7.9	.....	.....	.....	.....	.....

"WEE-DUCTOR" SUBMINIATURE RF INDUCTORS

Encapsulated, shielded unit has high inductance: density ratio. Meets environmental requirements of MIL-C-15305C, Grade 1, Class B. Tol. to ±10%. 700 V rms diel. strength. Less than 3% coupling. 1¼", #24 leads. 0.164 dia.x7/16". Av. wt./100, 3 oz.

- Meets MIL-C-15305C
- Only .164" by .450"

μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
.10-.82	.94	.79	.64	.56	.50	.46	.43
1.0-15	1.03	.87	.70	.61	.55	.50	47
22-1000	1.26	1.26	.84	.73	.67	.62	.58
1200-4700	1.42	1.42	.96	.82	.75	.70	.65
5600-56k	1.69	1.69	1.13	.99	.90	.83	.77
68k-180k	2.59	2.59	1.74	1.51	1.38	1.27	1.18

Stock No.	Type WEE-	Ind. μH	Q @ MHz		Stock No.	Type WEE-	Ind. μH	Q @ MHz	
871-4500	.10	.10	63	25	871-4587	68	68	40	2.5
871-4502	.12	.12	61	25	871-4592	100	100	63	.79
871-4505	.15	.15	59	25	871-4597	150	150	63	.79
871-4507	.18	.18	57	25	871-4600	180	180	60	.79
871-4510	.22	.22	56	25	871-4602	220	220	57	.79
871-4512	.27	.27	50	25	871-4605	270	270	52	.79
871-4515	.33	.33	48	25	871-4607	330	330	50	.79
871-4520	.39	.39	48	25	871-4610	390	390	43	.79
871-4522	.47	.47	48	25	871-4612	470	470	66	.79
871-4525	.56	.56	45	25	871-4615	560	560	64	.79
871-4527	.68	.68	45	25	871-4617	680	680	71	.79
871-4530	.82	.82	41	25	871-4620	820	820	67	.79
871-4532	1.0	1.0	42	7.9	871-4622	1000	1000	62	.79
871-4535	1.2	1.2	43	7.9	871-4625	1200	1200	52	.250
871-4537	1.5	1.5	41	7.9	871-4627	1500	1500	51	.250
871-4540	1.8	1.8	42	7.9	871-4630	1800	1800	51	.250
871-4542	2.2	2.2	42	7.9	871-4632	2200	2200	50	.250
871-4545	2.7	2.7	41	7.9	871-4635	2700	2700	51	.250
871-4547	3.3	3.3	40	7.9	871-4637	3300	3300	52	.250
871-4550	3.9	3.9	40	7.9	871-4640	3900	3900	48	.250
871-4552	4.7	4.7	40	7.9	871-4642	4700	4700	48	.250
871-4555	5.6	5.6	40	7.9	871-4645	5600	5600	48	.250
871-4557	6.8	6.8	40	7.9	871-4647	6800	6800	45	.250
871-4560	8.2	8.2	45	7.9	871-4652	10,000	10,000	36	.079
871-4562	10	10	46	2.5	871-4657	15,000	15,000	38	.079
871-4565	12	12	47	2.5	871-4662	22,000	22,000	32	.079
871-4567	15	15	47	2.5	871-4667	33,000	33,000	32	.079
871-4572	22	22	47	2.5	871-4672	47,000	47,000	25	.079
871-4577	33	33	43	2.5	871-4677	68,000	68,000	20	.079
871-4582	47	47	46	2.5	871-4682	100,000	100,000	20	.079

TYPE "VIV" MINIATURE VARIABLE INDUCTORS

Epoxy encapsulated variable inductors conforming to MIL-C-15305A, Grade 1, Class B. Stable to extreme temperature variations. Inductance values from 0.10 μH to 4700 μH with high Q. Tunable range: values 0.33 μH—4700, ±20%; values 0.15 μH—0.22 μH, ±15%; 0.1 μH, ±10%. Size, ½"x.400" dia. Vertical mounting—AWG #22 start and finish leads .300" apart. Av. shpg. wt. 1 oz.

μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
Values 0.1-15	4.25	3.35	2.68	2.33	2.12	1.96	1.83
Values 22-4700	4.52	3.58	2.86	2.49	2.27	2.10	1.96

Stock No.	Type VIV-	Nom. μH	Q @ MHz		Stock No.	Type VIV-	Nom. μH	Q @ MHz	
871-5000	.10	.10	85	25	871-5140	33	33	54	2.5
871-5010	.15	.15	100	25	871-5150	47	47	51	2.5
871-5020	.22	.22	100	25	871-5160	68	68	55	2.5
871-5030	.33	.33	100	25	871-5170	100	100	50	2.5
871-5040	.47	.47	100	25	871-5180	150	150	50	.79
871-5050	.68	.68	100	25	871-5190	220	220	50	.79
871-5060	1.0	1.0	90	25	871-5200	330	330	48	.79
871-5070	1.5	1.5	70	7.9	871-5210	470	470	45	.79
871-5080	2.2	2.2	73	7.9	871-5220	680	680	42	.79
871-5085	3.3	3.3	80	7.9	871-5230	1000	1000	40	.79
871-5090	4.7	4.7	75	7.9	871-5235	1500	1500	40	.25
871-5100	6.8	6.8	80	7.9	871-5240	2200	2200	44	.25
871-5110	10	10	82	7.9	871-5245	3300	3300	46	.25
871-5120	15	15	65	2.5	871-5250	4700	4700	48	.25
871-5130	22	22	55	2.5	.....	.....	.....	.....	.....

WEE V-L SHIELDED VARIABLE INDUCTORS

Subminiature, hi-Q, epoxy molded inductors. Inductance adjustable ±10% of rated value. Meet MIL-C-15305C Style LT-K, Grade 1, Class B. Moisture, vibration, shock resistant. Shielded. Oper. temp., −55° to +125° C. Up to 70,000 ft. alt. 300 WVDC. 0.2" grid spacing. Size, 0.4x0.3" dia. Av. shpg. wt. per 100, 3½ oz.

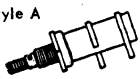
Values in μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
.10-1.0	7.37	5.87	4.70	4.08	3.71	3.43	3.19
1.2-10k	6.14	4.89	3.91	3.40	3.09	2.85	2.66
12k-100k	8.77	6.98	5.59	4.85	4.42	4.08	3.80

Stock No.	Type WEE-VL-	Ind. μH	Nom. Q	Stock No.	Type WEE-VL-	Ind. μH	Nom. Q
871-6940	.10	.10	70	871-7115	120	120	95
871-6945	.12	.12	70	871-7120	150	150	90
871-6950	.15	.15	70	871-7125	180	180	95
871-6955	.18	.18	70	871-7130	220	220	95
871-6960	.22	.22	70	871-7135	270	270	100
871-6965	.27	.27	80	871-7140	330	330	100
871-6970	.33	.33	80	871-7145	390	390	100
871-6975	.39	.39	80	871-7150	470	470	100
871-6980	.47	.47	80	871-7155	560	560	95
871-6985	.56	.56	80	871-7160	680	680	100
871-6990	.68	.68	80	871-7165	820	820	90
871-6995	.82	.82	85	871-7170	1000	1000	100
871-7000	1.0	1.0	85	871-7175	1200	1200	95
871-7005	1.2	1.2	90	871-7180	1500	1500	90
871-7010	1.5	1.5	100	871-7185	1800	1800	100
871-7015	1.8	1.8	115	871-7190	2200	2200	100
871-7020	2.2	2.2	110	871-7195	2700	2700	95
871-7025	2.7	2.7	110	871-7200	3300	3300	90
871-7030	3.3	3.3	90	871-7205	3900	3900	85
871-7035	3.9	3.9	90	871-7210	4700	4700	85
871-7040	4.7	4.7	95	871-7215	5600	5600	85
871-7045	5.6	5.6	95	871-7220	6800	6800	75
871-7050	6.8	6.8	85	871-7225	8200	8200	80
871-7055	8.2	8.2	95	871-7230	10,000	10,000	70
871-7060	10	10	90	871-7235	12,000	12,000	70
871-7065	12	12	120	871-7240	15,000	15,000	70
871-7070	15	15	120	871-7245	18,000	18,000	70
871-7072	18	18	115	871-7250	22,000	22,000	70
871-7074	22	22	125	871-7255	27,000	27,000	70
871-7076	27	27	115	871-7260	33,000	33,000	70
871-7080	33	33	120	871-7265	39,000	39,000	70
871-7085	39	39	120	871-7270	47,000	47,000	70
871-7090	47	47	110	871-7275	56,000	56,000	70
871-7095	56	56	115	871-7280	68,000	68,000	60
871-7100	68	68	105	871-7285	82,000	82,000	60
871-7105	82	82	105	871-7350	100,000	100,000	60
871-7110	100	100	95	.....	.....	.....	.....

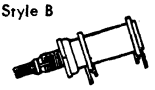
J. W. Miller Coils, Coil Forms, Shields

J. W. MILLER ADJUSTABLE RF COIL FORMS

Style A



Style B



Precision-made coil forms feature all metal parts that are plated for protection against corrosion. Fully moisture proof cores are made of powdered iron except 100 MHz and up (suffix-5) which are brass. Available in selected frequency ranges of 0.2 MHz to 100 MHz and up, or as form alone, without tuning core. Types 60A022 and 60A024 both have two collars, one and two terminals per collar, respectively. All types are supplied complete with mounting hardware. Illustrations (A) and (B) at left show basic styles available. Av. wt. 2 oz.

SERIES 4300 COIL FORMS

Style A. With two wire ring terminals.

Stock No.	Mfr's Type	Length x Dia. (Inches)	Freq. Range of Core Material	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-3206	4300-0	.593x.205	Form only	1.50	1.27	.85	.64
855-3209	4300-2	.593x.205	1.0-2.0 MHz	1.70	1.43	.96	.72
855-3222	4300-3	.593x.205	20-50 MHz	1.70	1.43	.96	.72
855-3224	4300-4	.593x.205	50-200 MHz	1.70	.143	.96	.72
855-3226	4300-5	.593x.205	100 and Up	1.95	1.66	1.10	.83
855-3228	4300-6	.593x.205	2.0-40 MHz	1.70	1.43	.96	.72
855-3229	4300-7	.593x.205	40-300 MHz	1.70	1.43	.96	.72

SERIES 4500 COIL FORMS

Style A. With two wire ring terminals.

Stock No.	Mfr's Type	Length x Dia. (Inches)	Freq. Range of Core Material	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-3302	4500-0	.858x.260	Form only	1.62	1.37	.91	.68
855-3306	4500-2	.858x.260	1.0-20 MHz	1.80	1.52	1.02	.76
855-3308	4500-3	.858x.260	20-50 MHz	1.80	1.52	1.02	.76
855-3309	4500-4	.858x.260	50-200 MHz	1.80	1.52	1.02	.76
855-3326	4500-7	.858x.260	40-300 MHz	1.80	1.52	1.02	.76

SERIES 60A022 AND 60A024 COIL FORMS

Style B. Type 60A022 has 1 terminal/collar; 60A024, 2 per collar.

Stock No.	Mfr's Type	Length x Dia. (Inches)	Freq. Range of Core Material	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-1638	60A022-0	.593x.205	Form only	2.02	1.94	1.30	.97
855-1640	60A022-1	.593x.205	0.2-1.5 MHz	2.25	2.16	1.44	1.08
855-1642	60A022-2	.593x.205	1.0-20 MHz	2.25	2.16	1.44	1.08
855-1644	60A022-3	.593x.205	20-50 MHz	2.25	2.16	1.44	1.08
855-1646	60A022-4	.593x.205	50-200 MHz	2.25	2.16	1.44	1.08
855-1648	60A022-5	.593x.205	100 and Up	2.55	2.45	1.63	1.22
855-1650	60A022-6	.593x.205	2.0-25 MHz	2.25	2.16	1.44	1.08
855-1656	60A024-0	.593x.205	Form only	1.92	1.84	1.22	.92
855-1660	60A024-2	.593x.205	1.0-20 MHz	2.25	2.16	1.44	1.08
855-1662	60A024-3	.593x.205	20-50 MHz	2.25	2.16	1.44	1.08
855-1664	60A024-4	.593x.205	50-200 MHz	2.25	2.16	1.44	1.08
855-1666	60A024-5	.593x.205	100 and Up	2.55	2.45	1.63	1.22

SERIES 66A022 COIL FORMS

Style B. Two collars, with one terminal per collar.

Stock No.	Mfr's Type	Length x Dia. (Inches)	Freq. Range of Core Material	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-1746	66A022-1	1.249x.500	0.2-1.5 MHz	3.12	2.99	1.99	1.49
855-1748	66A022-2	1.249x.500	1.0-20 MHz	3.12	2.99	1.99	1.49
855-1750	66A022-3	1.249x.500	20-50 MHz	3.12	2.99	1.99	1.49
855-1752	66A022-4	1.249x.500	50-200 MHz	3.12	2.99	1.99	1.49
855-1756	66A022-6	1.249x.500	.20-40 MHz	3.12	2.99	1.99	1.49

SERIES 66A024 COIL FORMS

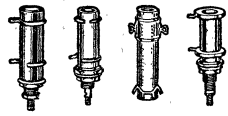
Style B. Two collars, with two terminals per collar.

Stock No.	Mfr's Type	Length x Dia. (Inches)	Freq. Range of Core Material	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-1760	66A024-0	1.249x.500	Form only	2.82	2.70	1.80	1.35
855-1762	66A024-1	1.249x.500	0.2-1.5 MHz	3.12	2.99	1.99	1.49
855-1764	66A024-2	1.249x.500	1.0-20 MHz	3.12	2.99	1.99	1.49
855-1766	66A024-3	1.249x.500	20-50 MHz	3.12	2.99	1.99	1.49
855-1768	66A024-4	1.249x.500	50-200 MHz	3.12	2.99	1.99	1.49
855-1772	66A024-6	1.249x.500	2.0-40 MHz	3.12	2.99	1.99	1.49

RF POWER TRANSFORMERS

Type 4526. Used with RF oscillator and 1B3 rectifier for high-voltage power supply. Provides up to 10,000 volts DC power (up to 30,000 volts in rectifier-tripler circuit). Simple resistive-capacitive filter will give low-ripple output. Complete schematic incl. 6x2¼" dia. Wt. 2½ oz.

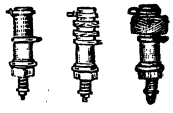
855-3364 ..... 17.15



RF COIL FORMS

Types 20A000-2, 21A000-2, 22A000-2 are resinite phenolic impregnated tubing; can be certified to meet MIL-P-79B, Type PBG Specs. Types 40A000CBI, 41A000CBI, 42A000-CBI, 43A000CBI and 4400 are silicone-impregnated ceramic material that conforms to JAN-1-10, grade .5 specs. Type 4200 is nylon. Hardware. Core with range of 1-30 MHz. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-0536	20A000-2	1.47	1.24	.83	.62
855-0622	21A000-2	1.47	1.24	.83	.62
855-0696	22A000-2	1.90	1.81	1.21	.91
855-0988	40A000CBI	2.25	2.07	1.38	1.04
855-1044	41A000CBI	2.37	2.19	1.46	1.10
855-1094	42A000CBI	2.57	2.46	1.64	1.23
855-1168	43A000CBI	2.65	2.53	1.69	1.27
855-3184	4200-8	1.17	.98	.66	.49
855-3266	4400-2	2.77	2.15	1.43	1.07



MINIATURE, STANDARD RF COILS

All are wound on silicon-impregnated ceramic forms to reduce moisture absorption. Both Standard and Miniature Types are tuned by a powdered-iron core. Supplied complete with mounting hardware. STANDARD. High "Q" units with large inductance range. Mounting brushing requires a ¼" dia. hole. ⅜" dia., 1 1/16" long. Wt. 2 oz.

Stock No.	Mfr's Type	Inductance Min. μH	Inductance Max. μH	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-3278	4403	.99	1.5	2.75	2.63	1.75	1.31
855-3279	4404	1.6	3.1	2.77	2.66	1.78	1.33
855-3282	4405	3.3	6.5	2.82	2.70	1.80	1.35
855-3284	4406	7.3	14.0	2.90	2.77	1.85	1.39
855-3286	4407	16.0	29.0	2.97	2.84	1.90	1.42
855-3288	4408	33.0	66.0	3.15	3.02	2.02	1.51
855-3289	4409	74	124	3.22	3.10	2.06	1.55
855-3292	4410	138	238	3.27	3.13	2.09	1.57
855-3294	4411	270	451	3.30	3.17	2.11	1.58
855-3295	4412	495	760	3.35	3.20	2.14	1.60
855-3296	4413	825	1300	3.35	3.20	2.14	1.60
855-3298	4414	1400	2000	3.35	3.20	2.14	1.60

MINIATURE. Same high-quality coils as above, but designed for limited-space applications. Units mount in a 3/16" diameter hole. Size: ¼" dia., ⅞" long. Includes all required mounting hardware: nut, lock washer and spring clip. Av. shpg. wt., 2 oz.

855-3328	4501	.44	.76	3.32	2.57	1.72	1.29
855-3329	4502	1.1	1.5	3.32	2.57	1.72	1.29
855-3330	4503	1.7	2.7	3.32	2.57	1.72	1.29
855-3332	4504	3.1	4.8	3.32	2.57	1.72	1.29
855-3334	4505	5.5	8.6	3.48	2.69	1.80	1.35
855-3336	4506	9.9	15.0	3.62	2.81	1.87	1.40
855-3338	4507	17.0	23.0	3.00	2.89	1.92	1.44
855-3342	4508	26.0	33.0	3.77	2.93	1.95	1.46
855-3344	4509	38.0	57.0	3.10	2.96	1.98	1.48
855-3345	4511	66.0	114	3.17	3.01	2.00	1.50
855-3346	4512	120	190	3.18	3.04	2.03	1.52
855-3348	4513	209	314	3.23	3.08	2.06	1.54
855-3352	4514	350	475	3.25	3.12	2.08	1.56

ALUMINUM COIL SHIELDS

Drawn aluminum, tarnish-proof satin finish. Two #6-32 threaded bolts riveted to shield. *Has ¼" dia. hole in top. Av. shpg. wt., 2 oz.

Stock No.	Type No.	Dimensions	Mtg. Center	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-0254	S-21	2 1/16" dia. x 3½"	2"	.90	.83	.56	.42
855-0258	S-32	1⅛" sq. x 2⅛"	1 1/16"	.90	.83	.56	.42
855-0260	*S-33	1⅛" sq. x 2⅛"	1 1/16"	.90	.83	.56	.42
855-0262	S-34	1" sq. x 1¼"	.....	.90	.83	.56	.42
855-0266	S-42	2" dia. x 3"	.....	.87	.80	.53	.40
855-0268	S-42C	Cover for S-42	.....	.75	.68	.46	.35
855-0270	S-51	1⅜" sq. x 3¼"	1 5/16"	.90	.83	.56	.42
855-0272	S-74	1¼" dia. x 2"	1 5/16"	.90	.83	.56	.42
855-0186	L-110	2" sq. x 4¼"	1 15/16"	1.27	1.12	.75	.56
855-0274	S-727	2 1/16" dia. x 2½"	2"	.90	.83	.56	.42

HEAVY-DUTY HASH FILTER CHOKES

Relatively high inductance, high current chokes. Molded, powdered iron form. 9/16" dia., 1¼" long. Av. wt., 2 oz.

Stock No.	Mfr's Type	μH ±20%	Max. DC Ohms	EACH
855-3628	5218	3.35	.010	2.10
855-3632	5220	8.8	.021	2.10
855-3640	5240	40.0	.082	1.65
855-3642	5248	68.0	.054	1.87
855-3644	*5250*	*100.0*	*.216*	1.87

Trimmers, 150-160—Linears, 160-171—Mil, 172—Controls, 174-5—Coils, 176-9—Rheostats, 180

J. W. Miller Filter Chokes, Coil Winder

COILS SECTION

TV AND APPLIANCE INTERFERENCE FILTERS

Designed to eliminate noises caused by household appliances. Prevent pick-up of interference and unwanted signals when connected between receiver and power outlet. Two models are available: Type 7818 eliminates radio noise caused by small household appliances such as food mixers, sewing machines, vacuum cleaners, etc. Handles load requirements up to 220 watts; Type 7815 uses larger capacitors and heavier capacity inductors for larger load requirements. Useful for elimination of TV interference in radio receivers. Designed for use with larger appliances and commutator-type motors as well as communication-type receivers and recording equipment. Handles up to 550 watts. Both models for 115 VAC; measure 2¼x 4½".

855-4618. Type 7818 for 220 Watts. Shpg. wt. 1 lb.....**25.50**

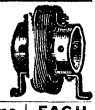
855-4615. Type 7815 for 550 Watts. Shpg. wt. 1 lb.....**26.55**

RADIO INTERFERENCE FILTER CONDENSER

Type 7804. Highest quality mylar dielectric condenser especially developed for radio interference filter use. While rated at 220 volts AC-DC, this condenser is designed to withstand transient surges up to 1000 volts. Non-inductive construction results in extremely low reactance to all interference frequencies. Provides a lifetime of trouble-free service when used with interference filters on circuits having a 220 VAC maximum voltage. Capacity, 2.0 mfd. Measures ⅞x1x2½".

855-4604. Shpg. wt. 2 lbs.....**9.72**

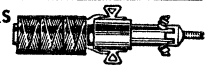
DUO-LATERAL LINE FILTER CHOKES



Ideal for AC lines to filter RF or noise pulses from transmitters, power supplies, intermittent-type switching systems—many more. Types 7825 on bakelite form; 1⅞x1¾". 7827 ceramic form; 2½x4". 4 oz.

Stock No.	Type No.	Millihenries	Amps	DC Ohms	EACH
855-4676	*7825*	*.600*	*2*	*.7*	4.45
855-4677	7825-3	.000	3	.25	4.45
855-4678	7825-5	.000	5	.1	5.35
855-4679	7825-8	.000	8	.05	5.72
855-4686	7827	.370	10	.15	12.50

WIDE-RANGE ADJUSTABLE INDUCTORS



For prototypes when inductance value is unknown. Max. diameter ¾"; length, 2¼". *Indicates μH. Shpg. wt., 3 oz.

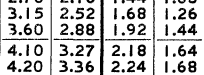
UNTAPPED INDUCTORS

Stock No.	Mfr's Type	Min. mH	Q Min.	Max. mH	Q Min.	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-4878	9001	40*	85	.24	220	2.00	1.59	1.06	.80
855-4880	9002	.18	80	.80	170	2.25	1.80	1.20	.90
855-4882	9003	.57	73	2.80	110	2.70	2.16	1.44	1.08
855-4884	9004	2.10	72	8.00	88	3.15	2.52	1.68	1.26
855-4886	9005	6.00	69	16.0	105	3.60	2.88	1.92	1.44
855-4888	*9006*	*12.0*	*43*	*40.0*	*72*	4.10	3.27	2.18	1.64
855-4890	9007	30.0	43	105.0	76	4.20	3.36	2.24	1.68
855-4892	9008	78.0	36	240.0	61	4.25	3.39	2.26	1.70
855-4894	9009	180.0	20	750.0	41	4.42	3.54	2.36	1.77

TAPPED OSCILLATING INDUCTORS (Basic Type Refers to Table Above)

Stock No.	Mfr's Type	Basic Type	Total Turns	Turns to Tap	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-4896	9011	9001	102	34	2.47	1.98	1.32	.99
855-4900	9013	9003	376	128	3.15	2.52	1.68	1.26
855-4902	9014	9004	608	203	3.57	2.85	1.90	1.43
855-4906	9016	9006	1480	493	4.10	3.27	2.18	1.64
855-4920	9018	9008	3860	1286	4.72	3.78	2.52	1.89
855-4922	9019	9009	6100	2030	4.95	3.95	2.64	1.98

MOISTURE, FUNGUS-RESISTANT RF CHOKES



Phenolic, 3/16" dia. x ¾" long; iron, 7/32x⅞". *max.; †min. ±5% except: ‡ ±20%, § ±10%. F is self-resonant freq. 2 oz.

PHENOLIC FORM—SINGLE LAYER WINDING

Stock No.	Mfr's Type	μH	†Q	†F MHz	DC* Ohms	mA Max.	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-3482	4602	‡1.0	60	190	.050	2000	.83	.66	.44	.33
855-3486	4604	§1.5	58	149	.093	1800	.83	.66	.44	.33
855-3489	4606	§2.4	56	120	.190	1500	.83	.66	.44	.33
855-3508	4612	§10.0	36	61	1.50	500	.87	.69	.46	.35

IRON CORE FORM—SINGLE LAYER WINDING

855-3526	4624	15	62	33	.17	1000	.95	.75	.50	.38
855-3536	4628	39	70	20	.65	600	.97	78	.52	.39
855-3538	4629	55	72	17	1.0	500	1.05	.84	.56	.42
855-3550	*4632*	*100*	*107*	*12*	*3.0*	*400*	1.05	.84	.56	.42

PHENOLIC FORM—3-SECTION WINDING

855-3556	4642	100	49	11	5.4	160	1.05	.84	.56	.42
855-3558	4644	150	53	8.8	6.5	160	1.05	.84	.56	.42
855-3562	4646	240	56	7.2	8.5	160	1.05	.84	.56	.42
855-3582	4652	1000	59	3.7	19.0	160	1.12	.95	.64	.48

J. W. MILLER RF CHOKES

SUBMINIATURE IRON CORE RF CHOKES

Type 70F. Iron core RF chokes for high reliability in ultra-miniature components. Ideal for network and filter design, delay lines, computer applications. Rated 50 mA max. DC current. ¼" in length except: 10-.82 μH, 5/16"; 3.30-22 mH, 25-100 mH, ⅝". †Millihenries. Av. shpg. wt., 2 oz.

Stock No.	Type 70-F-	μH	Min Q	Freq.	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-499
855-1884	337AP	.33	47	25 MHz	.90	.72	.48	.36
855-2060	827AP	.82	48	25 MHz	.90	.72	.48	.36
855-1794	106AI	1	41	25 MHz	.90	.72	.48	.36
855-1850	226AI	2.2	43	7.9 MHz	.90	.72	.48	.36
855-1882	336AI	3.3	40	7.9 MHz	.90	.72	.48	.36
855-1792	105AI	10	36	7.9 MHz	1.05	.84	.56	.42
855-1806	125AI	12	52	2.5 MHz	1.05	.84	.56	.42
855-1848	225AI	22	51	2.5 MHz	1.05	.84	.56	.42
855-1860	255AI	25	48	2.5 MHz	1.05	.84	.56	.42
855-1880	335AI	33	50	2.5 MHz	1.05	.84	.56	.42
855-1790	104AI	100	25	2.5 MHz	1.05	.84	.56	.42
855-1804	124AI	120	40	790 kHz	1.05	.84	.56	.42
855-1822	154AI	150	47	790 kHz	1.05	.84	.56	.42
855-1840	204AI	200	47	790 kHz	1.05	.84	.56	.42
855-1846	224AI	220	46	790 kHz	1.05	.84	.56	.42
855-1878	334AI	330	41	790 kHz	1.05	.84	.56	.42
855-2025	474AI	470	35	790 kHz	1.12	.90	.60	.45
855-2035	684AI	680	37	790 kHz	1.12	.90	.60	.45
855-1788	*103AI*	*1.00mH†*	*30*	*790 kHz*	1.12	.90	.60	.45
855-1820	153AI	1.50mH†	40	250 kHz	1.12	.90	.60	.45
855-1844	223AI	2.20mH†	40	250 kHz	1.20	.96	.64	.48
855-1856	*253AI*	*2.50mH†*	*48*	*250 kHz*	1.25	.99	.66	.50
855-1876	333AI	3.30mH†	52	250 kHz	1.25	.99	.66	.50
855-2020	473AI	4.70mH†	49	150 kHz	1.25	.99	.66	.50
855-2030	683AI	6.80mH†	51	250 kHz	1.25	.99	.66	.50
855-1786	102AI	10 mH†	41	250 kHz	1.50	1.20	.80	.60
855-1830	182AI	18 mH†	49	79 kHz	1.05	.84	.56	.42
855-1842	222AI	22 mH†	50	79 kHz	1.72	1.38	.92	.69
855-1862	272AF	27 mH†	61	79 kHz	1.62	1.29	.86	.65
855-1784	101AF	100 mH†	48	79 kHz	2.25	1.80	1.20	.90

FERRITE CORE RF CHOKES

Meet industrial standards. High permeability of the ferrite core provides increased inductance—permits size of choke to be much smaller for a given inductance than one with a conventional core. Applications: transmitters, receivers, test equipment. Provide high inductance, low DC resistance. Core ¼" dia.; ⅞" long. 1½" axial leads. Av. wt., 2 oz.

Stock No.	Mfr's Type	mH	Ohms	mA	Dia.	EACH 1-9	EACH 10-99	BULK 100-249	BULK 250-62
855-3992	6302	2.5	9.0	160	15/32"	1.47	1.24	.83	.62
855-3996	6304	5	14	160	17/32"	1.70	1.43	.96	.72
855-4000	*6306*	*10*	*31*	*100*	17/32"	1.87	1.59	1.06	.80
855-4004	*6308*	*25*	*82*	*65*	17/32"	1.87	1.59	1.06	.80
855-4008	6310	50	127	65	⅝"	2.25	1.91	1.27	.95

PRINTED CIRCUIT RF CHOKES

Available in a wide range of inductances. With printed-circuit type mounting lugs for quick, easy soldering. Coil forms are ⅞" long. Av. shpg. wt., 1½ oz.

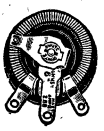
855-2692	970	1	20.6	125	11/16"	1.17	.98	.66	.49
855-2696	972	1.5	26.4	125	¾"	1.17	.98	.66	.49
855-2702	975	2.7	37.4	125	13/16"	1.25	1.05	.70	.53
855-2704	976	3.3	41.8	125	13/16"	1.32	1.12	.74	.56
855-2708	978	4.7	51.8	125	⅞"	1.32	1.12	.74	.56
855-2726	982	10	81.6	100	⅞"	1.32	1.12	.74	.56
855-2730	984	15	105	100	15/16"	1.47	1.24	.83	.62
855-2734	986	22	130	75	31/32"	1.50	1.27	.85	.64
855-2736	987	27	145	75	1 1/16"	1.55	1.30	.87	.65
855-2750	994	100	473	50	1 1/16"	2.02	1.72	1.14	.86

MORRIS "COILMASTER"

Easy-to-operate coil winder makes professional-looking self-supporting, universal and honeycomb coils; solenoids; single-layer coils; etc. Just set winder for type of coil desired and turn handle. Indicator counts turns as you wind, for neat and precise winding. Has 3 cams and 4 gears—easily adjusts for pi spacing and different types of coil forms. For use with No. 22 to No. 40 wire, and variety of coil form sizes. Base size, 5x5". Wire and coil forms not included.

559-5401. Shpg. wt. 3 lbs.....**13.50**

Ohmite Wirewound Rheostats



VITREOUS-ENAMELED RHEOSTATS FROM 7½ WATTS TO 300 WATTS

Vitreous enameled, (except Types 4200, —1, —2, —3, and —4), silicone-ceramic. Cannot smoke, char, shrink or shift. Metal-graphite contact brushes, varied to fit current and resistance. Ratings at full setting. ■U.L. Recog. except types indicated by †. Types H, J, K, and L mount on panels up to ¼″ thick. Type N on panels up to 1¼″ thick. Depth behind panel (and dia.): Type H, 1⅜″ (1⁹⁄₁₆″); Type J, 1⅜″ (2⁵⁄₁₆″); Type K, 1¾″ (3⅛″); Type L, 2″ (4″); Type N, 2⅜″ (6″). **Less knobs; see knobs, dial plates, and coupling kits at bottom of page.** Av. shpg. wt., 8 oz.

PRICE LOCATOR

Price Code	EACH 1-4	5-9	10-24	25-49	50-Up	Price Code	EACH 1-4	5-9	10-24	25-49	50-Up	Price Code	EACH 1-2	3-4	5-9	10-24	25-Up
A	6.30	5.36	4.22	3.47	2.65	H	8.40	7.14	5.63	4.62	3.53	R	12.12	9.70	8.25	6.50	5.34
B	5.50	4.68	3.69	3.03	2.31	J	9.20	7.82	6.16	5.06	3.86	S	16.37	13.10	11.14	8.78	7.21
C	7.60	6.46	5.09	4.18	3.19	K	6.60	5.61	4.42	3.63	2.77	T	18.62	14.90	12.67	9.98	8.20
D	7.90	6.72	5.29	4.35	3.32	L	7.00	5.95	4.69	3.85	2.94	W	17.37	13.90	11.82	9.31	7.65
E	8.60	7.31	5.76	4.73	3.61	M	13.30	8.08	5.70	.....	.....	X	16.12	12.90	10.97	8.64	7.10
F	7.10	6.04	4.76	3.91	2.98	N	14.50	8.93	6.26	.....	.....	Y	27.20	21.75	18.49	14.57	11.96
G	7.40	6.29	4.96	4.07	3.[illegible]	P	13.25	9.01	7.10	5.83	.....	Z	25.75	19.76	.....	.....	.....

7½ WATT—TYPE C

Rugged ceramic and metal construction. Operate at max. hot spot temp. of 340°C. .515″ dia., ⅞″ behind panel. ⅛″ dia. shaft, ⅝″ long. §Locking shaft. 2¼ oz.

Stock No.	Mfr's Type	Ohms	Price Code
875-8001	4908†	10	M
875-8002	4909†	15	M
875-8009	4919†	500	M
875-8020	4952§†	50	N

12½-WATT—TYPE E MINIATURE RHEOSTATS

For high temperature applications; operate at maximum hot spot temperature of 340°C. Resistance ±10%. ⅞″ diameter. 11⁄16″ behind panel. ⅛″ dia. shaft, ⅜″ long. Less knob, below left. 2½ oz.

Stock No.	Type	Ohms	Code	Stock No.	Type	Ohms	Code	Stock No.	Type	Ohms	Code
875-4001	0101†	1	A	875-4011	0111†	75	B	875-4020	0120†	1500	A
875-4002	0102†	2	A	875-4012	0112†	100	B	875-4021	0121†	2500	A
875-4003	0103†	3	A	875-4014	0114†	175	B	875-4022	0122†	3500	C
875-4005	0105†	8	A	875-4015	0115†	250	B	875-4023	0123†	5000	C
875-4006	0106†	10	A	875-4017	0117†	500	B	875-4135	4190†	7500	D
875-4007	0107†	15	B	875-4018	0118†	750	B	875-4136	4191†	10k	D
875-4008	0108†	25	B	875-4019	0119†	1000	A	875-4137	4193†	15k	E
875-4010	0110†	50	B	.....	.....	.....	..	.....	.....	.....	..

25 WATT—TYPE H

Stock No.	Mfr's Type	Ohms	Price Code
875-4025	0140	1	A
875-4026	0141	2	A
875-4027	0142	3	A
875-4028	0143	6	A
875-4029	0144	8	A
875-4030	0145	10	A
875-4031	0146	15	B
875-4032	0147	25	B
875-4033	0148	35	B
875-4034	0149	50	B
875-4035	0150	75	B
875-4036	0151	100	B
875-4037	0152	125	B
875-4038	0153	175	B
875-4039	0154	250	B
875-4040	0155	350	B
875-4041	0156	500	B
875-4042	0157	750	B
875-4043	0158	1000	A
875-4044	0159	1500	A
875-4045	0160	2500	A
875-4046	0161	3500	F
875-4047	0162	5000	F
875-4138	4200†	7500	G
875-4139	4201†	10k	G

25 WATT—TYPE H (Cont'd)

Stock No.	Mfr's Type	Ohms	Price Code
875-4140	4202†	15k	D
875-4141	4203†	20k	H
875-4142	4204†	25k	J

50 WATT—TYPE J

Stock No.	Mfr's Type	Ohms	Price Code
875-4048	0308	0.5	G
875-4049	0309	1	G
875-4050	0310	2	G
875-4051	0311	4	G
875-4052	0312	6	G
875-4053	0313	8	K
875-4054	0314	12	K
875-4055	0315	16	K
875-4056	0316	22	K
875-4057	0317	35	K
875-4058	0318	50	K
875-4059	0319	80	K
875-4060	0320	125	K
875-4061	0321	150	K
875-4062	0322	225	K
875-4063	0323	300	K
875-4064	0324	500	K
875-4065	0325	800	L
875-4066	0326	1000	L
875-4067	0327	1600	L

50 WATT—TYPE J (Cont'd)

Stock No.	Mfr's Type	Ohms	Price Code
875-4068	0328	2500	L
875-4069	0329	3500	G
875-4070	0330	5000	G
875-4071	0331	8000	G
875-4072	0332	10k	G

100 WATT—TYPE K

Stock No.	Mfr's Type	Ohms	Price Code
875-4073	0440	0.5	P
875-4074	0441	1	P
875-4075	0442	2	P
875-4076	0443	3	P
875-4077	0444	5	P
875-4078	0445	7.5	P
875-4079	0446	10	P
875-4080	0447	16	R
875-4081	0448	25	R
875-4082	0449	50	R
875-4083	0450	75	R
875-4084	0451	100	R
875-4085	0452	200	R
875-4086	0453	300	R
875-4087	0455	500	R
875-4088	0456	750	R
875-4089	0457	1000	P

100 WATT—TYPE K (Cont'd)

Stock No.	Mfr's Type	Ohms	Price Code
875-4090	0459	2000	P
875-4091	0461	5000	S
875-4092	0463	10k	T

150 WATT—TYPE L

875-4093	0524	0.5	W
875-4094	0525	1	W
875-4095	0528	5	W
875-4096	0529	7.5	W
875-4097	0530	10	W
875-4098	0531	15	W
875-4099	0532	25	X
875-4100	0533	35	X
875-4101	0534	50	X
875-4102	0535	75	X
875-4103	0536	100	X
875-4104	0537	150	X
875-4105	0538	200	X
875-4106	0539	250	X
875-4107	0540	350	X
875-4108	0541	500	X
875-4109	0542	750	W
875-4110	0543	1250	W
875-4111	0549	10k	Y

300 WATT—TYPE N

Stock No.	Type	Ohms	Code	Stock No.	Type	Ohms	Code	Stock No.	Type	Ohms	Code
875-4112	0650	1	Z	875-4119	0658	25	Z	875-4125	0665	400	Z
875-4114	0652	3	Z	875-4120	0659	50	Z	875-4126	0666	700	Z
875-4115	0654	5	Z	875-4121	0661	100	Z	875-4127	0668	1200	Z
875-4116	0655	7.5	Z	875-4122	0662	150	Z	875-4128	0669	1500	Z
875-4117	0656	10	Z	875-4123	0663	200	Z	875-4129	0671	2500	Z
875-4118	0657	15	Z	875-4124	0664	300	Z	.....	.....	.....	.....

DIAL PLATES AND KNOB

Type 5000 Dial Plate. For Type H, J, K and L rheostats. 2³⁄₁₆″ diameter. Handsomely finished with bright figures and lines on etched black background. 0-100 scale. Shpg. wt., 2 oz.
875-8030. 1-4.....Ea. .50 5-9.....Ea .33

Type 5001 Dial Plate. For Type N. 5½″ dia. 0-100. Shpg. wt., 2 oz.
875-8050. 1-4.....Ea. 1.22 5-9.....Ea. .81

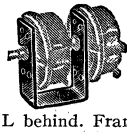
Type 5104 Handwheel. With pointer. For Type N. 3¼″ dia. 2 oz.
875-8050. 1-4.....Ea. 2.40 5-9.....Ea. 1.60

Type 5150 Knob. 1½″ finger-grip type for H, J, K and L. 2 oz.
875-8060. 1-4.....Ea. .50 5-9.....Ea. .33 10-Up....Ea. .28

DIAL PLATE AND KNOB FOR TYPE E

Type 5007 Dial Plate. For Type E. 1¼″ dia. Black backgrnd. 1 oz.
875-8035. 1-4.....Ea. .50 5-9.....Ea. .33 10-Up.....Ea. .28

Type 5151 Knob. ¾″ finger-grip type for E rheostats. Black. 1 oz.
875-8061. 1-4.....Ea. .50 5-9.....Ea. .33 10-Up.....Ea. .28



TANDEM COUPLING KITS

Include steel "U" frame, mica washer, coupling, Allen wrench and instructions. Maximum panel thickness with standard rheostat is ⅛″.

Type 6533 Tandem Coupling Kit. Large frame for Types G, K, or L in front, Types H, J, G, K or L behind. Frame size, 2⁹⁄₁₆″ long by 1¼″ wide. Shpg. wt., 8 oz.
875-8301. 1-2....Ea. 4.32 3-4....Ea. 3.45 5-9.....Ea. 2.93

Type 6532 Tandem Coupling Kit. Compact frame for Types H or J in front; accommodates Types H, J, G, K or L in rear position. Frame size is 2⁵⁄₃₂″ long by 1¼″ wide. Shpg. wt., 4 oz.
875-8300. 1-2....Ea. 3.45 3-4....Ea. 2.75 5-9.....Ea. 2.34

TANDEM COUPLING KIT FOR TYPE E

Type 6591 Tandem Coupling Kit. For assembling two Type E rheostats. Max. panel thickness, 1⁄16″. Frame 1⁷⁄₁₆″. long, ¾″ wide. 2 oz.
875-8325. 1-2.....Ea. 3.45 3-4.....Ea. 2.75
5-9.....Ea. 2.34 10-24.....Ea. 1.84

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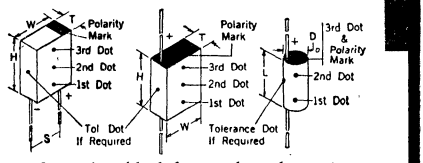
KEMET MICROMINIATURE SOLID TANTALUM CAPACITORS

Available in a wide variety of styles, sizes, and lead configurations. Capacitance-voltage range is .0047 to 220 μF, 2 to 50 volts. Temp. range: −55°C to +85°C. Up to +125°C with derating. Enclosed in Mylar® cases and filled with tough epoxy resin. Non-polar device also available in similar packages.

Case Size	Length Max.	Dia. Max.
A	.125	.070
B	.160	.070
C	.200	.080
D	.225	.100
E	.250	.150



Type 370. Solder coated pure nickel leads. 130% surge voltage rating. ±10% & 5% tolerances available. 2 to 35 volts DC. First letter of type no. indicates case size in chart above.

Stock No.	Type No. T370-	Capac. μF 25°C 120 Hz	Volt. Rating 85°C	EACH 1-24	25-49	50-99	100-up
834-7500	A103L020AS	.010	20	.69	.55	.47	.40
834-7506	A223L020AS	.022	20	.69	.55	.47	.40
834-7511	A473L020AS	.047	20	.69	.55	.47	.40
834-7501	A104L020AS	.10	20	.69	.55	.47	.40
834-7509	A334L015AS	.33	15	.69	.55	.47	.40
834-7502	A105L004AS	1.0	4	.69	.55	.47	.40
834-7505	A155L003AS	1.5	3	.69	.55	.47	.40
834-7533	B472M035AS	.0047	35	.64	.50	.44	.37
834-7537	B682M035AS	.0068	35	.64	.50	.44	.37
834-7520	B103M035AS	.010	35	.64	.50	.44	.37
834-7527	B223M035AS	.022	35	.64	.50	.44	.37
834-7534	B473M035AS	.047	35	.64	.50	.44	.37
834-7521	B104M035AS	.10	35	.64	.50	.44	.37
834-7528	B224M035AS	.22	35	.64	.50	.44	.37
834-7535	B474M035AS	.47	35	.64	.50	.44	.37
834-7522	B105M020AS	1.0	20	.64	.50	.44	.37
834-7526	B155M015AS	1.5	15	.64	.50	.44	.37
834-7532	B335M006AS	3.3	6	.64	.50	.44	.37
834-7540	B685M003AS	6.8	3	.64	.50	.44	.37
834-7558	C684M035AS	.68	35	.80	.63	.55	.46
834-7550	C105M035AS	1.0	35	.80	.63	.55	.46
834-7554	C225M025AS	2.2	25	.80	.63	.55	.46
834-7557	C475M020AS	4.7	20	.80	.63	.55	.46
834-7551	C106M006AS	10	6	.80	.63	.55	.46
834-7555	C226M002AS	22	2	.80	.63	.55	.46
834-7562	D225M035AS	2.2	35	.90	.71	.62	.52
834-7566	D475M035AS	4.7	35	.90	.71	.62	.52
834-7560	D106M020AS	10	20	.90	.71	.62	.52
834-7561	D156M015AS	15	15	.90	.71	.62	.52
834-7563	D226M010AS	22	10	.90	.71	.62	.52
834-7567	D476M004AS	47	4	.90	.71	.62	.52
834-7575	E685M035AS	6.8	35	.90	.71	.62	.52
834-7570	E106M025AS	10	25	.90	.71	.62	.52
834-7571	E156M020AS	15	20	.90	.71	.62	.52
834-7574	E476M006AS	47	6	.90	.71	.62	.52
834-7580	F106M035AS	10	35	2.23	1.76	1.53	1.29
834-7584	F226M035AS	22	35	2.23	1.76	1.53	1.29
834-7587	F476M020AS	47	20	2.23	1.76	1.53	1.29
834-7581	F107M010AS	100	10	2.23	1.76	1.53	1.29
834-7585	F227M003AS	220	3	2.23	1.76	1.53	1.29

Type 376. Axial lead configuration ideal for cordwood construction. 130% surge voltage rating. 2 to 50 volts DC. 5 and 10% tol. First letter of type no. is case size in chart above.

Stock No.	Type No. T376-	Capac. μF 25°C 120 Hz	Volt. Rating 85°C	EACH 1-24	25-49	50-99	100-up
834-7611	A472L020AS	.0047	20	.67	.53	.46	.39
834-7600	A103L020AS	.010	20	.67	.53	.46	.39
834-7603	A153L020AS	.015	20	.67	.53	.46	.39
834-7612	A473L020AS	.047	20	.67	.53	.46	.39
834-7601	A104L020AS	.10	20	.67	.53	.46	.39
834-7604	A154L020AS	.15	20	.67	.53	.46	.39
834-7613	A474L010AS	.47	10	.67	.53	.46	.39
834-7602	A105L004AS	1.0	4	.67	.53	.46	.39
834-7608	A225L002AS	2.2	2	.67	.53	.46	.39
834-7620	B102L050AS	.0010	50	.67	.53	.46	.39
834-7632	B332L050AS	.0033	50	.67	.53	.46	.39
834-7640	B682L050AS	.0068	50	.67	.53	.46	.39
834-7621	B103L050AS	.010	50	.67	.53	.46	.39
834-7629	B223L035AS	.022	35	.67	.53	.46	.39
834-7637	B473L035AS	.047	35	.67	.53	.46	.39
834-7622	B104L035AS	.10	35	.67	.53	.46	.39
834-7630	B224L035AS	.22	35	.67	.53	.46	.39
834-7634	B334L020AS	.33	20	.67	.53	.46	.39
834-7642	B684L015AS	.68	15	.67	.53	.46	.39
834-7623	B105L010AS	1.0	10	.67	.53	.46	.39
834-7639	B475L002AS	4.7	2	.67	.53	.46	.39
834-7654	C334M035AS	.33	35	.64	.50	.44	.37
834-7650	C105M020AS	1.0	20	.64	.50	.44	.37
834-7655	C335M006AS	3.3	6	.64	.50	.44	.37
834-7651	C106M002AS	10.0	2	.64	.50	.44	.37
834-7668	D684M035AS	.68	35	.69	.55	.47	.40
834-7660	D105M035AS	1.0	35	.69	.55	.47	.40
834-7662	D155M020AS	1.5	20	.69	.55	.47	.40
834-7664	D225M020AS	2.2	20	.69	.55	.47	.40
834-7667	D475M010AS	4.7	10	.69	.55	.47	.40
834-7661	D106M004AS	10.0	4	.69	.55	.47	.40
834-7665	D226M002AS	22.0	2	.69	.55	.47	.40
834-7671	E155M035AS	1.5	35	.88	.69	.60	.51
834-7675	E335M020AS	3.3	20	.88	.69	.60	.51
834-7679	E685M020AS	6.8	20	.88	.69	.60	.51
834-7670	E106M015AS	10.0	15	.88	.69	.60	.51
834-7674	E226M006AS	22.0	6	.88	.69	.60	.51
834-7677	E376M003AS	47.0	3	.88	.69	.60	.51

SPRAGUE CL 25 (TYPE 112D) TANTALEX® FOIL CAPACITORS

CL25 (112D) PRICE AND SIZE LOCATOR

Price Code*	Diameter & Length	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	13/64x3/4"	5.30	3.37	2.46	1.74	1.23	.88
B	19/64x15/16"	9.48	4.98	3.84	2.74	1.91	1.50
C	25/64x1 1/2"	15.80	8.69	6.69	4.77	3.31	2.64
D	25/64x2 3/16"	25.73	14.15	10.87	7.74	5.35	4.69
E	25/64x2 13/16"	34.23	18.80	14.48	10.30	7.14	5.94

Polarized, etched-foil tantalum capacitors with virtually leakproof fluorocarbon end-seals. Specially designed for applications up to 150 volts in both military and industrial equipment. Excellent low temperature performance. Feature exceptionally high degree of stability at all operating temperatures. Operating temperature range is −50° to +85°C. Engineered to meet MIL-C-3965B specifications. Have float-design for higher insulation resistance, ultra-low leakage current, and longer service life. With tubular aluminum cases and outer plastic insulating sleeve. Av. shpg. wt. 2 oz.

Stock No.	MIL CL25- / Type 112D-	μF	WVDC	Case Size*
926-5988	BQ010SP3 / 105C3150D1	1	150	A
926-6005	BN020SP3 / 205C3100D1	2	100	A
926-6031	BQ040SP3 / 405C3150G1	4	150	B
926-6040	BJ4R5TP3 / 455C5050D1	4.5	50	A
926-5989	BG100UP3/ 106C7025D1	10	25	A
926-5996	BL120TP3 / 126C5075G1	12	75	B
926-6001	BJ180TP3 / 186C5050G1	18	50	B
926-6010	BN250SP3 / 256C3100J1	25	100	C
926-6019	BL300TP3 / 306C5C75J1	30	75	C
926-6032	BG400UP3/ 406C7025G1	40	25	B
926-6046	BE600UP3 / 606C7015G1	60	15	B

Stock No.	MIL CL25- / Type 112D-	μF	WVDC	Case Size*
926-6045	BJ600TP3 / 606C5050J1	60	50	C
926-5991	BJ101TP3 / 107C5050M1	100	50	D
926-5993	BL101TP3 / 107C5075P1	100	75	E
926-5995	BH111UP3/ 117C7030J1	110	30	C
926-5998	BJ151TP3 / 157C5050P1	150	50	E
926-6008	BH221UP3/ 227C7030M1	220	30	D
926-6012	BG251UP3/ 257C7025M1	250	25	D
926-6022	BH301UP3/ 307C7030P1	300	30	E
926-6026	BG351UP3/ 357C7025P1	350	25	E
926-6033	BE401UP3 / 407C7015M1	400	15	D

SPRAGUE® THE MARK OF RELIABILITY

Polarized Tantalum 10% Capacitors

MALLORY

COMMERCIAL 150D OR TAS AND MILITARY CS13

Both Types are Identical and Interchangeable, but Military Type has MIL-C-26655B Marking

All capacitors on this page are subminiature, hermetically sealed units meeting MIL-C-26655B. All are interchangeable with, and superior to MIL-C-26655A. Life test: 2000 hours. Temperature range: —55 to +85°C. Tighter leakage current and dissipation-factor characteristics over MIL-C-26655A. High-frequency performance: impedance remains low above 1 MHz. 2000-cycle vibration test and 50g shock test without any adverse effects. Withstand severe humidity. NOTE: CS12 with uninsulated bare can is available on Special Order in same values listed below; deduct 2¢ each, from prices shown. See note below on ordering, and note on interchangeability of MIL-C-26655B and MIL-C-26655A at left. 1 oz. **For price and size, see Code (*), then refer to Price and Size Locator.**

NOTE: Allied reserves the right to ship the Military CS13 types in all instances where this listing shows both Military and Commercial designations. The Military types are directly interchangeable with the corresponding Commercial types.

PRICE AND SIZE LOCATOR

Price Code	Diameter x Length Inches	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.135x.286	1.25	1.00	.76	.64	.52	.46
B	.135x.286	1.05	.84	.64	.54	.44	.39
C	.135x.286	1.25	1.00	.76	.64	.52	.46
C#	.135x.286	1.35	1.08	.82	.69	.56	.50
D	.185x.474	1.15	.92	.70	.59	.48	.43
E	.185x.474	1.35	1.08	.82	.69	.56	.50
F	.289x.686	2.30	1.84	1.39	1.17	.94	.82
G	.289x.686	3.25	2.60	1.96	1.64	1.32	1.16
G#	.289x.686	3.45	2.76	2.08	1.74	1.40	1.23
H	.351x.786	4.50	3.60	2.71	2.27	1.82	1.60
J	.351x.786	6.70	5.36	4.03	3.37	2.70	2.37

Stock No.	Sprague Type 150D	Stock No.	Mallory Type TAS	µF	WV DC	Price Code*
926-6372	472X9035A2	852-5700	472K035P1A	.0047	35	A
926-6383	562X9035A2	852-5728	562K035P1A	.0056	35	A
926-6366	103X9035A2	.....	.....	.01	35	A
926-6323	153X9035A2	852-5557	153K035P1A	.015	35	A
926-6324	153X9050A2	.....	.....	.015	50	C#
926-6344	223X9035A2	.....	.....	.022	35	A
926-6345	223X9050A2	.....	.....	.022	50	C#
926-6363	333X9035A2	852-5654	333K035P1A	.033	35	B
926-6370	393X9035A2	852-5654	393K035P1A	.039	35	B
926-6377	473X9035A2	852-5705	473K035P1A	.047	35	B
926-6378	473X9050A2	.....	.....	.047	50	C
926-6387	563X9035A2	.....	.....	.056	35	B
926-6388	463X9050A2	.....	.....	.056	50	C
926-6392	683X9035A2	.....	.....	.068	35	B
926-6405	823X9035A2	.....	.....	.082	35	B
926-6314	104X9035A2	852-5511	104K035P1A	.1	35	B
926-6315	104X9050A2	.....	.....	.1	50	C
926-6320	124X9050A2	852-5536	124K035P1A	.12	50	C
926-6330	154X9035A2	852-5562	154K035P1A	.15	35	B
926-6335	184X9035A2	852-5586	184K035P1A	.18	35	B
926-6336	184X9050A2	.....	.....	.18	50	C
926-6351	224X9035A2	852-5608	224K035P1A	.22	35	B
926-6352	224X9050A2	.....	.....	.22	50	C
926-6357	274X9035A2	852-5634	274K035P1A	.27	35	B
926-6358	274X9050A2	.....	.....	.27	50	C
926-6368	334X9050A2	852-1185	334K050P1A	.33	50	C
926-6369	394X9050A2	852-1189	394K050P1A	.39	50	C
926-6384	474X9050A2	852-1193	474K050P1A	.47	50	C
926-6385	564X9050A2	852-1197	564K050P1A	.56	50	C
926-6402	684X9050A2	852-1200	684K050P1A	.68	50	C
926-6409	824X9050A2	852-1203	824K050P1A	.82	50	C

Stock No.	Military CS13 MIL-C-26655B	Commercial Type 150D or TAS	µF	WV DC	Price Code*
926-0306	CS13BF334K	334X9035A2	.33	35	B
926-0332	CS13BF394K	394X9035A2	.39	35	B
926-0341	CS13BF474K	474X9035A2	.47	35	B
926-0361	CS13BF564K	564X9035A2	.56	35	B
926-0370	CS13BF684K	684X9035A2	.68	35	B
926-0389	CS13BF824K	824X9035A2	.82	35	B
926-0204	CS13BF105K	105X9035A2	1.0	35	B
926-0206	CS13BG105K	105X9050A2	1.0	50	C
926-0225	CS13BE125K	125X9020A2	1.2	20	B
926-0226	CS13BF125K	125X9035A2	1.2	35	D
926-0236	CS13BE155K	155X9020A2	1.5	20	B
926-0238	CS13BF155K	155X9035B2	1.5	35	D
926-0240	CS13BG155K	155X9050B2	1.5	50	E
926-0260	CS13BE185K	185X9020A2	1.8	20	B
926-0261	CS13BF185K	185X9035B2	1.8	35	D
926-0273	CS13BE225K	225X9020A2	2.2	20	B
926-0275	CS13BF225K	225X9035B2	2.2	35	D
926-0277	CS13BG225K	225X9050B2	2.2	50	E
926-0295	CS13BD275K	275X9015A2	2.7	15	B
926-0297	CS13BF275K	275X9035B2	2.7	35	D

Stock No.	Military CS13 MIL-C-26655B	Commerical Type 1050D or TAS	µF	WV DC	Price Code*
926-0311	CS13BD335K	335X9015A2	3.3	15	B
926-0314	CS13BF335K	335X9035B2	3.3	35	D
926-0316	CS13BG335K	335X9050B2	3.3	50	E
926-0334	CS13BC395K	395X9010A2	3.9	10	B
926-0335	CS13BF395K	395X9035B2	3.9	35	D
926-0336	CS13BG395K	395X9050B2	3.9	50	E
926-0346	CS13BC475K	475X9010A2	4.7	10	B
926-0348	CS13BF475K	475X9035B2	4.7	35	D
926-0350	CS13BG475K	475X9050B2	4.7	50	E
926-0363	CS13BB565K	565X9006A2	5.6	6	B
926-0364	CS13BF565K	565X9035B2	5.6	35	D
926-0365	CS13BG565K	565X9050R2	5.6	50	G
926-0377	CS13BB685K	685X9006A2	6.8	6	B
926-0379	CS13BF685K	685X9035B2	6.8	35	D
926-0391	CS13BE825K	825X9020B2	8.2	20	D
926-0392	CS13BF825K	825X9035R2	8.2	35	F
926-0393	CS13BG825K	825X9050R2	8.2	50	G
926-0212	CS13BE106K	106X9020B2	10.0	20	D
926-0214	CS13BF106K	106X9035R2	10.0	35	F
926-0216	CS13BG106K	106X9050R1	10.0	50	G
926-0228	CS13BE126K	126X9020B2	12.0	20	D
926-0229	CS13BF126K	126X9035R2	12.0	35	F
926-0230	CS13BG126K	126X9050R2	12.0	50	G#
926-0245	CS13BE156K	156X9020B2	15.0	20	D
926-0247	CS13BF156K	156X9035R2	15.0	35	F
926-0250	CS13BG156K	156X9050R2	15.0	50	G#
926-0263	CS13BD186K	186X9015B2	18.0	15	D
926-0265	CS13BF186K	186X9035R2	18.0	35	F
926-0266	CS13BG186K	186X9050R2	18.0	50	G#
926-0285	CS13BD226K	226X9015B2	22.0	15	D
926-0287	CS13BF226K	226X9035R2	22.0	35	F
926-0289	CS13BG226K	226X9050S2	22.0	50	J
926-0300	CS13BC276K	276X9010B2	27.0	10	D
926-0301	CS13BE276K	276X9020R2	27.0	20	F
926-0302	CS13BF276K	276X9035S2	27.0	35	H
926-0321	CS13BC336K	336X9010B2	33.0	10	D
926-0324	CS13BE336K	336X9020R2	33.0	20	F
926-0326	CS13BF336K	336X9035S2	33.0	35	H
926-0337	CS13BC396K	396X9010B2	39.0	10	D
926-0338	CS13BE396K	396X9020R2	39.0	20	F
926-0339	CS13BF396K	396X9035S2	39.0	35	H
926-0354	CS13BB476K	476X9006B2	47.0	6	D
926-0356	CS13BE476K	476X9020R2	47.0	20	F
926-0358	CS13BF476K	476X9035S2	47.0	35	H
926-0367	CS13BB566K	566X9006B2	56.0	6	D
926-0368	CS13BD566K	566X9015R2	56.0	15	F
926-0388	CS13BD686K	686X9015R2	68.0	15	F
926-0387	CS13BE686K	686X9020S2	68.0	20	H
926-0396	CS13BC826K	826X9010R2	82.0	10	F
926-0220	CS13BC107K	107X9010R2	100.0	10	F
926-0222	CS13BE107K	107X9020S2	100.0	20	H
926-0233	CS13BC127K	127X9010R2	120.0	10	F
926-0234	CS13BD127K	127X9015S2	120.0	15	H
926-0255	CS13BB157K	157X9006R2	150.0	6	F
926-0257	CS13BD157K	157X9015R2	150.0	15	H
926-0268	CS13BB187K	187X9006R2	180.0	6	F
926-0269	CS13BC187K	187X9010S2	180.0	10	H
926-0292	CS13BC227K	227X9010S2	220.0	10	H
926-0304	CS13BB277K	277X9006S2	270.0	6	H
926-0329	CS13BB337K	337X9006S2	330.0	6	H

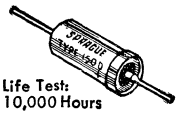
Cut costs by making "one order" purchases from Allied Electronics. You get prompt shipment from the worlds largest stock of electronic equipment.

Mallory, Sprague Solid-Tantalum Capacitors

TYPE CSR13—±10% TOLERANCE-PLASTIC INSULATING SLEEVE

Subminiature hermetically sealed units meet new MIL-C-39003/1A specifications. Life test 10,000 hours. Tighter leakage current and dissipation factor over MIL-C-26655B. Low impedance above 1 MHz. 2000-cycle vibration test. 50g shock test. Temp., —55°C to +125°C.

Leads: Type N1 of MIL-STD-1276, tin coated 0.50 to 1.50 mil. Temperature cycling and voltage aging: Method 102, Condition C, of MIL-STD-202, followed by exposure at +85°C for 40 hrs. minimum, with rated voltage applied. Plastic insulating sleeve. Wt., 2 oz.



Life Test: 10,000 Hours

1% (M) FAILURE RATE PRICE AND SIZE LOCATOR

Case Size	Diameter x Length	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.135x.286″	1.14	.91	.71	.61	.51	.46
B	.185x.474″	1.24	.99	.77	.66	.55	.50
C	.289x.686″	2.38	1.91	1.46	1.24	1.01	.89
D	.351x.786″	4.58	3.67	2.78	2.34	1.89	1.67
E†	.135x.286″	1.43	1.15	.89	.76	.63	.57
E	.135x.286″	1.33	1.07	.83	.71	.59	.53
F	.185x.474″	1.43	1.15	.89	.76	.63	.57
G†	.289x.686″	3.33	2.67	2.03	1.71	1.39	1.23
G	.289x.686″	3.53	2.83	2.15	1.81	1.47	1.30
H	.351x.786″	6.78	5.43	4.10	3.44	2.77	2.44
J	.135x.286″	6.96	5.57	4.44	3.75	3.20	2.92
K	.185x.474″	7.32	5.86	4.67	3.96	3.37	3.11
L	.289x.686″	11.98	9.59	7.66	6.54	5.53	5.09
M	.351x.786″	22.40	17.92	14.31	12.14	10.29	9.45

2% (L) FAILURE RATE PRICE AND SIZE LOCATOR

Case Size	Diameter x Length	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.135x.286″	1.07	.86	.66	.56	.46	.41
B	.185x.474″	1.17	.94	.72	.61	.50	.45
C	.289x.686″	2.32	1.86	1.41	1.19	.96	.84
D	.351x.786″	4.52	3.62	2.73	2.29	1.84	1.62
E†	.135x.286″	1.37	1.10	.84	.71	.58	.52
E	.135x.286″	1.27	1.02	.78	.66	.54	.48
F	.185x.474″	1.37	1.10	.84	.71	.58	.52
G†	.289x.686″	3.27	2.62	1.98	1.66	1.34	1.18
G	.289x.686″	3.47	2.78	2.10	1.76	1.42	1.25
H	.351x.786″	6.72	5.38	4.05	3.39	2.72	2.39
J	.135x.286″	5.10	4.08	3.26	2.75	2.34	2.14
K	.185x.474″	5.37	4.30	3.42	2.90	2.48	2.27
L	.289x.686″	8.80	7.04	5.61	4.79	4.05	3.73
M	.351x.786″	16.43	13.15	10.49	8.91	7.55	6.93

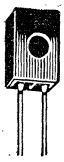
Stock No.	Type CSR13-	Cap., μF	WV DC	Case Size
926-0421	B685KM	6.8	6	A
926-0416	B476KM	47	6	B
926-0407	B157KM	150	6	C
926-0411	B337KM	330	6	D
926-0441	C475KM	4.7	10	A
926-0436	C336KM	33	10	B
926-0426	C107KM	100	10	C
926-0431	C227KM	220	10	D
926-0458	D335KM	3.3	15	A
926-0453	D226KM	22	15	B
926-0463	D686KM	68	15	C
926-0447	D157KM	150	15	D
926-0479	E155KM	1.5	20	A
926-0485	E225KM	2.2	20	A
926-0469	E106KM	10	20	B
926-0481	E156KM	15	20	B
926-0489	E336KM	33	20	C
926-0491	E476KM	47	20	C
926-0493	E686KM	68	20	D
926-0474	E107KM	100	20	D
926-0509	F685KM	6.8	35	B
926-0497	F226KM	22	35	C
926-0501	F336KM	33	35	D
926-0505	F476KM	47	35	D
926-0557	G472KM	.0047	50	E†
926-0559	G682KM	.0068	50	E†
926-0513	G103KM	.01	50	E†
926-0521	G153KM	.015	50	E†
926-0529	G223KM	.022	50	E†
926-0537	G333KM	.033	50	E
926-0543	G473KM	.047	50	E
926-0549	G683KM	.068	50	E
926-0515	G104KM	.1	50	E
926-0523	G154KM	.15	50	E
926-0531	G224KM	.22	50	E
926-0539	G334KM	.33	50	E
926-0545	G474KM	.47	50	E
926-0551	G684KM	.68	50	E
926-0517	G105KM	1	50	E
926-0525	G155KM	1.5	50	F
926-0533	G225KM	2.2	50	F
926-0541	G335KM	3.3	50	F
926-0547	G475KM	4.7	50	F
926-0553	G685KM	6.8	50	G†
926-0519	G106KM	10	50	G†
926-0527	G156KM	15	50	G
926-0535	G226KM	22	50	H
926-0561	H104KM	.1	75	J
926-0569	H154KM	.15	75	J
926-0575	H224KM	.22	75	J
926-0582	H334KM	.33	75	J
926-0588	H474KM	.47	75	J
926-0594	H684KM	.68	75	J
926-0563	H105KM	1	75	K
926-0571	H155KM	1.5	75	K
926-0578	H225KM	2.2	75	K
926-0584	H335KM	3.3	75	K
926-0590	H475KM	4.7	75	L
926-0596	H685KM	6.8	75	L
926-0565	H106KM	10	75	L
926-0573	H156KM	15	75	M

Stock No.	Type CSR13-	Cap., μF	WV DC	Case Size
926-0420	B685KL	6.8	6	A
926-0415	B476KL	47	6	B
926-0405	B157KL	150	6	C
926-0410	B337KL	330	6	D
926-0440	C475KL	4.7	10	A
926-0435	C336KL	33	10	B
926-0425	C107KL	100	10	C
926-0430	C227KL	220	10	D
926-0457	D335KL	3.3	15	A
926-0452	D226KL	22	15	B
926-0462	D686KL	68	15	C
926-0446	D157KL	150	15	D
926-0478	E155KL	1.5	20	A
926-0484	E225KL	2.2	20	A
926-0468	E106KL	10	20	B
926-0480	E156KL	15	20	B
926-0488	E336KL	33	20	C
926-0490	E476KL	47	20	C
926-0492	E686KL	68	20	D
926-0473	E107KL	100	20	D
926-0508	F685KL	6.8	35	B
926-0496	F226KL	22	35	C
926-0500	F336KL	33	35	D
926-0504	F476KL	47	35	D
926-0556	G472KL	.0047	50	E†
926-0558	G682KL	.0068	50	E†
926-0512	G103KL	.01	50	E†
926-0520	G153KL	.015	50	E†
926-0528	G223KL	.022	50	E†
926-0536	G333KL	.033	50	E
926-0542	G473KL	.047	50	E
926-0548	G683KL	.068	50	E
926-0514	G104KL	.1	50	E
926-0522	G154KL	.15	50	E
926-0530	G224KL	.22	50	E
926-0538	G334KL	.33	50	E
926-0544	G474KL	.47	50	E
926-0550	G684KL	.68	50	E
926-0516	G105KL	1	50	E
926-0524	G155KL	1.5	50	F
926-0532	G225KL	2.2	50	F
926-0540	G335KL	3.3	50	F
926-0546	G475KL	4.7	50	F
926-0552	G685KL	6.8	50	G†
926-0518	G106KL	10	50	G†
926-0526	G156KL	15	50	G
926-0534	G226KL	22	50	H
926-0560	H104KL	.1	75	J
926-0568	H154KL	.15	75	J
926-0574	H224KL	.22	75	J
926-0581	H334KL	.33	75	J
926-0587	H474KL	.47	75	J
926-0593	H684KL	.68	75	J
926-0562	H105KL	1	75	K
926-0570	H155KL	1.5	75	K
926-0578	H225KL	2.2	75	K
926-0583	H335KL	3.3	75	K
926-0589	H475KL	4.7	75	L
926-0595	H685KL	6.8	75	L
926-0564	H106KL	10	75	L
926-0572	H156KL	15	75	M

All capacitance values, failure rate .1% (P), and tolerance per MIL 39003/1A are available from Allied. Contact your nearest Allied facility for complete information and for prices in production quantities.

KEMET Molded Solid-Tantalum Capacitors

SERIES T330 AND T331 POLAR SOLID TANTALUM CAPACITORS



Highly reliable, miniature molded solid-tantalum electrolytic capacitors. Rectangular shape for stacking in computers, portable pagers, video recorders, electronic organs, stereo, filtering in color or portable black-and-white TV—anywhere space is at a premium. Provide ultra-low DC leakage, high resistance to heat. Capacitance/voltage range: .082 to 22 μF, 6 to 50 volts DC. Temperature rating: −55° to +85°C. Small size, only .345x.228x.105", ideal for use in high density circuits. All tolerance values are same size. Av. shpg. wt., 1 oz. ±10% tolerance available on special order.

PRICE LOCATOR

Price Code	Tolerance	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	±20%	.83	.66	.53	.45	.39	.35
B	±20%	.77	.61	.48	.41	.36	.32
C	±20%	.63	.50	.40	.34	.29	.27
D	±20%	.57	.45	.35	.30	.26	.23

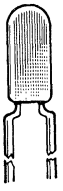
Stock No.	Mfr's Type T330-	Cap., μF	WV DC	Price Code
834-5805	A104M035	.10	35	D
834-5807	A104M050	.10	50	B
834-5820	A124M035	.12	35	D
834-5821	A124M050	.12	50	B
834-5832	A154M035	.15	35	D
834-5833	A154M050	.15	50	B
834-5845	A184M035	.18	35	D
834-5846	A184M050	.18	50	B
834-5857	A224M035	.22	35	D
834-5858	A224M050	.22	50	B
834-5867	A274M035	.27	35	D
834-5868	A274M050	.27	50	B
834-5875	A334M035	.33	35	D
.....	.....	.....	....	.....
.....	.....	.....	....	.....

Stock No.	Mfr's Type T330-	Cap., μF	WV DC	Price Code
834-5876	A334M050	.33	50	B
834-5883	A394M035	.39	35	D
834-5884	A394M050	.39	50	B
834-5891	A474M035	.47	35	D
834-5892	A474M050	.47	50	B
834-5905	A564M035	.56	35	D
834-5906	A564M050	.56	50	B
834-5917	A684M035	.68	35	D
834-5918	A684M050	.68	50	B
834-5927	A824M035	.82	35	D
834-5928	A824M050	.82	50	B
834-5809	A105M035	1.0	35	D
834-5811	A105M050	1.0	50	B
834-5824	A125M035	1.2	35	C
834-5825	A125M050	1.2	50	A

Stock No.	Mfr's Type T331-	Cap., μF	WV DC	Price Code
834-5836	A155M035	1.5	35	C
834-5837	A155M050	1.5	50	A
834-5852	A185M035	1.8	35	C
834-5862	A225M035	2.2	35	C
834-5872	A275M035	2.7	35	C
834-5880	A335M025	3.3	25	C
834-5897	A475M025	4.7	25	C
834-5911	A565M020	5.6	20	C
834-5923	A685M020	6.8	20	C
834-5933	A825M015	8.2	15	C
834-5816	A106M010	10	10	C
834-5828	A126M010	12	10	C
834-5841	A156M010	15	10	C
834-5844	A186M006	18	6	C
834-5864	A226M006	22	6	C

SERIES E DIPPED SOLID-TANTALUM CAPACITORS

A-B



C-D

Space-saving, solid-tantalum capacitors. Special dip-coated, hard-epoxy encapsulation process provides the ability to withstand high humidity and temperature extremes. These capacitors are ideal for decoupling, bypass, filtering and blocking applications in all types of electronic equipment. They are highly resistant to mechanical shock. Have temperature range from −55°C to +85°C with no voltage derating required. Have low impedance over entire temperature range. Capacitance/voltage range of 1 to 330 μF, 6 to 50 volts DC. Dissipation factors are less than 10%. Special solder-coated nickel leads assure quick and easy soldering. ±20% tolerance. Av. wt. 2 oz.

SIZE LOCATOR

Case Size	Height	Width	Depth	Diam.	Lead Size (Diameter)
A	0.350"	.....	.....	0.175"	0.020" ± .002"
B	0.500"	.....	.....	0.250"	0.020" ± .002"
C	0.650"	0.450"	0.250"	.....	0.025" ± .002"
D	0.750"	0.600"	0.275"	.....	0.025" ± .002"

50-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-99	100-499	500-999	1000-4999	5000-Up
834-7006	T360A105M050	1.0	A	.51	.34	.30	.21	.19
834-7039	T360B155M050	1.5	B	.57	.38	.33	.235	.21
834-7047	T360B225M050	2.2	B	.57	.38	.33	.235	.21
834-7056	T360B335M050	3.3	B	.57	.38	.33	.235	.21
834-7064	T360B475M050	4.7	B	.63	.42	.37	.26	.235
834-7117	T362C685M050	6.8	C	1.47	.98	.89	.67	.60
834-7081	T362C106M050	10.0	C	1.47	.98	.89	.67	.60
834-7091	T362C156M050	15.0	C	1.47	.98	.89	.67	.60

35-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-99	100-499	500-999	1000-4999	5000-Up
834-7005	T360A105M035	1.0	A	.36	.24	.21	.15	.135
834-7038	T360B155M035	1.5	B	.42	.28	.25	.17	.15
834-7046	T360B225M035	2.2	B	.42	.28	.25	.17	.15
834-7055	T360B335M035	3.3	B	.42	.28	.25	.17	.15
834-7063	T360B475M035	4.7	B	.42	.28	.25	.17	.15
834-7072	T360B685M035	6.8	B	.42	.28	.25	.17	.15
834-7080	T362C106M035	10.0	C	.96	.64	.56	.40	.36
834-7090	T362C156M035	15.0	C	.96	.64	.56	.40	.36
834-7133	T362D226M035	22.0	D	1.05	.70	.61	.44	.39
834-7140	T362D336M035	33.0	D	1.68	1.12	.98	.70	.63

25-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-99	100-499	500-999	1000-4999	5000-Up
834-7010	T360A155M025	1.5	A	.36	.24	.21	.15	.135
834-7071	T360B685M025	6.8	B	.42	.28	.25	.17	.15
834-7035	T360B106M025	10.0	B	.48	.32	.28	.20	.18
834-7366	T362C156M025	15.0	C	.96	.64	.56	.40	.36
834-7105	T362C226M025	22.0	C	.96	.64	.56	.40	.36
834-7420	T362D476M025	47.0	D	1.68	1.12	.98	.70	.63

20-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-99	100-499	500-999	1000-4999	5000-Up
834-7015	T360A225M020	2.2	A	.36	.24	.21	.15	.135
834-7054	T360B335M020	3.3	B	.48	.28	.25	.17	.15
834-7062	T360B475M020	4.7	B	.42	.28	.25	.17	.15
834-7070	T360B685M020	6.8	B	.42	.28	.25	.17	.15
834-7034	T360B106M020	10.0	B	.42	.28	.25	.17	.15
834-7042	T360B156M020	15.0	B	.48	.32	.28	.20	.18

20-VOLT RATING (Cont'd)

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-99	100-499	500-999	1000-4999	5000-Up
834-7370	T362C226M020	22.0	C	.96	.64	.56	.40	.36
834-7376	T362C336M020	33.0	C	.96	.64	.56	.40	.36
834-7383	T362C476M020	47.0	C	.96	.64	.56	.40	.36
834-7428	T362D686M020	68.0	D	1.68	1.12	.98	.70	.63
834-7391	T362D107M020	100.0	D	1.68	1.12	.98	.70	.63

15-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-99	100-499	500-999	1000-4999	5000-Up
834-7019	T360A335M015	3.3	A	.36	.24	.21	.15	.135
834-7069	T360B685M015	6.8	B	.42	.28	.25	.17	.15
834-7033	T360B106M015	10.0	B	.42	.28	.25	.17	.15
834-7041	T360B156M015	15.0	B	.42	.28	.25	.17	.15
834-7050	T360B226M015	22.0	B	.48	.32	.28	.20	.18
834-7375	T362C336M015	33.0	C	.96	.64	.56	.40	.36
834-7382	T362C476M015	47.0	C	.96	.64	.56	.40	.36
834-7388	T362C686M015	68.0	C	.96	.64	.56	.40	.36
834-7393	T362D157M015	150.0	D	1.68	1.12	.98	.70	.63

10-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-99	100-499	500-999	1000-4999	5000-Up
834-7023	T360A475M010	4.7	A	.36	.24	.21	.15	.135
834-7040	T360B156M010	15.0	B	.42	.28	.25	.17	.15
834-7049	T360B226M010	22.0	B	.42	.28	.25	.17	.15
834-7067	T360B336M010	33.0	B	.48	.32	.28	.20	.18
834-7360	T362C686M010	68.0	C	.96	.64	.56	.40	.36
834-7361	T362C107M010	100.0	C	.96	.64	.56	.40	.36
834-7396	T362D227M010	220.0	D	1.68	1.12	.98	.70	.63

6-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-99	100-499	500-999	1000-4999	5000-Up
834-7028	T360A685M006	6.8	A	.36	.24	.21	.15	.135
834-7048	T360B226M006	22.0	B	.42	.28	.25	.17	.15
834-7058	T360B336M006	33.0	B	.42	.28	.25	.17	.15
834-7067	T360B476M006	47.0	B	.48	.32	.28	.20	.18
834-7360	T362C107M006	100.0	C	.96	.64	.56	.40	.36
834-7368	T362C157M006	150.0	C	.96	.64	.56	.40	.36
834-7398	T362D337M006	330.0	D	1.68	1.12	.98	.70	.63

For Large Quantity Pricing . . Contact the Nearest Allied Electronics Facility

Polarized Solid-Tantalum Capacitors

KEMET

C SERIES—POLAR TYPE

Epoxy-molded, self-insulating solid tantalum capacitors designed for lead wire pre-forming and use in automatic insertion equipment. Ideally suited for use in ship-to-shore and two-way radio communications, industrial electronic equipment, computers and better grade entertainment devices. Bullet-shaped for positive polarity identification. Exhibit low-leakage current, narrow range of capacitance tolerance, good capacitance stability and low dissipation factor characteristics. Designed to operate continuously at full-rated voltage at temperatures from −55° to +85°C. High purity solder-coated nickel lead wires may be soldered or welded. Av. shpg. wt., 2 oz. **Price depends upon case size and capacitance; see price and size locator below.** *+20% tolerance available on special order. Contact the Allied facility nearest you for complete price and ordering information.*

PRICE AND SIZE LOCATOR ±10% Tolerance

Price Code*	Case Size (Diam. x Lgth.)	EACH 1-9	10-24	25-99	100-499	500-Up
A	.138x.390″	.79	.63	.53	.43	35
B	.190x.562″	.81	.65	.55	.45	.37
C	.300x.710″	.81	.65	.55	.45	.37
D	.300x.710″	2.49	1.99	1.59	1.27	1.06
E	.365x.875″	2.49	1.99	1.59	1.27	1.06
F	.365x.875″	4.14	3.31	2.65	2.12	1.77

Stock No.	Type T310-	µF	WV DC	*	Stock No.	Type T310-	µF	WV DC	*
834-5005	A104K035	.10	35	A	834-5344	B565K035	5.6	35	B
834-5017	A124K035	.12	35	A	834-5127	A685K006	6.8	6	A
834-5028	A154K035	.15	35	A	834-5349	B685K020	6.8	20	B
834-5052	A224K035	.22	35	A	834-5350	B685K035	6.8	35	B
834-5064	A274K035	.27	35	A	834-5355	B825K020	8.2	20	B
834-5076	A334K035	.33	35	A	834-5151	*B106K020*	10.0	20	B
834-5088	A394K035	.39	35	A	834-5365	C106K035	10.0	35	D
834-5100	A474K035	.47	35	A	834-5159	B126K020	12	20	B
834-5112	A564K035	.56	35	A	834-5369	C126K035	12	35	D
834-5124	A684K035	.68	35	A	834-5171	*B156K020*	15	20	B
834-5137	A824K035	.82	35	A	834-5372	C156K035	15	35	D
834-5011	*A105K035*	1.0	35	A	834-5182	B186K015	18	15	B
834-5022	A125K020	1.2	20	A	834-5375	C186K020	18	20	D
834-5154	B125K035	1.2	35	B	834-5194	*B226K015*	22	15	B
834-5033	A155K020	1.5	20	A	834-5377	C226K020	22	20	D
834-5166	B155K035	1.5	35	B	834-5428	D226K035	22	35	E
834-5045	A185K020	1.8	20	A	834-5305	B276K010	27	10	B
834-5178	B185K035	1.8	35	B	834-5379	C276K020	27	20	D
834-5057	*A225K020*	2.2	20	A	834-5317	B336K010	33	10	B
834-5190	B225K035	2.2	35	B	834-5382	C336K020	33	20	D
834-5068	A275K015	2.7	15	A	834-5433	D336K035	33	35	F
834-5302	B275K035	2.7	35	B	834-5329	B396K010	39	10	C
834-5080	A335K015	3.3	15	A	834-5384	C396K015	39	15	D
834-5314	B335K035	3.3	35	B	834-5340	B476K006	47	6	B
834-5091	A395K010	3.9	10	A	834-5388	C476K010	47	10	D
834-5326	B395K035	3.9	35	B	834-5390	C476K015	47	15	D
834-5103	A475K010	4.7	10	A	834-5346	B566K006	56	6	C
834-5338	B475K035	4.7	35	B	834-5396	C566K010	56	10	D
834-5114	A565K006	5.6	6	A	.....	.....	.....	.....	...

50-VOLT RATING

PRICE AND SIZE LOCATOR ±10% Tolerance

Price Code*	Case Size (Diam. x Lgth.)	EACH 1-9	10-24	25-99	100-499	500-Up
A	.138x.390″	.85	.68	.55	.45	.37
B	.190x.562″	.89	.71	.57	.47	.39
C	.300x.710″	2.74	2.19	1.75	1.40	1.17
D	.365x.875″	4.55	3.64	2.92	2.33	1.95

Stock No.	Type T310-	µF	*	Stock No.	Type T310-	µF	*
834-5006	A104K050	.10	A	834-5179	B185K050	1.8	B
834-5029	A154K050	.15	A	834-5191	B225K050	2.2	B
834-5041	A184K050	.18	A	834-5303	B275K050	2.7	B
834-5053	A224K050	.22	A	834-5315	B335K050	3.3	B
834-5077	A334K050	.33	A	834-5383	C395K050	3.9	C
834-5089	A394K050	.39	A	834-5386	C475K050	4.7	C
834-5101	A474K050	.47	A	834-5397	C685K050	6.8	C
834-5125	A684K050	.68	A	834-5366	C106K050	10.0	C
834-5138	A824K050	.82	A	834-5370	C126K050	12	C
834-5012	A105K050	1.0	A	834-5420	D156K050	15	D
834-5155	B125K050	1.2	B	834-5424	D186K050	18	D
834-5167	B155K050	1.5	B	.....	.....	.....	...

P SERIES—POLAR TYPE

Dry, sintered slab-shaped tantalum anode capacitor encapsulated in molded epoxy case. Excellent moisture resistance and dielectric properties. Withstands severe shock and vibration. Extremely compact and highly reliable—provides maximum capacitance per unit of chassis area. Ideal for printed circuits and other limited space applications. Parallel wire leads spaced .200″ apart, can be soldered or welded. One face of epoxy case has slight radius on two vertical corners to permit use with automatic insertion equipment. Polarity symbol molded into top face of case. Operates continuously at full-rated voltage at temperatures from −55° to +85°C. Av. shpg. wt., 2 oz. **Price based on case size; see price and size locator below.**

PRICE AND SIZE LOCATOR ±10% Tolerance

Price Code*	Case Size (DxWxH)	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.225x.285x.170″	2.38	1.90	1.52	1.28	.95	.90
B	.225x.285x.170″	3.25	2.60	2.08	1.75	1.50	1.37
C	.225x.285x.170″	3.08	2.46	1.97	1.66	1.43	1.29
D	.225x.285x.170″	2.48	1.98	1.58	1.34	.98	.93
E	.325x.360x.170″	3.25	2.60	2.08	1.75	1.50	1.37
F	.325x.360x.170″	2.48	1.98	1.58	1.34	.98	.93
G	.325x.360x.170″	5.33	4.26	3.41	2.88	2.45	2.24
H	.325x.360x.170″	4.10	3.28	2.62	2.21	1.63	1.55
J	.375x.600x.195″	5.33	4.26	3.41	2.88	2.45	2.24
K	.375x.600x.195″	4.10	3.28	2.62	2.21	1.63	1.55
L	.375x.600x.195″	7.64	6.11	4.89	3.59	2.91	2.42
M	.375x.600x.195″	9.95	7.96	6.37	5.37	4.58	4.18

Stock No.	Mfr's Type	µF	WV DC	*	Stock No.	Mfr's Type	µF	WV DC	*
834-1155	KR1P35K	.1	35	A	834-1063	K6R8P15K	6.8	15	D
834-1156	KR1P50K	.1	50	C	834-1065	K6R8P35K	6.8	35	F
834-1158	*KR12P35K*	.12	35	A	834-1069	K8R2P15K	8.2	15	D
834-1159	KR12P50K	.12	50	C	834-1070	K8R2P25K	8.2	25	F
834-1161	KR15P35K	.15	35	A	834-1071	K8R2P35K	8.2	35	H
834-1162	KR15P50K	.15	50	C	834-1072	K8R2P50K	8.2	50	J
834-1164	KR18P35K	.18	35	A	834-1074	K10P10K	10	10	D
834-1165	KR18P50K	.18	50	C	834-1076	K10P25K	10	25	H
834-1167	KR22P35K	.22	35	A	834-1077	K10P35K	10	35	H
834-1168	KR22P50K	.22	50	C	834-1078	K10P50K	10	50	J
834-1170	KR27P35K	.27	35	A	834-1080	K12P10K	12	10	D
834-1171	KR27P50K	.27	50	C	834-1082	K12P25K	12	25	H
834-1173	KR33P35K	.33	35	A	834-1083	K12P35K	12	35	K
834-1176	KR39P35K	.39	35	A	834-1086	K15P10K	15	10	D
834-1177	KR39P50K	.39	50	C	834-1088	K15P25K	15	25	H
834-1179	KR47P35K	.47	35	A	834-1089	K15P35K	15	35	K
834-1180	KR47P50K	.47	50	C	834-1090	K15P50K	15	50	M
834-1182	KR56P35K	.56	35	A	834-1091	K18P6K	18	6	D
834-1185	KR68P35K	.68	35	A	834-1093	K18P15K	18	15	F
834-1188	KR82P35K	.82	35	A	834-1095	K18P35K	18	35	K
834-1005	K1P35K	1.0	35	A	834-1096	K18P50K	18	50	M
834-1006	K1P50K	1.0	50	C	834-1097	K22P6K	22	6	D
834-1010	K1R2P25K	1.2	25	A	834-1099	K22P15K	22	15	H
834-1011	K1R2P35K	1.2	35	D	834-1101	K22P35K	22	35	L
834-1016	K1R5P25K	1.5	25	A	834-1105	K27P15K	27	15	H
834-1017	K1R5P35K	1.5	35	D	834-1106	K27P25K	27	25	L
834-1022	K1R8P25K	1.8	25	A	834-1107	K27P35K	27	35	L
834-1023	K1R8P35K	1.8	35	D	834-1110	K33P10K	33	10	H
834-1024	K1R8P50K	1.8	50	B	834-1111	K33P15K	33	15	K
834-1027	K2R2P15K	2.2	15	A	834-1113	K33P35K	33	35	L
834-1029	K2R2P35K	2.2	35	D	834-1116	K39P10K	39	10	H
834-1030	K2R2P50K	2.2	50	B	834-1117	K39P15K	39	15	K
834-1033	K2R7P15K	2.7	15	A	834-1118	K39P25K	39	25	L
834-1035	K2R7P35K	2.7	35	D	834-1121	K47P6K	47	6	H
834-1036	K2R7P50K	2.7	50	E	834-1123	K47P15K	47	15	L
834-1039	K3R3P15K	3.3	15	A	834-1124	K47P25K	47	25	L
834-1041	K3R3P35K	3.3	35	D	834-1127	K56P6K	56	6	H
834-1042	K3R3P50K	3.3	50	E	834-1129	K56P15K	56	15	L
834-1046	K3R9P25K	3.9	25	D	834-1133	K68P6K	68	6	H
834-1047	K3R9P35K	3.9	35	F	834-1135	K68P15K	68	15	L
834-1051	K4R7P25K	4.7	25	D	834-1142	K82P15K	82	15	L
834-1052	K4R7P15K	4.7	15	D	834-1143	K100P10K	100	10	L
834-1053	K4R7P35K	4.7	35	F	834-1145	K120P10K	120	10	L
834-1054	K4R7P50K	4.7	50	G	834-1147	K150P6K	150	6	L
834-1057	K5R6P15K	5.6	15	D	834-1148	K150P10K	150	10	L
834-1059	K5R6P35K	5.6	35	F	834-1150	K180P6K	180	6	L
834-1060	K5R6P50K	5.6	50	G	834-1152	K220P6K	220	6	L

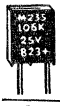
ATTENTION PURCHASING AGENTS

Allied can furnish the complete line of Kemet capacitors. Contact the Allied facility nearest you for information on larger quantities than shown here or on types not listed. Allied can make immediate shipments in industrial quantities and at OEM prices.

Wet Slug and Tantalum Capacitors

TIM AND TAC PRICE AND SIZE LOCATOR

Type	Price & Size Code*	Tolerance	Size, Inches	3-35 VOLT TYPES, EACH 1-9	10-24	25-49	50-99	100-499	500-Up	50 VOLT TYPES, EACH 1-9	10-24	25-49	50-99	100-499	500-Up
TIM	A	±10%	.225x.285x.170	1.63	1.31	1.05	.72	.59	.49	2.02	1.62	1.30	.90	.73	.59
	B	±10%	.225x.285x.170	1.66	1.33	1.07	.74	.61	.51	2.18	1.75	1.40	.97	.78	.63
	C	±10%	.335x.360x.170	1.66	1.33	1.07	.74	.61	.51	2.18	1.75	1.40	.97	.78	.63
	D	±10%	.335x.360x.170	3.15	2.52	2.02	1.39	1.13	.95	5.18	4.15	3.32	2.49	2.01	1.62
TAC	2	±10%	.105 dia. x .295	.78	.63	.53	.48	.43	.35	.85	.68	.55	.50	.45	.37
	3	±10%	.137 dia. x .340	.78	.63	.53	.48	.43	.35	.85	.68	.55	.50	.45	.37
	4	±10%	.187 dia. x .530	.81	.65	.55	.50	.45	.37	.88	.71	.57	.52	.47	.39



TIM SERIES RECTANGULAR SOLID TANTALUM CAPACITORS

Ultra-miniature tantalum capacitors in molded epoxy case with tinned nickel radial leads, precisely positioned for PC board mounting. High stability, long shelf life, excellent performance in severe environments. Uniform size for automatic assembly. Temperature range, —55° to +85° C. Tolerance, ±10%. Lead spacing, .200". Av. shpg. wt., 2 oz.

Stock No.	Type TIM-	Cap., µF	WV DC	Case Code*
852-6447	186K006P0X	18	6	B
852-6460	226K006P0X	22	6	B
852-6518	566K006P0Y	56	6	C
852-6530	686K006P0Y	68	6	C
852-6542	826K006P0Y	82	6	D
852-6412	106K010P0X	10	10	B
852-6435	156K010P0X	15	10	B
852-6480	336K010P0Y	33	10	C
852-6494	396K010P0Y	39	10	C
852-6405	104K035P0X	0.1	35	A
852-6417	124K035P0X	0.12	35	A
852-6426	154K035P0X	0.15	35	A
852-6440	184K035P0X	0.18	35	A
852-6451	224K035P0X	.22	35	A
852-6465	274K035P0X	.27	35	A
852-6473	334K035P0X	.33	35	A
852-6485	394K035P0X	.39	35	A

Stock No.	Type TIM-	Cap., µF	WV DC	Case Code*
852-6501	474K035P0X	.47	35	A
852-6511	564K035P0X	.56	35	A
852-6522	684K035P0X	.68	35	A
852-6535	824K035P0X	.82	35	A
852-6409	*105K035P0X*	1.0	35	A
852-6421	125K035P0X	1.2	35	A
852-6431	155K035P0X	1.5	35	B
852-6444	185K035P0X	1.8	35	B
852-6457	225K035P0X	2.2	35	B
852-6469	275K035P0X	2.7	35	B
852-6477	335K035P0X	3.3	35	B
852-6490	395K035P0X	3.9	35	B
852-6506	475K035P0Y	4.7	35	C
852-6515	565K035P0Y	5.6	35	C
852-6526	685K035P0Y	6.8	35	C
852-6539	825K035P0Y	8.2	35	D

Stock No.	Type TIM-	Cap., µF	WV DC	Case Code*
852-6414	106K035P0Y	10	35	D
852-6406	104K050P0X	.1	50	A
852-6418	124K050P0X	.12	50	A
852-6427	154K050P0X	.15	50	A
852-6441	184K050P0X	.18	50	A
852-6452	224K050P0X	.22	50	A
852-6466	274K050P0X	.27	50	A
852-6502	474K050P0X	.47	50	A
852-6410	105K050P0X	1.0	50	A
852-6445	185K050P0X	1.8	50	B
852-6458	225K050P0X	2.2	50	B
852-6470	275K050P0Y	2.7	50	C
852-6478	335K050P0Y	3.3	50	C
852-6491	395K050P0Y	3.9	50	C
852-6507	475K050P0Y	4.7	50	C
852-6516	565K050P0Y	5.6	50	D

TAC SERIES SUBMINIATURE TUBULAR SOLID TANTALUM CAPACITORS

High-reliability axial-lead capacitors in precision-molded epoxy case. Excellent environmental protection. Rated for —55° C to +85° C. Tolerance, ±10%. 1/10 oz.

Stock No.	Type TAC-	Cap., µF	WV DC	Case Code*
852-5328	156K003P02	15	3	2
852-5341	186K003P02	18	3	2
852-5438	686K003P04	68	3	4
852-5455	826K003P04	82	3	4
852-5448	825K006PO2	8.2	6	2
852-5307	106K006P02	10	6	2
852-5319	126K006PO2	12	6	2
852-5410	476K006P04	47	6	4
852-5424	566K006P04	56	6	4
852-5386	395K010P02	3.9	10	2
852-5403	475K010P02	4.7	10	2
852-5417	565K010P02	5.6	10	2
852-5431	685K010P02	6.8	10	2
852-5368	276K010P04	27	10	4
852-5378	336K010P04	33	10	4
852-5394	396K010P04	39	10	4
852-5303	105K202P02	1.0	20	2

Stock No.	Type TAC-	Cap., µF	WV DC	Case Code*
852-5349	*225K020P02*	2.2	20	2
852-5413	564K035P02	.56	35	2
852-5427	684K035P02	.68	35	2
852-5445	824K035P02	.82	35	2
852-5316	125K035P03	1.2	35	3
852-5365	275K035P04	2.7	35	4
852-5374	335K035P04	3.3	35	4
852-5390	395K035P04	3.9	35	4
852-5407	475K035P04	4.7	35	4
852-5421	565K035P04	5.6	35	4
852-5435	685K035P04	6.8	35	4
852-5451	*825K035P04*	8.2	35	4
852-5442	823K050P02	.082	50	2
852-5302	*104K050P02*	.1	50	2
852-5312	124K050P02	.12	50	2
852-5322	154K050P02	.15	50	2
852-5333	184K050P02	.18	50	2

Stock No.	Type TAC-	Cap., µF	WV DC	Case Code*
852-5345	224K050P02	.22	50	2
852-5360	274K050P02	.27	50	2
852-5370	334K050P02	.33	50	2
852-5382	394K050P02	.39	50	2
852-5400	474K050P02	.47	50	2
852-5414	564K050P03	.56	50	3
852-5428	684K050P03	.68	50	3
852-5446	824K050P03	.82	50	3
852-5305	105K050P03	1.0	50	3
852-5317	125K050P04	1.2	50	4
852-5326	155K050P04	1.5	50	4
852-5339	185K050P04	1.8	50	4
852-5351	225K050P04	2.2	50	4
852-5366	275K050P04	2.7	50	4
852-5375	335K050P04	3.3	50	4
852-5391	395K050P04	3.9	50	4
852-5408	475K050P04	4.7	50	4

TYPE CL65 MINIATURE WET SLUG CAPACITORS

*CL65 PRICES

Price Size Code	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
T1	2.71	2.47	1.99	1.69	1.45	1.32
T2	4.12	3.75	3.00	2.55	2.18	1.99
T3	6.46	5.88	4.72	3.99	3.41	3.11

CASE SIZES

*Size Code	Dia.xLength (Inches)
T1	.219x.485
T2	.313x.672
T3	.406x.797

Series TLS miniature, polarized, sintered-tantalum-anode, liquid-electrolyte capacitors. Three case sizes and high µF-Volt rating to volume ratios. Equivalent to Style CL65 of MIL-C-3965D. Can be selected for operation in temperature range of —55°C to +85°C or —55°C to +125°C. Excellent stability versus both temperature and life. Low DC leakage current makes these capacitors especially suited to very low-cnrreut timing circuits. Small size and sturdiness make them ideal for high-density electronics packages and severe physical environments. Tolerance: ±10%. Come in plain, uninsulated case. See price tables above.

Stock No.	Mfr's Type	Cap. µF	WVDC @+85°C	WVDC @+125°C	*Case Code
852-1059	CL65BB561KPE	30	6	4	T1
852-1060	CL65BE150KPE	270	15	10	T3
852-1061	CL65BE271KPE	10	25	15	T1
852-1062	CL65BG100KPE	22	25	15	T1
852-1063	CL65BG220KPE	100	25	15	T2
852-1064	CL65BG101KPE	180	25	15	T3
852-1065	CL65BG181KPE	100	30	20	T3
852-1066	CL65BH101KPE	150	30	20	T3
852-1067	CL65BH151KPE	10	50	30	T1
852-1068	CL65BJ100KPE	25	50	30	T2

Stock No.	Mfr's Type	Cap. µF	WVDC @+85°C	WVDC @+125°C	*Case Code
852-1069	CL65BJ250KPE	25	50	30	T2
852-1070	CL65BJ470KPE	47	50	30	T2
852-1071	CL65BJ820KPE	82	50	30	T3
852-1072	CL65BL6R8KPE	6.8	75	50	T1
852-1073	CL65BL150KPE	15	75	50	T2
852-1074	CL65BN2R5KPE	2.5	100	65	T1
852-1075	CL65BN4R7KPE	4.7	100	65	T1
852-1076	CL65BN220KPE	22	100	65	T2
852-1077	CL65BN430KPE	43	100	65	T3
852-1078	CL65BP090KPE	9	125	85	T2

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

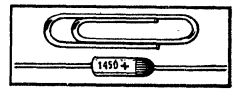
Solid Tantalum Capacitors

TYPE 145D MINIATURE TANTALEX CAPACITORS

Compact sintered-anode capacitors. Ideal for industrial printed wiring boards, many tight-space applications. Priced comparably to older style electrolytics. Tol., ±20%; ±10% available on special order. Oper. temp. range: −55°C to +85°C. Voltage ratings, 6 to 75 WVDC. Moisture-protected case, plastic insulation sleeve. Wt. ½ oz.

145D PRICE AND SIZE LOCATOR

Price Code*	Diameter & Length	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.115 x .312″	2.41	1.55	1.36	1.18	.95	.88
B	.145 x .600″	3.62	1.95	1.71	1.48	1.19	1.10
C	.225 x .700″	4.75	2.55	2.24	1.93	1.55	1.43



Stock No.	Type 145D-	μF	WV DC	*
926-6233	276X0006E2	27	6	A
926-6271	187X0006H2	180	6	B
926-6285	567X0006J2	560	6	C
926-6229	226X0008E2	22	8	A
926-6267	157X0008H2	150	8	B
926-6283	477X0008J2	470	8	C
926-6225	186X0010E2	18	10	A
926-6263	127X0010H2	120	10	B
926-6281	397X0010J2	390	10	C
926-6221	156X0012E2	15	12	A
926-6259	107X0012H2	100	12	B
926-6279	337X0012J2	330	12	C
926-6219	126X0015E2	12	15	A
926-6255	826X0015H2	82	15	B
926-6277	277X0015J2	270	15	C
926-6217	106X0020E2	10	20	A
926-6251	686X0020H2	68	20	B
926-6275	227X0020J2	220	20	C
926-6215	825X0025E2	8.2	25	A
926-6245	566X0025H2	56	25	B
926-6273	187X0025J2	180	25	C
926-6213	685X0030E2	6.8	30	A
926-6241	476X0030H2	47	30	B
926-6269	157X0030J2	150	30	C
926-6211	565X0035E2	5.6	35	A
926-6239	396X0035H2	39	35	B
926-6265	127X0035J2	120	35	C
926-6209	475X0040E2	4.7	40	A
926-6237	336X0040H2	33	40	B
926-6261	107X0040J2	100	40	C
926-6207	395X0050E2	3.9	50	A
926-6235	276X0050H2	27	50	B
926-6257	826X0050J2	82	50	C
926-6205	335X0060E2	3.3	60	A
926-6231	226X0060H2	22	60	B
926-6253	686X0060J2	68	60	C
926-6201	225X0075E2	2.2	75	A
926-6203	275X0075E2	2.7	75	A
926-6223	156X0075H2	15	75	B
926-6227	186X0075H2	18	75	B
926-6243	476X0075J2	47	75	C
926-6247	566X0075J2	56	75	C

TYPE 196D SOLID TANTALUM EPOXY-DIPPED CAPACITORS

Units are low on cost, high on space-saving. Rugged epoxy-resin coating effectively resists and prevents moisture and mechanical damage. Tinned nickel leads for long life, dependability. Operating temperature range, −55°C to +85°C. Tolerance, ±20%. Voltage ratings range from 4 WVDC to 50 WVDC. Av. shpg. wt. ½ oz.

SIZE TABLE

Case Code	Height	Width	Thickness	Lead Length	Case Code	Height	Width	Thickness	Lead Length
A	.375	.175	.175	.750	D	.500	.450	.250	1.500
B	.425	.225	.225	.750	E	.800	.600	.257	1.500
C	.450	.225	.225	.750					

Stock No.	Type 196D-	Cap. μF	Case Size Code	EACH 1-24	25-49	50-99	100-499	500-Up
4 WVDC								
926-6746	106X0004HA1	10	A	.60	.36	.30	.24	.21
926-6835	476X0004JA1	47	B	.70	.42	.35	.28	.25
926-6753	107X0004KA1	100	C	.80	.48	.40	.32	.28
926-6797	227X0004LA3	220	D	1.60	.96	.80	.64	.56
6 WVDC								
926-6845	685X0006HA1	6.8	A	.60	.36	.30	.24	.21
926-6815	336X0006JA1	33	B	.70	.42	.35	.28	.25
926-6836	476X0006KA1	47	C	.80	.48	.40	.32	.28
926-6850	686X0006KA1	68	C	.80	.48	.40	.32	.28
926-6772	157X0006LA3	150	D	1.60	.96	.80	.64	.56
926-6823	337X0006MA3	330	E	2.80	1.68	1.40	1.12	.98
10 WVDC								
926-6830	475X0010HA1	4 7	A	.60	.36	.30	.24	.21
926-6791	226X0010JA1	22	B	.70	.42	.35	.28	.25
926-6816	336X0010KA1	33	C	.80	.48	.40	.32	.28
926-6755	107X0010LA3	100	D	1.60	.96	.80	.64	.56
926-6799	227X0010MA3	220	E	2.80	1.68	1.40	1.12	.98
15 WVDC								
926-6808	335X0015HA1	3.3	A	.60	.36	.30	.24	.21
926-6766	156X0015JA1	15	B	.70	.42	.35	.28	.25
926-6792	226X0015KA1	22	C	.80	.48	.40	.32	.28
926-6852	686X0015LA3	68	D	1.60	.96	.80	.64	.56
926-6774	157X0015MA3	150	E	2.80	1.68	1.40	1.12	.98
20 WVDC								
926-6749	*106X0020JA1*	10	B	.70	.42	.35	.28	.25
926-6767	156X0020KA1	15	C	.80	.48	.40	.32	.28
926-6838	*476X0020LA3*	47	D	1.60	.96	.80	.64	.56
926-6757	107X0020MA3	100	E	2.80	1.68	1.40	1.12	.98
25 WVDC								
926-6761	155X0025HA1	1.5	A	.60	.36	.30	.24	.21
926-6784	225X0025HA1	2.2	A	.60	.36	.30	.24	.21
926-6847	685X0025JA1	6.8	B	.70	.42	.35	.28	.25
926-6751	106X0025KA1	10	C	.80	.48	.40	.32	.28
926-6794	226X0025LA3	22	D	1.60	.96	.80	.64	.56
25 WVDC (CONT'D)								
926-6818	336X0025LA3	33	D	1.60	.96	.80	.64	.56
926-6839	476X0025MA3	47	E	2.80	1.68	1.40	1.12	.98
926-6853	686X0025MA3	68	E	2.80	1.68	1.40	1.12	.98
35 WVDC								
926-6740	104X0035HA1	0.1	A	.60	.36	.30	.24	.21
926-6759	154X0035HA1	0.15	A	.60	.36	.30	.24	.21
926-6778	224X0035HA1	0.22	A	.60	.36	.30	.24	.21
926-6805	334X0035HA1	0.33	A	60	.36	.30	.24	.21
926-6827	*474X0035HA1*	0.47	A	.60	.36	.30	.24	.21
926-6842	684X0035HA1	0.68	A	.60	.36	.30	.24	.21
926-6744	105X0035HA1	1.0	A	.60	.36	.30	.24	.21
926-6763	155X0035HA1	1.5	B	.70	.42	.35	.28	.25
926-6787	225X0035JA1	2.2	B	.70	.42	.35	.28	.25
926-6810	*335X0035JA1*	3.3	B	.70	.42	.35	.28	.25
926-6833	475X0035JA1	4.7	B	.70	.42	.35	.28	.25
926-6848	685X0035KA1	6.8	C	.80	.48	.40	.32	.28
926-6752	106X0035LA3	10	D	1.60	.96	.80	.64	.56
926-6768	156X0035LA3	15	D	1.60	.96	.80	.64	.56
926-6795	226X0035MA3	22	E	1.75	1.05	.88	.70	.61
926-6819	336X0035MA3	33	E	2.80	1.68	1.40	1.12	.98
50 WVDC								
926-6741	104X0050HA1	0.1	A	.85	.51	.43	.34	.30
926-6760	154X0050HA1	0.15	A	.85	.51	.43	.34	.30
926-6779	224X0050HA1	0.22	A	.85	.51	.43	.34	.30
926-6806	334X0050HA1	0.33	A	.85	.51	.43	.34	.30
926-6828	474X0050HA1	0.47	A	.85	.51	.43	.34	.30
926-6843	684X0050HA1	0.68	A	.85	.51	.43	.34	.30
926-6745	105X0050HA1	1.0	A	.85	.51	.43	.34	.30
926-6764	155X0050JA1	1.5	B	.95	.57	.48	.38	.33
926-6788	225X0050JA1	2.2	B	.95	.57	.48	.38	.33
926-6811	335X0050JA1	3.3	B	.95	.57	.48	.38	.33
926-6834	475X0050KA1	4.7	C	1.05	.63	.53	.42	.37

TYPE 162D MINIATURE POLARIZED TANTALUMS

Extremely small and compact tantalum capacitors designed for use on printed circuit wiring boards, in packaged circuit modules, and in applications where space is a critical factor. Excellent for use in hearing aids and ultra-miniature radios. Have solid, non-corrosive electrolyte. Exceptionally long shelf and service life. All have plastic resin end-seal; plastic insulating sleeve. Tolerance, ±10%. Operating temperature range, −55° to +85°C, derating. Axial leads. Av. shpg. wt., 2 oz. *Price Code.

Stock No.	Type 162D-	μF	WV DC	*
926-6591	683X9100AA2	.068	100	F
926-6580	104X9050AA2	.1	50	E
926-6584	154X9035AA2	.15	35	A
926-6589	474X9020AA2	.47	20	A
926-6592	684X9015AA2	.68	15	A
926-6581	105X9010AA2	1.0	10	A
926-6582	105X9020AB2	1.0	20	B
926-6586	225X9015AB2	2.2	15	B
926-6589	475X9020BA2	4 7	20	C
926-6593	685X9015BA2	6.8	15	C
926-6583	106X9010BA2	10	10	C
926-6585	156X9015CA2	15	15	D
926-6587	226X9010CA2	22	10	D
926-6590	476X 9004CA2	47	4	D

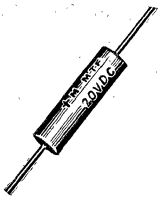
162D AXIAL-LEAD PRICE AND SIZE LOCATOR

*	Diameter x Length	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.080x.135″	1.52	1.22	.72	.54	.50	.46
B	.080x.185″	1.52	1.22	.72	.54	.50	.46
C	.105x.265″	1.60	1.28	.76	.57	.53	.49
D	.145x.265″	1.75	1.40	.83	.62	.58	.53
E	.080x.135″	2.31	1.85	1.09	.82	.76	.70
F	.080x.135″	4.52	3.62	2.12	1.58	1.46	1.34

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Mallory Tantalum, Aluminum Electrolytics, Hardware

MTP SERIES ULTRAMINIATURE TANTALUM CAPACITORS



PRICE AND SIZE LOCATOR*

Case Size†	Diameter x Length	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.115 x .400″	2.59	2.28	1.99	1.71	1.37	1.25
B	.145 x .590″	3.11	2.74	2.39	2.06	1.64	1.51
C	.225 x .775″	3.62	3.18	2.78	2.39	1.91	1.75
D	.115 x .312″	2.57	2.26	1.97	1.69	1.35	1.23

Sintered tantalum anode, polar wet slug units offer higher capacity-voltage than ordinary wet slug, solid or foil tantalum capacitors. Meet MIL-STD-202 for high frequency vibration, shock, temperature cycling moisture resistance, sleeve strength. Silver case, closed on elastomer end seal. Insulated sleeve. —55° C to +85° C. ±20%. Max. DC leakage, 2 μA at 25° C. Av. shpg. wt., 1 oz.

- Higher Capacity-Voltage Product Than Ordinary Wet Slug, Tantalum Capacitors
- Meets MIL-STD-202 Specifications for High-Frequency Vibration and Rigid Construction

Stock No.	Type MTP-	Cap. μF	WV DC	Case Size†
852-2757	335M060P1D	3.3	60	D
852-2768	405M050P1D	4	50	D
852-2775	475M035P1D	4.7	35	D
852-2777	475M060P1A	4.7	60	A
852-2790	605M030P1D	6	30	D
852-2801	685M020P1D	6.8	20	D
852-2803	685M050P1A	6.8	50	A
852-2804	685M060P1A	6.8	60	A
852-2705	106M010P1D	10	10	D
852-2707	106M030P1A	10	30	A
852-2708	106M035P1A	10	35	A
852-2710	106M060P1B	10	60	B
852-2725	156M006P1D	15	6	D
852-2727	156M020P1A	15	20	A
852-2730	156M060P1B	15	60	B

Stock No.	Type MTP-	Cap. μF	WV DC	Case Size†
852-2744	226M015P1A	22	15	A
852-2747	226M060P1B	22	60	B
852-2752	306M050P1B	30	50	B
852-2759	336M010P1A	33	10	A
852-2762	336M050P1B	33	50	B
852-2763	336M060P1C	33	60	C
852-2770	456M030P1B	45	30	B
852-2779	476M006P1A	47	6	A
852-2781	476M020P1B	47	20	B
852-2783	*476M060P1C*	47	60	C
852-2792	606M020P1B	60	20	B
852-2807	686M015P1B	68	15	B
852-2810	686M050P1C	68	50	C
852-2813	786M050P1C	78	50	C

Stock No.	Type MTP-	Cap., μF	WV DC	Case Size†
852-2816	806M015P1B	80	15	B
852-2713	107M010P1B	100	10	B
852-2716	*107M035P1C*	100	35	C
852-2720	127M010P1B	120	10	B
852-2733	157M006P1B	150	6	B
852-2735	157M020P1C	150	20	C
852-2722	127M030P1C	120	30	C
852-2738	187M006P1B	180	6	B
852-2741	207M015P1C	200	15	C
852-2749	227M015P1C	220	15	C
852-2755	307M010P1C	300	10	C
852-2765	337M010P1C	330	10	C
852-2772	457M006P1C	450	6	C
852-2785	477M006P1C	470	6	C

MTA ALUMINUM ELECTROLYTICS

Operating temp. range, —30°C to 85°C. Tol., —10%, +100%. Polypropylene case. DC leakage not over .03 μA per μF volt or 6 μA, whichever is

PRICE AND SIZE LOCATOR*

Size Code	Dia. Length	EACH 1-24	25-49	50-99	100-249	250-499	500-999	1000-Up
A	.313x .750″	.45	.28	.24	.21	.18	.15	.13
B	.375x1.000″	.50	.30	.26	.22	.20	.17	.15
C	.500x1.375″	.56	.35	.30	.26	.23	.19	.17
D	.500x1.375″	.64	.38	.33	.28	.25	.21	.19
E	.500x1.375″	.68	.41	.35	.30	.27	.23	.20
F	.500x1.375″	.71	.43	.37	.32	.28	.24	.21

Stock No.	Type MTA	μF	Max WV DC	*	Stock No.	Type MTA	μF	Max WV DC	*
852-2501	*1D50*	1	50	A	852-2540	50D6	50	6	A
852-2503	2D50	2	50	A	852-2541	50E15	50	15	B
852-2505	3D50	3	50	A	852-2542	*50E25*	50	25	B
852-2507	4D50	4	50	A	852-2543	*50F50*	50	50	C
852-2509	*5D50*	5	50	A	852-2547	60D3	60	3	A
852-2511	6D50	6	50	A	852-2548	60E20	60	20	B
852-2513	7D50	7	50	A	852-2549	60F50	60	50	D
852-2515	8D50	8	50	A	852-2550	70E20	70	20	B
852-2516	*10D35*	10	35	A	852-2551	70F50	70	50	D
852-2517	10E50	10	50	B	852-2553	80E15	80	15	B
852-2519	15D35	15	35	A	852-2554	80F50	80	50	E
852-2520	15E50	15	50	B	852-2557	100E10	100	10	B
852-2522	*20D30*	20	30	A	852-2558	*100E15*	100	15	B
852-2523	20E50	20	50	B	852-2559	*100F35*	100	35	D
852-2525	25D20	25	20	A	852-2560	125E6	125	6	B
852-2526	25E35	25	35	B	852-2561	125F35	125	35	E
852-2527	25F50	25	50	C	852-2564	150E6	150	6	B
852-2529	30D15	30	15	A	852-2565	*150F35*	150	35	F
852-2530	30E35	30	35	B	852-2568	175E3	175	3	C
852-2531	30F50	30	50	C	852-2569	175F25	175	25	E
852-2532	35D15	35	15	A	852-2571	200F10	200	10	C
852-2533	35E35	35	35	B	852-2575	*300F15*	300	15	F
852-2534	35F50	35	50	C	852-2578	350F15	350	15	F
852-2536	40D10	40	10	A	852-2581	450F6	450	6	D
852-2537	40E30	40	30	B	852-2584	500F6	500	6	D
852-2538	40F50	40	50	C	852-2587	600F3	600	3	C

MTV ALUMINUM ELECTROLYTIC CAPACITORS

Molded in plastic case for moisture-tight seal, uniform size. 3 molded stand-off mounts for PC board mounting. Uniform spacing of .200″. #20 AWG leads. Temp. range, —30° to +65°C continuous; to ±85°C intermittent. 1000 hrs. life test at 65°C. Capacity tolerance, —10%, +100% at 25°C, 120 Hz. Case size, indicated in Type No. Wt., 1 oz.

§Size Code	Dia. x L. (Inches)	§Size Code	Dia. x L. (Inches)	§Size Code	Dia. x L. (Inches)	§Size Code	Dia. x L. (Inches)
CB	3/8x13/16	CF	3/8x1 1/16	DE	1/2x1	DN	1/2x1 1/2
CD	3/8x15/16	CK	3/8x1 5/16	DJ	1/2x1 1/4	.....	.....

PRICES FOR TYPE MTV CAPACITORS‡

Price Code	EACH 1-24	25-49	50-99	100-249	250-499	500-999	1000-Up
A	.50	.30	.26	.22	.20	.17	.14
B	.53	.32	.27	.23	.21	.18	.15
C	.60	.37	.32	.27	.24	.19	.17
D	.68	.41	.35	.30	.27	.23	.20
E	.70	.43	.37	.31	.28	.24	.21
F	.75	.45	.39	.33	.30	.25	.22

Stock No.	§Type MTV	μF	WV DC	‡	Stock No.	§Type MTV	μF	WV DC	‡
852-3080	1000DN3	1000	3	F	852-3052	200DJ25	200	25	F
852-3040	100CB6	100	6	B	852-3059	*250DN25*	250	25	F
852-3066	*400DE6*	400	6	C	852-3021	50CF35	50	35	C
852-3072	500DJ6	500	6	D	852-3044	*100DE35*	100	35	D
852-3027	70CB10	70	10	B	852-3053	*200DN35*	200	35	F
852-3041	100CD10	100	10	B	852-3002	1CB50	1	50	A
852-3057	250CK10	250	10	C	852-3003	2CB50	2	50	A
852-3062	300DE10	300	10	D	852-3004	3CB50	3	50	A
852-3068	400DJ10	400	10	E	852-3005	4CB50	4	50	A
852-3018	*50CB15*	50	15	B	852-3006	5CB50	5	50	A
852-3035	90CD15	90	15	B	852-3007	6CB50	6	50	A
852-3042	*100CF15*	100	15	B	852-3009	*10CB50*	10	50	B
852-3058	250DE15	250	15	D	852-3011	15CD50	15	50	B
852-3069	400DJ15	400	15	F	852-3013	20CD50	20	50	B
852-3074	500DN15	500	15	F	852-3015	*25CF50*	25	50	C
852-3020	*50CD25*	50	25	B	852-3022	*50DE50*	50	50	C
852-3043	*100CK25*	100	25	C	852-3045	*100DN50*	100	50	F

CAPACITOR MOUNTING HARDWARE

Selection of mounting hardware for capacitors subject to moderate or acute vibration. Hold capacitors securely in position, positively eliminating any chance of wobble or strain on terminals or body. Straps are tinned steel; others cadmium plated.

A TUBULAR STRAPS (Wt., 1 oz.)

Stock No.	Dia. Size	EACH 1-99	100-999	1000-Up
755-0945	5/8″	.11	.07	.05
755-9025	11/16″	.11	.07	.05
755-0946	3/4″	.11	.07	.05
755-9130	13/16″	.11	.07	.05
755-9110	7/8″	.15	.10	.08
755-9095	15/16″	.15	.10	.08
755-9118	1″	.15	.10	.08
755-9065	1 3/8″	.15	.10	.08

B "C" CLAMPS (Wt., 1 oz.)

Stock No.	Dia. Size	EACH 1-99	100-999	1000-Up
755-9084	5/8-3/4″	.15	.10	.08
755-9085	7/8-1″	.15	.10	.08

C MOUNTING RINGS (Wt., 1 oz.)

Stock No.	Dia. Size	EACH 1-99	100-999	1000-Up
852-7530	1-1 1/16″	.32	.15	.11
852-7532	1 3/8-1 7/16″	.32	.15	.11
852-7533	1 1/2-1 9/16″	.32	.15	.11
852-7535	1 3/4-1 13/16″	.38	.18	.13
852-7536	2-2 1/16″	.63	.30	.22
852-7538	2 1/2-2 9/16″	.63	.30	.22

C MOUNTING RINGS (Cont'd)

Stock No.	Dia. Size	EACH 1-99	100-999	1000-Up
755-7540	3″	.75	.36	.22

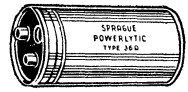
D UNIVERSAL CLIPS (Wt., 1 oz.)

Stock No.	Dia. Size	EACH 1-99	100-999	1000-Up
852-6010	3/8-7/16″	.15	.10	.08
852-6012	1/2-9/16″	.15	.10	.08
852-6014	5/8-11/16″	.15	.10	.08
852-6016	3/4-13/16″	.19	.11	.09
852-6018	7/8-15/16″	.19	.11	.09
852-6020	1-1 1/16″	.19	.12	.10
852-6022	1 3/8x1 7/16″	.19	.12	.10

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Selected Electrolytic Capacitors

SPRAGUE TYPE 36D "POWERLYTIC" INSULATED COMPUTER-GRADE ALUMINUM ELECTROLYTICS



Provide maximum capacitance in a given size. Low ESR and leakage currents. Long life. Plastic insulating tube withstands military environment conditions including —55° storage tests. Pressure safety vents. Terminal tapped 10-32. —20° +65°C. Tol.: 3-50 WV, —10%, +75%; 75-450 WV, —10%, +50%. Av., 1½ lbs.

*Code	Dia. x L.	*Code	Dia. x L.	*Code	Dia. x L.	*Code	Dia. x L.	*Code	Dia. x L.	*Code	Dia. x L.
A	1 7/16x2½"	C	1 7/16x4½"	E	2 1/16x4½"	G	2 9/16x4½"	I	3 1/16x4½"	K	3 1/16x6"
B	1 7/16x3½"	D	2 1/16x3½"	F	2 9/16x3½"	H	2 9/16x5"	J	3 1/16x5"	.....	.....

Stock No.	Type 36D. .2A	uF	WV DC	*	EACH 1-9	10-24	25-49	50-99	100-Up
926-5420	274G003DF	270000	3	K	17.34	14.08	11.26	9.85	7.60
926-5323	124G006DC	120000	6	I	12.81	10.25	8.20	7.18	5.54
926-5376	194G006DF	190000	6	K	17.34	14.08	11.26	9.85	7.60
926-5554	602G010AA	6000	10	A	2.89	2.30	1.84	1.61	1.24
926-5319	123G010AB	12000	10	B	3.49	2.78	2.22	1.94	1.50
926-5364	183G010AC	18000	10	C	4.01	3.23	2.58	2.26	1.74
926-5424	283G010BB	28000	10	D	5.39	4.28	3.42	2.99	2.31
926-5476	423G010BC	42000	10	E	6.49	5.28	4.22	3.69	2.85
926-5507	483G010CB	48000	10	F	7.28	6.10	4.88	4.27	3.29
926-5304	104G010DC	100000	10	I	12.81	10.25	8.20	7.18	5.54
926-5359	164G010DF	160000	10	K	17.34	14.08	11.26	9.85	7.60
926-5496	462G015AA	4600	15	A	2.89	2.30	1.84	1.61	1.24
926-5617	*922G015AB*	9200	15	B	3.49	2.78	2.22	1.94	1.50
926-5331	133G015AC	13000	15	C	4.01	3.23	2.58	2.26	1.74
926-5389	213G015BB	21000	15	D	5.39	4.28	3.42	2.99	2.31
926-5440	313G015BC	31000	15	E	6.49	5.28	4.22	3.69	2.85
926-5454	363G015CB	36000	15	F	7.28	6.10	4.88	4.27	3.29
926-5531	543G015CC	54000	15	G	9.59	7.70	6.16	5.39	4.16
926-5563	633G015CD	63000	15	H	10.74	8.50	6.80	5.95	4.59
926-5590	803G015DC	80000	15	I	12.81	10.25	8.20	7.18	5.54
926-5442	*272G025AA*	2700	25	A	2.89	2.30	1.84	1.61	1.24
926-5534	552G025AB	5500	25	B	3.49	2.78	2.22	1.94	1.50
926-5597	*822G025AC*	8200	25	C	4.01	3.23	2.58	2.26	1.74
926-5366	*183G025BC*	18000	25	E	6.49	5.28	4.22	3.69	2.85
926-5442	323G025CC	32000	25	G	9.59	7.70	6.16	5.39	4.16
926-5504	473G025DC	47000	25	I	12.81	10.25	8.20	7.18	5.54
926-5540	553G025DD	55000	25	J	14.86	11.50	9.20	8.05	6.21
926-5579	713G025DF	71000	25	K	17.34	14.08	11.26	9.85	7.60
926-5456	363G030DC	36000	30	I	12.81	10.25	8.20	7.18	5.54
926-5478	423G030DD	42000	30	J	14.86	11.50	9.20	8.05	6.21
926-5536	552G040AC	5500	40	C	4.01	3.23	2.58	2.26	1.74
926-5602	842G040BB	8400	40	D	5.39	4.28	3.42	2.99	2.31
926-5321	123G040BC	12000	40	E	6.49	5.28	4.22	3.69	2.85
926-5521	213G040CC	21000	40	G	9.59	7.70	6.16	5.39	4.16
926-5409	253G040CD	25000	40	H	10.74	8.50	6.80	5.95	4.59
926-5329	*132G050AA*	1300	50	A	2.89	2.30	1.84	1.61	1.24
926-5414	*262G050AB*	2600	50	B	3.49	2.78	2.22	1.94	1.50
926-5467	392G050AC	3900	50	C	4.01	3.23	2.58	2.26	1.74
926-5556	602G050BB	6000	50	D	5.39	4.28	3.42	2.99	2.31
926-5617	902G050BC	9000	50	E	6.49	5.28	4.22	3.69	2.85
926-5345	153G050CC	15000	50	G	9.59	7.70	6.16	5.39	4.16
926-5399	223G050DC	22000	50	E	12.81	10.25	8.20	7.18	5.54
926-5405	252F075AC	2500	75	C	4.01	3.23	2.58	2.26	1.74
926-5465	392F075BB	3900	75	D	5.39	4.28	3.42	2.99	2.31

Stock No.	Type 36D. .2A	uF	WV DC	*	EACH 1-9	10-24	25-49	50-99	100-Up
926-5547	592F075BC	5900	75	E	6.49	5.28	4.22	3.69	2.85
926-5311	113F075CD	11000	75	H	10.74	8.50	6.80	5.95	4.59
926-5341	143F075DC	14000	75	I	12.81	10.25	8.20	7.18	5.54
926-5397	223F075DF	22000	75	K	17.25	14.08	11.26	9.85	7.60
926-5489	451F100AA	450	100	A	2.89	2.30	1.84	1.61	1.24
926-5326	132F100AC	1300	100	C	4.01	3.23	2.58	2.26	1.74
926-5434	302F100BC	3000	100	E	6.49	5.28	4.22	3.69	2.85
926-5523	532F100CC	5300	100	G	9.73	7.70	6.16	5.39	4.16
926-5583	782F100DC	7800	100	I	12.81	10.25	8.20	7.18	5.54
926-5432	301F150AA	300	150	A	2.89	2.30	1.84	1.61	1.24
926-5615	901F150AC	900	150	C	4.01	3.23	2.58	2.26	1.74
926-5335	142F150BB	1400	150	D	5.39	4.28	3.42	2.99	2.31
926-5384	212F150BC	2100	150	E	6.49	5.28	4.22	3.69	2.85
926-5452	362F150CC	3600	150	G	9.59	7.70	6.16	5.39	4.16
926-5435	532F150DC	5300	150	I	12.81	10.25	8.20	7.18	5.54
926-5585	782F150DF	7800	150	K	17.34	14.08	11.26	9.85	7.60
926-5402	251F200AA	250	200	A	2.89	2.30	1.84	1.61	1.24
926-5483	431F200AB	430	200	B	3.49	2.78	2.22	1.94	1.50
926-5569	641F200AC	640	200	C	4.01	3.23	2.58	2.26	1.74
926-5337	142F200BC	1400	200	E	6.49	5.28	4.22	3.69	2.85
926-5354	162F200CB	1600	200	F	7.28	6.10	4.88	4.27	3.29
926-5460	372F200DC	3700	200	I	12.81	10.25	8.20	7.18	5.54
926-5525	552F200DF	5500	200	K	17.34	14.08	11.26	9.85	7.60
926-5520	531F250AC	530	250	C	4.01	3.23	2.58	2.26	1.74
926-5316	122F250BC	1200	250	E	6.49	5.28	4.22	3.69	2.85
926-5436	302F250DC	3000	250	I	12.81	10.25	8.20	7.18	5.54
926-5491	452F250DF	4500	250	K	17.34	14.08	11.26	9.85	7.60
926-5400	241F300AB	240	300	B	3.49	2.78	2.22	1.94	1.50
926-5595	821F300BC	820	300	E	6.49	5.28	4.22	3.69	2.85
926-5386	212F300DC	2100	300	I	12.81	10.25	8.20	7.18	5.54
926-5624	950F350AA	95	350	A	2.89	2.30	1.84	1.61	1.24
926-5372	191F350AB	190	350	B	3.49	2.78	2.22	1.94	1.50
926-5472	421F350BB	420	350	D	5.39	4.28	3.42	2.99	2.31
926-5574	651F350BC	650	350	E	6.49	5.28	4.22	3.69	2.85
926-5309	112F350CC	1100	350	G	9.59	7.70	6.16	5.39	4.16
926-5356	162F350DC	1600	350	I	12.81	10.25	8.20	7.18	5.54
926-5407	252F350DF	2500	350	K	17.34	14.08	11.26	9.85	7.60
926-5474	421F400BC	420	400	E	6.49	5.28	4.22	3.69	2.85
926-5510	500F450AA	50	450	A	2.89	2.30	1.84	1.61	1.24
926-5333	141F450AC	140	450	C	4.01	3.23	2.58	2.26	1.74
926-5395	*221F450BB*	220	450	D	5.39	4.28	3.42	2.99	2.31
926-5446	331F450BC	330	450	E	6.49	5.28	4.22	3.69	2.85
926-5609	861F450DC	860	450	I	12.81	10.25	8.20	7.18	5.54
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

PRICE LOCATOR—SPECIFY pF FROM TABLE BELOW

Capacity pF	EACH 1-24	25-99	100-249	250-499	500-999	1000-Up
5 to 300	.15	.112	.093	.07	.054	.051
330 to 1000	.15	.112	.093	.07	.054	.051
1100 to 3000	.19	.13	.111	.086	.066	.062
3300 to 5000	.23	.16	.13	.103	.076	.07
5100 to 10,000	.26	.16	.14	.105	.079	.076

SIZE CHART

pF	Nominal Lgth.	Diameter
5 to 300	.395"	.165 to .255"
330 to 1000	.590"	.194 to .233"
1100 to 3000	.590"	.238 to .348"
3300 to 5000	.590 to .790"	.366 to .466"
5100 to 10,000	.590 to .790"	.470 to .590"

MALLORY SX POLYSTYRENE CAPACITORS

- Less than 1.3% Change: —10°C to +70°C
- High Insulation Resistance
- Small Size
- Power Factor Less Than .05%
- Low Cost

Stretched polystyrene dielectric fused to high-purity aluminum foil, produces excellent humidity barrier. Excellent where utmost capacitance stability versus temperature and time are required, due to high insulation resistance and power factor of less than .05%. Capacitance change from —10°C to +70°C is less than 1.3% total, and is negative. Temp. coefficient, —150 ppm/°C, ±60 ppm/°C. 600 WVDC. ±5% capacitance tolerance. Temp. range —40°C to +85°C. Average shipping weight, 1 oz. Price Locator at left. For larger quantities, contact Allied Electronics.

Stock No.	pF	Stock No.	pF	Stock No.	pF	Stock No.	pF	Stock No.	pF
852-0005	5	852-0020	56	852-0035	*240*	852-0050	*1000*	852-0065	3900
852-0006	10	852-0021	62	852-0036	270	852-0051	1100	852-0066	4300
852-0007	12	852-0022	68	852-0037	300	852-0052	1200	852-0067	*4700*
852-0008	15	852-0023	75	852-0038	330	852-0053	1300	852-0068	*5000*
852-0009	18	852-0024	*82*	852-0039	360	852-0054	1500	852-0069	5100
852-0010	*20*	852-0025	91	852-0040	390	852-0055	*1600*	852-0070	5600
852-0011	22	852-0026	*100*	852-0041	430	852-0056	1800	852-0071	6200
852-0012	24	852-0027	110	852-0042	*470*	852-0057	2000	852-0072	6800
852-0013	27	852-0028	120	852-0043	*510*	852-0058	2200	852-0073	7500
852-0014	30	852-0029	130	852-0044	560	852-0059	2400	852-0074	8200
852-0015	33	852-0030	150	852-0045	620	852-0060	2500	852-0075	9100
852-0016	36	852-0031	*160*	852-0046	680	852-0061	*2700*	852-0076	*10,000*
825-0017	39	852-0032	180	852-0047	750	852-0062	*3000*	.....	.....
852-0018	43	852-0033	200	852-0048	820	852-0063	3300	.....	.....
852-0019	*47*	852-0034	220	852-0049	*910*	852-0064	3600	.....	.....

MALLORY

Aluminum Computer-Grade Electrolytics

HIGH RELIABILITY POWER-SUPPLY FILTER CAPACITORS FOR MILITARY AND COMMERCIAL APPLICATIONS

MALLORY

- New Smaller Cases
- Operating Life Exceeds Ten Years
- Plastic Insulating Sleeves

Feature pressure sensitive safety vent construction. 7/32" high terminal posts; 10-32 screws. Tolerance: 0-150 WVDC, −10%, +75%; 200 WVDC and up, −10%, +50%. *For additional specifications ask for Bulletin 4-303.*

SIZE CODE TABLE

*Size Code	Dia. x Lgth. (Inches)	*Size Code	Dia. x Lgth. (Inches)	*Size Code	Dia. x Lgth. (Inches)	*Size Code	Dia. x Lgth. (Inches)	*Size Code	Dia. x Lgth. (Inches)
A	1 25/64 x 2 11/64	D	1 49/64 x 3 11/64	G	2 1/64 x 4 11/64	K	3 1/64 x 4 11/64	N	3 1/64 x 5 39/64
B	1 25/64 x 3 11/64	E	1 49/64 x 4 11/64	H	2 1/64 x 5 43/64	L	3 1/64 x 5 11/64	.....	.....
C	1 25/64 x 4 11/64	F	2 1/64 x 3 11/64	J	2 33/64 x 4 11/64	M	3 1/64 x 5 43/64	.....	.....

TYPE CGS 65°C COMPUTER GRADE ELECTROLYTICS

Operating temperature range, −40° C to +65° C. Lower temperature range allows greater capacitance per volume in a small package.

Stock No.	Type CGS .. 3PH	µF	V DC	* Size Code	EACH 1-9	10-24	25-49	50-99	100-Up
852-0824	123U010R2C	12,000	10	A	2.80	2.32	1.93	1.73	1.40
852-0879	223U010R3C	22,000	10	B	3.39	2.80	2.34	2.09	1.70
852-0912	333U010R4C	33,000	10	C	4.10	3.38	2.82	2.52	2.05
852-0999	763U010V4C	76,000	10	G	6.60	5.45	4.54	4.05	3.30
852-0895	284U010X5R	280,000	10	N	17.65	14.54	12.12	10.82	8.79
852-1015	892U015R2C	8900	15	A	2.80	2.32	1.93	1.73	1.40
852-0856	173U015R3C	17,000	15	B	3.39	2.80	2.34	2.09	1.70
852-0888	253U015R4C	25,000	15	C	4.10	3.38	2.82	2.52	2.05
852-0930	383U015V3C	38,000	15	F	4.55	3.76	3.14	2.80	2.59
852-0967	563U015V4C	56,000	15	G	6.60	5.45	4.54	4.05	3.30
852-1012	833U015V5L	83,000	15	H	8.78	7.24	6.03	5.39	4.38
852-0836	134U015X4C	130,000	15	K	12.40	10.25	8.54	7.63	6.20
852-0859	174U015X5C	170,000	15	L	14.45	11.84	9.87	8.81	7.16
852-0874	214U015X5R	210,000	15	N	17.63	14.54	12.12	10.82	8.79
852-0953	472U025R2C	4700	25	A	2.80	2.32	1.93	1.73	1.40
852-1016	892U025R3C	8900	25	B	3.93	3.24	2.59	2.27	1.75
852-0831	133U025R4C	13,000	25	C	4.10	3.38	2.82	2.52	2.05
852-0871	203U025V3C	20,000	25	F	4.55	3.76	3.14	2.80	2.59
852-0897	293U025V4C	29,000	25	G	6.60	5.45	4.54	4.05	3.30
852-0945	433U025V5L	43,000	25	H	11.35	9.36	7.49	6.52	5.06
852-0989	703U025X4C	70,000	25	K	12.40	10.25	8.54	7.63	6.20
852-1018	923U025X5C	92,000	25	L	14.45	11.84	9.87	8.81	7.16
852-0816	114U025X5R	110,000	25	N	17.63	14.54	12.12	10.82	8.79
852-0891	272U040R2C	2700	40	A	2.80	2.32	1.93	1.73	1.40
852-0961	512U040R3C	5100	40	B	3.39	2.80	2.34	2.09	1.70
852-0998	752U040R4C	7500	40	C	4.10	3.38	2.82	2.52	2.05
852-0815	113U040V3C	11,000	40	F	4.55	3.76	3.14	2.80	2.59
852-0857	173U040V4C	17,000	40	G	6.60	5.45	4.54	4.05	3.30
852-0889	253U040V5L	25,000	40	H	8.78	7.24	6.03	5.39	4.38
852-0936	403U040X4C	40,000	40	K	12.40	10.25	8.54	7.63	6.20
852-0962	533U040X5C	53,000	40	L	14.45	11.84	9.87	8.81	7.16
852-0976	633U040X5R	63,000	40	N	17.63	14.54	12.12	10.82	8.79
852-0876	222U050R2C	2200	50	A	2.92	2.41	1.92	1.69	1.30
852-0837	412U050R3C	4100	50	B	3.39	2.80	2.34	2.09	1.70
852-0974	612U050R4C	6100	50	C	4.10	3.38	2.82	2.52	2.05
852-1019	932U050V3C	9300	50	F	4.55	3.76	3.14	2.80	2.59
852-0833	133U050V4C	13,000	50	G	6.60	5.45	4.54	4.05	3.30
852-0873	203U050V5L	20,000	50	H	8.78	7.24	6.03	5.39	4.38
852-0913	333U050X4C	33,000	50	K	12.40	10.25	8.54	7.63	6.20
852-0946	433X050X5C	43,000	50	L	14.45	11.84	9.87	8.81	7.16
852-0959	513U050X5R	51,000	50	N	17.63	14.54	12.12	10.82	8.79
852-0813	112U075R2C	1100	75	A	2.80	2.32	1.93	1.73	1.40
852-0870	212U075R3C	2100	75	B	3.39	2.80	2.34	2.09	1.70
852-0909	312U075R4C	3100	75	C	4.10	3.38	2.82	2.52	2.05
852-0955	482U075V3C	4800	75	F	4.55	3.76	3.14	2.80	2.59
852-0990	712U075V4C	7100	75	G	6.60	5.45	4.54	4.05	3.30
852-0858	173U075X4C	17,000	75	K	12.40	10.25	8.54	7.63	6.20
852-0892	263U075X5R	26,000	75	N	17.63	14.54	12.12	10.82	8.79
852-0978	651U100BB1	650	100	A	3.09	2.55	2.04	1.79	1.38
852-0820	122U100BD1	1200	100	B	3.82	3.15	2.52	2.20	1.70
852-0857	182U100BF1	1800	100	C	4.69	3.87	3.09	2.71	2.09
852-0890	272U100DD1	2700	100	F	5.95	4.92	3.94	3.45	2.66
852-0935	402U100DF1	4000	100	G	7.74	6.38	5.11	4.47	3.45
852-0972	592U100DI1	5900	100	H	10.32	8.51	6.81	5.97	4.60
852-0932	401U150BB1	400	150	A	3.06	2.52	2.01	1.76	1.36
852-0991	721U150BD1	720	150	B	3.58	2.96	2.37	2.08	1.60
852-0814	112U150BF1	1100	150	C	4.44	3.66	2.93	2.57	1.98
852-0851	162U150DD1	1600	150	F	5.57	4.59	3.67	3.22	2.48
852-0887	252U150DF1	2500	150	G	7.17	5.92	4.74	4.15	3.38
852-0920	352U150DI1	3500	150	H	9.30	7.68	6.14	5.38	4.15
852-0866	201T250BB1	200	250	A	2.80	2.31	1.85	1.62	1.25
852-0929	381T250BD1	380	250	B	3.37	2.78	2.22	1.95	1.50
852-0963	551T250BF1	550	250	C	3.93	3.24	2.59	2.27	1.75
852-1014	851T250DD1	850	250	F	4.92	4.07	3.26	2.85	2.20
852-0817	122D250DF1	1200	250	G	6.19	5.11	4.08	3.58	2.76
852-0863	192T250DI1	1900	250	H	8.70	7.18	5.74	5.03	3.88

TYPE CG 85°C COMPUTER GRADE ELECTROLYTICS

Operating temperature range, −40° C to +85° C. Designed to assure lowest DCL. Mounting clamps listed on page 188.

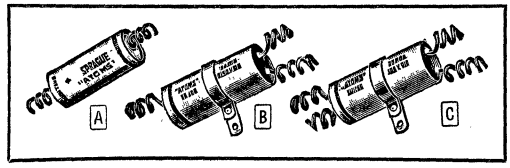
Stock No.	Type CG 3PH	µF	V DC	*Size Code	EACH 1-9	10-49	50-99	100-Up
852-0650	263U003R3C	26,000	3	B	2.87	2.15	1.76	1.49
852-0688	573U003V3C	57,000	3	F	4.23	3.17	2.60	2.20
852-0697	752U010R2C	7500	10	A	2.35	1.76	1.44	1.22
852-0610	143U010R3C	14,000	10	B	5.14	3.86	3.04	2.48
852-0633	213U010R4C	21,000	10	C	3.36	2.52	2.07	1.75
852-0636	243U010U3C	24,000	10	D	3.35	2.51	2.05	1.74
852-0652	313U010V3C	31,000	10	F	4.23	3.17	2.60	2.20
852-0677	463U010V4C	46,000	10	G	5.25	3.94	3.23	2.74
852-0694	743U010W4C	74,000	10	J	7.36	5.52	4.52	3.83
852-0606	114U010X4C	110,000	10	K	8.68	6.51	5.33	4.52
852-0624	164U010X5L	160,000	10	M	11.55	8.67	7.11	6.02
852-0691	652U015R2C	6500	15	A	2.35	1.76	1.44	1.22
852-0607	123U015R3C	12,000	15	B	2.87	2.15	1.76	1.49
852-0631	183U015R4C	18,000	15	C	3.36	2.52	2.07	1.75
852-0633	213U015U3C	21,000	15	D	3.35	2.51	2.05	1.74
852-0642	273U015V3C	27,000	15	F	4.23	3.17	2.60	2.20
852-0667	403U015V4C	40,000	15	G	5.25	3.94	3.23	2.74
852-0716	953U015X4C	95,000	15	K	8.68	6.51	5.33	4.52
852-0612	144U015X5L	140,000	15	M	11.55	8.67	7.11	6.02
852-0653	332U025R2C	3300	25	A	2.35	1.76	1.44	1.22
852-0689	632U025R3C	6300	25	B	2.87	2.15	1.76	1.49
852-0713	922U025R4C	9200	25	C	3.36	2.52	2.07	1.75
852-0600	103U025U3C	10,000	25	D	3.35	2.51	2.05	1.74
852-0609	133U025V3C	13,000	25	F	4.23	3.17	2.60	2.20
852-0634	203U025V4C	20,000	25	G	8.74	6.55	5.15	4.21
852-0655	323U025W4C	32,000	25	J	7.36	5.52	4.52	3.83
852-0679	483U025X4C	48,000	25	K	8.68	6.51	5.33	4.52
852-0692	713U025X5L	71,000	25	M	11.55	8.67	7.11	6.02
852-0637	232U035R2C	2300	35	A	2.35	1.76	1.44	1.22
852-0668	432U035R3C	4300	35	B	2.87	2.15	1.76	1.49
852-0686	632U035R4C	6300	35	C	3.36	2.52	2.07	1.75
852-0715	952U035V3C	9500	35	F	4.23	3.17	2.60	2.20
852-0603	113U035U4C	11,000	35	E	4.36	3.27	2.68	2.27
852-0613	143U035V4C	14,000	35	G	5.25	3.94	3.23	2.74
852-0639	223U035W4C	22,000	35	J	7.36	5.52	4.52	3.83
852-0656	333U035X4C	33,000	35	K	8.68	6.51	5.33	4.52
852-0680	493U035X5L	49,000	35	M	11.55	8.67	7.11	6.02
852-0621	152U050R2C	1500	50	A	2.73	2.05	1.62	1.32
852-0645	292U050R3C	2900	50	B	2.87	2.15	1.76	1.49
852-0670	432U050R4C	4300	50	C	3.36	2.52	2.07	1.75
852-0676	502U050U3C	5000	50	D	3.35	2.51	2.05	1.74
852-0695	652U050V3C	6500	50	F	4.23	3.17	2.60	2.20
852-0698	742U050U4C	7400	50	E	4.36	3.27	2.68	2.27
852-0712	952U050V4C	9500	50	G	5.25	3.94	3.23	2.74
852-0622	153U050W4C	15,000	50	J	7.36	5.52	4.52	3.83
852-0640	223U050X4C	22,000	50	K	8.68	6.51	5.33	4.52
852-0658	333U050X5L	33,000	50	M	11.55	8.67	7.11	6.02
852-0701	801U075R2C	800	75	A	2.35	1.76	1.44	1.22
852-0619	152U075R3C	1500	75	B	3.78	2.84	2.23	1.82
852-0642	222U075R4C	2200	75	C	3.36	2.52	2.07	1.75
852-0649	262U075U3C	2600	75	D	5.00	3.75	2.95	2.41
852-0659	332U075V3C	3300	75	F	4.14	3.11	2.60	2.20
852-0662	382U075U4C	3800	75	E	4.36	3.27	2.68	2.27
852-0674	492U075V4C	4900	75	G	5.25	3.94	3.23	2.74
852-0700	792U075W4C	7900	75	J	7.36	5.52	4.52	3.83
852-0604	113U075X4C	11,000	75	K	8.68	6.51	5.33	4.52
852-0625	173U075X5L	17,000	75	M	11.55	8.67	7.11	6.02
852-0699	771U100R3C	770	100	B	2.87	2.15	1.76	1.49
852-0602	112U100R4C	1100	100	C	3.36	2.52	2.07	1.75
852-0627	172U100V3C	1700	100	F	4.42	3.31	2.61	2.13
852-0630	192U100U4C	1900	100	E	4.36	3.27	2.68	2.27
852-0648	252U100V4C	2500	100	G	5.25	3.94	3.23	2.74
852-0665	402U100W4C	4000	100	J	7.36	5.52	4.52	3.83
852-0685	592U100X4C	5900	100	K	8.68	6.51	5.33	4.52
852-0710	872U100X5L	8700	100	M	11.55	8.67	7.11	6.02
.....	.....	.....	.....	.....	.....	.....	.....	.....

Specify Stock No., Mfr's Type No. and Capacitance When Ordering

TVA Atom Midget Electrolytics

SPRAGUE
THE MARK OF RELIABILITY

Sprague Atom electrolytics offer dependable performance, compact size and the ability to operate at high temperatures. Ultra-compact size makes these dry electrolytics excellent for use in circuits for television, AC-DC home radios, auto radios, and radio-phonograph combinations. Easy to install—even in crowded chassis. Capacitors will perform efficiently at temperatures up to 85°C (185°F) and withstand high surge voltages and ripple currents as found in television circuits. All have extremely low leakage and long shelf life. All have metal cases with outer cardboard insulating case except †, cardboard. **Contact Your Nearest Allied Facility for Prices on Larger Quantities.**



A SINGLE SECTION TYPE TVA Av. shpg. wt., 3 oz.

Stock No.	Type TVA	µF	WV DC	Size (Inches)	EACH 1-9	10-24	25-49	50-99	100-Up
926-1620	1102	250	6	9/16x1 5/16	1.01	.81	.64	.56	.42
926-1621	1103	500	6	5/8x1 9/16	1.16	.93	.74	.64	.48
926-1622	1104	1000	6	3/4x1 13/16	1.43	1.14	.90	.79	.59
926-1623	1105	1500	6	13/16x2 11/16	1.57	1.26	.99	.87	.65
926-1624	1106	2000	6	13/16x2 15/16	1.73	1.38	1.09	.96	.72
926-1635	1130	100	12	9/16x1 5/16	.90	.72	.57	.45	.34
926-1636	1131	250	12	5/8x1 5/16	1.09	.87	.69	.60	.45
926-1637	1132	500	12	11/16x1 9/16	1.28	1.02	.80	.70	.53
926-1638	1133	1000	12	13/16x1 13/16	1.69	1.35	1.07	.93	.70
926-1655	1160	100	15	9/16x1 5/16	.94	.75	.58	.46	.35
926-1656	1161	250	15	5/8x1 9/16	1.16	.93	.74	.65	.49
926-1657	*1162*	500	15	11/16x1 13/16	1.31	1.05	.83	.73	.55
926-1658	1163	1000	15	13/16x1 13/16	1.73	1.38	1.09	.95	.71
926-1660	1170	2000	15	15/16x2 13/16	2.40	1.92	1.43	1.14	.86
926-1684	1201	2	25	5/16x5/8	.68	.54	.43	.35	.26
926-1686	1203	5	25	5/16x5/8	.75	.60	.46	.37	.28
926-1687	1204	10	25	5/16x1 3/16	.75	.60	.47	.37	.28
926-1688	1204.5	20	25	3/8x1 3/16	.75	.60	.48	.38	.29
926-1689	*1205*	25	25	3/8x1 3/16	.75	.60	.46	.39	.29
926-1690	1206	50	25	9/16x1 5/16	.83	.66	.52	.42	.31
926-1691	*1207*	100	25	9/16x1 11/16	1.01	.81	.64	.51	.38
926-1692	1207.5	150	25	13/16x1 9/16	1.09	.87	.69	.55	.42
926-1693	*1208*	250	25	1 1/16x1 9/16	1.28	1.02	.80	.70	.52
926-1695	*1209*	500	25	3/4x1 13/16	1.73	1.38	1.09	.95	.71
926-1697	1211	1000	25	13/16x2 5/16	2.48	1.98	.60	.48	.36
926-1701	1214	3000	25	1 1/4x3 5/8	2.70	2.16	1.72	1.52	1.43
926-1720	1300	1	50	5/16x5/8	.68	.54	.43	.35	.26
926-1721	1301	2	50	5/16x5/8	.68	.54	.43	.35	.26
926-1723	1303	5	50	5/16x1 3/16	.75	.60	.46	.37	.28
926-1724	1304	10	50	3/8x1 3/16	.75	.60	.47	.37	.28
926-1725	1305	15	50	3/8x1 3/16	.75	.60	.48	.38	.29
926-1726	1305.5	20	50	3/8x1 5/16	.75	.60	.48	.38	.29
926-1727	1306	25	50	3/8x1 5/16	.79	.63	.49	.39	.29
926-1729	*1308*	50	50	5/8x1 5/16	.90	.72	.57	.46	.34
926-1731	*1310*	100	50	5/8x1 9/16	1.05	.84	.66	.53	.40
926-1732	*1311*	150	50	3/4x1 9/16	1.16	.93	.73	.58	.44
926-1733	*1312*	250	50	13/16x1 9/16	1.31	1.05	.83	.73	.55
926-1736	*1315*	500	150	1x1 15/16	1.80	1.44	1.13	.98	.74
926-1737	*1316*	1000	50	1 1/16x2 13/16	2.93	2.34	1.82	1.56	1.17
926-1739	1318	1500	50	1 1/16x3 13/16	2.85	2.28	1.02	.82	.61
926-1765	1400	1	50	5/16x5/8	.71	.57	.45	.36	.27
926-1767	1402	4	150	3/8x1 5/16	.75	.60	.47	.38	.28
926-1768	1403	5	150	3/8x1 5/16	.75	.60	.48	.38	.29
926-1770	1405	8	150	7/16x1 7/8	.79	.63	.49	.39	.30
926-1771	*1406*	10	150	9/16x1 5/16	.79	.63	.48	.41	.31
926-1772	1407	12	150	9/16x5/16	.83	.66	.52	.41	.31
926-1774	1409	16	150	9/16x1 9/16	.86	.69	.54	.43	.33
926-1775	1410	20	150	5/8x1 9/16	.90	.72	.56	.44	.33
926-1776	1411	25	150	3/4x1 9/16	.94	.75	.59	.47	.35
926-1777	1412	30	150	13/16x1 5/16	.98	.78	.61	.49	.37
926-1718	1413	40	150	13/16x1 9/16	1.01	.81	.64	.51	.39
926-1779	1414	50	150	13/16x1 13/16	1.05	.84	.66	.53	.40
926-1780	1415	60	150	15/16x1 9/16	1.13	.90	.70	.56	.42
926-1783	1418	80	150	1 5/16x1 9/16	1.20	.96	.76	.61	.46
926-1784	*1420*	100	150	1 5/16x2 1/16	1.31	1.05	.83	.66	.50
926-1786	1422	150	150	1 1/16x2 1/16	1.43	1.14	.90	.72	.54
926-1787	1423	200	150	1 1/16x2 9/16	1.65	1.32	1.03	.82	.62
926-1788	1424	250	150	1 1/4x4 3/8	2.70	2.16	1.67	1.42	1.07
926-1689	1425†	300	150	1 1/16x3 5/16	2.10	1.68	1.30	1.11	.83
926-1794	1430	80	175	1 1/16x2 1/16	1.24	.99	.76	.61	.46
926-1810	1445	100	200	1 1/16x2 5/16	1.43	1.14	.91	.79	.60
926-1812	1447	150	200	1 3/8x3 3/8	2.10	1.68	1.30	1.12	.84
926-1835	1480†	200	200	1 3/8x3 3/8	2.36	1.89	1.47	1.26	.95
926-1850	1501	4	250	9/16x1 5/16	.83	.66	.52	.42	.32
926-1852	*1503*	8	250	9/16x1 9/16	.86	.69	.54	.47	.36
926-1853	1504	10	250	5/8x1 9/16	.90	.72	.57	.49	.37
926-1854	1505	12	250	5/8x1 9/16	.94	.75	.59	.51	.38
926-1856	1507	16	250	13/16x1 5/16	.98	.78	.61	.53	.40
926-1857	1508	20	250	13/16x1 5/16	1.01	.81	.64	.57	.43
926-1859	1510	30	250	13/16x1 13/16	1.09	.87	.69	.60	.45
926-1860	1511	40	250	13/16x2 1/16	1.16	.93	.74	.65	.49
926-1861	1512	50	250	15/16x1 13/16	1.28	1.02	.81	.71	.53
926-1862	1513	60	250	1x1 13/16	1.35	1.08	.85	.75	.56
926-1870	1522	100	250	1 1/16x2 5/16	1.84	1.47	1.06	.85	.64
926-1874	1528	200	250	1 3/8x3 1/8	2.63	2.10	1.49	1.19	.90
926-1895	1573	100	300	1 1/16x3 1/16	1.99	1.59	.98	.77	.61
926-1897	1575†	140	300	1 3/8x3 3/8	2.24	2.19	1.82	1.45	1.09
926-1902	1578	200	300	1 3/8x4 5/8	3.38	2.70	1.67	1.33	1.00
926-1910	1601	4	350	1 1/16x1 5/16	.79	.63	.50	.43	.32
926-1912	1603	8	350	1 1/16x1 9/16	.90	.72	.56	.49	.37
926-1916	1607	16	350	13/16x1 9/16	1.05	.84	.67	.58	.44
926-1917	1608	20	350	13/16x1 13/16	1.09	.87	.69	.60	.45
926-1919	1610	30	350	13/16x2 1/16	1.24	.99	.78	.68	.51
926-1920	1611	40	350	15/16x2 1/16	1.31	1.05	.82	.71	.53
926-1922	1613	60	350	1 1/16x2 1/16	1.46	1.17	.93	.81	.61
926-1929	1620	100	350	1 1/16x2 13/16	2.33	1.86	1.11	.86	.69
926-1931	1622	150	350	1 3/8x3 5/8	2.78	2.22	1.62	1.29	.97
926-1933	1624	200	350	1 3/8x4 1/8	3.90	3.12	1.85	1.48	1.11
926-1985	1700	1	450	9/16x1 5/16	.83	.66	.52	.45	.34
926-1986	1701	2	450	9/16x1 5/16	.83	.69	.53	.46	.34
926-1987	*1702*	4	450	11/16x1 5/16	.86	.66	.54	.47	.36
926-1989	1704	8	450	3/4x1 9/16	.94	.75	.60	.53	.40
926-1990	1705	10	450	13/16x1 9/16	.98	.78	.61	.53	.40
926-1993	1708	16	450	13/16x1 13/16	1.05	.84	.66	.58	.45
926-1994	*1709*	20	450	15/16x1 13/16	1.16	.93	.74	.64	.49
926-1996	1711	30	450	15/16x2 1/16	1.28	1.02	.81	.71	.53
926-1997	*1712*	40	450	1 1/16x2 1/16	1.35	1.08	.85	.74	.55
926-1999	1714	60	450	1 1/16x2 13/16	1.76	1.41	1.12	.99	.77
926-2001	1716	80	450	1 1/16x3 13/16	2.44	1.95	1.51	1.30	.97
926-2003	1718†	100	450	1 1/16x4 1/16	2.40	1.92	1.53	1.49	1.12
926-2005	1719	150	450	1 3/8x4 3/4	3.56	2.85	2.24	1.80	1.35
926-2006	1720	200	450	1 1/2x4 5/8	3.75	3.00	2.33	2.00	1.50
926-2070	1902	8	500	15/16x1 13/16	.98	.78	.62	.54	.41
926-2075	1906	20	500	1 1/16x2 5/16	1.20	.96	.83	.66	.50
926-2100	1962	8	600	1 1/16x3 3/16	2.29	1.83	1.42	1.21	.91
926-2101	1963	10	600	1 1/16x3 3/16	2.74	2.19	1.70	1.45	1.09
926-2103	1965	16	600	1 1/16x4 3/16	3.11	2.49	1.93	1.66	1.25
926-2104	1966	20	600	1 1/16x4 3/16	3.23	2.58	2.00	1.71	1.28

B DUAL SECTION TYPE TVA Av. shpg. wt., 5 oz.

926-2251	2428	20-20	150	13/16x1 9/16	1.31	1.05	.81	.70	.52
926-2260	2438	40-20	150	15/16x1 9/16	1.43	1.14	.88	.74	.56
926-2256	2434	30-30	150	15/16x1 9/16	1.35	1.08	.86	.75	.56
926-2266	2445	40-40	150	15/16x2 1/16	1.39	1.11	.88	.78	.59
926-2270	2450	50-30	150	15/16x2 1/16	1.46	1.17	.91	.78	.59
926-2273	2453	50-50	150	15/16x2 1/16	1.58	1.26	.96	.81	.61
926-2280	2460	80-30	150	15/16x2 9/16	1.65	1.32	1.05	.84	.63
926-2282	2462	80-50	150	15/16x2 9/16	1.76	1.41	1.09	.87	.65
926-2283	2463	100-50	150	1 1/16x2 13/16	1.99	1.59	1.17	.94	.70
926-2284	2464†	100-100	150	1 3/8x3 3/8	2.40	1.92	1.47	1.17	.88
926-2302	2515	20-20	250	15/16x1 13/16	1.39	1.11	.88	.78	.59
926-2352	2720	8-8	450	15/16x1 13/16	1.45	1.17	.91	.78	.59
926-2354	2722	10-10	450	15/16x2 1/16	1.54	1.23	.98	.81	.61
926-2360	2730	20-20	450	15/16x2 13/16	1.88	1.50	1.18	1.03	.77
926-2365	2735	30-30	450	1 1/16x3 5/16	2.44	1.95	1.51	1.29	.97
926-2370	2740	40-40	450	1 1/16x4 1/16	2.81	2.25	1.75	1.50	1.12

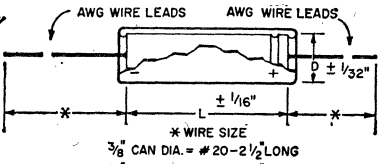
C TRIPLE SECTION TYPE TVA Av. shpg. wt., 6 oz.

926-2452	3442	30-25-20	150	15/16x2 5/16	2.25	1.80	1.40	1.20	.90
926-2454	3444	30-30-30	150	15/16x2 5/16	2.33	1.86	1.44	1.23	.92
926-2456	3446	40-20-20	150	15/16x2 1/16	2.25	1.80	1.40	1.20	.90
926-2458	3448	40-30-20	150	15/16x2 5/16	2.33	1.86	1.44	1.23	.92
926-2460	3450	40-40-20	150	15/16x2 9/16	2.33	1.86	1.45	1.25	.94
926-2461	3451	40-40-40	150	1 1/16x2 9/16	2.40	1.92	1.60	1.28	.96
926-2463	3453	50-30-2 0	150	1 1/16x2 9/16	2.36	1.89	1.50	1.25	.94
926-2465	3455	80-40-2 0	150	1 1/16x3 1/16	2.48	1.98	1.54	1.32	.99
926-2466	3456	80-40-40	150	1 1/16x3 1/16	2.55	2.04	1.58	1.35	1.02
926-2559	3712	5-80-4	400-400	1 1/16x4 1/8	3.45	2.76	2.14	1.84	1.38
926-2585	3740	40-20-20	450	1 1/16x4 1/16	3.23	2.58	2.00	1.71	1.29

EK9 Capacitor Assortment. Total of 18 electrolytic capacitors in metal case. Described in µF values. At 25 WVDC: 25, 100. At 50 WVDC: 5, 10, 25, 50, 100. At 150 WVDC: 20, 40, 150. At 450 WVDC: 8, 10, 20, 30, 40, 80. At 150-150 WVDC: 50-30, 50-50. Neatly packaged in a convenient and durable 9-drawer cabinet.
926-0625. Shpg. wt. 4 lbs..... Each, 18.69 2-Up, Each 16.41

Sizes Given in the Tables Above are Maximum

Cornell-Dubilier "Blue Beaver" Capacitors



*WIRE SIZE
3/8" CAN DIA. = #20-2 1/2" LONG
1/2" CAN DIA. = #20-3 1/2" LONG
5/8" AND LARGER = #18-3 1/2"

Tubular electrolytics for economy circuits. Sealed in aluminum cans, cardboard sleeves. Types BR and BBR have negative terminal grounded to can. Type BBR is miniature version of BR. Anodes and cathodes of BR and BBR units up to and including 150-V. types, are etched for use with junction rectifiers. BBRD, BBRT, BBRQ have 7" flexible vinyl-covered leads with color-coded positive, common neg. Operating temperature range is −20°C to +85°C up to 450 volts and to 65°C for higher voltages. Sizes are can-size only; add 1/16" to diameter and 3/16" to length for sleeve. Tolerance through 50 V is −10% to +150%; 51 V through 350 V, −10% to +100%; 351 V to 700 V, −10% to +50%. Specify Stock No., Mfr's Type and capacitance. Av. wt., 3 oz.

TYPES BR/*BBR SINGLE SECTION ELECTROLYTICS

Stock No.	Mfr's Type	µF	WV DC	Size Inches	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
755-0365	5/6	5	6	3/8x1 1/16	.60	.45	.35	.27	.22	.19
755-0224	25-6*	25	6	3/8x1 1/16	.64	.51	.37	.29	.23	.20
755-0234	50-6*	50	6	3/8x1 1/16	.71	.57	.41	.32	.26	.22
755-0482	100-6	100	6	1/2x1 1/16	.86	.69	.50	.39	.31	.26
755-0510	250-6	250	6	1/2x1 1/16	.73	.81	.64	.50	.40	.34
755-0530	500-6	500	6	1/2x1 7/16	1.16	.93	.73	.57	.45	.38
755-0560	3000-6	3000	6	7/8x2	2.25	1.80	1.35	1.04	.84	.72
755-0565	4000-6	4000	6	1x2 3/16	2.55	2.04	1.54	1.20	.95	.82
755-0540	1000-6	1000	6	5/8x1 11/16	1.43	1.14	.89	.69	.55	.47
755-0552	2000-6	2000	6	3/4x2	1.73	1.38	1.04	.83	.67	.57
755-0483	100-15	100	15	1/2x1 1/16	.94	.75	.52	.41	.32	.28
755-0511	250-15	250	15	1/2x1 1/16	1.16	.93	.73	.57	.46	.40
755-0531	500-15	500	15	1/2x1 7/16	1.31	1.05	.82	.64	.51	.43
755-0541	1000-15	1000	15	5/8x1 11/16	1.76	1.41	1.07	.83	.67	.58
755-0553	2000-15	2000	15	3/4x2	2.10	1.68	1.26	.97	.78	.67
755-0561	3000-15	3000	15	7/8x2 3/16	2.96	2.37	1.82	1.42	1.14	.97
755-0566	4000-15	4000	15	7/8x2 3/4	3.75	3.00	2.25	1.75	1.40	1.20
755-0571	5000-15	5000	15	1x3	4.09	3.27	2.45	1.91	1.53	1.30
755-0214	10-25*	10	25	3/8x1 1/16	.75	.60	.42	.33	.26	.23
755-0220	20-25*	20	25	3/8x1 1/16	.75	.60	.43	.34	.27	.23
755-0228	25-25*	25	25	3/8x1 1/16	.75	.60	.44	.35	.28	.24
755-0455	50-25	50	25	1/2x1 1/16	.83	.66	.47	.37	.30	.25
755-0484	100-25	100	25	1/2x1 1/16	.98	.78	.57	.45	.36	.30
755-0562	3000-25	3000	25	1x3	4.12	3.30	2.47	1.93	1.54	1.32
755-0567	4000-25	4000	25	1x4 1/16	4.87	3.90	2.92	2.28	1.82	1.56
755-0512	250-25	250	25	1/2x1 7/16	1.28	1.02	.79	.62	.49	.42
755-0532	500-25	500	25	5/8x1 11/16	1.73	1.38	1.04	.83	.67	.57
755-0542	1000-25	1000	25	3/4x2	2.96	2.37	1.78	1.39	1.11	.95
755-0554	2000-25	2000	25	7/8x2 1/2	3.64	2.91	2.19	1.70	1.36	1.17
755-0341	1-50	1	50	3/8x1 1/16	.66	.54	.39	.31	.24	.21
755-0352	2-50	2	50	3/8x1 1/16	.66	.54	.39	.31	.24	.21
755-0337	4-50	4	50	3/8x1 1/16	.66	.54	.39	.31	.24	.21
755-0209	5-50*	5	50	3/8x1 1/16	.74	.60	.42	.32	.26	.22
755-0216	10-50*	10	50	3/8x1 1/16	.75	.60	.42	.33	.27	.23
755-0425	25-50	25	50	1/2x1 1/16	.79	.63	.44	.35	.28	.24
755-0456	50-50	50	50	1/2x1 1/16	.90	.72	.51	.40	.32	.28
755-0485	100-50	100	50	1/2x1 7/16	1.01	.81	.59	.46	.37	.31
755-0495	150-50	150	50	5/8x1 7/16	1.13	.90	.66	.51	.41	.35
755-0513	250-50	250	50	3/4x1 7/16	1.31	1.05	.83	.64	.51	.44
755-0533	500-50	500	50	7/8x1 11/16	1.30	1.44	1.11	.86	.69	.59
755-0543	1000-50	1000	50	1x2 11/16	3.11	2.49	1.84	1.44	1.15	.98
755-0550	1500-50	1500	50	1 1/8x2 3/4	3.65	3.00	2.26	1.76	1.41	1.21
755-0555	2000-50	2000	50	1 3/8x2 3/4	4.35	3.48	2.60	2.02	1.61	1.38
755-0563	3000-50	3000	50	1 3/8x3 1/16	4.87	3.90	2.92	2.28	1.82	1.56
755-0205	4-150*	4	150	3/8x1 1/16	.75	.60	.43	.33	.27	.23
755-0370	8-150	8	150	1/2x1 1/16	.79	.63	.45	.34	.28	.24
755-0380	10-150	10	150	1/2x1 1/16	.79	.63	.46	.35	.29	.25
755-0389	12-150	12	150	1/2x1 1/16	.83	.66	.47	.37	.29	.25
755-0405	16-150	16	150	1/2x1 7/16	.86	.69	.49	.38	.31	.26
755-0415	20-150	20	150	1/2x1 7/16	.86	.69	.50	.39	.31	.27
755-0427	25-150	25	150	3/4x1 7/16	.94	.75	.53	.41	.33	.28
755-0435	30-150	30	150	3/4x1 7/16	.94	.75	.55	.43	.34	.29
755-0445	40-150	40	150	3/4x1 11/16	1.01	.81	.58	.45	.36	.31
755-0458	50-150	50	150	3/4x1 11/16	1.05	.84	.59	.46	.37	.32
755-0467	60-150	60	150	7/8x1 11/16	1.09	.87	.63	.49	.39	.34
755-0475	80-150	80	150	7/8x1 11/16	1.16	.93	.68	.54	.43	.36
755-0515	250-150	250	150	1x3 9/16	2.07	1.65	1.24	.96	.77	.66
755-0367	5-250	5	150	1/2x1 1/16	.81	.66	.49	.38	.31	.26
755-0476	80-250	80	150	1x1 11/16	1.46	1.17	.91	.71	.57	.48
755-0498	150-250	150	150	1 1/8x3	1.88	1.50	1.12	.85	.70	.60
755-0504	200-250	200	150	1 3/8x3 1/8	2.25	1.80	1.35	1.05	.84	.72

Stock No.	Mfr's Type	µF	WV DC	Size Inches	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
755-0486	*100-150*	100	150	7/8x2	1.31	1.05	.74	.58	.46	.40
755-0496	150-150	150	150	1x2 3/16	1.39	1.11	.82	.63	.51	.44
755-0503	*200-150*	200	150	1x3	1.65	1.32	.98	.77	.62	.53
755-0518	300-150	300	150	1x3 13/16	2.21	1.77	1.35	1.04	.84	.72
755-0360	4-250	4	250	1/2x1 1/16	.79	.63	.47	.37	.30	.25
755-0371	*8-250*	8	250	1/2x1 7/16	.86	.69	.53	.41	.33	.28
755-0390	*12-250*	12	250	1/2x1 7/16	.94	.75	.57	.44	.35	.30
755-0406	16-250	16	250	3/4x1 7/16	.98	.78	.60	.47	.38	.32
755-0416	*20-250*	20	250	3/4x1 7/16	1.01	.81	.64	.49	.40	.34
755-0436	*30-250*	30	250	3/4x1 11/16	1.09	.87	.68	.53	.42	.36
755-0446	*40-250*	40	250	3/4x2	1.16	.93	.73	.57	.46	.40
755-0459	50-250	50	250	7/8x1 1/16	1.31	1.05	.80	.62	.50	.43
755-0468	60-250	60	250	1x1 11/16	1.35	1.08	.84	.65	.52	.44
755-0487	*100-250*	100	250	1 x2 3/16	1.65	1.32	.96	.75	.60	.52
755-0361	4-350	4	350	5/8x1 1/16	.79	.63	.49	.38	.30	.26
755-0372	8-350	8	350	5/8x1 7/16	.90	.72	.55	.43	.34	.29
755-0391	12-350	12	350	3/4x1 7/16	.98	.78	.60	.47	.38	.32
755-0407	16-350	16	350	3/4x1 7/16	1.05	.84	.66	.51	.41	.35
755-0417	20-350	20	350	3/4x1 7/16	1.09	.87	.68	.52	.42	.36
755-0437	30-350	30	350	3/4x2	1.24	.99	.77	.60	.48	.41
755-0447	40-350	40	350	7/8x2	1.31	1.05	.81	.62	.51	.43
755-0469	60-350	60	350	1x2	1.46	1.17	.91	.71	.57	.48
755-0477	80-350	80	350	1x3	1.69	1.35	1.01	.78	.63	.54
755-0488	100-350	100	350	1x3	1.88	1.50	1.11	.86	.69	.59
755-0350	1-450	1	450	5/8x1 1/16	.83	.66	.51	.39	.32	.27
755-0355	2-450	2	450	5/8x1 1/16	.83	.66	.52	.40	.32	.28
755-0362	*4-450*	4	450	5/8x1 1/16	.86	.69	.53	.42	.34	.29
755-0373	8-450	8	450	3/4x1 7/16	.94	.75	.59	.46	.37	.31
755-0383	*10-450*	10	450	3/4x1 7/16	.98	.78	.62	.47	.38	.33
755-0392	12-450	12	450	3/4x1 7/16	1.01	.81	.64	.50	.40	.34
755-0408	*16-450*	16	450	3/4x1 11/16	1.05	.84	.65	.53	.42	.36
755-0418	*20-450*	20	450	7/8x1 11/16	1.16	.93	.73	.56	.45	.38
755-0438	30-450	30	450	1x2	1.28	1.02	.80	.62	.50	.42
755-0448	*40-450*	40	450	1x2 3/16	1.35	1.08	.83	.64	.52	.44
755-0470	60-450	60	450	1x3	1.76	1.41	1.08	.83	.67	.57
755-0478	80-450	80	450	1x3 9/16	2.10	1.68	1.26	.98	.79	.67
755-0489	100-450	100	450	1x3 13/16	2.40	1.92	1.48	1.15	.92	.80
755-0363	4-500	4	500	5/8x1 7/16	.90	.72	.56	.43	.35	.30
755-0374	8-500	8	500	3/4x1 7/16	.98	.78	.61	.47	.38	.33
755-0409	16-500	16	500	7/8x1 11/16	1.13	.90	.70	.54	.43	.37
755-0419	20-500	20	500	7/8x2	1.20	.96	.74	.58	.47	.40
755-0439	30-500	30	500	1x2	1.31	1.05	.82	.66	.52	.44
755-0376	8-700	8	700	15/16x3 3/16	2.18	1.74	1.31	1.02	.81	.70
755-0386	10-700	10	700	1 1/16x3 3/16	2.33	1.86	1.40	1.09	.87	.74
755-0411	16-700	16	700	1 1/16x4 5/16	2.81	2.25	1.69	1.31	1.05	.90
755-0460	50-350	50	350	1x2	1.39	1.11	.87	.68	.54	.47
755-0499	150-350	150	350	1 3/8x3	2.44	1.95	1.44	1.02	.90	.77
755-0505	200-350	200	350	1 3/8x4 1/8	3.00	2.40	1.78	1.39	1.11	.95
755-0369	5-450	5	450	5/8x1 1/16	.90	.72	.56	.43	.35	.30
755-0461	50-450	50	450	1x2 11/16	1.57	1.26	.97	.75	.61	.52
755-0500	150-450	150	450	1 3/8x3 5/8	3.38	2.70	2.00	1.55	1.25	1.07
755-0506	200-450	200	450	1 3/8x4 1/8	4.13	3.30	2.50	1.95	1.56	1.33
755-0384	10-500	10	500	3/4x1 7/16	1.01	.81	.64	.50	.40	.34
755-0393	12-500	12	500	3/4x1 11/16	1.05	.84	.66	.51	.41	.35
755-0364	4-600	4	600	13/16x2 7/16	1.80	1.44	1.08	.84	.67	.58
755-0375	8-600	8	600	13/16x3 3/16	2.10	1.68	1.26	.98	.78	.67
755-0385	10-600	10	600	15/16x3 3/16	2.25	1.80	1.35	1.05	.84	.72
755-0394	12-600	12	600	1 1/16x3 3/16	2.40	1.92	1.46	1.12	.90	.77
755-0410	16-600	16	600	1 1/16x3 11/16	2.62	2.10	1.57	1.23	.98	.84
755-0420	20-600	20	600	1 1/16x3 11/16	2.90	2.31	1.73	1.35	1.08	.92
755-0395	12-700	12	700	1 1/16x3 11/16	2.48	1.98	1.49	1.16	.92	.79

TYPES BRNP

The type BRNP is a true non-polarized electrolytic suitable for use when no DC polarizing voltage is present. The BRNP is physically similar to the type BR, with axial leads, and is hermetically sealed.

Stock No.	Mfr's Type BRNP	µF	Voltage	Size (In.)	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
755-0591	1000-3	1000	3	7/8x2	1.61	1.29	1.01	.79	.63	.54
755-0577	4-10	4	10	5/8x1 1/16	.90	.72	.51	.40	.32	.27
755-0582	8-10	8	10	5/8x1 7/16	.90	.72	.54	.42	.33	.28
755-0588	170-10	170	10	5/8x1 1/16	1.12	.90	.67	.53	.42	.36
755-0589	500-10	500	10	3/4x1 7/16	1.43	1.14	.80	.62	.50	.42
755-0580	5-15	5	15	5/8x1 1/16	.90	.72	.51	.40	.32	.27
755-0590	500-15	500	15	3/4x1 11/16	1.69	1.35	.98	.76	.61	.52
755-0587	68-25	.68	25	1/2x1 1/16	.90	.72	.51	.40	.32	.27
755-0578	4-25	4	25	5/8x1 1/16	.90	.72	.51	.40	.32	.27

These units are normally used for reverse DC application. Oper., Temp: −40°C to +85°C. Dimensions are uninsulated. Add 1/16" to dia., and 3/16" to length for cardboard tube. Wt. 3 oz.

Stock No.	Mfr's Type	µF	Voltage	Size (In.)	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
755-0584	20-30	20	30	5/8x1 1/16	.94	.75	.54	.42	.34	.29
755-0575	1-50	1	50	1/2x1 1/16	.83	.66	.49	.38	.31	.26
755-0576	2-50	2	50	1/2x1 1/16	.83	.66	.49	.38	.31	.26
755-0579	4-50	4	50	5/8x1 7/16	.90	.72	.51	.40	.32	.27
755-0586	50-50	50	50	5/8x1 7/16	1.09	.87	.65	.50	.40	.35
755-0581	5-400	5	400	3/4x1 7/16	.94	.75	.56	.44	.35	.30
755-0583	10-400	10	400	7/8x1 11/16	1.24	.99	.74	.58	.46	.40
755-0585	20-400	20	400	1x2 3/16	1.50	1.20	.89	.70	.56	.48
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Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

SPRAGUE
THE MARK OF RELIABILITY

Sprague Aluminum Electrolytics

TYPE 39D MINIATURE ELECTROLYTICS

SPRAGUE

Ultra-dependable computer-grade electrolytics. Provide high reliability for transistorized and printed circuit applications. Greatest possible capacitance in small case. Welded terminals; welded construction. 2½" axial leads. Low ESR and leakage current. With plastic sleeve. −20°C to +85°C. Tolerance: 3-50 WV. −10 +50%. Average shpg. wt. 4 oz.

PRICE AND SIZE LOCATOR

*Price, Size Code	Dia. x L., Inches	EACH 1-9	10-24	25-49	50-99	100-Up
EE	9/16x1¼	1.99	1.59	.93	.72	.64
EJ	9/16x1¾	2.03	1.62	.95	.73	.65
EL	9/16x2¼	2.09	1.67	.98	.75	.67
FJ	11/16x1¾	2.14	1.71	1.00	.77	.69
FL	11/16x2¼	2.29	1.83	1.07	.83	.74
FP	11/16x2¾	2.44	1.95	1.14	.88	.79
GE	13/16x1¼	2.18	1.74	1.02	.79	.70
GJ	13/16x1¾	2.36	1.89	1.11	.85	.76
GL	13/16x2¼	2.44	1.95	1.14	.88	.79
GP	13/16x2¾	2.51	2.01	1.18	.91	.81
HE	15/16x1¼	2.29	1.83	1.07	.83	.74
HL	15/16x2¼	2.96	2.37	1.39	1.07	.95
HP	15/16x2¾	3.00	2.40	1.41	1.08	.97
HS	15/16x3¼	3.15	2.52	1.48	1.14	1.01
JE	1 1/16x1¼	2.36	1.89	1.11	.85	.76
JL	1 1/16x2¼	3.19	2.55	1.49	1.15	1.03
JP	1 1/16x2¾	3.23	2.58	1.51	1.16	1.04
JS	1 1/16x3¼	3.64	2.91	1.70	1.31	1.17
JT	1 1/16x3¾	3.94	3.15	1.84	1.42	1.26

Stock No.	Mfr's Type 39D-	µF	WV DC	*
926-5689	138G003EL4	1300	3	EL
926-5740	218G003HE4	2100	3	HE
926-5793	308G003JE4	3000	3	JE
926-5715	189G003JT4	18000	3	JT
926-5841	607G006EJ4	600	6	EJ
926-5650	108G006GE4	1000	6	GE
926-5736	208G006GJ4	2000	6	GJ
926-5804	408G006GP4	4000	6	GP
926-5844	608G006HP4	6000	6	HP
926-5665	109G006JS4	10000	6	JS
926-5819	507G010EJ4	500	10	EJ
926-5661	108G010FJ4	1000	10	FJ
926-5706	168G010FL4	1600	10	FL
926-5769	258G010GL4	2500	10	GL
926-5825	508G010HP4	5000	10	GP
926-5666	109G010JT4	10000	10	JT
926-5842	607G015EL4	600	15	EL
926-5680	*128G015FL4*	1200	15	FL
926-5779	258G015GP4	2500	15	GP
926-5805	408G015JL4	4000	15	JL
926-5857	808G015JT4	8000	15	JT

Stock No.	Mfr's Type 39D-	µF	WV DC	*
926-5733	*207G025EJ4*	200	25	EJ
926-5820	*507G025HE4*	500	25	HE
926-5662	*108G025GL4*	1000	25	GL
926-5747	*228G025HP4*	2200	25	HP
926-5806	408G025JT4	4000	25	JT
926-5852	756G030EE4	75	30	EE
926-5697	157G030EJ4	150	30	EJ
926-5765	257G030EL4	250	30	EL
926-5821	*507G030EF4*	500	30	FL
926-5674	118G030GP4	1100	30	GP
926-5741	218G030HS4	2100	30	HS
926-5794	308G030JS4	3000	30	JS
926-5817	506G050EE4	50	50	EE
926-5656	*107G050EJ4*	100	50	EJ
926-5698	157G050EL4	150	50	EL
926-5766	*257G050HE4*	250	50	HE
926-5822	*507G050GL4*	500	50	GL
926-5675	118G050HP4	1100	50	HP
926-5754	*238G050JT4*	2300	50	JT
926-5763	256F150EJ4	25	150	EJ

Stock No.	Mfr's Type 39D-	µF	WV DC	*
926-5813	*506F150FL4*	50	150	FJ
926-5653	107F150FP4	100	150	FP
926-5764	257F150HP4	250	150	HP
926-5833	537F150JT4	530	150	JT
926-5728	206F250EL4	20	250	EL
926-5814	506F250JE4	50	250	JE
926-5654	107F250HL4	100	250	HL
926-5732	207F250JP4	200	250	JP
926-5791	307F250JT4	300	250	JT
926-5729	206F350FL4	20	350	FL
926-5789	306F350FP4	30	350	FP
926-5802	406F350GL4	40	350	GL
926-5815	506F350GP4	50	350	GP
926-5655	107F350HS4	100	350	HS
926-5704	167F350JT4	160	350	JT
926-5811	505F450EL4	5	450	EL
926-5651	106F450FL4	10	450	FL
926-5730	206F450GL4	20	450	GL
926-5816	506F450JP4	50	450	JP
926-5851	756F450JT4	75	450	JT

TYPE 600D 125°C HIGH-GRADE ALUMINUM ELECTROLYTICS

SPRAGUE EXTRAMYTIC

High-grade aluminum electrolytics. Temp. range from −55°C to +125°C, voltage ratings up to 150 VDC. Dual-rated for either 85°C or 125°C operation. 200-hr. life test at either temp. and corresponding working voltage. Withstand vibration from 10-2000 cycles at 15g. Tolerance, −10% and +75% up to 75 WVDC; −10% and +50% for 100 VDC up. All types with insulating sleeve. Chart sizes for bare can only; add 1/64" to dia. and 1/16" to length for insulating sleeve. Average shpg. wt. 3 oz.

PRICE AND SIZE LOCATOR

*Price, Size Code	Dia. x L., Inches	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	9/32x1 5/16	3.83	2.29	1.54	1.34	.97	.89
B	3/8x1 5/16	3.83	2.29	1.54	1.34	.97	.89
C	3/8x1 1/8	4.98	2.98	2.00	1.75	1.26	1.16
D	3/8x1 3/8	7.48	4.48	3.00	2.62	1.88	1.73
E	3/8x1 5/8	7.68	4.60	3.08	2.69	1.93	1.78
F	3/8x2 3/16	8.23	4.93	3.30	2.88	2.07	1.90
G	3/8x2 11/16	9.68	5.80	3.88	3.39	2.43	2.24

Stock No.	Mfr's Type 600 D-	µF	WVDC@ 85° C	125° C	*
926-8635	127G007KD4	120	7	5	A
926-8735	227G007DD4	220	7	5	B
926-8765	277G007DE4	270	7	5	C
926-8841	397G007DG4	390	7	5	D
926-8902	567G007DJ4	560	7	5	E
926-8965	827G007DL4	820	7	5	F
926-8615	108G007DX4	1000	7	5	G
926-8607	107G010KD4	100	10	7	A
926-8709	187G010DE4	180	10	7	C
926-8737	227G010DE4	220	10	7	C
926-8830	337G010DG4	330	10	7	D
926-8874	477G010DJ4	470	10	7	E
926-8924	687G010DL4	680	10	7	F
926-8968	827G010DX4	820	10	7	G
926-8915	686G015KD4	68	15	10	A
926-8960	826G015KD4	82	15	10	A
926-8675	157G015DD4	150	15	10	B
926-8712	187G015DE4	180	15	10	C
926-8767	277G015DG4	270	15	10	D
926-8843	397G015DJ4	390	15	10	E
926-8904	567G015DL4	560	15	10	F
926-8927	687G015DX4	680	15	10	G
926-8918	686G020KD4	68	20	15	A
926-8608	107G020DD4	100	20	15	B
926-8664	147G020DE4	140	20	15	C
926-8734	227G020DG4	220	20	15	D
926-8776	297G020DJ4	290	20	15	E
926-8876	447G020DL4	440	20	15	F
926-8909	607G020DX4	600	20	15	G
926-8828	336G030DK4	33	30	20	A
926-8870	476G030KD4	47	30	20	A

Stock No.	Mfr's Type 600 D-	µF	WVDC@ 85° C	125° C	*
926-8963	826G030DD4	82	30	20	B
926-8609	107G030DE4	100	30	20	C
926-8637	127G030DG4	120	30	20	D
926-8678	157G030DG4	150	30	20	D
926-8741	227G030DJ4	220	30	20	E
926-8831	337G030DL4	330	30	20	F
926-8845	397G030DX4	390	30	20	G
926-8801	306G040KD4	30	40	30	A
926-8881	506G040DD4	50	40	30	B
926-8936	706G040DE4	70	40	30	C
926-8610	107G040DG4	100	40	30	D
926-8666	147G040DJ4	140	40	30	E
926-8720	217G040DL4	210	40	30	F
926-8775	287G040DX4	280	40	30	G
926-8733	226G050KD4	22	50	40	A
926-8829	336G050DD4	33	50	40	B
926-8872	476G050DE4	47	50	40	C
926-8897	566G050DG4	56	50	40	D
926-8920	686G050DG4	68	50	40	D
926-8612	107G050DJ4	100	50	40	E
926-8681	157G050DL4	150	50	40	F
926-8714	187G050DX4	180	50	40	G
926-8794	176G060KD4	17	60	50	A
926-8745	256G060DD4	25	60	50	B
926-8854	406G060DE4	40	60	50	C
926-8906	606G060DG4	60	60	50	D
926-8952	806G060DJ4	80	60	50	E
926-8639	127G060DL4	120	60	50	F
926-8685	167G060DX4	160	60	50	G
926-8625	126F075KD4	12	75	60	A
926-8725	226F075DD4	22	75	60	B

Stock No.	Mfr's Type 600 D-	µF	WVDC@ 85° C	125° C	*
926-8823	336F075DE4	33	75	60	C
926-8867	476F075DG4	47	75	60	D
926-8911	686F075DJ4	68	75	60	E
926-8606	107F075DL4	100	75	60	F
926-8633	127F075DX4	120	75	60	G
926-8955	825F100KD4	8.2	100	75	A
926-8627	126F100DD4	12	100	75	B
926-8670	156F100DE4	15	100	75	C
926-8727	226F100DG4	22	100	75	D
926-8825	336F100DJ4	33	100	75	E
926-8869	476F100DL4	47	100	75	F
926-8913	686F100DX4	68	100	75	G
926-8861	475F150KD4	4.7	150	100	A
926-8890	565F150KD4	5.6	150	100	A
926-8957	825F150DD4	8.2	150	100	B
926-8629	126F150DE4	12	150	100	C
926-8704	186F150DG4	18	150	100	D
926-8729	226F150DJ4	22	150	100	E
926-8827	336F150DL4	33	150	100	F
926-8894	566F150DX4	56	150	100	G
926-8851	405F200KD4	4	200	150	A
926-8905	605F200DD4	6	200	150	B
926-8943	805F200DE4	8	200	150	C
926-8654	136F200DG4	13	200	150	D
926-8692	176F200DJ4	17	200	150	E
926-8754	266F200DL4	26	200	150	F
926-8838	396F200DX4	39	200	150	G
926-8816	335F250KD4	3.3	250	200	A
926-8891	565F250DD4	5.6	250	200	B
926-8910	685F250DX4	6.8	250	200	C
926-8605	106F250DG4	10	250	200	D

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

SPRAGUE
THE MARK OF RELIABILITY

Miniature and Storage Capacitors

TE "LITTL-LYTIC" (30D) MINIATURE ELECTROLYTICS

*Code	Size	*Code	Size
BA	1 7/64x3 5/64"	DC	2 5/64x5 5/64"
BB	1 7/64x4 7/64"	DD	2 5/64x6 3/64"
CB	2 1/64x4 7/64"	DF	2 5/64x1 19/64"
CC	2 1/64x5 5/64"	DH	2 5/64x1 35/64"

- For All Types of Transistorized Equipment
- Dependable All-Welded Construction
- Plastic Sleeve for Corrosion Resistance
- Hermetically Sealed and Metal-Enclosed

Ultra-small and dependable 30D Series miniature electrolytic capacitors provide high reliability for transistorized and printed circuit applications. Ideal for radios, hearing aids, wireless microphones and a variety of other electronic equipment. Hermetically-sealed and metal enclosed, with clear plastic outer insulating sleeves for corrosion resistance in hot, humid conditions. All-welded construction—no pressure joints to cause open or intermittent circuits. Will withstand temperatures of up to 85° C (185° F) without derating. Leakage current is extremely low, with long shelf life. All dimensions are given in sequence of diameter by length. Av. shpg. wt. 2 oz.

IMPORTANT ORDERING INFORMATION

If a capacitance you require is not listed in the voltage desired, go to the higher voltage where the capacitance is listed. For example: 1, 2, 3 and 4 μF capacitors are not stocked at less than 25 WVDC, because all voltages below this are the same size and approximately the same price as the 25 WVDC.

Stock No.	Mfr's Type	μF	WV DC	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
926-1205	*TE1200*	1	25	BA	.71	.39	.31	.23	.19	.17
926-1252	*TE1300*	1	50	BA	.71	.39	.31	.23	.19	.17
926-1302	*TE1400*	1	100	BA	.78	.43	.34	.26	.21	.19
926-1352	*TE1500*	1	150	BA	.78	.43	.34	.26	.21	.19
926-1207	*TE1201*	2	25	BA	.71	.39	.31	.23	.19	.17
926-1254	*TE1301*	2	50	BA	.71	.39	.31	.23	.19	.17
926-1304	TE1401	2	100	BA	.78	.44	.35	.26	.22	.19
926-1306	TE1402	3	100	CB	.90	.49	.39	.29	.24	.22
926-1354	TE1501	2	150	BA	.78	.44	.35	.26	.22	.19
926-1208	*TE1201.1*	3	25	BA	.71	.39	.31	.23	.19	.17
926-1256	*TE1302*	3	50	BA	.71	.39	.31	.23	.19	.17
926-1356	TE1502	3	150	CB	.90	.49	.39	.29	.24	.22
926-1209	TE1201.2	4	25	BA	.71	.39	.31	.23	.19	.17
926-1257	*TE1302.1*	4	50	BA	.71	.39	.31	.23	.19	.17
926-1309	TE1403	4	100	CB	.90	.49	.39	.29	.24	.22
926-1360	*TE1503*	4	150	CC	1.01	.55	.44	.33	.28	.24
926-1005	TE1052.2	5	3	BA	.71	.39	.31	.23	.19	.17
926-1058	TE1084	5	6	BA	.71	.39	.31	.23	.19	.17
926-1120	*TE1127*	5	12	BA	.71	.39	.31	.23	.19	.17
926-1159	*TE1152*	5	16	BA	.71	.39	.31	.23	.19	.17
926-1210	*TE1202*	5	25	BA	.71	.39	.31	.23	.19	.17
926-1259	*TE1303*	5	50	BB	.71	.39	.31	.23	.19	.17
926-1312	TE1404	5	100	CC	1.01	.55	.44	.33	.28	.24
926-1363	*TE1504*	5	150	CC	1.01	.55	.44	.33	.28	.24
926-1060	TE1085	6	6	BA	.71	.39	.31	.23	.19	.17
926-1161	TE1153	6	16	BA	.71	.39	.31	.23	.19	.17
926-1212	TE1203	6	25	BA	.71	.39	.31	.23	.19	.17
926-1253	TE1303.1	6	50	BB	.71	.39	.31	.23	.19	.17
926-1315	TE1405	6	100	CC	1.01	.55	.44	.33	.28	.24
926-1366	TE1505	6	150	DC	1.05	.58	.46	.35	.29	.25
926-1368	TE1505.5	7	150	DC	1.05	.58	.46	.35	.29	.25
926-1062	TE1086	8	6	BA	.71	.39	.31	.23	.19	.17
926-1163	TE1154	8	16	BA	.71	.39	.31	.23	.19	.17
926-1213	TE1203.5	8	25	BA	.71	.39	.31	.23	.19	.17
926-1262	TE1303.3	8	50	BB	.71	.39	.31	.23	.19	.17
926-1318	TE1406	8	100	DC	1.05	.58	.46	.35	.29	.25
926-1371	TE1506	8	150	DC	1.05	.58	.46	.35	.29	.25
926-1007	TE1053	10	3	BA	.71	.39	.31	.23	.19	.17
926-1064	TE1087	10	6	BA	.71	.39	.31	.23	.19	.17
926-1122	*TE1128*	10	12	BA	.71	.39	.31	.23	.19	.17
926-1165	*TE1155*	10	16	BA	.71	.39	.31	.23	.19	.17
926-1215	*TE1204*	10	25	BB	.71	.39	.31	.23	.19	.17
926-1263	*TE1304*	10	50	CB	.78	.44	.35	.26	.22	.19
926-1321	TE1407	10	100	DC	1.05	.58	.46	.35	.29	.25
926-1374	*TE1507*	10	150	DD	1.08	.60	.48	.36	.30	.26
926-1066	TE1089	16	6	BA	.71	.39	.31	.23	.19	.17
926-1124	TE1129	16	12	BA	.71	.39	.31	.23	.19	.17
926-1167	TE1156	16	16	BB	.71	.39	.31	.23	.19	.17
926-1217	*TE1205*	16	25	BB	.71	.39	.31	.23	.19	.17
926-1265	*TE1304.2*	16	50	CB	.78	.44	.35	.26	.22	.19
926-1325	TE1408	16	100	DD	1.08	.60	.48	.36	.30	.26
926-1377	TE1508.1	16	150	DF	1.12	.63	.50	.38	.31	.28
926-1069	TE1090	20	6	BA	.71	.39	.31	.23	.19	.17
926-1130	*TE1130*	20	12	BB	.71	.39	.31	.23	.19	.17
926-1169	*TE1157*	20	16	BB	.71	.39	.31	.23	.19	.17
926-1267	*TE1305*	20	50	CC	1.01	.55	.44	.33	.28	.24
926-1381	*TE1509*	20	150	DH	1.20	.65	.52	.39	.33	.29

Stock No.	Mfr's Type	μF	WV DC	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
926-1328	TE1409	20	100	DF	1.12	.63	.50	.38	.31	.28
926-1011	TE1055	25	3	BA	.71	.39	.31	.23	.19	.17
926-1071	TE1091	25	6	BB	.71	.39	.31	.23	.19	.17
926-1128	TE1131	25	12	BB	.71	.39	.31	.23	.19	.17
926-1170	*TE1157.1*	25	16	BB	.71	.39	.31	.23	.19	.17
926-1220	*TE1207*	25	25	CB	.78	.44	.35	.26	.22	.19
926-1269	*TE1305.5*	25	50	CC	1.01	.55	.44	.33	.28	.24
926-1332	TE1410	25	100	DH	1.20	.65	.52	.39	.33	.29
926-1171	TE1158	30	16	CB	.78	.44	.35	.26	.22	.19
926-1222	*TE1207.5*	30	25	CB	.78	.44	.35	.26	.22	.19
926-1336	TE1411	30	100	DH	1.20	.65	.52	.39	.33	.29
926-1074	TE1093	35	6	BB	.71	.39	.31	.23	.19	.17
926-1173	TE1159	35	16	CB	.78	.44	.35	.26	.22	.19
926-1224	*TE1208*	35	25	CB	.78	.44	.35	.26	.22	.19
926-1271	*TE1306*	35	50	DC	1.05	.58	.46	.35	.29	.25
926-1014	TE1058	50	3	BB	.71	.39	.31	.23	.19	.17
926-1130	TE1133	50	12	BB	.78	.44	.35	.26	.22	.19
926-1175	*TE1160*	50	16	CB	.78	.44	.35	.26	.22	.19
926-1226	*TE1209*	50	25	CC	1.01	.55	.44	.33	.28	.24
926-1273	*TE1307*	50	50	DD	1.08	.60	.48	.36	.30	.26
926-1080	TE1101.5	75	6	CB	.78	.44	.35	.26	.22	.19
926-1132	TE1134	75	12	CC	1.01	.55	.44	.33	.28	.24
926-1177	TE1161	75	16	CC	1.01	.55	.44	.33	.28	.24
926-1228	TE1210	75	25	DC	1.05	.58	.46	.35	.29	.25
926-1275	*TE1308*	75	50	DF	1.12	.63	.50	.38	.31	.28
926-1016	TE1059.5	100	3	CB	.78	.44	.35	.26	.22	.19
926-1085	TE1102	100	6	CC	1.01	.55	.44	.33	.28	.24
926-1134	*TE1135*	100	12	CC	1.05	.58	.46	.35	.29	.25
926-1179	*TE1162*	100	16	DC	1.05	.58	.46	.35	.29	.25
926-1230	*TE1211*	100	25	DD	1.08	.60	.48	.36	.30	.26
926-1277	*TE1309*	100	50	DH	1.20	.65	.52	.39	.33	.29
926-1019	TE1061	150	3	CC	1.01	.55	.44	.33	.28	.24
926-1087	TE1103	150	6	DC	1.05	.58	.46	.35	.29	.25
926-1136	TE1136	150	12	DD	1.08	.60	.48	.36	.30	.26
926-1181	TE1163	150	16	DD	1.08	.60	.48	.36	.30	.26
926-1232	*TE1212*	150	25	DF	1.12	.63	.50	.38	.31	.28
926-1023	TE1064	200	3	CC	1.01	.55	.44	.33	.28	.24
926-1089	*TE1104*	200	6	DC	1.05	.58	.46	.35	.29	.25
926-1138	TE1137	200	12	DF	1.12	.63	.50	.38	.31	.28
926-1183	*TE1164*	200	16	DF	1.12	.63	.50	.38	.31	.28
926-1254	*TE1213*	200	25	DH	1.20	.65	.52	.39	.33	.29
926-1025	TE1065	250	3	DC	1.05	.58	.46	.35	.29	.25
926-1091	TE1105	250	6	DD	1.08	.60	.48	.36	.30	.26
926-1140	TE1138	250	12	DF	1.12	.63	.50	.38	.31	.28
926-1184	TE1164.5	260	16	DE	1.12	.63	.50	.38	.31	.28
926-1142	TE1139	290	12	DF	1.12	.63	.50	.38	.31	.28
926-1093	TE1106	300	6	DF	1.08	.60	48	.36	.30	.26
926-1187	TE1166	350	16	DH	1.20	.65	.52	.39	.33	.29
926-1031	TE1067	300	3	DD	1.08	.60	.48	.36	.30	.26
926-1144	TE1140	390	12	DH	1.20	.65	.52	.39	.33	.29
926-1095	TE1107	400	6	DF	1.12	.63	.50	.38	.31	.28
926-1033	TE1068	500	3	DF	1.12	.63	.50	.38	.31	.28
926-1098	TE1108.5	560	6	DH	1.20	.65	.52	.39	.33	.29
926-1035	TE1069	590	3	DF	1.12	.63	.50	.38	.31	.28
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MALLORY TYPES HC AND NP ELECTROLYTICS

- Wide Operating Temperature Range
- Plastic-Cased and Moisture Resistant

Plastic-cased electrolytics can operate at wide temperature range and are moisture-resistant. Screw terminals. Temperature range: —40°C to +85°C. ‡Aluminum case, lug terminals—for fence control. *NP non-polarized types for intermittent AC use only. Others are HC polarized types for high-capacity, low voltage uses. †For photoflash. **Dual section. See Page 188 for mounting clamps. Tolerances: NP, ±25%, except 3003A, ±15%; HC, 0.50 WVDC, —10% to +150%; 51-350 WVDC, —10% to +100%; 351 WVDC and up, —10% to +50%. Average shpg. wt. for size code A through D, ½ lb.; E through H, Shpg. wt. 1½ lbs.

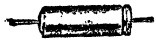
§	Size	Clamp	§	Size	Clamp
A	1 7/16x2 3/4"	852-7532	E	1 7/16x4 3/8"	852-7532
B	1 7/16x3 3/8"	852-7532	F	1 7/16x2 3/4"	852-7532
C	2 1/16x4 3/8"	852-7536	G	1 13/16x4 3/8"	852-7535
D	1 13/16x3 3/8"	852-7535	H	3x4 1/8"	852-7540

Stock No.	Mfr's Type	μF	WV DC	§	EACH 1-9	10-24	25-49	50-99	100-Up
852-2055	10100	10000	10	C	9.78	6.70	3.90	3.02	2.60
852-2015	1540A	4000	15	E	6.71	4.61	2.69	2.07	1.69
852-2017	1560A	6000	15	D	7.03	4.82	2.81	2.17	1.75
852-2021	2050-50	5000	20**	C	10.00	6.86	4.00	3.09	2.18
852-2023	2060A	6000	20	G	7.64	5.24	3.05	2.36	2.29
852-2067	20250‡	25,000	20	H	16.10	11.04	6.44	4.96	4.02
852-2026	2510A	1000	25	F	3.99	2.73	1.59	1.23	1.00
852-2027	2520A	2000	25	B	5.19	3.56	2.07	1.60	1.30
852-2030	2540A	4000	25	D	6.98	4.79	2.79	2.15	1.75
852-2035	4040A	4000	40	G	8.73	6.00	3.49	2.69	2.18
852-2038	5005A	500	50	A	4.16	2.85	1.66	1.28	1.04
852-2040	5010A	1000	50	B	5.31	3.65	2.13	1.64	1.33
852-2043	5020A	2000	50	D	6.33	4.34	2.53	1.95	1.58
852-2046	5040	4000	50	C	9.15	6.27	3.66	2.82	2.29
852-3507	1255A*	500	125	G	7.88	5.40	3.15	2.42	1.90
852-2059	15010A	1000	150	G	8.05	5.52	3.22	2.48	2.01
852-2063	20005	500	200	C	7.46	5.12	2.99	2.30	1.87
852-2064	20005A	500	200	D	6.91	4.74	2.77	2.13	1.73
852-3513	3014A*	100	300	D	7.66	5.25	3.06	2.36	1.85
852-3516	3025*	200	300	C	8.75	6.00	3.50	2.70	2.11
852-3520	4505*	50	450	D	7.88	5.40	3.15	2.42	1.88
852-3521	4510*	100	450	C	9.63	6.60	3.85	2.97	2.64
852-2077	*45003*†	300	450	C	10.54	7.26	4.24	3.27	2.65

 Contact Your Nearest Allied Electronics Facility for Prices on Sprague 500D Series

Cornell-Dubilier Capacitors

NLW "ELECTOMITE" SUBMINIATURE ELECTROLYTIC CAPACITORS



"Electomite" subminiature electrolytic capacitors are manufactured of aluminum foil, hermetically sealed in aluminum cans with transparent plastic sleeves. Designed for use with a variety of transistorized equipment—mount easily on printed circuit boards. All connections are securely welded for optimum dependability. Sure voltages exceed working voltages by 20%. Temperature range, −40°C to 105°C. Tolerance, −10% to +75%. Grounded negative lead. *Refer to Size Code Index at right. Av. shpg. wt. 2 oz.

SIZE CODE INDEX

Code*	Size	Code*	Size	Code*	Size
A	1/4x1/2"	H	3/8x5/8"	M	3/8x1 1/4"
B	1/4x5/8"	J	3/8x3/4"	N	3/8x1 1/2"
C	5/16x5/8"	K	3/8x7/8"	.....	.....
F	5/16x3/4"	L	3/8x1"	.....	.....

3 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3072	25	A	.64	.35	.27	.22	.18	.17
755-3122	75	C	.71	.39	.31	.25	.21	.20
755-3132	100	C	.71	.39	.31	.25	.21	.20
755-3171	200	F	.90	.50	.39	.31	.26	.25
755-3187	250	J	.94	.52	.40	.33	.27	.26
755-3195	300	J	.94	.52	.40	.33	.27	.26
755-3202	350	K	.98	.54	.42	.34	.28	.27
755-3212	450	K	1.01	.56	.44	.35	.29	.28
755-3218	500	L	1.01	.56	.44	.35	.29	.28
755-3228	1000	N	1.13	.65	.50	.39	.33	.32

6 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3047	10	A	.64	.35	.27	.22	.18	.17
755-3065	20	A	.64	.35	.27	.22	.18	.17
755-3083	30	A	.64	.35	.27	.22	.18	.17
755-3113	50	B	.71	.39	.31	.25	.21	.20
755-3133	100	C	.79	.45	.35	.28	.23	.22
755-3153	150	F	.94	.52	.40	.33	.27	.26
755-3188	250	K	.98	.54	.42	.34	.28	.27
755-3196	300	K	.98	.54	.42	.34	.28	.27
755-3219	500	M	1.05	.60	.46	.37	.31	.30
755-3224	800	N	1.13	.65	.50	.39	.33	.32

10 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3038	8	A	.64	.35	.27	.22	.18	.17
755-3114	50	C	.71	.39	.31	.25	.21	.20
755-3124	75	C	.90	.50	.39	.31	.26	.25
755-3144	125	F	.94	.52	.40	.33	.27	.26
755-3154	150	J	.98	.54	.42	.34	.28	.27
755-3183	225	K	1.01	.56	.44	.35	.29	.28

12 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3057	15	A	.64	.35	.27	.22	.18	.17
755-3075	25	A	.64	.35	.27	.22	.18	.17
755-3094	35	B	.64	.35	.27	.22	.18	.17
755-3135	100	F	.94	.52	.40	.33	.27	.26
755-3174	200	K	1.01	.56	.44	.35	.29	.28
755-3190	250	K	1.01	.56	.44	.35	.29	.28
755-3221	500	N	1.13	.65	.50	.39	.33	.32

16 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3019	4	A	.63	.35	.27	.22	.18	.17
755-3025	5	A	.63	.35	.27	.22	.18	.17
755-3050	10	A	.63	.35	.27	.22	.18	.17
755-3067	20	A	.63	.35	.27	.22	.18	.17
755-3076	25	B	.63	.35	.27	.22	.18	.17
755-3085	30	B	.71	.39	.31	.25	.21	.20
755-3106	40	C	.71	.39	.31	.25	.21	.20
755-3116	50	C	.71	.39	.31	.25	.21	.20
755-3136	100	F	.93	.52	.40	.33	.27	.26
755-3146	125	J	.93	.52	.40	.33	.27	.26
755-3156	150	J	.98	.54	.42	.34	.28	.27
755-3166	175	K	.98	.54	.42	.34	.28	.27
755-3175	200	K	1.01	.56	.44	.35	.29	.28
755-3191	250	L	1.01	.56	.44	.35	.29	.28
755-3199	300	M	1.05	.60	.46	.37	.31	.30
755-3209	400	N	1.13	.65	.50	.39	.33	.32
755-3215	450	N	1.20	.66	.51	.40	.34	.33

25 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3002	1	A	.63	.35	.27	.22	.18	.17
755-3008	2	A	.63	.35	.27	.22	.18	.17
755-3014	3	A	.63	.35	.27	.22	.18	.17
755-3026	5	A	.63	.35	.27	.22	.18	.17
755-3032	6	A	.63	.35	.27	.22	.18	.17
755-3041	8	A	.63	.35	.27	.22	.18	.17
755-3051	10	A	.63	.35	.27	.22	.18	.17
755-3059	15	B	.63	.35	.27	.22	.18	.17
755-3077	25	B	.71	.39	.31	.25	.21	.20
755-3086	30	C	.71	.39	.31	.25	.21	.20
755-3096	35	C	.71	.39	.31	.25	.21	.20
755-3107	40	C	.90	.50	.39	.31	.26	.25
755-3117	50	F	.90	.50	.39	.31	.26	.25
755-3127	75	J	.94	.52	.40	.33	.27	.26
755-3137	100	J	.97	.54	.42	.34	.28	.27
755-3157	150	L	1.01	.56	.44	.35	.29	.28
755-3176	200	M	1.08	.62	.48	.38	.32	.31
755-3192	250	N	1.12	.65	.50	.39	.33	.32

50 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3004	1	A	.63	.35	.27	.22	.18	.17
755-3010	2	A	.63	.35	.27	.22	.18	.17
755-3015	3	A	.63	.35	.27	.22	.18	.17
755-3021	4	A	.63	.35	.27	.22	.18	.17
755-3127	5	A	.63	.35	.27	.22	.18	.17
755-3033	6	A	.63	.35	.27	.22	.18	.17
755-3042	8	B	.63	.35	.27	.26	.18	.17
755-3052	10	B	.71	.39	.31	.25	.21	.20
755-3060	15	C	.71	.39	.31	.25	.21	.20
755-3069	20	C	.90	.50	.39	.31	.26	.25
755-3078	25	F	.90	.50	.39	.31	.26	.25
755-3087	30	H	.94	.52	.40	.33	.27	.26
755-3097	35	J	.94	.52	.40	.33	.27	.26
755-3108	40	J	.97	.54	.42	.34	.28	.27
755-3118	50	K	.97	.54	.42	.34	.28	.27
755-3128	75	L	1.01	.56	.44	.35	.29	.28
755-3138	100	M	1.05	.60	.46	.37	.31	.30
755-3148	125	N	1.12	.65	.50	.39	.33	.32

100 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3011	2	A	.71	.39	.31	.25	.21	.20
755-3028	5	C	.82	.48	.37	.29	.25	.24
755-3034	6	C	.90	.50	.39	.31	.26	.25
755-3043	8	H	.94	.52	.40	.33	.27	.26
755-3053	10	J	.94	.52	.40	.33	.27	.26
755-3070	20	L	1.01	.56	.44	.35	.29	.28
755-3109	40	N	1.12	.65	.50	.39	.33	.32

150 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3006	1	A	.67	.38	.30	.24	.20	.19
755-3012	2	B	.71	.39	.31	.25	.21	.19
755-3017	3	C	.78	.45	.34	.27	.23	.22
755-3029	5	F	.90	.50	.39	.31	.26	.25
755-3044	8	J	.94	.52	.40	.33	.27	.26
755-3054	10	K	.97	.54	.42	.34	.28	.27
755-3062	15	M	1.01	.56	.44	.35	.29	.28

TYPE UHL EXTENDED TEMPERATURE RANGE CAPACITORS

Stock No.	Mfr's Type UHL-	µF	WV DC	Size Dia.XL In.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5066	220-5	220	5	3/8x1 5/16	2.53	1.54	1.35	.96	.87	.80
755-5077	560-5	560	5	3/8x1 5/8	5.06	3.08	2.69	1.92	1.74	1.59
755-5052	100-7	100	7	3/8x1 3/16	2.37	1.44	1.25	.90	.82	.75
755-5060	150-10	150	10	3/8x1 5/16	3.53	1.54	1.35	.96	.87	.80
755-5068	270-10	270	10	3/8x1 3/8	4.95	3.00	2.62	1.87	1.71	1.56
755-5078	560-10	560	10	3/8x2 3/16	5.45	3.30	2.90	2.06	1.88	1.71
755-5082	680-10	680	10	3/8x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24
755-5050	82-20	82	20	3/8x1 5/16	2.53	1.54	1.35	.96	.87	.80
755-5053	100-20	100	20	3/8x1 1/8	3.30	2.00	1.75	1.25	1.13	1.03
755-5070	330-20	330	20	3/8x2 3/16	5.45	3.30	2.90	2.06	1.88	1.71
755-5033	33-40	33	40	3/8x1 5/16	2.53	1.54	1.35	.96	.87	.80
755-5054	100-40	100	40	3/8x1 5/8	5.06	3.08	2.69	1.92	1.74	1.59
755-5064	180-40	180	40	3/8x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24
755-5042	47-60	47	60	3/8x1 3/8	4.95	3.00	2.62	1.87	1.71	1.56
755-5022	15-75	15	75	3/8x1 1/8	3.30	2.00	1.75	1.25	1.13	1.03
755-5043	47-75	37	75	3/8x2 3/16	5.45	3.30	2.90	2.06	1.88	1.71
755-5015	12-100	12	100	3/8x1 1/8	3.30	2.00	1.75	1.25	1.13	1.03
755-5027	22-100	22	100	3/8x1 5/8	5.06	3.08	2.69	1.92	1.74	1.59
755-5045	56-100	56	100	3/8x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24
755-5008	6-150	6	150	3/8x1 5/16	2.53	1.54	1.35	.96	.87	.80
755-5019	13-150	13	150	3/8x1 3/8	4.95	3.00	2.62	1.87	1.71	1.56
755-5039	39-150	39	150	3/8x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24
755-5004	3.3-200	3.3	200	3/8x1 3/16	2.37	1.44	1.25	.90	.82	.75
755-5005	5.6-200	5.6	200	3/8x2 3/16	2.53	1.54	1.35	.96	.87	.80
755-5011	6.8-200	6.8	200	3/8x1 1/8	3.30	2.00	1.75	1.25	1.13	1.03
755-5017	12-200	12	200	3/8x1 5/8	5.06	3.08	2.69	1.92	1.74	1.59
755-5031	27-200	27	200	3/8x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

All-welded aluminum electrolytic capacitors for by-pass, filtering and coupling applications over a wide temperature range of −55° to +125°C (without derating voltage). Meet or exceed established reliability specs of MIL-C-39018. Etched foil design replaces equivalent tantalums in case size and parameters, plus has greater capacitance per voltage range. All aluminum construction for minimum weight—ideal for airborne and space uses. Standard capacitance tolerance, −10%, +75%.

Can withstand 2000 hours of rated DC voltage at +125°C, with maximum capacitance change of only +15%. Also withstand prolonged periods of off-voltage storage without detrimental effects. Limits after 500 hours at 125°C: capacitance within 10% of initial measured value; DC leakage not more than 200% of initial requirement; dissipation factor not greater than 115% of initial requirement. May be operated and stored up to 80,000 feet without evidence of mechanical damage or electrolyte leakage. Meet or exceed requirements of barometric pressure test per MIL-STD-202, Method 105.

Maximum capacitance change at temperature of −55°C is −30%; at +125°C, +25%. Average capacitance change; low-voltage units, −55°C, −20%; +125°C, +8%: high-voltage units, −55°C, −10%; +125°C, +8%. Maximum dissipation factor limits: 30 WVDC and below; at +25°C, +20%; at +125°C, +25%. Above 30 WVDC: at +25°C, +10%; at +125°C, +20%.

Withstand 1000 cycles (30 second surge, 5½ minute discharge) at +125°C. Capacitance remains within ±6% of initial value. Meet or exceed requirements for vibration of 10-2000 cps at 15g (Method 204); shock of 50g, 11 msec (Method 205, Test Condition C) of MIL-STD-202B. Also moisture resistance test of MIL-STD-202, METHOD 106 (No polarizing voltage). Salt spray test (Method 101, Test Condition B per MIL-STD-202) shows no harmful corrosion on at least 90% of case area or terminals and no obliteration of markings. Wire leads. Av. shpg. wt., 4 oz.

MALLORY

Twist-Prong Electrolytic Capacitors

TYPES FP, WP, PWP. Designed for filter, audio bypass and TV circuits. Precision engineered to remain stable under high ripple current, surge voltages and temperatures (+85° C). Can is common negative. Both FP and WP types have etched-plate anodes. All have standard twist-prong mounting lugs with solder terminals. Made with exclusive vent and seal designs for better operation. Tolerances: 0-50 WVDC, −10 to +150%; 150-350 WVDC, −10 to +100%; over 350 WVDC, −10 to +50%. Comes with insulating washer. §In table refers to size. *Indicates PC terminals. 6 oz.

§	Dia. x L	§	Dia. x L	§	Dia. x L	§	Dia. x L	§	Dia. x L	§	Dia. x L
A	1x1½"	C	1x2"	E	1x3"	G	1⅜x2½"	J	1⅜x3½"	L	1⅜x1¾"
B	1x1¾"	D	1x2½"	F	1⅜x2"	H	1⅜x3"	K	1⅜x4"	....	.....

SINGLE SECTION (FP, Except †WP, *PWP)—Specify Stock No. and Type When Ordering

Stock No.	Mfr's Type	Cap. µF	WV DC	§	EACH 1-9	10-24	25-49	50-Up	Stock No.	Mfr's Type	Cap. µF	WV DC	§	EACH 1-9	10-24	25-49	50-Up
852-7702	039A†	1000	15	A	2.20	1.76	1.04	.84	852-1526	119A	300	150	F	2.45	1.96	1.32	1.06
852-7704	041A†	2000	15	F	2.96	2.37	1.41	1.12	852-7726	123A†	500	200	H	4.23	3.39	2.01	1.61
852-7706	042A†	3000	15	F	3.66	2.93	1.74	1.39	852-1533	127	200	250	E	3.15	2.52	1.49	1.19
852-7709	055A†	100	25	A	1.44	1.15	.68	.55	852-1534	128A	80	300	D	2.15	1.72	1.02	.82
852-3760	056*	400	25	B	1.99	1.59	1.08	.86	852-1535	129.1A	100	300	D	2.35	1.88	1.12	.89
852-7711	057A†	500	25	A	1.86	1.49	.89	.71	852-1537	131.7	160	250	G	2.34	1.87	1.26	1.01
852-7713	059†	1000	25	F	2.73	2.18	1.30	1.04	852-7731	132†	200	300	G	2.84	3.07	1.67	1.33
852-1510	060.2	2000	25	L	3.66	2.93	1.74	1.39	852-1540	138A	80	350	F	2.51	2.01	1.19	.96
852-1513	060.6A	5000	25	J	6.63	5.30	3.14	2.51	852-1541	140A	125	350	G	3.15	2.52	1.49	1.19
852-7716	064A†	100	50	A	1.38	1.10	.65	.52	852-1543	140.6A	150	350	G	3.40	2.72	1.61	1.29
852-7718	065†	500	50	F	2.19	1.75	1.04	.83	852-1545	141	320	350	K	4.84	3.87	2.61	2.09
852-7720	066B†	500	50	C	2.19	1.75	1.04	.83	852-1548	144A	20	450	C	1.58	1.26	.85	.68
852-1515	066.5	1000	50	F	3.00	2.40	1.62	1.30	852-1552	146	40	450	D	1.90	1.52	1.03	.82
852-3764	067A*	1250	50	G	3.10	2.48	1.68	1.34	852-1555	149	80	450	G	2.75	2.20	1.49	1.19
852-7723	068†	1500	50	H	3.71	2.97	2.00	1.60	852-1557	150A	100	450	H	3.03	2.42	1.63	1.31
852-1517	070A	2000	50	J	4.23	3.38	2.28	1.83	852-1558	155A	125	450	H	3.44	2.75	1.85	1.48
852-1519	115A	50	150	A	3.15	2.52	1.49	1.19	852-1561	173A	20	500	C	1.78	1.42	.84	.67
852-1520	116A	100	150	A	1.59	1.35	.80	.64	852-1564	177	40	500	G	2.25	1.80	1.07	.85
852-1523	117A	150	150	C	1.94	1.55	.92	.74	852-1570	187A	90	500	H	3.35	2.68	1.81	1.45
852-1525	118A	200	150	F	2.13	1.70	1.15	.92	.....	.....	.....	.....	.....	.....	.....	.....	.....

DUAL SECTION (FP, Except †WP, *PFP)—Specify Stock No. and Type When Ordering

852-7735	200†	1000-1000	15	F	3.64	2.91	1.72	1.38	852-1611	227A	20-20	350	C	1.99	1.59	.95	.76
852-7736	200.1B†	1000-1000	15	C	3.64	2.91	1.72	1.38	852-1612	227.3A	30-30	350	D	2.40	1.92	1.14	.91
852-7744	201.5A†	1000-1000	35	G	4.14	3.31	1.96	1.57	852-1614	227.6A	80-80	350	H	4.05	3.24	1.76	1.41
852-7747	202.5A†	100-100	50	A	1.84	1.47	.88	.70	852-1615	227.7A	100-100	350	J	4.60	3.68	2.00	1.60
852-3715	213.1A*	50-30	150	L	1.85	1.48	.88	.70	852-1635	231A	10-10	450	C	1.68	1.34	.91	.73
852-1578	214A	50-50	150	D	1.89	1.51	1.02	.82	852-1637	234A	20-20	450	D	2.21	1.77	1.05	.84
852-3717	214.3*	70-30	150	B	1.93	1.54	.91	.73	852-1640	238A	40-40	450	G	2.96	2.37	1.60	1.28
852-1584	216.4A	200-200	150	G	3.45	2.76	1.64	1.31	852-1667	282.5	20-20	500	F	2.44	1.95	1.31	1.05
852-1606	221A	40-40	250	B	2.13	1.70	1.01	.81	852-1669	284A	30-30	500	F	3.25	2.60	1.54	1.23
852-1591	217.7A	150-150	250	G	4.05	3.24	1.92	1.54	852-1671	288A	40-40	500	G	3.73	2.98	1.76	1.41
852-1592	217.74A	200-200	250	H	4.84	3.87	2.29	1.83	.....	.....	.....	.....	.....	.....	.....	.....	.....

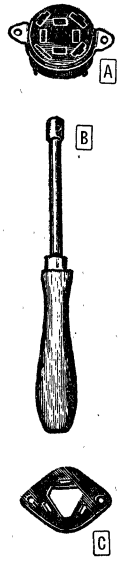
TRIPLE SECTION—Specify Stock No. and FP Type When Ordering (‡400-400-50 WVDC)

852-1682	311.5A	40-40-40	150	B	2.19	1.75	1.04	.83	852-1825	375.8	10-10-10	450	D	2.25	1.80	1.07	.86
852-1752	330.7A	30-20-10	350	D	2.36	1.89	1.12	.90	852-1828	376.5A	20-20-20	450	G	3.10	2.48	1.47	1.18
852-1756	331.3A	80-60-60	350	J	4.80	3.84	2.09	1.67	852-1833	377.1A	40-40-40	450	J	4.23	3.38	2.01	1.60
852-1770	333.2A	80-40-100	‡	J	4.16	3.33	1.98	1.58	852-1837	378	80-40-20	450	K	4.56	3.65	2.16	1.73

PSU MOTOR-STARTING DUAL VOLTAGE CAPACITORS

Motor-starting aluminum electrolytic capacitors. Type PSU are dual 110-125 volt type with quick disconnect terminals. Packed with adapters for solder or screw type connection. Other voltages on special order.

Stock No.	Mfr's Type	µF	SIZE Dia.xLg. (inches)	EACH 1-4	5-9	10-24	25-Up
852-4000	PSU2115	21-25	1 7/16x2¾	1.17	.88	.80	.75
852-4001	PSU2515	25-30	1 7/16x2¾	1.19	.90	.81	.76
852-4002	PSU3015	30-36	1 7/16x2¾	1.21	.91	.82	.77
852-4003	PSU3615	36-43	1 7/16x2¾	1.25	.94	.84	.78
852-4004	PSU3815	38-46	1 7/16x2¾	1.26	.95	.85	.79
852-4005	PSU4315	43-53	1 7/16x2¾	1.29	.97	.87	.81
852-4006	PSU5315	53-64	1 7/16x2¾	1.30	.98	.88	.82
852-4007	PSU6415	64-77	1 7/16x2¾	1.33	1.00	.90	.84
852-4008	PSU7215	72-88	1 7/16x2¾	1.34	1.01	.91	.85
852-4009	PSU8815	88-108	1 7/16x2¾	1.42	1.07	.97	.90
852-4010	PSU10815	108-130	1 7/16x2¾	1.44	1.09	.99	.91
852-4011	PSU12415	124-149	1 7/16x2¾	1.46	1.10	1.00	.93
952-4012	PSU13015	130-156	1 7/16x2¾	1.54	1.16	1.04	.97
852-4013	PSU14515	145-175	1 7/16x2¾	1.59	1.20	1.08	1.01
852-4014	PSU16115	161-193	1 7/16x2¾	1.63	1.23	1.10	1.03
852-4015	PSU18915	189-227	1 7/16x2¾	1.88	1.42	1.28	1.20
852-4016	PSU20015	200-240	1 7/16x3⅜	1.94	1.46	1.31	1.22
852-4017	PSU21615	216-259	1 7/16x3⅜	2.00	1.51	1.37	1.27
852-4018	PSU23315	233-280	1 7/16x4⅜	2.32	1.75	1.58	1.47
852-4019	PSU24315	243-292	1 13/16x3⅜	2.36	1.78	1.60	1.48
852-4020	PSU27015	270-324	1 13/16x3⅜	2.38	1.79	1.61	1.49
852-4021	PSU30015	300-360	1 13/16x3⅜	2.64	1.99	1.79	1.66
852-4022	PSU32415	324-388	1 13/16x3⅜	2.71	2.04	1.84	1.71
852-4023	PSU34015	340-408	1 13/16x3⅜	2.76	2.08	1.87	1.74
852-4024	PSU37815	378-440	1 13/16x3⅜	2.88	2.17	1.95	1.82
852-4025	PSU40015	400-480	1 13/16x3⅜	3.04	2.29	2.06	1.91
852-4026	PSU43015	430-516	2 1/16x4⅜	3.57	2.69	2.42	2.25
852-4027	PSU46015	460-552	2 1/16x4⅜	3.76	2.83	2.54	2.36
852-4028	PSU54015	540-648	2 1/16x4⅜	4.86	3.66	3.29	3.06
852-4029	PSU59015	590-708	2 1/16x4⅜	5.16	3.88	3.49	3.25
852-4030	PSU70515	705-845	2 1/16x4⅜	5.29	3.98	3.58	3.33



A CINCH MOUNTING SOCKETS

For Mallory FP type capacitors. Permit instant replacement. Molded from black bakelite. Recessed center contacts for extended prongs. Also take short prongs.

Stock No.	Size	EACH 1-99	100-Up
750-0816	1"	.65	.42
750-0817	1⅜"	.95	.61

B MOUNTING WRENCH

For locking "Twist-Prong" electrolytic capacitors securely into position. Length of unit, 7⅞". Shpg. wt., 1 lb.

852-3095 ..... 1.46

C MOUNTING PLATES (Wt., 1 oz.)

Standard mounting plates for mounting "Twist-Prong" capacitors. *Phenolic. †Metal. #Mount 1" dia. can over a 1⅜" dia. hole.

Stock No.	Size	Stock No.	Size
852-0305	1"*	852-2440	1"†
852-0307	1⅜"*	852-2442	1⅜"†
852-9160	#*	852-9161	#†

1-99 Ea. .11 100-999 Ea. .08 1000-Up Ea. .07

KRAFT INSULATING SLEEVES (Not Illus.)

852-0485	¾x2"	852-0493	1⅜x2½"
852-0487	1x2"	852-0490	1⅜x3"
852-0491	1x2½"	852-0496	1⅜x3½"
852-0488	1x3"	852-0494	1⅜x4"
852-0489	1⅜x2"	852-9140	1⅜x4⅛"

1-99 Ea. .11 100-999 Ea. .08 1000-Up Ea. .07

Specify Stock No., Mfr's Type and Capacitance When Ordering

Cornell-Dubilier Capacitors

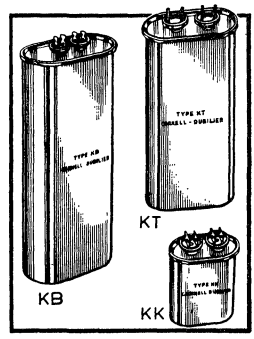
HERMETICALLY SEALED AC DYKANOL® CAPACITORS

370 VOLTS AC RATING

Stock No.	Mfr's Type	Cap. µF	Size LxWxH	EACH 1-24	25-99	100-Up
755-2145	KKX37P205Q	2	2 3/16x1 5/16x2 1/16"	2.58	1.32	1.03
755-2147	KKX37P305Q	3	2 3/16x1 5/16x2 1/16"	2.86	1.46	1.14
755-2149	KKX37P405Q	4	2 3/16x1 5/16x2 5/16"	3.21	1.64	1.28
755-2151	KKX37P505Q	5	2 3/16x1 5/16x2 3/4"	3.56	1.81	1.41
755-2176	KKX37P605Q	6	2 3/16x1 5/16x3 3/8"	3.74	1.90	1.48
755-2153	KKX37P755Q	7.5	2 7/16x1 5/16x3 3/4"	4.30	2.18	1.70
755-2207	KTX37P106Q	10	2 29/32x1 29/32x3 1/2"	5.21	2.63	2.05
755-2208	KTX37P156Q	15	2 29/32x1 29/32x4 3/4"	6.71	3.39	2.63
755-2214	KTX37P1755Q	17.5	2 29/32x1 29/32x5 1/4"	7.59	3.82	2.96
755-2210	KTX37P206Q	20	2 29/32x1 29/32x5 3/4"	8.64	4.35	3.37
755-2211	KTX37P256Q	25	2 29/32x1 29/32x7 3/4"	10.04	5.05	3.91
755-2132	KBX37P306Q	30	3 21/32x1 31/32x6 3/4"	11.79	5.92	4.58
755-2134	KBX37P356Q	35	3 21/32x1 31/32x8"	13.71	6.89	5.33
755-2190	KNX37P406Q*	40	4 9/16x2 7/8x5 3/16"	15.85	7.98	6.18
755-2191	KNX37P456Q*	45	4 9/16x2 7/8x5 3/4"	17.92	9.01	6.97
755-2157	KNX37P506Q*	50	4 9/16x2 7/8x6 1/4"	19.74	9.92	7.67

- One-Piece Drawn Seamless Case
- Minimum Leakage
- Vinyl Paint Finish
- Welded Terminals

Motor-run capacitors designed for continuous AC duty with air conditioner motors, refrigerators, fans, blowers, business machines. Excellent for general purpose filtering, blocking power factor correction and similar applications. All types meet National Electrical Manufacturers' Association Standards set for AC capacitors.



Exclusive "Dykanol" impregnant

Maintains constant rated capacitance over entire operating temperature. One-piece drawn case is seamless and leak-proof, hermetically sealed to prevent moisture or other contaminants affecting impregnant or capacitor performance.

Rugged welded terminal assembly

Provide vibration and leakage-proof connections; has phenolic cups and quick-connect terminals on cover, hermetically sealed to case. Quick-connect terminals accept standard female connectors; also have 3/32" hole for soldering wire leads directly to terminal. Leakage currents are reduced up to 80% through improved design and construction.

Cases are vinyl-painted

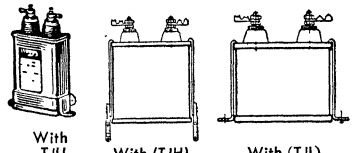
Painted to fight corrosion and are recognized under Component Program of Underwriter's Laboratories, Inc. Voltage ratings listed in table are measured at 60 Hz AC. Operating temperature: —30°C to +55°C (maximum case temperature, +70°C). Capacitance tolerance ±10%. All types listed have oval cases except *rectangular. Av. shpg. wt., 2 lbs.

440 VOLTS AC RATING

Stock No.	Mfr's Type	Cap. µF	Size LxWxH	EACH 1-24	25-99	100-Up
755-2158	KKX44P205Q	2	2 3/16x1 5/16x2 1/16"	3.35	1.71	1.33
755-2159	KKX44P305Q	3	2 3/16x1 5/16x2 3/4"	3.56	1.81	1.41
755-2161	KKX44P405Q	4	2 3/16x1 5/16x3 1/8"	3.95	2.00	1.56
755-2163	KKX44P505Q	5	2 3/16x1 5/16x3 3/4"	4.93	2.49	1.94
755-2221	KTX44P755Q	7.5	2 29/32x1 29/32x4 1/4"	6.36	3.21	2.49
755-2216	KTX44P106Q	10	2 29/32x1 29/32x4 1/4"	6.68	3.37	2.61
755-2217	KTX44P156Q	15	2 29/32x1 29/32x6 3/4"	9.76	4.91	3.80
755-2224	KTX44P755Q	7.5	2 29/32x1 29/32x6 1/4"	6.36	3.21	2.49
755-2137	KBX44P206Q	20	3 21/32x1 31/32x6 1/4"	12.31	6.19	4.79
755-2140	KBX44P206Q	20	3 21/32x1 31/32x6 1/4"	12.31	6.19	4.79
755-2142	KBX44P256Q	25	3 21/32x1 31/32x8"	13.22	6.64	5.14
755-2195	KNX44P306Q*	30	4 9/16x2 7/8x5 3/16"	15.92	8.01	6.20
755-2199	KNX44P306Q*	30	4 9/16x2 7/8x5 3/16"	15.92	8.01	6.20
755-2200	KNX44P356Q*	35	4 9/16x2 7/8x6 1/4"	19.25	9.67	7.49
755-2201	KNX44P406Q*	40	4 9/16x2 7/8x7 1/4"	21.17	10.64	8.23
755-2197	KNX44P506Q*	50	4 9/16x2 7/8x8 3/4"	26.98	13.54	10.47
755-2202	KNX44P506Q*	50	4 9/16x2 7/8x8 3/4"	26.98	13.54	10.47

TYPE CP70 CAPACITORS AND BRACKETS

Oil-filled paper capacitors designed for power supply, filter applications. Meet MIL-C-25C specifications as shown. Tolerance, ±10%. Terminals have ceramic pillar insulators. The hermetically sealed metal cases have soldered seams. Operating temp range, —55° C to +85° C. Dual marked with MIL No. and industrial CDE Type No. Brackets must be ordered with capacitors to obtain prices shown in table. Order the MIL CP07F Footed Bracket (sold in pairs) to get equivalent of CDE's capacitor Type TJH; Type TJU (sold singly) is universal bracket. All listings are Characteristic F, commercial type T-; except *Characteristic E, TCO-. **Contact Allied for prices on quantities of 500-999 or on brackets alone.** Shpg. wt., 4 oz.



With TJU Bracket — With (TJH) Bracket — With (TJL) Bracket

1000 WVDC Shpg. wts., 5 oz. to 2 lbs.

Stock No.	MIL No. CP70E1-	Type T-	µF	Size (In.)	EACH 1-9	10-24	25-49	50-99	100-499	CAPACITOR MOUNTING BRACKETS: Pr. of TJL Brackets Stock No.	MIL CP07F	Pr. of TJH Brackets Stock No.	PER PAIR	(One) Universal Bracket Stock No.	Type TJU	EA.
755-1617	EG504K1	10005X*	.5	1 13/16x1 1/16x2 1/4	5.54	4.07	3.14	2.59	2.32	755-1501	A2	755-1551	.32	755-4502	18402	.32
755-1660	FG105K1	10010	1.0	1 13/16x1 1/16x2 1/4	5.87	4.31	3.33	2.74	2.45	755-1501	A2	755-1551	.32	755-4502	18402	.32
755-1667	FG205K1	10020	2.0	1 13/16x1 1/16x3 7/8	6.34	4.65	3.59	2.97	2.64	755-1504	A5	755-1554	.32	755-4502	18402	.32
755-1669	FG405K1	10040	4.0	2 1/2x1 3/16x4 3/4	7.35	5.38	4.17	3.43	3.06	755-1511	B6	755-1561	.32	755-4503	18403	.32
755-1673	FG805K1	10080X	8.0	3 3/4x1 3/4x3 7/8	9.69	7.11	5.49	4.53	4.03	755-1519	D2	755-1569	.54	755-4505	18405	.32
755-1661	FG106K1	10100	10.0	3 3/4x1 3/4x4 3/4	10.98	8.05	6.23	5.13	4.57	755-1522	D5	755-1572	.54	755-4505	18405	.32
755-1663	FG126K1	10120X	12.0	3 3/4x2 1/4x4 1/2	12.82	9.40	7.26	5.99	5.34	755-1528	E4	755-1578	.54	755-4506	18406	.32
755-1665	FG156K1	10150	15.0	3 3/4x2 1/2x4 3/4	15.48	11.35	8.77	7.23	6.46	755-1532	F1	755-1582	1.16	755-4507	18407	.32

2000 WVDC (†2500 WVDC) Shpg. wts., 8 oz. to 6 lbs.

Stock No.	MIL No. CP70E1-	Type T-	µF	Size (In.)	EACH 1-9	10-24	25-49	50-99	100-499	CAPACITOR MOUNTING BRACKETS: Pr. of TJL Brackets Stock No.	MIL CP07F	Pr. of TJH Brackets Stock No.	PER PAIR	(One) Universal Bracket Stock No.	Type TJU	EA.
755-1645	EK104K1†	25001X*	.1	2 1/2x1 3/16x2 1/2	7.67	5.62	4.35	3.58	3.19	755-1506	B1	755-1556	.32	755-4503	18403	.32
755-1635	EJ504K1	20005X*	.5	2 1/2x1 3/16x2 7/8	8.35	6.13	4.74	3.90	3.48	755-1507	B2	755-1557	.32	755-4503	18403	.32
755-1675	FJ105K1	20010X	1.0	2 1/2x1 3/16x3 1/2	8.14	5.97	4.61	3.81	3.40	755-1508	B3	755-1558	.32	755-4503	18403	.32
755-1680	FJ205K1	20020X	2.0	3 3/4x1 1/4x4 1/4	9.97	7.32	5.65	4.66	4.15	755-1514	C3	755-1564	.32	755-4504	18404	.32
755-1682	FJ405K1	20040	4.0	3 3/4x2 1/4x3 7/8	12.60	9.24	7.14	5.88	5.26	755-1527	E3	755-1577	.54	755-4506	18406	.32
755-1686	FJ805K1	20080X	8.0	3 3/4x3 3/16x5 1/8	19.44	14.26	11.02	9.08	8.10	755-1536	G3	755-1586	1.16	755-4508	18408	.54
755-1676	FJ106K1	20100	10.0	4 9/16x3 3/4x4 3/4	22.61	16.59	12.82	10.55	9.42	755-1541	J3	755-1591	1.16	755-4509	18409	1.16
755-1678	FJ126K1	20120	12.0	4 9/16x3 3/4x5 1/2	26.32	19.30	14.92	12.29	10.97	755-1543	J5	755-1593	1.16	755-4509	18409	1.16

3000 WVDC Shpg. wts., 8 oz. to 5 lbs.

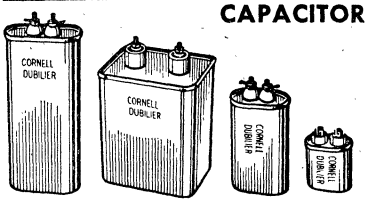
Stock No.	MIL No. CP70E1-	Type T-	µF	Size (In.)	EACH 1-9	10-24	25-49	50-99	100-499	CAPACITOR MOUNTING BRACKETS: Pr. of TJL Brackets Stock No.	MIL CP07F	Pr. of TJH Brackets Stock No.	PER PAIR	(One) Universal Bracket Stock No.	Type TJU	EA.
755-1688	FL104K1	30001X	.1	2 1/2x1 3/16x2 1/2	10.08	7.39	5.71	4.71	4.20	755-1506	B1	755-1556	.32	755-4503	18403	.32
755-1692	FL254K1	300025X	.25	2 1/2x1 3/16x2 7/8	11.23	8.25	6.37	5.25	4.68	755-1507	B2	755-1557	.32	755-4503	18403	.32
755-1695	FL504K1	30005X	.5	2 1/2x1 3/16x4 1/4	12.06	8.85	6.84	5.63	5.03	755-1510	B5	755-1560	.32	755-4503	18403	.32
755-1689	FL105K1	30010	1.0	3 3/4x2 1/4x3 7/8	14.37	10.54	8.14	6.71	5.79	755-1527	E3	755-1577	.54	755-4506	18406	.32
755-1691	FL205K1	30020X	2.0	3 3/4x3 3/16x4 1/2	18.58	13.62	10.53	8.68	7.74	755-1534	G1	755-1584	1.16	755-4508	18408	.54
755-1694	FL405K1	30040	4.0	4 9/16x3 3/4x4 3/4	25.89	18.99	14.67	12.09	10.79	755-1541	J3	755-1591	1.16	755-4509	18409	1.16

4000 WVDC Shpg. wts., 4 lbs. to 8½ lbs.

Stock No.	MIL No. CP70E1-	Type T-	µF	Size (In.)	EACH 1-9	10-24	25-49	50-99	100-499	CAPACITOR MOUNTING BRACKETS: Pr. of TJL Brackets Stock No.	MIL CP07F	Pr. of TJH Brackets Stock No.	PER PAIR	(One) Universal Bracket Stock No.	Type TJU	EA.
755-1697	FM105K1	40010	1.0	3 3/4x2 1/4x5 1/8	25.03	13.26	10.25	8.44	7.54	755-1530	E6	755-1580	.54	755-4506	18406	.32
755-1698	FM205K1	40020	2.0	4 9/16x3 3/4x5 1/8	24.05	17.64	13.63	11.22	10.02	755-1542	J4	755-1592	1.16	755-4509	18409	1.16
755-1699	FM405K1	40040X	4.0	4 9/16x3 3/4x8 1/2	46.87	34.38	26.57	21.88	19.54	755-1548	J10	755-1598	1.16	755-4509	18409	1.16

Cornell-Dubilier Capacitors

CAPACITORS FOR SCR COMMUTATION APPLICATIONS



Reliable oil-filled capacitors, primarily designed for breadboard prototype work in specialized silicon controlled rectifier commutation and other similar square-wave voltage applications. Precision-made capacitors have low inductance and minimum equivalent series resistance; internal connections carry high currents frequently encountered in operation. Paint finish on cases increases emissivity and holds dielectric temperature increase to a minimum.

Oil dielectric maintains nominal (25°C) capacity within 2.5% over temperature range of —55°C to 80°C. Table below is based on 50 microseconds current pulse width. In no case should maximum voltage, current, ambient and case temperatures be exceeded. Capacitors are oil-impregnated paper, except *metallized paper, †polycarbonate. They have oval cases, except §rectangular. Av. wt., 5 lbs.

Stock No.	Mfr's Type	µF	rms Volts AC Max.	Volts DC Max.	Size (Inches (WxDxH)	Bracket Key	Max. rms (Amps) Ambient Temperature 80° C	Max. rms (Amps) Ambient Temperature 60° C	Case Temperature 87° C	Case Temperature 80° C	EACH 1-9	10-24	25-49	50-99	100-999
755-3722	SCRG101	3	200	200	25/32x15/16x21/16	A	3.8	8.9			8.60	5.38	3.87	3.01	2.58
755-3723	SCRG102	5	200	200	25/32x15/16x29/16	D	5.5	12.8			9.40	5.88	4.23	3.29	2.82
755-3724	SCRG103	10	200	200	25/32x15/16x33/16	C	9.4	22.1			11.04	6.90	4.97	3.86	3.31
755-3726	SCRG105	20	200	200	21 1/16x19/16x4 1/2	H	16.1	37.7			14.56	9.10	6.55	5.10	4.37
755-3731	SCRG110	2	300	400	25/32x15/16x21/16	A	3.1	7.3			8.52	5.33	3.83	2.98	2.56
755-3735	SCRG114	15	300	400	29/32x129/32x4 3/4	L	15.1	35.4			17.28	10.80	7.78	6.05	5.18
755-3736	SCRG115	20	300	400	29/32x129/32x6 1/4	M	20.0	46.9			20.48	12.80	9.22	7.17	6.14
755-3737	SCRG116	30	300	400	31/32x131/32x6 3/4	O	27.8	50.0			27.52	17.20	12.38	9.63	8.26
755-3741	SCRG120	2	400	600	25/32x15/16x25/16	J	3.3	7.7			8.92	5.58	4.01	3.12	2.68
755-3742	SCRG121	3	400	600	25/32x15/16x213/16	G	4.4	10.4			9.92	6.20	4.46	3.47	2.98
755-3743	SCRG122	5	400	600	25/32x15/16x313/16	C	6.7	15.6			11.12	6.95	5.00	3.89	3.34
755-3744	SCRG123	10	400	600	29/32x129/32x4 1/4	K	11.7	27.3			15.04	9.40	6.77	5.26	4.57
755-3745	SCRG124	15	400	600	29/32x129/32x5 3/4	P	16.6	39.0			19.00	11.88	8.55	6.65	5.70
755-3746	SCRG125	20	400	600	31/32x131/32x5 3/4	P	21.0	49.2			22.96	14.35	10.33	8.04	6.89
755-3752	SCRG131	1	500	1000	25/32x15/16x21/16	A	2.2	5.1			8.32	5.20	3.74	2.91	2.50
755-3753	SCRG132	2	500	1000	25/32x15/16x31/16	B	3.8	8.9			9.36	5.85	4.21	3.28	2.81
755-3754	SCRG133	3	500	1000	25/32x15/16x313/16	C	5.2	12.1			10.24	6.40	4.61	3.58	3.07
755-3755	SCRG134	5	500	1000	21 1/16x19/16x4 1/4	K	7.8	18.3			12.20	7.63	5.49	4.27	3.66
755-3763	SCRG142	1	700	1500	25/32x15/16x31/16	B	2.7	6.3			9.20	5.75	4.14	3.22	2.76
755-3764	SCRG143	2	700	1500	2 1/16x19/16x37/8	C	4.7	11.0			10.92	6.83	4.91	3.82	3.28
755-3767	SCRG146§	10	700	1500	49/16x227/32x53/16	R	15.9	37.3			29.60	18.50	13.32	10.36	8.88
755-3773	SCRG152	.50	800	2000	25/32x15/16x29/16	D	1.7	4.0			9.04	5.66	4.07	3.17	2.71
755-3774	SCRG153	1	800	2000	27/32x15/16x37/16	E	2.8	6.6			9.60	6.00	4.32	3.36	2.88
755-3776	SCRG155	3	800	2000	229/32x129/32x4 3/4	L	6.8	15.8			13.84	8.65	6.23	4.84	4.15
755-3777	SCRG156	5	800	2000	321/32x131/32x6 1/4	M	10.9	25.6			18.20	11.38	8.19	6.37	5.46
755-3785	SCRG164†	20	330	600	321/32x131/32x6		50.0	50.0			58.60	36.65	26.40	20.50	17.60
755-2177	KMSCR103§	10.0	165	200	3 3/4x1 1/4x4 1/4	X	22.0	39.5			19.80	12.35	8.91	6.93	5.94
755-2178	KMSCR104§	20.0	165	200	3 3/4x1 1/4x4 1/2	T	38.0	43.1			27.72	17.29	12.46	9.70	8.31
755-2180	KMSCR108§	5.0	330	600	3 3/4x1 1/4x4 3/4	S	15.8	28.4			19.60	12.24	8.82	6.86	5.88
755-2181	KMSCR109§	10.0	330	600	3 3/4x2 1/4x4 1/2	T	25.3	42.9			27.72	17.29	12.46	9.70	8.31
755-2182	KMSCR110§	20.0	330	600	3 3/4x3 3/16x5 1/2	Y	43.0	43.0			39.40	24.61	17.74	13.79	11.82
755-2184	KMSCR114§	2.0	700	2000	3 3/4x1 1/4x4 3/4	S	10.7	18.3			19.52	12.20	8.79	6.84	5.86
755-2185	KMSCR115§	3.0	700	2000	3 3/4x2 1/4x4 1/2	T	14.5	25.3			27.72	17.29	12.46	9.70	8.31
755-2186	KMSCR116§	5.0	700	2000	3 3/4x3 3/16x5 1/8	U	22.1	36.3			32.72	20.42	14.71	11.46	9.83
755-2187	KMSCR117§	10.0	700	2000	4 9/16x3 3/4x6	V	36.3	43.0			44.24	27.63	19.92	15.49	13.28
755-3702	SCR2025*	25.0	120	200	21 1/16x19/16x2 1/8	F	4.7	12.0			25.28	15.79	11.38	8.84	7.59
755-3704	SCR2050*	50.0	120	200	21 1/16x19/16x2 7/8	G	4.7	12.0			32.40	20.00	14.40	11.20	9.60
755-3706	SCR2100*	100.0	120	200	321/32x131/32x3 1/8	N	13.0	20.0			50.00	31.25	22.25	17.50	15.00
755-3708	SCR2125*	125.0	120	200	321/32x131/32x37/8	Z	16.3	20.0			54.08	33.80	24.34	18.93	16.23
755-3716	SCR20010†§	10.0	700	2000	4 9/16x3 3/4x5 1/8	W	43.0	43.0			107.60	67.40	48.50	37.70	32.30

TYPE DYR PAPER-OIL "BATH-TUB" CAPACITORS

For severe heat and humidity conditions. Rugged "bathtub" type metal shells; solder terminals. Capacity tolerance: single section, ±10%; others +20%, —10%. 600 WVDC, except *1000 volts. Satisfy MIL-C-25A test requirements. Similar to JAN CP53. Dual section units have common case. Temperature range: from —55°C to +85°C. Av. wt., 5 oz.

Stock No.	Type DYR-	µF	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
755-1906	6010	.1	2.55	1.70	1.49	1.15	1.03	.94
755-1910	6025	.25	2.59	1.73	1.51	1.16	1.04	.95
755-1913	6050	.5	2.89	1.93	1.68	1.30	1.15	1.06
755-1916	6100	1.0	3.45	2.30	2.01	1.55	1.38	1.26
755-1922	6200	2.0	4.50	3.00	2.62	2.03	1.80	1.65
755-1979	60055	.05-.05	3.41	2.28	1.99	1.54	1.36	1.25
755-1907	6011J	.1-.1	3.53	2.35	2.06	1.59	1.41	1.30
755-1909	6022	.25-.25	3.83	2.55	2.24	1.73	1.53	1.40
755-1914	6055	.5-.5	4.35	2.90	2.54	1.96	1.74	1.60
755-1918	6110	1.0-1.0	5.18	3.45	3.03	2.33	2.08	1.90
755-1919	6111	.1-.1-.1	4.09	2.73	2.39	1.84	1.64	1.50
755-1928	10005*	.05	2.48	1.65	1.44	1.11	.99	.91
755-1930	10010*	.1	2.59	1.73	1.51	1.16	1.04	.95
755-1932	10025*	.25	2.81	1.86	1.64	1.26	1.13	1.03
755-1934	10050*	.5	3.04	2.03	1.78	1.36	1.21	1.11
755-1939	10100*	1.0	4.05	2.70	2.36	1.83	1.63	1.49
755-1936	10055*	.5-.5	5.48	3.65	3.20	2.46	2.19	2.01

CAPACITOR BRACKETS FOR ABOVE

New ruggedly constructed capacitor brackets designed for easy mounting. Provide firm hold on PC boards. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Key	Description	PER PAIR
755-9305	30434-32	A	Footed Oval	.25
755-9310	30434-48	B	Footed Oval	.25
755-9315	30434-60	C	Footed Oval	.25
755-9308	30434-40	D	Footed Oval	.25
755-9312	30434-54	E	Footed Oval	.25
755-9306	30434-34	F	Footed Oval	.25
755-9309	30434-44	G	Footed Oval	.25
755-9317	30434-62	H	Footed Oval	.25
755-9307	30434-36	J	Footed Oval	.25
755-9360	30828-67	K	Footed Oval	.25
755-9362	30828-75	L	Footed Oval	.25
755-9369	30828-99	M	Footed Oval	.25
755-9355	30828-49	N	Footed Oval	.25
755-9373	30828-107	O	Footed Oval	.25
755-9366	30828-91	P	Footed Oval	.25
755-9333	30879-46	R	Footed Rect.	.50
755-9316	30879-16	S	Footed Rect.	.32
755-9320	30879-25	T	Footed Rect.	.54
755-9323	30879-32	U	Footed Rect.	1.16
755-9329	30879-39	V	Footed Rect.	1.16
755-9327	30879-37	W	Footed Rect.	1.16
755-9315	30879-15	X	Footed Rect.	.32
755-9324	30879-33	Y	Footed Rect.	1.16
755-9359	30828-63	Z	Footed Oval	.40

Contact Allied Electronics for Prices on Quantities Not Shown

Motor-Starting, Min., Submin., Capacitors

SPRAGUE — THE MARK OF RELIABILITY

SERIES TL TRANSI-LYTIC (31D) MINIATURE CAPACITORS

Miniature units designed for transistorized circuits. Plastic cases with thermosetting resin end seals. Operating temperature range −20°C to +65°C. Tolerance, −10% to +100% of rated capacitance, measured at 120 Hz and 25°C. **Important Note:** Values listed in table below combine the highest voltage with the smallest case size for added protection at no extra cost. Example: 1μF is only listed at 25 V, as all lower voltages are the same size and price. Wt. 2 oz.

SIZE CHART

Code	Size	Code	Size	Code	Size	Code	Size
A	.180x.57	D	.250x .82	G	.625x1.70	K	1.00x2.32
B	.218x.57	E	.375x1.07	H	.750x2.10	.....	.....
C	.210x.70	F	.312x .82	J	.875x2.32	.....	.....

Stock No.	Mfr's Type	μF	WV DC	Size Code	EACH 1-24	25-49	50-99	100-249	250-Up
926-1560	*TL1200*	1	25	A	.64	.39	.30	.24	.20
926-1561	TL1201	2	25	A	.67	.41	.32	.26	.21
926-1534	TL1127	5	12	A	.67	.41	.32	.26	.21
926-1545	TL1152	5	16	B	.71	.43	.34	.27	.22
926-1562	TL1202	5	25	D	.78	.48	.37	.30	.25
926-1584	TL1303	5	50	D	.82	.50	.39	.31	.26
926-1554	TL1176	8	20	C	.82	.50	.39	.31	.26
926-1564	TL1203.5	8	25	D	.86	.52	.41	.33	.27
926-1585	TL1303.3	8	50	D	.90	.54	.42	.34	.28
926-1535	TL1128	10	12	C	.78	.48	.37	.30	.25
926-1565	TL1204	10	25	D	.90	.54	.42	.34	.28
926-1547	TL1157.1	25	16	D	.93	.57	.44	.36	.29
926-1587	TL1304	10	50	D	.93	.57	.44	.36	.29
926-1567	TL1207	25	25	E	1.11	.61	.48	.38	.32
926-1591	TL1305.1	25	50	E	1.05	.63	.49	.40	.33
926-1510	TL1058	50	3	D	.90	.54	.42	.34	.28
926-1539	TL1133	50	12	F	.97	.59	.46	.37	.30
926-1569	TL1209	50	25	E	1.12	.68	.53	.42	.35
926-1512	TL1059.5	100	3	D	.97	.59	.46	.36	.30
926-1550	TL1162	100	16	E	1.12	.68	.53	.42	.35
926-1524	TL1103.5	175	6	E	1.12	.68	.53	.42	.35
926-1572	TL1214	250	25	G	1.65	.99	.77	.62	.51
926-1575	*TL1217*	500	25	G	2.10	1.26	.98	.78	.64
926-1576	TL1218	1000	25	H	2.25	1.35	1.05	.84	.69
926-1578	TL1219	1500	25	J	2.40	1.44	1.12	.90	.74
926-1580	TL1220	2000	25	K	2.55	1.53	1.19	.95	.78
926-1557	TL1194	2500	20	K	2.55	1.53	1.19	.95	.78

AB PLASTIC-ENCASED MOTOR-STARTING CAPACITORS

Electrolytic capacitors for intermittent duty with 110/125 V capacitor-start AC motors. Dual blade universal terminals take quick-connect connectors, notches and eyes for soldered leads. Includes two clip-on adapters with screws. In questions of proper size, use next larger capacitance. *Minimum-maximum capacitance values replaceable. Type AB-1109 for ⅛ hp motors; AB-1110, 1/6 hp; AB-1113 and AB-1116, ¼ hp; AB-1125, ⅓ hp; AB-1130 and AB-1131, ½ hp; AB-1146 and AB-1149, 1 hp. Standard sizes to fit conventional type motor mounts. Av. shpg. wt., 10 oz.

Stock No.	Mfr's Type	* μF	Size (Dia. x L)	EACH 1-9	10-24	25-Up
926-0015	AB-1104	38-46	1 7/16x2¾"	1.26	1.01	.91
926-0016	AB-1105	43-53	1 7/16x2¾"	1.31	1.05	.95
926-0018	AB-1107	53-64	1 7/16x2¾"	1.33	1.06	.96
926-0019	AB-1108	64-77	1 7/16x2¾"	1.35	1.08	.98
926-0020	AB-1109	72-88	1 7/16x2¾"	1.38	1.10	.99
926-0021	AB-1110	88-108	1 7/16x2¾"	1.41	1.13	1.02
926-0024	AB-1113	108-130	1 7/16x2¾"	1.43	1.14	1.03
926-0027	AB-1116	124-149	1 7/16x2¾"	1.46	1.17	1.06
926-0030	AB-1119	130-156	1 7/16x2¾"	1.55	1.24	1.13
926-0033	AB-1122	145-175	1 7/16x2¾"	1.59	1.27	1.16
926-0036	AB-1125	161-193	1 7/16x3⅜"	1.63	1.30	1.18
926-0039	AB-1128	189-227	1 7/16x3⅜"	1.86	1.49	1.36
926-0041	AB-1130	200-240	1 7/16x3⅜"	1.93	1.55	1.40
926-0042	AB-1131	216-259	1 13/16x3⅜"	2.03	1.62	1.46
926-0045	AB-1134	233-280	1 13/16x3⅜"	2.34	1.87	1.68
926-0048	AB-1137	243-292	1 13/16x3⅜"	2.34	1.87	1.68
926-0057	AB-1140	270-324	1 13/16x3⅜"	2.36	1.89	1.70
926-0053	AB-1142	324-388	1 13/16x3⅜"	2.69	2.15	1.93
926-0054	AB-1143	340-408	1 13/16x3⅜"	2.76	2.21	2.00
926-0057	AB-1146	378-440	1 13/16x3⅜"	2.96	2.37	2.10
926-0060	AB-1149	400-480	1 13/16x3⅜"	3.01	2.41	2.20
926-0063	AB-1152	430-516	2 1/16x4⅜"	3.45	2.76	2.49
926-0069	AB-1158	540-648	2 1/16x4⅜"	4.83	3.87	3.49
926-0072	AB-1161	590-708	2 1/16x4⅜"	5.18	4.14	3.73

96P "VITAMIN Q" SUBMINIATURES

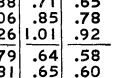
Hermetically-sealed glass-to-metal terminals. Style S-2—insulated section, plain metal case. Inserted tabs. "Vitamin Q" impregnated for high insulation resistance. Tolerance, ±10%. Exceed MIL-C-25. For ambient temperatures —55° to +125° C. Av. shpg. wt., 3 oz.

SIZE LOCATOR

*	Size	*	Size	*	Size	*	Size
A	3/16x¾"	D	13/32x⅞"	G	13/32x1⅜"	K	21/32x1⅞"
B	7/32x¾"	E	13/32x1⅛"	H	9/16x1⅜"	L	1x1⅞"
C	5/16x⅞"	F	9/16x1⅛"	J	9/16x1⅞"	M	¾x2⅛"

Stock No.	Type 96P-S2	μF	WV DC	*	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
926-5910	10391	.01	100	A	2.65	1.59	1.19	.80	.64	.59
926-5939	22391	.022	100	A	2.86	1.72	1.29	.86	.69	.63
926-5965	47391	.047	100	C	2.70	1.62	1.22	.81	.65	.60
926-5919	10491	.1	100	C	2.80	1.68	1.26	.84	.67	.62
926-5951	22491	.22	100	E	2.92	1.75	1.32	.88	.71	.65
926-5973	47491	.47	100	F	3.65	2.19	1.65	1.10	.88	.81
926-5927	10591	1.0	100	J	4.23	2.55	1.91	1.27	1.02	.94
926-5907	10292	.001	200	B	2.62	1.58	1.18	.79	.63	.58
926-5960	47292	.0047	200	B	2.62	1.58	1.19	.79	.63	.58
926-5911	10392	.01	200	B	2.63	1.58	1.19	.79	.64	.58
926-5940	22392	.022	200	B	2.63	1.58	1.19	.79	.64	.58
926-5920	10492	.1	200	D	2.77	1.66	1.25	.83	.67	.61
926-5952	22492	.22	200	G	2.92	1.76	1.32	.88	.71	.65
926-5974	47492	.47	200	H	3.52	2.12	1.59	1.06	.85	.78
926-5928	10592	1.0	200	K	4.18	2.51	1.89	1.26	1.01	.92
926-5913	10394	.01	400	B	2.63	1.58	1.19	.79	.64	.58
926-5942	22394	.022	400	C	2.68	1.62	1.21	.81	.65	.60
926-5968	47394	.047	400	D	2.75	1.65	1.24	.83	.66	.61
926-5922	10494	.1	400	G	2.86	1.72	1.29	.86	.69	.63
926-5954	22494	.22	400	H	3.56	2.14	1.61	1.07	.86	.79
926-5930	10594	1.0	400	L	5.40	3.24	2.43	1.62	1.30	1.19
926-5915	10396	.01	600	G	2.70	1.62	1.22	.81	.65	.60
926-5970	47396	.047	600	E	2.81	1.69	1.27	.85	.68	.62
926-5924	10496	.1	600	F	3.30	1.98	1.49	.99	.80	.73
926-5977	47496	.47	600	M	4.51	2.71	2.03	1.36	1.09	1.00

MIL TYPE CP 53 CAPACITORS



Non-inductive oil-filled bathtub capacitors; hermetically sealed, silicone rubber compression terminals. Have mtg. flanges. Exceed MIL-C-25A. Suffix K has tolerance of ±10%; V, +20%, −10%. For use up to 85°C. 600 WVDC, except *1000. Shpg. wt., 4 oz.

Stock No.	MIL No. CP53	μF	Size	EACH 1-9	10-24	25-49	50-99	100-Up
926-0171	B1EF254K	.25	1 13/16x1x¾"	3.83	2.87	2.16	1.44	1.15
926-0174	B1EF504K	.5	1 13/16x1x1"	4.12	3.09	2.32	1.55	1.24
926-0165	B1EF105K	1.0	2x1¾x1"	4.80	3.60	2.70	2.80	1.44
926-0168	B1EF205K	2.0	2x2x1⅛"	6.44	4.83	3.63	2.42	1.94
926-0193	B4EF104V	.1-.1	1 13/16x1x¾"	5.00	3.75	2.82	1.88	1.50
926-0196	B4EF254V	.25-.25	1 13/16x1x1"	5.16	3.87	2.91	1.94	1.55
926-0198	B4EF504V	.5-.5	2x1¾x1"	5.88	4.41	3.31	2.21	1.77
926-0185	B1EG254K*	.25	1 13/16x1x⅞"	4.04	3.03	2.28	1.52	1.22
926-0179	B1EG104K*	.1	1 13/16x1x¾"	3.92	2.94	2.20	1.47	1.18
926-0199	B4EG254V*	.25-.25	2x1¾x⅞"	5.68	4.26	3.20	2.13	1.71
926-0188	B1EG504K*	.5	2x1¾x⅞"	4.32	3.24	2.43	1.62	1.30
926-0182	B1EG105K*	1.0	2x2x1⅛"	5.80	4.35	3.27	2.18	1.74

TYPE 121P METALLIZED PAPER CAPACITORS

Operate at 125°C without derating. Have ungrounded cases. Hermetically sealed, glass-to-metal solder-seal terminals. Tol., ±10%. 150 WVDC. 3 oz.

Stock No.	Type 121P	μF	Size, Inches	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
926-6122	15591R5S2	1.5	9/16x1⅛	4.56	3.11	2.34	1.56	1.25	1.15
926-6135	20591R5S2	2.0	9/16x1⅜	4.86	3.26	2.44	1.63	1.31	1.20
926-6138	25591R5S2	2.5	9/16x1⅝	5.32	3.33	2.50	1.67	1.34	1.23
926-6141	30591R5S2	3.0	43/64x1⅜	5.94	3.75	2.82	1.88	1.50	1.38
926-6144	40591R5S2	4.0	43/64x1⅝	6.60	4.05	3.04	2.03	1.62	1.49
926-6146	50591R5S2	5.0	43/64x1⅞	7.83	12.54	9.41	6.27	5.02	4.60
926-6149	60591R5S2	6.0	¾x1⅞	8.40	4.83	3.63	2.42	1.94	1.78
926-6152	80591R5S2	8.0	¾x2⅜	9.94	5.64	4.23	2.82	2.26	2.07
926-6114	10691R5S2	10.0	¾x2⅝	11.74	6.51	4.89	3.26	2.61	2.39
926-6116	12691R5S2	12.0	1x1⅞	13.46	7.38	5.54	3.69	2.96	2.71
926-6119	14691R5S2	14.0	1x2⅛	15.18	8.25	6.19	4.13	3.30	3.03
926-6126	16691R5S2	16.0	1x2⅜	16.80	8.76	6.57	4.38	3.51	3.22
926-6130	18691R5S2	18.0	1x2⅝	18.61	9.99	7.50	5.00	4.00	3.67

"Metfilm", Miniature and Storage Capacitors

SPRAGUE — THE MARK OF RELIABILITY

SPRAGUE CAPACITORS

192P "PACER" MINIATURE CAPACITORS

Type 192P "Pacer" miniature capacitors are nearly three times smaller than conventional paper-film tubular capacitors. They fit tight spots in small electronic assemblies that require high temperature operation and good humidity performance. Miniature capacitor sizes are approximately the same as composition resistors and may be used together with resistors and diodes in modular circuits. Non-inductor capacitors are manufactured with metal end caps over foil sections for better shielding. All have durable epoxy coating for high insulation resistance. Ambient temperature range, −55° to +85°C. Derate 50% at 105° centigrade temperature. Overall tolerance, ±10%. "R" in Mfr's Type indicates 80 WVDC, others are 200 WVDC. Av. shpg. wt. 2 oz.

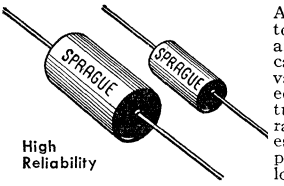
SIZE CHART

Code	Size	Code	Size	Code	Size	Code	Size
A	9/64x5/16"	D	11/64x1/2"	G	15/64x9/16"	K	21/64x5/8"
B	11/64x5/16"	E	7/32x7/16"	H	19/64x1/2"	L	21/64x7/8"
C	11/64x7/16"	F	7/32x9/16"	J	19/64x5/8"	M	21/64x1 3/16"

Stock No.	Type 192P-	μF	Size Code	EACH 1-24	25-49	50-99	100-249	250-Up
926-6678	2229R8	.0022	A	.48	.28	.22	.18	.16
926-6681	2729R8	.0027	A	.48	.28	.22	.18	.16
926-6684	3329R8	.0033	A	.48	.28	.22	.18	.16
926-6687	3929R8	.0039	A	.48	.28	.22	.18	.16
926-6690	*4729R8*	.0047	A	.48	.28	.22	.18	.16
926-6693	5629R8	.0056	B	.48	.28	.22	.18	.16
926-6695	6829R8	.0068	B	.48	.28	.22	.18	.16
926-6697	8229R8	.0082	B	.48	.28	.22	.18	.16
926-6670	*1039R8*	.01	B	.45	.27	.21	.17	.15
926-6672	1239R8	.012	C	.48	.28	.22	.18	.16
926-6674	1539R8	.015	C	.52	.31	.24	.19	.18
926-6676	1839R8	.018	D	.52	.31	.24	.19	.18
926-6679	*2239R8*	.022	D	.52	.31	.24	.20	.18
926-6682	2739R8	.027	E	.56	.32	.25	.20	.18
926-6685	3339R8	.033	E	.56	.32	.25	.20	.19
926-6688	3939R8	.039	F	.56	.33	.26	.21	.19
926-6691	*4739R8*	.047	F	.56	.34	.26	.21	.20
926-6694	5639R8	.056	G	.60	.35	.27	.22	.20
926-6696	6839R8	.068	G	.63	.37	.28	.23	.21
926-6698	8239R8	.082	H	.63	.38	.30	.24	.22
926-6671	*1049R8*	.1	H	.67	.39	.30	.24	.23
926-6673	1249R8	.12	J	.78	.46	.36	.29	.27
926-6675	1549R8	.15	J	.82	.49	.39	.31	.29
926-6677	1849R8	.18	K	.93	.55	.42	.34	.32
926-6680	*2249R8*	.22	K	1.01	.60	.47	.37	.35
926-6683	2749R8	.27	L	1.08	.64	.50	.40	.37
926-6686	3349R8	.33	L	1.12	.68	.53	.42	.39
926-6689	3949R8	.39	M	1.20	.72	.56	.45	.41
926-6692	*4749R8*	.47	M	1.25	.75	.59	.47	.44
926-6720	47192	.00047	A	.38	.24	.19	.15	.14
926-6723	56192	.00056	A	.38	.22	.17	.14	.13
926-6726	68192	.00068	A	.38	.22	.17	.14	.13
926-6729	82192	.00082	A	.38	.22	.17	.14	.13
926-6702	*1029Z*	.001	A	.34	.19	.15	.12	.11
926-5705	12292	.0012	A	.34	.19	.15	.12	.11
926-6708	15292	.0015	A	.34	.19	.15	.12	.11
926-6711	18292	.0018	B	.34	.19	.15	.12	.11
926-6713	22292	.0022	B	.34	.20	.15	.12	.11
926-6716	33292	.0033	B	.34	.20	.15	.12	.11
926-6718	39292	.0039	C	.34	.20	.15	.13	.12
926-6721	*47292*	.0047	C	.34	.20	.16	.13	.12
926-6724	56292	.0056	C	.34	.20	.16	.13	.12
926-6727	68292	.0068	C	.38	.21	.16	.13	.12
926-6730	82292	.0082	D	.38	.21	.17	.14	.13
926-6703	*1039Z*	.01	D	.38	.22	.17	.14	.13
926-6706	12392	.012	E	.38	.22	.17	.14	.13
926-6709	15392	.015	E	.38	.23	.18	.14	.13
926-6712	18392	.018	F	.41	.23	.18	.14	.13
926-6714	*22392*	.022	F	.41	.23	.18	.15	.14
926-6717	33392	.033	G	.45	.26	.20	.16	.15
926-6719	39392	.039	H	.47	.27	.21	.17	.16
926-6722	*47392*	.047	H	.49	.29	.22	.18	.17
926-6725	56392	.056	J	.52	.30	.24	.19	.18
926-6728	68392	.068	J	.56	.32	.25	.20	.18
926-6731	82392	.082	K	.56	.33	.26	.21	.19
926-6704	*1049Z*	.1	K	.60	.35	.27	.22	.20
926-6707	12492	.12	L	.63	.37	.28	.23	.21
926-6710	15492	.15	L	.71	.42	.32	.26	.24
926-6715	22492	.22	M	.78	.47	.36	.29	.27

TK36 Assortment. Total of 73. Same construction as TK35. In 80 WVDC. Two each, μF: .0022, .0033, .0047, 0068,, 01,. 015, .022, .047, .068, .22, .47. Three each: .1. At 200 WVDC. Two each: .0015, .0068, .068. Three each: .0022, .0033, .0047, .015, .022, .033, .047, :15, .22. Five each: .01, .1. 9-drawer cabinet.
926-1268. Shpg. wt. 4 lbs. 27.99

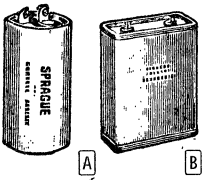
TYPE 431P METFILM "E"



A small sized, lightweight capacitor protected against moisture and well-suited for potting or encapsulating. Provides space advantage over metal-cased, molded, or wax-coated cardboard-case tubular capacitors of comparable rating. Controlled metalizing process for greater dependability and performance. Axial leads, 1¾" long. Tolerance: ±10%. Temperature Range: −55°C to +85°C. Minimum Insulation Resistance; 1000 megohm-microfarads. Power Factor: 1% at 25°C. Able to meet 2000 Hz vibration Test Method 204' MIL-STD-202, Condition B. Av. shpg. wt. 1 oz.

Stock No.	Type 431P	μF	WV DC	Size TxWxl.	EACH 1-9	10-24	25-49	50-Up
926-8002	1049R5	.1	50	9/64x7/32x5/8"	2.54	2.31	1.64	.96
926-8011	1549R5	.15	50	11/64x1/4x5/8"	2.67	2.43	1.72	1.00
926-8017	2249R5	.22	50	5/32x9/32x3/4"	2.83	2.58	1.84	1.07
926-8004	1059R5	1.0	50	15/16x13/32x1"	3.79	3.45	2.45	1.43
926-8013	1559R5	1.5	50	9/32x31/64x1"	4.35	3.96	2.81	1.64
926-8015	2059R5	2.0	50	23/64x9/32x1"	4.71	4.29	3.06	1.79
926-8019	2559R5	2.5	50	21/64x17/32x1 1/4"	5.04	4.59	3.28	1.91
926-8006	1069R5	10.0	50	9/16x49/64x1 3/4"	13.76	12.51	8.93	5.21
926-8009	1269R5	12.0	50	1/2x51/64x2 1/4"	15.87	14.43	10.30	6.01
926-8045	15392	.015	200	1/32x11/64x5/8"	1.51	1.38	.98	.57
926-8062	22392	.022	200	7/64x3/32x5/8"	1.51	1.38	.98	.57
926-8074	33392	.033	200	1/8x13/64x5/8"	1.22	1.11	.78	.46
926-8085	47392	.047	200	5/32x15/64x5/8"	1.22	1.11	.78	.46
926-8104	68392	.068	200	9/64x17/64x3/4"	1.22	1.11	.78	.46
926-8026	10492	.1	200	11/64x19/64x3/4"	1.22	1.11	.78	.46
926-8050	15492	.15	200	13/64x21/64x3/4"	1.28	1.17	.82	.48
926-8062	22492	.22	200	15/64x13/32x3/4"	1.38	1.26	.90	.53
926-8078	33492	.33	200	7/32x25/64x1"	1.58	1.44	1.02	.60
926-8088	47492	.47	200	7/32x25/64x1 1/4"	1.74	1.59	1.14	.66
926-8108	68492	.68	200	21/64x33/64x1"	2.04	1.86	1.33	.78
926-8031	10592	1.0	200	5/16x33/64x1 1/4"	2.17	1.98	1.41	.82
926-8052	15592	1.5	200	11/32x35/64x1 1/2"	2.73	2.49	1.77	1.03
926-8055	*20592*	2.0	200	23/64x9/16x1 3/4"	3.13	2.85	2.02	1.18
926-8068	25592	2.5	200	29/64x21/32x1 1/2"	3.39	3.09	2.20	1.29
926-8071	30592	3.0	200	29/64x21/32x1 3/4"	3.66	3.33	2.38	1.39
926-8082	40592	4.0	200	17/32x47/64x1 3/4"	4.15	3.78	2.70	1.58
926-8092	50592	5.0	200	29/64x3/4x2 1/4"	4.71	4.29	3.06	1.79
926-8095	60592	6.0	200	15/32x49/64x2 1/2"	5.77	5.25	3.75	2.19
926-8112	70592	7.0	200	47/64x15/16x1 3/4"	6.99	6.36	4.54	2.65
926-8036	*10692*	10.0	200	45/64x1x2 1/4"	8.44	7.68	5.48	3.20
926-8038	12692	12.0	200	23/32x11/64x2 1/2"	9.37	8.52	6.09	3.55
926-8042	15296	.0015	600	3/32x11/64x5/8"	2.01	1.83	1.31	.77
926-8058	22296	.0022	600	7/64x3/16x5/8"	2.01	1.83	1.31	.77
926-8073	33296	.0033	600	9/64x7/32x5/8"	2.01	1.83	1.31	.77
926-8084	47296	.0047	600	1/8x1/4x1/8"	2.01	1.83	1.31	.77
926-8102	68296	.0068	600	9/64x17/64x3/4"	2.07	1.89	1.35	.79
926-8024	10396	.01	600	11/64x19/64x3/4"	1.81	1.65	1.17	.69
926-8047	15396	.015	600	3/16x23/64x3/4"	2.01	1.83	1.29	.76
926-8063	22396	.022	600	15/64x13/32x3/4"	1.98	1.80	1.29	.76
926-8076	33396	.033	600	13/64x3/8x1"	2.01	1.83	1.29	.76
926-8086	47396	.047	600	13/64x3/8x1 1/4"	2.04	1.86	1.33	.78
926-8106	68396	.068	600	19/64x1/2x1"	2.04	1.86	1.33	.78
926-8028	10496	.1	600	3/8x37/64x1"	2.11	1.92	1.37	.80
926-8051	15496	.15	600	3/8x37/64x1 1/4"	2.31	2.10	1.49	.87
926-8065	22496	.22	600	11/32x35/64x1 3/4"	2.60	2.37	1.68	.98
926-8079	33496	.33	600	7/16x41/64x1 3/4"	2.77	2.52	1.80	1.05
926-8090	47496	.47	600	35/64x3/4x1 3/4"	3.73	2.85	2.03	1.19
926-8109	68496	.68	600	15/32x49/64x2 1/2"	4.22	3.84	2.73	1.60
926-8033	10596	1.0	600	3/4x11/64x2"	4.85	4.41	3.14	1.83
926-8053	15596	1.5	600	3/4x13/64x2 1/2"	6.43	5.85	4.18	2.44

ENERGY-STORAGE CAPACITORS FOR PHOTOFLASH OR LASERS



A Type FF-1 525-μF Capacitor. Highly stable film formation ensures long life. Weighs only 11 oz. Working voltage, 450 VDC. Nominal rating, 53 watt-seconds. Shpg. wt. ¾ lb.
926-0701 ..... 13.50

B Type PQ Capacitors. Hermetically sealed, oil-impregnated, and oil-filled. Have high insulation resistance.

Stock No.	Type PQ-	μF	DC Peak Volts	Watt/Sec.	Size TxWxH"	Wt., Lbs.	EACH
926-0880	2510	10	2500	31	2 1/4x3 3/4x4 1/2"	1 3/4	20.40
926-0885	2515	15	2500	47	3 3/16x3 3/4x4 3/4"	2 1/2	28.80
926-0889	2525	25	2500	78	4 9/16x3 3/4x5 1/8"	4 1/4	37.20
926-0899	2535	35	2500	109	4 9/16x3 3/4x7"	6	44.70
926-0855	315	15	3000	67	3 3/16x3 3/4x4 3/4"	3	30.60
926-0865	425	25	4000	200	4 9/16x3 3/4x9 5/8"	7 1/4	55.50

Capacitors: Ceramic, 205-9, 211—Electrolytic, 188-195—Mica, 210, 211—Tant., 181-8—Var., 212-215

Paper Capacitors, Assortments and Indicator

SPRAGUE
THE MARK OF RELIABILITY

ORANGE DROP PRINTED CIRCUIT CAPACITORS

Type 225P. Filmite 'E' orange drop capacitors. Designed with the minimum thickness for limited space on printed wiring boards. Contains polyester film and thin gauge foil. Covered in epoxy to prevent melting. Tolerance, ±10%. Temperature range, −40°C to +85°C. Wt. 2 oz.

Type 220P. Orange drop dual-dielectric capacitors with polyester film and special capacitor tissue. Double dipped in epoxy resin for a rock-hard case. Radial leads are crimped for printed circuit board spacing. Tolerance ±10%. Temperature range, −40°C to +85°C. Wt. 2 oz.

TYPE 225P RECTANGULAR

Size, height by thickness. 45/64" long, except *3/4", †13/16", 13/16".

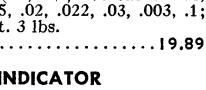
Stock No.	Mfr's Type 225P	µF	WV DC	Size	EACH 1-24	25-49	50-99	100-249	250-Up
926-6913	*1549R75*	.15*	75	5/8x25/64"	.30	.16	.13	.10	.09
926-6914	*2249R75*	.22*	75	43/64x27/64"	.37	.22	.17	.14	.12
926-6915	*3349R75*	.33*	75	27/32x31/64"	.67	.40	.31	.25	.20
926-6916	*4749R75*	.47*	75	27/32x19/32"	.78	.47	.37	.29	.24
926-6917	6849R75	.68†	75	29/32x19/32"	.86	.51	.40	.32	.26
926-6912	1059R75	1.0†	75	63/64x47/64"	.86	.51	.40	.32	.26
926-6918	*10291*	.001	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6928	15291	.0015	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6938	*22291*	.0022	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6954	*33291*	.0033	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6963	*47291*	.0047	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6974	68291	.0068	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6921	*10391*	.01	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6931	*15391*	.015	100	5/16x13/64"	.18	.11	.09	.07	.06
926-6936	18391	.018	100	5/16x13/64"	.18	.11	.09	.07	.06
926-6942	*22391*	.022	100	5/16x13/64"	.18	.11	.09	.07	.06
926-6951	27391	.027	100	21/64x15/64"	.18	.11	.09	.07	.06
926-6957	*33391*	.033	100	21/64x15/64"	.18	.11	.09	.07	.06
926-6962	39391	.039	100	11/32x1/4"	.22	.12	.09	.07	.06
926-6966	*47391*	.047	100	11/32x1/4"	.22	.12	.10	.08	.06
926-6972	56391	.056	100	3/8x9/32"	.22	.13	.10	.08	.07
926-6978	*68391*	.068	100	3/8x9/32"	.22	.13	.10	.08	.07
926-6987	82391	.082	100	17/32x21/64"	.22	.13	.11	.09	.07
926-6924	*10491*	.1	100	17/32x21/64"	.22	.14	.11	.09	.07
926-6973	56491	.56†	100	57/64x9/16"	.67	.40	.31	.25	.21
926-6983	68491	.68†	100	29/32x19/32"	.67	.40	.31	.25	.21
926-6927	*10591*	1.0†	100	63/64x47/64"	.86	.51	.40	.32	.26
926-6919	10292	.001‡	200	9/16x15/64"	.18	.10	.08	.06	.05
926-6929	15292	.0015‡	200	9/16x15/64"	.18	.10	.08	.06	.05
926-6939	22292	.0022‡	200	9/16x15/64"	.18	.10	.08	.06	.05
926-6955	33292	.0033‡	200	9/16x15/64"	.18	.10	.08	.06	.05
926-6964	47292	.0047‡	200	9/16x15/64"	.18	.10	.08	.06	.05
926-6975	68292	.0068‡	200	19/32x1/4"	.18	.10	.08	.06	.05
926-6922	10392	.01‡	200	19/32x1/4"	.18	.10	.08	.06	.05
926-6932	15392	.015‡	200	19/32x1/4"	.18	.11	.08	.07	.06
926-6943	22392	.0022‡	200	19/32x1/4"	.18	.11	.09	.07	.06
926-6958	33392	.033‡	200	5/8x9/32"	.18	.11	.09	.07	.06
926-6967	47392	.047‡	200	5/8x9/32"	.22	.12	.09	.07	.06
926-6979	68392	.068‡	200	41/64x5/16"	.22	.13	.10	.08	.06
926-6925	10492	.1‡	200	23/32x3/8"	.26	.14	.11	.09	.07
926-6934	15492	.15‡	200	3/4x27/64"	.30	.18	.14	.11	.09
926-6946	22492	.22‡	200	25/32x15/32"	.37	.21	.16	.13	.11
926-6960	33492	.33†	200	23/32x27/64"	.41	.24	.19	.15	.12
926-6970	47492	.47†	200	27/32x1/2"	.48	.28	.22	.17	.14
926-6984	68492	.68†	200	19/64x27/32"	.75	.45	.35	.28	.23
926-6920	10294	.001‡	400	9/16x15/64"	.18	.10	.08	.06	.05
926-6930	15294	.0015‡	400	9/16x15/64"	.18	.10	.08	.06	.05
926-6940	22294	.0022‡	400	9/16x15/64"	.18	.10	.08	.06	.05
926-6956	33294	.0033‡	400	9/16x15/64"	.18	.10	.08	.06	.05
926-6965	47294	.0047‡	400	9/16x15/64"	.18	.10	.08	.06	.05
926-6976	68294	.0068‡	400	19/32x1/4"	.18	.10	.08	.06	.05
926-6923	10394	.01‡	400	19/32x1/4"	.18	.10	.08	.07	.05
926-6933	15394	.015‡	400	19/32x9/32"	.18	.11	.09	.07	.06
926-6944	22394	.022‡	400	19/32x5/16"	.18	.11	.09	.07	.06
926-6959	33394	.033‡	400	21/32x11/32"	.22	.12	.09	.07	.06
926-6968	47394	.047‡	400	21/32x27/64"	.22	.13	.10	.08	.07
926-6980	68394	.068‡	400	13/16x31/64"	.26	.14	.11	.09	.07
926-6926	10494	.1‡	400	27/32x17/32"	.30	.17	.13	.11	.09
926-6935	15494	.15†	400	13/16x31/64"	.41	.23	.18	.14	.12
926-6947	22494	.22†	400	57/64x9/16"	.52	.30	.23	.18	.15
926-6961	33494	.33†	400	1x47/64"	.86	.50	.39	.31	.25
926-6971	47494	.47†	400	19/64x27/32"	1.08	.63	.49	.40	.35

TK28 Assortment. Total of 80. Dipped tubular polyester capacitors. Leakproof, and heat humidity resistant. All 600 WVDC. At following µF values. Five each: .001, .002, .0022, .0033, .0047, .005, .015, .02, .022, .033, .047, .05, .1. Ten each: .01. 6-drawer cabinet.
926-1260. Shpg. wt. 2½ lbs.....13.65

TK29 Assortment. Total of 105. Same as TK28 but has these µF values. Two: .0015; three each: .003, .068, .22, .25; five each: .001, .002, .0022, .0033, .0047, .005, .0068, .015, .02, .022, .03, .003, .1; eight: .047, .05; ten: .01. 9-drawer cabinet. 3 lbs.
926-1261.....19.89

TYPE C-751 CAPACITOR INDICATOR

Handy thumbwheel indicator reads color codes directly in capacitance, tolerance and volts. Shpg. wt. 2 oz.
926-0140.....25



TYPE 220P TUBULAR

Size, height by thickness. 45/64" long.

Stock No.	Mfr's Type 220P	µF	WV DC	Size	EACH 1-24	25-49	50-99	100-249	250-Up
926-6865	2PS-S20	.02	200	3/8x7/8"	.22	.12	.09	.08	.06
926-6866	2PS-S47	.047	200	29/64x7/8"	.22	.13	.10	.08	.07
926-6867	*2PS-S50*	.05	200	15/32x7/8"	.22	.14	.11	.09	.07
926-6859	*2PS-P10*	.1	200	31/64x13/16"	.26	.15	.12	.10	.08
926-6860	2PS-P20	.2	200	19/32x15/16"	.37	.21	.16	.13	.11
926-6861	2PS-P25	.25	200	5/8x15/16"	.37	.22	.17	.14	.11
926-6862	2PS-P33	.33	200	5/8x15/8"	.48	.29	.22	.18	.15
926-6863	*2PS-P47*	.47	200	45/64x15/8"	.56	.34	.26	.21	.17
926-6864	2PS-P50	.5	200	23/32x15/8"	.60	.34	.27	.22	.18
926-6873	4PS-S10	.01	400	13/32x11/16"	.18	.11	.08	.07	.06
926-6874	4PS-S20	.02	400	13/32x7/8"	.22	.12	.10	.08	.06
926-6875	4PS-S47	.047	400	29/64x13/16"	.26	.15	.12	.10	.08
926-6876	4PS-S50	.05	400	29/64x13/16"	.26	.15	.12	.10	.08
926-6877	4PS-S68	.068	400	33/64x13/16"	.26	.16	.12	.10	.08
926-6869	*4PS-P10*	.1	400	37/64x13/16"	.30	.18	.14	.11	.09
926-6870	4PS-P20	.2	400	19/32x15/8"	.45	.26	.21	.17	.14
926-6871	4PS-P22	.22	400	39/64x15/8"	.45	.26	.21	.17	.14
926-6872	4PS-P25	.25	400	41/64x15/8"	.45	.27	.21	.17	.14
926-6879	*6PS-D10*	.001	600	21/64x11/16"	.18	.11	.08	.07	.06
926-6880	6PS-D15	.0015	600	21/64x11/16"	.18	.11	.08	.07	.06
926-6881	*6PS-D20*	.002	600	21/64x11/16"	.18	.11	.09	.07	.06
926-6882	6PS-D25	.0025	600	21/64x11/16"	.18	.11	.09	.07	.06
926-6883	6PS-D33	.0033	600	23/64x11/16"	.18	.11	.09	.07	.06
926-6884	6PS-D39	.0039	600	3/8x11/16"	.18	.11	.09	.07	.06
926-6885	6PS-D47	.0047	600	25/64x11/16"	.18	.11	.09	.07	.06
926-6886	*6PS-D50*	.005	600	25/64x11/16"	.18	.11	.09	.07	.06
926-6887	6PS-D56	.0056	600	25/64x11/16"	.18	.11	.09	.07	.06
926-6888	6PS-D68	.0068	600	13/32x11/16"	.18	.11	.09	.07	.06
926-6889	6PS-D82	.0082	600	3/8x7/8"	.18	.11	.09	.07	.06
926-6895	*6PS-S10*	.01	600	25/64x7/8"	.18	.12	.09	.07	.06
926-6896	6PS-S15	.015	600	27/64x7/8"	.22	.12	.09	.07	.06
926-6897	*6PS-S20*	.02	600	31/64x7/8"	.22	.13	.10	.08	.07
926-6898	6PS-S22	.022	600	31/64x7/8"	.22	.13	.10	.08	.07
926-6899	6PS-S25	.025	600	17/32x7/8"	.22	.14	.11	.09	.07
926-6900	6PS-S33	.033	600	15/32x13/16"	.22	.14	.11	.09	.07
926-6901	6PS-S39	.039	600	31/64x13/16"	.26	.15	.11	.09	.08
926-6902	6PS-S47	.047	600	17/32x13/16"	.26	.15	.12	.10	.08
926-6903	*6PS-S50*	.05	600	17/32x13/16"	.26	.16	.12	.10	.08
926-6904	6PS-S56	.056	600	35/64x13/16"	.26	.16	.13	.10	.08
926-6905	6PS-S68	.068	600	37/64x13/16"	.33	.19	.15	.12	.10
926-6906	6PS-S82	.082	600	37/64x15/16"	.33	.19	.15	.12	.10
926-6990	*6PS-P10*	.1	600	5/8x15/16"	.33	.20	.16	.13	.10
926-6991	6PS-P15	.15	600	43/64x15/8"	.45	.27	.21	.17	.14
926-6992	6PS-P20	.2	600	3/4x15/8"	.56	.34	.26	.21	.17
926-6993	6PS-P22	.22	600	25/32x15/8"	.56	.34	.26	.21	.17
926-6994	*6PS-P25*	.25	600	13/16x15/8"	.60	.34	.27	.22	.18
926-6907	10PS-D10	.001	1000	21/64x11/16"	.18	.11	.08	.07	.06
926-6908	10PS-D50	.005	1000	13/32x7/8"	.22	.12	.10	.08	.06

118P HERMETICALLY SEALED "DIFILM" CAPACITORS

Metallized paper and polyester film dielectric. Meet MIL-C-25 specs. Ambient temperature to 125°C without derating. Tolerance ±10%. 3 oz.

Stock No.	Type 118P	µF	WV DC	Size	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
926-6060	10392S2	.01	200	15/64x3/4"	3.16	2.37	1.78	1.19	.95	.87
926-6065	10492S2	.1	200	5/16x7/8"	2.87	2.16	1.62	1.08	.86	.79
926-6080	22492S2	.22	200	13/32x7/8"	2.92	2.19	1.65	1.10	.88	.81
926-6090	47492S2	.47	200	1/2x1 1/8"	3.36	2.52	1.89	1.26	1.01	.93
926-6096	56492S2	.56	200	1/2x1 1/8"	3.40	2.55	1.92	1.28	1.02	.94
926-6069	10592S2	1.0	200	9/16x1 1/8"	3.64	2.73	2.05	1.37	1.10	1.01
926-6077	20592S2	2.0	200	43/64x1 5/8"	6.04	4.53	3.40	2.27	1.81	1.67
926-6085	30592S2	3.0	200	43/64x1 7/8"	6.32	4.74	3.56	2.37	1.90	1.74
926-6089	40592S2	4.0	200	3/4x1 7/8"	6.76	5.07	3.81	2.54	2.03	1.86
926-6094	50592S2	5.0	200	1x1 7/8"	7.36	5.52	4.14	2.76	2.21	2.03
926-6102	60592S2	6.0	200	1x1 7/8"	8.44	6.33	4.75	3.17	2.54	2.33
926-6105	80592S2	8.0	200	1x1 7/8"	8.64	6.48	4.86	3.24	2.60	2.38
926-6072	10692S2	10.0	200	1x2 3/8"	9.20	6.90	5.18	3.45	2.76	2.53
926-6070	10594S2	1.0	400	3/4x1 7/8"	5.04	3.78	2.84	1.89	1.52	1.39
926-6078	20594S2	2.0	400	1x1 7/8"	6.96	5.22	3.20	2.61	2.09	1.92
926-6086	30594S2	3.0	400	1x2 5/8"	8.20	6.15	4.62	3.08	2.46	2.26
926-6061	10396S2	.01	600	5/16x7/8"	2.80	2.10	1.58	1.05	.84	.77
926-6066	10496S2	.1	600	1/2x1 1/8"	3.30	2.48	1.86	1.24	.99	.91
926-6081	22496S2	.22	600	9/16x1 3/8"	3.62	2.71	2.04	1.36	1.09	1.00
926-6091	47496S2	.47	600	43/64x1 5/8"	4.33	3.25	2.44	1.63	1.30	1.19
926-6071	10596S2	1.0	600	1x1 7/8"	6.12	4.59	3.45	2.30	1.84	1.69
926-6079	*20596S2*	2.0	600	1x2 1/8"	7.80	5.85	4.39	2.93	2.34	2.15

Sprague and CDE Capacitors

SPRAGUE 160P "BLACK BEAUTY" POLYESTER FILM AND PAPER TUBULAR CAPACITORS

SPRAGUE

High-quality molded tubular capacitors built for long life under high heat and humidity operating conditions. Dual polyester-paper dielectric combines the best qualities of both polyester film and paper capacitors. Solid impregnated construction, will not leak or drip. 200 to 1600-volt types operate to 105° C without derating; 6000-volt up to 85° C. 6000-volt types oil impregnated. Capacitance tolerance ±10% from .001 µF. Av. shpg. wt. 2 oz.

TYPE 160P TUBULAR

Stock No.	Mfr's Type	µF	WV DC	Size Dia. x L.	EACH 1-24	25-49	50-99	100-Up
926-6527	*2TM-S10*	.01	200	5/16x1"	.26	.14	.11	.09
926-6528	2TM-S20	.02	200	3/8x1 1/4"	.30	.17	.13	.10
926-6529	2TM-S47	.047	200	3/8x1 1/4"	.30	.17	.13	.10
926-6530	*2TM-S50*	.05	200	3/8x1 1/4"	.30	.17	.13	.10
926-6521	*2TM-P10*	.1	200	7/16x1 1/4"	.30	.18	.14	.12
926-6522	2TM-P15	.15	200	1/2x1 1/2"	.37	.22	.18	.14
926-6523	2TM-P22	.22	200	5/8x1 7/8"	.60	.36	.28	.23
926-6524	2TM-P25	.25	200	5/8x1 7/8"	.60	.36	.28	.23
926-6525	2TM-P47	.47	200	5/8x1 7/8"	.60	.36	.28	.23
926-6526	2TM-P50	.5	200	5/8x1 7/8"	.60	.36	.28	.23
926-6520	*2TM-M1*	1.0	200	3/4x2 1/4"	1.05	.62	.48	.39
926-6531	4TM-D10	.001	400	5/16x1"	.26	.15	.12	.09
926-6532	4TM-D50	.005	400	5/16x1"	.26	.14	.11	.09
926-6541	*4TM-S10*	.01	400	5/16x1"	.26	.14	.11	.09
926-6542	4TM-S15	.015	400	3/8x1 1/4"	.30	.17	.13	.10
926-6543	4TM-S20	.02	400	3/8x1 1/4"	.30	.17	.13	.10
926-6544	4TM-S25	.025	400	3/8x1 1/4"	.30	.17	.13	.10
926-6545	4TM-S47	.047	400	7/16x1 1/4"	.30	.18	.14	.12
926-6546	*4TM-S50*	.05	400	7/16x1 1/4"	.37	.22	.18	.14
926-6534	*4TM-P10*	.1	400	1/2x1 1/2"	.37	.22	.18	.14
926-6535	4TM-P15	.15	400	5/8x1 7/8"	.60	.36	.28	.23
926-6536	4TM-P20	.2	400	5/8x1 7/8"	.60	.36	.28	.23
926-6537	4TM-P22	.22	400	5/8x1 7/8"	.60	.36	.28	.23
926-6538	4TM-P25	.25	400	3/4x2 1/4"	1.05	.62	.48	.39
926-6539	4TM-P47	.47	400	3/4x2 1/4"	1.05	.62	.48	.39
926-6540	4TM-P50	.5	400	3/4x2 1/4"	1.05	.62	.48	.39
926-6533	4TM-M1	1.0	400	1x2 1/2"	1.35	.81	.63	.50
926-6568	6TM-T10	.0001	600	5/16x1"	.56	.34	.27	.21
926-6569	6TM-T25	.00025	600	5/16x1"	.56	.34	.27	.21
926-6570	6TM-T50	.0005	600	5/16x1"	.56	.34	.27	.21
926-6547	*6TM-D10*	.001	600	5/16x1"	.26	.15	.12	.09
926-6548	6TM-D15	.0015	600	5/16x1"	.26	.15	.12	.09
926-6549	*6TM-D20*	.002	600	5/16x1"	.26	.15	.12	.09
926-6550	6TM-D25	.0025	600	5/16x1"	.26	.15	.12	.09
926-6551	6TM-D30	.003	600	5/16x1"	.26	.15	.12	.09
926-6552	6TM-D40	.004	600	3/8x1 1/4"	.30	.17	.13	.10
926-6553	6TM-D47	.0047	600	3/8x1 1/4"	.30	.17	.13	.10
926-6554	*6TM-D50*	.005	600	3/8x1 1/4"	.30	.17	.13	.10
926-6555	6TM-D68	.0068	600	3/8x1 1/4"	.30	.17	.13	.10
926-6557	*6TM-S10*	.01	600	3/8x1 1/4"	.30	.17	.13	.10
926-6558	6TM-S15	.015	600	3/8x1 1/4"	.30	.17	.13	.10
926-6559	6TM-S20	.02	600	7/16x1 1/4"	.30	.18	.14	.12
926-6560	6TM-S22	.022	600	7/16x1 1/4"	.30	.18	.14	.12
926-6561	6TM-S25	.025	600	7/16x1 1/4"	.30	.18	.14	.12
926-6562	6TM-S30	.03	600	7/16x1 1/4"	.30	.18	.14	.12
926-6563	6TM-S40	.04	600	1/2x1 1/2"	.37	.22	.18	.14
926-6564	6TM-S47	.047	600	1/2x1 1/2"	.37	.22	.18	.14
926-6565	*6TM-S50*	.05	600	1/2x1 1/2"	.37	.22	.18	.14
926-6566	6TM-S60	.06	600	1/2x1 1/2"	.37	.22	.18	.14
926-6567	6TM-S68	.068	600	1/2x1 1/2"	.37	.22	.18	.14
926-6503	6TM-P10	.1	600	5/8x1 7/8"	.60	.36	.28	.23
926-6504	6TM-P15	.15	600	5/8x1 7/8"	.60	.36	.28	.23
926-6505	6TM-P20	.2	600	3/4x2 1/4"	1.05	.62	.48	.39
926-6506	6TM-P22	.22	600	3/4x2 1/4"	1.05	.62	.48	.39
926-6507	6TM-P25	.25	600	3/4x2 1/4"	1.05	.62	.48	.39
926-6508	6TM-P50	.5	600	1x2 1/2"	1.35	.81	.63	.50
926-6556	*6TM-M1*	1.0	600	1x2 1/2"	1.95	1.17	.91	.73
926-6576	10TM-T50	.0005	1000	5/16x1"	.56	.34	.27	.21
926-6571	10TM-D10	.001	1000	5/16x1"	.26	.15	.12	.09
926-6572	10TM-D50	.005	1000	3/8x1 1/4"	.30	.17	.13	.10
926-6574	10TM-S10	.01	1000	7/16x1 1/4"	.30	.18	.14	.12
926-6575	10TM-S50	.05	1000	5/8x1 7/8"	.60	.36	.28	.23
926-6573	*10TM-P10*	.1	1000	3/4x2 1/4"	1.05	.62	.48	.39
926-6510	MB-D1	.001	1600	3/8x1 1/4"	.33	.18	.14	.12
926-6512	MB-D5	.005	1600	1/2x1 1/2"	.41	.25	.19	.15
926-6514	MB-S1	.01	1600	5/8x1 7/8"	.67	.39	.30	.24
926-6515	MB-S2	.02	1600	5/8x1 7/8"	.67	.39	.30	.24
926-6516	MB-S3	.03	1600	3/4x2 1/4"	1.12	.66	.51	.41
926-6517	MB-S4	.04	1600	3/4x2 1/4"	1.12	.66	.51	.41
926-6518	MB-S5	.05	1600	3/4x2 1/8"	1.42	.86	.67	.54

Contact the Allied facility nearest you for information on any Sprague capacitor types not listed in this catalog.

CDE TYPE WCR FILM WRAP CAPACITORS

WCR 1022 .0022 MFD 100 VDC

These polycarbonate capacitors offer characteristics similar to polystyrene types at considerably lower cost. High operating temperature range from −55°C to +85°C without voltage derating and up to 125°C with 50% derating—overcoming one of the limitations of polystyrene units. Tolerance is ±10%. Measured at 1000 Hz, the average capacitance charge is within −1%, +3% of the 25°C value throughout the range from −55°C to +125°C. Av. shpg. wt. 2 oz.

50 WVDC

Stock No.	Type WCR-	Cap. µF	Size Dia. x L.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5520	05S1	.01	11/64x5/8"	.63	.39	.30	.26	.22	.18
755-5526	05S22	.022	7/32x5/8"	.67	.40	.31	.27	.22	.18
755-5529	05S33	.033	1/4x5/8"	.71	.42	.33	.29	.24	.19
755-5532	05S47	.047	9/32x5/8"	.75	.45	.35	.30	.25	.20
755-5502	05P1	.1	21/64x3/4"	.86	.52	.41	.35	.29	.24
755-5508	05P22	.22	7/16x3/8"	1.08	.64	.50	.43	.36	.29
755-5511	05P33	.33	15/32x1"	1.27	.77	.60	.52	.43	.35
755-5514	05P47	.47	1/2x1 1/8"	1.50	.89	.69	.60	.50	.40
755-5537	*05W1*	1.0	5/8x1 1/2"	2.32	1.40	1.09	.94	.78	.63
755-5545	05W2	2.0	25/32x1 3/4"	4.12	2.48	1.93	1.65	1.38	1.10

100 WVDC

Stock No.	Type WCR-	Cap. µF	Size Dia. x L.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5556	1S1	.01	15/64x3/4"	.60	.35	.27	.24	.20	.16
755-5558	1S22	.022	19/64x3/4"	.60	.36	.28	.24	.20	.16
755-5550	1P1	.1	29/64x1"	.78	.47	.37	.32	.27	.21
755-5552	1P22	.22	19/32x1 3/8"	.97	.59	.46	.39	.33	.26
755-5553	1P33	.33	41/64x1 3/8"	1.16	.70	.54	.47	.39	.31
755-5554	1P47	.47	47/64x1 5/8"	1.35	.81	.63	.54	.45	.36
755-5563	1W1	1.0	59/64x1 7/8"	2.13	1.27	.99	.85	.71	.57

200 WVDC

Stock No.	Type WCR-	Cap. µF	Size Dia. x L.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5566	2D1	.001	1/5x15/16"	.60	.35	.27	.24	.20	.16
755-5567	2D22	.0022	7/32x15/16"	.60	.35	.27	.24	.20	.16
755-5569	2D47	.0047	19/64x15/16"	.60	.35	.27	.24	.20	.16
755-5580	2S1	.01	19/64x15/16"	.60	.35	.27	.24	.20	.16
755-5582	2S22	.022	25/64x15/16"	.71	.42	.32	.28	.24	.19
755-5583	2S33	.033	15/32x15/16"	.78	.46	.36	.31	.26	.21
755-5584	2S47	.047	13/32x15/16"	.86	.51	.39	.34	.29	.23
755-5572	2P1	.1	19/32x1 5/16"	1.05	.63	.49	.42	.35	.28
755-5574	2P22	.22	43/64x1 7/8"	1.38	.82	.64	.55	.46	.37
755-5575	2P33	.33	13/16x1 7/8"	1.61	.96	.74	.64	.54	.43
755-5576	2P47	.47	61/64x1 7/8"	1.83	1.10	.86	.74	.62	.49

CDE MCR METALLIZED POLYCARBONATE CAPACITORS

MCR 2W1 1.0 MFD 200 VDC

Operating temp. −55°C to +125° C. Capacitance charge is −2.5%, +2.0% (25°C measurement as reference). Tolerance, ±20%. Drift, .5% max., while dissipation factor is less than .75% at +25°C. May be operated at temperatures up to 125°C with 50% voltage derating. Lead length, 1½" minimum. Film wrap, epoxy end seal provides superior moisture resistance. Shpg. wt. 2 oz.

INSULATION RESISTANCE FACTOR

Temperature (°C)	Megs x µF	Need Not Exceed
+25	50,000	200,000 Meg
+85	3000	30,000 Meg
+125	200	2000 Meg

100 WVDC

Stock No.	Type MCR-	Cap. µF	Size Dia. x L.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2234	1P22	.22	19/64x11/16"	1.50	.90	.70	.60	.50	.40
755-2236	1P33	.33	11/32x11/16"	1.65	.99	.77	.66	.55	.44
755-2238	1P47	.47	11/32x7/8"	1.91	1.15	.89	.77	.64	.51
755-2242	*1W1*	1.0	7/16x1"	2.51	1.51	1.17	1.01	.84	.68
755-2244	1W2	2.0	9/16x1 1/4"	3.52	2.12	1.65	1.41	1.18	.94
755-2246	1W3	3.0	5/8x1 3/8"	4.35	2.61	2.03	1.74	1.45	1.16
755-2248	1W4	4.0	43/64x1 1/2"	5.36	3.22	2.50	2.15	1.79	1.43
755-2250	1W5	5.0	3/4x1 1/2"	6.33	3.80	2.96	2.54	2.11	1.69

200 WVDC

Stock No.	Type MCR-	Cap. µF	Size Dia. x L.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2260	2S1	.01	5/32x9/16"	.90	.54	.42	.36	.30	.24
755-2261	2S15	.015	11/64x9/16"	.90	.54	.42	.36	.30	.24
755-2262	2S22	.022	3/16x9/16"	.90	.54	.42	.36	.30	.24
755-2264	2S47	.047	1/4x9/16"	1.01	.61	.47	.41	.34	.27
755-2265	2S68	.068	7/32x11/16"	1.08	.65	.51	.44	.37	.29
755-2253	*2P1*	.1	9/32x11/16"	1.12	.68	.53	.45	.38	.30
755-2254	2P15	.15	5/16x11/16"	1.23	.74	.58	.50	.42	.33
755-2256	2P33	.33	7/16x11/16"	1.50	.90	.70	.60	.50	.40
755-2257	2P47	.47	5/8x1"	1.72	1.04	.81	.69	.58	.46
755-2258	2P68	.68	7/16x1"	1.95	1.17	.91	.78	.65	.52
755-2268	2W1P5	1.5	9/16x1 1/4"	2.81	1.69	1.31	1.13	.94	.75
755-2269	2W2	2.0	21/32x1 1/4"	3.22	1.94	1.51	1.29	1.08	.86
755-2270	2W3	3.0	11/16x1 1/2"	3.97	2.39	1.86	1.59	1.33	1.06
755-2271	2W4	4.0	3/4x1 3/4"	4.87	2.93	2.28	1.95	1.63	1.30
755-2272	2W5	5.0	13/16x1 3/4"	5.77	3.47	2.70	2.31	1.93	1.54

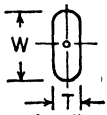
Capacitors: Ceramic, 205-9, 211—Electrolytic, 188-195—Mica, 210, 211—Tant., 181-8—Var., 212-215

Cornell-Dubilier Capacitors

MYLAR, POLY CAPACITORS

CDE

TYPE MFP FLAT-OVAL "MYLAR" CAPACITORS



Solve tight space problems. Similar type WMF tubular on facing page, but with flat pressed section for oval configuration. Mylar dielectric with tough yellow outer film wrap, epoxy end seals bonded to wrapper and leads. Moisture and humidity resistant. Copper-weld leads, 1½" long for easy connections to circuitry. Temperature range, −55°C to +85°C at full rated voltage. Derate 10% for 100°C, 50% for 125° C operation. All units listed have tolerance of ±10%. Av. shpg. wt. 2 oz.

50 WVDC

Stock No.	Type MFP-	µF	Size, In. LxWxT	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2286	05S1	.01	7/64x15/64x1/2	.36	.27	.21	.18	.15	.12
755-2291	05S22	.022	9/64x17/64x1/2	.39	.29	.23	.20	.17	.13
755-2295	05S47	.047	5/32x9/32x5/8	.39	.29	.23	.20	.17	.13
755-2275	05P1	.1	11/64x19/64x13/16	.45	.34	.26	.23	.19	.15
755-2279	05P22	.22	17/64x25/64x13/16	.51	.38	.30	.26	.22	.17
755-2281	05P33	.33	19/64x31/64x13/16	.57	.43	.33	.29	.24	.19
755-2276	05P5	.50	9/32x15/32x1 1/16	.63	.47	.37	.32	.27	.21
755-2302	05W1	1.0	23/64x9/16x1 3/8	.96	.72	.56	.48	.40	.32
755-2305	05W2	2.0	13/32x45/64x1 5/8	1.53	1.15	.89	.77	.64	.51
755-2308	05W5	5.0	19/32x63/64x1 7/8	3.09	2.32	1.80	1.55	1.29	1.03

100 WVDC

Stock No.	Type MFP-	µF	Size, In. LxWxT	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2326	1S33	.033	5/8x5/16x3/16	.36	.24	.18	.16	.13	.11
755-2328	1S47	.047	3/4x5/16x3/16	.36	.24	.18	.16	.13	.11
755-2310	1P1	.1	7/8x11/32x7/32	.36	.27	.21	.19	.16	.13
755-2314	1P22	.22	1x15/32x9/32	.48	.32	.25	.22	.18	.15
755-2316	1P33	.33	1 1/8x1/2x5/16	.51	.35	.27	.24	.20	.16
755-2318	1P47	.47	1 1/4x17/32x3/8	.57	.37	.29	.25	.21	.17
755-2332	1W1	1.0	1 1/2x23/32x1/2	.84	.57	.44	.38	.32	.26
755-2338	1W2	2.0	1 3/4x1 1/16x27/32	1.37	.92	.72	.62	.52	.41

200 WVDC

Stock No.	Type MFP-	µF	Size, In. LxWxT	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2358	2S22	.022	5/8x11/32x7/32	.48	.21	.16	.14	.12	.10
755-2362	2S47	.047	3/4x3/8x1/4	.36	.24	.18	.16	.13	.11
755-2341	2P1	.1	7/8x1/2x5/16	.39	.27	.21	.19	.16	.13
755-2345	2P22	.22	1 1/8x9/16x13/32	.48	.32	.25	.22	.18	.15
755-2350	2P47	.47	1 1/4x21/32x1/2	.57	.37	.29	.25	.21	.17
755-2366	2W1	1.0	1 3/4x13/16x5/8	.84	.57	.44	.38	.32	.26
755-2372	2W2	2.0	1 7/8x1 1/16x27/32	1.38	.92	.72	.62	.52	.41

400 WVDC

Stock No.	Type MFP-	µF	Size, In. LxWxT	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2393	4S47	.047	7/8x1/2x11/32	.39	.26	.20	.18	.15	.12
755-2375	4P1	.1	1x17/32x3/8	.39	.27	.21	.19	.16	.13
755-2379	4P22	.22	1 3/8x5/8x1/2	.48	.32	.25	.22	.18	.15
755-2402	4W1P5	1.5	2 1/4x1 1/16x27/32	1.41	.95	.74	.63	.53	.42

DPMS PAPER-"MYLAR" DIELECTRIC CAPACITORS

Dual-dielectric for high reliability operation. "Fix-fil" impregnant. Crimped leads permit uniform parallel mounting. Temp. range, −55°C to 125°C. Tolerance ±10%. Av. shpg. wt., 2 oz.

200 WVDC

Stock No.	Mfr's Type DPMS	µF	Size, Inches	EACH 1-24	25-49	50-99	100-499	500-Up
755-1823	2S22	.022	.350x .855	.22	.15	.11	.10	.08
755-1826	2S47	.047	·450x .855	.26	.16	.12	.11	.09
755-1815	2P1	.1	·470x1.180	.30	.19	.15	.13	.11
755-1817	2P22	.22	·590x1.300	.45	.27	.21	.18	.15
755-1820	2P47	.47	..730x1.600	.56	.35	.27	.23	.20

400 WVDC

Stock No.	Type DPMS	µF	Size, Inches	EACH 1-24	25-49	50-99	100-499	500-Up
755-1836	4S1	.01	.390x .690	.22	.15	.11	.10	.08
755-1840	4S22	.022	.390x .855	.22	.15	.11	.10	.08
755-1841	4S33	.033	.440x .855	.26	.15	.12	.10	.08
755-1838	4S5	.05	.415x1.150	.26	.17	.13	.11	.10
755-1829	4P1	.1	.520x1.180	.33	.20	.16	.14	.12
755-1833	4P22	.22	.620x1.560	.45	.27	.21	.18	.15
755-1834	4P25	.25	.650x1.560	.52	.32	.25	.22	.18

600 WVDC

Stock No.	Type DPMS	µF	Size, Inches	EACH 1-24	25-49	50-99	100-499	500-Up
755-1845	6D1	.001	.340x .690	.22	.15	.11	.10	.08
755-1853	6D15	.0015	.340x .660	.22	.15	.11	.10	.08
755-1855	6D22	.0022	.340x .660	.22	.15	.11	.10	.08
755-1858	6D33	.0033	.370x .660	.22	.15	.11	.10	.08
755-1860	6D47	.0047	.400x .690	.22	.15	.11	.10	.08
755-1849	6D5	.005	.400x .690	.22	.15	.11	.10	.08
755-1862	6D68	.0068	.430x .690	.22	.15	.11	.10	.08
755-1872	6S1	.01	.390x .870	.22	.15	.11	.10	.08
755-1879	6S15	.015	.415x .870	.22	.15	.11	.10	.08
755-1883	6S33	.033	.430x1.150	.30	.18	.14	.12	.10
755-1885	6S47	.047	.490x1.150	.33	.20	.16	.14	.12
755-1876	6S5	.050	.490x1.150	.33	.20	.16	.14	.12
755-1865	6P1	.1	.640x1.300	.45	.26	.20	.18	.15
755-1868	6P22	.22	.750x1.560	.63	.39	.30	.26	.22
755-1869	6P25	.25	.830x1.560	.71	.42	.33	.28	.24

TYPE PKM KRAFT-PAPER "MYLAR" CAPACITORS

Extremely moisture resistant. Molded plastic cases. Note: 400 WVDC units are identical in price and size to 200 WVDC units. −55°C to +125°C. Tolerance, ±10%. Av. 3 oz.

400 WVDC

Stock No.	Type PKM-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000 Up
755-3514	4S1	.01	5/16x1"	.26	.15	.12	.11	.09	.07
755-3520	4S39	.039	3/8x1 1/4"	.30	.18	.14	.12	.10	.08
755-3515	4S5	.05	7/16x1 1/4"	.33	.20	.16	.14	.12	.09
755-3502	4P1	.1	1/2x1 1/2"	.33	.20	.16	.14	.12	.09
755-3504	4P15	.15	1/2x1 1/2"	.45	.27	.21	.18	.15	.12
755-3506	4P22	.22	5/8x1 7/8"	.45	.27	.21	.18	.15	.12
755-3507	4P25	.25	5/8x1 7/8"	.52	.32	.25	.21	.18	.14
755-3503	4P5	.5	11/16x1 15/16"	.78	.47	.37	.32	.27	.21

600 WVDC

Stock No.	Type PKM-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000 Up
755-3530	6D22	.0022	5/16x1"	.26	.15	.12	.11	.09	.07
755-3555	6S15	.015	3/8x1 1/4"	.26	.15	.12	.11	.09	.07
755-3561	6S39	.039	1/2x1 1/2"	.30	.18	.14	.12	.10	.08
755-3562	6S47	.047	1/2x1 1/2"	.30	.18	.14	.12	.10	.08
755-3553	6S5	.05	1/2x1 1/2"	.33	.20	.16	.14	.12	.09
755-3564	6S68	.068	1/2x1 1/2"	.33	.20	.16	.14	.12	.09
755-3538	6P1	.1	9/16x1 9/16"	.41	25	.19	.17	.14	.11
755-3544	6P25	.25	11/16x1 15/16"	.78	.47	.37	.32	.27	.21
755-3548	6P47	.47	1x2 1/8"	1.08	.65	.51	.44	.37	.29
755-3539	6P5	.5	1x2 1/8"	1.16	.70	.54	.47	.39	.31

1000 WVDC

Stock No.	Type PKM-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000 Up
755-3568	10D5	.005	3/8x1 1/4"	.30	.17	.13	.12	.10	.08
755-3572	10S1	.01	7/16x1 1/4"	.33	.20	.16	.14	.12	.09
755-3573	10S15	.015	7/16x1 1/4"	.37	.23	.18	.15	.13	.10
755-3574	10S22	.022	1/2x1 1/2"	.37	.23	.18	.15	.13	.10
755-3576	10S47	.047	9/16x1 9/16"	.52	.36	.28	.24	.20	.14
755-3577	10S68	.068	5/8x1 7/8"	.52	.36	.28	.24	.20	.14

1600 WVDC

Stock No.	Type PKM-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000 Up
755-3583	16D33	.0033	3/8x1 1/4"	.33	.20	.16	.14	.12	.09
755-3586	16S1	.01	1/2x1 1/2"	.60	.36	.28	.24	.20	.16
755-3591	16S47	.047	5/8x1 7/8"	.82	.50	.39	.33	.28	.22

DMF DIPPED POLYESTER FILM CAPACITORS

Flat, space saving capacitors. Moisture resistant casing, phenolic dipped and epoxy impregnated. "Fix-fil" impregnated; no leakage even at maximum operating temperature. 1½" copperweld leads. Operating temp., −55° C to 85° C. Derate voltage, 10% at 100° C, 50% at 125° C. Tol., ±10%. Av. shpg. wt., 2 oz.

100 WVDC

Stock No.	Type DMF	µF	Size, Inches LxWxT	EACH 1-24	25-49	50-99	100-499	500-Up
755-1740	1S22-10	.022	3/4x5/16x3/16	.26	.16	.13	.11	.09
755-1745	*1S47-10*	.047	3/4x11/32x7/32	.30	.17	.14	.12	.10
755-1725	*1P1-10*	.1	3/4x7/16x5/16	.33	.20	.16	.14	.12
755-1730	1P22-10	.22	3/4x3/4x3/8	.48	.29	.23	.20	.17
755-1732	1P33-10	.33	3/4x27/32x7/16	.56	.33	.26	.22	.18
755-1735	*1P47-10*	.47	1 1/8x3/4x3/8	.63	.38	.30	.26	.21
755-1748	*1W1-10*	1.0	1 1/8x15/16x9/16	.93	.57	.44	.38	.32

200 WVDC

Stock No.	Type DMF	µF	Size, Inches LxWxT	EACH 1-24	25-49	50-99	100-499	500-Up
755-1764	2S1-10	.01	3/4x5/16x3/16	.26	.16	.13	.11	.09
755-1767	2S22-10	.022	3/4x3/8x1/4	.26	.16	.13	.11	.09
755-1771	2S47-10	.047	3/4x3/8x1/4	.30	.17	.14	.12	.10
755-1774	2S68-10	.068	3/4x13/32x9/32	.30	.18	.14	.12	.10
755-1752	2P1-10	.91	3/4x23/32x5/16	.33	.20	.16	.14	.12
755-1758	2P33-10	.33	3/4x31/32x9/16	.56	.33	.26	.22	.18
755-1760	2P47-10	.47	1 1/8x7/8x1/2	.63	.38	.30	.26	.21

400 WVDC

Stock No.	Type DMF	µF	Size, Inches LxWxT	EACH 1-24	25-49	50-99	100-499	500-Up
755-1784	4S47-10	.047	3/4x23/32x11/32	.30	.18	.14	.12	.10
755-1776	4P1-10	.1	3/4x29/32x1/2	.37	.23	.18	.15	.13
755-1779	4P22-10	.22	1 1/8x7/8x15/32	.48	.29	.23	.20	.17

600 WVDC

Stock No.	Type DMF	µF	Size, Inches LxWxT	EACH 1-24	25-49	50-99	100-499	500-Up
755-1788	6D22-10	.0022	3/4x5/16x3/16	.26	.16	.13	.11	.09
755-1798	6S4-710	.047	3/4x7/8x15/32	.37	.23	.18	.15	.13
755-1794	6P1-10	.1	1 1/8x13/16x7/16	.48	.29	.23	.19	.16

Cornell-Dubilier Capacitors

TYPE WMF "MYLAR" DIELECTRIC TUBULAR CAPACITORS

Encased in "Mylar" film and end-sealed with a high-density thermosetting epoxy. Outstanding features are high resistance to humidity, excellent capacitance stability, wide temperature range and long life. Operating temperature range: —55°C to +125°C. Full rated voltage at 85°C. Derate voltage 10% at 100°C, and 50% at 125°C. Capacitance tolerance, ±10%. Av. shpg. wt., 2 oz.

50 WVDC

Stock No.	Type WMF-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5702	*05P1*	.1	1/4x13/16"	.41	.24	.19	.17	.14	.11
755-5711	*05P2*	.22	21/64x13/16"	.45	.26	.21	.18	.15	.12
755-5715	05P33	.33	13/32x13/16"	.53	.31	.24	.21	.18	.14
755-5704	*05P5*	.50	13/32x11/16"	.64	.39	.30	.26	.22	.18
755-5722	05P68	.68	1/2x11/16"	.83	.49	.38	.33	.27	.22
755-5775	05W1	1.0	1/2x13/8"	1.12	.68	.53	.46	.38	.31
755-5728	05W2	2.0	37/64x15/8"	1.88	1.12	.87	.75	.63	.50
755-5735	05W5	5.0	27/32x17/8"	3.86	2.32	1.80	1.55	1.29	1.03

100 WVDC

755-5740	*1D1*	.001	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5742	*1D15*	.0015	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5744	*1D22*	.0022	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5746	*1D33*	.0033	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5748	*1D47*	.0047	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5750	1D68	.0068	11/64x1/2"	.33	.20	.15	.14	.11	.09
755-5766	*1S1*	.01	13/64x1/2"	.33	.20	.15	.14	.11	.09
755-5768	*1S15*	.015	15/64x1/2"	.33	.20	.15	.14	.11	.09
755-5770	1S22	.022	9/32x5/8"	.33	.20	.15	.14	.11	.09
755-5772	*1S32*	.033	19/64x5/8"	.33	.20	.15	.14	.11	.09
755-5774	*1S47*	.047	17/64x3/4"	.33	.21	.16	.14	.12	.10
755-5776	1S68	.068	9/32x3/4"	.37	.22	.17	.15	.12	.10
755-5753	*1P1*	.1	19/64x7/8"	.37	.22	.17	.15	.13	.10
755-5755	1P15	.15	31/64x7/8"	.37	.23	.18	.15	.13	.10
755-5757	*1P22*	.22	25/64x1"	.41	.24	.19	.16	.14	.11
755-5759	1P33	.33	27/64x1 1/8"	.49	.28	.22	.19	.16	.13
755-5761	*1P47*	.47	15/32x1 1/4"	.56	.34	.27	.23	.20	.16
755-5763	1P68	.68	9/16x1 1/4"	.75	.44	.34	.30	.25	.20
755-7779	*1W1*	1.0	5/8x1 1/2"	1.05	.62	.48	.42	.35	.28
755-5780	1W1P5	1.5	25/32x1 3/4"	1.38	.84	.65	.56	.47	.38
755-5782	1W2	2.0	61/64x1 3/4"	1.69	1.02	.79	.68	.57	.46

200 WVDC

755-5785	2D1	.001	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5786	2D15	.0015	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5787	2D22	.0022	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5788	2D33	.0033	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5789	2D47	.0047	11/64x1/2"	.33	.20	.15	.14	.11	.09
755-5790	2D68	.0068	13/64x1/2"	.33	.20	.15	.14	.11	.09
755-5801	2S1	.01	15/64x1/2"	.33	.20	.15	.14	.11	.09
755-5802	2S15	.015	19/64x1/2"	.33	.20	.15	.14	.11	.09
755-5803	2S22	.022	9/32x5/8"	.33	.20	.15	.14	.11	.09
755-5804	2S33	.033	17/64x3/4"	.33	.20	.15	.14	.11	.09

200 WVDC (Cont'd)

Stock No.	Type WMF-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5805	2S47	.047	21/64x3/4"	.33	.21	.16	.14	.12	.10
755-5806	2S68	.068	11/32x3/4"	.37	.22	.17	.15	.12	.10
755-5793	*2P*	.1	13/32x7/8"	.45	.26	.20	.18	.15	.12
755-5794	2P15	.15	1/2x7/8"	.45	.28	.22	.19	.16	.13
755-5795	*2P22*	.22	1/2x1 1/8"	.48	.29	.23	.20	.17	.13
755-5796	2P33	.33	35/64x1 1/8"	.56	.33	.26	.23	.19	.15
755-5797	*2P47*	.47	19/32x1 1/4"	.63	.38	.29	.26	.21	.17
755-5798	2P68	.68	21/32x1 5/8"	.75	.44	.34	.30	.25	.20
755-5808	2W1	1.0	3/4x1 3/4"	1.05	.62	.48	.42	.35	.28
755-5809	2W1P5	1.5	29/32x1 3/4"	1.38	.84	.65	.56	.47	.38
755-5811	2W2	2.0	63/64x1 7/8"	1.68	1.02	.79	.68	.57	.46

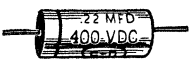
400 WVDC

755-5815	4D22	.0022	5/32x5/8"	.37	.22	.17	.15	.13	.10
755-5817	4D47	.0047	13/64x5/8"	.37	.22	.17	.15	.13	.10
755-5827	4S1	.01	19/64x5/8"	.37	.22	.17	.15	.13	.10
755-5828	4S15	.015	23/64x5/8"	.37	.22	.17	.15	.13	.10
755-5829	4S22	.022	5/16x3/4"	.37	.22	.17	.15	.13	.10
755-5830	4S33	.033	11/32x7/8"	.37	.22	.17	.15	.13	.10
755-5831	4S47	.047	13/32x7/8"	.37	.23	.18	.16	.13	.11
755-5832	4S68	.068	25/64x1"	.41	.25	.19	.17	.14	.11
755-5820	*4P1*	.1	15/32x1"	.41	.25	.20	.17	.14	.12
755-5821	4P15	.15	33/64x1 1/4"	.45	.26	.20	.18	.15	.12
755-5822	4P22	.22	9/16x1 3/8"	.52	.30	.24	.21	.17	.14
755-5823	4P33	.33	19/32x1 5/8"	.82	.49	.38	.33	.28	.22
755-5824	*4P47*	.47	45/64x1 5/8"	.97	.58	.46	.39	.33	.26
755-5825	4P68	.68	11/64x1 3/4"	1.20	.71	.56	.48	.40	.32
755-5835	*4W1*	1.0	7/8x2"	1.42	.85	.66	.57	.48	.38
755-5836	4W1P5	1.5	31/32x2 1/4"	1.76	1.06	.82	.71	.59	.47
755-5838	4W2	2.0	1 1/4x2 1/4"	2.32	1.39	1.08	.93	.77	.62

600 WVDC

755-5841	6D1	.001	11/64x3/4"	.41	.26	.20	.17	.15	.12
755-5843	6D22	.0022	3/16x3/4"	.41	.26	.20	.17	.15	.12
755-5845	6D47	.0047	15/64x3/4"	.41	.26	.20	.17	.15	.12
755-5857	6S1	.01	19/64x3/4"	.41	.26	.20	.17	.15	.12
755-5859	6S22	.022	21/64x7/8"	.41	.26	.20	.17	.15	.12
755-5861	6S47	.047	27/64x1"	.41	.26	.20	.17	.15	.12
755-5850	6P1	.1	33/64x1 3/8"	.56	.33	.26	.22	.19	.15
755-5852	6P22	.22	21/32x1 5/8"	.67	.39	.31	.27	.22	.18
755-5854	*6P47*	.47	55/64x2"	1.42	.86	.67	.58	.48	.39
755-5864	6W1	1.0	1 11/16x2 1/2"	3.03	1.81	1.41	1.21	1.01	.81

TYPE MMW MINIATURE METALLIZED FILM TUBULARS



Ideal for transistorized circuits—can be used in conventional manner or imbedded in sub-assemblies. Constructed of metallized polyester film dielectric, tightly wound and encased in poly-film tape wrap; and sealed with high-density thermosetting resin. Resistant to humidity and moisture. Operating temperature range, —55°C to +85°C. Tolerance, ±20%. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type MMW-	µF	WV DC	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2470	05P1	.1	50	.170x11/16"	.86	.51	.39	.34	.29	.23
755-2476	05P22	.22	50	.215x11/16"	1.01	.61	.47	.41	.34	.27
755-2479	05P33	.33	50	.265x11/16"	1.16	.69	.54	.46	.39	.31
755-2482	*05P47*	.47	50	.315x11/16"	1.20	.71	.55	.48	.40	.32
755-2488	05W1	1.0	50	.325x1"	1.43	.86	.67	.58	.48	.39
755-2494	05W2	2.0	50	.405x1 1/4"	2.06	1.25	.97	.83	.70	.56
755-2503	05W5	5.0	50	.510x1 3/4"	3.75	2.24	1.74	1.49	1.24	.95
755-2514	2S33	.033	200	.180x9/16"	.78	.47	.36	.32	.26	.21
755-2509	2S47	.047	200	.200x9/16"	.78	.47	.36	.32	.26	.21
755-2506	2P1	.1	200	.240x11/16"	.86	.51	.39	.34	.29	.23
755-2508	2P22	.22	200	.340x11/16"	1.01	.61	.47	.41	.34	.27
755-2509	2P33	.33	200	.390x11/16"	1.16	.69	.54	.46	.39	.31
755-2510	2P47	.47	200	.370x1"	1.20	.71	.55	.48	.40	.32
755-2518	*2W1*	1.0	200	.500x1"	1.42	.86	.67	.58	.48	.39
755-2520	2W2	2.0	200	.620x1 1/4"	2.06	1.25	.97	.83	.70	.56
755-2528	4S1	.01	400	.180x9/16"	.75	.45	.35	.30	.25	.20
755-2530	4S22	.022	400	.210x11/16"	.78	.47	.36	.32	.26	.21
755-2532	4S47	.047	400	.300x11/16"	.86	.51	.39	.34	.29	.23
755-2522	4P1	.1	400	.325x1"	.93	.57	.44	.38	.32	.26
755-2524	4P22	.22	400	.400x1 1/4"	1.16	.69	.54	.46	.39	.31
755-2526	4P47	.47	400	.520x1 1/2"	1.53	.91	.71	.61	.51	.41
755-2535	4W1	1.0	400	.675x1 3/4"	2.17	1.30	1.01	.87	.73	.58

TYPE MPY 125°C METALLIZED PAPER

For applications where low impedance is required. Feature superior moisture resistance, and self-healing properties of metallized dielectric capacitors. Resin impregnated Triclad tube with resin end-fill is wax-free for clean handling; virtually unaffected by hot irons. Range, —55°C to +85°C. Tolerance, ±20%. 3 oz.

200 WVDC

Stock No.	Mfr's Type MPY-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2562	2S22	.022	1/4x5/8"	.56	.34	.26	.23	.19	.15
755-2564	2S47	.047	1/4x5/8"	.56	.34	.26	.23	.19	.15
755-2555	2P1	.1	3/8x5/8"	.63	.38	.30	.26	.22	.17
755-2557	2P22	.22	15/32x5/8"	.78	.47	.37	.32	.27	.21
755-2559	2P47	.47	7/16x1 1/8"	.93	.56	.44	.38	.32	.25
755-2566	2W1	1.0	9/16x1 1/8"	1.35	.81	.63	.54	.45	.36
755-2568	2W2	2.0	5/8x1 7/16"	1.83	1.10	.86	.74	.62	.49

400 WVDC

755-2574	4S22	.022	5/16x5/8"	.56	.34	.26	.23	.19	.15
755-2570	4P1	.1	3/8x1 1/8"	.71	.43	.33	.29	.24	.19
755-2572	4P22	.22	1/2x1 1/8"	.90	.54	.42	.36	.30	.24
755-2578	4W1	1.0	11/16x1 13/16"	1.65	.99	.77	.66	.55	.44
755-2580	4W2	2.0	13/16x2 3/8"	2.17	1.31	1.02	.87	.73	.58

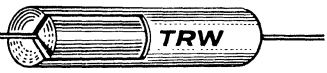
600 WVDC

755-2588	6S1	.01	1/4x5/8"	.56	.34	.26	.23	.19	.15
755-2590	6S22	.022	3/8x5/8"	.60	.36	.28	.24	.20	.16
755-2592	6S47	.047	15/32x5/8"	.68	.41	.32	.27	.23	.18
755-2582	6P1	.1	3/8x1 1/8"	.75	.45	.35	.30	.25	.20
755-2586	6P47	.47	5/8x1 7/16"	1.42	.86	.67	.57	.48	.38
755-2596	6W1	1.0	23/32x1 13/16"	1.80	1.08	.84	.72	.60	.48
755-2598	6W2	2.0	29/32x2 3/8"	2.62	1.58	1.23	1.05	.88	.70

Allied Can Supply CDE Capacitors in Any Quantity at Factory Prices

TRW "Mylar" Capacitors

TYPE 663UW "MYLAR" CAPACITORS



Space-saving capacitors have "skin-tight" cases. Offer long, stable life, high insulation resistance, and low dissipation factor. Epoxy end-fills ensure high resistance to humidity. Temperature range: —55°C; to +125°C with 50% derating. Tolerance, ±10%. Av. shpg. wt., 2 oz.

100 WVDC

Stock No.	μF	Size	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
960-6010	.001	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6030	.0022	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6040	.0033	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6050	.0047	5/32x1/2"	.91	.44	.32	.29	.25	.23
960-6060	.0068	5/32x1/2"	.91	.44	.32	.29	.25	.23
960-6070	.01	5/32x1/2"	.96	.46	.34	.30	.26	.24
960-6090	.022	13/64x5/8"	.96	.46	.34	.30	.26	.24
960-6105	.033	7/32x5/8"	1.01	.48	.35	.32	.28	.25
960-6115	.047	15/64x3/4"	1.01	.48	.35	.32	.28	.25
960-6125	.068	17/64x3/4"	1.01	.48	.35	.32	.28	.25
960-6135	.10	9/32x7/8"	1.07	.52	.37	.34	.29	.26
960-6155	.22	21/64x1"	1.20	.56	.41	.37	.33	.30
960-6165	.33	3/8x1 1/8"	1.23	.59	.44	.39	.35	.32
960-6175	.47	15/32x1 1/4"	1.36	.65	.47	.42	.37	.35
960-6185	.68	9/16x1 1/4"	1.48	.70	.51	.46	.41	.37
960-6200	1.0	19/32x1 1/2"	1.65	.79	.57	.51	.46	.42
960-6210	2.0	13/16x1 3/4"	2.16	1.03	.75	.68	.59	.54

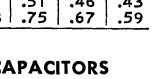
200 WVDC

Stock No.	μF	Size	1-24	25-49	50-99	100-249	250-499	500-Up
960-6011	.001	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6021	.0015	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6031	.0022	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6041	.0033	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6051	.0047	5/32x1/2"	.91	.44	.32	.29	.25	.23
960-6071	.01	11/64x1/2"	.96	.46	.34	.30	.26	.24
960-6116	.047	19/64x3/4"	1.01	.48	.35	.32	.28	.25
960-6136	.10	3/8x7/8"	1.07	.52	.37	.34	.29	.26
960-6156	.22	7/16x1 1/8"	1.20	.56	.41	.37	.33	.30
960-6166	.33	31/64x1 1/8"	1.23	.59	.44	.39	.35	.32
960-6176	.47	35/64x1 1/4"	1.36	.65	.47	.42	.37	.35
960-6201	1.0	43/64x1 3/4"	1.65	.79	.57	.51	.46	.42
960-6211	2.0	7/8x1 7/8"	2.16	1.03	.75	.68	.59	.54

400 WVDC

Stock No.	μF	Size	1-24	25-49	50-99	100-249	250-499	500-Up
960-6032	.0022	5/32x5/8"	.91	.44	.32	.29	.25	.23
960-6052	.0047	3/16x5/8"	.96	.46	.34	.30	.26	.24
960-6072	.01	1/4x5/8"	1.01	.48	.35	.32	.28	.25
960-6092	.022	5/16x3/4"	1.07	.52	.37	.34	.29	.26
960-6117	.047	11/32x7/8"	1.12	.54	.40	.35	.32	.29
960-6137	.10	27/64x1"	1.20	.56	.41	.37	.33	.30
960-6157	.22	35/64x1 3/8"	1.36	.65	.47	.42	.37	.35
960-6177	.47	43/64x1 5/8"	1.65	.79	.57	.51	.46	.43
960-6202	1.0	13/16x2"	2.37	1.16	.83	.75	.67	.59

TYPE X663F METALLIZED "MYLAR" CAPACITORS



Thin, oval design. Extended-foil metallized "Mylar" dielectric is self-healing, has high insulation resistance and low dissipation factor. NOTE: the 200 WVDC units listed below are identical in price and size to 100 WVDC units (not listed)—you get this higher voltage rating at no extra cost. Temperature range: —55° to +100°C; derate 50% for +125°C. Life test: 250 hours at 100°C. and 125% of rated voltage. Tolerance: ±10%. Av. shpg. wt., 2 oz.

200 WVDC

Stock No.	μF	Size	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
960-3005	.01	5/32x13/64x7/16"	1.55	.94	.67	.61	.54	.50
960-3010	.022	13/64x17/64x7/16"	1.44	.87	.64	.56	.50	.47
960-3015	.033	7/32x9/32x7/16"	1.35	.81	.58	.53	.47	.43
960-3020	.047	11/64x17/64x9/16"	1.24	.75	.54	.48	.43	.40
960-3025	.10	1/4x23/64x9/16"	1.13	.68	.48	.45	.40	.37
960-3030	.22	17/64x3/8x11/16"	1.30	.78	.55	.51	.45	.41
960-3035	.33	19/64x31/64x11/16"	1.58	.95	.68	.62	.55	.51
960-3040	.47	23/64x35/64x11/16"	1.78	1.07	.78	.70	.62	.57
960-3045	.68	11/32x33/64x15/16"	1.98	1.19	.86	.78	.68	.64
960-3050	1.00	27/64x19/32x15/16"	2.23	1.33	.97	.87	.78	.72
960-3055	1.5	9/16x37/64x1 1/4"	2.50	1.50	1.09	.98	.87	.80
960-3060	2.00	27/64x23/32x1 1/4"	2.77	1.66	1.20	1.09	.96	.88
960-3065	3.00	29/64x49/64x1 1/2"	3.31	1.98	1.44	1.30	1.16	1.07
960-3070	4.00	1/2x57/64x1 1/2"	4.13	2.49	1.79	1.62	1.43	1.32
960-3075	5.00	33/64x29/32x1 3/4"	4.68	2.81	2.04	1.83	1.62	1.50

TYPE 608 MICROMINIATURE "MYLAR" CAPACITORS

Foil-wound mylars for high-component-density applications. Temperature range, —55°C to +85°C.; to 125°C. with 50% derating. Dissipation factor less than 1.0% at 1000 Hz., 25°C. Humidity resistance meets MIL-C-27287 paragraph 3.12 when tested at 40°C for 240 hours. Life: 1000 hours at 85°C and 125% of rated voltage. Tolerance: ±10%. 100 WVDC. Av. shpg. wt., 1 oz.

Stock No.	μF	Size	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
960-4305	.001	5/64x3/8"	1.52	1.11	.83	.75	.66	.61
960-4310	.0015	3/32x3/8"	1.54	1.12	.84	.76	.67	.62
960-4315	.0022	3/32x3/8"	1.56	1.13	.85	.76	.67	.63
960-4320	.0033	7/64x3/8"	1.57	1.14	.86	.77	.68	.63
960-4325	.0047	7/64x3/8"	1.60	1.16	.87	.78	.69	.64
960-4330	.0068	1/8x3/8"	1.62	1.18	.88	.79	.69	.65
960-4335	.0082	1/8x3/8"	1.63	1.19	.89	.80	.70	.65
960-4340	.01	9/64x3/8"	1.63	1.19	.89	.80	.70	.65
960-4345	.015	5/32x3/8"	1.67	1.21	.90	.81	.73	.67
960-4350	.022	11/64x3/8"	1.67	1.21	.90	.81	.73	.67
960-4355	.033	7/32x3/8"	1.74	1.27	.95	.85	.75	.69
960-4360	.047	1/4x3/8"	1.78	1.29	.97	.87	.77	.70
960-4365	.068	11/32x11/32"	2.50	1.50	1.09	.98	.87	.80
960-4370	.10	3/8x17/32"	2.64	1.58	1.16	1.03	.91	.85

TYPE 601PE "MYLAR" CAPACITORS

Space-saving capacitors are designed for transistor printed circuits. Replace ceramic discs where stability with temperature change is important. Temp. range: —55°C to +85°C. Derate 50% for +125°C. Life test: 500 hours at +85°C and 125% of rated voltage. Dipped epoxy coating seals winding and lead entries, provides high-dielectric strength, and humidity resistance. Rated 50 WVDC. Tolerance, ±10%. Av. shpg. wt., 1 oz.

Stock No.	μF	Size	1-24	25-49	50-99	100-249	250-499	500-Up
960-4020	.01	13/32x11/32x13/64"	.83	.50	.35	.32	.28	.26
960-4025	.022	27/64x25/64x13/64"	.92	.55	.40	.35	.32	.29
960-4030	.033	17/32x13/32x3/16"	.95	.57	.41	.37	.33	.31
960-4035	.047	17/32x29/64x13/64"	1.02	.61	.44	.39	.35	.32
960-4040	.068	17/32x1/2x7/32"	1.05	.63	.45	.41	.36	.34
960-4045	.10	21/32x11/32x15/64"	1.13	.68	.50	.45	.39	.36
960-4050	.15	43/64x21/32x17/64"	1.19	.72	.51	.46	.41	.37
960-4055	.22	47/64x11/16x5/16"	1.28	.76	.56	.50	.44	.41
960-4060	.33	13/16x3/4x5/16"	1.36	.83	.59	.53	.47	.44

JFD

HIGH-K UNICERAM ±10% CAPACITORS

ACTUAL SIZE

Offer greatly increased capacitance per unit volume (up to 48 μF/in³). Ceramic multilayer unit construction and glass encapsulated package. Meet or exceed MIL-C-11015C. Rated 50 WVDC. Temperature coefficient of +5%, −15% from −55° C to +125° C. Dissipation factor at 25° C, 1 kHz; 3% maximum. Test VDC, 300% rated. Insulation resistance 10^5 megohms or 100 ohm-farads, whichever is less. Tolerance is ±10%. Specially designed for a wide variety of commercial as well as industrial applications. Small size makes for convenience, and serviceability. Av. shpg. wt. 1 oz.

Stock No.	Type UY-	μF	EACH 1-49	50-99	100-249	250-499	500-Up
827-4605	12102K	.001	2.89	2.03	1.76	1.50	1.13
827-4610	12222K	.0022	2.97	2.06	1.80	1.54	1.14
827-4614	12472K	.0047	2.97	2.06	1.80	1.54	1.14
827-4607	12103K	.01	3.09	2.16	1.86	1.59	1.20
827-4629	14223K	.022	4.10	2.87	2.49	2.14	1.59
827-4634	14473K	.047	4.57	3.21	2.78	2.38	1.78
827-4625	14104K	.1	5.43	3.81	3.30	2.81	2.12
827-4639	15224K	.22	8.44	5.91	5.12	4.39	3.28
827-4643	15474K	.47	13.84	9.71	8.42	7.20	5.40

PURCHASING AGENTS NOTE

Depend on Allied for prompt off-the-shelf delivery in industrial quantities for all your electronic needs. Contact the nearest Allied Electronics facility for information on prices and delivery on quantities larger than shown. See Page 3 for a list of Allied offices, from coast to coast.

SPRAGUE
THE MARK OF RELIABILITY

CERAMIC CAPACITORS

Ceramic Capacitors

NPO AND N750 CERAMICS

SERIES 10TCC NPO CERAMICS. Rugged, ultra-reliable capacitors for wide industrial applications. Zero-temperature-coefficient. 1000 WVDC. Tolerance: ±5%. 6.8 pF and above; ±2.5 pF, 4.7 pF and below. Av. sh. wt. 1 oz.

Stock No.	Mfr's Type	pF	EACH 1-49	EACH 50-99	Ea., Mult. of 100 Only 100-400	500-900	1000-Up
926-5004	*10TCC-V10*	1.0	.18	.15	.06	.04	.03
926-5009	10TCC-V15	1.5	.18	.15	.06	.04	.03
926-5015	*10TCC-V22*	2.2	.18	.15	.06	.04	.03
926-5024	*10TCC-V33*	3.3	.18	.15	.06	.04	.03
926-5034	*10TCC-V47*	4.7	.18	.15	.06	.04	.03
926-5044	10TCC-V68	6.8	.18	.15	.06	.04	.03
926-4920	*10TCC-Q10*	10.0	.18	.15	.06	.04	.03
926-4924	10TCC-Q15	15.0	.18	.15	.06	.04	.03
926-4928	10TCC-Q20	20.0	.18	.15	.06	.04	.03
926-4930	10TCC-Q22	22.0	.18	.15	.06	.04	.03
926-4933	10TCC-Q25	25.0	.18	.15	.06	.04	.03
926-4939	10TCC-Q33	33.0	.18	.15	.06	.04	.03
926-4945	*10TCC-Q39*	39.0	.18	.15	.06	.04	.03
926-4950	*10TCC-Q47*	47.0	.18	.15	.07	.05	.04
926-4953	10TCC-Q50	50.0	.18	.15	.07	.05	.04
926-4962	10TCC-Q68	68.0	.18	.15	.07	.05	.04
926-4969	10TCC-Q75	75.0	.18	.15	.07	.05	.04
926-4974	10TCC-T10	100.0	.18	.15	.09	.06	.04
926-4976	10TCC-T12	120.0	.18	.15	.09	.06	.04
926-4979	10TCC-T15	150.0	.18	.15	.11	.08	.05
926-4985	10TCC-T22	220.0	.37	.30	.21	.14	.10
926-4990	10TCC-T27	270.0	.47	.33	.24	.16	.11

SERIES 10TCU N750 CERAMICS. Negative temperature coefficient capacitors with a negative change of 750 parts per million per degree Centigrade. 1000WVDC. Tolerance, ±5%. Av. shpg. wt. 3 oz.

926-5153	10TCU-V50	5	.18	.15	.06	.04	.03
926-5055	10TCU-Q10	10	.18	.15	.06	.04	.03
926-5060	10TCU-Q15	15	.18	.15	.06	.04	.03
926-5065	10TCU-Q20	20	.18	.15	.06	.04	.03
926-5067	10TCU-Q22	22	.18	.15	.06	.04	.03
926-5070	10TCU-Q25	25	.18	.15	.06	.04	.03
926-5075	10TCU-Q33	33	.18	.15	.06	.04	.03
926-5084	10TCU-Q47	47	.18	.15	.06	.04	.03
926-5095	10TCU-Q68	68	.18	.15	.06	.04	.03
926-5105	10TCU-Q75	75	.18	.15	.06	.04	.03
926-5110	10TCU-T10	100	.18	.15	.07	.05	.04
926-5115	10TCU-T15	150	.18	.15	.07	.05	.04
926-5120	10TCU-T20	200	.18	.15	.09	.06	.04
926-5122	10TCU-T22	220	.18	.15	.09	.06	.04
926-5130	10TCU-T33	330	.18	.15	.11	.08	.05
926-5139	10TCU-T47	470	.26	.21	.15	.10	.07
926-5149	10TCU-T68	680	.41	.33	.24	.16	.11

HYPERCON CERAMIC DISCS

These ultraminiature ceramic discs are especially designed for use in solid-state circuits. Engineered for by-pass and coupling applications, but particularly well-suited for any low-voltage use where high capacitance and low power factor are important circuit considerations. Hypercons are superior to similar-capacitance electrolytics because of the Hypercon's low power factor. Capacity tolerance, +80% to −20%. Av shpg. wt. 1 oz.

Stock No.	Mfr's Type	μF	WVDC	EACH 1-49	EACH 50-Up	EA., Mult. of 100 Only 100-400	500-900	1000-Up
926-0715	HY-350	.047	10	.18	.15	.102	.068	.045
926-0719	HY-355	.068	10	.18	.15	.106	.071	.047
926-0723	HY-360	.1	10	.23	.18	.12	.08	.053
926-0727	HY-365	.15	10	.30	.24	.169	.113	.075
926-0731	HY-370	.22	10	.34	.27	.189	.126	.084
926-0735	HY-375	.33	10	.41	.33	.248	.165	.11
926-0739	HY-380	.47	10	.45	.36	.318	.212	.141
926-0745	*HY-420*	.01	16	.18	.15	.086	.057	.038
926-0749	HY-425	.022	16	.18	.15	.086	.057	.038
926-0754	HY-430	.033	16	.18	.15	.086	.057	.038
926-0758	*HY-435*	.047	16	.18	.15	.102	.068	.045
926-0762	HY-440	.068	16	.19	.15	.113	.075	.05
926-0766	*HY-450*	.1	16	.19	.15	.113	.075	.05
926-0775	HY-470	.2	16	.34	.27	.192	.128	.085
926-0790	HY-510	.0047	25	.18	.15	.09	.06	.04
926-0796	*HY-520*	.01	25	.18	.15	.09	.06	.04
926-0801	HY-525	.022	25	.18	.15	.102	.068	.045
926-0803	HY-530	.033	25	.18	.15	.102	.068	.045
926-0805	*HY-535*	.047	25	.23	.18	.124	.083	.055
926-0807	HY-540	.068	25	.23	.18	.135	.09	.06
926-0812	*HY-550*	1	25	.26	.21	.147	.098	.065

CERAMIC DISC CAPACITORS

Moistureproof-coating, ultra-compact ceramic disc capacitors in standard EIA and other popular values. Low self-inductance of silvered flat-plate design ensures high by-pass efficiency in critical circuits. Av., 1 oz.

SERIES 5GA—1000 WVDC ±20%.

Stock No.	Mfr's Type	Cap. in pF	EACH 1-49	EACH 50-99	EACH Multiples of 100 Only 100-400	500-900	1000-Up
926-4587	*5GA-V50*	5	.18	.15	.06	.04	.03
926-4594	5GA-V75	7.5	.18	.15	.06	.04	.03
926-4455	5GA-Q10	10	.18	.15	.06	.04	.03
926-4457	*5GA-Q12*	12	.18	.15	.06	.04	.03
926-4460	*5GA-Q15*	15	.18	.15	.06	.04	.03
926-4465	5GA-Q20	20	.18	.15	.06	.04	.03
926-4467	5GA-Q22	22	.18	.15	.06	.04	.03
926-4470	5GA-Q25	25	.18	.15	.06	.04	.03
926-4472	5GA-Q27	27	.18	.15	.06	.04	.03
926-4475	5GA-Q30	30	.18	.15	.06	.04	.03
926-4478	*5GA-Q33*	33	.18	.15	.06	.04	.03
926-4481	5GA-Q39	39	.18	.15	.06	.04	.03
926-4490	*5GA-Q50*	50	.18	.15	.06	.04	.03
926-4494	5GA-Q56	56	.18	.15	.06	.04	.03
926-4499	*5GA-Q68*	68	.18	.15	.06	.04	.03
926-4504	5GA-Q75	75	.18	.15	.06	.04	.03
926-4508	5GA-Q82	82	.18	.15	.06	.04	.03
926-4527	*5GA-T10*	100	.18	.15	.06	.04	.03
926-4529	*5GA-T12*	120	.18	.15	.06	.04	.03
926-4532	*5GA-T15*	150	.18	.15	.06	.04	.03
926-4535	5GA-T18	180	.18	.15	.06	.04	.03
926-4537	*5GA-T20*	200	.18	.15	.06	.04	.03
926-4539	*5GA-T22*	220	.18	.15	.06	.04	.03
926-4542	5GA-T25	250	.18	.15	.06	.04	.03
926-4544	*5GA-T27*	270	.18	.15	.06	.04	.03
926-4547	5GA-T30	300	.18	.15	.06	.04	.03
926-4550	*5GA-T33*	330	.18	.15	.06	.04	.03
926-4553	5GA-T36	360	.18	.15	.06	.04	.03
926-4556	*5GA-T39*	390	.18	.15	.06	.04	.03
926-4562	*5GA-T47*	470	.18	.15	.06	.04	.03
926-4565	*5GA-T50*	500	.18	.15	.06	.04	.03
926-4568	5GA-T56	560	.18	.15	.06	.04	.03
926-4572	*5GA-T68*	680	.18	.15	.06	.04	.03
926-4575	5GA-T75	750	.18	.15	.06	.04	.03
926-4579	*5GA-T82*	820	.18	.15	.06	.04	.03
926-4401	*5GA-D10*	1000	.18	.15	.06	.04	.03
926-4403	5GA-D12	1200	.18	.15	.06	.04	.03
926-4406	*5GA-D15*	1500	.18	.15	.06	.04	.03
926-4409	5GA-D18	1800	.18	.15	.06	.04	.03
926-4411	*5GA-D20*	2000	.18	.15	.06	.04	.03
926-4413	*5GA-D22*	2200	.18	.15	.06	.04	.03
926-4416	5GA-D25	2500	.18	.15	.06	.04	.03
926-4418	5GA-D27	2700	.18	.15	.06	.04	.03
926-4421	*5GA-D30*	3000	.18	.15	.06	.04	.03
926-4424	*5GA-D33*	3300	.18	.15	.06	.04	.03
926-4430	5GA-D39	3900	.18	.15	.06	.04	.03
926-4438	*5GA-D47*	4700	.18	.15	.07	.05	.03
926-4441	*5GA-D50*	5000	.18	.15	.07	.05	.03
926-4517	*5GA-S10*	10,000	.18	.15	.08	.05	.04
926-4522	*5GA-S20*	20,000	.19	.15	.12	.08	.05

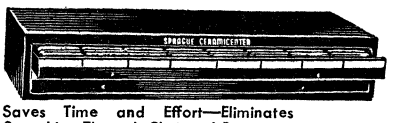
SERIES 5HK—1000 WVDC—20%, +80%. ‡500 WVDC.

Stock No.	Mfr's Type	Cap. in μF	EACH 1-49	EACH 50-99	EACH Multiples of 100 Only 100-400	500-900	1000-Up
926-4610	5HK-D10	.001	.18	.15	.06	.04	.03
926-4615	5HK-D15	.0015	.18	.15	.06	.04	.03
926-4620	5HK-D20	.002	.18	.15	.06	.04	.03
926-4622	5HK-D22	.0022	.18	.15	.06	.04	.03
926-4633	5HK-D33	.0033	.18	.15	.06	.04	.03
926-4647	5HK-D47	.0047	.18	.15	.06	.04	.03
926-4650	5HK-D50	.005	.18	.15	.06	.04	.03
926-4668	5HK-D68	.0068	.18	.15	.07	.05	.03
926-4680	5HK-S10	.010	.18	.15	.07	.05	.03
926-4685	5HK-S15	‡.015	.18	.15	.07	.05	.03
926-4690	5HK-S20	‡.020	.18	.15	.08	.06	.04
926-4695	5HK-S25	‡.025	.18	.15	.09	.06	.04
926-4705	5HK-S40	‡.040	.33	.27	.20	.13	.09
926-4715	5HK-S50	‡.050	.33	.27	.21	.14	.09
926-4675	5HK-P10	‡.1	.67	.54	.40	.27	.18

SERIES BL BUFFER CERAMICS—2000 WVDC ±20%.

926-0100	BL-D10	.001	.26	.21	.15	.13	.10
926-0107	BL-D50	.005	.26	.21	.15	.13	.10
926-0113	BL-S10	.01	.33	.27	.20	.17	.13

J-150 "CERAMICENTER" CERAMIC CAPACITOR ASSORTMENT KIT



Saves Time and Effort—Eliminates Searching Through Cluttered Boxes

Contains 795 Cera-Mite® disc ceramic capacitors in plastic "Klear-Paks", in compartmented 2-drawer steel cabinet. Kit includes: 290 Type 5GA, 1000 WVDC, in 31 values from 5 pF to .02 μF; 140 Type 5HK "High K" in 7 values from .001 to .01 μF at 1000 WVDC, .02 to .1 μF at 500 WVDC; 100 Type 10TS temperature-stable in 11 values, 100 pF to .01 μF; 150 Type TG, 100 WVDC in 6 values, .005 to .1 μF; 115 Type HY ultraminiature in 23 values, .022 to .1 μF, 12-25 WVDC. **926-0829.** Cabinet, 30¾x11½x5½". Shpg. wt. 30 lbs.....184.25

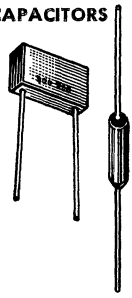
Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Porcelain and Ceramic Capacitors

VITRAMON CAPACITORS

MIL-C-23269 APPROVED CYR PORCELAIN CAPACITORS

- **Offer Highly Stable Performance**
- **Extremely Low Failure Rate**



Highly stable CYR porcelain capacitors feature 0 ±25 ppm/° C temperature coefficient, voltage ratings to 500 VDC, extremely low failure rates, long life and monolithic construction. Temperature range: −55° C to +125° C without voltage derating. Dissipation factor: Maximum of .001 at 25° C, .003 at 125° C. Insulation resistance: Minimum of 100,000 meg at 25° C and 10,000 meg at 125° C. Sizes (LxWxT): CYR41, .300x .300x.100-.200"; CYR42, .390x.200x.109"; CYR43, .375x.188x.156-.219". Leads: CYR41, spaced .200"; CYR42, 43 are axial. 1 oz.

Stock No.	Mfr's Type	Cap. pF	Tol.	Volt. Rating @125°C	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
980-5101	CYR41	4.7	±0.25 pF	100	4.44	4.26	4.12	3.42	3.40	2.86
980-5102	CYR41	10	±5%	100	3.26	2.92	2.85	2.45	2.39	2.02
980-5105	CYR41	22	±5%	100	3.26	2.92	2.85	2.45	2.39	2.02
980-5109	CYR41	47	±5%	100	3.26	2.92	2.85	2.45	2.39	2.02
980-5114	CYR41	100	±5%	100	3.28	2.92	2.85	2.45	2.39	2.02
980-5119	CYR41	220	±5%	100	3.30	2.98	2.91	2.50	2.43	2.06
980-5124	CYR41	470	±5%	100	3.54	3.24	3.15	2.70	2.63	2.21
980-5129	CYR41	1000	±5%	100	4.50	4.34	4.20	3.58	3.45	2.91
980-5151	CYR42	4.7	±0.25 pF	500	4.00	3.76	3.65	3.12	3.02	2.54
980-5152	CYR42	10	±5%	500	3.30	2.98	2.91	2.50	2.43	2.06
980-5155	CYR42	22	±5%	500	3.30	2.98	2.91	2.50	2.43	2.06
980-5159	CYR42	47	±5%	500	3.30	2.98	2.91	2.50	2.43	2.06
980-5164	CYR42	100	±5%	100	3.30	2.98	2.91	2.50	2.43	2.06
980-5169	CYR42	220	±5%	100	3.00	2.84	2.78	2.39	2.33	1.97
980-5174	CYR43	470	±5%	100	3.18	2.85	2.78	2.39	2.33	1.97
980-5179	CYR43	1000	±5%	50	3.58	3.28	3.20	2.75	2.66	2.24

MIL-C-39014 APPROVED CKR CERAMIC CAPACITORS

MIL-C-39014 ceramic capacitors offered in both popular CK body sizes. Series features low failure rates of 0.1%/1000 hours and BX characteristic. Tolerance: ±10%. Operating temperature range: −55° C to +125° C. Temperature characteristic: ±15% at 0 VDC and +15%, −25% at rated voltage. Sizes (LxWxT): CKR05, .200x.200x.100"; CKR06, .300x.300x.100". Leads spaced .215". 1 oz.

Stock No.	Mfr's Type	Cap. pF	Volt. DC @125°C	EACH 1-49	50-99	100-249	250-499	500-999	1000-Up
980-1401	CKR05BX	10	200	1.55	1.40	1.24	1.09	.93	.78
980-1405	CKR05BX	22	200	1.55	1.40	1.24	1.09	.93	.78
980-1409	CKR05BX	47	200	1.55	1.40	1.24	1.09	.93	.78
980-1413	CKR05BX	100	200	1.55	1.40	1.24	1.09	.93	.78
980-1417	CKR05BX	220	200	1.57	1.42	1.26	1.11	.95	.79
980-1422	CKR05BX	470	200	1.57	1.42	1.26	1.11	.95	.79
980-1427	CKR05BX	1000	200	1.57	1.42	1.26	1.11	.95	.79
980-1454	CKR06BX	2200	200	1.76	1.59	1.41	1.24	1.06	.89
980-1459	CKR06BX	10,000	200	1.83	1.65	1.47	1.29	1.10	.92
980-1463	CKR06BX	22,000	100	1.83	1.65	1.47	1.29	1.10	.92
980-1467	CKR06BX	47,000	100	1.95	1.76	1.56	1.37	1.17	.98
980-1474	CKR06BX	100,000	100	2.21	1.99	1.77	1.55	1.33	1.11
980-1479	CKR06BX	220,000	50	5.19	4.69	4.15	3.65	3.12	2.61
980-1484	CKR06BX	470,000	50	7.17	6.47	5.73	5.03	4.30	3.60
980-1491	CKR06BX	1 μF	50	9.31	8.40	7.44	6.53	5.58	4.67

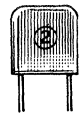
MIL-C-11015 APPROVED CK CERAMIC CAPACITORS

Low cost, established reliability CK ceramic capacitors. All values have ±10% tolerance and BX characteristic. Operate between −55° C and +150° C. Sizes: CK05, .200x.200x.100"; CK06, .300x .300x.100". Leads spaced .215". Lead length, 1.150" minimum. Av. wt. 1 oz.

980-1000	CK05BX	10	200	.50	.40	.34	.31	.27	.25
980-1006	CK05BX	22	200	.50	.40	.34	.31	.27	.25
980-1012	CK05BX	47	200	.50	.40	.34	.31	.27	.25
980-1018	CK05BX	100	200	.50	.40	.34	.31	.27	.25
980-1024	CK05BX	220	200	.58	.46	.39	.35	.32	.29
980-1030	CK05BX	470	200	.58	.46	.39	.35	.32	.29
980-1036	CK05BX	1000	200	.58	.46	.39	.35	.32	.29
980-1042	CK05BX	2200	100	.60	.48	.41	.37	.33	.30
980-1054	CK05BX	10,000	100	.60	.48	.41	.37	.33	.30
980-1075	CK06BX	2200	200	.72	.68	.58	.50	.45	.36
980-1076	CK06BX	4700	200	.74	.70	.59	.52	.46	.37
980-1077	CK06BX	10,000	200	.75	.71	.62	.58	.54	.45
980-1060	CK06BX	22,000	100	.75	.71	.62	.58	.54	.45
980-1066	CK06BX	47,000	100	.95	.85	.80	.75	.68	.60
980-1072	CK06BX	100,000	100	1.30	1.18	1.10	1.00	.91	.80
980-1091	CK06BX	220,000	50	2.75	2.48	2.20	1.93	1.65	1.38
980-1094	CK06BX	470,000	50	4.00	3.60	3.20	2.80	2.40	2.00
980-1098	CK06BX	1 μF	50	6.22	5.60	4.98	4.37	3.72	3.11

SPRAGUE CAPACITORS

7C RADIAL-LEAD CERAMIC CAPACITORS



Resin-coated monolythic ceramic capacitors made of technically upgraded material for the most reliable in dielectrics. Radial-lead style with stand off "feet" designed for printed wiring board mounting. Vacuum wax inpregnation and an outer epoxy varnish finish for moisture protection. 50 VDC rating. Layer-built construction offers highest capacitance values per unit size. Tolerance: ±20%. Operating temperature: −55°C. to +85°C. Size (Lx WxT): .39x.275x.16" except *.535x.55x.16"; †.535x.55x.26". Wt. 1 oz.

Stock No.	Type 7C	μF	EACH 1-24	25-49	50-99	100-499	500-Up
926-4890	075102X0500D	.0010	1.45	1.16	.87	.58	.44
926-4860	067152X0500D	.0015	1.45	1.16	.87	.58	.44
926-4863	067222X0500D	.0022	1.45	1.16	.87	.58	.44
926-4866	067332X0500D	.0033	1.45	1.16	.87	.58	.44
926-4869	067472X0500D	.0047	1.45	1.16	.87	.58	.44
926-4873	067682X0500D	.0068	1.50	1.20	.90	.60	.45
926-4877	067822X0500D	.0082	1.50	1.20	.90	.60	.45
926-4810	023103X0500D	.010	1.32	1.06	.80	.53	.40
926-4820	023153X0500D	.015	1.32	1.06	.80	.53	.40
926-4827	023223X0500D	.022	1.32	1.06	.80	.53	.40
926-4835	023333X0500D	.033	1.32	1.06	.80	.53	.40
926-4840	023473X0500D	.047	1.32	1.06	.80	.53	.40
926-4846	023683X0500D	.068	1.32	1.06	.80	.53	.40
926-4812	*023104X0500D*	*.10*	1.32	1.06	.80	.53	.40
926-4822	023154X0500D	.15	1.47	1.18	.88	.59	.44
926-4828	023224X0500D	.22	1.56	1.25	.94	.63	.47
926-4837	023334X0500E*	.33	1.96	1.57	1.18	.79	.59
926-4841	023474X0500E*	.47	2.18	1.75	1.32	.88	.66
926-4847	023684X0500E*	.68	2.30	1.84	1.38	.92	.69
926-4814	*023105X0500E**	*1.0*	2.60	2.08	1.56	1.04	.78
926-4824	023155X0500E*	1.5	3.91	3.13	2.35	1.57	1.18
926-4831	023225X0500F†	2.2	5.17	4.14	3.11	2.07	1.56

CERAMIC DISC CAPACITORS

SERIES 30GA—3000 WVDC

Tolerance: 1.5 pF, ±.25 pF; 4.7 pF, ±.5 pF; 10 through 50 pF, ±10%; 100 through 500 pF, ±20%. †in table indicates μF. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	pF	EACH 1-49	50-99	EA., Multiples of 100 Only 100-400	500-Up
926-5283	30GA-V15	1.5	.18	.15	.10	.09
926-5296	30GA-V47	4.7	.18	.15	.10	.09
926-5215	30GA-Q10	10	.18	.15	.10	.09
926-5224	30GA-Q25	25	.18	.15	.10	.09
926-5229	30GA-Q30	30	.18	.15	.10	.09
926-5237	30GA-Q50	50	.18	.15	.10	.09
926-5251	30GA-T10	100	.18	.15	.10	.09
926-5255	30GA-T15	150	.18	.15	.11	.10
926-5258	30GA-T18	180	.18	.15	.11	.10
926-5262	30GA-T22	220	.18	.15	.11	.10
926-5265	30GA-T25	250	.18	.15	.11	.10
926-5269	30GA-T30	300	.22	.18	.13	.11
926-5277	30GA-T50	500	.26	.21	.15	.13
926-5180	30GA-D10	†.001	.26	.21	.15	.13
926-5185	30GA-D20	†.002	.26	.21	.15	.13
926-5195	30GA-D50	†.005	.30	.24	.17	.15
926-5243	*30GA-S10*	†*.01*	.48	.39	.29	.25

SERIES TG—100 WVDC ±20%.

Stock No.	Mfr's Type	μF	EACH 1-49	50-99	EA., Multiples of 100 Only 100-400	500-900	1000-Up
926-1420	*TG-D50*	*.005*	.18	.15	.06	.04	.03
926-1434	*TG-S10*	*.01*	.18	.15	.08	.05	.04
926-1437	*TG-S20*	*.02*	.18	.15	.09	.06	.04
926-1440	TG-S25	.025	.18	.15	.10	.07	.05
926-1444	TG-S30	.03	.18	.15	.10	.07	.05
926-1447	*TG-S50*	*.05*	.37	.30	.22	.15	.10
926-1425	*TG-P10*	*.1*	.48	.39	.29	.19	.13

CAPACITOR ASSORTMENTS

TK33 Assortment. Total of 61. Case is humidity-resistant, mica-filled, non-flammable phenolic. Dual dielectric of polyester film and capacitor tissue. Solid impregnant. All units are rated at 600 WVDC. Operate at up to 105° C without voltage derating. Contains the following μF values. Five each: .001, .002, .003, .005, .02, .03, .25; eight each: .05, .1; ten each: .01. 6-drawer capacitor cabinet.
926-1465. Shpg. wt. 3 lbs. 19.59

TK34 Assortment. Total of 90. Same construction as TK33. All 600 WVDC. In μF values. Two each: .5; three each: .15, .22, .25; five each: .001, .0015, .003, .004, .005, .0068, .015, .020, .03; eight each: .002, .05, .1; ten each: .01. 9 drawer cabinet.
926-1466. Shpg. wt. 4 lbs. 29.31

CENTRALAB

CERAMIC CAPACITORS

Centralab Ceramic Capacitors

SERIES DD DISC CERAMICS

Recommended for use where high capacity is required and control stability is secondary Operate for long periods under extreme moisture, vibration, and temperature conditions. *Price code. 1000 WVDC except: DD-6-103, DD-153 through DD-503, 600 WVDC. Tolerance: ±10% except †GMV; ‡±20%; §—20%, +80%. Size, Dia. 9/32x7/8". Av. shpg. wt. 2 oz.

PRICES FOR DD SERIES

* Code	EACH 1-99	EACH, Pkgs. of 100 Only 100	200-400	500-Up	EACH, Pkgs. of 1000 Only 1000-3000	4000-Up
A	.15	.12	.08	.06	.048	.042
B	.15	.12	.08	.06	.038	.033
C	.15	.12	.08	.06	.041	.035
D	.15	.12	.08	.06	.044	.038
E	.15	.12	.08	.06	.036	.031
F	.15	.12	.08	.06	.046	.040
G	.24	.19	.12	.09	.054	.047
H	.24	.19	.12	.09	.062	.054
J	.45	.36	.23	.17	.054	.047
K	.45	.36	.23	.17	.155	.145

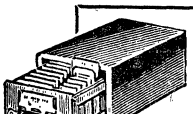
Stock No.	Mfr's Type	pF	*	Stock No.	Mfr's Type	pF	*
748-0437	*DD-050*	*5*	*A*	748-0667	*DD-471*	*470*	*C*
748-0443	*DD-100*	*10*	*B*	748-0687	*DD-501*	*500*	*C*
748-0466	DD-150	15	B	748-0707	DD-561	560	C
748-0493	DD-200	20	B	748-0717	DD-681	680	C
748-0502	DD-220	22	B	748-0730	DD-751	750	C
748-0526	DD-250	25	B	748-0736	DD-821	820	C
748-0542	DD-270	27	B	748-0447	*DD-102*	*1000*	*D*
748-0564	DD-300	30	B	748-0449	DD-102G	1000†	E
748-0588	DD-330	33	B	748-0470	DD-152	1500	D
748-0636	DD-390	39	B	748-0488	DD-182	1800	D
748-0665	*DD-470*	*47*	*B*	748-0497	DD-202	2000†	B
748-0685	*DD-500*	*50*	*B*	748-0506	DD-222	2200†	B
748-0705	DD-560	56	B	748-0530	DD-252	2500†	B
748-0715	DD-680	68	B	748-0546	DD-272	2700†	B
748-0734	DD-820	82	B	748-0568	DD-302	3000†	B
748-0445	*DD-101*	*100*	*B*	748-0592	DD-332	3300†	D
748-0460	DD-121	120	B	748-0669	DD-472	4700‡	F
748-0468	*DD-151*	*150*	*B*	748-0689	DD-5022	5000‡	F
748-0486	DD-181	180	B	748-0745	DD-502	5000†	D
748-0495	*DD-201*	*200*	*B*	748-0719	DD-682	6800†	D
748-0504	*DD-221*	*220*	*B*	748-0452	*DD-103*	*10,000†*	*G*
748-0528	DD-251	250	C	748-0740	DD-1032	10,000‡	H
748-0544	DD-271	270	C	748-0795	DD-6-103	10,000†	D
748-0566	DD-301	300	C	748-0472	DD-153	15,000§	G
748-0590	DD-331	330	C	748-0499	*DD-203*	*20,000§*	*J*
748-0638	DD-391	390	C	748-0691	*DD-503*	*50,000§*	*K*

HIGH-VOLTAGE DISC CERAMICS

Buffer capacitors. Capacitance tolerance: ±20%, except *guaranteed minimum value. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	pF	WV DC	EACH 1-99	EACH, Pkgs. of 100 100	200-400	500-Up
748-0815	DD16-502	5000*	1600	.34	.21	.14	.10
748-0805	*DD16-103*	*10,000**	*1600*	.34	.21	.14	.10
748-0892	DD30-330	33	3000	.30	.19	.12	.09
748-0865	DD30-101	100	3000	.30	.19	.12	.09
748-0910	DD30-501	500	3000	.30	.19	.12	.09
748-0867	*DD30-102*	*1000*	*3000*	.38	.24	.15	.12
748-0912	DD30-502	5000	3000	.38	.24	.15	.12
748-0940	DD60-100	10	6000	.45	.29	.18	.14
748-0948	DD60-150	15	6000	.45	.29	.18	.14
748-0975	DD60-500	50	6000	.45	.29	.18	.14
748-0942	DD60-101	100	6000	.45	.29	.18	.14
748-0977	*DD60-501*	*500*	*6000*	.45	.29	.18	.14
748-0990	DD60-751	750	6000	.45	.29	.18	.14
748-0944	DD60-102	1000	6000	.75	.48	.30	.23
748-0955	DD60-202	2000	6000	.75	.48	.30	.23

CERAMIC CAPACITOR KIT

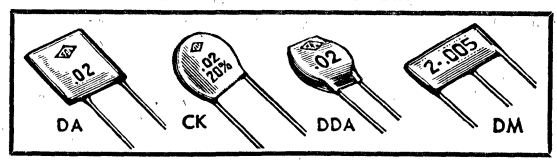


DDK-200 Ceramic Capacitor Kit. Handy assortment contains 200 of the most commonly used Type DD Ceramic Discs in a convenient metal storage tray. All capacitors in clearly labeled reusable plastic packages.

All are 1000 WVDC unless otherwise specified. Five each: 5, 10, 25, 33, 47, 50, 68, 120, 150, 180, 220, 250, 270, 300, 330, 390, 470, 500, 680, 1500, 3000, 4700, 10,000 (600 V) pF. Ten each: 100, 200 pF. Fifteen each: 1000, 5000; 20,000 (600 V) pF. Twenty: 10,000 pF. Cabinet size, 4x6x11". Shpg. wt., 6 lbs.

748-0765 ..... Each 34.10

LOW-VOLTAGE CAPACITORS



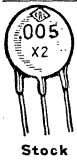
Feature double-Durex resin insulation. All are high-vacuum wax impregnated. Specially designed for transistor circuit applications. Type DA: 9/16x9/16x3/16" thick; tolerance, −30% to +100%. Type DDA: 23/32" dia. x 5/32" thick; tolerance −30% to +80%. Type DM: 17/32x7/32x7/64" thick; tolerance *−20% to +50% and †−20% to +80%. Thick CK, −20% to +80%; sizes: 502 and 103, 25/64" dia. x 5/32" thick; 203, 253 and 303 are 19/32" dia. x 5/32"; 503, 11/16x5/32"; 104, 3/32x11/64". Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	μF	WV DC	EA. 1-99	EA., Pkgs. of 100 100	200-400	500-Up	EA., Pkgs. of 1000 1000-3000	4000-Up
748-0420	*DA-203*	*.02*	*30*	.45	.29	.18	.14	.10	.09
748-0425	DA-503	.05	30	1.01	.64	.41	.30	.24	.21
748-0415	*DA-104*	*.1*	*30*	1.69	1.07	.68	.51	.40	.35
748-0385	CK-502	.005	50	.26	.17	.11	.08	.05	.042
748-0365	*CK-103*	*.01*	*50*	.26	.17	.11	.08	.05	.046
748-0373	*CK-203*	*.02*	*50*	.26	.17	.11	.08	.08	.07
748-0377	CK-253	.025	50	.26	.17	.11	.08	.08	.07
748-0381	CK-303	.03	50	.26	.17	.11	.08	.08	.07
748-0389	*CK-503*	*.05*	*50*	.38	.24	.15	.11	.09	.08
749-0369	CK-104	.1	50	.75	.48	.30	.23	.22	.20
748-0759	DDA-503	.05	75	.38	.24	.15	.13	.08	.07
748-0753	*DDA-104*	*.1*	*75*	.75	.48	.30	.23	.20	.18
748-3118	DM-501*	.0005	150	1.13	.72	.45	.34	.....	.....
748-3102	DM-102*	.001	150	1.13	.72	.45	.34	.....	.....
748-3108	DM-202†	.002	150	1.13	.72	.45	.34	.....	.....
748-3113	DM-302†	.003	150	1.13	.72	.45	.34	.....	.....
748-3120	DM-502†	.005	150	1.13	.72	.45	.34	.....	.....
748-3104	DM-103†	.01	150	1.13	.72	.45	.34	.....	.....

CE AND CF CERAMIC DISC CAPACITORS

Type CE: temperature stable "K", operate from −55° C to +85° C with ±7½% capacity variation; Type CF: temperature semi-stable "K", ±15% variation. Phenolic vacuum insulation is impregnated with high-melting-point wax. All are 500 WVDC. Life test: 1000 hours at 1000 volts at +85° C. Leakage resistance: initial, 10,000 megohms minimum; after humidity, over 1000 megohms. Power factor: 2% maximum at 1 kHz. Tolerance: ±10%. 1½" minimum lead length. No. 22 copper leads. Capacities range from 150 to 10,000 picofarads. All types are 5/32" thick Dia. 19/64" to 59/64". Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	pF	Dia. (In.)	EACH 1-99	EACH, Pkgs. of 100 100	200-400	500-Up
748-0228	CE-151	150	.290	.23	.15	.09	.07
748-0231	CE-221	220	.290	.23	.15	.09	.07
748-0234	CE-331	330	.290	.23	.15	.09	.07
748-0237	CE-471	470	.290	.23	.15	.09	.07
748-0240	CE-501	500	.390	.23	.15	.09	.07
748-0243	CE-561	560	.390	.23	.15	.09	.07
748-0246	CE-681	680	.390	.23	.15	.09	.07
748-0249	CE-751	750	.390	.23	.15	.09	.07
748-0252	CE-801	800	.390	.23	.15	.09	.07
748-0225	CE-102	1000	.590	.23	.15	.09	.07
748-0273	CF-122	1200	.390	.23	.15	.09	.07
748-0276	CF-152	1500	.390	.23	.15	.09	.07
748-0279	CF-182	1800	.390	.23	.15	.09	.07
748-0282	CF-202	2000	.590	.26	.17	.11	.08
748-0285	CF-222	2200	.590	.26	.17	.11	.08
748-0288	CF-332	3300	.590	.26	.17	.11	.08
748-0291	CF-392	3900	.590	.26	.17	.11	.08
748-0294	CF-472	4700	.690	.26	.17	.11	.08
748-0300	CF-502	5000	.690	.26	.17	.11	.08
748-0303	CF-622	6200	.690	.26	.17	.11	.08
748-0305	CF-822	8200	.920	.30	.19	.12	.09
748-0270	*CF-103*	*10,000*	*.920*	.30	.19	.12	.09



DD-2 CERAMIC DISC CAPACITORS

Single disc, dual capacity. Double-Durex insulation. Stamped with capacity. Operating temperature: —55° C to +85° C. Dissipation factor: 2% maximum at 1 kHz. Tolerance: (GM Vexcept*) —20% to +80%. 600 WVDC. Average shpg. wt., 1 oz.

Stock No.	Mfr's Type	μF	Dia. (In.)	EACH 1-99	EACH, Pkgs. of 100 100	200-400	500-Up
748-0775	DD2-102	2x.001	.408	.30	.19	.12	.09
748-0779	DD2-152	2x.0015	.594	.30	.19	.12	.09
748-0787	DD2-502*	2x.005	.719	.45	.29	.18	.14

Capacitors: Ceramic, 205-9, 211—Electrolytic, 188-195—Mica, 210, 211—Tant., 181-8—Var., 212-215

Centralab Special Application Capacitors

CENTRALAB

850 SERIES TRANSMITTING CAPACITORS

850S

Designed for transmitters, induction heaters, electronic welding equipment, X-ray, diathermy, and other high voltage, high frequency circuits. Have extremely low power factor, stable retrace characteristics, and long leakage paths. All ±10% tol., except 858 types— ±20%. Type nos. with N have temp. coeff. of neg. 750 parts/million/°C, types with Z have zero (NPO) coeff., types with no suffix letter are Hi-K, variable. Type 850S and type 858S have 1/8" axial hex studs tapped 6-32; Type 857 has axial studs tapped 10-32 NF-2, 1/4" deep. *Typical RF characteristics @ 30 MHz.

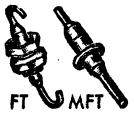
Types 850S, 858S, 13/16" dia. x 57/64" long. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	pF	WV DC	*RF Load, Amps	EACH 1-4	EACH, Pkgs. of 5 5-25	30-100	105-Up
748-7305	850S-25Z	25	7500	7	3.38	2.43	2.14	1.92
748-7310	850S-50Z	50	7500	10	3.38	2.43	2.14	1.92
748-7315	850S-100N	100	5000	9.8	3.38	2.43	2.14	1.92
748-7397	858S-500	500	5000	.....	3.38	2.43	2.14	1.92
748-7399	858S-1000	1000	5000	.....	3.38	2.43	2.14	1.92

Type 857. 1 9/32" dia., 1 57/64" long. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	pF	WV DC	*RF Load, Amps	EACH 1-9	10-24	25-99	100-Up
748-7380	857-25Z	25	15,000	12	10.50	7.56	6.65	5.99
748-7385	857-50Z	50	15,000	12	10.50	7.56	6.65	5.99
748-7390	857-100N	100	15,000	14.4	9.00	6.48	5.70	5.13
748-7395	857-200N	200	7500	18.2	9.00	6.48	5.70	5.13

FEED-THRU CERAMIC HI-KAPS

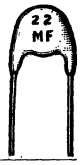


Type FT. For high-frequency circuits where feed-thru plus capacity ground is required. Double-flatted bushing, .281" long with 12-28 thread bushing and nut; #16 tinned copper leads. Length, 1 5/32". Av. shpg. wt., 3 oz.

Type MFT. Miniature version of FT, above. 7/32" max.-dia. flange eyelet for insertion in .160" hole. Solder to chassis; #16 leads. Max. length, 1 3/8". 500 WVDC; 1000 VDC test. Tol.: *±20%; †—20 to +50%; § ±10%; ‡guaranteed min. value. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	pF	EACH 1-99	EACH, Pkgs. of 100 100	200-400	500-Up
748-3500	FT-500	*500	.75	.59	.38	.28
748-3502	FT-1000	*1000	.75	.59	.38	.28
748-3504	FT-1500	†1500	.75	.59	.38	.28
748-3506	FT-1800	†1800	.75	.59	.38	.28
748-3508	FT-2300	†2300	.75	.59	.38	.28
748-4000	MFT-50	§50	.38	.24	.15	.11
748-4002	MFT-100	§100	.38	.24	.15	.11
748-4004	MFT-500	*500	.38	.24	.15	.11
748-4006	MFT-1000	‡1000	.38	.24	.15	.11

UK ULTRA-KAP MINIATURE DISC CAPACITORS



Miniature ceramic disc capacitors for transistor circuitry. Designed for low-voltage applications requiring high capacities and low power factors. Insulated with double coating of "Durez" and impregnated with high-vacuum wax. Dissipation factor at 1 kHz, 3-10%. Tolerance: 3 WVDC types, guaranteed minimum value; 10 and 20 WVDC, +80 −20%. 25 & 50 WVDC ±20% 5/32" thick; 7/32" to 5 9/64" diameter. All types listed have No. 22 leads. 1 oz.

Stock No.	Type UK-	µF	WV DC	EACH 1-99	EA., Pkgs./100 100	200-400	500-Up	EA., Pkgs./1000 1000-3000	4000-Up
748-6004	104	.1	3	.53	.33	.21	.16	.15	.13
748-6010	224	.22	3	.38	.24	.15	.11	.09	.08
748-6016	474	.47	3	.38	.24	.15	.11	.10	.09
748-6005	105	1.0	3	.45	.29	.18	.14	.13	.11
748-6011	225	2.2	3	.53	.34	.21	.16	.16	.14
748-6047	*10-503*	*.05*	*10*	.23	.15	.09	.07	.06	.053
748-6035	*10-104*	*.1*	*10*	.23	.15	.09	.07	.07	.06
748-6039	10-204	.2	10	.38	.24	.15	.11	.10	.08
748-6043	*10-474*	*.47*	*10*	.53	.33	.21	.16	.15	.13
748-6088	20-503	.05	20	.23	.15	.09	.07	.06	.055
748-6080	*20-104*	*.1*	*20*	.26	.17	.11	.09	.08	.07
748-6084	*20-204*	*.2*	*20*	.49	.31	.20	.15	.14	.122
748-6110	*25-103*	*.01*	*25*	.20	.13	.09	.08	.05	.046
748-6116	25-223	.022	25	.24	.15	.11	.10	.08	.076
748-6122	25-503	.05	25	.30	.19	.14	.12	.09	.076
748-6111	25-104	.1	25	.31	.20	.15	.13	.09	.076
748-6165	50-103	.01	50	.24	.16	.10	.08	.056	.05
748-6180	50-503	.05	50	.64	.41	.24	.21	.139	.12
748-6166	50-104	.1	50	1.08	.69	.42	.35	.24	.22

TYPE C1 CERAMIC BY-PASS

Recommended for AC line by-pass application, or where a steady or intermittent higher voltage may occur. Leakage resistance: initial, over 10,000 megohms; after humidity, over 1000 megohms. Dissipation factor: 2% maximum at 1 kHz. Tolerance: ±20%. Operating temperature: to +85°C. Working voltage: 1400 VDC minimum (suitable for continuous operation at 150 VAC rms, 60 Hz). Leads: #22 tinned copper, 1 1/2" long. Case stamped with capacity, tolerance and voltage. U.L. Component Program-Recognized. Shpg. wt. 1 oz.

Stock No.	Mfr's Type	pF	Dia. (in.)	EACH 1-99	EACH, Pkgs. of 100 100	200-400	500-Up
748-0345	C1-471	470	.440	.23	.14	.09	.07
748-0355	C1-681	680	.440	.23	.14	.09	.07
748-0330	C1-102	1000	.640	.26	.17	.11	.08
748-0340	C1-222	2200	.640	.23	.14	.09	.07
748-0350	C1-502	5000	.730	.23	.14	.09	.07
748-0335	C1-103	10,000	.840	.30	.19	.12	.09

JFD 5% HIGH "Q" UNICERM CAPACITORS

ACTUAL SIZE

Meet or exceed MIL-C-11272B. Encapsulated in glass with solid silver ribbon leads for low inductance. Drift-free, low TC of 95 ±20 ppm stability and reliability plus high Q. Low dissipation factor, .0002. No derating, −55°C to +125°C. 300WVDC, *except 200WVDC. †±.25 pF tol. max. UY01, 3/64" sq.; UY02 11/64" sq.; UY03 7/32" sq.; UY05, 7/16" sq. and 7/32" thick. UY04, 9/32" sq. x 1/8" thick. Av. wt. 1 oz.

Stock No.	Mfr's Type	pF	EACH 1-49	50-99	100-249	250-499	500-Up
827-4500	UY01†	1.0	2.23	1.78	1.54	1.31	.99
827-4501	UY01†	1.5	2.23	1.78	1.54	1.31	.99
827-4502	UY01†	2.2	2.23	1.78	1.54	1.31	.99
827-4503	UY01†	2.7	2.23	1.78	1.54	1.31	.99
827-4504	UY01†	3.0	2.23	1.78	1.54	1.31	.99
827-4506	UY01†	3.3	2.23	1.78	1.54	1.31	.99
827-4507	UY01†	3.9	2.23	1.78	1.54	1.31	.99
827-4508	UY01†	4.7	2.23	1.78	1.54	1.31	.99
827-4509	UY01	5.1	2.23	1.78	1.54	1.31	.99
827-4511	UY01	5.6	2.23	1.78	1.54	1.31	.99
827-4512	UY01	6.2	2.23	1.78	1.54	1.31	.99
827-4513	UY01	6.8	2.23	1.78	1.54	1.31	.99
827-4514	UY01	8.2	2.23	1.78	1.54	1.31	.99
827-4516	UY01	9.1	2.23	1.78	1.54	1.31	.99
827-4517	UY01	10	2.23	1.78	1.54	1.31	.99
827-4518	UY01	12	2.23	1.78	1.54	1.31	.99
827-4519	UY01	15	2.25	1.80	1.56	1.34	1.00
827-4521	UY01	20	2.25	1.80	1.56	1.34	1.00
827-4522	UY01	22	2.25	1.80	1.56	1.34	1.00
827-4523	UY01	24	2.38	1.89	1.64	1.40	1.05
827-4524	UY01	30	2.38	1.89	1.64	1.40	1.05
827-4526	UY01	33	2.38	1.89	1.64	1.40	1.05
827-4527	UY01	43	2.38	1.89	1.64	1.40	1.05
827-4528	UY01	47	2.38	1.89	1.64	1.40	1.05
827-4529	UY01	62	2.38	1.89	1.64	1.40	1.05
827-4532	UY02	5.1	2.15	1.71	1.49	1.28	.95
827-4533	UY02	5.6	2.15	1.71	1.49	1.28	.95
827-4534	UY02	6.2	2.15	1.71	1.49	1.28	.95
827-4536	UY02	6.8	2.15	1.71	1.49	1.28	.95
827-4537	UY02	8.2	2.15	1.71	1.49	1.28	.95
827-4538	UY02	9.1	2.15	1.71	1.49	1.29	.95
827-4539	UY02	10	2.15	1.71	1.49	1.28	.95
827-4541	UY02	12	2.15	1.71	1.40	1.29	.95
827-4542	UY02	15	2.20	1.75	1.51	1.30	.98
827-4543	UY02	30	2.20	1.75	1.51	1.30	.98
827-4544	UY02	22	2.20	1.75	1.51	1.30	.98
827-4546	UY02	24	2.20	1.75	1.51	1.30	.98
827-4547	YU02	30	2.23	1.78	1.54	1.31	.99
827-4548	UY02	33	2.23	1.78	1.54	1.31	.99
827-4549	UY02	43	2.25	1.80	1.56	1.34	1.00
827-4551	UY02	47	2.25	1.80	1.56	1.34	1.00
827-4552	UY02	68	2.25	1.80	1.56	1.34	1.00
827-4553	UY02	75	2.25	1.80	1.56	1.34	1.00
827-4554	UY02	82	2.25	1.80	1.56	1.34	1.00
827-4556	UY02	91	2.35	1.86	1.61	1.38	1.04
827-4557	UY02	100	2.35	1.86	1.61	1.38	1.04
827-4558	UY02	110	2.35	1.86	1.61	1.38	1.04
827-4559	UY02	120	2.35	1.86	1.61	1.38	1.04
827-4561	UY02	130	2.35	1.86	1.61	1.38	1.04
827-4562	UY03	150	2.38	1.91	1.66	1.43	1.06
827-4563	UY03	160	2.38	1.91	1.66	1.43	1.06
827-4564	UY03	180	2.38	1.91	1.66	1.43	1.06
827-4566	UY03	200	2.38	1.91	1.66	1.43	1.06
827-4567	UY03	220	2.55	2.03	1.75	1.50	1.13
827-4568	UY03	270	2.55	2.03	1.75	1.50	1.13
827-4569	UY03	300	2.55	2.03	1.75	1.50	1.13
827-4571	UY03	330	2.80	2.23	1.93	1.65	1.24
827-4572	UY03	390	2.80	2.23	1.93	1.65	1.24
827-4573	UY03	470	2.80	2.23	1.93	1.65	1.24
827-4574	UY04	510	3.18	2.54	2.20	1.88	1.41
827-4576	UY04	560	3.18	2.54	2.20	1.88	1.41
827-4577	UY04	620	3.18	2.54	2.20	1.88	1.41
827-4578	UY04	680	3.18	2.54	2.20	1.88	1.41
827-4579	UY04*	750	3.50	2.81	2.44	2.09	1.56
827-4580	UY04*	910	3.50	2.81	2.44	2.09	1.56
827-4581	UY04*	1000	3.50	2.81	2.44	2.09	1.56
827-4587	UY05	1800	4.93	3.94	3.41	2.93	2.19
827-4589	UY05	2200	4.93	3.94	3.41	2.93	2.19
827-4591	UY05	2700	5.80	4.64	4.03	3.45	2.58
827-4592	UY05	3000	5.80	4.64	4.03	3.45	2.58

Elmenco Silvered Mica Capacitors

Oper. temperature range: —55 to +125°C without derating. Tolerance, ±5% or 0.5 pF, whichever is greater, except micro-miniature types CD6 (minimum tolerance ±1 pF) and CD7 (minimum tolerance ±0.5 pF) which have ±2% tolerance. 500 WVDC, except *300 WVDC, †100 WVDC. Have 1¼" tinned brass wire leads, except DM/CD10 which has copperweld leads. All units meet 10-2000 cycle vibration tests. Av. shpg. wt. 2 oz.

Units are dual-marked in both MIL and Commercial Type Numbers

Mfr's Type	MIL Type	Size (HxWxD)
CD6	.....	.265x.135x.095"
CD7	.....	.265x.260x.110" to .330x.310x.175"
DM/CD10	CM04	.360x.330x.190" to .390x.380x.220"
DM/CD15	CM05	.450x.360x.170" to .470x.400x.220"
DM/CD19	CM06	.640x.510x.200" to .700x.580x.350"
DM/CD30	CM07	.780x.860x.280" to .830x.920x.450"
DM/CD42	CM08	1.420x.800x.310" to 1.470x.910x.450"

TYPES DM/CD 10, 15, 19

Stock No.	Mfr's Type DM or CD	pF	EACH 1-24	25-99	100-499	500-999	1000-Up
755-0805	10CD050D03	5	.46	.27	.15	.11	.09
755-0808	10CD100J03	10	.46	.27	.15	.11	.09
755-0810	10CD120J03	12	.46	.27	.15	.11	.09
755-0812	10CD150J03	15	.46	.27	.15	.11	.09
755-0814	10CD180J03	18	.46	.27	.15	.11	.09
755-0835	10ED220J03	22	.31	.18	.10	.08	.06
755-0840	10ED240J03	24	.32	.19	.11	.08	.07
755-0850	10ED270J03	27	.32	.19	.11	.08	.07
755-0853	10ED300J03	30	.32	.19	.11	.08	.07
755-0855	10ED330J03	33	.32	.19	.11	.08	.07
755-0857	10ED390J03	39	.32	.19	.11	.08	.07
755-0860	10ED470J03	47	.34	.20	.11	.08	.07
755-0862	10ED510J03	51	.34	.20	.11	.08	.07
755-0864	10ED560J03	56	.34	.20	.11	.08	.07
755-0866	10ED620J03	62	.35	.20	.12	.09	.07
755-0868	10ED680J03	68	.35	.21	.12	.09	.07
755-0872	10ED820J03	82	.36	.21	.12	.09	.07
755-0818	10ED101J03	100	.38	.22	.13	.10	.08
755-0822	10ED121J03	120	.40	.23	.13	.10	.08
755-0826	10ED151J03	150	.46	.27	.15	.12	.09
755-0830	10ED181J03	180	.53	.31	.18	.13	.11
755-0832	10ED201J03	200	.57	.33	.19	.14	.11
755-0837	10ED221J03	220	.59	.35	.20	.15	.12
755-0842	10ED241J03	240	.64	.37	.21	.16	.13
755-0845	10ED251J03	250	.65	.38	.22	.16	.13
755-0905	15CD050K03	5	.32	.19	.11	.08	.06
755-0909	*15CD100K03*	*10*	.24	.14	.08	.06	.05
755-0912	15CD120K03	12	.24	.14	.08	.06	.05
755-0918	15CD180K03	18	.24	.14	.08	.06	.05
755-0923	15CD220J03	22	.26	.15	.09	.07	.05
755-0926	15ED240J03	24	.26	.15	.09	.07	.05
755-0928	15ED270J03	27	.26	.15	.09	.07	.05
755-0930	15ED300J03	30	.26	.15	.09	.07	.05
755-0932	15ED330J03	33	.26	.15	.09	.07	.05
755-0934	15ED360J03	36	.26	.15	.09	.07	.05
755-0936	15ED390J03	39	.26	.15	.09	.07	.05
755-0938	15ED470J03	47	.26	.15	.09	.07	.05
755-0940	15ED500J03	50	.26	.15	.09	.07	.05
755-0942	15ED510J03	51	.26	.15	.09	.07	.05
755-0944	15ED560J03	56	.26	.15	.09	.07	.05
755-0946	15ED620J03	62	.26	.15	.09	.07	.05
755-0948	15ED680J03	68	.26	.15	.09	.07	.05
755-0951	15ED750J03	75	.26	.15	.09	.07	.05
755-0953	15ED820J03	82	.26	.15	.09	.07	.05
755-0956	*15FD101J03*	*100*	.26	.15	.09	.07	.05
755-0960	15FD121J03	120	.28	.17	.09	.07	.06
755-0964	*15FD151J03*	*150*	.31	.18	.10	.08	.06
755-0973	*15FD201J03*	*200*	.35	.21	.12	.08	.06
755-0976	*15FD221J03*	*220*	.38	.22	.13	.09	.08
755-0979	15FD241J03	240	.40	.24	.13	.09	.08
755-0982	15FD271J03	270	.43	.25	.14	.11	.09
755-0985	15FD301J03	300	.45	.26	.15	.12	.09
755-0988	15FD331J03	330	.50	.29	.17	.12	.10
755-0991	15FD361J03	360	.52	.31	.17	.13	.11
755-0994	15FD391J03	390	.55	.32	.18	.14	.11
755-0997	15FD501J03	500	.48	.25	.19	.16	.13
755-0999	15FD511J03	510	.66	.39	.22	.17	.13
755-1030	19FD431J03	430	.38	.22	.13	.10	.08
755-1034	19FD471J03	470	.43	.25	.14	.11	.09
755-1038	19FD511J03	510	.43	.25	.14	.11	.09
755-1040	19FD561J03	560	.43	.25	.14	.11	.09
755-1042	19FD621J03	620	.47	.27	.16	.12	.09
755-1044	19FD681J03	680	.47	.27	.16	.12	.09
755-1046	19FD751J03	750	.51	.30	.17	.13	.10
755-1048	19FD821J03	820	.51	.30	.17	.13	.10
755-1051	19FD911J03	910	.55	.32	.18	.14	.11
755-1005	*19FD102J03*	*1000*	.60	.35	.20	.15	.12
755-1007	19FD112J03	1100	.64	.38	.21	.16	.13
755-1009	19FD122J03	1200	.68	.40	.23	.17	.14
755-1011	19FD152J03	1500	.82	.48	.27	.20	.16
755-1013	19FD182J03	1800	.90	.53	.30	.23	.18
755-1015	19FD202J03	2000	.99	.58	.33	.25	.20
755-1017	19FD222J03	2200	1.08	.63	.36	.27	.22
755-1019	19FD242J03	2400	1.13	.66	.38	.28	.23
755-1021	19FD272J03	2700	1.28	.75	.43	.32	.26
755-1023	19FD302J03	3000	1.44	.84	.48	.36	.29

TYPES DM/CD 19, 30

Stock No.	Mfr's Type DM or CD	pF	EACH 1-24	25-99	100-499	500-999	1000-Up
755-1025	19FD332J03	3300	1.54	.90	.51	.39	.31
755-1027	19FD392J03	3900	1.80	1.05	.60	.45	.36
755-1032	19FD432J03	4300	2.00	1.17	.67	.50	.40
755-1036	19FD472J03	4700	2.15	1.26	.72	.54	.43
755-1150	30FD512J03	5100	1.69	.98	.56	.42	.34
755-1152	30FD562J03	5600	1.84	1.08	.61	.46	.40
755-1154	30FD622J03	6200	1.99	1.16	.66	.50	.40
755-1156	30FD682J03	6800	2.21	1.29	.74	.55	.44
755-1158	30FD752J03	7500	2.36	1.38	.79	.59	.47
755-1160	30FD822J03	8200	2.59	1.51	.86	.65	.52
755-1162	30FD912J03	9100	2.81	1.64	.94	.70	.56
755-1107	30FD123J03	12,000	3.64	2.12	1.21	.91	.73
755-1109	30FD133J03	13,000	3.93	2.29	1.31	.98	.79
755-1113	30FD163J03	16,000	4.76	2.78	1.59	1.19	.95
755-1115	30FD183J03	18,000	5.28	3.08	1.76	1.32	1.06
755-1117	30FD203J03	20,000	5.88	3.43	1.96	1.47	1.18

MINIATURE INDUSTRIAL TYPES

Stock No.	Mfr's Type DM or CD	pF	EACH 1-24	25-99	100-499	500-999	1000-Up
755-0620	6CD030C03	3	.45	.26	.15	.11	.09
755-0624	6CD050C03	5	.45	.26	.15	.11	.09
755-0634	*6CD100K03*	*10*	.45	.26	.15	.11	.09
755-0638	6CD120C03	12	.51	.30	.17	.13	.10
755-0642	6CD180C03	18	.51	.30	.17	.13	.10
755-0645	6CD200J03	20	.51	.30	.17	.13	.10
755-0648	6CD220J03	22	.51	.30	.17	.13	.10
755-0652	6ED240J03	24	.54	.32	.18	.14	.11
755-0656	6ED270J03	27	.54	.32	.18	.14	.11
755-0659	6ED300J03	30	.54	.32	.18	.14	.11
755-0662	6ED330J03	33	.56	.33	.19	.14	.11
755-0665	6ED360J03	36	.56	.33	.19	.14	.11
755-0668	6ED390J03	39	.56	.33	.19	.14	.11
755-0671	6ED430J03	43	.56	.33	.19	.14	.11
755-0674	6ED470J03	47	.56	.33	.19	.14	.11
755-0680	6ED510G03	51	.93	.54	.31	.23	.19
755-0684	6ED560G03	56	.93	.54	.31	.23	.19
755-0688	6ED620G03	62	.93	.54	.31	.23	.19
755-0691	6ED680G03	68	1.03	.60	.34	.26	.21
755-0692	6ED750G03	75	1.03	.60	.34	.26	.21
755-0650	6EC820G03*	82	1.06	.62	.35	.27	.21
755-0651	6EC910G03*	91	1.06	.62	.35	.27	.21
755-0702	*6FC101G03**	*100*	1.06	.62	.35	.27	.21
755-0706	6FC111G03*	110	1.09	.64	.36	.27	.22
755-0710	6FC121G03*	120	1.09	.64	.36	.27	.22
755-0715	7CD131G03	130	1.11	.65	.37	.28	.22
755-0718	7CD151G03	150	1.11	.65	.37	.28	.22
755-0720	7CD161G03	160	1.14	.67	.38	.29	.23
755-0722	7CD181G03	180	1.15	.67	.38	.29	.23
755-0765	7FC201G03*	200	1.16	.68	.39	.29	.23
755-0767	7FC221G03*	220	1.18	.69	.39	.30	.24
755-0769	7FC241G03*	240	1.25	.73	.42	.31	.25
755-0771	7FC271G03*	270	1.38	.81	.46	.35	.28
755-0773	7FC301G03*	300	1.46	.81	.49	.37	.29
755-0737	7FA331G03†	330	1.55	.93	.52	.39	.31
755-0739	7FA361G03†	360	1.60	.94	.54	.40	.32
755-0741	7FA391G03†	390	1.65	.96	.55	.41	.33
755-0743	7FA431G03†	430	1.70	.99	.57	.43	.34
755-0745	7FA471G03†	470	1.75	1.02	.58	.44	.35
755-0747	7FA511G03†	510	1.80	1.05	.60	.45	.36
755-0750	7FA561G03†	560	1.85	1.08	.62	.46	.37
755-0752	7FA621G03†	620	1.90	1.11	.63	.48	.38
755-0754	7FA681G03†	680	2.40	1.40	.80	.60	.48
755-0756	7FA751G03†	750	2.60	1.52	.87	.65	.52
755-0758	7FA821G03†	820	2.70	1.58	.90	.68	.54
755-0760	7FA911G03†	910	2.80	1.64	.93	.70	.56
755-0725	7FA102G03†	1000	3.15	1.84	1.05	.79	.63
755-0727	7FA112G03†	1100	3.25	1.90	1.08	.81	.65
755-0729	7FA122G03†	1200	3.35	1.95	1.12	.84	.67
755-0731	7FA132G03†	1300	3.80	2.22	1.27	.95	.76
755-0733	7FA152G03†	1500	4.15	2.42	1.38	1.04	.83
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Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Ceramic and Mica Capacitors

NYTRONICS "DECI-CAPS" ULTRAMINIATURE CERAMIC CAPACITORS

Ultraminiature ceramic capacitors in .250x.100" dia. rugged epoxy molded envelope (1/4-watt resistor size). Standardized size permits high-density cordwood packaging. Feature high stability—less than 7½% capacitance change from −55° C to +125° C operating range. ±10% tolerance. Meet MIL-C-11015. Wt., 1 oz.

Stock No.	Mfr's Type	pF	WV DC	EACH 1-24	25-49	50-99	100-249	250-Up
870-0300	DC-047K	4.7	200	.66	.42	.36	.33	.31
870-0302	DC-056K	5.6	200	.66	.42	.36	.33	.31
870-0304	DC-068K	6.8	200	.66	.42	.36	.33	.31
870-0306	DC-082K	8.2	200	.66	.42	.36	.33	.31
870-0308	DC-100K	10	200	.66	.42	.36	.33	.31
870-0313	DC-120K	12	200	.66	.42	.36	.33	.31
870-0318	DC-150K	15	200	.66	.42	.36	.33	.31
870-0323	DC-180K	18	200	.66	.42	.36	.33	.31
870-0328	DC-220K	22	200	.66	.42	.36	.33	.31
870-0333	DC-270K	27	200	.66	.42	.36	.33	.31
870-0348	DC-330K	33	200	.66	.42	.36	.33	.31
870-0342	DC-390K	39	200	.66	.42	.36	.33	.31
870-0350	DC-470K	47	200	.66	.42	.36	.33	.31
870-0354	DC-560K	56	200	.66	.42	.36	.33	.31
870-0358	DC-680K	68	200	.66	.42	.36	.33	.31
870-0362	DC-820K	82	200	.66	.42	.36	.33	.31
870-0309	DC-101K	100	200	.66	.42	.36	.33	.31
870-0314	DC-121K	120	200	.66	.42	.36	.33	.31
870-0319	DC-151K	150	200	.66	.42	.36	.33	.31
870-0324	DC-181K	180	200	.66	.42	.36	.33	.31
870-0329	DC-221K	220	200	.66	.42	.36	.33	.31
870-0334	DC-271K	270	200	.66	.42	.36	.33	.31
870-0339	DC-331K	330	200	.66	.42	.36	.33	.31

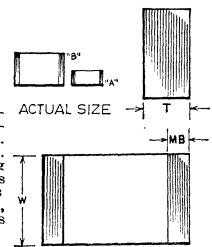
Stock No.	Mfr's Type	pF	WV DC	EACH 1-24	25-49	50-99	100-249	250-Up
870-0343	DC-391K	390	200	.66	.42	.36	.33	.31
870-0351	DC-471K	470	200	1.12	.71	.62	.56	.52
870-0355	DC-561K	560	100	1.12	.71	.62	.56	.52
870-0359	DC-681K	680	100	1.12	.71	.62	.56	.52
870-0363	DC-821K	820	100	1.12	.71	.62	.56	.52
870-0310	DC-102K	1000	100	1.52	.97	.84	.78	.73
870-0315	DC-122K	1200	100	1.67	1.07	.93	.84	.78
870-0320	DC-152K	1500	100	1.71	1.09	.95	.87	.80
870-0325	DC-182K	1800	100	1.88	1.22	1.05	.96	.89
870-0330	DC-222K	2200	100	1.91	1.23	1.07	.97	.90
870-0335	DC-272K	2700	100	2.12	1.36	1.18	1.08	1.00
870-0340	DC-332K	3300	100	2.23	1.43	1.25	1.13	1.04
870-0344	DC-392K	3900	100	2.33	1.50	1.30	1.18	1.09
870-0352	DC-472K	4700	100	2.41	1.56	1.34	1.22	1.12
870-0356	DC-562K	5600	100	2.72	1.74	1.51	1.38	1.28
870-0360	DC-682K	6800	100	3.00	1.93	1.67	1.52	1.40
870-0364	DC-822K	8200	100	3.28	2.10	1.82	1.66	1.53
870-0311	DC-103K	10,000	100	3.61	2.32	2.01	1.83	1.69
870-0316	DC-123K	12,000	100	3.77	2.42	2.09	1.01	1.76
870-0321	DC-153K	15,000	100	4.12	2.64	2.29	2.08	1.93
870-0326	DC-183K	18,000	100	4.12	2.64	2.29	2.08	1.93
870-0331	DC-223K	22,000	100	4.18	2.69	2.33	2.12	1.96
870-0336	DC-273K	27,000	100	4.71	3.02	2.62	2.39	2.20

NYTRONICS "NYT-CHIP" CERAMICS FOR IC'S AND PRINTED CIRCUIT BOARDS

PHYSICAL DIMENSIONS (†SIZE CODE)

†	L	W	T	MB
A	.170" (±.015)	.065" (±.015)	.070" max.	.035" (+.020, −.010)
B	.280" (±.020)	.195" (±.020)	.070" max.	.035" (+.020, −.010)

- Convenient Installation
- Ultra-High Stability, Low Loss
- Low Dissipation Factors



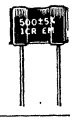
Chip-type capacitors designed for convenient mounting and installation with integrated circuits and PC board constructions. Provide ultra-high stability and low loss. High packaging density and mounting flexibility. Temperature coefficient, 1 less than ±25 PPM/° C. Dissipation factors less than 0.100 at 25° C. 200 WVDC. Tolerance, ±10%. Average shpg. wt. per 100 capacitors is approximately 2 oz.

Stock No.	Mfr's Type	PF	†	Stock No.	Mfr's Type	PF	†
870-2500	NCU-047	4.7	A	870-2524	NCU-181	180	A
870-2502	NCU-056	5.6	A	870-2529	NCU-221	220	A
870-2504	NCU-068	6.8	A	870-2534	NCU-271	270	B
870-2506	NCU-082	8.2	A	870-2539	NCU-331	330	B
870-2508	NCU-100	10	A	870-2544	NCU-391	390	B
870-2513	NCU-120	12	A	870-2551	NCU-471	470	B
870-2518	NCU-150	15	A	870-2556	NCU-561	560	B
870-2523	NCU-180	18	A	870-2556	NCU-681	680	B
870-2528	NCU-220	22	A	870-2566	NCU-821	820	B
870-2530	NCU-270	27	A	870-2510	NCU-102	1000	B
870-2538	NCU-130	33	A	870-2515	NCU-122	1200	B
870-2543	NCU-390	39	A	870-2520	NCU-152	1500	B
870-2550	NCU-470	47	A	870-2525	NCU-182	1800	B
870-2555	NCU-560	56	A	870-2530	NCU-222	2200	B
870-2560	NCU-680	68	A	870-2535	NCU-272	2700	B
870-2565	NCU-820	82	A	870-2540	NCU-332	3300	B
870-2509	NCU-101	100	A	870-2545	NCU-392	3900	B
870-2514	NCU-121	120	A	870-2552	NCU-472	4700	B
870-2519	NCU-151	150	A	.....	.....	.....	....

PRICES FOR "NYT-CHIP" CAPACITORS

Capacity Range µF	Size	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
4.7 to 82	.170x.065x.070"	1.75	1.12	.96	.88	.80	.74
100 to 220	.170x.065x.070"	1.85	1.18	1.02	.92	.84	.78
270 to 470	.280x.195x.070"	3.07	1.97	1.70	1.53	1.42	1.32
560 to 1000	.280x.195x.070"	4.25	2.71	2.34	2.13	1.96	1.82
200 to 4700	.280x.195x.070"	5.33	3.42	2.96	2.69	2.48	2.31

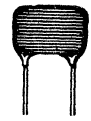
ELMENCO SCDM THIN-COAT DIPPED MICAS



Ideal where space is at a premium. Single resin coat instead of series of dips. Meet **MIL-C-5** except for case insulation (3.5.3) and moisture resistance (3.14). Operate well where not exposed to extensive periods of high humidity. 500 WVDC except *300 WVDC and †100 WVDC. Tol., ±5% except ‡ ± .5 pF. Av. shpg. wt. 2 oz.

Stock No.	Type SCDM-	pF	Size (LxWxT) (Inches)	EACH 1-9	10-99	100-499	500-Up
782-2002	10-030D‡	3	.310x.230x.120	.23	.16	.15	.14
782-2004	10-050D‡	5	.310x.230x.120	.23	.16	.15	.14
782-2008	10-100J	10	.310x.230x.120	.23	.16	.15	.14
782-2018	10-150J	15	.310x.230x.120	.24	.17	.15	.14
782-2026	10-200J	20	.310x.230x.120	.19	.13	.12	.11
782-2030	10-220J	22	.310x.230x.120	.19	.13	.12	.11
782-2040	10-270J	27	.310x.230x.120	.19	.13	.12	.11
782-2051	10-330J	33	.310x.230x.120	.19	.13	.12	.11
782-2057	10-390J	39	.310x.230x.120	.20	.14	.13	.12
782-2061	10-470J	47	.310x.230x.120	.20	.14	.13	.12
782-2064	10-500J	50	.310x.230x.120	.19	.13	.12	.11
782-2069	10-560J	56	.310x.230x.120	.20	.14	.13	.12
782-2072	10-680J	68	.310x.230x.120	.22	.15	.14	.12
782-3075	10-750J	75	.310x.230x.120	.22	.15	.14	.12
782-2078	10-820J	82	.310x.230x.120	.20	.14	.13	.12
782-2079	10-101J	100	.320x.230x.130	.22	.15	.14	.13
782-2014	10-121J	120	.320x.230x.130	.23	.16	.15	.14
782-2019	10-151J	150	.320x.230x.130	.23	.16	.15	.14
782-2022	10-181J	180	.330x.240x.150	.27	.19	.17	.16
782-2027	10-201J	200	.330x.240x.150	.29	.20	.18	.17
782-2031	10-221J	220	.330x.240x.150	.30	.21	.19	.18
782-2036	10-251J	250	.340x.250x.160	.31	.22	.20	.19
782-2041	10-271J	270	.340x.250x.160	.30	.21	.19	.18
782-2045	10-301J	300*	.340x.250x.160	.33	.23	.21	.20
782-2052	10-331J	330	.340x.250x.160	.31	.22	.20	19
782-2055	10-361J	360	.340x.250x.160	.33	.23	.21	.20
782-2058	10-391J	390†	.340x.250x.160	.36	.25	.23	.21
782-2135	15-471J	470	.450x.310x.190	.30	.21	.19	.18
782-2137	15-501J	500	.450x.310x.190	.30	.21	.19	.18
782-2140	15-511J	510	.450x.310x.190	.31	.22	.20	.19
782-2147	15-561J	560*	.450x.310x.160	.31	.22	.20	.19
782-2155	15-681J	680*	.450x.310x.160	.37	.26	.23	.22
782-2159	15-751J	750*	.450x.310x.170	.40	.28	.25	.23
782-2164	15-821J	820*	.450x.310x.170	.43	.30	.27	.26
782-2104	15-102J	1000†	.450x.320x.170	.40	.28	.25	.23

ELMENCO DM5 MINIATURE DUR-MICA



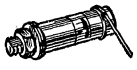
Volumetric savings through decreased area of mica film and use of a new dip-coat material that provides improved protection with a far thinner coat than on larger mica capacitors. Approx. size less leads, 3/16x1/4x1/8". Final letter in Type No. indicates tolerance: J—±5%, K—±10%, WVDC, 300 except *100, †50. Av. wt. 1 oz.

Stock No.	Mfr's No.	pF	EACH 1-9	10-99	100-499	500-Up
782-1005	DM5-050K	5	.27	.19	.17	.16
782-1007	DM5-060K	6	.29	.20	.18	.17
782-1009	DM5-070K	7	.29	.20	.18	.17
782-1011	DM5-080K	8	.29	.20	.18	.17
782-1013	DM5-100J	10	.29	.20	.18	.17
782-1018	DM5-120J	12	.30	.21	.19	.18
782-1023	DM5-150J	15	.30	.21	.19	.18
782-1028	DM5-180J	18	.30	.21	.19	.18
782-1031	DM5-200J	20	.20	.14	.13	.12
782-1033	DM5-220J	22	.21	.15	.14	.13
782-1035	DM5-240J	24	.21	.15	.14	.13
782-1037	DM5-270J	27	.21	.15	.14	.13
782-1039	DM5-300J	30	.21	.15	.14	.13
782-1041	DM5-330J	33	.23	.16	.14	.13
782-1043	DM5-360J	36	.24	.17	.15	.14
782-1045	DM5-390J	39	.24	.17	.15	.14
782-1047	DM5-430J	43	.24	.17	.15	.14
782-1049	DM5-470J	47	.24	.17	.15	.14
782-1051	DM5-500J	50	.24	.17	.15	.14
782-1053	DM5-510J	51	.26	.18	.16	.15
782-1055	DM5-560J	56	.24	.17	.15	.14
782-1057	DM5-620J	62	.29	.20	.18	.17
782-1059	DM5-680J	68	.30	.21	.19	.18
782-1061	DM5-750J	75	.30	.21	.19	.18
782-1063	DM5-820J	82	.33	.23	.21	.20
782-1065	DM5-910J	91	.36	.25	.23	.21
782-1014	*DM5-101J*	100	.37	.26	.24	.22
782-1016	DM5-111J	110	.40	.28	.25	.24
782-1019	DM5-121J	120	.43	.30	.27	.26
782-1021	DM5-131J*	130	.36	.25	.23	.21
782-1024	DM5-151J*	150	.40	.28	.25	.24
782-1026	DM5-161J†	160	.34	.24	.22	.21
782-1029	DM5-181J†	180	.39	.27	.24	.23

JFD Tubular Piston Trimmer Capacitors

Precision-bore solid dielectric, with anti-corrosion metalizing. Meet MIL-C-14409B. Glass types usable from —55° to +125°C (Q 500 min. @ 20 MHz); quartz, —55° to +150°C (Q 1500 min. @ 20 MHz). Five dielectric materials and matched metalizing for homogeneous bond of metalizing to dielectric. Low temperature coefficient, low loss and inductance. High shock and vibration resistance. Green Glass "N" prefix units with higher Q increase delta C's 30% over other similar-size units, and include Hi-Life "Y" mechanism. Low-cost "Y" suffix units combine Hi-Life mechanism with standard glass dielectric; interchangeable with standard units.

NVC/VC GLASS AND NMQ QUARTZ MINIATURE TRIMMERS



Telescoping assembly for 50% savings in length. Positive stops at both ends. NVC and VC glass dielectric, ¼" dia. NMQ quartz dielectric, ¼" dia. Y Series interchangeable with standard VC, and NMQ with standard MQ with added features of longer life and lower cost. Av. shpg. wt. 1 oz. Write for larger-quantity prices.

PANEL MOUNT TYPES

Stock No.	Mfr's Type PC	Mil Type	Cap., pF Min.-Max.	Length In.	EACH 1-9	10-24	25-49	50-99	100-Up
827-2385	NVC20G	50J110	0.8-11.0	35/64	5.60	4.20	3.80	3.40	3.00
827-2387	NVC21G	50J5R5	0.8- 5.5	19/64	5.06	3.80	3.40	3.05	2.65
827-2389	NVC22G	50H160	0.8-16.0	¾	6.40	4.80	4.30	3.85	3.35
827-2391	NVC23G	50H230	0.8-23.0	53/64	7.20	5.40	4.85	4.35	3.80
827-2393	NVC24G	50H380	1.0-38.0	1 19/32	8.00	6.00	5.40	4.85	4.25
827-4750	VC20GY	40J8R5	0.8- 8.5	35/64	4.53	3.40	3.05	2.70	2.25
827-4752	VC21GY	40J4R5	0.8- 4.5	19/64	4.27	3.20	2.95	2.50	2.10
827-4754	VC22GY	40H120	0.8-12.0	¾	5.00	3.75	3.40	2.95	2.45
827-4756	VC23GY	40H180	0.8-18.0	43/64	5.80	4.35	3.95	3.40	2.85
827-4758	VC24GY	40H300	1.0-30.0	1 19/32	6.06	4.55	4.15	3.60	3.05
827-2105	NMQ101	40Q1R8	0.6- 1.8	19/64	6.65	5.00	4.50	4.05	3.55
827-2110	NMQ103	40Q5R8	0.6- 5.5	35/64	7.46	5.60	5.05	4.55	4.00
827-2115	NMQ106	40Q9R5	0.6- 9.5	63/64	9.86	7.40	6.65	6.00	5.25
827-2120	NMQ109	40Q160	0.8-16.0	1 15/32	12.28	9.20	8.30	7.45	6.55

PRINTED CIRCUIT TYPES—*Lug, †Wire Mtg.

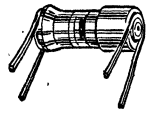
Stock No.	Mfr's Type PC	Mil Type	Cap., pF Min.-Max.	Length In.	EACH 1-9	10-24	25-49	50-99	100-Up
827-2377	†VC9GWY	51J110	0.8-11.0	9/16	5.06	3.80	3.40	3.05	2.65
827-2382	†NVC10GW	51J5R5	0.8- 5.5	5/16	4.53	3.40	3.05	2.75	2.40
827-2408	†NVC31GW	51H160	0.8-16.0	49/64	5.86	4.40	3.95	3.55	3.10
827-2414	†NVC32GW	51H230	0.8-23.0	1	6.65	5.00	4.50	4.05	3.55
827-2419	†NVC43GW	51H380	1.0-38.0	1 39/64	7.46	5.60	5.05	4.55	4.00
827-4730	†VC9GWY	41J8R5	0.8- 8.5	9/16	4.00	3.00	2.75	2.40	2.00
827-4735	†VC10GWY	41J4R5	0.8- 4.5	5/16	3.73	2.80	2.60	2.20	1.85
827-4770	†VC31GWY	41H120	0.8-12.0	49/64	4.46	3.35	3.05	2.65	2.20
827-4774	†VC32GWY	41H180	0.8-18.0	1	5.26	3.95	3.60	3.10	2.60
827-4479	†VC43GWY	41H300	1.0-30.0	1 39/64	5.53	4.15	3.80	3.30	2.80
827-2375	*NVC9G	.....	0.8-11.0	9/16	5.06	3.80	3.40	3.05	2.65
827-2380	*NVC10G	.....	0.8- 5.5	5/16	4.53	3.40	3.05	2.75	2.40
827-2407	*NVC31G	.....	0.8-16.0	49/64	5.86	4.40	3.95	3.55	3.10
827-2412	*NVC32G	.....	0.8-23.0	1	6.65	5.00	4.50	4.05	3.55
827-2417	*NVC43G	.....	1.0-38.0	1 39/64	7.46	5.60	5.05	4.55	4.00
827-4732	*VC9GY	.....	0.8- 8.5	9/16	4.00	3.00	2.75	2.40	2.00
827-4737	*VC10GY	.....	0.8- 4.5	5/16	3.73	2.80	2.60	2.20	1.85
827-4772	*VC31GY	.....	0.8-12.0	49/64	4.46	3.35	3.05	2.65	2.20
827-4776	*VC32GY	.....	0.8-18.0	1	5.26	3.95	3.60	3.10	2.60
827-4781	*VC43GY	.....	1.0-30.0	1 39/64	5.53	4.15	3.80	3.30	2.80
827-2125	*NMQ111	.....	0.6- 1.8	5/16	6.13	4.60	4.15	3.75	3.30
827-2130	*NMQ113	.....	0.6- 5.5	9/16	6.94	5.20	4.70	4.20	3.70
827-2135	*NMQ116	.....	0.6- 9.5	1	9.34	7.00	6.30	5.65	4.95
827-2140	*NMQ119	.....	0.8-16.0	1 39/64	11.74	8.80	7.90	7.10	6.20
827-2145	†NMQ121	41Q1R8	0.6- 1.8	5/16	6.13	4.60	4.15	3.75	3.30
827-2150	†NMQ123	41Q5R5	0.6- 5.5	9/16	6.94	5.20	4.70	4.20	3.70
827-2155	†NMQ126	41Q9R5	0.6- 9.5	1	9.34	7.00	6.30	5.65	4.95
827-2160	†NMQ129	41Q160	0.8-16.0	1 39/64	11.74	8.80	7.90	7.10	6.20

SCY/NSC/NQS SEALCAP MINIATURE PANEL-MOUNT SERIES

Sealed against moisture, atmospheric effects, corona and voltage breakdown. SCY (glass), NQS (quartz), NSC (High-K, High-Q Green Glass) miniature panel mount. Hi-Life adjustment mechanism has a 500 cys adjustment life, exceeding MIL-C-14409B by 600%. "Y" series SC interchangeable with std. SC series and NQS with QS. NSC has 30% greater delta C than SC, and superior Q. NQS has longer-adjustment-life mechanism and TC 25 ±25. 1 oz.

Stock No.	Mfr's Type	Mil Type PC	Cap., pF Min.-Max.	Length In.	EACH 1-9	10-24	25-49	50-99	100-Up
827-2310	NSC131	48J5R5	0.8- 5.5	23/64	6.13	4.60	4.15	3.75	3.30
827-2315	NSC133	48J110	0.8-11.0	19/32	6.65	5.00	4.50	4.05	3.55
827-2317	NSC134	48H160	0.8-16.0	13/16	7.46	5.60	5.05	4.55	4.00
827-2320	NSC136	48H230	0.8-23.0	1 1/16	8.25	6.20	5.60	5.05	4.45
827-2324	NSC139	48H380	1.0-38.0	1 21/32	9.06	6.80	6.10	5.50	4.80
827-4010	SC131Y	38J4R5	0.8- 4.5	23/64	5.06	3.80	3.40	3.05	2.65
827-4015	SC133Y	38J8R5	0.8- 8.5	19/32	5.34	4.00	3.60	3.25	2.85
827-4020	SC134Y	38H120	0.8-12.0	13/16	5.86	4.40	3.95	3.55	3.10
827-4025	SC136Y	38H180	0.8-18.0	1 1/16	6.65	5.00	4.50	4.05	3.55
827-4030	SC139Y	38H300	1.0-30.0	1 21/32	6.94	5.20	4.70	4.20	3.70
827-2180	NQS171	38Q1R8	0.6- 1.8	23/64	9.34	7.00	6.30	5.65	4.95
827-2183	NQS173	38Q5R5	0.6- 5.5	19/32	10.12	7.60	6.80	6.10	5.30
827-2187	NQS176	38Q9R5	0.6- 9.5	1 1/16	12.52	9.40	8.45	7.65	6.70
827-2192	NQS179	38Q160	0.8-16.0	1 21/32	14.92	11.20	10.10	9.10	8.00

MAX-C EXTENDED-RANGE SERIES



Max-C embedded electrode technique gives three times more capacity than standard metalizing in standard glass. All units sealed. "Y" Series positive mechanical stops at both ends of adjustment. Offers longer adjustment life and lower cost. "N" series has approximately 30% greater delta C and Hi-Life mechanism. Wt., 1 oz.

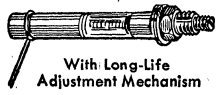
PANEL MOUNT TYPES

Stock No.	Mfr's Type	Mil Type PC	Cap., pF Min.-Max.	Length In.	EACH 1-9	10-24	25-49	50-99	100-Up
827-2010	NMC601	39J160	1.0-16.0	15/32	13.60	10.20	9.20	8.30	7.30
827-2015	NMC603	39J360	1.0-36.0	45/64	14.00	10.50	9.45	8.50	7.45
827-2020	NMC604	39J520	1.0-52.0	59/64	14.40	10.80	9.70	8.70	7.60
827-2025	NMC606	39J750	1.0-75.0	1 11/64	15.20	11.40	10.25	9.25	8.10
827-2030	NMC609	39J121	1.0-120.0	1 49/64	16.80	12.60	11.35	10.20	8.95
827-1510	MC601Y	38J140	1.0-14.0	15/32	8.26	6.20	5.60	5.05	4.45
827-1515	MC603Y	39J280	1.0-28.0	45/64	8.66	6.50	5.85	5.25	4.60
827-1520	MC604Y	39J420	1.0-42.0	59/64	9.06	6.80	6.10	5.50	4.80
827-1525	MC606Y	39J600	1.0-60.0	1 11/64	9.86	7.40	6.65	6.00	5.25
827-1530	MC609Y	39J900	1.0-90.0	1 49/64	10.47	8.60	7.75	7.00	6.15

PRINTED CIRCUIT BOARD TYPES

Stock No.	Mfr's Type	Mil Type PC	Cap., pF Min.-Max.	Length In.	EACH 1-9	10-24	25-49	50-99	100-Up
827-2060	NMC621	43J160	1.0-16.0	.750	13.60	10.20	9.20	8.30	7.30
827-2065	NMC623	43J360	1.0-36.0	.990	14.00	10.50	9.45	8.50	7.45
827-2070	NMC624	43J520	1.0-52.0	1.205	14.40	10.80	9.70	8.70	7.60
827-2075	NMC626	43J750	1.0-75.0	1.450	15.20	11.40	10.25	9.25	8.10
827-2080	NMC629	43J121	1.0-120.0	2.050	16.80	12.60	11.35	10.20	8.95
827-1560	MC621Y	43J140	1.0-14.0	.750	8.26	6.20	5.60	5.05	4.45
827-1565	MC623Y	43J280	1.0-28.0	.990	8.66	6.50	5.85	5.25	4.60
827-1570	MC624Y	43J420	1.0-42.0	1.205	9.06	6.80	6.10	5.50	4.80
827-1575	MC626Y	43J600	1.0-60.0	1.450	9.86	7.40	6.65	6.00	5.25
827-1580	MC629Y	43J900	1.0-90.0	2.050	10.47	8.60	7.75	7.00	6.15

STANDARD PANEL-MOUNT SERIES

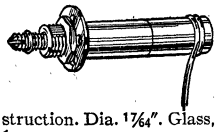


With Long-Life Adjustment Mechanism

Available in glass, quartz and new Green Glass with improved long-life adjustment mechanism. VC99 is designed for unusually high-voltage and power RF use: has closed end to prevent arcing at high altitudes. Rated 5000 WVDC. Use production tool 7104-1 on opposite page. *Glass, †Quartz, ‡Green Glass. Quartz under 5/16" dia., glass and green glass measure ¼". Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Mil Type PC	Cap.,pF Min.-Max.	EACH 1-9	10-24	25-49	50-99	100-199	200-Up
827-4760	*VC25G	.....	0.5-3.0	2.32	1.74	1.55	1.35	1.14	1.03
827-4710	*VC1GC	.....	0.7-9.0	2.21	1.66	1.50	1.34	1.12	1.01
827-4762	*VC26G	.....	0.7-9.0	2.32	1.74	1.55	1.35	1.14	1.03
827-4010	*VC27G	.....	0.8-18.0	2.40	1.80	1.60	1.42	1.20	1.08
827-4017	*VC4G	.....	0.8-18.0	2.27	1.70	1.53	1.35	1.31	1.18
827-4766	*VC28G	.....	0.8-30.0	2.57	2.00	1.80	1.55	1.30	1.17
827-2395	‡NVC25G	35H4R5	0.5-4.5	3.33	2.50	2.25	2.00	1.75	1.58
827-2397	‡NVC26G	35H130	0.8-13.0	3.47	2.60	2.35	2.10	1.85	1.67
827-2402	‡NVC27G	35H240	1.0-24.0	4.00	3.00	2.70	2.40	2.10	1.89
827-2404	‡NVC28G	35H400	1.0-40.0	4.53	3.40	3.05	2.75	2.40	2.16
827-4713	†VC2	37Q4R5	0.7-4.5	5.80	4.35	3.91	3.91	3.62	3.26
827-4721	†VC5	37Q060	0.6-6.0	7.00	5.25	4.72	4.72	4.37	3.94
827-4740	†VC11	37Q100	0.8-10.0	8.00	6.00	5.40	5.40	5.00	4.50
827-4742	†VC12	37Q210	0.9-21.0	10.60	7.95	7.15	7.15	6.62	5.96
827-4805	†VC99	.....	0.8-10.0	11.40	8.55	7.69	7.69	7.12	6.41

LOW-COST STANDARD PANEL MOUNTS



Glass and ceramic dielectric direct-traverse trimmers. For commercial and industrial applications not requiring MIL specs. Positive spring-loaded torque mechanism. No split bushings to cause erratic tuning, noise or short adjustment life. Std. panel mount construction. Dia. 17/64". Glass, except *ceramic dielectric. Av. shpg. wt., 1 oz.

PANEL MOUNTING TYPES

Stock No.	Mfr's Type VC-	pF Range	WV DC	Body Length Inches	EACH 1-9	10-24	25-99	200-199	200-Up
827-4784	54G	0.8-13.0	2500	13/16	2.20	1.65	1.48	1.37	1.24
827-4786	53C*	5.0-50.0	1250	1	2.60	1.95	1.75	1.62	1.46
827-4789	57G	1.0-12.0	750	1	1.32	.99	.89	.83	.74

PRINTED CIRCUIT BOARD TYPES

Stock No.	Mfr's Type VC-	pF Range	WV DC	Body Length Inches	EACH 1-9	10-24	25-99	200-199	200-Up
827-4787	56C*	5.0-50.0	1250	1 13/64	2.60	1.95	1.75	1.62	1.46
827-4791	58G	1.0-12.0	750	1 13/64	1.32	.99	.89	.83	.74

Capacitors: Ceramic, 205-9, 211—Electrolytic, 188-195—Mica, 210, 211—Tant., 181-8—Var., 212-215

Plastic, Filter and Variable Capacitors

JFD CERAMIC VARIABLE, FIXED CERAMIC CAPACITORS

MODUTRIM CERAMIC VARIABLE CAPACITORS

Subminiature variable capacitors for micro-module and hybrid circuits. Choice of 9 wide Delta C ranges. Overall size: ¼x¼x⅛". All are 50 WVDC except *500 V. Specify Series MT300 Pictured or MT400 with "Feed Thru" leads. Av. shpg. wt. 2 oz.

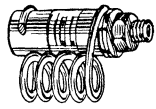
Stock No.	Mfr's Type	Capacity Range, pF	EACH 1-9	10-24	25-99	100-199	200-299	300-Up
827-1760	MT-300	4.0-15.0*	8.00	6.00	5.40	5.00	4.50	4.00
827-1761	MT-306	1.1-5.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1762	MT-309	1.6-9.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1763	MT-312	3.0-12.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1764	MT-320	3.5-20.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1765	MT-330	5.0-30.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1766	MT-340	6.5-40.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1767	MT-350	8.5-50.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1768	MT-360	12.0-60.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1770	MT-400	4.0-15.0*	8.00	6.00	5.40	5.00	4.50	4.00
827-1771	MT-406	1.1-5.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1772	MT-409	1.6-9.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1773	MT-412	3.0-12.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1774	MT-420	3.5-20.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1775	MT-430	5.0-30.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1776	MT-440	6.5-40.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1777	MT-450	8.5-50.0	8.00	6.00	5.40	5.00	4.50	4.00
827-1778	MT-460	12.0-60.0	8.00	6.00	5.40	5.00	4.50	4.00

MVM MINIATURE AIR-VARIABLE CAPACITORS

This air-variable capacitor series is specifically designed for high frequency applications that demand extreme stability, small size and high Q. MVM's are ruggedly constructed and are completely interchangeable with competitive devices. Metal housing elements provide smoother and more constant torque during cycling. In addition, they provide reliable electrical contact over a large area, assuring reduced minimum noise levels. A positive stop beyond maximum rated capacitance prevents electrical shorting. Guiding element keeps rotor centered even under conditions of intense shock and vibration. All-metal rotor with integral spring contact elements. Q values: MVM010, greater then 3000; MVM020, greater than 1200; MVM003 and 006, greater than 5000. Sizes, MVM010, ⅝x9/32"; MVM020, ¾x9/32"; MVM003, ½x9/64"; MVM006, ½x .220". *Turret terminal. †Lug terminal.

Stock No.	Mfr's Type	Range, pF	Mounting	EACH 1-9	10-99	100-Up
827-1585	MVM010	0.8-10.0	Panel*	4.38	3.15	2.45
827-1587	MVM010M	0.8-10.0	Panel†	4.38	3.15	2.45
827-1588	MVM010W	0.8-10.0	PC	4.38	3.15	2.45
827-1589	MVM020	1.0-20.0	Panel*	7.60	5.49	4.62
827-1591	MVM020M	1.0-20.0	Panel†	7.60	5.49	4.62
827-1592	MVM020W	1.0-20.0	PC	7.60	5.49	4.62
827-1594	MVM003	0.35-3.5	Panel*	6.50	4.69	4.12
827-1595	MVM003W	0.35-3.5	PC	6.50	4.69	4.12
827-1596	MVM006	0.40-6.0	Panel*	7.27	5.25	4.65
827-1597	MVM006W	0.40-6.0	PC	7.27	5.25	4.65

MINIATURE TANK CIRCUITS



This well built inductor-capacitor comes in a convenient miniature size. It employs a precision-wound air core coil across a miniature trimmer piston capacitor. Cost is little more than cost of trimmer alone with only one small unit to mount instead of two. Have a nominal Q of 230. Trimmer varies from 0.8 to 8.5 pF. Size: approximately 9/16x½x¼" with 10-32x¼" mtg. bushing and nut. *Indicates self-resonating frequency range. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Range* MHz	EACH 1-9	10-24	25-99	100-199	200-Up
827-1075	LC371	450-1000	5.62	4.05	3.64	3.37	3.04
827-1078	LC372	280-765	5.62	4.05	3.64	3.37	3.04
827-1081	LC373	225-580	5.62	4.05	3.64	3.37	3.04
827-1084	LC374	190-485	5.62	4.05	3.64	3.37	3.04
827-1087	LC375	170-415	5.62	4.05	3.64	3.37	3.04

As new types are released by JFD Allied Electronics will stock them

PLASTIC CAPACITORS, INC.

PLASTIC DIELECTRIC, GLASS-ENCASED CAPACITORS

Extremely long life even under high temperature. Operate 10,000 hours at 85°C at rated voltage. Range: —55°C to +85°C: derate 60% at 150°C. Units meet or exceed MIL-C-25A specs, except high-altitude flashover. Tolerance: ±10%. Mounting terminals: 8-32x⅜" for capacitors ¾" dia. or larger; smaller units have No. 18 tinned-copper axial pigtails.

TYPE OF-20 2000 WVDC. Av. shpg. wt. 4 oz.

Stock No.	Mfr's Type	µF	Size (Dia. x L.)	EACH 1-9	10-24	25-49	50-99	100-Up
884-0402	103	.01	19/32x1 3/16"	3.32	2.85	2.59	2.33	2.04
884-0410	203	.02	19/32x1 9/16"	3.32	2.85	2.59	2.33	2.04
884-0418	503	.05	¾x1¾"	3.60	3.07	2.82	2.53	2.20
884-0406	*104*	.1	¾x2¼"	4.08	3.48	3.19	2.88	2.49
884-0414	*254*	.25	29/32x2¾"	4.66	3.96	3.63	3.25	2.85
884-0422	504	.5	1⅞x2"	5.06	4.34	3.86	3.59	3.11

TYPE OF-30 3000 WVDC. Av. shpg. wt., 6 oz.

884-0430	103	.01	19/32x1 9/16"	3.56	3.32	3.09	2.83	2.18
884-0438	203	.02	¾x1¾"	4.17	3.55	3.22	3.07	2.33
884-0446	503	.05	¾x2¼"	4.25	3.61	3.38	3.14	2.40
884-0434	104	.1	1⅛x1¾"	4.52	4.23	3.94	3.65	2.78
884-0442	254	.25	1⅜x2"	5.08	4.78	4.43	4.10	3.12
884-0451	504	.5	1⅝x2¾"	6.36	5.95	5.54	5.15	3.90

TYPE OF-50 5000 WVDC. Av. shpg. wt., 8 oz.

884-0460	102	.001	19/32x1 3/16"	4.98	4.51	4.00	3.75	3.24
884-0480	502	.005	19/32x1⅝"	5.06	4.56	4.00	3.75	3.24
884-0464	103	.01	¾x1¾"	5.14	4.58	4.11	3.84	3.34
884-0472	203	.02	¾x2¼"	5.60	5.10	4.51	4.26	3.65
884-0484	503	.05	29/32x2¼"	6.02	5.85	5.18	4.86	4.24
884-0468	104	.1	1⅜x2¼"	8.14	7.45	5.67	6.18	5.29
884-0476	254	.25	1⅝x3"	10.30	9.36	8.29	7.80	6.70
884-0488	504	.5	1⅝x6"	11.84	10.79	9.50	9.00	7.70

TYPE OF-80 8000 WVDC. Av. shpg. wt., 1 lb., *3 lbs.

Stock No.	Mfr's Type	µF	Size (Dia. x L.)	EACH 1-9	10-24	25-49	50-99	100-Up
884-0504	102	.001	19/32x1 9/16"	5.28	4.72	4.20	3.94	3.43
884-0520	502	.005	¾x1¾"	5.34	4.85	4.26	4.00	3.52
884-0508	103	.01	¾x2¼"	6.38	5.18	4.59	4.33	3.73
884-0516	203	.02	29/32x2¾"	6.40	5.61	5.00	4.61	4.01
884-0524	503	.05	1⅜x2¾"	8.30	7.23	6.37	5.97	5.15
884-0512	104*	.1	1⅝x3⅝"	9.36	8.49	7.92	7.25	6.09

TYPE OF-100 10,000 WVDC. Av. shpg. wt., 1½ lbs.

884-0543	202	.002	¾x19/32"	5.46	4.82	4.20	4.06	3.55
884-0535	103	.01	29/32x2¼"	6.72	5.91	5.36	5.02	4.37
884-0547	203	.02	1⅛x2¾"	8.82	7.78	7.03	6.61	5.73
884-0552	503	.05	1⅝x2¾"	12.94	10.92	9.88	9.31	8.10
884-0539	104	.1	1⅝x5"	14.08	11.91	10.79	10.13	8.79

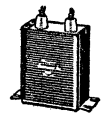
TYPE OF-300 30,000 WVDC. Av. shpg. wt., 4 lbs.

884-0589	502	.005	1⅜x5"	21.78	17.76	15.68	14.70	12.85
884-0580	103	.01	1⅝x6½"	26.02	21.31	18.73	17.51	15.30
884-0584	203	.02	1⅝x9"	27.38	21.81	19.71	17.99	15.43

TYPE OF-200 20,000 WVDC. Av. shpg. wt., 3 lbs.

884-0560	102	.001	¾x3½"	9.78	9.02	8.13	7.44	6.36
884-0568	202	.002	13/16x3½"	11.40	9.33	8.45	7.69	6.62
884-0572	502	.005	1⅛x3½"	12.24	10.03	9.07	8.26	7.12
884-0564	103	.01	1⅛x4½"	14.60	11.91	10.71	9.85	8.45

HIGH-VOLTAGE FILTER CAPACITORS



Smaller than comparable CP-70 style. Range: —50°C to +60°C for 10,000 hours. MIL-C-25A dielectric resistance. Tolerance: —10%, +20%. With footed brackets; nuts and solder lugs on terminals. Wt. †4 lbs. *7 lbs.

TYPE EP30—3000 WVDC

Stock No.	Mfr's Type	µF	Size	EACH 1-9	10-24	25-49	50-99	100-Up
884-0023	504†	.5	2½x1 3/16x2½"	7.90	6.00	5.53	5.00	4.40
884-0015	105	1.0	2½x1 3/16x3¾"	8.28	6.78	6.13	5.66	5.00
884-0018	205*	2.0	3¾x1¼x4½"	11.92	8.88	8.10	7.50	6.58
884-0021	405*	4.0	3¾x2¼x4¾"	17.88	13.50	12.15	11.25	9.88
884-0026	805*	8.0	4 9/16x3¾x4¾"	33.94	24.30	21.85	20.24	17.81

TYPE EP50—5000 WVDC

884-0044	504†	.50	2½x1 3/16x4"	8.72	6.58	5.92	5.48	4.82
884-0035	105*	1.0	3¾x1¾x3¾"	13.36	10.00	9.05	8.34	7.38
884-0038	205*	2.0	3¾x2¼x4¾"	15.62	14.83	13.34	12.38	10.90
884-0041	405*	4.0	4 9/16x3¾x4¾"	34.44	24.60	22.13	20.54	18.10

TYPE EP100—10,000 WVDC. Shpg. wt., 10 lbs.

884-0060	105	1.0	4 9/16x3¾x5½"	44.22	35.72	30.24	27.97	24.77
884-0064	205	2.0	4 9/16x3¾x10"	68.90	52.40	46.59	43.58	38.58

Trimmers and Padders

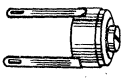
JFD STANDARD VARIABLE DISC TRIMMERS

Miniature ceramic variable trimmer capacitors have disc-type tuning, come in 4 temperature coefficients and 4 mounting types. Type PS has short crimped printed circuit leads; Type A has axial leads; Type P has standard printed circuit leads; Type PR has right-angle printed circuit leads. Size, .375″ dia.x.275″ deep. Wt., 2 oz.

Range pF	Type DV11-	Temp. Coeff.	TYPE PS	TYPE A	TYPE P	TYPE PR
			ERIE EQUIVALENT			
			538-011	538-000	538-002	538-006
2.0-8.0	8A	NP0	827-0390	827-0310	827-0340	827-0375
2.5-11.0	11B	N300	827-0392	827-0312	827-0342	827-0377
3.0-10.0	10C	N500	827-0391	827-0311	827-0341	827-0376
3.0-15.0	15D	N650	827-0393	827-0313	827-0343	827-0378
5.5-18.0	18A	NP0	827-0394	827-0314	827-0344	827-0379
7.0-25.0	25B	N300	827-0395	827-0315	827-0345	827-0380
8.0-25.0	25C	N500	827-0396	827-0316	827-0346	827-0381
9.0-35.0	35D	N650	827-0397	827-0317	827-0347	827-0382

1-24.Each 1.69 25-49.Each 1.60 50-99.Each 1.35 100-199.Each 1.12
200-499.....Each .68 500-Up.....Each .57

JFD DV-5 SUBMINIATURE-DISC VARIABLE CAPACITORS



Ceramic 5mm dia. discs combine the best features of DV and Modutrim configurations. Occupy less than .050 square inches of printed circuit board space. Choice of wide ΔC's in small and stable units. Q—measured at 1 MHz and +25°C = 500 Min.

Stock No.	Mfr's Type	Δ C pF Min.-Max.	EACH 1-9	10-49	50-99	100-Up
827-0301	DV 510H	2-10				
827-0303	DV 525H	3.5-25	8.75	6.95	6.25	5.20
827-0305	DV 530H	5-30				

JFD VC900 SUBMINIATURE PISTON TRIMMERS

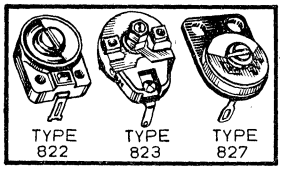
Extremely small size with very wide Delta C. "Hi-Life" telescope mechanism. Temperature Coefficient, +75/−75ppm/°C. *Panel mount; other types are printed circuit mountings. 500 WVDC range. Shpg. wt., ½ oz.

Stock No.	Mfr's Type VC-	Min. pF	Max. pF	Body Lgth.	EACH 1-9	10-24	25-49	50-99	100-299	300-Up
827-4820	950	1.0	10.0	17/64″*	5.60	4.20	3.80	3.40	3.00	2.70
827-4822	951	1.2	16.0	5/16″*	8.26	6.20	5.60	5.05	4.45	4.05
827-4830	960	1.0	10.0	17/64″	5.06	3.80	3.40	3.05	2.65	2.40
827-4832	961	1.2	16.0	5/16″	7.74	5.80	5.22	4.70	4.15	3.70

TUNING (PRODUCTION) TOOLS

Stock No.	Mfr's Type	Description	Wt., Oz.	EACH
827-4890	7104-1	.115″ aperture, internal .019″ screw blade	6	3.34
827-4875	5284	.015″ screwdriver and .050″ hex wrench	5	1.08

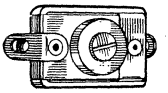
CENTRALAB CERAMIC DIELECTRIC TRIMMERS



Feature ceramic dielectric for high insulating strength. Full capacity range with 180° rotation. Designed to compensate for variation in tube capacities. Rated at 500 WVDC. Power factor: less than 0.2% at 1 MHz. Insulation resistance is 10,000 megohms min. Types 822 and 823 have steatite base; Type 827 phenolic base. Letter N in Type Number indicates negative temperature coefficient; letter Z in Type Number indicates zero temperature coefficient. Mounting holes of Type 822 take #4 machine screws; Type 823 is tapped for #4-40 machine screws; Type 827 has 9/16″ dia. mounting holes. Terminals are silver-plated brass Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	pF	Base Size	EACH 1-4	EACH, Pkgs. of 5 5-25	30-100	105-Up
748-7050	822-EN	4-30	21/32x27/32″	1.43	.95	.90	.76
748-7040	822-CN	4.5-25		1.43	.95	.90	.76
748-7030	822-BN	7-45		1.43	.95	.90	.76
748-7020	822-AN	8-50		1.43	.95	.90	.76
748-7054	822-EZ	1.5-7	21/32x27/32″	1.43	.95	.90	.76
748-7034	822-BZ	2.5-13		1.43	.95	.90	.76
748-7064	822-FZ	3-12		1.43	.95	.90	.76
748-7024	822-AZ	4.5-25		1.43	.95	.90	.76
748-7090	823-DN	8-50	15/16x17/32″	4.50	3.00	2.85	2.40
748-7080	823-BN	10-100		4.50	3.00	2.85	2.40
748-7070	823-AN	20-125		4.50	3.00	2.85	2.40
748-7074	823-AZ	12-62		4.50	3.00	2.85	2.40
748-7160	827-A	2.5-7	17/32x3/4″	1.13	.75	.71	.60
748-7165	827-B	3.5-12		1.13	.75	.71	.60
748-7170	827-C	6-30		1.13	.75	.71	.60
748-7175	827-D	7-35		1.13	.75	.71	.60

ELMENCO TRIMMERS AND PADDERS



TRIMMER

PADDER

Ceramic base, clear India mica. Resistant to humidity. Resilient phosphor-bronze adjusting plates. Trimmers rated 350 VDC test, 175 WVDC. Padders 500 VDC test, 250 WVDC. Three turns for open to tight setting. Wt., 2 oz.

TYPE 30 PADDERS 7/8x1 5/16″

Stock No.	Mfr's Type	pF Min-Max	EACH 1-24	25-99	100-Up
782-0302	302	15-130	.76	.68	.45
782-0303	303	65-340	.83	.74	.50
782-0304	304	115-550	.88	.80	.53
782-0305	305	190-760	.95	.85	.57
782-0306	306	275-970	1.01	.91	.61
782-0307	307	350-1180	1.10	.99	.66
782-0308	308	450-1390	1.18	1.06	.70
782-0309	309	550-1600	1.25	1.13	.75
782-0310	310	650-1890	1.34	1.21	.80
782-0311	311	780-2110	1.43	1.29	.86
782-0312	312	880-2330	1.51	1.35	.90
782-0315	315	1400-3055	1.80	1.63	1.09

TYPE 40 MIDGET TRIMMERS 3/8x9/16″

782-0400	400	9-7	.40	.35	.23
782-0402	402	1.5-20	.39	.35	.23
782-0403	403	4-40	.46	.42	.28
782-0404	404	7-60	.55	.50	.33

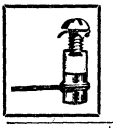
TYPE 42 MIDGET TRIMMERS 3/8x3/4″

789-3760	420	1-12	.39	.35	.23
789-3761	421	2-25	.39	.35	.23
789-3762	422	4-40	.39	.35	.23
789-3763	423	7-100	.44	.40	.26
789-3764	424	16-150	.53	.47	.32
789-3765	425	24-200	.61	.54	.36
789-3766	426	37-250	.66	.61	.41
789-3767	427	55-300	.76	.68	.45
789-3768	428	70-350	.81	.74	.50
789-3769	429	90-400	.89	.80	.54

TYPE 46 STANDARD TRIMMERS 3/4x5/8″

789-3785	460	1.5-15	.39	.35	.23
789-3786	461	2.7-40	.39	.35	.23
789-3787	462	5-80	.39	.35	.23
789-3788	463	9-180	.44	.40	.26
789-3789	464	25-280	.53	.47	.32
789-3790	465	50-380	.59	.54	.36
789-3791	466	80-480	.66	.59	.40
789-3792	467	110-580	.75	.67	.45
789-3793	468	140-680	.83	.74	.50
789-3794	469	170-780	.89	.80	.54

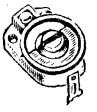
CENTRALAB SERIES 829 TRIMMERS



Small, lightweight ceramic trimmers. Rugged steatite bodies with fired silver stator plates. Initial resistance: 10,000 megohms, minimum. Rated at 500 WVDC; 1000 VDC test. Power factor: less than 0.25% at 1 MHz. Supplied with locknut for mounting against metal panel or chassis. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	pF	L.	EACH 1-24	EACH, Pkgs. of 25 25-100	125-475	500-Up
748-7185	829-3	0.5-3	½″	.38	.24	.15	.11
748-7190	829-6	1.0-6	5/8″	.38	.24	.15	.11
748-7195	829-10	1.5-10	¾″	.38	.24	.15	.11

CENTRALAB SERIES 825 TRIMMERS



Ceramic trimmers meet MIL-C-81 specs and are marked with MIL No. Pure silver stator plate fired on top of low-loss steatite base. Rated at 500 WVDC; 1100 VDC test. Power factor: less than 0.2% at 1 MHz. Body size, 27/32x21/32″. *Temperature characteristic. Av. shpg. wt. 2 oz.

Stock No.	MIL No. CV 11-	CRL No.	pF	*Temp. Char.	EACH 1-4	EA., Pkgs. of 5 5-25	30-100	105-Up
748-7135	A070	825-EZ	1.5-7.0	NP0	1.46	.98	.93	.78
748-7144	A120	835-FZ	3.0-12.0	NP0	1.46	.98	.93	.78
748-7114	A250	825-AZ	4.5-25.0	NP0	1.46	.98	.93	.78
748-7140	B200	825-FN	5.0-20.0	N300	1.46	.98	.93	.78
748-7125	C300	825-CN	4.0-30.0	N500	1.46	.98	.93	.78
748-7149	C450	825-GN	7.0-45.0	N500	1.46	.98	.93	.78
748-7120	D450	825-BN	7.0-45.0	N650	1.46	.98	.93	.78

Capacitors: Tantalum, 181-8—Electrolytic, 188-195—Motor-Start/Oil, 196-9—Mylar, etc., 200, 202-5

Variable Capacitors and Filters

E. F. JOHNSON VARIABLE CAPACITORS

TYPE L VARIABLES

Resist shock, vibration. Split-sleeve tension bearing, silver-plated copper alloy contact for better torque, smooth action. Nickel plates spaced .030". Peak voltage, 1500. Panel space, 1⅜" square behind. †Maximum/Minimum. Wt. 8 oz.

A SINGLE END PLATE

Stock No.	Mfr's Type	pF †	EACH 1-4	5-9	10-49	50-Up
828-1115	167-1-1	10-2.2	3.34	2.50	2.25	2.00
828-1116	167-2-1	25-2.9	3.54	2.65	2.40	2.22
828-1117	167-3-1	50-4.0	3.86	2.90	2.60	2.30
828-1118	167-4-1	75-5.2	4.13	3.10	2.80	2.47

B BUTTERFLY

828-1121	167-21-1	10-2.3	4.00	3.00	2.70	2.40
828-1123	167-23-1	50-5.9	5.86	4.40	3.95	3.50

TYPE M MINIATURE VARIABLES

Small types for compact equipment. Bridge-type stator terminal. Peak voltage 1250 V, except *850 V. Panel space ¾x⅝", up to 1¼" behind. 3/16" dia. slotted shaft, with ¼"-32 mtg. bushing. Av. wt., 2 oz.

C SINGLE SECTION

828-1152	167-102-1	5.0-1.5	1.26	.95	.85	.76
828-1154	167-104-1	8.7-1.8	1.33	1.00	.90	.80
828-1157	167-107-1	14.2-2.3	1.47	1.10	.99	.88
828-1160	167-110-1	19.6-2.7	1.53	1.15	1.04	.92
828-1164	167-130-1	32.0-3*	1.73	1.30	1.17	1.04

D BUTTERFLY

828-1171	167-203-1	3.1-1.5	1.73	1.30	1.17	1.04
828-1173	167-205-1	5.1-1.8	1.86	1.40	1.26	1.12
828-1176	167-208-1	8.0-2.2	2.07	1.55	1.40	1.23
828-1179	167-211-1	10.8-2.7	2.27	1.70	1.53	1.36

E TYPE R VARIABLES

Extra-heavy, rugged construction. Panel or base mtg. Panel space 1 11/16x1⅝", up to 2⅛" behind. 1200 V peak. Av. wt., 1 lb.

828-1025	149-3-1	50-5.9	4.60	3.45	3.10	2.75
828-1027	149-5-1	102-7.1	4.93	3.70	3.32	2.95
828-1028	149-6-1	140-8.0	5.34	4.00	3.60	3.20

F TYPE S VARIABLES

Compact and rugged. 850 V peak rating. Slotted hex-nut shaft. Panel space, 29/32x 25/32", up to 1 1/16" behind. Two 4-40 mtg. holes. *Max./Min. Av. shpg. wt., 1 lb

Stock No.	Mfr's Type	pF *	EACH 1-4	5-9	10-49	50-Up
828-1001	148-1-1	15-2.3	1.60	1.20	1.10	1.00
828-1002	148-2-1	25-2.6	1.67	1.25	1.14	1.04
828-1003	148-3-1	35-2.9	1.73	1.30	1.18	1.08
828-1004	148-4-1	50-3.2	1.80	1.35	1.25	1.14
828-1005	148-5-1	75-3.9	1.93	1.45	1.34	1.23
828-1006	148-6-1	100-4.5	2.07	1.55	1.46	1.32

G MICRO J CERAMIC DISC TRIMMER

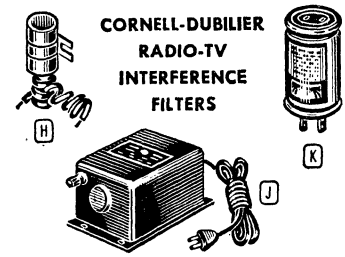
Vertical tuning subminiature trimmer capacitor—less than ¼" D. x ½" L. 200 VDC. High-alumina stator provides lower losses. *Maximum-minimum. Shpg. wt. 1 oz.

Stock No.	Mfr's Type 274-	pF *	EACH 1-49	50-99	100-499	500-Up
828-1509	9-5	9.0-2.5	3.95	3.50	3.00	2.60
828-1520	20-5	20-3.5	3.95	3.50	3.00	2.60
828-1525	25-5	25-5.0	3.95	3.50	3.00	2.60

TYPE U VARIABLES FOR PRINTED CIRCUIT MOUNTING (Not illus.)

Tiny capacitors that require only ¼" sq. panel space, and up to ¾" behind. High Q, low temperature coefficient. Metal parts silver plated. Steatite ceramic. 5/16" PC terminals. Peak voltage 650V except *500V. Av. wt., 4 oz.

Stock No.	Mfr's Type 189-	pF Max-Min	EACH 1-9	10-49	50-99	100-Up
828-1204	501-5	4.2-1.2	.83	.64	.55	.47
828-1207	502-5	6.7-1.3	.85	.66	.56	.48
828-1210	503-5	9.2-1.4	.83	.64	.55	.47
828-1213	504-5	11.6-1.5	.85	.66	.56	.48
828-1216	505-5	14.1-1.7	.88	.68	.59	.51
828-1219	506-5	16.7-1.8	.90	.70	.61	.52
828-1229	509-5	24.5-2.4*	1.00	.76	.65	.56



CORNELL-DUBILIER RADIO-TV INTERFERENCE FILTERS

"Quietone" filters offer highly efficient suppression of interference from many types of household, industrial and heavy-duty electrical equipment or other high frequency disturbance carried through power lines. Designed to provide optimum suppression on the equipment for which intended.

H *Type IF-24.* Industrial filter for permanent installation directly at equipment causing interference. Flex-leads and metal housing, mounting lug. For 110-120 V, AC/DC. Shpg. wt. 6 oz.
755-2115 ..... 1.38

J Type IF-18. All-wave capacitive-inductive filter for severe interference caused by air conditioners, machine tools, etc. Bakelite case, 6x3¾x2½". With line cord, plug. Binding post for ground wire. 5 amps. For 115 V, AC/DC. Shpg. wt. 4 lbs.
755-2110 ..... 9.50

Type NF-10431. Not illus. Commercial type for RF-1 suppression of fluorescent light sources. With line cord, plug. Mounting centers, 2 15/16". 5 amps. For 280 V, AC/DC. 2x3 5/16x1 3/16". Wt. 3 lbs.
755-2701 ..... 3.87

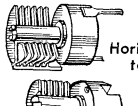
K Type IF-4. Plug-in, cylindrical type for medium interference produced by fluorescent lights, electric shavers, similar devices. Filter plugs into wall; appliance plugs into filter. 5 amps. 110 V, AC/DC. Size, 1⅜x2". Shpg. wt. 5 oz.
755-2100 ..... 1.44

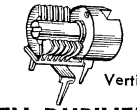
K Type IF-6. Similar to above, but has ground terminal. Connects between power line and appliance, or power line and receiver. 5 amps. 110 V, AC/DC. Size, 1⅜x2". Shpg. wt. 6 oz.
755-2102 ..... 2.24

E. F. JOHNSON SUB-MINIATURE "T" TRIMMERS

*Horiz.; †Vert.; ‡Min./Max.; §Lgth. ". 1 oz.

Stock No.	Type 187-	pF ‡	§	EACH 1-9	10-Up
828-1183	0103-105*	1.3-5.4	.36	.80	.70
828-1185	0106-105*	1.7-11.0	.47	.85	.74
828-1187	0109-105*	1.9-15.7	.58	.94	.82
828-1193	0103-005†	1.3-5.4	.36	.75	.66
828-1195	0106-005†	1.7-11.0	.47	.80	.70
828-1197	0109-005†	1.9-15.7	.58	.89	.78

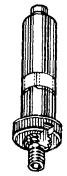

Horizontal


Vertical

E. F. JOHNSON SUB-MINATURE TEFLON TRIMMERS

Ideal for VHF and UHF applications requiring low minimum capacity and delta C. Uniform tuning is linear. Temp. coeff., +50 ±50 ppm/°C. Temp. range, −55° to +150°C. Peak voltage, 2000 VDC. *Mounting. 1 oz.

Stock No.	Mfr's Type	*	pF Max.-Min.	Torque Oz.	In.	EACH 1-9	10-Up
828-1500	273-0001-001	PC	1.5-.25	.2	3.0	.80	.60
828-1501	273-0001-002	Solder	1.5-.25	.2	3.0	.93	.70
828-1503	273-0015-001	Panel	2.9-.30	.2	10.0	1.47	1.10


Panel Mount

CORNELL-DUBILIER TYPE NFR TUBULAR PI RFI FILTERS

150 kHz TO 10 GHz

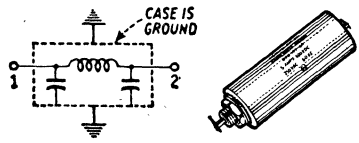
Stock No.	Mfr's Type	Amps	Volts AC	DC	Size, L. x Dia.	EACH 1-24	25-49	50-99	100-499	500-Up
755-2702	NFR100-6#	1.0	.....	100	2¾"x1"	12.30	8.20	6.15	5.54	4.92
755-2726	NFR124-1§	1.0	250	600	2⅝"x1"	14.64	9.76	7.32	6.59	5.86
755-2710	NFR101-8#	5.0	.....	100	3½"x1¼"	15.59	10.46	7.85	7.06	6.28
755-2728	NFR126-1§	5.0	250	600	3"x1¼"	18.60	12.40	9.30	8.37	7.44
755-2733	NFR136-1§	10.0	.....	100	3⅛"x1⅜"	20.49	13.66	10.25	9.22	8.20
755-2730	NFR127-1§	10.0	250	600	3¾"x1⅛"	24.93	16.62	12.47	11.22	9.97

14 kHz TO 10 GHz

755-2706	NFR100-24‡	1.0	120	300	6"x1⅛"	21.75	14.50	10.88	9.79	8.70
755-2720	NFR110-10‡	5.0	120	300	6⅜"x1½"	29.64	19.76	14.82	13.34	11.86
755-2714	NFR102-19‡	10.0	120	300	7"x1¾"	38.52	25.68	19.26	17.34	15.41

14 kHz to 10 GHz†

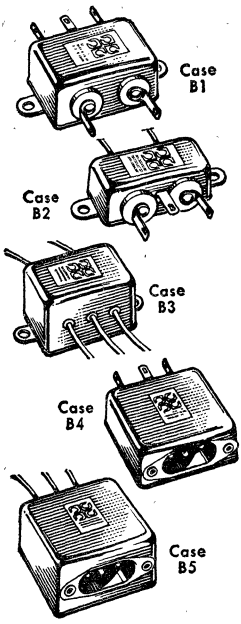
755-2704	NFR100-8A**	1.0	250	600	2¾"x1"	10.65	7.10	5.33	4.79	4.26
755-2718	NFR110-4A**	3.0	250	600	3½"x1⅛"	16.50	11.00	8.25	7.43	6.60
755-2708	NFR101-4A**	5.0	250	600	3½"x1¼"	17.70	11.80	8.85	7.97	7.08
755-2712	NFR102-6A**	10.0	250	600	3¾"x1½"	21.75	14.50	10.88	9.79	8.70
755-2722	NFR111-2A**	20.0	250	600	4⅞"x1¾"	30.90	20.60	15.45	13.91	12.36
755-2724	NFR112-1A**	30.0	250	600	4"x2¼"	50.55	33.70	25.28	22.75	20.22
755-2716	NFR103-3A**	50.0	250	600	4½"x2¼"	68.40	45.60	34.20	30.78	27.36



Have a 3-terminal network in tubular seal d metal cases. For connection in series with the circuit or line to be filtered and for bulkhead or chassis shielded mounting. ‡80 dB attenuation over 150 kHz-10 GHz range. Attenuation is 25 dB/14 kHz. Curve is essentially a straight line from 25 dB/14 kHz-80 db/150 kHz plotted semi-log with frequency the log scale. §80 dB atten. from 500 kHz-10 GHz. 50 dB atten. at 150 kHz. Curve essen. straight from 50 dB/150 kHz-80 dB/500 kHz. #Greater than 80 dB atten. 150 kHz-10 GHz. **80 dB atten. 1 MHz-10 GHz. *Not incl. Terminals. †U.L. Listed for use in data processing equipment.

Components Corporation RFI and EMI Filters

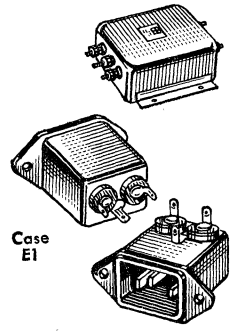
HIGH PERFORMANCE RFI POWERLINE FILTERS



Filters for powerline and internally generated RFI. Both sides of line filtered. Features high RFI rejection at low frequencies (see Table 1). Leakage current limited to 0.5 mA at 120 VAC, 60 Hz. Operate from 115 or 230 VAC. 50-400 Hz. 2100 VDC high pot test. B4 and B5 mate with standard 3 conductor line cord shown below. Dimensions in B2, B3 and B5 do not include 4" leads. Av. wt. 2 oz.

Stock No.	Mfr's Type	Case Style	Size LxWxH	Max. Line Current	DC Ohms	EACH 1-24	25-49	50-99	100-Up
754-0206	1B1	B1	2.50x2.12x .625"	1 amp	.15	5.85	4.77	4.24	3.71
754-0209	1B2	B2	2.50x1.56x .625"	1 amp	.15	5.95	4.86	4.32	3.78
754-0212	1B3	B3	2.50x .94x .625"	1 amp	.15	6.05	4.95	4.40	3.85
754-0215	1B4	B4	2.00x2.50x .750"	1 amp	.15	6.70	5.49	4.88	4.27
754-0218	1B5	B5	2.00x1.90x .750"	1 amp	.15	6.80	5.58	4.96	4.34
754-0230	2B1	B1	2.50x2.12x .625"	2 amp	.04	5.30	4.32	3.84	3.36
754-0233	2B2	B2	2.50x1.56x .625"	2 amp	.04	5.35	4.36	3.88	3.39
754-0236	2B3	B3	2.50x .94x .625"	2 amp	.04	5.40	4.41	3.92	3.43
754-0239	2B4	B4	2.00x2.50x .750"	2 amp	.04	6.05	4.95	4.40	3.85
754-0242	2B5	B5	2.00x1.90x .750"	2 amp	.04	6.15	5.04	4.48	3.92
754-0245	3B1	B1	2.50x2.50x .750"	3 amp	.08	6.05	4.95	4.40	3.85
754-0248	3B2	B2	2.50x1.94x .750"	3 amp	.08	6.15	5.04	4.48	3.92
754-0252	3B3	B3	2.50x1.31x .750"	3 amp	.08	6.40	5.22	4.64	4.06
754-0255	3B4	B4	2.00x2.75x .750"	3 amp	.08	6.95	5.67	5.04	4.41
754-0258	3B5	B5	2.00x2.16x .750"	3 amp	.08	7.05	5.76	5.12	4.48
754-0261	5B1	B1	2.50x2.50x .750"	5 amp	.02	5.40	4.41	3.92	3.43
754-0264	5B2	B2	2.50x1.94x .750"	5 amp	.02	5.55	4.54	4.04	3.53
754-0267	5B3	B3	2.50x1.31x .750"	5 amp	.02	5.70	4.68	4.16	3.64
754-0270	5B4	B4	2.00x2.75x .750"	5 amp	.02	6.30	5.13	4.56	3.99
754-0273	5B5	B5	2.00x2.16x .750"	5 amp	.02	6.40	5.22	4.64	4.06
754-0276	10B1	B1	2.50x2.50x1.125"	10 amp	.015	5.95	4.86	4.32	3.78
754-0279	10B2	B2	2.50x1.94x1.125"	10 amp	.015	6.05	4.95	4.40	3.85
754-0282	10B3	B3	2.50x1.31x1.125"	10 amp	.015	6.15	5.04	4.48	3.92
754-0285	10B4	B4	2.00x2.75x1.125"	10 amp	.015	6.80	5.58	4.96	4.34
754-0288	10B5	B5	2.00x2.16x1.125"	10 amp	.015	6.95	5.67	5.04	4.41
754-0289	10B6	B6	2.50x2.62x1.13"	10 amp	.015	7.25	5.90	5.24	4.60
754-0301	20B1	B1	2.75x3.35x1.13"	20 amp	.01	10.00	8.12	7.23	6.34
754-0306	20B6	B6	2.78x3.37x1.13"	20 amp	.01	11.25	9.13	8.13	7.13
754-0406	30B6	B6	4.12x5.37x1.50"	30 amp	.....	20.00	16.24	14.46	12.68

"EF" INTERNATIONAL SERIES

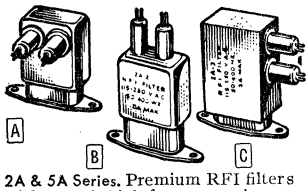


The EF Series with new IEC powerline connector meets European requirements where a detachable line cord is standard equipment. Operates at 115 or 230 VAC, 50-400 Hz. High pot test 2100 VDC. Both sides of line filtered. Insertion loss: 37 dB at 1.0 MHz, 50 dB at 2.0, 2.5 and 5.0 MHz. 1.575 mtg. cent. Positive chassis ground. Mating cord #80-1245 below. 3 oz.

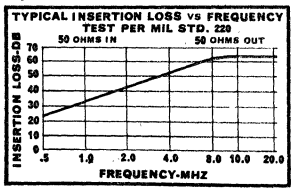
Stock No.	Mfr's Type	Case Style	Size LxWxH	Max. Line Current	1-24	25-49	50-99	100-Up
754-0219	1EF1	E1	1.97x1.97x.79"	1 Amp	9.75	8.30	7.80	7.30
754-0253	3EF1	E1	1.97x1.97x.79"	3 Amp	9.00	7.65	7.00	6.25
754-0274	6EF1	E1	1.97x1.97x.79"	6 Amp	8.25	7.00	6.60	6.20
754-0220	1EF2	E2	1.97x1.55x1.31"	1 Amp	9.75	8.30	7.80	7.30
754-0254	3EF2	E2	1.97x1.55x1.31"	3 Amp	9.00	7.65	7.00	6.25
754-0275	6EF2	E2	1.97x1.55x1.31"	6 Amp	8.25	7.00	6.60	6.20

2A SERIES RFI EQUIPMENT FILTERS

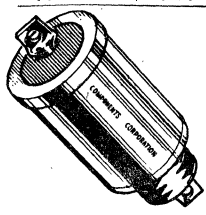
Stock No.	Mfr's Type	Case Style	Size LxWxH	Max. Line Current	EACH 1-9	10-49	50-99	100-Up
754-0221	2A-1	A	1.86x1.50x1.50"	2 Amp	11.68	10.51	9.93	9.35
754-0224	2A-2	B	1.86x2.50x.700"	2 Amp	11.68	10.51	9.93	9.35
754-0227	2A-3	C	2.38x1.88x.700"	2 Amp	11.68	10.51	9.93	9.35
754-0259	5A-1	A	1.86x1.75x1.75"	5 Amp	12.84	11.56	10.91	10.27
754-0260	5A-2	B	1.86x2.50x1.22"	5 Amp	12.84	11.56	10.91	10.27
754-0262	5A-3	C	2.38x2.12x1.22"	5 Amp	12.84	11.56	10.91	10.27



2A & 5A Series. Premium RFI filters with superb high frequency characteristics are ideal for critical instrumentation needs. Operate from 115 to 230 VAC, 50 to 400 Hz. Insertion loss: 30 dB at 1 MHz, 50 dB at 10 MHz and above. 5000 pF capacitance between line and ground. Dual L section configuration. 2100 VDC high pot test. Input mates with #80-1255 three-conductor line cord shown below, right. 1½" mounting centers. Av. wt. 2 oz.



LOW-PASS EMI TEMPERATURE STABLE FILTERS



M Series. Miniature hermetically sealed filters designed for critical applications. Ultra high frequency attenuation. Uniquely designed coils for maximum induction with high DC saturation. Excellent stability of filter capacitance over the full temperature range −55° C to +125° C. Non-polar, ideal for DC and AC lines. Covers 10 kKz to 10 GHz. Highest rejection for size available. ⅜" dia. Mounts with ½-28 stud. Wt. 1 oz.

115 VAC FILTERS FOR 10 kHz TO 10 GHz OPERATION

Stock No.	Mfr's Type	Erie Equivalent	Filter Section	DC A	Max. DC Ohms	L., Inches	EACH 1-9	10-49	50-99	100-Up
754-0147	M115-L1	9000-000-0026	L	1.0	.25	1.028	20.47	18.42	16.38	14.33
754-0151	M115-L3	9000-000-0028	L	3.0	.05	1.028	18.86	16.97	15.09	13.20
754-0154	M115-L5	9000-000-0030	L	5.0	.015	1.028	19.52	17.57	15.62	13.66
754-0169	M115-T2	9004-000-2002	T	2.0	.1	1.464	24.22	21.80	19.38	16.95
754-0172	M115-T5	9005-000-2002	T	5.0	.05	1.630	27.07	24.36	21.66	18.95
754-0166	M115-PQ	9000-000-1018	Pi	.25	1.2	1.028	21.09	18.98	16.87	14.76
754-0157	M115-P1	9000-000-1021	Pi	1.0	.25	1.028	20.38	18.34	16.30	14.27
754-0160	M115-P3	9000-000-1023	Pi	3.0	.05	1.028	19.76	17.78	15.80	13.83
754-0163	M115-P5	9000-000-1025	Pi	5.0	.015	1.028	20.47	18.42	16.38	14.33

3 CONDUCTOR CORD. Mates with 2A, 5A and "B" filters.
754-0855. Type 80-1255. 1-49.....1.70 50-Up.....1.34
3 CONDUCTOR CORD. Mates with EF International filters.
754-0845. Type 80-1245. 1-49.....3.12 50-Up.....2.50

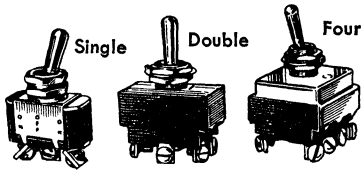
All "B" Series and "EF" International Series Part Numbers are Recognized Under the Components Program of Underwriters Laboratories, Inc.

J-B-T and Cutler-Hammer Military Switches

TOGGLE AND PUSH SWITCHES

C-H MIL-S-3950-C SEALED-LEVER TOGGLE SWITCH

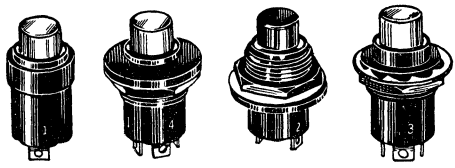
One-hole mounting switches with rocker-type contact mechanism. Sealed levers protect against sand, dust, water. Screw terminals are hot-tin dipped to facilitate soldering. *Locking levers. Code explanation below, right. Av. shpg. wt. 2 oz.



Stock No.	Mfr's Type	Gov't MS No.	Code	EACH 1-9	10-24	25-49	50-99	100-Up
SINGLE POLE								
757-7680	8800K16	35058-21	II	2.32	1.95	1.80	1.50	1.20
757-7701	*8801K22*	35058-22	I	2.00	1.67	1.55	1.28	1.03
757-7750	8810K15	35058-23	III	2.32	1.95	1.80	1.50	1.20
757-7702	8801K23	35058-24	IV	2.00	1.67	1.55	1.28	1.03
757-7770	*8812K14*	35058-27	V	2.52	2.11	1.95	1.62	1.30
757-7760	8811K17	35058-30	IX	2.20	1.85	1.71	1.42	1.14
757-8009	8857K39*	25125-A1	XIII	5.60	4.71	4.35	3.62	2.90
757-8014	8857K44*	25125-E3	XIV	5.60	4.71	4.35	3.62	2.90
DOUBLE POLE								
757-7845	8820K16	35059-21	II	2.94	2.47	2.28	1.90	1.52
757-7855	*8822K20*	35059-22	I	2.55	2.14	1.98	1.65	1.32
757-7869	*8824K14*	35059-23	III	2.94	2.47	2.28	1.90	1.52
757-7856	8822K21	35059-24	IV	2.74	2.30	2.13	1.77	1.42
757-7885	8830K13	35059-26	VIII	3.75	3.15	2.91	2.42	1.94
757-7904	*8834K5*	35059-27	V	3.62	3.04	2.80	2.34	1.87
757-7883	8828K13	35059-29	X	3.56	2.99	2.76	2.30	1.84
757-7893	8832K6	35059-31	VI	3.62	3.04	2.80	2.34	1.87
757-8039	8858K39*	25126-A1	XIII	6.38	5.36	4.95	4.12	3.30
757-8044	8858K44*	25126-E3	XIV	6.38	5.36	4.95	4.12	3.30
FOUR POLE								
757-5127	*7662K7*	25068-21	II	6.73	5.65	5.22	4.35	3.48
757-5134	*7664K5*	25068-23	III	6.73	5.65	5.22	4.35	3.48
757-5120	7660K13	25068-24	IV	5.49	4.61	4.26	3.55	2.84
757-5160	7674K5	25068-26	VIII	8.78	7.37	6.81	5.67	4.54
757-5150	7672K5	25068-27	V	8.78	7.37	6.81	5.67	4.54
757-8064	8859K44	25127-E3	XIV	10.44	8.77	8.10	6.75	5.40

C-H MIL-S-8805/3B PUSHBUTTON SWITCHES

Snap-Action Type Switches



Suffix A Suffix C Suffix F Suffix G

Momentary pushbutton snap-action switches have wiping contacts with .012" overtravel. Mechanical life, 250,000 operations. Rated at 10 amps at 125 VAC; 10 amps at 28 VDC resistive. Temperature range, −55°C to +85°C. 4 lbs. operating force. Dust-tight case. "B" at end of mfr's type no. indicates black button; "R" indicates red button. See table below for explanation of circuit configuration codes. Average shpg. wt., 3 oz.

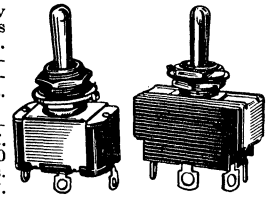
CODE

2 CKT Indicates — SPNO3 Indicates

Stock No.	Mfr's Type No.	MS-25089-	Code	EACH 1-9	10-24	25-49	50-99	100-Up
757-0401	SA401CB2	1C	SPNO	7.27	5.45	4.91	4.36	3.82
757-0405	SA401CR2	1CR	SPNO	7.27	5.45	4.91	4.36	3.82
757-0430	SA403CB2	3C	2 CKT	7.27	5.45	4.91	4.36	3.82
757-0435	SA403CR2	3CR	2 CKT	7.27	5.45	4.91	4.36	3.82
757-0440	SA403FB2	3F	2 CKT	7.27	5.45	4.91	4.36	3.82
757-0445	SA403FR2	3FR	2 CKT	7.27	5.45	4.91	4.36	3.82
757-0450	SA403GB2	3G	2 CKT	7.27	5.45	4.91	4.36	3.82
757-0455	SA403GR2	3GR	2 CKT	7.27	5.45	4.91	4.36	3.82
757-0460	SA404AB2	4A	SPNO3	7.27	5.45	4.91	4.36	3.82
757-0465	SA404CB2	4C	SPNO3	7.27	5.45	4.91	4.36	3.82
757-0470	SA404CR2	4CR	SPNO3	7.27	5.45	4.91	4.36	3.82
757-0475	SA404FB2	4F	SPNO3	7.27	5.45	4.91	4.36	3.82
757-0480	SA404FR2	4FR	SPNO3	7.27	5.45	4.91	4.36	3.82
757-0482	SA404GB2	4G	SPNO3	7.27	5.45	4.91	4.36	3.82
757-0484	SA404GR2	4GR	SPNO3	7.27	5.45	4.91	4.36	3.82
757-0487	SA405CB2	5C	SPNC3	7.27	5.45	4.91	4.36	3.82
757-0490	SA405GB2	5G	SPNC3	7.27	5.45	4.91	4.36	3.82
757-0493	SA405GR2	5YR	SPNC3	7.27	5.45	4.91	4.36	3.82

J-B-T AND CUTLER-HAMMER JAN-S-23 SWITCHES

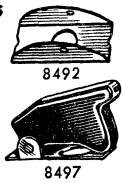
J-B-T 100-200 Series. Medium duty switches per JAN-S-23. Rated 6 amps at 125 VAC, 3 amps at 250 VAC. Have self-wiping silver-plated double-grip contacts. Ideal for instruments and communications circuits. 15/32" bushing. Solder terminals. Cutler-Hammer ST42-ST52. Heavy-duty switches per MIL-S-3950C. Rated 10 amps at 117 VAC; 20 amps at 28 VDC. Solder terminals. *SPST, †DPST, ‡SPDT, §DPDT. • Lever seal. 2 oz.



Stock No.	Mfr's Type	JAN Desig.	Code	Cross Ref. MS3950C Desig.	EACH 1-9	10-24	25-49	50-99	100-Up
826-4012	121*	ST12A	I	.....	1.28	1.20	.88	.80	.75
826-4028	122*	ST12B	X	.....	1.56	1.45	1.06	.97	.91
826-4055	123*	ST12C	IX	.....	1.66	1.55	1.14	1.04	.97
826-4013	131*	ST13A	I	.....	1.33	1.24	.97	.83	.78
826-4016	161*	ST16A	I	.....	1.63	1.53	1.12	1.02	.96
826-4032	162*	ST16B	X	.....	1.71	1.59	1.17	1.06	1.00
826-4059	163*	ST16C	IX	.....	1.71	1.59	1.17	1.06	1.00
826-4017	171*	ST17A	I	.....	1.37	1.28	.94	.86	.80
826-4081	124‡	ST12D	III	.....	1.49	1.39	1.02	.93	.87
826-4082	134‡	ST13D	III	.....	1.54	1.43	1.05	.96	.90
826-4085	164‡	ST16D	III	.....	1.54	1.43	1.05	.96	.90
826-4086	174‡	ST17D	III	.....	1.68	1.57	1.15	1.05	.98
826-4276	221†	ST22K	I	.....	1.78	1.65	1.21	1.10	1.02
826-4277	222†	ST22L	X	.....	2.04	1.90	1.39	1.27	1.19
826-4278	223†	ST22M	IX	.....	2.04	1.90	1.39	1.27	1.19
826-4376	231†	ST23K	I	.....	1.83	1.69	1.24	1.13	1.06
826-4676	261†	ST26K	I	.....	1.92	1.79	1.31	1.20	1.12
826-4677	262†	ST26L	X	.....	2.09	1.94	1.42	1.30	1.22
826-4678	263†	ST26M	IX	.....	2.21	2.04	1.49	1.36	1.28
826-4776	271†	ST27K	I	.....	1.97	1.83	1.34	1.22	1.15
826-4279	224§	ST22N	III	.....	1.94	1.80	1.32	1.20	1.12
826-4379	234§	ST23N	III	.....	1.97	1.84	1.34	1.23	1.15
826-4679	264§	ST26N	III	.....	1.94	1.80	1.32	1.20	1.13
826-4779	274§	ST27N	III	.....	2.09	1.94	1.42	1.30	1.22
757-7730	8803K6*	ST42A	I	35058-22	1.78	1.49	1.38	1.15	.92
757-7734	8803K10*•	ST42A	I	35058-22	1.89	1.59	1.47	1.22	.98
757-7840	8819K5*	ST42B	X	35058-29	1.87	1.57	1.45	1.21	.96
757-7790	8816K5‡	ST42D	III	35058-23	1.87	1.57	1.45	1.21	.96
757-7720	8802K6‡	ST42E	II	35058-21	1.87	1.57	1.45	1.21	.96
757-7740	8805K9†•	ST42F	VIII	35058-26	2.36	1.98	1.83	1.52	1.22
757-7820	8818K5‡	ST42G	V	35058-27	2.07	1.74	1.60	1.34	1.07
757-7824	8818K9†•	ST42G	V	35058-27	2.32	1.95	1.80	1.50	1.20
757-7780	8815K6‡	ST42H	VI	35058-31	2.07	1.74	1.60	1.34	1.07
757-7863	*8823K5*†	ST52K	I	35059-22	2.24	1.88	1.74	1.45	1.16
757-7864	8823K6†•	ST52K	I	35059-22	2.55	2.14	1.98	1.65	1.32
757-7875	8825K5§	ST52N	III	35059-23	2.32	1.95	1.80	1.50	1.20
757-7876	8825K6§•	ST52N	III	35059-23	2.69	2.26	2.08	1.74	1.39
757-7851	*8821K5*§	ST52P	II	35059-21	2.32	1.95	1.80	1.50	1.20
757-7852	8821K6§•	ST52P	II	35059-21	2.69	2.26	2.08	1.74	1.39
757-7890	8831K5§	ST52R	VIII	35059-26	2.98	2.24	2.07	1.73	1.38
757-7910	8835K3§	ST52S	V	35059-27	2.98	2.24	2.07	1.73	1.38
757-7911	8835K4§•	ST52T	V	35059-27	3.50	2.63	2.43	2.03	1.62
757-7897	8833K3§	ST52T	VI	35059-31	2.98	2.24	2.07	1.73	1.38

CUTLER-HAMMER AIRCRAFT SWITCH GUARDS

Type 8492K1 for one hole mounting switches utilizes a locking pin through the two holes off center in the guard to lock single-throw switches in position; double-throw switches can be moved from the first position to center, but not to the extreme position. Type 8497K1 for single-throw switches allows operation only when the guard is up. In the down position the lever is forced to the off position. Av. shpg. wt. 2 oz.



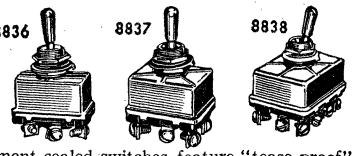
Stock No.	Mfr's Type No.	Gov't MS No.	EACH 1-9	10-24	25-49	50-99	100-Up
757-7182	8492K1	MS 24417-1	1.27	1.07	.99	.83	.66
757-7187	*8497K1*	MS 25224-1	2.43	2.04	1.89	1.57	1.26

Code No.	Lever Travel: Up Position	Center Position	Down (Keyway) Position
I	On	None	Off
II	On	Off	On
III	On	None	On
IV	On	Off	None
V	On*	Off	On*
VI	On	Off	On*
VII	On*	Off	On
VIII	On	None	On*
IX	Off	None	On*
X	On	None	Off*
XI	None	On	On*
XII	None	Off	On*
XIII	On→	←Off→	←On
XIV	On→	None	←On

LEVER TRAVEL CHART

Explanation of Roman Numeral code numbers used in tables on these pages, to determine lever travel. *Indicates momentary contact. Arrow (→) indicates direction in which lever is locked.

Cutler-Hammer Military Switches



MIL-S-8834-B POSITIVE ACTION SWITCHES

Positive action environment sealed switches feature "tease proof" action with toggle lined directly to the movable contact member to insure positive make and break. Contact wiping action keeps contacts clean and smooth, insures satisfactory operation with high current capability. Rated at 25A @ 28 VDC and 20A @ 115 VAC resistive load. **Code explanation on Page 217.** Av. wt. 4 oz.

SINGLE POLE

Stock No.	Mfr's Type	Gov't MS No.	Code	EACH 1-9	10-24	25-49	50-99	100-Up
757-7920	8836K1	25306-212	II	11.22	9.42	8.70	7.25	5.80
757-7928	8836K9	25306-222	I	10.83	9.10	8.40	7.00	5.60
757-7923	8836K4	25306-232	III	11.22	9.42	8.70	7.25	5.80
757-7925	8836K6	25306-242	IV	11.22	9.42	8.70	7.25	5.80
757-7921	8836K2	25306-272	V	11.99	10.07	9.30	7.75	6.20
757-7930	8836K11	25306-302	IX	11.99	10.07	9.30	7.75	6.20

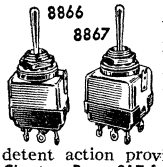
DOUBLE POLE

Stock No.	Mfr's Type	Gov't MS No.	Code	1-9	10-24	25-49	50-99	100-Up
757-7950	8837K1	25307-212	II	15.48	13.00	12.00	10.00	8.00
757-7958	8837K9	25307-222	I	14.70	12.35	11.40	9.50	7.60
757-7953	8837K4	25307-232	III	15.48	13.00	12.00	10.00	8.00
757-7955	8837K6	25307-242	IV	15.09	12.67	11.70	9.75	7.80
757-7954	8837K5	25307-262	VIII	16.64	13.97	12.90	10.75	8.60
757-7951	8837K2	25307-272	V	16.64	13.97	12.90	10.75	8.60
757-7952	8837K3	25307-312	VI	16.64	13.97	12.90	10.75	8.60
757-7990	8844K6	24613-E232	XIV	22.44	18.85	17.40	14.50	11.60

FOUR POLE

Stock No.	Mfr's Type	Gov't MS No.	Code	1-9	10-24	25-49	50-99	100-Up
757-7970	8838K1	25308-212	II	30.96	26.00	24.00	20.00	16.00
757-7978	8838K9	25308-222	I	29.41	24.70	22.80	19.00	15.20
757-7973	8838K4	25308-232	III	30.96	26.00	24.00	20.00	16.00
757-7974	8838K5	25308-262	VIII	32.89	27.62	25.50	21.25	19.00
757-7995	8845K6	24614-E232	XIV	41.02	34.45	31.80	26.50	21.20

MIL-S-8834 MINIATURE SMALL LEVER

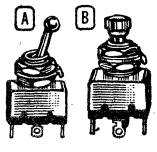


Miniature base switches have ¼-40 threaded bushing and .440" long toggle lever. Single-pole base, .749x562x.354"; double-pole base, .706x.562x.546". Direct-linked toggle for positive operation. Gold-plated contacts with wiping action. Switches come with "O" ring panel seal furnished. Rated at 3 amperes at 117 VAC; 4 amperes at 28 VDC resistive. Minimum rating, 25 μA at 5 mV or less. Positive detent action provides excellent operator feel. **See Lever Travel Chart on Page 217 for codes.** Wt. 6 oz.

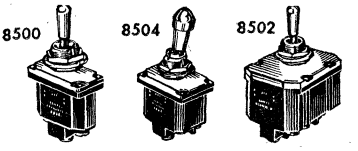
SINGLE POLE

Stock No.	Mfr's Type	Gov't MS No.	Code	EACH 1-9	10-24	25-49	50-99	100-Up
757-8076	8866K1	24655-211	II	6.11	5.13	4.74	3.95	3.16
757-8082	8866K7	24655-221	I	6.11	5.13	4.74	3.95	3.16
757-8079	8866K4	24655-231	III	6.11	5.13	4.74	3.95	3.17
757-8080	8866K5	24655-241	IV	6.88	5.78	5.34	4.45	3.56
757-8077	8866K2	24655-271	V	6.88	5.78	5.34	4.45	3.56
757-8081	8866K6	24655-281	XII	6.88	5.78	5.34	4.45	3.56
757-8078	8866K3	24655-311	VI	6.88	5.78	5.34	4.45	3.56
757-8083	8866K8	None	XI	7.27	6.11	5.64	4.70	3.76
757-8107	8867K1	24656-211	II	7.62	6.40	5.91	4.92	3.94
757-8113	8867K7	24656-221	I	7.62	6.40	5.91	4.92	3.94
757-8110	8867K4	24656-231	III	7.62	6.40	5.91	4.92	3.94
757-8111	8867K5	24656-241	IV	8.86	7.44	6.87	5.72	4.58
757-8108	8867K2	24656-271	V	8.86	7.44	6.87	5.72	4.58
757-8112	8867K6	24656-281	XII	8.86	7.44	6.87	5.72	4.58
757-8109	8867K3	24656-311	VI	8.86	7.44	6.87	5.72	4.58
757-8114	8867K8	None	XI	9.24	7.76	7.27	5.97	4.78

ARROW-HART SUBMINIATURE SWITCHES



Gold-plated silver contacts; gold plated brass terminals; diallyl phthalate bases. Toggle types (Fig. A) 5A res. @ 29VDC/115VAC; meet MIL-S-3950. MS-75028, SPDT; MS-75029, DPDT. Pushbutton types (Fig. B), 2A res. @ 29 VDC/1A @ 115 VAC. Figure A except PM-3 through PM-7 which are Figure B. * signifies momentary action. Shpg. wt. 1 oz.



MIL-S-3950-C ENVIRONMENTALLY SEALED SWITCHES

Environmentally sealed switches meet or exceed MIL-S-3950-C. Features a patented sealing process for protection against environmental conditions. Offers greater safety, positive detent feel, improved dielectric capability, simplified wiring. Rated at 20A @ 28 VDC; 15A @ 117 VAC resistive load. **Code explanation on Page 217.** Av. shpg. wt. 6 oz.

SINGLE POLE

Stock No.	Mfr's Type	Gov't MS No.	Code	EACH 1-4	5-9	10-19	20-49	50-Up
757-7400	8500K1	24523-21	II	5.85	4.40	3.96	3.52	3.08
757-7508	8500K9	24523-22	I	5.85	4.40	3.96	3.52	3.08
757-7404	8500K4	24523-23	III	5.85	4.40	3.96	3.52	3.08
757-7407	8500K7	24523-28	XI	6.78	5.10	4.59	4.08	3.57
757-7402	8500K2	24523-27	V	5.85	4.40	3.96	3.52	3.08
757-7411	8500K11	24523-30	IX	5.85	4.40	3.96	3.52	3.08

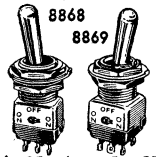
DOUBLE POLE

Stock No.	Mfr's Type	Gov't MS No.	Code	1-4	5-9	10-19	20-49	50-Up
757-7441	8501K1	24524-21	II	9.57	7.20	6.48	5.76	5.04
757-7449	8501K9	24524-22	I	9.57	7.20	6.48	5.76	5.04
757-7444	8501K4	24524-23	III	9.57	7.20	6.48	5.76	5.04
757-7451	8501K11	24524-30	IX	9.57	7.20	6.48	5.76	5.04
757-7445	8501K5	24524-26	VIII	9.57	7.20	7.20	5.76	5.04
757-7442	8501K2	24524-27	V	9.57	7.20	7.20	5.76	5.04
757-7443	8501K3	24524-31	VI	9.57	7.20	7.20	5.76	5.04
757-7490	8504K6	24659-23D	XIV	14.89	11.20	10.08	8.96	7.84

FOUR POLE

Stock No.	Mfr's Type	Gov't MS No.	Code	1-4	5-9	10-19	20-49	50-Up
757-7471	8502K1	24525-21	II	15.22	11.45	10.30	9.16	8.01
757-7479	8502K9	24525-22	I	15.22	11.45	10.30	9.16	8.01
757-7474	8502K4	24525-23	III	15.22	11.45	10.30	9.16	8.01
757-7475	8502K5	24525-26	VIII	15.22	11.45	10.30	9.16	8.01
757-7472	8502K2	24525-27	V	15.22	11.45	10.30	9.16	8.01
757-7473	8502K3	24525-31	VI	15.22	11.45	10.30	9.16	8.01
757-7495	8505K6	24660-23D	XIV	20.48	15.40	13.86	12.32	10.78

MIL-S-8834 MINIATURE LARGE LEVER & BUSHING



Positive action switches featuring miniature base with standard 15/32-32 threaded bushings and large lever. Silicone rubber lever protects switch against environmental conditions. Toggle is linked directly to the movable contact for positive make and break. Gold-plated contacts open, close with a wiping action for good contact on dry circuit. 3 amps at 117 VAC; 4 amps at 28 VDC resistive. Minimum rating is 25 μA at 5 mV or less. **Code explanation is on Page 217.** Av. shpg. wt. 2 oz.

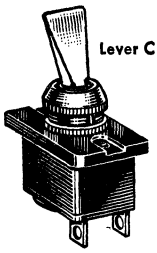
SINGLE POLE

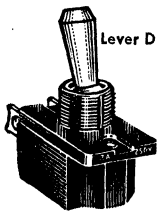
Stock No.	Mfr's Type	Gov't MS No.	Code	EACH 1-9	10-24	25-49	50-99	100-Up
757-8140	8868K1	90310-211	II	6.30	5.29	4.89	4.07	3.26
757-8146	8868K7	90310-221	I	6.30	5.29	4.89	4.07	3.26
757-8143	8868K4	90310-231	III	6.30	5.29	4.89	4.07	3.26
757-8144	8868K5	90310-241	IV	7.08	5.94	5.49	4.57	3.66
757-8141	8868K2	90310-271	V	7.08	5.94	5.49	4.57	3.66
757-8145	8868K6	90310-281	XII	7.08	5.94	5.49	4.57	3.66
757-8142	8868K3	90310-311	VI	7.08	5.94	5.49	4.57	3.66
757-8147	8868K8	90310-321	XI	7.46	6.27	5.79	4.82	3.86
757-8170	8869K1	90311-211	II	7.85	6.59	6.09	5.07	4.06
757-8176	8869K7	90311-221	I	7.85	6.59	6.09	5.07	4.06
757-8173	8869K4	90311-231	III	7.85	6.59	6.09	5.07	4.06
757-8174	8869K5	90311-241	IV	9.09	7.63	7.05	5.87	4.70
757-8171	8869K2	90311-271	V	9.09	7.63	7.05	5.87	4.70
757-8175	8869K6	90311-281	XII	9.09	7.63	7.05	5.87	4.70
757-8172	8869K3	90311-311	VI	9.09	7.63	7.05	5.87	4.70
757-8177	8869K8	90311-321	XI	9.11	7.96	7.35	6.12	4.90

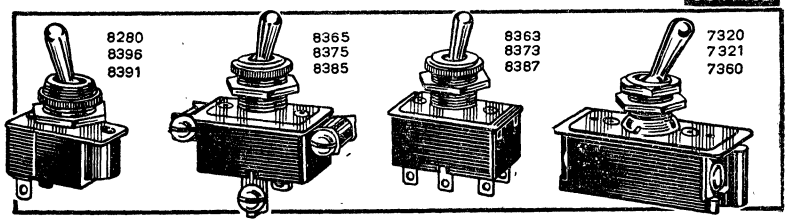
Stock No.	Mfr's Type	Gov't Mil Spec No.	Action	EACH
717-0075	TC-3M	75028-21	On-Off-On	3.20
717-0090	TS-3M	75028-23	On-None-On	3.20
717-0086	TG-3M	75028-27	On*-Off-On*	3.40
717-0083	TE-3M	75028-31	On*-Off-On	3.40
717-0080	TC-6M	75029-21	On-Off-On	4.10
717-0095	TS-6M	75029-23	On-None-On	4.10
717-0053	PM-3	.....	SPDT	2.86
717-0056	PM-6	.....	DPDT	3.51
717-0057	PM-7	.....	3PST-N.O.	3.31

Cutler-Hammer AC-DC Toggle Switches

TOGGLE SWITCHES







AC-DC "DESIGNER LINE" SWITCHES

Precision made to assure long life and reliable operation under heavy usage. Brilliant new design concept adds "class" to any equipment. Two handle styles are available in red, white, yellow, black and green. All switches have high arc-resistant and "tease resistant" quick-make, quick-break contact mechanism enclosed in a sturdy phenolic case. Switches have 15/32" diameter, 11/32" long stem. All switches have solder lug terminals. ■U.L. Recognized. C.S.A. Listed. Average shpg. wt. 2 oz.

SPST (3 AMPS AT 250 VOLTS, 6 AMPS AT 125 VOLTS)

Stock No.	Mfr's Type	Lever Color	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-7050	*8381K21C*	*White*	1.15	.87	.80	.67	.61	.53
757-7051	8381K21D	White	1.15	.87	.80	.67	.61	.53
757-7052	*8381K22C*	*Red*	1.15	.87	.80	.67	.61	.53
757-7058	8381K22D	Red	1.15	.87	.80	.67	.61	.53
757-7062	*8381K25C*	*Yellow*	1.15	.87	.80	.67	.61	.53
757-7063	8381K25D	Yellow	1.15	.87	.80	.67	.61	.53
757-7070	*8381K27C*	*Black*	1.15	.87	.80	.67	.61	.53
757-7071	8381K27D	Black	1.15	.87	.80	.67	.61	.53
757-7060	*8381K24C*	*Green*	1.15	.87	.80	.67	.61	.53
757-7061	8381K24D	Green	1.15	.87	.80	.67	.61	.53

SPDT (1 AMP AT 250 VOLTS, 3 AMPS AT 125 VOLTS)

757-6501	8282K21C	White	1.28	.95	.88	.74	.66	.58
757-6502	*8282K21D*	*White*	1.28	.95	.88	.74	.66	.58
757-6503	8282K22C	Red	1.28	.95	.88	.74	.66	.58
757-6504	8282K22D	Red	1.28	.95	.88	.74	.66	.58
757-6512	8282K25C	Yellow	1.28	.95	.88	.74	.66	.58
757-6513	8282K25D	Yellow	1.28	.95	.88	.74	.66	.58
757-6520	8282K27C	Black	1.28	.95	.88	.74	.66	.58
757-6521	8282K27D	Black	1.28	.95	.88	.74	.66	.58
757-6510	8282K24C	Green	1.28	.95	.88	.74	.66	.58
757-6511	8282K24D	Green	1.28	.95	.88	.74	.66	.58

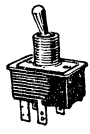
DPST (3 AMPS AT 250 VOLTS, 6 AMPS AT 125 VOLTS)

757-6860	8370K21C	White	1.85	1.39	1.28	1.07	.96	.85
757-6861	8370K21D	White	1.85	1.39	1.28	1.07	.96	.85
757-6862	*8370K22C*	*Red*	1.85	1.39	1.28	1.07	.96	.85
757-6863	8370K22D	Red	1.85	1.39	1.28	1.07	.96	.85
757-6872	8370K25C	Yellow	1.85	1.39	1.28	1.07	.96	.85
757-6873	8370K25D	Yellow	1.85	1.39	1.28	1.07	.96	.85
757-6880	8370K27C	Black	1.85	1.39	1.28	1.07	.96	.85
757-6881	8370K27D	Black	1.85	1.39	1.28	1.07	.96	.85
757-6870	8370K24C	Green	1.85	1.39	1.28	1.07	.96	.85
757-6871	8370K24D	Green	1.85	1.39	1.28	1.07	.96	.85

DPDT (3 AMPS AT 250 VOLTS, 6 AMPS AT 125 VOLTS)

757-6920	*8373K21C*	*White*	2.10	1.57	1.45	1.21	1.09	.97
757-6921	8373K21D	White	2.10	1.57	1.45	1.21	1.09	.97
757-6922	*8373K22C*	*Red*	2.10	1.57	1.45	1.21	1.09	.97
757-6923	8373K22D	Red	2.10	1.57	1.45	1.21	1.09	.97
757-6932	8373K25C	Yellow	2.10	1.57	1.45	1.21	1.09	.97
757-6933	8373K25D	Yellow	2.10	1.57	1.45	1.21	1.09	.97
757-6940	*8373K27C*	*Black*	2.10	1.57	1.45	1.21	1.09	.97
757-6941	8373K27D	Black	2.10	1.57	1.45	1.21	1.09	.97
757-6930	8373K24C	Green	2.10	1.57	1.45	1.21	1.09	.97

DRY-CIRCUIT AC-DC SWITCHES



Rugged dry-circuit switches for a variety of industrial uses. They have C-H quick-make, quick-break self-cleaning contacts to assure long and dependable service. Low resistance contacts are *silver or †gold. Quick connecting terminals are .110". Switches are rated 5 amps at 125 volts or 3 amps at 250 volts. All switches have 15/32" diameter bushings. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-7020	*8376K1	DPST	2.30	1.79	1.66	1.39	1.24	1.10
757-7021	*8376K2	DPDT	2.75	2.06	1.90	1.58	1.43	1.27
757-7030	†8377K1	DPST	3.22	2.42	2.23	1.87	1.68	1.49
757-7031	†8377K2	DPDT	3.58	2.68	2.49	2.07	1.86	1.65

AC-DC UTILITY AND HEAVY-DUTY SWITCHES

High-performance utility heavy-duty switches are ideal for tools, appliances and a variety of other industrial uses. Precision made to assure long life and reliable operation. They have arc resistant and "tease resistant" quick-make, quick-break contact mechanism enclosed in a durable phenolic case. Self-cleaning contacts assure circuit continuity every time switches are thrown. Supplied with all necessary hardware for one hole mounting. ‡SP-2 circuit. 15/32" dia. stem. ■U.L. Recognized. C.S.A. Listed. Av. shpg. wt. 2 oz.

SPST

Stock No.	Mfr's Type	A @ 125 V	A @ 250 V	Bushing L	Terminal	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-6301	*8280K14*	*3*	*3*	1/4"	*Solder*	1.01	.77	.70	.59	.53	.47
757-6302	8280K15	3	3	11/32"	Solder	1.01	.77	.70	.59	.53	.47
757-6303	*8280K16*	*3*	*3*	15/32"	*Solder*	1.01	.77	.70	.59	.53	.47
757-6550	8290K15	3	3	11/32"	Wire	1.23	.92	.85	.72	.64	.57
757-6551	8290K16	3	3	15/32"	Wire	1.23	.92	.85	.72	.64	.57
757-6555	8295K7	3	3	11/32"	Screw	1.23	.92	.85	.72	.64	.57
757-6566	8295K8	3	3	15/32"	Screw	1.23	.92	.85	.72	.64	.57
757-7040	*8381K7*	*6*	*3*	11/32"	*Solder*	1.18	.88	.81	.68	.61	.54
757-7041	*8381K8*	*6*	*3*	15/32"	*Solder*	1.18	.88	.81	.68	.61	.54
757-7085	8391K7	6	3	11/32"	Wire	1.38	1.03	.96	.80	.72	.64
757-7086	8391K8	6	3	15/32"	Wire	1.38	1.03	.96	.80	.72	.64
757-7096	*8396K7*	*6*	*3*	11/32"	*Screw*	1.38	1.03	.96	.80	.72	.64
757-7097	8396K8	6	3	15/32"	Screw	1.38	1.03	.96	.80	.72	.64
757-3750	7321K2	16	8	11/32"	Screw	2.20	1.65	1.53	1.28	1.14	1.01
757-3751	*7321K3*	*16*	*8*	15/32"	*Screw*	2.20	1.65	1.53	1.28	1.14	1.01
757-3770	7361K5	20	10	15/32"	Screw	3.70	2.77	2.56	2.13	1.93	1.71
757-3810	7403K2	20	20	15/32"	Screw	4.91	3.69	3.40	2.84	2.55	2.26

SPDT

Stock No.	Mfr's Type	A @ 125 V	A @ 250 V	Bushing L	Terminal	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-6379	8282K12	3	1	1/4"	Solder	1.29	.97	.89	.75	.67	.59
757-6380	8282K13	3	1	11/32"	Solder	1.29	.97	.89	.75	.67	.59
757-6381	*8282K14*	*3*	*1*	15/32"	*Solder*	1.29	.97	.89	.75	.67	.59
757-6530	‡8284K14	3	1	15/32"	Solder	1.36	1.01	.94	.77	.70	.63

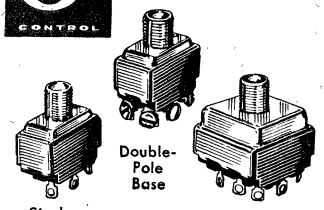
DPST

Stock No.	Mfr's Type	A @ 125 V	A @ 250 V	Bushing L	Terminal	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-6656	8360K6	3	3	1/4"	Solder	1.84	1.38	1.28	1.07	.96	.85
757-6658	8360K8	3	3	11/32"	Solder	1.84	1.38	1.28	1.07	.96	.85
757-6657	8360K7	3	3	15/32"	Solder	1.84	1.38	1.28	1.07	.96	.85
757-6841	8370K8	6	3	11/32"	Solder	1.98	1.49	1.36	1.14	1.02	.91
757-6840	8370K7	6	3	15/32"	Solder	1.98	1.49	1.36	1.14	1.02	.91
757-6895	8372K7	6	3	15/32"	Screw	2.40	1.80	1.67	1.40	1.25	1.11
757-3720	*7320K2*	*16*	*8*	11/32"	*Screw*	2.06	1.54	1.42	1.18	1.07	.95
757-3721	*7320K3*	*16*	*8*	15/32"	*Screw*	2.06	1.54	1.42	1.18	1.07	.95
757-3760	7360K7	20	10	11/32"	Screw	3.52	2.65	2.45	2.05	1.84	1.63
757-3761	*7360K8*	*20*	*10*	15/32"	*Screw*	3.52	2.65	2.45	2.05	1.84	1.63
757-3802	7402K3	20	20	11/32"	Screw	4.75	3.56	3.29	2.75	2.48	2.20
757-3803	7402K4	20	20	15/32"	Screw	4.75	3.56	3.29	2.75	2.48	2.20

DPDT

Stock No.	Mfr's Type	A @ 125 V	A @ 250 V	Bushing L	Terminal	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-6806	*8363K6*	*3*	*3*	1/4"	*Solder*	2.11	1.58	1.46	1.22	1.10	.98
757-6808	8363K8	3	3	11/32"	Solder	2.11	1.58	1.46	1.22	1.10	.98
757-6807	*8363K7*	*3*	*3*	15/32"	*Solder*	2.11	1.58	1.46	1.22	1.10	.98
757-6825	8365K7	3	3	15/32"	Screw	2.78	2.09	1.93	1.61	1.44	1.29
757-6911	*8373K8*	*6*	*3*	11/32"	*Solder*	2.26	1.71	1.57	1.31	1.18	1.05
757-6910	*8373K7*	*6*	*3*	15/32"	*Solder*	2.26	1.71	1.57	1.31	1.18	1.05
757-7005	8375K7	6	3	15/32"	Screw	2.93	2.19	2.02	1.68	1.52	1.34
757-7608	8680K1	5	5	11/32"	Screw	6.11	4.59	4.24	3.53	3.18	2.83
757-7609	8680K2	5	5	15/32"	Screw	6.11	4.59	4.24	3.53	3.18	2.83
757-7629	8690K1	15	10	11/32"	Screw	7.40	5.55	5.13	4.28	3.85	2.42
757-7630	8690K2	15	10	15/32"	Screw	7.40	5.55	5.13	4.28	3.85	2.42

Cutler-Hammer "Designer Line" Switches



AC DESIGNER LINE

Select Switch Type From Tables Below, Then Select Handle, Shape and Color

Use for Stock No.-	A	C	D	E	F	G	K
	(1)	(3)	(4)	(5)	(6)	(7)	(9)

Color Suffix No. Select One

Suffix	Color	Use for Stock No.
21	White	1
22	Red	2
23	Gray	3
24	Green	4
25	Yellow	5
26	Blue	6
27	Black	7

ORDERING INFORMATION

7590K73	A	21
BASIC SWITCH	LEVER STYLE (1)	COLOR (1)

For Complete Ordering Number Also Include Stock Number.

EXAMPLE:

Stock No.	Complete Type No.
531A1611	7590K73A21

"Designer Line" AC switches utilize nylon toggles in 7 styles and colors for use where "eye-appeal" is a design factor. Switches have 15/32"x 32 threads, 15/32" bushing. Types with suffix K53, K73 in tables below have screw terminals. Suffixes K54 and K74 have solder lug terminals. **To order, select switch type below, then add suffix made up of lever shape (above, left) and color (above, right).** Av. shpg. wt., 2 oz.

SINGLE-POLE SCREW TERMINALS

Stock No.	Basic Switch Type	Amperes 125V	Amperes 250V	Code	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
531A16XX	7590K73	6	3	I	1.48	1.11	1.03	.86	.77	.68
531A20XX	7591K73	6	3	II	1.73	1.30	1.20	1.00	.90	.80
531A24XX	7592K73	6	3	III	1.73	1.30	1.20	1.00	.90	.80
531A26XX	7597K73	6	3	IV	2.23	1.67	1.54	1.29	1.16	1.03
531A01XX	7560K73	15	10	I	1.73	1.30	1.20	1.00	.90	.80
531A05XX	7562K73	15	10	II	2.11	1.58	1.46	1.22	1.09	.97
531A09XX	7564K73	15	10	III	2.11	1.58	1.46	1.22	1.09	.97

SINGLE-POLE SOLDER LUGS

Stock No.	Basic Switch Type	Amperes 125V	Amperes 250V	Code	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
531A17XX	7590K74	6	3	I	1.23	.92	.85	.71	.64	.57
531A21XX	7591K74	6	3	II	1.36	1.02	.94	.79	.69	.63
531A25XX	7592K74	6	3	III	1.36	1.02	.94	.79	.69	.63
531A27XX	7597K74	6	3	IV	1.92	1.44	1.33	1.11	1.00	.89
531A03XX	7561K74	15	10	I	1.48	1.11	1.03	.86	.77	.68
531A07XX	7563K74	15	10	II	1.73	1.30	1.20	1.00	.90	.80
531A11XX	7565K74	15	10	III	1.73	1.30	1.20	1.00	.90	.80

DOUBLE-POLE SCREW TERMINALS

Stock No.	Basic Switch Type	Amperes 125V	Amperes 250V	Code	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
531A14XX	7590K53	6	3	I	1.79	1.34	1.24	1.03	.93	.82
531A18XX	7591K53	6	3	II	2.04	1.53	1.41	1.18	1.06	.94
531A22XX	7592K53	6	3	III	2.04	1.53	1.41	1.18	1.06	.94
531A12XX	7569K53	15	10	IV	3.01	2.26	2.08	1.74	1.56	1.39
531A00XX	7560K53	15	10	I	2.04	1.53	1.41	1.18	1.06	.94
531A04XX	7562K53	15	10	II	2.42	1.81	1.67	1.39	1.25	1.11
531A08XX	7564K53	15	10	III	2.42	1.81	1.67	1.39	1.25	1.11

DOUBLE-POLE SOLDER LUGS

Stock No.	Basic Switch Type	Amperes 125V	Amperes 250V	Code	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
531A15XX	7590K54	6	3	I	1.53	1.15	1.06	.89	.80	.71
531A19XX	7591K54	6	3	II	1.67	1.25	1.15	.96	.86	.77
531A23XX	7592K54	6	3	III	1.67	1.25	1.15	.96	.86	.77
531A13XX	7569K54	15	10	IV	2.61	1.96	1.81	1.51	1.36	1.21
531A02XX	7561K54	15	10	I	1.79	1.34	1.24	1.03	.93	.82
531A06XX	7563K54	15	10	II	2.04	1.53	1.41	1.17	1.06	.94
531A10XX	7565K54	15	10	III	2.04	1.53	1.41	1.17	1.06	.94

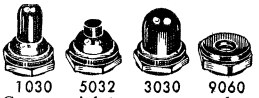
THREE-POLE SCREW TERMINALS

Stock No.	Basic Switch Type	Amperes 125V	Amperes 250V	Code	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
531A28XX	7690K73	15	10	I	4.89	3.67	3.39	2.83	2.34	2.26
531A30XX	7692K73	15	10	II	5.30	3.97	3.66	3.05	2.75	2.44
531A31XX	7694K73	15	10	III	5.38	4.03	3.72	3.10	2.79	2.48

FOUR-POLE SCREW TERMINALS

Stock No.	Basic Switch Type	Amperes 125V 10	Amperes 250V 15	Code	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
531A29XX	7692K53			II	6.37	4.78	4.41	3.68	3.31	2.94
.....	.....									
.....	.....									

SWITCH AND PANEL SEALS

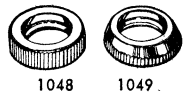


1030 5032 3030 9060

Military types perform three functions: vibration resistant mounting nut; seal mounting hole; seal switch lever to 15 psi. RFI types conform to MIL-B-5423. Commercial types are made of black neoprene, have removable round nuts. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Threads	MIL-B-5423/ Type and Style	EACH 1-24	25-99	100-499	500-999	1000-Up
757-1010	SWI-AN1030	15/32-32	1 A1	1.00	.75	.58	.52	.47
757-1050	*SWI-BN30*	15/32-32	2 A3	1.00	.75	.58	.52	.47
757-1060	SWI-LN5030	¼-40	5 A71	1.40	1.05	.81	.75	.68
757-1055	SWI-BN5032	¼-40	11 A3	1.40	1.05	.81	.75	.68
757-1028	SWI-AN3030	15/32-32-5/16	7 B21	.86	.65	.51	.47	.43
757-1063	SWI-NC3030	15/32-32-7/16	7 B22	.86	.65	.51	.51	.43
757-1045	SWI-AN9060-14	15/32-32	9 C6	1.60	1.20	.96	.84	.74
757-1035	SWI-AN9030-14	⅜-32	9 C2	.81	.61	.48	.44	.40
757-1040	SWI-AN9040-18	¼-32	9 C4	.86	.65	.51	.47	.43
757-1071	SWI-RN1030-2	15/32-32	RFI	3.72	2.79	2.57	2.32	2.02
757-1067	SWI-RC3030-1	15/32-32	RFI	2.65	1.99	1.81	1.57	1.36
757-1075	SWI-RN9030-14	⅜-32	RFI	1.72	1.29	1.15	1.00	.87
757-1014	SWI-AN1111-14	15/32-32	Commercial	.61	.46	.20	.20	.18
757-1020	SWI-AN1211-5	⅜-32	Commercial	.61	.46	.20	.20	.18
757-1025	SWI-AN1312-7	⅜-32	Commercial	.61	.46	.20	.20	.18

"DESIGNER LINE" FACENUTS



1048 1049

Designed to further enhance equipment appearance. Made of anodized aluminum, have knurled edge (1048) or beveled (1049), fit switches above. 15/32"-32 threads. 1 oz.

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-2103	*15-1048-3*	Black	.17	.13	.12	.10	.09	.08
757-2107	*15-1048-7*	Clear Aluminum	.17	.13	.12	.10	.09	.08
757-2112	15-1048-12	Bronze	.17	.13	.12	.10	.09	.08
757-2122	15-1048-22	Avocado	.17	.13	.12	.10	.09	.08
757-2153	*15-1049-3*	Black	.17	.13	.12	.10	.09	.08
757-2157	*15-1049-7*	Clear Aluminum	.17	.13	.12	.10	.09	.08
757-2162	15-1049-12	Bronze	.17	.13	.12	.10	.09	.08
757-2172	15-1049-22	Avocado	.17	.13	.12	.10	.09	.08

FULL-RANGE SPEED CONTROL

For stepless control of fractional hp motors. Rated 4 amps at 125 VAC. Black lead connects to line, black-and-yellow connects to load and 250K variable resistor, red connects to same variable resistor. Shpg. wt. 6 oz.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
757-6649	8349K2	6.93	5.19	4.79	3.99	3.59	3.19

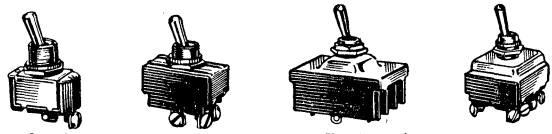
Switches: Toggle, 217-223, 225, 226, 228, 229—Pushbutton, 217, 218, 222-5, 227-9, 236, 238-242

Cutler-Hammer AC Switches

TOGGLE AND ROCKER SWITCHES

COMMERCIAL ONE-HOLE-MOUNTING SWITCHES

For use in appliances, heater units, radios, many other commercial applications. Feature a special slow make and slow break type rocker mechanism. Reduced arcing in AC circuits eliminates the need for complicated DC mechanisms, permits a simpler contact structure. Mechanical life is considerably longer than in corresponding devices designed for DC service. †in table below indicates sealed lever; *reversing circuit. Av. shpg. wt. 2 oz.



Single Double Triple Four

SINGLE-POLE SINGLE-THROW

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	Code	Bush. Lgth. (In.)	Terms	EACH 1-9	10-24	25-49	50-99	100-Up
757-4886	*7580K5*	6	3	I	1 1/32	Screw	.95	.80	.74	.62	.55
757-4885	*7580K4*	6	3	I	15/32	Screw	.95	.80	.74	.62	.55
757-4888	*7580K7*	6	3	I	11/32	Solder	.82	.69	.64	.53	.48
757-4887	*7580K6*	6	3	I	15/32	Solder	.82	.69	.64	.53	.48
757-4889	7580K8	6	3	I	15/32	Spade	.82	.69	.64	.53	.48
757-4254	7506K4	10	....	VII	15/32	Screw	1.43	1.20	1.11	.93	.83
757-4253	7506K3	10	....	VII	15/32	Solder	1.29	1.09	1.00	.84	.75
757-4000	*7500K13*	15	10	I	11/32	Screw	1.09	.92	.85	.71	.63
757-4001	*7500K14*	15	10	I	15/32	Screw	1.09	.92	.85	.71	.63
757-4020	*7501K12*	15	10	I	11/32	Solder	.95	.80	.74	.62	.55
757-4021	7501K13	15	10	I	15/32	Solder	.95	.80	.74	.62	.55
757-4022	*7501K15*	15	10	I	15/32	Spade	.95	.80	.74	.62	.55
757-4007	7500K20	15	10	†I	15/32	Screw	1.28	1.08	1.00	.83	.75

SINGLE-THROW DOUBLE-THROW

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	Code	Bush. Lgth. (In.)	Terms	EACH 1-9	10-24	25-49	50-99	100-Up
757-4904	7581K4	6	3	II	15/32	Screw	1.09	.92	.85	.71	.63
757-4907	*7580K7*	6	3	II	11/32	Solder	.89	.75	.69	.58	.52
757-4906	7581K6	6	3	II	15/32	Solder	.89	.75	.69	.58	.52
757-4924	7582K4	6	3	III	15/32	Screw	1.09	.92	.85	.71	.63
757-4926	*7582K6*	6	3	III	15/32	Solder	.89	.75	.69	.58	.52
757-4270	7509K5	....	10	IV	15/32	Screw	1.67	1.41	1.30	1.08	.97
757-4069	*7502K12*	15	10	II	11/32	Screw	1.28	1.08	1.00	.83	.75
757-4070	*7502K13*	15	10	II	15/32	Screw	1.28	1.08	1.00	.83	.75
757-4090	7503K12	15	10	II	11/32	Solder	1.09	.92	.85	.71	.63
757-4091	7503K13	15	10	II	15/32	Solder	1.09	.92	.85	.71	.63
757-4092	7503K14	15	10	II	11/32	Spade	1.09	.92	.85	.71	.63
757-4200	7504K3	15	10	III	11/32	Screw	1.28	1.08	1.00	.83	.75
757-4201	*7504K4*	15	10	III	15/32	Screw	1.28	1.08	1.00	.83	.73
757-4230	*7560K6*	15	10	III	11/32	Solder	1.09	.92	.85	.71	.63
757-4231	7505K4	15	10	III	15/32	Solder	1.09	.92	.85	.71	.63
757-4233	7505K6	15	10	III	15/32	Spade	1.09	.92	.85	.71	.63
757-4295	7555K11	15	10	VIII	15/32	Screw	2.37	2.00	1.84	1.54	1.38

DOUBLE-POLE SINGLE-THROW

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	Code	Bush. Lgth. (In.)	Terms	EACH 1-9	10-24	25-49	50-99	100-Up
757-4940	*7590K4*	6	3	I	15/32	Screw	1.45	1.22	1.13	.94	.85
757-4943	*7590K7*	6	3	I	11/32	Solder	1.18	1.00	.92	.77	.69
757-4942	7590K6	6	3	I	15/32	Solder	1.18	1.00	.92	.77	.69
757-4945	7590K9	6	3	I	11/32	Spade	1.18	1.00	.92	.77	.69
757-4501	7560K6	15	10	*I	11/32	Screw	1.72	1.45	1.34	1.12	1.00
757-4561	*7561K5*	15	10	*I	11/32	Solder	1.45	1.22	1.13	.94	.85
757-4500	*7560K5*	15	10	*I	15/32	Screw	1.72	1.45	1.34	1.12	1.00
757-4560	*7561K4*	15	10	*I	15/32	Solder	1.45	1.22	1.13	.94	.85
757-4562	7561K6	15	10	*I	15/32	Spade	1.45	1.22	1.13	.94	.85

DOUBLE-POLE DOUBLE-THROW

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	Code	Bush. Lgth. (In.)	Terms	EACH 1-9	10-24	25-49	50-99	100-Up
757-4970	*7591K4*	6	3	II	15/32	Screw	1.72	1.45	1.34	1.12	1.00
757-4973	*7591K7*	6	3	II	11/32	Solder	1.33	1.12	1.03	.86	.77
757-4972	*7591K6*	6	3	II	15/32	Solder	1.33	1.12	1.03	.86	.77
757-5004	*7592K4*	6	3	III	15/32	Screw	1.72	1.45	1.34	1.12	1.00
757-5007	7592K7	6	3	III	11/32	Solder	1.33	1.12	1.03	.86	.77
757-5006	7592K6	6	3	III	15/32	Solder	1.33	1.12	1.03	.86	.77
757-5008	7592K8	6	3	III	15/32	Spade	1.33	1.12	1.03	.86	.77
757-4591	7562K5	15	10	II	11/32	Screw	2.12	1.79	1.65	1.38	1.24
757-4590	*7562K4*	15	10	II	15/32	Screw	2.12	1.79	1.65	1.38	1.24
757-4598	7562K3	15	10	*II	15/32	Screw	2.39	2.02	1.86	1.55	1.39
757-4721	7563K5	15	10	II	11/32	Spade	1.72	1.45	1.34	1.12	1.00
757-4720	*7563K*	15	10	II	15/32	Solder	1.72	1.45	1.34	1.12	1.00
757-4722	7563K6	15	10	II	15/32	Spade	1.72	1.45	1.34	1.12	1.00
757-4761	7564K7	15	10	III	11/32	Screw	2.12	1.79	1.65	1.38	1.24
757-4760	*7564K6*	15	10	III	15/32	Screw	2.12	1.79	1.65	1.38	1.24
757-4770	7564K23	15	10	*III	15/32	Screw	2.39	2.02	1.86	1.55	1.39
757-4806	*7565K6*	15	10	III	11/32	Solder	1.72	1.45	1.34	1.12	1.00
757-4805	*7565K5*	15	10	III	15/32	Solder	1.72	1.45	1.34	1.12	1.00
757-4807	7565K7	15	10	III	15/32	Spade	1.72	1.45	1.34	1.12	1.00
757-4860	7569K1	....	10	IV	15/32	Solder	2.35	1.98	1.83	1.53	1.37

THREE-POLE SINGLE-THROW

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	Code	Bush. Lgth. (In.)	Terms	EACH 1-9	10-24	25-49	50-99	100-Up
757-5060	7600K3	15	10	I	Flush	Screw	3.31	2.79	2.58	2.15	1.93
757-5070	*7619K2*	15	10	I	15/32	Screw	3.31	2.79	2.58	2.15	1.93
757-5071	7611K2	15	10	I	15/32	Solder	2.84	2.39	2.21	1.84	1.66
757-5074	7611K4	15	10	I	15/32	Spade	2.84	2.39	2.21	1.84	1.66
757-6620	*8320K1*	....	20	I	15/32	Screw	6.04	5.10	4.71	3.92	3.53

THREE-POLE DOUBLE-THROW

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	Code	Bush. Lgth. (In.)	Terms	EACH 1-9	10-24	25-49	50-99	100-Up
757-5062	7602K2	15	10	II	Flush	Screw	4.19	3.54	3.27	2.72	2.45
757-5080	*7612K2*	15	10	II	15/32	Screw	4.19	3.54	3.27	2.72	2.45
757-5085	*7613K2*	15	10	II	15/32	Solder	3.49	2.95	2.72	2.27	2.04
757-5087	7613K4	15	10	II	15/32	Spade	3.49	2.95	2.72	2.27	2.04
757-5090	*7614K2*	15	10	III	15/32	Screw	4.19	3.54	3.27	2.72	2.45
757-5095	*7615K2*	15	10	III	15/32	Solder	3.49	2.95	2.72	2.27	2.04
757-5097	7615K4	15	10	III	15/32	Spade	3.49	2.95	2.72	2.27	2.04

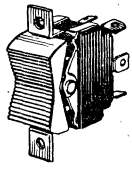
FOUR-POLE SINGLE-THROW

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	Code	Bush. Lgth. (In.)	Terms	EACH 1-9	10-24	25-49	50-99	100-Up
757-5170	7690K8	15	10	I	15/32	Screw	4.75	4.01	3.70	3.09	2.78
757-5180	7691K14	15	10	I	15/32	Spade	4.28	3.62	3.34	2.78	2.50

FOUR-POLE SINGLE-THROW

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	Code	Bush. Lgth. (In.)	Terms	EACH 1-9	10-24	25-49	50-99	100-Up
757-5182	7692K13	15	10	II	15/32	Screw	5.92	4.99	4.61	3.84	3.46
757-5190	7693K2	15	10	II	15/32	Spade	5.22	4.41	4.07	3.39	3.05
757-5194	7694K4	15	10	III	15/32	Screw	5.92	4.99	4.61	3.84	3.46
757-5205	7695K5	15	10	III	15/32	Spade	5.22	4.41	4.07	3.39	3.05

"ROCKETTE" AC SWITCHES



For use where modern design and dependable operation are important. Feature white nylon rocker (other colors available on special request). .250" spade terminals, except *screw terminals. Rated at 15 amps, 125 VAC; 10 amps, 250 VAC. **See lever-travel chart on P. 217 for explanation of code Column in Table.** Av. shpg. wt., 2 oz.

SINGLE-POLE

Stock No.	Mfr's Type	Code	Style Frame	Style Rocker	No. of Rockers	EACH 1-9	10-24	25-49	50-99	100-Up
757-6176	*8144K21A1M50**	I	A	1	1	1.06	.89	.82	.69	.62
757-6178	*8144K21A1M52*	I	A	1	1	.95	.80	.74	.62	.55
757-6175	8144K20A1M52	II	A	1	1	1.07	.91	.84	.70	.63
757-6179	8144K22A1M52	III	A	1	1	1.07	.91	.84	.70	.63
757-6190	8146K20A1M52	IV	A	1	1	1.27	1.07	.99	.82	.74

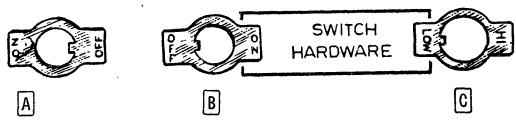
DOUBLE-POLE

Stock No.	Mfr's Type	Code	Style Frame	Style Rocker	No. of Rockers	EACH 1-9	10-24	25-49	50-99	100-Up
757-6153	8142K21E6M50*	I	E	6	1	1.65	1.39	1.29	1.07	.96
757-6154	*8142K21E6M52*	I	E	6	1	1.47	1.24	1.14	.95	.85
757-6152	8142K20E6M52	II	E	6	1	1.79	1.51	1.39	1.16	1.04
757-6155	8142K22E6M52	III	E	6	1	1.79	1.54	1.39	1.16	1.04
757-6198	8148K20E6M52	IV	E	6	1	2.09	1.76	1.63	1.36	1.22

FOUR-POLE

Stock No.	Mfr's Type	Code	Style Frame	Style Rocker	No. of Rockers	EACH 1-9	10-24	25-49	50-99	100-Up
757-6141	8140K21H14M52	I	H	14	2	3.03	2.56	2.36	1.97	1.77
757-6151	8141K21H16M52	I	H	16	3	3.24	2.74	2.53	2.11	1.89
757-6140	8140K20H14M52	II	H	14	2	3.54	2.99	2.76	2.30	2.07
757-6150	8141K20H16M52	II	H	16	3	3.74	3.15	2.91	2.43	2.18

SWITCH HARDWARE



Switch plates. ½" hole dia. Shpg. wt. per 100, 8 oz.

Stock No.	Mfr's Type	Fig.	EACH 1-49	50-99	100-249	250-499	500-Up
757-2813	*30-5632-4*	A	.09	.08	.07	.06	.05
757-2816	30-5632-13	B	.09	.08	.07	.06	.05
757-2803	30-5632-16	C	.09	.08	.07	.06	.05

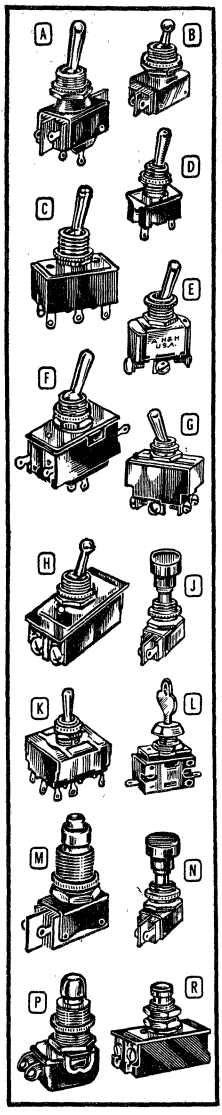
757-2229. Type 29-761-3 Locking Rings. Pkg. of 100. 8 oz.
1-4 pkgs.....Per Pkg. 3.85 5-10 pkgs.....Per Pkg. 3.25

757-2216. Type 16-886 Lockwashers. Pkg. of 100, 8 oz.
1-4 pkgs.....Per Pkg. 3.08 5-10 pkgs.....Per Pkg. 2.60

VAST SELECTION AND FAST SERVICE

Depend on Allied Electronics for prompt service on your order. Allied Electronics makes available to you the world's most complete and comprehensive inventory of electronics parts at factory OEM prices. Save time and reduce your costs—a single order to Allied Electronics takes care of all your electronic needs.

Switches: Lever, 218, 224-8, 232, 241—Rocker, 221, 227-9, 240—Lock, 222, 228—Slide, 223, 227



TOGGLE, PUSH, KEY SWITCHES

Arrow-Hart Switches

Small laminated canopy, intermediate molded, heavy-duty power, and midget switches. Fig. E and G AC-only with high capacity in small unit. All: 15/32" shank, except ‡13/32". Shank dia. 15/32" except §3/4". †Fine silver buttons. Solter terminals except # screw. With 2 mtg. nuts. ▪U.L. Recog. 4 oz.

SPST (2-POSITION—ON-OFF) *Momentary

Stock No.	Mfr's Type	Fig.	Amperes 125V	Amperes 250V	hp	Wiping Action	Silver-Plated Contacts	Silver-Plated Terms.	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
717-0330	*20994LH*	A	.....	3	....	No	No	No	1.05	.99	.93	.76	.58	.46
717-0320	‡20994BF	B	.....	3	....	No	No	No	1.05	.99	.93	.76	.58	.46
717-0325	*20994CS*	B	.....	3	....	No	No	No	1.05	.99	.93	.76	.58	.46
717-0465	*81015AW*	C	6	3	....	Yes	Yes	No	1.38	1.30	1.23	1.00	.77	.61
717-0472	**81045FB*	C	6	3	....	Yes	Yes	No	2.19	2.07	1.95	1.58	1.22	.97
717-0616	*83050*	D	3	1	....	Yes	Yes	Yes	1.38	1.30	1.23	1.00	.77	.61
717-0601	*83001*	E	6	3	1/6	No	Yes	No	.95	.90	.84	.68	.53	.42
717-0520	*#82600*	E	15	10	3/4	No	Yes†	No	1.25	1.18	1.11	.90	.69	.55
717-0523	*82601*	E	15	10	3/4	No	Yes†	No	1.09	1.03	.97	.79	.61	.48

SPDT (2-POSITION—ON-ON) *Momentary

Stock No.	Mfr's Type	Fig.	125V	250V	hp	Wiping Action	Contacts	Terms.	1-9	10-24	25-49	50-99	100-499	500-Up
717-0340	*21350EH*	A	3	1	....	No	No	No	1.32	1.24	1.17	.95	.73	.58
717-0335	21350BF	B	3	1	....	No	No	No	1.32	1.24	1.17	.95	.73	.58
717-0467	*81021AV*	C	6	1	....	Yes	Yes	No	1.65	1.56	1.47	1.19	.92	.73
717-0473	**81051G*	C	6	1	....	Yes	Yes	No	2.39	2.26	2.12	1.72	1.33	1.06
717-0618	83052	D	3	1	....	Yes	Yes	Yes	1.65	1.56	1.47	1.19	.92	.73
717-0607	83007	E	6	3	1/6	No	Yes	No	1.01	.96	.90	.73	.56	.45
717-0532	*#82604*	E	15	10	3/4	No	Yes†	No	1.50	1.41	1.33	1.08	.83	.66
717-0535	82605	E	15	10	3/4	No	Yes†	No	1.25	1.18	1.11	.90	.69	.55

SPDT (3-POSITION—ON-OFF-ON)

Stock No.	Mfr's Type	Fig.	125V	250V	hp	Wiping Action	Contacts	Terms.	1-9	10-24	25-49	50-99	100-499	500-Up
717-0510	82022HD	F	6	3	....	Yes	Yes	No	2.67	2.52	2.37	1.93	1.48	1.18
717-0604	*83004*	E	6	3	1/6	No	Yes	No	1.01	.96	.90	.73	.56	.45
717-0526	#82602	E	15	10	3/4	No	Yes†	No	1.50	1.41	1.33	1.08	.83	.66
717-0529	82603	E	15	10	3/4	No	Yes†	No	1.25	1.18	1.11	.90	.69	.55

DPST (2-POSITION—ON-OFF) *Momentary N.O.

Stock No.	Mfr's Type	Fig.	125V	250V	hp	Wiping Action	Contacts	Terms.	1-9	10-24	25-49	50-99	100-499	500-Up
717-0302	*20902CX*	A	3	1	....	No	No	No	1.90	1.80	1.69	1.37	1.06	.84
717-0305	20902N	B	3	1	....	No	No	No	1.90	1.80	1.69	1.37	1.06	.84
717-0469	*81024GB*	C	6	3	....	Yes	Yes	No	2.05	1.93	1.82	1.48	1.14	.91
717-0475	*81054H	C	6	3	....	Yes	Yes	No	2.87	2.71	2.55	2.07	1.59	1.27
717-0619	83053	D	3	1	....	Yes	Yes	Yes	2.05	1.93	1.82	1.48	1.14	.91
717-0440	#80600B	H	16	8	1	Yes	Yes	Yes	2.10	1.98	1.87	1.45	1.17	.93
717-0442	#80602C	H	20	10	1 1/2	Yes	Yes	Yes	3.67	3.46	3.26	2.65	2.04	1.63
717-0417	*#80421*	H	.....	20	1 1/2	Yes	Yes	Yes	4.93	4.65	4.38	3.56	2.74	2.19
717-0610	83025	G	6	3	1/6	No	Yes	No	1.38	1.30	1.23	1.00	.77	.61
717-0538	*#82606*	G	15	10	3/4	No	Yes†	No	2.01	1.90	1.79	1.45	1.12	.89
717-0540	82607	G	15	10	3/4	No	Yes†	No	1.70	1.60	1.51	1.22	.94	.75

DPDT (2-POSITION—ON-ON) *Momentary

Stock No.	Mfr's Type	Fig.	125V	250V	hp	Wiping Action	Contacts	Terms.	1-9	10-24	25-49	50-99	100-499	500-Up
717-0315	*20905FR*	A	3	1	....	No	No	No	2.18	2.06	1.94	1.57	1.21	.97
717-0310	20905BX	B	3	1	....	No	No	No	2.18	2.06	1.94	1.57	1.21	.97
717-0471	*81027CE*	C	6	3	....	Yes	Yes	No	2.35	2.22	2.09	1.70	1.31	1.04
717-0477	**81057N*	C	6	3	....	Yes	Yes	No	3.46	3.27	3.08	2.50	1.92	1.54
717-0620	83054	D	3	1	....	Yes	Yes	Yes	2.35	2.22	2.09	1.70	1.31	1.04
717-0614	83031	G	6	3	1/6	No	Yes	No	1.54	1.46	1.37	1.11	.86	.68
717-0550	#82610	G	15	10	3/4	No	Yes†	No	2.48	2.34	2.20	1.79	1.38	1.10
717-0551	82611	G	15	10	3/4	No	Yes†	No	2.01	1.90	1.79	1.45	1.12	.89

DPDT (3-POSITION—ON-OFF-ON)

Stock No.	Mfr's Type	Fig.	125V	250V	hp	Wiping Action	Contacts	Terms.	1-9	10-24	25-49	50-99	100-499	500-Up
717-0514	*82024HD*	F	6	3	....	Yes	Yes	No	3.29	3.11	2.92	2.37	1.83	1.46
717-0612	*83028*	G	6	3	1/6	No	Yes	No	1.54	1.46	1.37	1.11	.86	.68
717-0544	*#82608*	G	15	10	3/4	No	Yes†	No	2.48	2.34	2.20	1.79	1.38	1.10
717-0541	82609	G	15	10	3/4	No	Yes†	No	2.01	1.90	1.79	1.45	1.12	.89

DPDT (3-POSITION—ON-POSITIVE OFF-ON) Cannot move through center position without stopping.

Stock No.	Mfr's Type	Fig.	125V	250V	hp	Wiping Action	Contacts	Terms.	1-9	10-24	25-49	50-99	100-499	500-Up
717-0454	#80638D§‡	....	10	5	3/4	Yes	Yes	No	6.12	5.78	5.44	4.42	3.40	2.72

3 AND 4-POLE—AC ONLY (Fig. K, except*, not illus.) †@ 125V; ‡250V

Stock No.	Mfr's Type	Action	Amp †	Amp ‡	EACH 1-9	10-24	25-49	50-99	100-Up
717-0552	82612	3PST (On-Off)	15	10	3.85	3.63	3.42	2.78	2.14
717-0555	82615	3PDT (On-Off-on)	15	10	4.07	3.85	3.62	2.94	2.26
717-0557	82617	3PDT (On-None-On)	15	10	4.08	3.85	3.63	2.95	2.27
717-0565	*82636	4PDT (On-None-On)	15	..	6.11	5.77	5.43	4.41	3.39

J PUSHBUTTON DOUBLE-ACTION SPST SWITCHES

Require two pushes to operate. 3A @ 250 V, 6A @ 125 V AC-DC. *DPST, 8A @ 250 V, 16A @ 125 V. Av. wt. 3 oz.

Stock No.	Mfr's Type	Button Color	EACH 1-9	10-24	25-49	50-99	100-Up
717-2010	86710	Nickel	1.35	1.28	1.18	.99	.89
717-2014	86710-CR	Red	1.60	1.51	1.40	1.17	1.05
717-2012	86710-C	Black	1.60	1.51	1.40	1.17	1.05
717-0460	*80863	Nickel	2.35	2.22	2.09	1.70	1.31

L SPST LOCK SWITCHES

81715-L. Fits panels to 9/32". Sleeve dia., 15/32". Switch must be open to remove key. 1 3/4x27/32x21/32". 81715-LE. Same, but key removable in open or closed position. Keys listed below. 4 oz.

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	EACH 1-9	10-24	25-49	50-99	100-Up
717-0479	*81715-L*	6	3	3.24	3.06	2.88	2.34	1.80
717-0480	*Key for above*	.....	.....	.27	.20	.19	.16	.15
717-0481	*81715-LE*	6	3	2.84	2.13	1.97	1.64	1.48
717-0482	*Key for above*	.....	.....	.27	.20	.19	.16	.15

MOMENTARY PUSH SWITCHES

AC only except 80630 and 3594 are AC-DC. ‡Midget size, molded phenolic; §canopy size, phenolic sections. 3 amp @ 125 VAC, 1-10 hp @ 125 V except *8 amp @ 250 V, 16 amp @ 125 V, 1 HP; †1 amp @ 125 V, #1A @ 250 V, 3A @ 125 V, AC-DC. 15/32" dia. shanks. ▪U.L. Recog. ††Button: B, black; R, red, N, nickel. 3 oz.

Stock No.	Mfr's Type	Fig.	Action	††	EACH 1-9	10-24	25-49	50-99	100-Up
717-0210	§*3391-GL*	N†	SPST-N.O.	B	1.48	1.40	1.32	1.07	.82
717-0215	§*3391-GL*	N†	SPST-N.O.	R	1.48	1.40	1.32	1.07	.82
717-0203	§3391-GJ	N†	SPST-N.C.	R	1.48	1.40	1.32	1.07	.82
717-0206	§3391-GJ	N†	SPST-N.C.	B	1.48	1.40	1.32	1.07	.82
717-0220	§3392	M†	SP2-N.C.	N	1.45	1.37	1.29	1.05	.81
717-0225	§3392-AE	N†	SP2-N.C.	B	1.80	1.70	1.60	1.30	1.00
717-0230	§3392-AE	N†	SP2-N.C.	R	1.80	1.70	1.60	1.30	1.00
717-0243	#3594-Q	N	DPST-N.O.	R	3.17	3.00	2.82	2.29	1.76
717-0242	#3594-Q	N	DPST-N.O.	B	3.17	3.00	2.82	2.29	1.76
717-0240	*#3594-PA*	N	DPST-N.C.	R	3.17	3.00	2.82	2.29	1.76
717-0235	*#3594-PA*	N	DPST-N.C.	B	3.17	3.00	2.82	2.29	1.76
717-0250	*#3599-GF*	N	DPDT-N.C.	R	3.67	3.46	3.26	2.65	2.04
717-0245	*#3599-GF*	N	DPDT-N.C.	B	3.67	3.46	3.26	2.65	2.04
717-0420	‡80511	P	SPST-N.C.	N	.78	.73	.69	.56	.43
717-0421	‡*80511-E*	P	SPST-N.O.	N	.78	.73	.69	.56	.43
717-0430	‡80541-R	P	SPST-N.C.	R	1.48	1.40	1.32	1.07	.82
717-0425	‡80541-E	P	SPST-N.O.	B	1.48	1.40	1.32	1.07	.82
717-0426	‡80541-ER	P	SPST-N.O.	R	1.48	1.40	1.32	1.07	.82
717-0450	*80630	R	DPST-N.O.	N	3.13	2.95	2.78	2.26	1.74

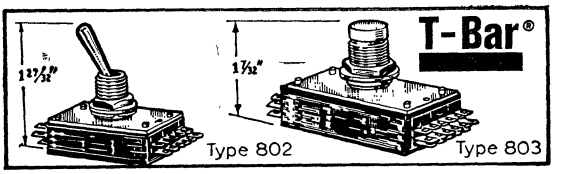
Switches: Rotary, 230-5—Snap, 235, 236—Thumbwheel (PC), 237—Ribbon/Mat/Foot, 239

Toggle, Keyboard and Slide Switches

T-BAR MULTI-POLE SWITCHES

- Switch More Circuits in Less Space
- Control Up to 72 Circuits

Reliable high density, multiple-pole, double-throw bat-handle toggle and momentary pushbutton switches. Unique design allows you to switch more circuits in less space. Control up to 72 circuits. Protected from dust, damage and humidity by tight plastic case separated from the actuator assembly. Withstands MIL STD-202, method 106B moisture-resistance test. Gold-bonded fine silver contacts providing many years of service are rated: non-inductive, 150 watts, 3 amps make-or-break; 500 watts, 5 amps carry. Contact Life: (Mechanical) Type 802, 50,000 cycles, Type 803, 500,000 cycles; (Electrical) 50,000 cycles at 5 amps. 28 VDC or 115 VAC, resistive. Dielectric strength: (terminal to case) 1000 VAC at sea level. Temperature Range: −55°C to +85°C. Operate and release times: Less than 30 milliseconds. Av. shpg. wt., 6 oz.



SERIES 802 BAT-HANDLE TOGGLE SWITCHES

Stock No.	Mfr's Type	Action	EACH 1-4	5-24	25-49	50-74	75-Up
774-0130	*802-8C*	8PDT	14.30	11.44	10.87	10.33	9.84
774-0134	802-12C	12PDT	15.86	12.68	12.05	11.44	10.91
774-0138	802-24C	24PDT	31.08	24.86	23.62	22.44	21.38
774-0142	802-36C	36PDT	43.00	34.40	32.68	31.05	29.58
774-0146	802-48C	48PDT	70.36	56.29	50.66	45.59	41.09
774-0148	802-72C	72PDT	106.00	84.80	76.32	68.69	61.90

SERIES 803 MOMENTARY PUSHBUTTON SWITCHES

Stock No.	Mfr's Type	Action	EACH 1-4	5-24	25-49	50-74	75-Up
774-0150	803-4C	4PDT	8.92	7.13	6.77	6.43	6.13
774-0152	803-8C	8PDT	11.92	9.54	9.06	8.61	8.20
774-0154	803-12C	12PDT	13.46	10.77	10.23	9.72	9.26
774-0156	803-24C	24PDT	28.70	22.96	21.81	20.72	19.75
774-0158	803-36C	36PDT	40.62	32.50	30.88	29.33	27.95

T-BAR CONNECTOR AND TOOLS

88601 Connector. Snap-in terms. for wire. Tools below. See page 431 for illustration and description.

774-0190. 8601-51 Crimping Tool. 1-4.....79.50 5-Up.....59.75
774-0195. 1-9.....2.16 10-Up.....1.35
774-0193. 8601-61 Extraction Tool. 1-4.....12.50 5-Up.....9.00

ALCO KEYBOARD SWITCHES AND ACCESSORIES

KEYBOARD SWITCH ASSEMBLIES

Single-pole, open circuit reed switches. Over two million operations. Square gray buttons (19/32"). Standard 0-9 markings with decimal button or triple "O" bar or 1-12 numeral markings. Contacts, 100 mA @ VDC. 1⅝" mtg. depth. 3⅝x2⅞x2¼". *PC connection's Wt. 10½ oz.

Stock No.	Mfr's Type	Description	EACH 1-3	4-Up
700-7532	SB-032	Lockout 0-9 ("O" triple bar)	38.00	28.50
700-7533	SB-032PC*	Lockout 0-9 ("O" triple bar)	39.30	29.50
700-7540	SB-003	Lockout 0-9 and "decimal"	38.00	28.50
700-7541	SB-033PC*	Lockout 0-9 and "decimal"	39.30	29.50
700-7545	SB-034	Lockout 1-12 numerals	39.95	29.95
700-7546	SB-034PC*	Lockout 1-12 numerals	41.20	30.95
700-7550	SB-035	Momentary 1-12 numerals	38.00	28.50
700-7551	SB-035PC*	Momentary 1-12 numerals	39.30	29.50

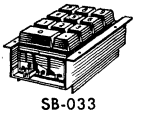
ECONOMY MECHANICAL KEYBOARDS

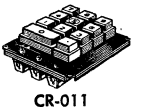
Contact system utilizes the spring resilience of wire contacts. Spring span of 2 million operations. Stabilized contact pressure. Gold-clad contacts. Rated 100 ma @ 24 VDC, normally open. Mtg. depth, .750". Size, 2.375x3.375". 9 oz.

700-1011	CR-011	Momentary 0-9 and "decimal"	13.30	9.95
700-1015	CR-015	Momentary 1-12 numerals	14.45	10.85

LOW PROFILE REED KEYBOARD SWITCHES

Single pole, normally open reed modular switches a as complete assembly or as single switches to form custom design. Rated 100 ma @ 48 V. Operating force, 5 oz. Life, 10,000,000 cycles. Two-shot molded gray keytops. Overall dimensions, 1.946Hx3.375Lx2.315"W. Av. shpg. wt. 10 oz.

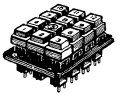

SB-033

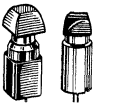

CR-011

Stock No.	Mfr's Type	Description	EACH 1-3	4-Up
700-1031	CS-021	Momentary 0-9 and "decimal"	24.30	18.25
700-1035	CS-025	Momentary 1-12 numerals	26.50	19.85
700-1047	CSM	Single keyswitch with keytop	1.93	1.45

BASE MOUNTED REED KEYSWITCHES

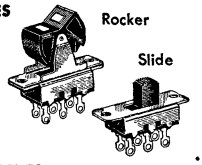
Reed actuated low profile, single pole normally open switches suitable for 0.75" matrix. Reed switch is molded in high quality glass-filled nylon and acetal resin. Switch is actuated by permanent magnet. **Specify color for blank keytops by replacing X in Stock No. with color code: 1=Black, 2=White, 3=Blue, 4=Red, 5=Gray.** Two-shot molded keytop available on special order. Contact your Allied representative for prices. 1.68" long, .15 Dia. Shpg. wt. 5 oz.


CS-025


RSM 61 RSM 41

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-499
700-7081	RSM-41	10° base keyswitch	3.40	2.55	1.71	1.53
700-7085	RSM-61	Flat base keyswitch	3.40	2.55	1.71	1.53
700-7070	RSB-1	Blank keytop	.26	.20	.13	.12

SWITCHCRAFT PHASE II SLIDE SWITCHES



Exclusive double-wipe action prevents oxidation, ensures good electrical contact. Positive-action detent tab holds slide at position. Terminals: silver-plated brass. Contacts: silver-plated brass alloy. 1⅜" long, 17/32" wide, 1½" mounting centers. Rated 0.5 amp DC; 3 amps AC, 125 volts noninductive load. Av. shpg. wt., 4 oz.

TWO-POSITION SLIDE SWITCHES

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-Up
933-9101	46201MR	SPST N.O. Locking	.32	.24	.22	.20	.16
933-9103	46202LR	SPST N.C. Locking	.28	.21	.19	.18	.14
933-9104	46202MR	SPST N.C. Momentary	.32	.24	.22	.20	.16
933-9105	*46203LR*	SPDT Locking	.32	.24	.22	.20	.16
933-9106	46203MR	SPDT Momentary	.36	.27	.25	.23	.18
933-9107	46204LR	DPST Locking	.36	.27	.25	.23	.18
933-9111	*46206LR*	DPDT Locking	.40	.30	.28	.25	.20
933-9112	46206MR	DPDT Momentary	.48	.36	.33	.30	.24
933-9120	46256LFR	DPDT Locking	.56	.42	.39	.35	.28

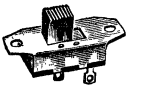
THREE-POSITION SLIDE SWITCHES (Center Locking)

933-9130	*46311LDR*	SPTT Lock/Lock	.52	.39	.36	.33	.26
933-9131	46311TDR	SPTT Lock/Momentary	.56	.42	.39	.35	.28
933-9134	*46313LDR*	DPTT Lock/Lock	.56	.42	.39	.35	.28
933-9196	46313TDR	DPTT Lock/Momentary	.60	.45	.41	.38	.30

TWO-POSITION ROCKER SWITCHES

933-9180	51202LR	SPST N.C. Locking	.72	.54	.50	.45	.36
933-9182	51203LR	SPDT Locking	.76	.57	.52	.48	.38
933-9187	51206LR	DPDT Locking	.84	.63	.58	.53	.42

CONTINENTAL-WIRT ECONOMY SLIDE SWITCHES

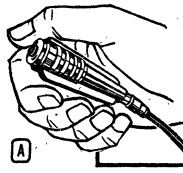


Low-cost AC-DC switches for many applications. Cadmium-plated steel housings. Solder lug terminals. Size, 35/64x1 13/32". Types G124, G126, G128L, 1x1 13/32". Recognized Under the Component Program of Underwriter's Laboratories, Inc. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Action	Amps @ 125 V	EACH 1-9	10-99	100-249	250-499	500-799	800-Up
760-0001	G111	SPDT	0.5	1.15	.84	.63	.46	.32	.28
760-0002	GF124	SPDT	0.5	.69	.52	.39	.26	.20	.17
760-0003	GF126	DPDT	0.5	.85	.64	.48	.32	.24	.21
760-0004	G128L	DP3T	0.5	1.05	.79	.59	.39	.30	.26
760-0005	G141S	DP4T	0.5	1.41	1.06	.80	.53	.40	.35
760-0008	GF323	SPST	3.0	.41	.31	.23	.15	.12	.10
760-0009	GF324	SPDT	3.0	.41	.31	.23	.15	.12	.10
760-0010	GF325	SPDT	3.0	.48	.36	.27	.18	.14	.12
760-0011	GF326	DPDT	3.0	.48	.36	.27	.18	.14	.12
760-0020	GH328	DP3T	3.0	.73	.55	.41	.27	.21	.18
760-0007	G338L	DP4T	3.0	1.28	.96	.72	.48	.37	.32
760-0012	GF361	3PDT	3.0	1.16	.87	.66	.47	.33	.29
760-0013	GF342	4PDT	3.0	1.53	1.15	.86	.57	.44	.38
760-0014	GF623	SPST	6.0	.48	.36	.27	.18	.14	.12
760-0015	GF624	SPDT	6.0	.48	.36	.27	.18	.14	.12
760-0016	GF625	DPST	6.0	.73	.55	.41	.27	.21	.18
760-0017	GF626	DPDT	6.0	.64	.48	.36	.24	.18	.16
760-0018	GF1123	SPST	11	.73	.55	.41	.27	.22	.18
760-0019	GG350	DPDT	3.0	.64	.48	.36	.24	.18	.16
760-0021	GH360	4PTT	3.0	1.69	1.27	.95	.63	.48	.42
760-0022	GH368L	3PTT	3.0	1.36	1.02	.84	.56	.43	.37

LEVER, PUSH SWITCHES

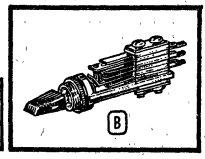
Switchcraft Lever and Pushbutton Switches



"CORDETTE"
921K

with 6 ft. cable. Pre-stripped and tinned.

A



B

A "CORDETTE" REMOTE CONTROL SWITCHES

TYPE 921-K. Momentary-action pendant switch. Provides remote switching of industrial and commercial instrumentation, control devices, nurse-call systems, X-ray equipment in hospitals, projectors, cameras. Fits comfortably in the hand, yet is rugged enough for critical applications. High-strength molded plastic one-piece body is enclosed to protect switching contacts. Molded plastic construction guards against contamination. Has SPST switch circuit with integral brass, hard-gold-plated 500-mA contacts, 50 watts max., AC noninductive load. 6-ft. gray, 2-conductor unshielded cable, stripped and tinned. 1 3/16" wide, 2 15/16" long. Shpg. wt., 4 oz. Type 921. Has Switchcraft Phono-Jax output molded direct to body. Standard jack accepts most phono plugs. Wt., 1 oz. Both types for low-voltage circuits.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-Up
933-6221	921-K	4.20	3.15	2.89	2.63	2.10
933-6220	921	3.60	2.70	2.48	2.25	1.80

B "LEV-R" SWITCHES

Require half the space normally needed for lever switches. Frame bushing and shaft of nickel-plated brass. Fine-silver contacts rated 3 amps, 300 watts maximum, AC noninductive. Nonlocking types have spring return. All are 5/8" wide; require 2 19/64" behind panel, and 15/32" mounting hole. With locknut and screw-on black knob. 3-position switches have same contact form for both sections on each side. †N.O., center position "off." Types 3033 and 13033 are 3-position switches with one form C only. Series 3000 has 13/64" mounting bushing; mounts in panels up to 3/32" thick. Series 13000 has 3/8" mtg. bushing; for panels up to 1/4" thick. Shpg. wt. 3 oz.

SERIES 3000 TWO-POSITION TYPES

Mfr's Type	Stock No. Locking Type	Nonlocking Type	Action	Contact Form	EACH 1-9	10-24	25-49	50-99	100-Up
3001	933-6501	933-6502	SPST	1-A	1.92	1.44	1.32	1.20	.96
3003	933-6505	933-6506	SPDT	1-C	2.28	1.71	1.57	1.43	1.14
3004	933-6507	933-6508	DPST	2-A	2.48	1.86	1.71	1.55	1.24
3006	933-6511	933-6512	DPDT	2-C	2.76	2.07	1.90	1.73	1.38
3009	933-6509	933-6519	3PDT	3-C	3.56	2.67	2.45	2.23	1.78

SERIES 3000 THREE-POSITION TYPES

3033	933-6533	933-6534	SPDT	1-C†	2.48	1.86	1.71	1.55	1.24
3034	933-6535	933-6536	SPST	1-A	2.56	1.92	1.76	1.60	1.28
3036	933-6539	933-6540	SPDT	1-C	2.88	2.16	1.98	1.80	1.44
3037	933-6541	933-6542	SPDT	1-C†	2.96	2.22	2.04	1.85	1.48

SERIES 13000 TWO-POSITION TYPES

13001	933-7100	933-7102	SPST	1-A	2.08	1.56	1.43	1.30	1.04
13003	933-7105	933-7106	SPDT	1-C	2.40	1.80	1.65	1.50	1.20
13006	933-7111	933-7112	DPDT	2-C	2.88	2.16	1.98	1.80	1.44
13009	933-7117	933-7118	3PDT	3-C	3.84	2.88	2.64	2.40	1.92

SERIES 13000 THREE-POSITION TYPES

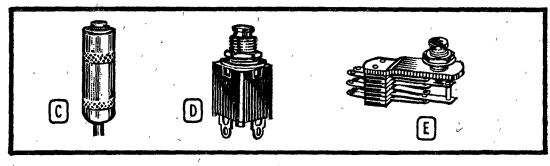
13033	933-7133	933-7134	SPDT	1-C†	2.64	1.98	1.82	1.65	1.32
13036	933-7139	933-7140	SPDT	1-C	3.16	2.37	2.17	1.98	1.58
13037	933-7141	933-7142	SPDT	1-C†	3.16	2.37	2.17	1.98	1.58

B "LEV-R" SWITCHES WITH MOLDED-ON KNOBS

As above, but permanently molded-on black knob. All 2-position except *3-position types which have same contact form for both sections on each side. Nylon roller for smoother action. With locknut and nonturn ring to keep switch from turning. Mount on 5/8" centers in panels to 3/32" thick. Require 15/32" hole (1/8" for nonturn ring) and 2 17/64" behind panel. †Normally open, center position "off." Shpg. wt., 3 oz.

Mfr's Type	Stock No. Locking Type	Nonlocking Type	Action	Contact Form	EACH 1-9	10-24	25-49	50-99	100-Up
28203	933-7790	933-7791	SPDT	1-C	3.04	2.28	2.09	1.90	1.52
28204	933-7792	933-7793	DPST	2-A	2.96	2.22	2.04	1.85	1.48
28206	933-7794	933-7795	DPDT	2-C	3.52	2.64	2.42	2.20	1.76
*28304	933-7801	933-7802	SPST	1-A	3.32	2.49	2.28	2.08	1.66
*28306	933-7805	933-7806	SPDT	1-C	3.64	2.73	2.50	2.28	1.82
*28307	933-7807	933-7808	SPDT	1-C†	3.72	2.79	2.56	2.33	1.86

PUSHBUTTON SWITCHES



C D E

C CORD PUSHBUTTON SWITCH

Precision switch for remote control of recorders, lights, etc. Hole at one end for 2-conductor line; other end has nonlocking, spring-return pushbutton switch. Rated 250 mA, noninductive load. 30 watts max. Nickel-plated sleeve 11/16" dia. 2 3/16" long. 4 oz.

Stock No.	Mfr's Type	Color	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
933-0823	*E903*	Red	1-C	2.00	1.50	1.38	1.25	1.00
933-0816	E923	Black	1-C	2.00	1.50	1.38	1.25	1.00

D "HI-D" PUSHBUTTON SWITCHES

High-density, momentary-action switches for limited-space applications. Switch is enclosed in well-insulated housing. One-piece pushbutton and shaft. Integral silver-plated springs rated at 1 amp, 100 watts maximum, AC noninductive load. Button color: *red, †black. Mount in 3/8" hole in panels up to 5/32" thick on 5/8" centers. Require 1 3/32" behind panel. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Action	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
933-1451	**H-101*	SPST	1-A	.96	.72	.66	.60	.48
933-1452	*H-102	SPST	1-B	.96	.72	.66	.60	.48
933-1453	*H-103	SPDT	1-C	1.08	.81	.74	.68	.54
933-1481	†*H-201*	SPST	1-A	.96	.72	.66	.60	.48
933-1482	†H-202	SPST	1-B	.96	.72	.66	.60	.48
933-1483	†H-203	SPDT	1-C	1.08	.81	.74	.68	.54

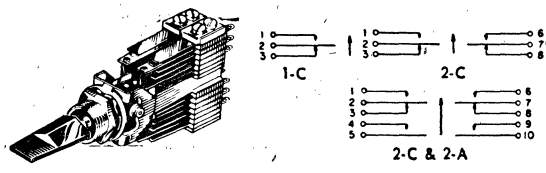
E "FF" PUSHBUTTON SWITCHES

Rugged flat-frame switches provide a simple, direct-acting momentary pushbutton contact. Fine-silver contacts rated 3 amps, 300 watts maximum, AC noninductive load. Insulated springs are form-free at flex point to assure long life. One-piece black button and shaft. Threaded mounting shank is 3/8" in diameter and 3/8" long. Comes with locknut and washer. Shpg. wt., 3 oz.

933-6301	1001	SPST n.o.	1-A	1.12	.84	.77	.70	.56
933-6303	1003	SPDT	1-C	1.24	.93	.85	.78	.62
933-6304	1004	DPST n.o.	2-A	1.36	1.02	.94	.85	.68
933-6306	*1006*	DPDT	2-C	1.56	1.17	1.07	.98	.78
933-6309	1009	3PDT	3-C	2.24	1.68	1.54	1.40	1.12

SWITCHCRAFT SWITCHES

Functional Diagrams Refer to Switches Below



SERIES 41000 "LT" MINIATURE LEVER SWITCHES

Telephone-type. Detent guide prevents accidental actuator bypass of switch position. Contacts rated 3A, 200 W max, AC non-ind. load. Long life nickel-silver springs. Damping block minimizes leaf-spring travel. Ground term. on frame. Mount in 15/32" hole, std. hardware; 23/32" mtg. centers. 2 1/8" behind panel. 5/8x3/4x3 3/4". *Pos. 1 and 2, identical contact assemblies. Shpg. wt. 1 lb.

TWO-POSITION SWITCHES

Mfr's Type	Stock No. Locking Type	Non-Locking Type	Contact Assem.	EACH 1-9	10-24	25-49	50-99	100-Up
41203	933-8901	933-8902	1-C	3.56	2.67	2.45	2.23	1.78
41206	933-8907	933-8908	2-C	4.44	3.33	3.05	2.78	2.22
41208	933-8911	933-8912	4-A	4.88	3.66	3.36	3.05	2.44
41212	933-8920	933-8921	4-C	6.00	4.50	4.13	3.75	3.00

THREE-POSITION SWITCHES

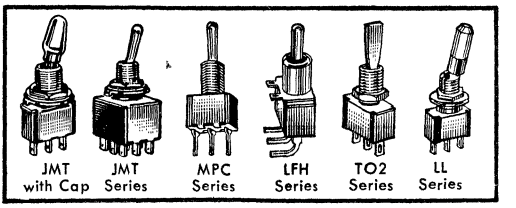
41306	933-8940	933-8941	1-C*	4.44	3.33	3.05	2.78	2.22
41308	933-8944	933-8945	2-A*	4.88	3.66	3.36	3.05	2.44
41312	933-8952	933-8953	2-C*	6.00	4.50	4.13	3.75	3.00
41324	933-8970	933-8971	4-C*	8.84	6.63	6.08	5.53	4.42

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Subminiature, Pushbutton and Hesitation Switches

J-B-T SUBMINIATURE SWITCHES

JMT Series. For manual control, solid-state devices and miniature circuits. Single pole types are ¼″ thin, double pole less than ½″ square, 3-4 pole also small. Single hole mounting; ¼″ threaded bushing. Nominal rating: 5 amps, 125 VAC or 24 VDC. Initial contact resistance: 5 milliohms. Insulation resistance: 10,000 megohms. Life under load: 100,000 make/break cycles. Bat handles, 30° throw. Silver contacts. **LFH Series.** Subminiature switches with flat handles for easy grasp and good sensing in direction of throw. **LL Series.** Self-locking lever switches with spring-loaded locking mechanism that must first be released to move from one position to another. **MPC Series.** Subminiature switches for direct insertion in PC boards. Terminals are gold plate over nickel. **TO2 Series.** Right-angle mounting switches rated 0.5 watt at 25 volts AC/DC. All types include mtg. hardware. Av. wt. 1 oz.



SPDT—3 TERMINALS *Momentary pos.

Stock No.	Mfr's Type	Action	EACH 1-24	25-99	100-249	250-Up
826-1351	JMT-121	On-Off-On	1.95	1.30	1.17	1.09
826-1353	JMT-123	On-None-On	1.65	1.10	.99	.93
826-1356	JMT-126	On-None-On*	1.95	1.30	1.17	1.09
826-1357	JMT-127	On*-Off-On*	2.10	1.40	1.26	1.18
826-1361	JMT-131	On-Off-On*	2.10	1.40	1.26	1.18
826-1364	JMT-134	None-On-On*	1.95	1.30	1.17	1.09
826-2411	LFH-121	On-Off-On	2.70	1.90	1.71	1.60
826-2431	LL-121	On-Off-On	3.70	2.59	2.33	2.15
826-2501	MPC-121	On-Off-On	2.05	1.38	1.24	1.16
826-2503	MPC-123	On-None-On	1.75	1.18	1.06	.99
826-4811	TO2-121	On-Off-On	2.20	1.55	1.39	1.30
826-4813	TO2-123	On-None-On	1.90	1.35	1.21	1.13

DPDT—6 TERMINALS *Momentary pos.

Stock No.	Mfr's Type	Action	EACH 1-24	25-99	100-249	250-Up
826-1381	JMT-221	On-Off-On	2.55	1.70	1.53	1.43
826-1383	JMT-223	On-None-On	2.15	1.43	1.28	1.20
826-1386	JMT-226	On-None-On*	2.55	1.70	1.53	1.43
826-1387	JMT-227	On*-Off-On*	2.70	1.80	1.62	1.51
826-1391	JMT-231	On-Off-On*	2.70	1.80	1.62	1.51
826-1392	JMT-232	On-On-On	2.85	1.90	1.71	1.60
826-1393	JMT-233	On-On-On*	3.15	2.10	1.89	1.76
826-1394	JMT-234	None-On-On*	2.55	1.70	1.53	1.43
826-1395	JMT-235	On*-On-On*	3.10	2.05	1.87	1.74
826-2414	LFH-221	On-Off-On	3.30	2.30	2.17	1.93
826-2416	LFH-223	On-None-On	2.90	2.03	1.83	1.71
826-2433	LL-221	On-Off-On	4.35	3.04	2.74	2.55
826-2506	MPC-221	On-Off-On	2.65	1.78	1.60	1.50
826-2507	MPC-223	On-None-On	2.25	1.51	1.36	1.27
826-4817	TO2-221	On-Off-On	2.80	1.95	1.75	1.64

3-POLE DT—9 TERMINALS *Momentary pos.

Stock No.	Type No.	Action	EACH 1-24	25-99	100-499	500-Up
826-1421	JMT-321	On-Off-On	4.25	2.84	2.54	2.37
826-1423	JMT-323	On-None-On	3.85	2.57	2.32	2.16
826-1427	JMT-327	On*-Off-On*	4.40	2.93	2.63	2.46
826-1431	JMT-331	On-Off-On*	4.40	2.93	2.63	2.46
826-1434	JMT-334	None-On-On*	4.50	3.00	2.70	2.62
826-2418	LFH-321	On-Off-On	5.00	3.44	3.10	2.89
826-2420	LFH-323	On-None-On	4.60	3.17	2.85	2.67
826-2437	LL-321	On-Off-On	5.90	4.13	3.72	3.47
826-2511	MPC-321	On-Off-On	4.40	2.96	2.66	2.49
826-2512	MPC-323	On-None-On	4.00	2.69	2.42	2.26

4-POLE DT—12 TERMINALS *Momentary pos.

826-1451	JMT-421	On-Off-On	5.45	3.64	3.26	3.05
826-1453	JMT-423	On-None-On	4.85	3.24	2.90	2.71
826-1457	JMT-427	On*-Off-On*	5.60	3.74	3.35	3.13
826-1461	JMT-431	On-Off-On*	5.60	3.74	3.35	3.13
826-1462	JMT-432	On-On-On	6.00	4.00	3.60	3.36
826-1463	JMT-433	On-On-On*	6.25	4.15	3.76	3.51
826-1464	JMT-434	None-On-On*	5.90	3.93	3.53	3.30
826-1465	JMT-435	On*-On-On*	6.40	4.28	3.83	3.57
826-2422	LFH-421	On-Off-On	6.20	4.24	3.82	3.56
826-2424	LFH-423	On-None-On	5.60	3.84	3.46	3.23
826-2516	MPC-421	On-Off-On	5.65	3.79	3.41	3.19
826-2517	MPC-423	On-None-On	5.05	3.39	3.05	2.85

COLOR CODED CAPS FOR JMT SERIES

Add suffix 1 through 0 to replace X in Stock No., to indicate color desired. 0—black; 1—brown; 2—red; 3—orange; 4—yellow; 5—green; 6—blue; 7—violet; 8—gray; 9—White.

826-134X. Pkg. of 10 per color. 1-3 Pkgs. ..... Each .28
4-19 Pkgs. ..... Each .25 20-39 Pkgs. ..... Each .22

CUTLER-HAMMER PUSHBUTTON AND HESITATION SWITCHES

PUSHBUTTON SWITCHES. Momentary contact, except ##push-push. SPST except §DPDT, #SPDT, **DPST. Normally open except †normally closed, ‡N.O.-N.C. Screw terminals except *solder lugs, †solder-spade. Av. shpg. wt. 2 oz.

HESITATION SWITCHES. Positive-stop switch restricts operation from one "on" position to the other "on" position with a pause in the center "off" or "stop" position. Those indicated match Arrow-Hart & Hegeman switches. Shpg. wt. 2 oz.

AC-DC PUSHBUTTON

Stock No.	Mfr's Type	Rated A 125 V	Rated A 250 V	Bush. Lgth.	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-7107	*8411K7*†	¾	¼	15/32″	.60	.51	.47	.39	.35	.312
757-7108	*8411K8*†*	¾	¼	15/32″	.45	.34	.32	.27	.24	.21
757-7112	*8411K12*	¾	¼	15/32″	.71	.53	.49	.41	.37	.33
757-7111	*8411K11*†	¾	¼	15/32″	.63	.47	.44	.37	.33	.29
757-7113	8411K13†	¾	¼	¼″	.63	.47	.44	.37	.33	.29
757-7329	7196K1	6	3	½″	2.06	1.55	1.43	1.20	1.08	.96
757-3290	7190K1*	6	3	½″	1.87	1.40	1.30	1.08	.97	.86
757-3408	7208K4##	6	3	11/16″	1.60	1.20	1.10	.92	.83	.74
757-3299	7199K2‡§*	6	3	½″	3.36	2.52	2.33	1.94	1.75	1.55

AC PUSHBUTTON

Stock No.	Mfr's Type	Rated A 125V	Rated A 250V	Bush. Lgth.	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-7136	8440K3	3	.....	15/32″	1.48	1.11	1.03	.86	.77	.68
757-7135	8440K2*	3	.....	15/32″	1.28	.96	.89	.74	.67	.59
757-7150	8442K4	6	3	11/32″	1.41	1.06	.98	.82	.73	.65
757-7154	8444K3	15	10	11/16″	1.52	1.14	1.05	.88	.79	.70
757-7155	8444K4	15	10	11/32″	1.52	1.14	1.05	.88	.79	.70
757-7160	*8446K2*‡#	15/10	10/5	11/16″	1.73	1.30	1.20	1.00	.90	.80
757-7168	8448K2**	15	10	11/32″	2.18	1.63	1.51	1.26	1.13	1.00
757-7123	8433K4#(##)	15	10	11/16″	2.16	1.62	1.49	1.25	.97	.65

HESITATION SWITCHES

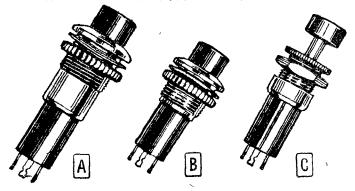
Stock No.	Mfr's Type	Relace AH&H Type	Action	Bush. Dia.	EACH 1-9	10-24	25-49	50-99	100-Up
757-5435	7992K10	.....	DPDT	15/32″	8.68	6.51	6.01	5.01	4.51
757-5440	7992K20	80638-D	DPDT	¾″	8.68	6.51	6.01	5.01	4.51
757-5425	7991K10	.....	3PDT	15/32″	10.84	8.13	7.51	6.26	5.63

Stock No.	Mfr's Type	Replace AH&H Type	Action	Bush. Dia.	EACH 1-9	10-24	25-49	50-99	100-Up
757-5430	7991K20	80983	3PDT	¾″	10.84	8.13	7.51	6.26	5.63
757-5410	7990K10	.....	4PDT	15/32″	12.15	9.11	8.41	7.01	6.31
757-5415	7990K20	80985	4PDT	¾″	12.15	9.11	8.41	7.01	6.31

GRAYHILL ALTERNATE AND MOMENTARY ACTION PUSHBUTTON SWITCHES

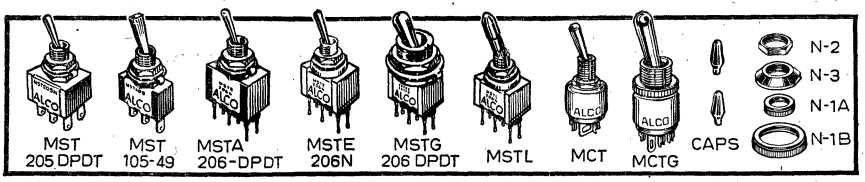
Alternate action switches, except Type 46-125, which is momentary contact. All are SPST. Type 46-502 has standard mounting; Types 46-125 and 46-525 have bezel mounting. 115 VAC, ¼ amp. 1000 VAC. Type 46-125, 1.554x0.625″; 46-502, 1.677x0.375″; 46-525, 1.840x0.625″. Av. shpg. wt. 2 oz.

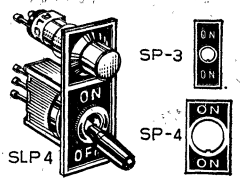
Stock No.	Mfr's Type	Fig.	Button Color	EACH 1-9	10-49	50-Up
801-1545	46-125R	B	Red	2.47	2.35	1.76
801-1540	46-125B	B	Black	2.47	2.35	1.76
801-1615	46-502R	C	Red	3.68	3.50	2.63
801-1610	46-502B	C	Black	3.68	3.50	2.63
801-1645	46-525R	A	Red	4.10	3.90	2.93
801-1640	46-525B	A	Black	4.10	3.90	2.93



Switches: Toggle, 217-223, 225, 226, 228, 229—Pushbutton, 217, 218, 222-5, 227-9, 236, 238-242

ALCOSWITCH Miniature Switches and Accessories





MST TOGGLE SWITCH—SLIM BAT HANDLE-30° THROW

Rated 5 amps @ 115 VAC. 1000 megs @ 500 VDC insulation test. 1000 V @ 60 Hz breakdown. DPDT switches are only ½ inch square. Silver contacts. ¼-inch bushing. (*) Momentary contact. (†) Special switch with 3 "On" positions. Av. shpg. wt. 1 oz.

Stock No.	Type MST-	Action	EACH 1-9	10-24	25-99	100-499	500-999
700-5780	105D	SPDT On-None-On	1.81	1.45	.97	.87	.73
700-5781	105E	SPDT On-Off-On	2.19	1.75	1.17	1.05	.88
700-5782	105F	SPDT None-On-On*	2.19	1.75	1.17	1.05	.88
700-5783	105G	SPDT On*-Off-On*	2.19	1.75	1.17	1.05	.88
700-5784	105H	SPDT On-Off-On*	2.19	1.75	1.17	1.05	.88
700-5795	205N	DPDT On-None-On	2.44	1.95	1.30	1.17	.97
700-5797	205P	DPDT On-Off-On	2.94	2.35	1.57	1.41	1.18
700-5799	205R	DPDT None-On-On*	2.94	2.35	1.57	1.41	1.18
700-5800	205S	DPDT On*-Off-On*	2.94	2.35	1.57	1.41	1.18
700-5802	205T	DPDT On-Off-On*	2.94	2.35	1.57	1.41	1.18
700-5798	205PA	†DPDT On-On-On	3.31	2.65	1.77	1.59	1.33
700-5801	205SA	†DPDT On*-On-On*	3.69	2.95	1.97	1.77	1.47
700-5803	205TA	†DPDT On*-On-On	3.69	2.95	1.97	1.77	1.47
700-5820	305D	3PDT On-None-On	4.31	3.45	2.31	2.07	1.73
700-5821	305E	3PDT On-Off-On	4.69	3.75	2.51	2.25	1.88
700-5822	305F	3PDT None-On-On*	4.69	3.75	2.51	2.25	1.88
700-5824	305H	3PDT On-Off-On*	4.69	3.75	2.51	2.25	1.88
700-5840	405N	4PDT On-None-On	5.44	4.35	2.91	2.61	2.18
700-5842	405P	4PDT On-Off-On	6.06	4.85	3.25	2.91	2.43

MST "49" TOGGLE SWITCH-FLAT HANDLE

700-5772	105D49	SPDT On-None-On	2.44	1.95	1.47	1.37	1.23
700-5773	105E49	SPDT On-Off-On	2.81	2.25	1.67	1.55	1.33
700-5774	105G49	SPDT On*-Off-On*	2.81	2.25	1.67	1.55	1.33
700-5783	205N49	DPDT On-None-On	3.06	2.45	1.80	1.67	1.47
700-5784	205P49	DPDT On-Off-On	3.69	2.95	2.07	1.91	1.68

MSTA MINIATURE 6-AMP TOGGLE SWITCHES

Plastic case withstands high impact. Low loss, high temperature coefficient. Bonded solid-silver contacts rated 6 amps 125 VAC. ¼"-40 bushing. (*) Momentary contact. Av. wt. 1 oz.

Stock No.	Type MSTA-	Action	EACH 1-9	10-24	25-99	100-499	500-999
700-5901	106D	SPDT On-None-On	2.25	1.80	1.23	1.08	.90
700-5902	106E	SPDT On-Off-On	2.81	2.25	1.53	1.35	1.13
700-5903	106F	SPDT None-On-On*	2.81	2.25	1.53	1.35	1.13
700-5904	106G	SPDT On*-Off-On*	2.81	2.25	1.53	1.35	1.13
700-5905	106H	SPDT On-Off-On*	2.81	2.25	1.53	1.35	1.13
700-5925	206N	DPDT On-None-On	2.94	2.35	1.60	1.41	1.18
700-5927	206P	DPDT On-Off-On	3.56	2.85	1.90	1.71	1.42
700-5929	206R	DPDT None-On-On*	3.56	2.85	1.90	1.71	1.42
700-5930	206S	DPDT On*-Off-On*	3.56	2.85	1.90	1.71	1.42
700-5931	206T	DPDT On-Off-On*	3.56	2.85	1.90	1.71	1.42
700-5928	206PA	DPDT On-On-On	3.94	3.15	2.14	1.89	1.58
700-5940	306D	3PDT On-None-On	5.06	4.05	2.75	2.43	2.03
700-5941	306E	3PDT On-Off-On	5.56	4.45	3.03	2.67	2.23
700-5955	406N	4PDT On-None-On	6.38	5.10	3.47	3.06	2.55
700-5957	406P	4PDT On-Off-On	7.06	5.65	3.84	3.39	2.83
700-5959	406PA	4PDT On-On-On	7.69	6.15	4.18	3.69	3.08

MSTE SERIES WATERPROOF TOGGLE SWITCHES

High voltage barriers, low loss, high impact materials. Bonded silver contacts rated 6 amp @ 115VAC. "O" rings, sealed turret terminals. (*) Momentary contact. Shpg. wt. 1 oz.

Stock No.	Type MSTE-	Action	EACH 1-9	10-24	25-99	100-499	500-999
700-6020	106D	SPDT On-None-On	2.44	1.95	1.33	1.17	.98
700-6021	106E	SPDT On-Off-On	3.19	2.55	1.72	1.53	1.28
700-6022	106F	SPDT None-On-On*	3.19	2.55	1.72	1.53	1.28
700-6023	106G	SPDT On*-Off-On*	3.19	2.55	1.72	1.53	1.28
700-6024	106H	SPDT On-Off-On*	3.19	2.55	1.72	1.53	1.28
700-6030	206N	DPDT On-None-On	3.19	2.55	1.72	1.53	1.28
700-6032	206P	DPDT On-Off-On	3.94	3.15	2.14	1.89	1.58
700-6035	206R	DPDT None-On-On*	3.94	3.15	2.14	1.89	1.58
700-6036	206S	DPDT On*-Off-On*	3.94	3.15	2.14	1.89	1.58
700-6037	206T	DPDT On-Off-On*	3.94	3.15	2.14	1.89	1.58
700-6033	206PA	DPDT On-On-On	4.31	3.45	2.35	2.07	1.73
700-6040	306D	3PDT On-None-On	5.31	4.25	2.89	2.55	2.13
700-6041	306E	3PDT On-Off-On	5.94	4.75	3.23	2.85	2.38
700-6050	406N	4PDT On-None-On	6.69	5.35	3.64	3.21	2.68
700-6051	406P	4PDT On-Off-On	7.44	5.95	4.05	3.57	2.98

MSTG "MUSTANG" SERIES SWITCHES

Features a standard 15/32" hole mounting, but with a rear space requirement of a miniature switch. Case construction of low loss, high impact and temperature materials, with turret terminals and silver contacts. Rated 6 amp @ 115 VAC. Av. wt. 1 oz.

Stock No.	Type MSTG-	Action	EACH 1-9	10-24	25-99	100-499	500-999
700-6080	106D	SPDT On-None-On	1.79	2.15	1.43	1.29	1.08
700-6081	106E	SPDT On-Off-On	2.34	2.75	1.87	1.65	1.38
700-6384	206N	DPDT On-None-On	2.34	2.75	1.87	1.65	1.38
700-6385	206P	DPDT On-Off-On	2.85	3.35	2.28	2.01	1.68
700-6386	206PA	DP3T On-On-On	3.10	3.65	2.48	2.19	1.83
700-6387	306D	3PDT On-None-On	3.79	4.45	3.03	2.67	2.23
700-6102	306E	3PDT On-Off-On	4.21	4.95	3.37	2.97	2.48
700-6115	406N	4PDT On-None-On	4.71	5.55	3.77	3.33	2.78
700-6116	406P	4PDT On-Off-On	5.23	6.15	4.18	3.69	3.08

MSTL MINIATURE LEVER-LOCKING SWITCHES

Spring loaded lever pulls forward, snaps back into accident proof detent. Have high-voltage barriers, turret terminals, bonded silver contacts. 6 amps, 125 VAC, bushing ¼"-40 by 0.316". (*) Momentary contact. Av. wt. 1 oz.

Stock No.	Type MSTL-	Action	EACH 1-9	10-24	25-99	100-499	500-999
700-6150	106D	SPDT On-None-On	3.94	3.15	2.14	1.89	1.58
700-6151	106E	SPDT On-Off-On	4.81	3.85	2.57	2.31	1.93
700-6152	106F	SPDT None-On-On*	4.81	3.85	2.57	2.31	1.93
700-6153	106G	SPDT On*-Off-On*	4.81	3.85	2.57	2.31	1.93
700-6160	206N	DPDT On-None-On	4.81	3.85	2.57	2.31	1.93
700-6161	206P	DPDT On-Off-On	5.56	3.03	3.03	2.67	2.23
700-6163	206R	DPDT None-On-On*	5.56	4.45	4.45	2.67	2.23
700-6164	206S	DPDT On*-Off-On*	5.56	4.45	3.03	2.67	2.23
700-6162	206PA	DPDT On-On-On	5.94	4.75	3.23	2.85	2.38
700-6175	306D	3PDT On-None-On	7.06	5.65	3.84	3.39	2.83
700-6176	306E	3PDT On-Off-On	7.81	6.25	4.24	3.75	3.13
700-6185	406N	4PDT On-None-On	8.69	6.95	4.73	4.17	3.48
700-6186	406P	4PDT On-Off-On	9.31	7.45	5.06	4.47	3.73
700-6187	406PA	4PDT On-On-On	9.94	7.95	5.40	4.77	3.98

MINIATURE CYLINDRICAL TOGGLE SWITCHES

Rated 10A at 125 VAC. Internal contact resistance: under 20 milliohms at 2-4 VDC, 1 amp. Life of 40,000 on-off operations. (*) MCT Type with ¼" bushing. (†) MCTG Type with 15/32" bushing. Wt. 1 oz.

700-4015	110D*	SPDT On-None-On	2.44	1.95	1.33	1.17	.98
700-4020	220N*	DPDT On-None-On	3.19	2.55	1.72	1.53	1.28
700-4040	110D†	SPDT On-None-On	2.44	1.95	1.33	1.17	.98
700-4049	220N†	DPDT On-None-On	3.19	2.55	1.72	1.53	1.28

COLOR CAPS AND NUTS FOR TOGGLE SWITCHES

To indicate color desired of plastic cap, insert color number in place of "X" in Allied Stock No. Red—2; White—9; Black—0; Blue—6; Green—5; C-10 and C-17 also available in Gray—8; Yellow—4; Pink—7. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Description	Packages of 25 1-3	4-19	20-Up
700-090X	C-10	Round Cap for MST, MSTA, MSTE	.70	.63	.55
700-094X	C-17	Flat Cap for MST, MSTA, MSTE	.70	.63	.55
700-093X	C-15	Round Cap for MSTG	1.00	.90	.83
700-6500	N-1	¼"-40 Standard Knurl Nut	1.00	.90	.83
700-6501	N-1A	¼"-40 Perfect Fit Chrome Nut	1.40	1.25	1.10
700-6504	N-1A-B	¼"-40 Perfect Fit Black Nut	1.40	1.25	1.10
700-6502	N-1B	15/32"-40 Perfect Fit Chrome Nut	2.10	1.80	1.65
700-6503	N-1C	3/8"-32 Perfect Fit Chrome Nut	1.70	1.50	1.38
700-6510	N-2	¼"-40 Standard Hex Nut	.70	.63	.55
700-6511	N-3	Decorative Mtg. Nut	1.40	1.25	1.10
700-6512	N-4	¼"-40 Decorative, Matte	2.10	1.80	1.65
700-3990	MAN-1	¼"-40 Mtg. Adapter Nut	4.38	3.75	3.45

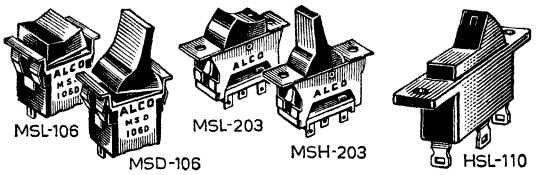
ETCHED ALUMINUM SWITCH PLATES

SLP-4 is 1 9/32", has hole for 3/8" pilot light; SP-3 and SP-4 are 1x3/8", no hole. Av. shpg. wt. 1 oz. per package.

Marking	For ¼" Bushing Stock No.	Type	For 15/32" Bushing Stock No.	Type	PER PKG. OF 5 1-9	10-24	25-Up
On-On	700-7616	SLP-4	.....	.....	.90	.65	.61
On-Off	700-7617	SLP-4	.....	.....	.90	.65	.61
Pwr-Off	700-7618	SLP-4	.....	.....	.90	.65	.61
On-On	700-7630	SP-3	700-7642	SP-4	.75	.55	.50
On-Off	700-7631	SP-3	700-7643	SP-4	.75	.55	.50
Pwr-Off	700-7632	SP-3	700-7644	SP-4	.75	.55	.50

Switches: Lever, 218, 224-8, 232, 241—Rocker, 221, 227-9, 240—Lock, 222, 228—Slide, 223, 227

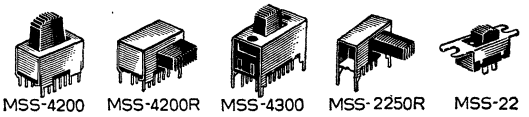
Switches and Accessories



ROCKER, LEVER, SLIDE SWITCHES

MSD and MSL have "snap-into-panel" mounting with metal clips to hold in place; fit into .50x.60" hole; 6 amps @ 125 VAC; silver terminals, contacts. (‡) Supplied with red, black, gray or white actuator; **SPECIFY COLOR WHEN ORDERING—SEE HOW TO ORDER INFORMATION BLOCK.** MSL-203N and MSH-203N switches are screw mounted types; 3 amps @ 125 VAC; 25,000 operations, silver plated contacts; black actuator. U/L listed HSL Series, is larger size, 10 amps @ 125 VAC, 6A @ 250 VAC; over 100,000 operations; extra-wide surface silver-clad contacts; tab terminals; black.

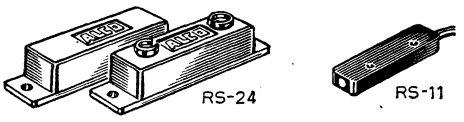
Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-999
700-405X	MSD-106D‡	SPDT On-None-On	2.06	1.65	1.12	.99	.83
700-406X	MSD-106E‡	SPDT On-Off-On	2.44	1.95	1.33	1.17	.98
700-409X	MSD-206N‡	DPDT On-None-On	2.69	2.15	1.43	1.29	1.08
700-410X	MSD-206P‡	DPDT On-Off-On	3.19	2.55	1.72	1.53	1.28
700-512X	MSL-106D‡	SPDT On-None-On	2.06	1.65	1.12	.99	.83
700-513X	MSL-106E‡	SPDT On-Off-On	2.44	1.95	1.33	1.17	.98
700-514X	MSL-206N‡	DPDT On-None-On	2.69	2.15	1.43	1.29	1.08
700-515X	MSL-206P‡	DPDT On-Off-On	3.19	2.55	1.72	1.53	1.28
700-5125	MSL-203N	DPDT	1.44	1.15	.78	.69	.58
700-5110	MSH-203N	DPDT	1.56	1.25	.85	.75	.63
700-2110	HSL-110A	SPST On-Off	1.06	.85	.58	.51	.43
700-2113	HSL-110D	SPDT On-On	1.19	.95	.65	.57	.48



MINIATURE PRINTED CIRCUIT SLIDE SWITCHES

Occupies less space for direct or overhead mounting. MSS-4300 and 6200 have threaded screw holes on top of mtg. frame for 4-40 screws. Models with suffix "R" have right angle mounting terminals. Contacts, silver or (*) gold plated (2 microns). Low resistance; positive wiping action. Rated .3A @ 125 VAC. MSS-22 and 44 have anti-tease design; rated 2A @ 120 VAC. Gold on niekel on silver plated brass contacts. 250,000 operations. .500x.305".

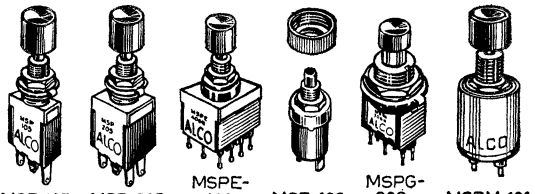
Stock No.	Type MSS-	Action	EACH 1-9	10-24	25-49	50-99	100-499
700-5720	1200R	SPDT Right Angle	.75	.60	.41	.36	.30
700-5721	1200RG*	SPDT Right Angle	1.00	.80	.55	.48	.40
700-5727	2200	DPDT Upright	.81	.65	.44	.39	.33
700-5729	2200G	DPDT Upright	1.31	1.05	.72	.63	.53
700-5731	2250	DPDT Long Handle	.88	.70	.48	.42	.35
700-5732	2250G*	DPDT Long Handle	1.38	1.10	.75	.66	.55
700-5734	2250R	DPDT Long Handle	1.50	.80	.55	.48	.40
700-5735	2250RG*	DPDT Long Handle	1.00	1.20	.82	.72	.60
700-5742	4200	4PDT Upright	.94	.75	.51	.45	.38
700-5743	4200R	4PDT Right Angle	1.06	.85	.58	.51	.43
700-5745	4300	4P3T Upright	1.31	1.05	.72	.63	.53
700-5762	6200	6PDT Upright	1.19	.95	.65	.57	.48
700-5701	22	SPDT 2-circuit	2.19	1.75	.17	.88	.73
700-5710	44	2PDT 2-circuit	3.94	3.15	2.11	1.58	1.31



PROXIMITY MAGNETIC REED SWITCH ASSEMBLIES

RS-24—Alnico 5 magnet actuates reed switch within distance of 1". Rated 0.5 amps break, 1.0 amps carry, over 5 million operations. Miniature RS-11—Alnico 5 magnet actuates reed switch within distance of .39". Current rating @ 50 VDC: .15 amps break, .5 amps carry. 200 VDC breakdown. Life: 10 million cycles.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-49	50-99	100-999
700-7068	RS-24-NO	N.O. (Apart) Pair	3.56	2.85	1.90	1.71	1.42
700-7067	RS-24-NC	N.C. (Apart) Pair	3.94	3.15	2.14	1.89	1.58
700-7066	RS-11-NO	N.O. (Apart) Pair	3.44	2.75	1.87	1.65	1.38
700-7065	RS-11-NC	N.C. (Apart) Pair	3.71	3.05	2.08	1.83	1.53



MINIATURE PUSHBUTTON SWITCHES

MSP. Snap action, 5 amps @ 115 VAC. Solid silver contacts, terminals. Bushing ¼-40 with keyway. Black phenolic case. 25,000 life cycle. **MSPE WATERPROOF.** 6 amps resistive, 2 amps inductive @ 125 VAC. Double "O" waterseals, low-loss "E" Series case; turret terminals. Versatile "double-throw." **MSP-103 ECONOMY.** 3 amps @ 125 VAC. Low-pressure. Silver plated brass contacts, terminals. Plunger travels .098". Depth behind panel, ¾". 1-pc. ¼-40 bushing. **MSPG MUSTANG.** Same as MSPE but not waterproof. (*) Supplied with C-12 Black plastic button other color caps available separately—see bottom of page. (†) Supplied with Black button. (††) Supplied with red button. (**) Supplied with Red or Black plastic button. To indicate button color desired see **HOW TO ORDER BLOCK ON THIS PAGE.**

Stock No.	Type MSP	Action	EACH 1-9	10-24	25-49	50-99	100-999
700-5235	-105D*	SPDT Push On/Off	2.69	2.15	1.46	1.29	1.08
700-5237	-105F*	SPDT Momentary	2.69	2.15	1.46	1.29	1.08
700-5249	-205N*	DPDT Push On/Off	3.69	2.95	2.01	1.77	1.48
700-5255	-205R*	DPDT Momentary	3.69	2.95	2.01	1.77	1.48
700-5310	E-106D*	SPDT Push On/Off	3.19	2.55	1.72	1.53	1.28
700-5312	E-106F*	SPDT Momentary	3.19	2.55	1.72	1.53	1.28
700-5330	E-206N*	DPDT Push On/Off	4.31	3.45	2.35	2.07	1.73
700-5334	E-206R*	DPDT Momentary	4.31	3.45	2.35	2.07	1.73
700-5360	E-406N*	4PDT Push On/Off	7.44	5.95	4.05	3.57	2.98
700-5362	E-406R*	4PDT Momentary	7.44	5.95	4.05	3.57	2.98
700-5220	-103B†	SPST Norm. NO	.81	.65	.44	.39	.33
700-5221	-103C††	SPST NC	.81	.65	.44	.39	.33
000-0000	-103C-B†	SPST NO	.81	.65	.44	.39	.33
700-542X	G-206N**	DPDT Push On/Off	3.94	3.15	2.14	1.89	1.58
700-543X	G-206R**	DPDT Momentary	3.94	3.15	2.14	1.89	1.58

MSPM MAGNETIC REPULSION PUSH BUTTON SWITCHES

Momentary types have ceramic magnets to eliminate springs. Glass reed contacts. Keyed plunger, non-rotating. Metal case. Rated 100 mA @ 50 VDC. resistance 100 milliohms; contact bounce 1 m/sec. 10 million life. (*) Supplied with C-12 black buttons; (†) red buttons.

Stock No.	Type MSPM	Description	EACH 1-9	10-24	25-49	50-99	100-499
700-5485	101B*	SPST-NC, Solder Lug	5.31	4.25	3.40	2.98	2.76
700-5486	101C†	SPST-NO, Solder Lug	4.88	3.90	3.12	2.73	2.54
700-5487	101B-1*	SPST-NC, 110" Term.	5.31	4.25	3.40	2.98	2.76
700-5488	101-1†	SPST-NO, 110" Term.	4.87	3.90	3.12	2.73	2.54

BUTTONS AND GUARDS FOR ABOVE SWITCHES

(*) Available in red, green or black. See **HOW TO ORDER BLOCK ON THIS PAGE** to indicate desired color.

Stock No.	Mfr's Type	Description	Per Package of 25 1-3	4-19	20-Up
700-090X	C-12	*Plastic Button	.90	.80	.75
700-092X	C-13	*Large Button	1.50	1.35	1.25
700-0929	C-14-L	Chrome Button	1.50	1.35	1.25
700-2010	G-12-A	Plain Guard for C-12	4.25	3.75	3.50
700-2020	G-12-K	Knurl Guard for C-12	5.00	4.50	4.13
700-2040	G-13-A	Plain Guard for C-13	4.25	3.75	3.50
700-2048	G-13-K	Knurl Guard for C-13	5.00	4.50	4.13

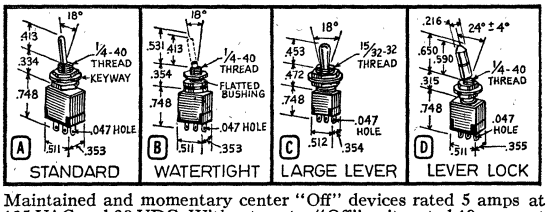
HOW TO ORDER

To indicate color desired, insert in place of the X in Allied's Stock No. the number of the color desired.
Black—0; Red—2; Yellow—4; Green—5; Blue—6; Pink—7; Gray—8; White—9.
Example: Change 700-090X to 700-0902 for Red.

Switches: Rotary, 230-5—Snap, 235, 236—Thumbwheel (PC), 237—Ribbon/Mat/Foot, 239

Cutler-Hammer Miniature Switches

A MINIATURE TOGGLE SWITCHES



Maintained and momentary center "Off" devices rated 5 amps at 125 VAC and 28 VDC. Without center "Off" units rated 10 amps at 125 VAC, 5 amps at 28 VDC maintained; 5 amps at 125 VAC and 28 VDC momentary. .413" high lever, 1/4-40 dia. bushing, solder lug terminals. With locking ring, lockwasher and two hex locknuts, unassembled. *Momentary contact. †With white cap. See below right for decorator caps.

Stock No.	Mfr's Type	Action	EACH 1-24	25-99	100-499	500-999
757-0246	SF1SBX191	SPDT On-Off-On	1.78	1.19	1.07	.89
757-0252	SF1SCY191	SPDT On-None-On	1.52	1.02	.91	.76
757-0260	SF1SFX191	SPDT On-Off-On*	1.78	1.19	1.07	.89
757-0266	SF1SGX191	SPDT On-None-On*	1.78	1.19	1.07	.89
757-0272	SF1SHX191	SPDT On*-Off-On*	1.78	1.19	1.07	.89
757-0247	SF2SBX191	DPDT On-Off-On	2.35	1.57	1.41	1.18
757-0254	SF2SCY191	DPDT On-None-On	1.98	1.33	1.19	1.00
757-0261	SF2SFX191	DPDT On-Off-On*	2.35	1.57	1.41	1.18
757-0267	SF2SGX191	DPDT On-None-On*	2.35	1.57	1.41	1.18
757-0273	SF2SHX191	DPDT On*-Off-On*	2.35	1.57	1.41	1.18
757-0248	SF3SBX191	3PDT On-Off-On	3.78	2.53	2.27	1.89
757-0256	SF3SCY191	3PDT On-None-On	3.55	2.38	2.13	1.78
757-0262	SF3SFX191	3PDT On-Off-On*	3.78	2.53	2.27	1.89
757-0268	SF3SGX191	3PDT On-None-On*	3.78	2.53	2.27	1.89
757-0274	SF3SHX191	3PDT On*-Off-On*	3.78	2.53	2.27	1.89
757-0249	SF4SBX191	4PDT On-Off-On	4.90	3.28	2.94	2.45
757-0257	SF4SCY191	4PDT On-None-On	4.45	2.98	2.67	2.23
757-0263	SF4SFX191	4PDT On-Off-On*	4.90	3.28	2.94	2.45
757-0269	SF4SGX191	4PDT On-None-On*	4.90	3.28	2.94	2.45
757-0278	SF4SHX191	4PDT On*-Off-On*	4.90	3.28	2.94	2.45
757-0253	SF1SCY191-1†	SPDT On-None-On	1.57	1.06	.95	.79
757-0255	SF2SCY191-1†	DPDT On-None-On	2.03	1.36	1.22	1.02

B WATERPROOF MINIATURE TOGGLE SWITCHES

Double seal design. Internal neoprene "O" ring seal restricts entrance of moisture into switch base. Withstands a 3.3 foot head of water for 15 minutes at temperatures from 25° to 65° C. Additional "O" ring bushing seal mounts under facenut for panel seal. 1/4-40 flatted bushing prevents switch rotation.

Stock No.	Mfr's Type	Action	EACH 1-24	25-99	100-499	500-999
757-0281	SF1WBX191	SPDT On-Off-On	2.55	1.71	1.53	1.28
757-0287	SF1WCY191	SPDT On-None-On	1.95	1.31	1.17	.98
757-0282	SF2WBX191	DPDT On-Off-On	3.15	2.11	1.89	1.48
757-0288	SF2WCY191	DPDT On-None-On	2.55	1.71	1.53	1.28
757-0283	SF3WBX191	3PDT On-Off-On	4.75	3.18	2.85	2.38
757-0289	SF3WCY191	3PDT On-None-On	4.25	2.85	2.56	2.13
757-0284	SF4WBX191	4PDT On-Off-On	5.95	3.99	3.57	2.98
757-0290	SF4WCY191	4PDT On-None-On	5.35	3.58	3.21	2.68

C LARGE LEVER—LARGE BUSHING MINIATURE SWITCHES

Large lever and bushing design combines space-saving behind-the-panel compactness and regular size front-of-panel appearance. Design features .453" high lever and 15/32" bushing.

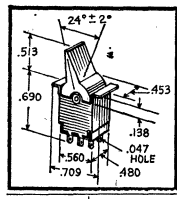
757-0221	SF1GBX191	SPDT On-Off-On	2.75	1.84	1.65	1.38
757-0226	SF1GCY191	SPDT On-None-On	2.15	1.44	1.29	1.03
757-0222	SF2GBX191	DPDT On-Off-On	3.35	2.24	2.01	1.68
757-0227	SF2GCY191	DPDT On-None-On	2.75	1.84	1.65	1.38
757-0223	SF3GBX191	3PDT On-Off-On	4.98	3.33	2.99	2.49
757-0228	SF3GCY191	3PDT On-None-On	4.45	2.98	2.67	2.23
757-0224	SF4GBX191	4PDT On-Off-On	6.15	4.11	3.69	3.08
757-0229	SF4GCY191	4PDT On-None-On	5.55	3.72	3.34	2.78

D LEVER LOCK MINIATURE SWITCHES

Self-locking lever mechanism for the critical or hazardous application. Spring-loaded design provides excellent means for safeguarding against accidental operation. Silver cap is standard.

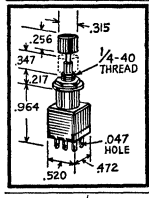
757-0232	SF1LBX183-7	SPDT On-Off-On	3.30	2.41	2.16	1.80
757-0238	SF1LCY173-7	SPDT On-None-On	3.00	2.21	1.98	1.65
757-0233	SF2LBX183-7	DPDT On-Off-On	3.80	2.55	2.28	1.90
757-0239	SF2LCY173-7	DPDT On-None-On	3.50	2.35	2.10	1.75
757-0234	SF3LBX183-7	3PDT On-Off-On	5.30	3.52	3.30	2.65
757-0240	SF3LCY173-7	3PDT On-None-On	5.00	3.35	3.00	2.50
757-0235	SF4LBX183-7	4PDT On-Off-On	6.50	5.55	3.90	3.25
757-0241	SF4LCY173-7	4PDT On-None-On	5.90	3.95	3.54	2.95

MINIATURE ROCKETTE SWITCHES



Ultra-compact snap-in switches employ a slow-make, slow-break contact structure with substantial current capacity. Rated 5 amps at 125 VAC, 5 amps at 28 VDC; except switches with On-None-On circuit rated 6 amps at 125 VAC, 5 amps at 28 VDC. All switches listed are DPDT. Designed for mounting in .040 to .150 inch thick panels. cut out .610x.515". Have solder lug terminals. Choice of white, red, or black rocker color. *Momentary.

Stock No.	Type Type	Action	Color	EACH 1-24	25-99	100-499	500-999
757-0175	SC4BX181	On-Off-On	White	2.92	1.96	1.75	1.46
757-0176	SC4BX182	On-Off-On	Red	2.92	1.96	1.75	1.46
757-0179	SC4BX185	On-Off-On	Black	2.92	1.96	1.75	1.46
757-0184	SC4CW181	On-None-On	White	2.92	1.96	1.75	1.46
757-0185	SC4CW182	On-None-On	Red	2.92	1.96	1.75	1.46
757-0188	SC4CW185	On-None-On	Black	2.92	1.96	1.75	1.46
757-0193	SC4FX181	On-Off-On*	White	2.92	1.96	1.75	1.46
757-0194	SC4FX181	On-Off-On*	Red	2.92	1.96	1.75	1.46
757-0197	SC4FX185	On-Off-On*	Black	2.92	1.96	1.75	1.46
757-0203	SC4GX181	On-None-On*	White	2.92	1.96	1.75	1.46
757-0204	SC4GX182	On-None-On*	Red	2.92	1.96	1.75	1.46
757-0207	SC4GX185	On-None-On*	Black	2.92	1.96	1.75	1.46
757-0212	SC4HX181	On*-Off-On*	White	2.92	1.96	1.75	1.46
757-0218	SC4HX192	On*-Off-On*	Red	2.92	1.96	1.75	1.46
757-0216	SC4HX185	On*-Off-On*	Black	2.92	1.96	1.75	1.46



MINIATURE PUSHBUTTON SWITCHES

Quick-make, quick-break mechanism well suited for AC and low-voltage DC. Momentary and alternate action designs. Rated 5 amps at 125 VAC and 28 VDC. Positive detent. Solder lug terminals. 1/4-40 bushing size. Hardware—internal tooth lockwasher, locking ring, hex facenut—supplied unassembled. Screw-on caps (.315" dia.) are required—order below.

Stock No.	Mfr's Type	Action	EACH 1-24	25-99	100-499	500-999
757-0104	SA21SDX11	SPDT Momentary	2.10	1.41	1.26	1.05
757-0105	SA21SEX11	SPDT Push On/Push Off	2.10	1.41	1.26	1.05
757-0122	SA22SDX11	DPDT Momentary	2.90	2.14	1.74	1.45
757-0123	SA22SEX11	DPDT Push On/Push Off	2.90	2.14	1.74	1.45
757-0148	SA24SDX11	4PDT Momentary	5.40	3.62	3.24	2.70
757-0149	SA24SEX11	4PDT Push On/Push Off	5.40	3.62	3.24	2.70

WATERPROOF MINIATURE PUSHBUTTON SWITCHES

Waterproof design features internal "O" ring seal and another external seal around bushing shoulder for behind-the-panel sealing. Surpasses a 3.3 foot head of water test for 30 minutes. Bushing flatted one-side prevents rotation after mounting. Hardware furnished unassembled. Screw-on decorator caps (.315" dia.) are required—order below.

757-0114	SA21WDX1	SPDT Momentary	2.50	1.67	1.50	1.25
757-0115	SA21WEX1	SPDT Push On/Push Off	2.50	1.67	1.50	1.25
757-0131	SA22WDX1	DPDT Momentary	3.40	2.28	2.04	1.70
757-0132	SA22WEX1	DPDT Push On/Push Off	3.40	2.28	2.04	1.70
757-0158	SA24WDX1	4PDT Momentary	5.90	3.95	3.54	2.95
757-0159	SA24WEX1	4PDT Push On/Push Off	5.90	3.95	3.54	2.95

SCREW-ON PUSHBUTTON DECORATOR CAPS

Screw-on design. Required for pushbutton series switches above.

Stock No.	Mfr's Type	Color	EACH 1-24	25-99	100-499	500-999
757-0321	SW53AA21	White	.05	.033	.03	.025
757-0322	SW53AA22	Red	.05	.033	.03	.025
757-0323	SW53AA23	Black	.05	.033	.03	.025
757-0324	SW53AA24	Blue	.05	.033	.03	.025
757-0325	SW53AA25	Yellow	.05	.033	.03	.025
757-0326	SW53AA26	Green	.05	.033	.03	.025

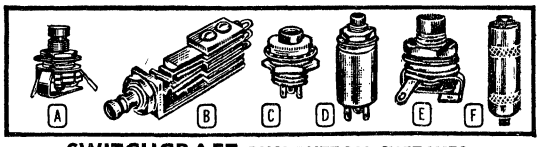
ACCESSORY TOGGLE LEVER DECORATOR CAPS

Caps for miniature toggle switches provide visual coding for critical functions or color-coordinating with equipment.

Stock No.	Mfr's Type	Color	EACH 1-24	25-99	100-499
757-0301	SW49AA1	White	.04	.027	.024
757-0302	SW49AA2	Red	.04	.027	.024
757-0303	SW49AA3	Black	.04	.027	.024
757-0304	SW49AA4	Blue	.04	.027	.024
757-0305	SW49AA5	Yellow	.04	.027	.024
757-0306	SW49AA6	Green	.04	.027	.024

Make Allied Your One-Order Source for All Your Needs

Miniature Pushbutton and Toggle Switches



SWITCHCRAFT PUSHBUTTON SWITCHES

A Illuminated "Little-lite" switches. Clear plastic button and shaft illuminated by a single 6 or 28 V lamp (less lamp). Rated at 3 amps, at 300 W maximum noninductive load. With four color chips (red, amber, green, yellow). Wt. 3 oz.

Stock No.	Mfr's Type	Action	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
933-5761	211S	SPST	1-A	1.80	1.35	1.24	1.13	.90
933-5763	213S	SPDT	1-C	2.12	1.59	1.46	1.33	1.06

B Miniature "TF" Pushbutton switch. Tiny-frame momentary-action. Each has cadmium-plated steel frame, phenolic insulation, nickel-silver springs, integral contacts. Recommended for low-level circuits where contact resistance is unimportant. Mount in 1/4" hole and require 1 19/32" behind panel which can be up to 3/32" thick. All are 3/8" wide. Stack height, 1 9/32" min. 3 oz.

933-6276	976	DPDT	2-C	1.36	1.02	.94	.85	.68

C D "Button Swtiches". Small momentary-action pushbutton switches. Types 903 and 913 (Figure C) are 7/8" long; for behind-panel mounting in panels up to 19/64" thick; fit 15/32" hole. Types 923 and 933 (Figure D) are 1 1/4" long; mount in front of panels up to 5/32" thick; fit 1/4" hole. All are rated 250 mA, 30 watts maximum. AC noninductive. Contact Form, 1-C. Wt. 3 oz.

Red Button Stock No.	Red Button Mfr's Type	Black Button Stock No.	Black Button Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-Up
933-6203	*903*	933-6123	*913*	SPDT	1.24	.93	.85	.78	.62
933-6223	923	933-6233	*933*	SPDT	1.32	.99	.91	.83	.66

E Pushbutton "Tiny Switches". For use in microphones, radio and automotive test instruments. Nickel-plated brass frame and bushing. With mounting hardware. 1/4" threaded shank; 13/64" long. For use with low-level currents only. Require 5/16" behind panels up to 3/32" thick. Wt. 3 oz.

933-6251	*951*	933-6261	961	SPST	.84	.63	.58	.53	.42
933-6252	952	933-6262	962	SPST	.84	.63	.58	.53	.42
933-6253	*953*	933-6263	963	SPDT	1.00	.75	.69	.63	.50

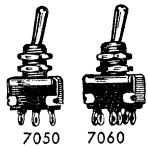
F Cord Pushbutton Switch. Hole at one end for 2-conductor line; other end has nonlocking, spring-return pushbutton switch. Rated 250 mA, noninductive load. 30 watts max. Nickel-plated sleeve 11/16" dia. 2 3/16" long. 4 oz.

Stock No.	Mfr's Type	Color	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
933-0823	E903	Red	1-C	2.00	1.50	1.38	1.25	1.00
933-0816	E923	Black	1-C	2.00	1.50	1.38	1.25	1.00

CUTLER HAMMER

MINIATURE COMMERCIAL TOGGLES

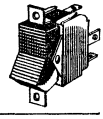
Commercial toggle switches for a variety of uses where compact size is an important design factor. Features massive current carrying parts to provide up to 50% longer life. Rated 5A at 125 VAC and 28 VDC. Overall size: SPST and SPDT types, 1 3/16x1/4x1/2". DPST and DPDT types, 1 3/16x1 5/32x1/2". Stem length, 1/4". *in table below indicates center off. Av. wt., 2 oz.


7050 7060

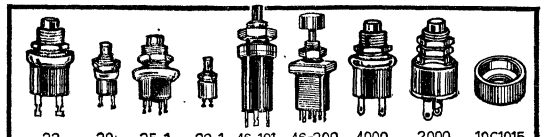
Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-3055	*7055K20*	SPST	4.62	3.46	3.19	2.66	2.40	2.13
757-3050	7050K20	SPDT*	4.91	3.68	3.40	2.83	2.54	2.26
757-3053	7053K20	SPDT	4.91	3.68	3.40	2.83	2.54	2.26
757-3065	7065K20	DPST	5.70	4.28	3.94	3.29	2.96	2.63
757-3060	7060K20	DPDT*	6.27	4.70	4.35	3.62	3.26	2.90
757-3063	7063K20	DPDT	6.27	4.70	4.35	3.62	3.26	2.90

LIGHTED ROCKETTE SWITCHES

Construction identical to standard "Rockette" switch with addition of integral light unit behind rocker mechanism that illuminates at 'On' position. White nylon rocker. On-None-Off lever travel. Wt. 2 oz.



Stock No.	Mfr's Type	Bulb	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-6230	8175K11 E 121 T52	120 VAC	2.58	1.93	1.78	1.49	1.34	1.19
757-6234	8175K11 E 321 T52	14 VDC	2.58	1.93	1.78	1.49	1.34	1.19



GRAYHILL PUSHBUTTON SWITCHES

Rugged, momentary contact, pushbutton switches with solder-lug type terminals. For on/off applications, computer equipment, printed circuit panels. Normally open types (indicated by N. O. in table below) have red buttons. Normally closed types (indicated by N. C. in table below) have black buttons. In Series 2000 and Series 46, "R" after Mfr's Type No. indicates red button, "B" black button. Av. shpg. wt., 2 oz.

Series 23. Miniature, over 500,000 operations. Contact resistance, 10 milliohms. Mounting hole, 21/64".

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	EACH 1-9	10-49	50-Up
801-0501	23-1	SPST N.O.	1/4	13/64x1/2"	1.38	1.10	.83

Series 30. Subminiature, over 1 million operations. Contact resistance, 10 milliohms. Mounting hole, 17/64".

801-0701	30-1	SPST N.O.	1	63/64x3/8"	1.19	.95	.71
801-0702	30-2	SPST N.C.	1	63/64x3/8"	1.19	.95	.71

Series 35. Miniature, over 100,000 operations. Mtg. hole, 31/64".

801-0735	35-1	DPST N.O.	1/2	1 17/64x51/64"	1.88	1.50	1.13

Series 39. Ultraminiature, over 1 million operations. Butt contact. Mounting hole, 11/64".

801-0750	39-1	SPST N.O.	1/2	39/64x1/4"	1.44	1.15	.86

Series 46. Miniature, over 250,000 operations. †In Action column indicates break-before-make, ‡ make-before-break. Mtg. hole, 17/64".

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	EACH 1-9	10-49	50-Up
801-1515	46-101R	SPDT†	1/4	1 1/3x7/16"	1.75	1.40	1.05
801-1510	46-101B	SPDT†	1/4	1 1/3x7/16"	1.75	1.40	1.05
801-1530	46-110R	SPDT‡	1/4	1 1/3x7/16"	1.94	1.55	1.16
801-1525	46-110B	SPDT‡	1/4	1 1/3x7/16"	1.94	1.55	1.16
801-1555	46-200R	DPDT†	1/4	1 9/16x1 7/32" sq.	3.88	3.10	2.33
801-1550	46-200B	DPDT†	1/4	1 9/16x1 7/32" sq.	3.88	3.10	2.33
801-1565	46-201R	DPDT‡	1/4	1 9/16x1 7/32" sq.	4.25	3.40	2.55
801-1560	46-201B	DPDT‡	1/4	1 9/16x1 7/32" sq.	4.25	3.40	2.55

Series 2000. Snap-Action, over 25,000 operations. Mtg. hole, 31/64".

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	EACH 1-9	10-49	50-Up
801-2201	2201	SPST N.O.	10	1 59/64x7/8"	3.31	2.65	1.99
801-2202	2202	SPST N.C.	10	1 59/64x7/8"	3.31	2.65	1.99
801-0035	7-26R	SPDT	10	1 9/64x7/8"	4.81	3.85	2.89
801-0026	7-26B	SPDT	10	1 9/64x7/8"	4.81	3.85	2.89

Series 4000. Silent-Action, over 100,000 operations. Mtg. hole, 31/64".

801-2251	4001	SPST N.O.	1	1 17/32x51/64"	1.25	1.00	.75
801-2252	4002	SPST N.C.	1	1 17/64x51/64"	1.25	1.00	.75

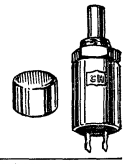
Button Guard. For Series 2000, 4000, 35. Cadmium-plated.

801-0007	10C1015	Provides button recess.	.38	.30	.23
801-0315	7C1040	Decorative mtg. nut.	.25	.20	.15

CUTLER HAMMER

ULTRAMINIATURE PUSHBUTTON SWITCHES

Rated 1/2-amp N.O.; 1/4-amp N.C. at 125 VAC resistive. Actuating force, 8 oz. Life expectancy, 50,000 operations. Gold-plated solder terminals and contacts with wiping action. 11/64" mounting hole. Av. shpg. wt., 2 oz.



Stock No.	Mfr's Type	Ckt.	Button Color	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-0040	SAIRV20	N.O.	Red	1.25	.94	.87	.73	.65	.58
757-0020	SAIBV20	N.O.	Black	1.25	.94	.87	.73	.65	.58
757-0042	SAIRW20	N.C.	Red	1.25	.94	.87	.73	.65	.58
757-0041	SAIRW20	N.C.	Black	1.25	.94	.87	.73	.65	.58

ACCESSORY BUTTON CAPS

757-1101	SW53AA1	.....	Red	.17	.13	.12	.10	.09	.08
757-1102	SW53AA2	.....	Black	.17	.13	.12	.10	.09	.08
757-1103	SW53AA3	.....	Blue	.17	.13	.12	.10	.09	.08
757-1105	SW53AA5	.....	Green	.17	.13	.12	.10	.09	.08
757-1109	SW53AA9	.....	White	.17	.13	.12	.10	.09	.08
757-1110	SW53AA10	.....	Yellow	.17	.13	.12	.10	.09	.08

MIL AND COMMERCIAL ROTARY SWITCHES

Rotary Switches

MIL-S-6807 ROTARY POWER SWITCHES

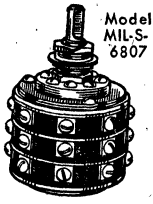
Adjustable index. 5 amps at 28 VDC and 115 VAC. 8 positions non-shorting. Screw terminals. 1 7/32" shaft, 15/32" bushing. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Gov't MS No.	Deck	EACH 1-24	25-49	50-99	100-Up
757-3441	7261K14	25002-1	1	8.14	6.39	5.33	4.26
757-3454	7262K14	25002-2	2	12.51	9.72	8.10	6.48
757-3471	7264K10	25002-4	4	21.03	16.32	13.60	10.88
757-3481	7265K10	25002-5	5	25.00	19.62	16.35	13.08
757-3491	7266K6	25002-6	6	29.22	22.92	19.10	15.28

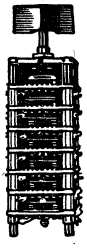
SERIES 1, 2 AND 4 SWITCHES

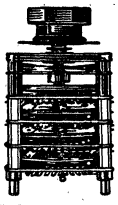
Precision-made switches meet MIL-S-3786 specifications; any modifications are readily available on special request. Series 1 is 1" in diameter; 2 is 1¾" square; 4 is 2½" square. All switches have 5/16" diameter bushing, 1" diameter shafts and fully adjustable stops. Order from tables below. Av. shpg. wt. 2 oz.

Series	Rating at 120 VAC	Life Operations	Rating at 30 VDC	Life Operations	Max. Allow. Contact Res.
1	350 mA	25,000	1000 mA	25,000	.0045 at 15 VA
2	2 A	10,000	2 A	20,000	.010 at 240 VA
4	2 A	5,000	2 A	20,000	.010 at 240 VA


Model MIL-S-6807

Series 1


Series 2


Series 4

SERIES 1 PER MIL-S-3786/SR28

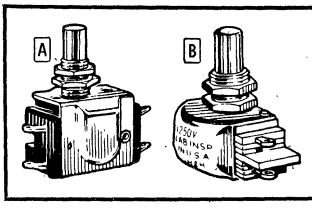
SHORTING TYPES Stock No.	Mfr's Type	NON-SHORTING TYPES Stock No.	Mfr's Type	No. of Poles	Pos/Poles	No. of Decks	EACH 1-9	10-24	25-49	50-99	100-Up
757-1530	1J04A6-1	757-1570	1J54A6-1	1	2-6	1	6.73	4.84	4.18	3.74	3.41
757-1531	1J04A6-2	757-1571	1J54A6-2	2	2-6	2	9.06	6.38	5.61	5.06	4.62
757-1532	1J04A6-3	757-1572	1J54A6-3	3	2-6	3	11.28	8.03	7.04	6.27	5.72
757-1515	1J02A12-1	757-1560	1J52A12-1	1	2-12	2	7.89	5.61	4.84	4.40	3.96
757-1516	1J02A12-2	757-1561	1J52A12-2	2	2-12	4	11.77	8.36	7.26	6.60	5.83
757-1517	1J02A12-3	757-1562	1J52A12-3	3	2-12	6	15.65	11.11	9.68	8.69	7.81
757-1501	1J00A12-1	757-1550	1J50A12-1	1	2-12	2	7.89	5.61	4.84	4.40	3.96
757-1502	1J00A12-2	757-1551	1J50A12-2	2	2-12	4	11.77	8.36	7.26	6.60	5.83
757-1503	1J00A12-3	757-1552	1J50A12-3	3	2-12	6	15.65	11.11	9.68	8.69	7.81

SERIES 2 PER MIL-S-3786/SR14

SHORTING TYPES Stock No.	Mfr's Type	Max. Pos.	NON-SHORTING TYPES Stock No.	Mfr's Type	Max. Pos.	Poles/Deck	No. of Decks	EACH 1-9	10-24	25-49	50-99	100-Up
757-1670	2E00A24-1	24	757-1775	2J50A12-1	12	1	1	16.35	11.88	10.34	9.24	8.25
757-1671	2E00A24-2	24	757-1776	2J50A12-2	12	1	2	24.20	17.60	15.29	13.64	12.21
757-1672	2E00A24-3	24	757-1777	2J50A12-3	12	1	3	32.11	23.32	20.24	18.04	16.28
757-1680	2E06A11-1	11	757-1785	2J56A6-1	6	2	1	16.83	12.21	10.56	9.46	8.47
757-1681	2E06A11-2	11	757-1786	2J56A6-2	6	2	2	24.59	17.82	15.51	13.80	12.43
757-1682	2E06A11-3	11	757-1787	2J56A6-3	6	2	3	32.45	23.54	20.46	18.26	16.39
757-1720	2E18A5-1	5	757-1795	2J68A3-1	3	4	1	17.60	12.76	11.11	9.90	8.91
.....	.....	.....	757-1796	2J68A3-2	3	4	2	27.83	20.24	17.49	15.62	14.08
757-1722	2E18A5-3	5	757-1797	2J68A3-3	3	4	3	38.06	27.61	23.98	21.34	19.25
757-1625	2C00A32-1	32	757-1735	2H50A16-1	16	1	1	16.35	11.88	10.34	9.46	8.25
757-1626	2C00A32-2	32	757-1736	2H50A16-2	16	1	2	24.20	17.60	15.29	13.80	12.21
757-1627	2C00A32-3	32	757-1737	2H50A16-3	16	1	3	32.11	23.32	20.24	18.26	16.28
757-1640	2C06A15-1	15	757-1750	2H56A8-1	8	2	1	16.83	12.21	10.56	9.90	8.47
757-1641	2C06A15-2	15	757-1751	2H56A8-2	8	2	2	24.59	17.82	15.51	15.62	12.43
757-1642	2C06A15-3	15	757-1752	2H56A8-3	8	2	3	32.45	23.54	20.46	21.34	16.39
757-1655	2C18A7-1	7	757-1765	2H68A4-1	4	4	1	17.60	12.76	11.11	9.90	8.91
.....	.....	.....	757-1766	2H68A4-2	4	4	2	27.83	20.24	17.49	15.62	14.08
757-1657	2C18A7-3	7	757-1767	2H68A4-3	4	4	3	38.06	27.61	23.98	21.34	19.25

SERIES 4 PER MIL-S-3786/SR15

757-1901	4A00A48-1	48	757-1965	4E50A24-1	24	1	1	25.25	18.26	15.84	14.19	12.76
.....	.....	.....	757-1966	4E50A24-2	24	1	2	36.08	26.18	22.77	20.21	18.26
757-1903	4A00A48-3	48	757-1967	4E50A24-3	24	1	3	46.86	34.10	29.59	26.29	23.76
757-1915	4A06A23-1	23	757-1975	4E56A12-1	12	2	1	25.63	18.59	16.17	14.41	12.98
757-1916	4A06A23-2	23	757-1976	4E56A12-2	12	2	2	37.02	26.95	23.32	20.79	18.81
757-1917	4A06A23-3	23	757-1977	4E56A12-3	12	2	3	48.28	35.09	30.47	27.17	24.42
757-1930	4A18A11-1	11	757-1985	4E68A6-1	6	4	1	26.40	19.14	16.61	16.85	14.42
757-1931	4A18A11-2	11	757-1986	4E68A6-2	6	4	2	40.51	29.37	25.52	22.77	20.46
757-1932	4A18A11-3	11	757-1987	4E68A6-3	6	4	3	54.73	39.71	34.43	30.69	27.72



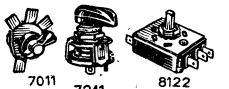
ROTARY POWER SWITCHES

U.L. Recognized
Ideal for Power Applications

Ideal for instrument, control panel, appliance uses, plus a wide variety of other applications. Type 1561-B rated 3 amp @ 250 volts. Type 1575 rated 1 amp @ 250 volts—3 amp @ 125 volts. Type 81715 rated 3 amp @ 250 volts—6 amp @ 125 volts. Have shanks 11/32" diameter., 3/8" long with solder lugs. U.L. Recognized. High-quality performance at a low cost. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Action	EACH 1-9	10-24	25-49	50-99	100-Up
717-0115	1561-B	B	SPST	1.26	.94	.86	.72	.65
717-0120	1575	B	DPDT	2.38	1.78	1.64	1.37	1.23
717-0478	81715	A	SPST	2.23	1.67	1.54	1.29	1.16
717-0479	*81727*	*A*	*DPDT*	3.25	2.44	2.25	1.88	1.69

ROTARY SWITCHES


7011 7012 7241 8122 8123

Types 7011 and 7012 rated 5A @ 125 V, 2A @ 250 V AC-DC; screw terminals.

Types 8122 and 8123 rated 3A @ 125 VAC; screw terminals.

Type 7241 rated 15A @ 250 VAC, 1 hp; spade terminals.

All have 3/8" bushing. Av. wt. 2 oz.

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757-3001	7011K1	2 on, 1 off	2.18	1.63	1.50	1.25	1.13	1.00
757-3010	7012K4	3 on, 1 off	2.23	1.67	1.54	1.29	1.16	1.03
757-6102	8422K4	2 on, 1 off	.79	.59	.55	.46	.41	.36
757-6110	8123K4	3 on, 1 off	.85	.64	.59	.49	.44	.39
757-3421	7241K2	DPDT	2.31	1.73	1.60	1.34	1.20	1.07

POWEREED SWITCH

Meets MIL-S-55433. 15 A max. inrush, break 3A @ 125 VAC; 10 A max. inrush, break 2A @ 250 VAC. N.O.

Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-499	500-Up
757-0515	SH400AA3	3.30	2.50	2.37	2.30	2.20

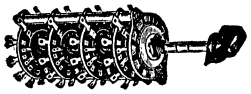
Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Rotary, Power Tap Switches and Dial Plates

ROTARY SWITCHES

MALLORY ROTARY SWITCHES AND DIAL PLATES

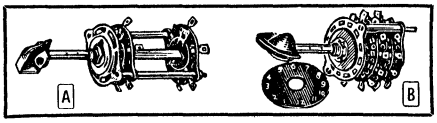
1200L AND 1300L ROTARY SWITCHES



Phenolic sections. ½" spacing for 1 section, 1" for extras. 30° index. 1¾" dia. mtg. space. ⅜"-32 bushing, ⅜" long. Shaft, ¼" dia. x2". Breakdown, 1000 VAC or DC. 0.6 amps @ 300 VDC or 1 amp @ 300 VAC (resistive). With bar knob. †Add'l. "off" position, all circuits open. Shpg. wt., 3 oz. per section.

Stock No.	Mfr's Type	Sec.	Poles	Pos. Per Pole	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
NON-SHORTING										
851-0711	1311L	1	1	11	2.71	2.05	1.84	1.74	1.64	1.47
851-0725	1315L†	1	2	5	2.71	2.05	1.84	1.74	1.64	1.47
851-0720	1313L†	1	3	3	2.71	2.05	1.84	1.74	1.64	1.47
851-0731	1321L	2	2	11	3.30	2.51	2.25	2.13	2.00	1.80
851-0735	1325L†	2	4	5	3.30	2.51	2.25	2.13	2.00	1.80
851-0733	1323L†	2	6	3	3.30	2.51	2.25	2.13	2.00	1.80
851-0741	1331L	3	3	11	4.16	3.16	2.84	2.68	2.52	2.27
851-0751	1341L	4	4	11	4.90	3.72	3.34	3.16	2.97	2.67
851-0755	1345L†	4	8	5	4.90	3.72	3.34	3.16	2.97	2.67
851-0761	1351L	5	5	11	5.29	4.01	3.61	3.41	3.20	2.88
851-0766	1356L	5	10	6	5.82	4.42	3.97	3.76	3.53	3.18
851-0770	1361L	6	6	11	6.22	4.72	4.24	4.01	3.76	3.39
SHORTING										
851-0561	1211L	1	1	11	2.71	2.05	1.84	1.74	1.64	1.47
851-0571	1221L	2	2	11	3.30	2.51	2.25	2.13	2.00	1.80
851-0575	1225L†	2	4	5	3.30	2.51	2.25	2.13	2.00	1.80
851-0591	1241L	4	4	11	4.90	3.72	3.34	3.16	2.97	2.67

SPECIAL-PURPOSE ROTARY SWITCHES



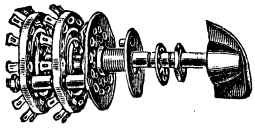
A Type 151L "Hamswitch". Two-section, 5-position switch; 1 pole per section. Non-shorting. 2¼" spacing between sections. Rated 1000 volts AC (rms) or 1500 volts DC. 60° indexing. With brass bushing ⅜" long, ⅜" dia. Shaft, 2" by ¼" dia. is grooved for cutting. With hardware. Shpg. wt., 6 oz.

B Type 13124L 24-Point Tap Switch. Single circuit, 24-position, non-shorting tap switch. Excellent for use in test equipment applications. Continuous rotation, with 15° indexing between positions. Bushing, ⅜" dia. by ⅜" long. 2" shaft is notched for cutting. With dial plate and hardware. Same ratings as Type 151L. Shpg. wt., 6 oz.

B Type 1400L Circuit-Opening Switch. Opens any 1 of 12 circuits, maintains other 11. Ideal for meter switching, inserting resistors and capacitors, etc. Breaking currents: 6A @ 300 VDC; 8A @ 6 VDC; 1A @ 300 VAC; 10A @ 6 VAC. Non-breaking, 10A. Max. VDC, 500 V. 30° indexing. ½x2" shaft. ⅜x⅜" bushing. Hardware, dial plate. Shpg. wt., 6 oz.

Stock No.	Mfr's Type	Fig.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
851-0951	151L	A	3.47	2.63	2.36	2.24	2.10	1.89
851-0713	13124L	B	3.55	2.70	2.43	2.30	2.16	1.94
851-0801	1400L	B	6.01	4.56	4.10	3.88	3.64	3.28

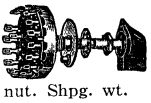
CERAMIC SECTION 30° INDEXING SWITCHES



Minimum RF loss. Adjustable stop. Non-shorting. Silver-plated contacts. 500 V AC/DC. Maximum non-breaking current (resistive load), 10 amps. ½" spacing between 2-section types, others have 1" spacing between sections. 1¼" base diameter. With 2" grooved shaft, knob and hardware. *Have additional "off" position. Shpg. wt., 3 oz. per section.

Stock No.	Mfr's Type	Sections	Total Poles	Pos. Per Pole	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
851-1172	172C	1	1	11	3.05	2.31	2.08	1.97	1.85	1.66
851-1173	173C*	1	2	5	3.05	2.31	2.08	1.97	1.85	1.66
851-1174	174C*	1	3	3	3.05	2.31	2.08	1.97	1.85	1.66
851-1176	176C	2	2	11	4.37	3.31	2.98	2.82	2.64	2.38
851-1177	177C*	2	4	5	4.37	3.31	2.98	2.82	2.64	2.38

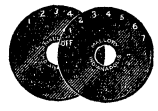
SERIES 3100J AND 3200J SINGLE-SECTION SWITCHES



Enclosed, low-voltage switches. For use in tone control, band selector and antenna switching circuits. Phenolic resin insulation. Have ⅜" threaded bushing ⅜" long. ¼" diameter shaft 2" long. Shafts are grooved at popular lengths for easy cutting. All 1 11/16" base types have adjustable stops. Breakdown rating is 500 volts, AC or DC. Current ratings (resistive load): .125 amp at 300 VDC; 3 amps at 6VDC; .2 amp at 6 VAC. Bar knob and nut. Shpg. wt. 4 oz.

Shorting Stock No.	Shorting Mfr's Type	Non-Shorting Stock No.	Non-Shorting Mfr's Type	Poles	Positions	Base Dia.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
851-1415	3115J	851-1485	3215J	1	5	1¼"	1.32	1.00	.90	.85	.80	.72
851-1412	31112J	851-1472	*32112J*	1	12	1¼"	1.32	1.00	.90	.85	.80	.72
851-1422	3122J	851-1492	3222J	2	2	1¼"	1.32	1.00	.90	.85	.80	.72
851-1423	3123J	851-1493	*3223J*	2	3	1¼"	1.32	1.00	.90	.85	.80	.72
851-1426	3126J	851-1496	*3226J*	2	6	1¼"	1.32	1.00	.90	.85	.80	.72
851-1434	3134J	851-1534	*3234J*	3	4	1¼"	1.36	1.03	.93	.88	.83	.74
851-1442	3142J	851-1542	3242J	4	2	1¼"	1.36	1.03	.93	.88	.83	.74
851-1443	3143J	851-1543	3243J	4	3	1¼"	1.36	1.03	.93	.88	.83	.74
851-1417	31117J	851-1477	*32117J*	1	17	1 11/16"	2.01	1.52	1.37	1.30	1.22	1.10
.....	.....	851-1499	3229J	2	9	1 11/16"	2.01	1.52	1.37	1.30	1.22	1.10
.....	.....	851-1536	3236J	3	6	1 11/16"	2.12	1.61	1.45	1.37	1.29	1.16
851-1463	3163J	851-1563	3263J	6	3	1 11/16"	2.12	1.61	1.45	1.37	1.29	1.16

DIAL PLATES



These dial plates are for switches 1200L, 1300L and 1¼" base 3100J and 3200J. Etched aluminum. Black background. 1 13/16" diameter plate. Mounting hole has 7/16" diameter. Shpg. wt., 4 oz.

30° SPACING FOR 1¼" BASE SWITCHES

Mfr's Type	Marking	Mfr's Type	Marking
372	1 to 2	382	1 to 12
373	1 to 3	383	Off 1 to 3
374	1 to 4	384	Off 1 to 4
375	1 to 5	385	Off 1 to 5
376	1 to 6	386	Off 1 to 6
377	1 to 7	387	Off 1 to 7
378	1 to 8	388	Off 1 to 8
379	1 to 9	389	Off 1 to 9
380	1 to 10	390	Off 1 to 10
381	1 to 11	.....	.....

851 - OXXX, ■See below..... Each .13

OHMITE CERAMIC-INSULATED POWER TAP SWITCHES

Ceramic-insulated rotary types. Non-shorting, SPST deck. 30° indexing. Model 111 is rated 15 amperes @ 125 VAC; diameter, 1¾". Model 212 rated 20 amperes @ 150 VAC; diameter, 2¼". Model 312 rated 30 amperes @ 300 VAC, 150 volts between taps; diameter, 3 5/16". Require 1⅛ to 2¼" behind panel. Have ¼" fluted shafts. U.L. Component Program-Recognized. Shpg. wt., 10 oz.

MODEL 111 Stock No.	Taps	1-4, EA.	5-Up	MODEL 212 Stock No.	Taps	1-4, EA.	5-Up	MODEL 312 Stock No.	Taps	1-4, EA.	5-Up
876-5112	3	4.25	3.61	876-5217	5	8.90	7.57	876-5318	4	11.50	9.78
876-5113	4	4.40	3.74	876-5219	6	9.20	7.82	876-5322	6	12.00	10.20
876-5114	5	4.50	3.83	876-5223	8	9.60	8.16	876-5328	9	12.75	10.84
876-5115	6	4.65	3.95	876-5231	12	10.30	8.76	876-5330	10	13.00	11.05

Model 111

Model 212

Stock No.	Mfr's Type	Positions	EACH 1-9	10-49	50-Up
801-3502	19101-2UL	2	4.63	3.70	2.78
801-3503	19101-3UL	3	4.88	3.90	2.93
801-3504	19101-4UL	4	5.13	4.10	3.08
801-3505	19101-5UL	5	5.39	4.30	3.23
801-3506	19101-6UL	6	5.62	4.50	3.38

Stock No.	Mfr's Type	Positions	EACH 1-9	10-49	50-Up
801-3507	19101-7UL	7	5.88	4.70	3.53
801-3508	19101-8UL	8	6.13	4.90	3.68
801-3510	19101-10UL	10	6.63	5.30	3.98
801-3511	19101-11UL	11	6.88	5.50	4.13

SERIES 19 POWER TAP SWITCHES

Single-pole, single deck. Nonshorting contacts, 15 A. 125 VAC resistive, 1 A, 115 VDC resistive. Breakdown, 2500 VAC. ⅜"-32 bushing. 1.83x1.69" diameter. Require 0.95" behind panel. ½"-long flatted shaft. Wt. 5 oz.

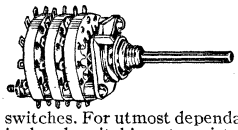
■TO ORDER DIAL PLATES: Complete Stock No. Fill in insert Mfr's Type Number in Place of XXX in Stock No. Ex. 851-OXXX (Type 372 Dial Plate) becomes 851-0372.

CENTRALAB

ROTARY, LEVER ACTION SWITCHES

Centralab Switches, Assemblies

SERIES PS-100 SUBMINIATURE CERAMIC ROTARY SWITCHES



Ultra-small; yet have same electrical characteristics as heavier and larger switches. For utmost dependability required in band switching, transistor circuits, aircraft instruments, guided missiles, etc. 1" dia. Bushing, ¼" dia. by ¼" long. Shaft, ⅛" dia. by 1¼" long. Silver-plated clips, contacts. Positive 30° indexing. Fixed stop. 550 mA @ 28 VDC or 170 mA at 115 VAC. With knob, nut, lockwasher. Av. shpg. wt. 4 oz.

Shorting		Non-Shorting		Total Poles	No. of Pos.	Poles per Sec.	No. of Sec.	EACH					
Stock No.	Type PS-	Stock No.	Type PS-					1-4	5-9	10-24	25-49	50-99	100-Up
747-1100	100	747-1101	101	1	11	1	1	5.54	4.62	4.16	3.96	3.70	3.32
747-1102	102	747-1103	103	2	11	1	2	6.90	5.78	5.19	4.95	4.62	4.15
747-1104	104	747-1105	105	2	5	2	1	5.54	4.62	4.16	3.96	3.70	3.32
.....	....	747-1107	107	3	11	1	3	8.32	6.93	6.24	5.95	5.54	4.97
747-1108	108	747-1109	109	3	3	3	1	5.54	4.62	4.16	3.96	3.70	3.32
747-1110	110	747-1111	111	4	5	2	2	6.90	5.78	5.19	4.95	4.62	4.15
.....	....	747-1113	113	4	2	4	1	5.54	4.62	4.16	3.96	3.70	3.32
.....	.....	747-1115	115	6	5	2	3	8.32	6.93	6.24	5.95	5.54	4.97
747-1116	116	747-1117	117	6	3	3	2	6.90	5.78	5.19	4.95	4.62	4.15
.....	.....	747-1119	119	8	2	4	2	8.32	6.93	6.24	5.95	5.54	4.97
.....	.....	747-1121	121	9	3	3	3	8.32	6.93	6.24	5.95	5.54	4.97

SERIES PS-20 CERAMIC SECTIONS FOR ABOVE

For fixed-stop indexing and switching not supplied in PS-100 series subminiature switches above. Use with index and shaft assemblies P-501 through P-510 at right to produce custom switches to meet special requirements. Av. shpg. wt. 2 oz.

Shorting		Non-Shorting		Total Poles	No. Pos.
Stock No.	Type	Stock No.	Type		
747-0160	PS-20	747-0161	PS-21	1	2-11
747-0162	PS-22	747-0163	PS-23	2	2-5
.....	.....	747-0165	PS-25	3	2-3

1-4.....Each 2.42 5-9.....Each 2.01 10-24.....Each 1.82
25-49.....Each 1.73 50-99.....Each 1.62 100-Up....Each 1.45

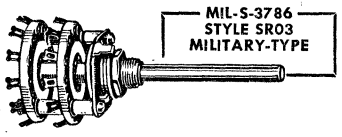
SERIES P-500 INDEX AND SHAFT ASSEMBLIES FOR ABOVE

Hardware for subminiature switches with up to 3 sections. Includes: P-106 pointer knob; six 3/32" spacers; two 1/16" spacers; two ⅛" spacers; two 3/16" spacers; two 1⅛" tie bolts, nuts, lockwashers; 16 plastic spacer washers, 30° indexing; fixed stop. 2 oz.

Stock No.	Mfr's Type	No. of Pos.	Stock No.	Mfr's Type	No. of Pos.
747-0501	P-501	2	747-0505	P-505	6
747-0502	P-502	3	747-0507	P-507	8
747-0503	P-503	4	747-0509	P-509	10
747-0504	P-504	5	747-0510	P-510	11

1-4 .....Each 2.15 5-9 .....Each 1.79 10-24.....Each 1.62
25-49.....Each 1.54 50-99.....Each 1.43 100-Up ...Each 1.29

SERIES PA-6000 MINIATURE CERAMIC ROTARY SWITCHES



MIL-S-3786 STYLE SR03 MILITARY-TYPE

1 9/32" dia. Pos. 30° indexing. Adjustable stop, except *fixed stop. 450 mA @ 115 VAC; 8 amps @ 6 VDC; 5½ amps @ 12 VDC. Knob, lockwasher, nut. Av. shpg. wt. 4 oz.

SHORTING TYPES

Stock No.	Type PA-	Total Poles	No. of Pos.	No. of Sec.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
747-6000	6000	1	2-11	1	3.94	3.28	2.95	2.82	2.63	2.35
747-6002	6002	2	2-5	1	3.94	3.28	2.95	2.82	2.63	2.35
747-6004	6004	2	2-11	2	6.01	5.01	4.51	4.29	4.00	3.60
747-6006	6006	3	2-3	1	3.94	3.28	2.95	2.82	2.63	2.35
747-6010	6010*	4	2	1	3.94	3.28	2.95	2.82	2.63	2.35
747-6012	6012	4	2-5	2	6.01	5.01	4.51	4.29	4.00	3.60

NON-SHORTING TYPES

Stock No.	Type PA-	Total Poles	No. of Pos.	No. of Sec.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
747-6001	6001	1	2-11	1	3.94	3.28	2.95	2.82	2.63	2.35
747-6003	6003	2	2-5	1	3.94	3.28	2.95	2.82	2.63	2.35
747-6005	6005	2	2-11	2	6.01	5.01	4.51	4.29	4.00	3.60
747-6007	6007	3	2-3	1	3.94	3.28	2.95	2.82	2.63	2.35
747-6013	6013	4	2-5	2	6.01	5.01	4.51	4.29	4.00	3.60
747-6019	6019	6	2-3	2	6.01	5.01	4.51	4.29	4.00	3.60
747-6025	6025*	8	2	2	6.01	5.01	4.51	4.29	4.00	3.60
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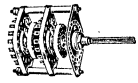
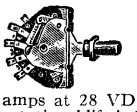
JV-9000 HEAVY-DUTY ROTARY POWER SWITCHES



Silicone-treated ceramic switches for transmitters, industrial and commercial controls, and test gear. Rated 9 A at 110 VAC (resistive); 30 A at 5 VDC; .015 A at 2500 VAC rms. Breakdown, 3000 V rms. 20° positive index; adjustable stop. All metal parts except clips, contacts and index spring are cadmium plated. Coin silver contacts. Non-shorting, except †shorting. Bushing, ⅜"x32 thread, ⅜" long. Flatted shaft, ¼x2¼" from mtg. surface. ⅛" thick ceramic sections; 1" between sections. Wafer size, 2x2 13/16". Av. shpg. wt. 4 oz.

Stock No.	Type JV-	Sec.	Total Poles	No. Pos.	EACH 1-4	5-9	10-24	25-49	50-Up
747-9001	9001	1	1	2-17	12.72	10.59	9.54	9.10	8.48
747-9033	9033	1	2	2-8	12.72	10.59	9.54	9.10	8.48
747-9005	9005	2	2	2-17	21.05	17.55	15.80	15.02	14.04
747-9003	9003	1	3	2-5	12.72	10.59	9.54	9.10	8.48
747-9009	9009	3	3	2-17	37.75	31.46	28.33	26.93	25.17
747-9035	9035	2	4	2-8	21.05	17.55	15.80	15.02	14.04
747-9013	9013	4	4	2-17	34.32	28.60	25.75	24.48	22.88
747-9007	9007	2	6	2-5	21.05	17.55	15.80	15.02	14.04
747-9037	9037	3	6	2-8	29.41	24.51	22.07	20.98	19.60
747-9021	9021	6	6	2-17	54.82	45.68	41.14	39.11	36.54
747-9039	9039	4	8	2-8	37.75	31.46	28.33	26.93	25.17
747-9015	9015	4	12	2-5	37.75	31.46	28.33	26.93	25.17
747-9019	9019	5	15	2-5	46.11	38.42	34.60	32.89	30.75
747-9000	9000	1†	1	2-17	12.72	10.59	9.54	9.10	8.48
747-9004	9004	2†	2	2-17	21.05	17.55	15.80	15.02	14.04
747-9002	9002	1†	3	2-5	12.72	10.59	9.54	9.10	8.48

LOW-COST LEVER-ACTION PHENOLIC SWITCHES



Dependable switches for new and replacement use in test equipment, intercoms, PA equipment, speaker selectors, and other applications. Feature nylon rotor and silver-plated brass clips and contacts. All have 30° indexing. Voltage breakdown of 1000 VAC rms. Contacts rated 1.5 amps at 28 VDC; 230 mA at 115 VAC rms. Contact resistance .0035 ohm. Minimum rotational life is 25,000 cycles. Mounting bracket has two 6-32 tapped holes on 1⅝" centers. Laminated phenolic insulation. 1⅞x7/16" (1.5" behind panel). Complete with knob and necessary mounting hardware. Av. shpg. wt., 4 oz.

Shorting		Non-Shorting		Total Poles	No. of Pos.	Type of Indexing	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
Stock No.	Mfr's Type	Stock No.	Mfr's Type									
747-1452	1452	747-1454	1454	2	3	Positive	1.76	1.46	1.32	1.25	1.18	1.06
.....	.....	747-1455	1455	2	3	Spring Return	1.76	1.46	1.32	1.25	1.18	1.06
747-1466	1466	747-1467	1467	2	3	Pos. & Sp. Ret.	1.76	1.46	1.32	1.25	1.18	1.06
747-1456	1456	.....	1457	4	2	Spring Return	1.96	1.63	1.47	1.40	1.31	1.18
747-1459	1459	.....	1458	4	2	Positive	1.96	1.63	1.47	1.40	1.31	1.18

SMALL GENERAL-PURPOSE SWITCHES

Step-type switches rated 1.5 amps at 28 VDC; 230 mA at 115 VAC. Shaft, ¼" dia., 2¼" long FMS. All have non-shorting contacts, except *shorting. Widely used in radio-phono combinations; PA channel selectors; meter reversers and selectors; intercom talk-listen, dual speaker and stereo speaker applications; momentary line or remote speaker returns on intercoms; and many other applications. Type 1472 is for use in FM-AM-phonos. Type 1463 and 1464 are for intercoms. Av. wt. 5 oz.

Stock No.	Mfr's Type	Description
747-1460	1460*	SPDT phono-radio
747-1461	*1461**	SP-3-pos. selector
747-1462	1462*	DPDT bandswitch
747-1463	1463	SPDT momentary
747-1464	1464	DPDT momentary
747-2517	1472	DP-3-position

1-4.....Each 1.25 5-9.....Each 1.01
10-24....Each .95 25-49.....Each .90
50-99....Each .84 100-Up ....Each .75

ATTENTION INDUSTRIAL BUYERS

Allied supplies Lutron Powerdial Power Controls and Ohmite Omitrol Power Controls for precision use in a wide variety of industrial applications. See page 393 for complete price and ordering information.

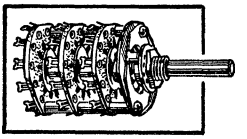
Switches: Lever, 218, 224-8, 223, 241—Rocker, 221, 227-9, 240—Lock, 222, 228—Slide, 223, 227

Centralab High-Reliability Rotary Switches

CENTRALAB

MINIATURE CERAMIC SWITCHES—1½x1 5/16" SECTIONS

Non-Shorting Stock No.	Non-Shorting Type PA-	Shorting Stock No.	Shorting Type PA-	Total Poles	No. Pos.	Sections	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
747-2001	*2001*	747-2000	2000	1	2-12	1	3.04	2.53	2.28	2.17	2.02	1.82
747-2003	*2003*	747-2002	2002	2	2-6	1	3.04	2.53	2.28	2.17	2.02	1.82
747-2005	*2005*	747-2004	2004	2	2-12	2	4.29	3.58	3.22	3.07	2.86	2.56
747-2007	2007	747-2006	2006	3	2-5	1	3.04	2.53	2.28	2.17	2.02	1.82
747-2009	2009	747-2008	2008	3	2-12	3	5.48	4.57	4.11	3.92	3.65	3.28
747-2011	*2011*	747-2010	2010	4	2-6	2	4.29	3.58	3.22	3.07	2.86	2.56
747-2013	2013	747-2012	2012	4	2-12	4	6.58	5.48	4.94	4.71	4.39	3.94
747-2015	2015	.....	.....	5	2-3	1	3.04	2.53	2.28	2.17	2.02	1.82
747-2017	2017	747-2016	2016	5	2-12	5	7.88	6.57	5.91	5.63	5.26	4.72
747-2019	2019	.....	.....	6	2	1	3.04	2.53	2.28	2.17	2.02	1.82
747-2021	2021	747-2020	2020	6	2-5	2	4.29	3.58	3.22	3.07	2.86	2.56
747-2023	2023	747-2022	2022	6	2-6	3	5.48	4.57	4.11	3.92	3.65	3.28
747-2025	2025	747-2024	2024	6	2-12	6	9.15	7.63	6.86	6.55	6.11	5.48
747-2027	2027	747-2026	2026	8	2-6	4	6.58	5.48	4.94	4.71	4.39	3.94
747-2029	2029	.....	.....	9	2-5	3	5.48	4.57	4.11	3.92	3.65	3.28
747-2031	2031	747-2030	2030	10	2-3	2	4.29	3.58	3.22	3.07	2.86	2.56
747-2033	2033	.....	.....	10	2-6	5	7.88	6.57	5.91	5.63	5.26	4.72
747-2035	2035	.....	.....	12	2	2	4.29	3.58	3.22	3.07	2.86	2.56
747-2037	2037	.....	.....	12	2-6	6	9.15	7.63	6.86	6.55	6.11	5.48
747-2039	2039	.....	.....	15	2-3	3	6.58	5.48	4.94	4.71	4.39	3.94
747-2041	2041	.....	.....	18	2	3	6.58	5.48	4.94	4.71	4.39	3.94
.....	.....	747-2042	2042†	1	2-10	1	2.75	2.29	2.07	1.97	1.84	1.65
747-2043	2043*	.....	.....	1	2-6	1	2.75	2.29	2.07	1.97	1.84	1.65
747-2045	2045*	.....	.....	2	2-6	2	4.29	3.58	3.22	3.07	2.86	2.56



PA-2000 SERIES

Precision Constructed

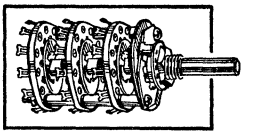
Rotary switches offering excellent RF characteristics. Feature maximum voltage flashover points, high-Q, low-loss ceramic bodies, minimum intercircuit capacity, and insulated front-back clips. All have positive 30° indexing, adjustable stop or continuous rotation, except * 60° indexing.

All are rated 2.75 amps @ 15 VDC; 230 mA @ 115 VAC. †Type 2042 has 1 off, up to 9 progressively shorting positions.

All are 1½x1 5/16" dia.; have ⅜" spacing between front plate and first section; ½" spacing between all other sections. Sections are .105" thick. Full round, ¼" diameter shafts are 2¼" long from mounting surfaces. Mount in single hole with ⅜"-32NEF-2A threaded bushing, ⅜" long. With mounting nut, lockwasher, and 1¼" black pointer knob. **Bulk packaging (quantities of 100 to 300) supplied less knobs, available on Special Order.** Shpg. wt., 3 oz. per section.

MINIATURE PHENOLIC SWITCHES—1½x1 5/16" SECTIONS

747-1001	*1001*	747-1000	1000	1	2-11	1	2.29	1.90	1.72	1.64	1.53	1.36
747-1003	1003	747-1002	1002	2	2-5	1	2.29	1.90	1.72	1.64	1.53	1.36
747-1005	1005	747-1004	1004	2	2-11	2	3.26	2.72	2.44	2.33	2.17	1.95
747-1007	1007	747-1006	1006	3	2-3	1	2.29	1.90	1.72	1.64	1.53	1.36
747-1009	*1009*	747-1008	1008	3	2-11	3	4.14	3.44	3.10	2.96	2.76	2.48
747-1011	1011	747-1010	1010	4	2	1	2.29	1.90	1.72	1.64	1.53	1.36
747-1013	*1013*	747-1012	1012	4	2-5	2	3.26	2.72	2.44	2.33	2.17	1.95
747-1015	1015	747-1014	1014	4	2-11	4	4.82	4.02	3.62	3.44	3.21	2.88
747-1017	1017	747-1016	1016	5	2-11	5	5.68	4.73	4.26	4.06	3.79	3.40
747-1019	1019	747-1018	1018	6	2-3	2	3.26	2.72	2.44	2.33	2.17	1.96
747-1021	1021	747-1020	1020	6	2-5	3	4.14	3.44	3.10	2.96	2.76	2.48
747-1025	1025	747-1024	1024	8	2	2	3.26	2.72	2.44	2.33	2.17	1.95
747-1027	1027	747-1026	1026	8	2-5	4	4.82	4.02	3.62	3.44	3.21	2.88
747-1029	1029	.....	.....	12	2	3	4.14	3.44	3.10	2.96	2.76	2.48
747-1031	1031	.....	.....	10	2-5	5	5.68	4.73	4.26	4.06	3.79	3.40



PA-1000 SERIES

Phenolic Insulated

All have 30° indexing, adjustable stop. 1½ x1 5/16" dia.; shaft, 2¼" long. 2.75 amps @ 15 VDC; 230 mA @ 115 VAC. Index assemblies and hardware identical to PA-2000 Series. Phenolic insulated and precision made. With knob, nut and lockwasher. Shpg. wt., 3 oz.

KNOBS FOR BULK PACK OF SERIES 1000 AND 2000

TYPE 2300. Black pointer knobs (1¼" diameter) for Series 1000 and 2000 switches. Shpg. wt., 1 oz.

747-2300. 1-9.....Each .20 10-24.....Each .18
25-99.....Each .15 100-Up.....Each .14

PA-1000 PHENOLIC SECTIONS

Provide maximum flexibility in assembly of special switches to meet specialized requirements. For use with PA-300, PA-301 and PA-302 shaft and index assemblies listed at right. Sections are made of 1/16" thick phenolic. Meet rigorous commercial or military specifications. All have 30° indexing. Same electrical ratings as PA-1000 Series Switches above. †In table below indicates all unused contacts are connected and shorted out. Av. shpg. wt. 2 oz.

Shorting Stock No.	Shorting Type PA-	Non-Shorting Stock No.	Non-Shorting Type PA-	Total Poles	No. Pos.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
747-0130	30	747-0131	31	1	2-11	1.10	.91	.83	.79	.74	.66
747-0132	32	747-0133	33	2	2-5	1.10	.91	.83	.79	.74	.66
.....	.....	747-0135	35	3	2-3	1.10	.91	.83	.79	.74	.66
.....	.....	747-0137	37	4	2	1.10	.91	.83	.79	.74	.66
.....	.....	747-0141	41 †	2	2-11	1.10	.91	.83	.79	.74	.66

PA-2000 CERAMIC SECTIONS

All have 30° indexing. For use with index assemblies PA-300, PA-301 and PA-302 listed in next column. *Unused contacts on one side of common are connected and shorted out. †Unused contacts are connected and shorted out. ‡Has one off, and up to 9 shorting positions. Shpg. wt., 2 oz.

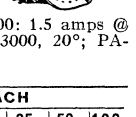
Shorting Stock No.	Shorting Type PA-	Non-Shorting Stock No.	Non-Shorting Type PA-	Total Poles	No. Pos.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
747-0100	0	747-0101	*1*	1	2-12	1.52	1.27	1.14	1.09	1.01	.91
747-0102	2	747-0103	3	2	2-6	1.52	1.27	1.14	1.09	1.01	.91
747-0104	4	747-0105	5	3	2-5	1.52	1.27	1.14	1.09	1.01	.91
747-0106	6	747-0107	7	5	2-3	1.52	1.27	1.14	1.09	1.01	.91
747-0108	8	747-0109	9	6	2	1.52	1.27	1.14	1.09	1.01	.91
.....	.....	747-0119	19*	1	2-5	1.52	1.27	1.14	1.09	1.01	.91
747-0111	11†	747-0118	18†	2	2-11	1.52	1.27	1.14	1.09	1.01	.91
747-0112	12‡	.....	.....	1	2-10	1.52	1.27	1.14	1.09	1.01	.91

PA-300 SERIES SHAFT AND INDEX ASSEMBLIES

Hardware for assembling miniature switches. Each type contains a 30° PA index assembly, a P-120 pointer knob, an adjustable stop plate, an assortment of spacers, tie bolts, nuts, fiber spacer washers, lock washers, and instructions. Shpg. wt. 3 oz.

Stock No.	Type PA-	Shaft Lgth.	Sec.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
747-0300	*300*	2"	1-3	1.65	1.38	1.24	1.18	1.10	.99
747-0301	*301*	4"	4-6	2.18	1.82	1.64	1.56	1.45	1.31
747-0302	*302*	6"	7-9	2.84	2.37	2.13	2.02	1.89	1.71

PA-3000 AND PA-4000 SERIES SWITCHES



18 and 24-position switches using hill-and-dale index mechanism. Voltage breakdown, 1000 V AC rms. Sections are 2 5/16" high, 1/16" thick. PA-3000 Series. 2 11/64" wide; PA-4000 Series, 1¾" wide. ¼" dia. shafts. 2¼" long. PA-3000: 2.25 amps @ 28 VDC, 0.350 amp @ 115 VAC. PA-4000: 1.5 amps @ 28 VDC, 0.230 amp @ 115 VAC. Indexing: PA-3000, 20°; PA-4000, 15°. Wt. 4 oz.

NON-SHORTING TYPES

Stock No.	Type PA-	Sections	Total Poles	No. Pos.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
747-3001	3001	1	1	2-17	2.46	2.06	1.85	1.76	1.64	1.47
747-3003	3003	2	2	2-17	3.80	2.95	2.69	2.53	2.36	2.16
747-3005	3005	3	3	2-17	4.64	3.87	3.49	3.32	3.10	2.78
747-3007	3007	4	4	2-17	5.65	4.71	4.25	4.05	3.77	3.39
747-4001	4001	1	1	2-23	2.62	2.18	1.97	1.87	1.75	1.56
747-4003	4003	2	2	2-23	3.85	3.21	2.89	2.75	2.57	2.31
747-4005	4005	3	3	2-23	5.04	4.20	3.77	3.60	3.36	3.01
747-4007	4007	4	4	2-23	6.03	5.03	4.52	4.31	4.03	3.61

SHORTING TYPES

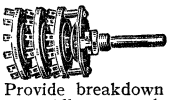
Stock No.	Type PA-	Sections	Total Poles	No. Pos.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
747-3000	3000	1	1	2-17	2.46	2.06	1.85	1.76	1.64	1.47
747-4002	3002	2	2	2-17	3.80	2.95	2.69	2.53	2.36	2.16
747-3004	3004	3	3	2-17	4.64	3.87	3.49	3.32	3.10	2.78
747-3006	3006	4	4	2-17	5.65	4.71	4.25	4.05	3.77	3.39
747-4000	4000	1	1	2-23	2.62	2.18	1.97	1.87	1.75	1.56
747-4002	4002	2	2	2-23	3.85	3.21	2.89	2.75	2.57	2.31
747-4004	4004	3	3	2-23	5.04	4.20	3.77	3.60	3.36	3.01
747-4006	4006	4	4	2-23	6.03	5.03	4.52	4.31	4.03	3.61

Switches: Rotary, 230-5—Snap, 235, 236—Thumbwheel (PC), 237—Ribbon/Mat/Foot, 239

Centralab Rotary Switches and Assemblies

CENTRALAB

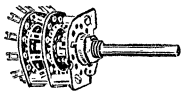
SERIES 2500 CERAMIC ROTARY SWITCHES—1⅝x1⅞" SECTIONS



Silicon-treated ceramic switches for band change and tap-switch uses. Provide breakdown voltage of 1500 volts rms. All are rated 2.75 amps at 15 volts DC; 350 mA at 115 volts AC, make and break, resistive load. Front plate, 1²³⁄₃₂"x 1⅞" dia. ½" from plate and between sections for 1- and 2-section switches; 1" spacing for others. Bushing, ⅜" diameter x ⅜" long. Shaft, ¼" dia.x2¼" long from mounting surface. Positive 30° indexing; 2 adjustable stops. Mtg. nut, lock washer, 1¼" long black pointer knob. 3 oz. per section.

Shorting		Non-Shorting		Total Poles	No. of Pos.	Poles per Sec.	No. of Sec.	EACH					
Stock No.	Mfr's Type	Stock No.	Mfr's Type					1-4	5-9	10-24	25-49	50-99	100-Up
747-2500	2500	747-2501	2501	1	2-6	1	1	3.26	2.72	2.44	2.33	2.17	1.95
747-2502	2502	747-2503	2503	1	2-11	1	1	3.26	2.72	2.44	2.33	2.17	1.95
747-2504	2504	747-2505	2505	2	2-5	2	1	3.26	2.72	2.44	2.33	2.17	1.95
747-2506	2506	747-2508	2507	3	2-3	3	1	3.26	2.72	2.44	2.33	2.17	1.95
747-2510	2510	747-2511	2511	2	2-6	1	2	4.64	3.87	3.49	3.32	3.09	2.78
747-2512	2512	747-2513	2513	2	2-11	1	2	4.64	3.87	3.49	3.32	3.09	2.78
747-2514	2514	747-2515	2515	4	2-5	2	2	4.64	3.87	3.49	3.32	3.09	2.78
.....	.....	747-2517	2517	6	2-3	3	2	4.64	3.87	3.49	3.32	3.09	2.78
.....	.....	747-2521	2521	3	2-6	1	3	5.96	4.97	4.48	4.27	3.98	3.56
.....	.....	747-2523	2523	3	2-11	1	3	5.96	4.97	4.48	4.27	3.98	3.56
.....	.....	747-2525	2525	6	2-5	2	3	5.96	4.97	4.48	4.27	3.98	3.56

SERIES 1400 PHENOLIC ROTARY SWITCHES—1⅝x1⅞" SECTIONS



Complete line of laminated, phenolic-insulated rotary switches. Used primarily for band change and general tap-switch applications where miniaturization is not essential. Front plate, 1²³⁄₃₂"x1⅞" diameter. Bushing, ⅜" diameter x ⅜" long. Shaft 2¼" long from mounting surface.

Index assemblies and hardware are identical to Series 2500 (above) allowing interchangeability. All metal parts, except clips and contacts, are cadmium-plated steel. Positive 30° indexing. Come complete with mounting nut, washer and 1¼" black pointer knob. All are rated 2.75 amps at 15 volts DC; 350 mA at 115 volts AC, make and break resistive load. Breakdown voltage 1000 volts AC RMS. Wt. 3 oz. per section.

Shorting		Non-Shorting		Total Poles	No. of Pos.	Poles per Sec.	No. of Sec.	EACH					
Stock No.	Mfr's Type	Stock No.	Mfr's Type					1-4	5-9	10-24	25-49	50-99	100-Up
747-1400	1400	747-1401	1401	1	2-6	1	1	2.90	2.42	2.18	2.08	1.94	1.74
.....	.....	747-1403	1403	1	2-11	1	1	2.90	2.42	2.18	2.08	1.94	1.74
747-1404	1404	747-1405	1405	2	2-5	2	1	2.90	2.42	2.18	2.08	1.94	1.74
.....	.....	747-1407	1407	3	2-3	3	1	2.90	2.42	2.18	2.08	1.94	1.74
.....	.....	747-1409	1409	4	2	4	1	2.90	2.42	2.18	2.08	1.94	1.74
.....	.....	747-1411	1411	2	2-6	1	2	3.54	2.95	2.66	2.53	2.37	2.12
747-1412	1412	747-1413	1413	2	2-11	1	2	3.54	2.95	2.66	2.53	2.37	2.12
.....	.....	747-1415	1415	4	2-5	2	2	3.54	2.95	2.66	2.53	2.37	2.12
.....	.....	747-1417	1417	6	2-3	3	2	3.54	2.95	2.66	2.53	2.37	2.12
.....	.....	747-1419	1419	8	2	4	2	3.54	2.95	2.66	2.53	2.37	2.12
.....	.....	747-1421	1421	3	2-6	1	3	4.51	3.75	3.39	3.22	3.00	2.70
.....	.....	747-1423	1423	3	2-11	1	3	4.51	3.75	3.39	3.22	3.00	2.70
.....	.....	747-1425	1425	6	2-5	2	3	4.51	3.75	3.39	3.22	3.00	2.70
.....	.....	747-1427	1427	4	2-6	1	4	5.19	4.32	3.89	3.71	3.47	3.10
.....	.....	747-1429	1429	4	2-11	1	4	5.19	4.32	3.89	3.71	3.47	3.10
.....	.....	747-1431	1431	8	2-5	2	4	5.19	4.32	3.89	3.71	3.47	3.10

INDEX ASSEMBLIES FOR SERIES 1400 AND 2500

Dependable assemblies for use with above series sections. 30° positive index with adjust. stops. Includes one index, one P-120 pointer knob and hardware to complete switch. Use with sections at right to design special application switches. Wt. 2 oz.

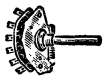
Stock No.	Mfr's Type	No. of Sec.	EACH					
			1-4	5-9	10-24	25-49	50-99	100-Up
747-0270	P-270	1-3	1.82	1.52	1.36	1.30	1.21	1.09
747-0271	P-271	3-5	2.31	1.93	1.74	1.65	1.54	1.39
747-0272	P-272	5-10	3.14	2.62	2.35	2.23	2.09	1.88

CERAMIC SECTIONS FOR SERIES 2500

For changing sections of Series 2500 switches above. Use with P-270, P-271 and P-272 assemblies at left. All unused contacts of Types GGD and FFD connected and shorted out; Type PISD is progressive. *Total poles. Wt. 2 oz.

Shorting		Non-Shorting		*	No. Pos.	EACH					
Stock No.	Type	Stock No.	Type			1-4	5-9	10-24	25-49	50-99	100-Up
747-0035	TD	747-0045	XD	1	2-6	1.56	1.30	1.18	1.12	1.05	.94
747-0040	UD	747-0050	YD	1	2-11	1.56	1.30	1.18	1.12	1.05	.94
747-0018	RD	747-0019	RRD	2	2-5	1.56	1.30	1.18	1.12	1.05	.94
.....	.....	747-0030	SSD	3	2-3	1.56	1.30	1.18	1.12	1.05	.94
747-0015	PISD	.....	.....	1	2-10	1.56	1.30	1.18	1.12	1.05	.94
747-0007	GGD	747-0006	FFD	1	2-11	1.56	1.30	1.18	1.12	1.05	.94
.....	.....	747-0008	HD	1	2-6	1.23	1.02	.92	.88	.83	.74
747-0002	BD	747-0010	JD	1	2-11	1.23	1.02	.92	.88	.83	.74
747-0003	CD	747-0011	KD	2	2-5	1.23	1.02	.92	.88	.83	.74
747-0004	DD	747-0012	LD	3	2-3	1.23	1.02	.92	.88	.83	.74
.....	.....	747-0013	MD	4	2	1.23	1.02	.92	.88	.83	.74

GENERAL-PURPOSE ROTARY SWITCHES



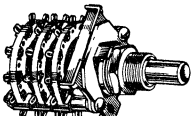
Phenolic-insulated switches. Breakdown, 1000 VAC RMS Bushing, ⅜" dia.x⅜" long. Shaft ¼" dia.x2¼" long FMS. Contacts rated 1.75 amps at 28 VDC; 350 mA at 115 VAC. With knobs. Momentary action, except †positive one side. Shpg. wt. 3 oz.

Stock No.	Mfr's Type	Total Poles	No. of Pos.	EACH					
				1-4	5-9	10-24	25-49	50-99	100-Up
747-1488	1488	6	3	4.16	3.47	3.12	2.97	2.77	2.49
747-1489	1489	6†	3	4.16	3.47	3.12	2.97	2.77	2.49
747-1451	1451	4	2	2.77	2.31	2.08	1.98	1.85	1.66

PHENOLIC SECTIONS FOR SERIES 1400

For replacing or changing individual sections of Series 1400 rotary switches shown in listing above. Sections can also be used with index assemblies P-270, P-271 and P-272 (at left, above) to design and assemble switches with special characteristics. Shpg. wt., 2 oz.

PSA SUBMINIATURE ROTARY SWITCHES



Diallyl phthalate rotary switches offer subminiature size, yet have same electrical rating as much larger switches. Positive 30° indexing with adjustable stops for versatility. Two-ball star-wheel lateral thrust construction for excellent torque control and feel. Sections are .080" thick, spaced ⁵⁄₃₂". Clips and rotor contacts silver-plated brass. Mounting bushing has ⅜"-32 NEF thread by ⅜" long. Full round shaft, ¼" dia., 1⅜" L.F.M.S. **Rating:** 0.55 amp at 28 VDC; make and break load, 170 mA at 115 VAC. **Current Carrying Capacity:** 7 amps. **Contact Resistance:** 5 milliohms. **Index Rotational Life:** 25,000 cycles minimum. 4 oz.

Shorting		Non-Shorting		Total Poles	No. Pos.	Poles/ Sec.	No. Sec.	EACH					
Stock No.	Type	Stock No.	Type					1-4	5-9	10-24	25-49	50-99	100-Up
747-0200	PSA-200	747-0201	PSA-201	1	2-12	1	1	5.28	4.40	3.96	3.76	3.52	3.17
747-0202	PSA-202	747-0203	PSA-203	2	2-6	2	1	5.28	4.40	3.96	3.76	3.52	3.17
747-0204	PSA-204	747-0205	PSA-205	2	2-12	1	2	6.60	5.50	4.95	4.71	4.40	3.96
.....	.....	747-0207	PSA-207	3	2-5	3	1	5.28	4.40	3.96	3.76	3.52	3.17
.....	.....	747-0209	PSA-209	3	2-12	1	3	7.92	6.60	5.94	5.64	5.28	4.75
747-0210	PSA-210	747-0211	PSA-211	4	2-6	2	2	6.60	5.50	4.95	4.71	4.40	3.96
.....	.....	747-0215	PSA-215	5	2-3	5	1	5.28	4.40	3.96	3.76	3.52	3.17
.....	.....	747-0221	PSA-221	6	2-5	3	2	6.60	5.50	4.95	4.71	4.40	3.96
747-0222	PSA-222	747-0223	PSA-223	6	2-6	2	3	7.92	6.60	5.94	5.64	5.28	4.75
747-0228	PSA-228	.....	.....	9	2-5	3	3	7.92	6.60	5.94	5.64	5.28	4.75
747-0230	PSA-230	747-0231	PSA-231	10	2-3	5	2	7.92	6.60	5.94	5.64	5.28	4.75
747-0238	PSA-238	747-0239	PSA-239	15	2-3	5	3	8.58	7.15	6.44	6.11	5.75	5.15

Switches: Toggle, 217-223, 225, 226, 228, 229—Pushbutton, 217, 218, 222-5, 227-9, 236, 238-242

Grayhill Miniature Rotary Switches

MIN. ROTARY, SNAP SWITCHES

SERIES 24 MINIATURE ROTARY TAP SWITCHES

One pole per deck. Nonshorting contacts. Break 1 amp or carry 5 amps, 115 VAC, resistive. Breakdown, 500-1000 VAC or better. Contact resistance, 0.003 ohm initial. Life, 100,000 operations. Insulation resistance, 50,000 megs. 36° indexing. Solder terminals. Diameter, 1"; 3/8"-32 bushing. 0.25"-long flatted shaft. *Indicates depth behind panel. Av. shpg. wt. 4 oz.

Pos.	1-Deck *.58" Stock No.	Type 24001-	EACH 1-9	10-49	50-Up	2-Deck *1.39" Stock No.	Type 24002-	EACH 1-9	10-49	50-Up
2	801-3002	2	3.81	3.05	2.29	801-3052	2	6.69	5.35	4.01
3	801-3003	3	3.94	3.15	2.36	801-3053	3	6.94	5.55	4.16
4	801-3004	4	4.06	3.25	2.44	801-3054	4	7.19	5.75	4.31
5	801-3005	5	4.19	3.35	2.51	801-3055	5	7.44	5.95	4.46
6	801-3006	6	4.31	3.45	2.59	801-3056	6	7.69	6.15	4.61
7	801-3007	7	4.44	3.55	2.66	801-3057	7	7.94	6.35	4.76
8	801-3008	8	4.56	3.65	2.75	801-3058	8	8.19	6.55	4.91
9	801-3009	9	4.69	3.75	2.81	801-3059	9	8.44	6.75	5.06
10	801-3010	10	4.81	3.85	2.89	801-3060	10	8.69	6.95	5.21

SERIES 5000 MINIATURE ROTARY TAP SWITCHES

Nonshorting rotary tap switches for adders, small business machines and a wide variety of industrial and commercial applications. Have one pole and 2 to 10 positions per deck. 36° indexing. Rated to break 1 amp at 115 VAC, resistive, or carry 5 amps. Mounting hole, 3/8" diameter. Overall diameter is 1 1/32". *Indicates depth behind panel. Av. shpg. wt. 4 oz.

Pos.	1-Deck *.47" Stock No.	Type 5001-	EACH 1-9	10-49	50-Up	2-Deck *1.25" Stock No.	Type 5002-	EACH 1-9	10-49	50-Up
2	801-2502	2	2.88	2.30	1.73	801-2552	2	6.13	4.90	3.68
3	801-2503	3	2.94	2.35	1.76	801-2553	3	6.25	5.00	3.75
4	801-2504	4	3.00	2.40	1.80	801-2554	4	6.38	5.10	3.83
5	801-2505	5	3.06	2.45	1.84	801-2555	5	6.50	5.20	3.90
6	801-2506	6	3.13	2.50	1.88	801-2556	6	6.63	5.30	3.98
7	801-2507	7	3.19	2.55	1.91	801-2557	7	6.75	5.40	4.05
8	801-2508	8	3.25	2.60	1.95	801-2558	8	6.88	5.50	4.13
9	801-2509	9	3.31	2.65	1.99	801-2559	9	7.00	5.60	4.20
10	801-2510	10	3.38	2.70	2.03	801-2560	10	7.13	5.70	4.28

SERIES 50 ROTARY SWITCHES

CD—commercial; noseals, adjustable stops, phenolic base. MD—military, meets MIL-S-3786; integral shaft and panel seal, adjustable stops, diallyl phthalate base. Both rated to make or break 50mA, 115 VAC for 25,000 cycles; or 200 mA, 115 VAC for 10,000 cycles. Nonshorting contacts, 36° index. §Poles/deck. *PC term. †Stop Adj. 4 oz.

Stock No.	Mfr's Type	†	EACH 1-9	10-49	50-Up
801-2001	50CD36-01-1§	2 thru 10	7.75	6.20	4.85
801-2002	50CD36-01-2§	2 thru 5	10.13	8.10	6.00
801-2030	50MD36-01-1§	2 thru 10	9.38	7.50	5.63
801-2031	50MD36-01-2§	2 thru 5	11.75	9.40	7.95
801-2050	50MDP36-01-1-AJN*	2 thru 10	9.38	7.50	5.63
801-2051	50MDP36-01-2-AJN*	2 thru 5	11.75	9.40	7.05

SERIES 51 ROTARY SWITCHES

Similar to series 50, except 12 position, 30° angle of throw. 51MDP-30-01-1-AJN has printed circuit tabs.

801-2070	51MD30-01-1-AJN	2 thru 12	10.06	8.05	6.04
801-2075	51MDP30-01-1-AJN	2 thru 12	10.06	8.05	6.04

SERIES 44D ROTARY TAP SWITCHES

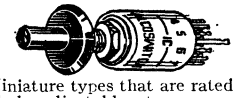
Enclosed with adjust. stops. 44 Series, 30° throw angle, 1.162" dia.; 42 series, 36° throw angle, 1.00" dia. Rated make/break, 1 A @ 115 VAC resis., .003 ohm initial. Ins. res., 50K megs minimum. Behind panel, 1-deck, 1.025"; 2-deck, 1.371"; 3-deck, 1.717". Av. shpg. wt. 4 oz.

Stock No.	Type 44D30-	Decks	Poles /Deck	Max. Pos.	EACH 1-9	10-49	50-Up
801-1010	01-1-ADJN	1	1	12	8.13	6.50	4.87
801-1012	01-2-ADJN	1	2	6	9.13	7.30	5.47
801-1013	01-3-ADJN	1	3	4	9.63	7.70	5.77
801-1014	01-4-ADJN	1	4	3	10.13	8.10	6.07
801-1030	02-1-ADJN	2	1	12	10.50	8.40	6.30
801-1032	02-2-ADJN	2	2	6	12.50	10.00	7.50
801-1033	02-3-ADJN	2	3	4	13.50	10.80	8.10
801-1034	02-4-ADJN	2	4	3	14.50	11.60	8.70
801-1051	03-1-ADJN	3	1	12	12.75	10.20	7.65
801-1052	03-2-ADJN	3	2	6	15.75	12.60	9.45
801-1054	03-4-ADJN	3	4	3	18.75	15.00	11.25

ALCOSWITCH MINIATURE ROTARY SWITCHES

Stock No.	Mfr's Type	*	†	With Knob	EACH 1-9	10-24	25-99	100-499	500-Up
700-4410	MRA-1-10	1	2-10	Yes	4.86	4.35	2.96	2.61	2.18
700-4429	MRA-2-5	2	2-5	Yes	4.86	4.35	2.96	2.61	2.18
700-4440	MRA-3-3	3	2-3	Yes	4.86	4.35	2.96	2.61	2.18
700-4450	MSRA-4-2‡	4	2	Yes	4.86	4.35	2.96	2.61	2.18
700-4415	MRA-1-10S	1	2-10	No	4.76	4.25	2.89	2.55	2.13
700-4416	MRA-1-10SC§	1	10	No	4.76	4.25	2.89	2.55	2.13
700-4430	MRA-2-5S	2	2-5	No	4.76	4.25	2.89	2.55	2.13
700-4445	MRA-3-3S	3	2-3	No	4.76	4.25	2.89	2.55	2.13
700-4451	MSRA-4-2S‡	4	2	No	4.76	4.25	2.89	2.55	2.13
700-4420	MRA-1-12S	1	2-12	No	5.31	4.75	3.23	2.85	2.38
700-4421	MRA-1-12SC§	1	12	No	5.31	4.75	3.23	2.85	2.38
700-4452	MRA-4-3S	4	3	No	5.31	4.75	3.23	2.85	2.38

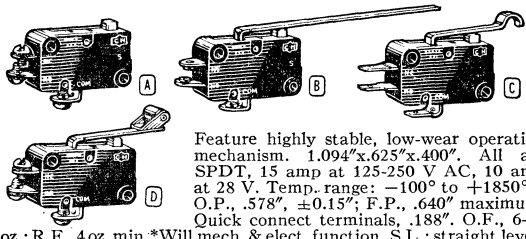
*Pole; †Positions; ‡Continuous rotation; §Switches non-adjustable



MRA Adjustable-Stop Rotary Switches. Miniature types that are rated 500 mA @ 125 VAC. Features include adjustable stops, nonshorting contacts, 36° indexing. Up to four poles on a single deck. Solid silver terminals and contacts assure long life. Types with suffix S, 1/8" diameter shaft, less knob. Bushing, 1/4-40.

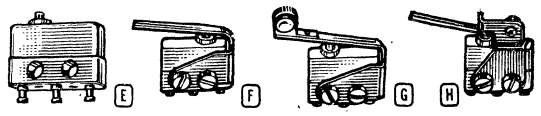
MRA 30° Position Rotary Switches. Are slightly larger than standard MRA Series and have 1/8" shaft. Other specifications are similar to standard MRA Series. Knobs are not included except MRA-1-10, 2-5 & 3-3. Type MRA 30° Position Rotary Switches can be converted to adjustable-stop type switches when used with KC-500 knobs. See page 358 for Alco Knobs.

CUTLER-HAMMER MINIATURE SNAP SWITCHES



Feature highly stable, low-wear operating mechanism. 1.094"x.625"x.400". All are SPDT, 15 amp at 125-250 V AC, 10 amp at 28 V. Temp. range: −100° to +1850°F. O.P., .578", ±0.15"; F.P., .640" maximum. Quick connect terminals, .188". O.F., 6-14 oz.; R.F., 4 oz. min.*Will mech. & elect. function. S.L.: straight lever, R.L.: roll. lever, SRL: simulated roll. lever. ■U.L. Recog.

Stock No.	Mfr's Type	Micro Equiv.*	Fig.	Description	EACH 1-24	25-49	50-99	100-Up
757-0660	SS12ET10	V3-1	A	Screw Term.	1.45	1.15	.84	.72
757-0663	SS12ET20	V3-19	A	Solder term.	1.25	1.00	.73	.63
757-0666	SS12ET30	V3-1-D8	A	Quick conn.	1.08	.85	.62	.54
757-0669	SS12ET302L1	V3L-1-D8	B	S.L. (.840")	1.08	1.00	.73	.63
757-0672	SS12ET302L2	V3L-2-D8	B	S.L. (1.40")	1.08	1.00	.73	.63
757-0675	SS12ET302L6	V3L-6-D8	B	S.L. (2.34")	1.08	1.00	.73	.63
757-0677	SS12ET302L24	V3L-14-D8	B	S.L. (2.75")	1.08	1.00	.73	.63
757-0690	SS12ET3012L5	V3L-5-D8	C	S.R.L. (1.285")	1.50	1.05	.77	.66
757-0691	SS12ET30102L3	V3L-3-D8	D	R.L. (.81")	1.50	1.20	.88	.76
757-0692	SS12ET30102L4	V3L-4-D8	D	R.L. (1.34")	1.50	1.20	.88	.76



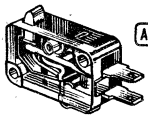
Rated for 50,000 operations at rated load; handles up to 7 amperes normal capacity, and 25 amperes in rush. .500"x.380"x.210". All are SPDT single turret terminals; temperature range: −65°F to +265°F. Standard: O.F., 5 oz. maximum; R.F. 1 oz. minimum; P.T., .020" maximum. D.T., .005" maximum .010" minimum; O.P., .320" ±.015. Other terminals: double turret, .055" pin, and .058" quick connect. *Will mech. and elect. function satisfactorily. Note: All devices are ■U.L. Recog.

Stock No.	Mfr's Type	Micro Equiv.*	Fig.	Description	EACH 1-9	10-19	20-49	50-Up
757-0610	SS10AT40	1SX1-T	E	Standard	2.45	2.20	1.96	1.72
757-0612	SS10FT40	2SX1-T	E	Low force	2.80	2.52	2.24	1.96
757-0613	SS10DT40	1SX12-T	E	Low dif.	3.15	2.83	2.27	2.20
757-0616	SS10KT40	3SX1-T	E	Gold contacts	3.65	3.28	2.92	2.55
757-1201	SW54SA8380-1	JX40	F	Leaf	.28	.25	.22	.20
757-1202	SW54SA8380-2	JX41	F	Reverse leaf	.28	.25	.22	.20
757-1203	SW54SA8380-3	JX45	G	Roller leaf	.78	.70	.62	.55
757-1204	SW54SA8380-4	JX51	G	Rev. roll leaf	.80	.72	.64	.56
757-1205	SW54SA8380-5	JX20	H	Lever	.85	.76	.68	.60
757-1206	SW54SA8380-6	JX25	H	Rev. lever	1.65	1.48	1.32	1.15

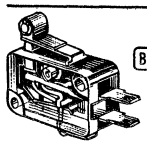
■Recognized Under the Component Program of Underwriters Laboratories, Inc.

Snap-Action Switches

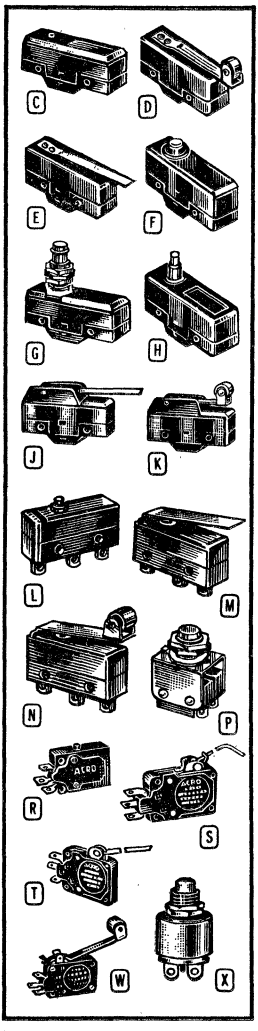
Robertshaw

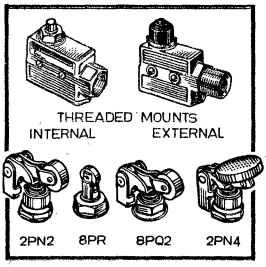


PIN PLUNGER



ROLLER LEAF





SNAP-ACTION SPDT SWITCHES WITH MICRO EQUIVALENTS

Popular replacements for Microswitch types. Feature clip-on covers, constant-stress rolling spring snap-action for long life. Operating forces given in ounces. Switches have screw terminals, except * solder terminals. U.L. Component Program-Recognized. C.S.A. Listed. Av. shpg. wt., 2 oz.

MODEL "V" MINIATURE TYPES WITH COVERS

Feature sealed mechanism cover. Excellent contact wiping action and bounce-free motion. Mechanical life, 10 million operations. Rated 15 amps at 125- 250 VAC. Easy-handling, one-piece integral actuators. †Micro equivalent is basic switch with actuator harness. *Solder term.

Stock No.	Mfr's Type	Micro Equiv.	Oper. Force	Pre-Travel	Fig.	EACH 1-9	10-19	20-49	50-99	100-199	200-Up
905-4521	*VD-0001	V3-19	14	.047″	A	1.20	.92	.82	.71	.66	.64
905-4527	VD-0007	V3-1	14	.047″	A	1.27	.97	.86	.76	.70	.68
905-4568	VLD-0018	†V3-1 (JV-5)	14	.062″	B	1.62	1.24	1.10	.97	.90	.87
905-4569	*VLD-0019	†V3-19 (JV-20)	8	.156″	B	1.53	1.17	1.04	.91	.85	.82
905-4533	VLD-0021	†V3-1 (JV-20)	8	.156″	B	1.62	1.24	1.10	.97	.90	.87

STANDARD-DUTY TYPES

Contacts are rated at 15 amps, 120, 240 and 480 volts AC; 0.5 amp, 120 volts DC. *Solder term.

905-0455	*BRD2-1A	BZ-2R	9-13	.020″	C	1.88	1.44	1.28	1.12	1.04	1.01
905-0454	*BRD2-1A-1S*	BZ-2R-A2	9-13	.020″	C	2.06	1.58	1.40	1.23	1.14	1.10
905-0493	*BRD2-5L	BZ-2RL	5	.156″	E	2.18	1.67	1.48	1.30	1.20	1.17
905-0495	BRD2-5L-1S	BZ-2RL-A2	5	.156″	E	2.35	1.80	1.60	1.40	1.30	1.26
905-0473	*BRD2-2M	BZ-2RL2	5	.156″	D	2.76	2.12	1.88	1.65	1.53	1.48
905-0478	*BRD2-2M-1S*	BZ-2RL2-A2	5	.156″	D	2.94	2.25	2.00	1.75	1.63	1.58
905-0497	BRD2-70	BZ-2RD	9-13	.025″	F	2.41	1.85	1.64	1.44	1.33	1.29
905-0498	*BRD2-70-1S*	BZ-2RD-1A	9-13	.025″	F	2.53	1.94	1.72	1.51	1.40	1.36
905-0457	*BRD2-1P	BZ-2RQ1	9-13	.025″	G	4.18	3.20	2.84	1.49	2.31	2.24
905-0458	*BRD2-1P-1S*	BZ-2RQ1-A2	9-13	.025″	G	4.30	3.29	2.92	2.56	2.37	2.30
905-0463	*BRD2-10	BZ-2RS	9-13	.025″	H	2.41	1.85	1.64	1.44	1.33	1.29
905-0461	BRD2-10-1S	BZ-2RS-A2	9-13	.025″	H	2.53	1.94	1.72	1.51	1.40	1.36
905-0372	*BRD2-LW8	BZ-2RW	2½	.406″	J	2.35	1.80	1.60	1.40	1.30	1.26
905-0374	*BRD2-L-W8-1S*	BZ-2RW-A2	2½	.406″	J	2.53	1.94	1.72	1.51	1.40	1.36
905-0389	*BRD2-LW228	BZ-2RW22	6	.140″	K	3.06	2.34	2.08	1.82	1.69	1.64
905-0391	*BRD2-L-W228-1S*	BZ-2RW22-A2	6	.140″	K	3.12	2.39	2.12	1.86	1.72	1.67

HEAVY-DUTY TYPES

Rated at 21 amps, 120-240-480 volts AC; 1 hp at 120 volts AC and 2 hp at 240 VAC. Screw term.

905-1215	FAD2-1A-1S	BA-2R-A2	10-18	1/20″	C	2.00	1.53	1.36	1.19	1.11	1.07
905-1240	FAD2-5L-1S	BA-2RL-A2	9	11/32″	D	2.35	1.80	1.60	1.40	1.30	1.26
905-1225	FAD2-2M-1S	BA-2RLS-A2	9	11/32″	E	2.94	2.25	2.00	1.75	1.63	1.58
905-1229	FAD2-1P-1S	BA-2RQ1-A2	10-18	1/20″	G	4.30	3.29	2.92	2.56	2.37	2.30
905-1202	FAD2-LV-1S	BA-2RV-A2	2½	5/8″	J	2.53	1.94	1.72	1.51	1.40	1.36
905-1204	*FAD2-LV2-1S*	BA-2RV2-A2	2½	15/32″	K	3.18	2.43	2.16	1.89	1.76	1.70
905-1234	FAD2-40-1S	BA-2RB-A2	10-18	1/20″	F	2.53	1.94	1.72	1.51	1.40	1.36

SUBMINIATURE TYPES

Contacts rated at 5 amps, 120 and 240 volts AC. †Indicates double gang switch. Post solder term.

905-5324	*ZD-0024*	1SM1	3-5	.008-.020″	L	1.39	1.06	.95	.83	.77	.75
905-5336	*ZLD-0036*	111-SM1-T	2	.094″	M	1.93	1.48	1.31	1.15	1.07	1.03
905-5337	*ZLD-0037*	111-SM2-T	2	.094″	N	2.33	1.78	1.58	1.39	1.29	1.25
905-5388	†ZPD-0088	.....	20	.070″	P	7.65	5.85	5.20	4.55	4.23	4.10

MINIATURE LIGHT-PRESSURE SWITCHES

For a wide variety of applications. All are shock-resistant and constructed for long-life performance. "M" types rated 10 amps, 125-250 VAC. "CM" types rated 3 amps, 250 VAC. All are SPDT. Operating forces are in ounces except ‡grams. Solder term.

Stock No.	Mfr's Type	Actuator Type	Oper. Force	Pre-Travel	Fig.	EACH 1-9	10-19	20-49	50-99	100-199	200-Up
905-5701	1MD1-1A	Pin plunger	6	1/32″	R	1.56	1.19	1.06	.92	.86	.83
905-5710	2MD3-1A	Pin plunger	10	1/32″	R	1.56	1.19	1.06	.92	.86	.83
905-5702	1MD1M1A-A18M	Roller	2	5/32″	W	2.26	1.73	1.54	1.34	1.25	1.21
905-5703	1MD1-1A-A18	Flat leaf	2	5/32″	T	2.03	1.55	1.38	1.20	1.12	1.08
905 5500	*1CMD1-2AXX*	Pin plunger	‡20-27	3/64″	R	1.56	1.19	1.06	.92	.86	.83
905-5505	2CMD1-2AXX	Pin plunger	‡33-44	3/64″	R	1.56	1.19	1.06	.92	.86	.83
905-5519	3CMD1-2AXX	Pin plunger	‡45-60	3/64″	R	1.56	1.19	1.06	.92	.86	.83
905-5502	*1CMD1-2AXX-A22*	Wire leaf	‡2.5	.....	S	1.92	1.47	1.30	1.14	1.06	1.03
905-5507	*2CMD1-2AXX-A24*	Flat leaf	‡4	.....	T	1.92	1.47	1.30	1.14	1.06	1.03
905-5501	1CMD1-1AXX-A23M	Roller leaf	5-8	3/64″	W	1.92	1.47	1.30	1.14	1.06	1.03
905-5504	1CMD1-18AXX-A27	Nylon leaf	‡6	.....	T	1.82	1.40	1.24	1.09	1.01	.98

SNAP-ACTION PUSHBUTTON SWITCHES

Panel-mounting, momentary contact switches. All are overtravel plunger type. Solder lug terminals. Types 3DO5-5P, 3DC5-5P compact SPST switches rated 6 amps. 250 VAC; 12 amps, 125 VAC. Min. overtravel, .007″. Type 3DO5-5P is N.O., (has black button). 3DC5-5P is N.C. (red button).

Stock No.	Mfr's Type	Fig.	Oper. Force	Pre-Travel	Size H x Dia.	EACH 1-9	10-19	20-49	50-99	100-199	200-Up
905-5811	*3DO5-5P*	X	10-15 oz.	.10″	1 35/64x1 5/16″	2.20	1.68	1.50	1.31	1.22	1.18
905-5805	*3DC5-5P*	X	10-15 oz.	.03-.06″	1 35/64x1 5/16″	2.20	1.68	1.50	1.31	1.22	1.18

MODEL B SPLIT HOUSING METAL-CASE SWITCHES

SPDT snap-action switches with bottom enclosure removable for easy wiring. Liner seals split housing and insulates bottom enclosure. SBH types have internally threaded housing; SBHT type has externally threaded housing. Contacts rated 15 amps, 120-240-480 VAC. Screw terminals. Slide-mounting—two 6¾x1½″ screws and washers. Size (less actuator), 1¾x3 33/64x1″. *Indicates operating force in ounces. †Height with actuator. Av. shpg. wt. 8 oz.

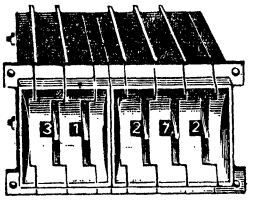
Stock No.	Mfr's Type	Micro Equivalent	Actuator Type	*Oper. Force	Pre-Travel	† Ht.	EACH 1-9	10-19	20-49	50-99	100-199	200-Up
905-3827	SBH2-7PN	BZE6-2RN	Sealed plunger	9-24	.078″	2 23/32″	7.70	5.90	5.24	4.59	4.25	4.13
905-3813	SBH2-2NP4	BZE6-2RN4	Sealed manual	10-20	.188″	3 11/32″	11.95	9.14	8.12	7.11	6.60	6.39
905-3825	SBH2-6PQ	BZE6-2RO	Plunger	9-13	.020″	1½″	6.05	4.64	4.12	3.61	3.35	3.24
905-3831	SBH2-8PR	BZE6-2RQ8	Roller-plunger	9-13	.020″	1 15/16″	10.25	7.83	6.96	6.09	5.66	5.48
905-3829	SBH2-8PQ2	BZE6-2RQ2	Adj. roller	10-18	.188″	2 9/16″	10.25	7.83	6.96	6.09	5.66	5.48
905-3803	SBHT2-2PN2	.....	Seal adj. roll	10-20	.188″	3 11/32″	11.90	9.09	8.08	7.07	6.57	6.36

Switches: Lever, 218, 224-8, 232, 241—Rocker, 221, 227-9, 240—Lock, 222, 228—Slide, 223, 227

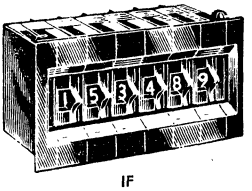
Imlec Thumbwheel Switches

THUMBWHEEL PC SWITCHES

IMLEC



S and SE



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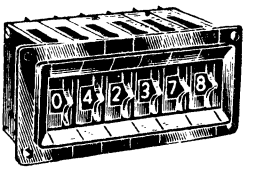

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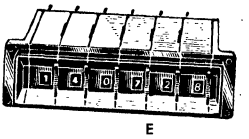


E

Printed circuit switches for instruments and process control. Five types offer a selection of binary and decimal outputs. Extended boards available for mounting of resistors or diodes. Optional lamp for internal illumination. Current Rating: 0.5 amp max.

STANDARD RANGE TYPE S

Rear-mounted black switch with black thumbwheel, white characters on black background. Illumination optional from a small lamp soldered to the base of switch. Life: 1,000,000 operations minimum. Outputs: Decimal, BCD 1248 or BCD 1248 with complements. Temperature: 0° to 75° C, suitable for normal industrial and commercial environments. Size: 2.81″ d. x 2.28″ h. (each switch .5″ wide).

STANDARD ECONOMY RANGE TYPE SE

Thumbwheel switch for maximum economy. Replaces rotary type switches to give fingertip control. Dark gray in color, rear panel mounting and solder pad connections. Optional illumination. Life: 250,000 operations min. Output: 0-9 decimal. Temperature: 0° to 55° C, suitable for normal industrial and commercial environments. Size: 2.81″ d. x 2.28″ h. (each switch .5″ wide).

per switch. Working Voltage: 200 VAC or DC max. Power Rating: 24 watts max. per switch. Insulation Res.: 1000 megohms. Contact Res.: 0.1 ohm.

INTERMEDIATE RANGE TYPE IF

Edge operated, front mounting type thumbwheel switch has large character readout. Black wheels and white characters. Illumination optional. 1,000,000 operations min. Stops: Any position. Outputs: Decimal, BCD 1248 or BCD 1248 with complements. Size: 2.28″ d. (.60″ for ext. board extra) x 2.125″ h. (.5″ wide each switch). Switch bank mounted with clips; no screws required. Temp. Range: −65° C to +100° C.

INTERMEDIATE RANGE TYPE IR

As above, but rear mounting type. Height, 1.875″.

MINIATURE RANGE TYPE E

Black wheels and white characters. Illumination optional with rear-mounted, miniature, flange-base lamp. Life: 100,000 cycles through 360°. Outputs: Decimal, BCD 1248, BCD 1248 with complements. Size: Character, .188″ h.; switch, 1.67″ d. x 1.125″ h. (each switch .5″ wide). Temp. Range: 0° C to +75° C.

THUMBWHEEL SWITCHES

*Letter in Stock No. column indicates price code—see Price Table

Mfr's Type	Description	Allied Stock Nos.									
		Standard				Intermediate				Miniature	
		Type S	*	Type SE	*	Type IF	*	Type IR	*	Type E	*
110ND	10-position decimal, single pole	816-0810	B	816-0744	A	816-0393	B	816-0442	B	816-0349	B
110NDE	10-position decimal/ext. board	†				816-0394	D	816-0443	D	†	
102ND (+,−)	2-position decimal (+,−)	816-0802	D			816-0391	D	816-0441	D	816-0342	D
112ND	12-position decimal	816-0812	D								
112NDE	12-position decimal, ext. board	†									
116ND	16-position decimal	816-0816	D			816-0395	C	816-0445	C		
116NDE	16-position decimal, ext. board	816-0818	F			816-0397	E	816-0447	E		
116ND (+−)	16-position, stopped (+,−)	816-0817	F			816-0395	E	816-0446	E		
205ND	5-position decimal, double pole	816-0825	I								
210ND	10-position decimal, double pole	816-0830	L								
B10N1248	10-position BCD, single pole	816-0871	H			816-0373	F	816-0423	F	816-0323	E
B10N1248E	10-position BCD, ext. board	816-0872	I			816-0374	K	816-0424	K	816-0324	G
B12N1248	12-position BCD	816-0875	J								
B12N1248E	12-position BCD, ext. board	†									
B16N1248	16-position BCD	816-0879	K			†		†			
B16N1248E	16-position BCD, ext. board	†				†		†			
BC10N1248	10-position BCD, complements, single pole	816-0873	J			816-0376	F	816-0426	F	816-0326	G
BC10N1248E	10-position BCD, ext. board, complements	816-0874	L			816-0377	K	816-0427	K	816-0327	I
BC12N1248	12-position BCD, complements	816-0877	L								
BC12N1248E	12-position BCD, ext. board, complements	†									
BC16N1248	16-position BCD, complements	816-0781	M			†		†			
BC16N1248E	16-position BCD, ext. board, complements	†				†		†			
THUMBWHEEL SWITCHES ACCESSORIES											
EP	End plates (Pair)	816-0787	P	816-0735	P	816-0385	Q	816-0435	P	816-0335	O
DP	Divider plate	816-0786	P							816-0330	O
HB	Blank body, ¼″ spacer	816-0792	P			816-0380	P	816-0437	P		
BB	Blank body, ½″ spacer	816-0770	P			816-0370	P	816-0420	P	816-0320	O
ASL	Illumination of legend ‡	816-0758	Q			816-0358	P	816-0408	P	816-0308	Q
ASS	Stopping of switch	816-0763	O			816-0363	N	816-0413	N	816-0313	N
ASD	Decimal point on switch or spacer	816-0755	O	816-0705	O	816-0355	O	816-0405	O	816-0305	O
G	Ganging shaft	816-0790	O	816-0739	O						
H	Hardware (specify S or E type)‡	816-0791	P	816-0738	P					816-0343	P
IH	Hardware (for I type) ‡					816-0389	Q	816-0439	Q		
A	Assembly of bank	816-0751	O	816-0701	O	816-0352	O	816-0401	O	816-0301	O
CN	Connectors	†		†		†		†		†	
ASM	Matte finish					816-0359	O	816-0409	O	816-0309	O

*PRICE TABLE—SWITCHES

Code	EACH			
	1-9	10-24	25-99	100-Up
A	2.60	2.00	1.75	1.52
B	3.57	2.75	2.40	2.08
C	3.90	3.00	2.62	2.28
D	4.22	3.25	2.84	2.46
E	4.55	3.50	3.06	2.66
F	4.87	3.75	3.28	2.85
G	5.20	4.00	3.50	3.04
H	5.50	4.25	3.72	3.23
I	5.85	4.50	3.94	3.42
J	6.18	4.75	4.15	3.60
K	6.50	5.00	4.38	3.80
L	6.83	5.25	4.60	4.00
M	7.15	5.50	4.82	4.18

NOTES

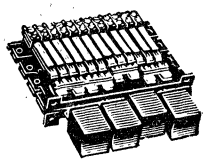
†Call your local Allied office for price and delivery. ‡Specify 6, 12 or 24 volts for S Type switches; lamp is included if illumination is ordered. On I and E type switches, lamp fitting is provided but bulb is not—see lamp pages for T-1 bulb. §Specify hardware by total number of switches, spacers or dividers in bank; e.g., H-5 contains 5 units. End plates are provided for in length.
Manufactured in England by Birch-Stolec, Limited.

*PRICE TABLE—ACCESSORIES

Code	EACH			
	1-9	10-24	25-99	100-Up
N	.33	.25	.22	.185
O	.66	.50	.43	.37
P	.95	.75	.65	.555
Q	1.98	1.50	1.30	1.11

SERIES 35000 NON-ILLUMINATED MULTI-SWITCH WITH DPDT CIRCUITRY

- Low Silhouette Design
- All Functions Available



Quality-engineered non-illuminated "Multi-Switch" features extremely compact, low silhouette design for mounting into even the most inacessible areas. All switching functions available. Interlock, non-lock, all-lock and push-to-lock-push-to-release. Interlock function features built-in lock-out mechanism preventing operation of more than one button simultaneously. Each station offers DPDT circuitry for a wide variety of military, industrial and consumer applications with a minimum of installation requirements. Plunger is mounted on 5/8" centers. All switching functions listed below are supplied with 2-C stack switch for each station. Positive-action switching assures long-life and reliable service. Complete unit measures only 3/4" high and 2 5/6" deep behind panel. **Order functions below.**

INTERLOCK FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-4	5-9	10-24	25-49	50-Up
933-7821	35021K-206	2	2	12.70	9.20	7.62	6.99	6.35
933-7841	35041K-206	4	4	20.40	14.73	12.24	11.22	10.20
933-7861	35061K-206	6	6	28.60	20.65	17.16	15.73	14.30
933-7881	35081K-206	8	8	36.80	26.58	22.08	20.24	18.40
933-7890	35101K-206	10	10	45.00	32.50	27.00	24.75	22.50
933-7894	35121K-206	12	12	53.20	38.43	31.92	29.26	26.60

NON-LOCK FUNCTION

933-7922	35022-206	2	2	12.70	9.20	7.62	6.99	6.35
933-7924	35024-206	4	4	20.40	14.73	12.24	11.22	10.20
933-7962	35062-206	6	6	28.60	20.65	17.16	15.73	14.30
933-7982	35082-206	8	8	36.80	26.58	22.08	20.24	18.40
933-8002	35102-206	10	10	45.00	32.50	27.00	24.75	22.50
933-8022	35122-206	12	12	53.20	38.43	31.92	29.26	26.60

ALL-LOCK FUNCTION

933-7923	35023-206	2	2	12.70	9.20	7.62	6.99	6.35
933-7943	35043-206	4	4	20.40	14.73	12.24	11.22	10.20
933-7963	35063-206	6	6	28.60	20.65	17.16	15.73	14.30
933-7983	35083-206	8	8	36.80	26.58	22.08	20.24	18.40
933-8003	35103-206	10	10	45.00	32.50	27.00	24.75	22.50
933-8023	35123-206	12	12	53.20	38.43	31.92	29.26	26.60

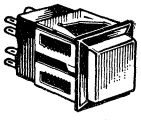
PUSH-PUSH FUNCTION

933-7927	35027-206	2	2	12.70	9.20	7.62	6.99	6.35
933-7947	35047-206	4	4	20.40	14.73	12.24	11.22	10.20
933-7967	35067-206	6	6	28.60	20.65	17.16	15.73	14.30
933-7987	35087-206	8	8	36.80	26.58	22.08	20.24	18.40
933-8007	35107-206	10	10	45.00	32.50	27.00	24.75	22.50
933-8027	35127-206	12	12	53.20	38.43	31.92	29.26	26.60

SERIES 35000 NON-ILLUMINATED FRAMES

Compact, low silhouette design. Only 3/4" high, 2 5/16" depth behind panel. Modern, square black buttons on 5/8" centers. Part numbers shown below indicate interlock function with "built-in" lockout. For other functions substitute following number for last digit of part number. Non-lock (2), All-lock (3), Push-to-lock, Push-to-release (7). Supplied less stack switches.

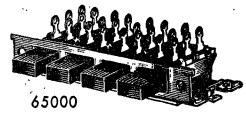
Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
933-7921	35021	2	2	7.56	5.10	4.68	4.25
933-7941	35041	4	4	10.67	7.20	6.60	6.00
933-7961	35061	6	6	14.22	9.60	8.80	8.00
933-7981	35081	8	8	17.80	12.00	11.00	10.00
933-8001	35101	10	10	21.34	14.40	13.20	12.00
933-8021	35121	12	12	24.89	16.80	15.40	14.00



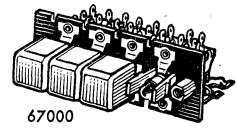
SERIES BX MOMENTARY ACTION PUSHBUTTON BOX SWITCHES

Tiny flush-mounted, momentary-action pushbutton switches provide up to 4 poles of switching. Only 1 1/16" square—mount in .615" square hole from front of panel. Take little panel space, yet have board switching capability. Rated to 250 mA, 30 watts maximum, AC non-inductive load. Protected from dirt and damage by molded-plastic case. Easy snap-in mounting saves assembly time and allows adjacent-mounting on matrix configurations. Special "Adjusto-Clips" mount switch in 3/64 to 17/64" thick panels, and lock it in reliably to resist vibration and shock conductions. Choice of four distinctive colors. Attractive low-silhouette bezel frames pushbutton and serves as escutcheon. Integral silver-plated brass contacts. Solder lugs are spaced and identified for quick, easy wiring. Contact assemblies listed in table at right are diagrammed in illustration above table. Av. shpg. wt. 1/2 oz.

ECONOMICAL "DW" SERIES MULTI-SWITCHES



65000



67000

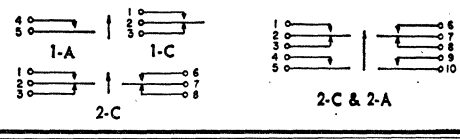
SERIES 65000 AND 67000 FACTORY ASSEMBLED "DW" SERIES "MULTI-SWITCH"

Series 65000 non-illuminated, low-cost "Multi-Switch." Factory assembled with DPDT switch module per station. Double wipe bifurcated silver-plated brass contacts are rated 3 Amperes AC, 0.5 Amperes DC; 125 Volts non-inductive load. Size, 1 1/16" depth behind panel. 3/4" length plus 5/8" for each station; 27/32" high.

Series 67000 illuminated version of above. Features front-of-panel lamp replacement. Accepts Ind. #327 and #328 lamps. Av. shpg. wt. 4 oz.

Stock No.	Mfr's Type	Function	Stations	EACH 1-9	10-24	25-49	50-Up
933-9251	65021K-206	Interlock	2	2.49	1.68	1.54	1.40
933-9252	65022-206	Non-lock	2	2.36	1.59	1.46	1.33
933-9253	65023-206	All-lock	2	2.49	1.68	1.54	1.40
933-9260	65041K-206	Interlock	4	4.45	3.00	2.75	2.50
933-9261	65042-206	Non-lock	4	4.31	2.91	2.67	2.43
933-9263	65043-206	All-lock	4	4.45	3.00	2.75	2.50
933-9271	65061K-206	Interlock	6	6.40	4.32	3.96	3.60
933-9272	65062-206	Non-lock	6	6.22	4.20	3.85	3.50
933-9273	65063-206	All-lock	6	6.43	4.32	3.96	3.60
933-9281	65081K-206	Interlock	8	8.36	5.64	5.17	4.70
933-9282	65082-206	Non-lock	8	8.20	5.52	5.06	4.60
933-9283	65083-206	All-lock	8	8.36	5.64	5.17	4.70
933-9291	65101K-206	Interlock	10	10.26	6.93	6.35	5.78
933-9292	65102-206	Non-lock	10	10.04	6.78	6.22	5.65
933-9293	65103-206	All-lock	10	10.26	6.93	6.35	5.78
933-9295	65121K-206	Interlock	12	12.23	8.25	7.56	6.88
933-9296	65122-206	Non-lock	12	12.00	8.10	7.43	6.75
933-9298	65123-206	All-lock	12	12.23	8.25	7.56	6.88
933-9321	67021K-506	Interlock	2	3.29	2.22	2.04	1.85
933-9322	67022-506	Non-lock	2	3.04	2.04	1.87	1.70
933-9323	67023-506	All-lock	2	3.29	2.22	2.04	1.85
933-9324	67041K-506	Interlock	4	5.95	4.02	3.69	3.35
933-9332	67042-506	Non-lock	4	5.43	3.66	3.36	3.05
933-9333	67043-506	All-lock	4	5.95	4.02	3.69	3.35
933-9341	67061K-506	Interlock	6	8.63	5.82	5.34	4.85
933-9342	67062-506	Non-lock	6	7.83	5.28	4.84	4.40
933-9343	67063-506	All-lock	6	8.63	5.82	5.34	4.85
933-9351	67081K-506	Interlock	8	11.29	7.62	6.99	6.35
933-9352	67082-506	Non-lock	8	10.23	6.90	6.33	5.75
933-9353	67083-506	All-lock	8	11.29	7.62	6.99	6.35
933-9371	67101K-506	Interlock	10	13.95	9.42	8.64	7.85
933-9372	67102-506	Non-lock	10	12.63	8.52	7.81	7.10
933-9373	67103-506	All-lock	10	13.95	9.42	8.64	7.85
933-9381	67121K-506	Interlock	12	16.62	11.22	10.29	9.35
933-9382	67122-506	Non-lock	12	15.03	10.14	9.30	8.45
933-9383	67123-506	All-lock	12	16.62	11.22	10.29	9.35

SERIES BX CONTACT ARRANGEMENTS



Stock No.	Mfr's Type	Contact Assembly	Color	EACH 1-9	10-24	25-49	50-99	100-Up
933-0227	BX-1	1-A	White	2.75	2.07	1.90	1.73	1.38
933-0228	BX-1	1-A	Black	2.75	2.07	1.90	1.73	1.38
933-0229	BX-1	1-A	Red	2.75	2.07	1.90	1.73	1.38
933-0230	BX-1	1-A	Green	2.75	2.07	1.90	1.73	1.38
933-0231	*BX-3*	*1-C*	*White*	2.88	2.16	1.98	1.80	1.44
933-0232	*BX-3*	*1-C*	*Black*	2.88	2.16	1.98	1.80	1.44
933-0233	*BX-3*	*1-C*	*Red*	2.88	2.16	1.98	1.80	1.44
933-0234	*BX-3*	*1-C*	*Green*	2.88	2.16	1.98	1.80	1.44
933-0235	BX-6	2-C	White	3.15	2.37	2.17	1.98	1.58
933-0236	BX-6	2-C	Black	3.15	2.37	2.17	1.98	1.58
933-0237	BX-6	2-C	Red	3.15	2.37	2.17	1.98	1.58
933-0238	BX-6	2-C	Green	3.15	2.37	2.17	1.98	1.58
933-0239	BX-10	2-C & 2-A	White	3.60	2.70	2.48	2.25	1.80
933-0240	BX-10	2-C & 2-A	Black	3.60	2.70	2.48	2.25	1.80
933-0241	BX-10	2-C & 2-A	Red	3.60	2.70	2.48	2.25	1.80
933-0242	BX-10	2-C & 2-A	Green	3.60	2.70	2.48	2.25	1.80

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

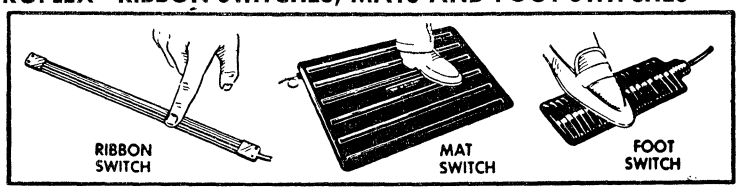
Special Purpose Switches and Switch Kits

TAPESWITCH CORP. "CONTROFLEX" RIBBON SWITCHES, MATS AND FOOT SWITCHES

Type CVP 1723 Flexible Area Switching Mat. Controflex elements spaced on 2¾" centers. Water-resistant vinyl. "Mylar" insulation. Overlay with masonite, carpeting or use exposed. Actuated by 5 lbs. pressure. 17x 23x3/32" thick. For 24 V circuits. 1¾ lbs.
966X1010.....**Each 14.10**
2-9.....**Each 9.60** **10-Up**.....**Each 9.12**

Type 111 100-Watt Foot Switch. Controflex ribbon switches (momentary, normally open) sealed in weatherproof molded flat pad. 2x5x¼" thick; can be taped or cemented to floor. With 6-ft. U.L. lead. 8 oz.
966-1060.....**Each 4.47**
2-9.....**Each 3.04** **10-Up**.....**Each 2.89**

Type TS-1 Chime-Mat Annunciator Kit. (Not illus.) Entrance signal system for stores, offices, plants, shops. Includes mat, dual-note chime, transformer, wire and instructions. Mat is 17x23x3/32" thick. 4½ lbs.
966 X 1046.....**Each 33.70**
2-9.....**Each 22.95** **10-Up**....**Each 20.67**



Type 131-A Controflex Wired Ribbon Switches. 40 oz. sensitivity. Normally open, momentary contact. 1 amp at 117 VAC/28 VDC. Ready to use. Sleeve terminals, 18" lead. ¾" wide, 3/16" thick. Gray.

Stock No.	Lgth. Ft.	Wt., Oz.	EACH 1	2-9	10-Up
966-1080	1	3	3.75	2.32	2.21
966-1081	2	4	5.15	3.20	3.04
966-1082	5	7	7.70	5.84	5.55

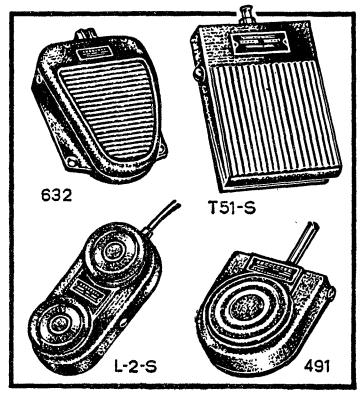
Type 121BP Sensitive Ribbon Switch. For highly sensitive alarm and control applications. Same as switches at left, but 8-oz. pressure closes circuit. 1 amp at 117 VAC/24 VDC. Sealed units have 18-inch leads. 9/16" wide, 5/32" thick. Green.

Stock No.	Lgth. Ft.	Wt., Oz.	EACH 1	2-9	10-Up
966-1070	1	3	3.75	2.32	2.21
966-1071	2	4	5.15	3.20	3.04

LINEMASTER FOOT SWITCHES FREE HANDS FOR WORK

Foot switches provide convenient switching operations when hands are occupied.
Model 491-S "Compact." SPDT 10-ampere. 125-volt AC contacts. Steel housing, black crackle finish. Skidproof base.
Model 491-SC. Above, 6-ft. cord plus 2-prong series plug. 491-SC3. 8-ft. cord and grounded plug.
Model 632-S. "Clipper." SPDT contacts rated 20 amps at 125-250 VAC. Cast iron housing has rubber anti-skid pad.
Model T-51-S. "Treadlite." For low-current loads. SPDT. 7 amps. 110-250 VAC. Rubber treading and skid-proof rubber base pad. T51-SC. Wired. Above, 6-ft. cord, 2-prong series plug. T51-SC3. 6' cord, grounded plug.
Model 632-D. Same as Model 632-S, at left, but maintains contact until again actuated.
Model L-2S "Lektro-Lok." Switch has 15-amp. 125-VAC contacts on each side. Mechanical interlock, steel housing. On-off switching from foot pressure.

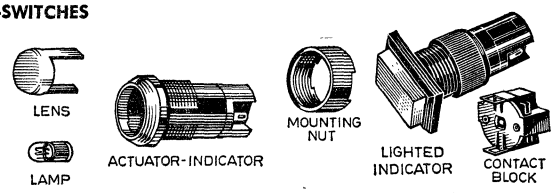
Stock No.	Mfr's Type	Description	Size	Wt., Lbs.	EACH 1-4	5-9	10-19	20-49	50-Up
842-6658	T51-S	Momentary cont.	3½x2⅝x1"	½	4.09	3.24	2.47	2.20	2.06
842-6659	T51-SC	Above, 6' cord	3½x2⅝x1"	1	6.14	4.70	3.60	3.20	3.00
842-6660	T51-SC3	Above, 6' cord	3½x2⅝x1"	1½	7.93	5.89	4.50	4.00	3.75
842-6680	491-S	Momentary cont.	2⅞x2½x1⅛"	½	4.97	3.82	2.92	2.60	2.44
842-6681	491-SC	Above, 6' cord	2⅞x2½x1⅛"	1¼	7.49	5.89	4.50	4.00	3.75
842-6682	491-SC3	Above, 8' cord	2⅞x2½x1⅛"	1½	9.13	6.88	5.27	4.68	4.39
842-6690	632-S	Momentary cont.	4½x3½x1½"	2	11.68	9.72	7.42	6.60	6.19
842-6691	632-D	Maintains cont.	4½x3½x1½"	2½	15.58	12.95	9.90	8.80	8.25
842-6634	L-2S	Two-way	5x2½x1⅛"	1	8.21	6.83	5.22	4.64	4.35



ARROW-HART SUBMINIATURE SWITCHES

ADAPT-A-SWITCHES

Ideal for business machines and computers. Lighted pushbutton switches designed to offer up to 25,344 combinations with 31 components listed below. Rated: 5A, 125VAC; 2A, 250VAC; 5A, 28VDC. 10 microamp minimum for dry circuit, 50 mV. Av. shpg. wt. ¼ oz.



RECTANGULAR ACTUATOR INDICATORS

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-Up
717-1080	83501	Rec. Momentary action	1.87	1.40	1.12	1.05
717-1083	83504	Rec. Alternate action	2.93	2.20	1.76	1.65
717-1081	83502	Square Momentary action	1.87	1.40	1.12	1.05
717-1084	83505	Square Alternate action	2.93	2.20	1.76	1.65
717-1082	83503	Round Momentary action	1.87	1.40	1.12	1.05
717-1085	83506	Round Alternate action	2.93	2.20	1.76	1.65

LENSES FOR ABOVE INDICATORS

Stock No.	Mfr's Type	Description	Stock No.	Mfr's Type	Description
717-1050	83500-70	Rect. white	717-1064	83500-84	Sq. yellow
717-1051	83500-71	Rect. red	717-1065	83500-85	Sq. amber
717-1052	83500-72	Rect. green	717-1066	83500-86	Sq. black
717-1053	83500-73	Rect. blue	717-1068	83500-90	Round white
717-1054	83500-74	Rect. yellow	717-1069	83500-91	Round red
717-1055	83500-75	Rect. amber	717-1070	83500-92	Round green
717-1056	83500-76	Rect. black	717-1071	83500-93	Round blue
717-1060	83500-80	Sq. white	717-1072	83500-94	Round yellow
717-1061	83500-81	Sq. red	717-1073	83500-95	Round amber
717-1062	83500-82	Sq. green	717-1074	83500-96	Round black
717-1063	83500-83	Sq. blue	.....	.....	.....

1-9.....**Each .30** **10-24**.....**Each .20**
25-99.....**Each .16** **100-Up**.....**Each .15**

CONTACT BLOCKS (*Silver plated contacts, †gold plated)

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-Up
717-0030	8500-30	Standard Duty*	2.00	1.50	1.20	1.13
717-0031	83600-30	Low Energy†	3.33	2.50	2.00	1.88

SNAP-ON BEZEL

717-1035	83500-46	Bright chrome	.27	.20	.16	.15

SNAP-ON CLIP TO CONVERT ANY ACTUATOR TO INDICATOR

717-1039	83500-51		.27	.20	.16	.15

717-0080. Mounting Wrench. For use in tightening molded nylon mounting nuts when installing Adapt-a-Switches. ¼ oz.....**1.33**

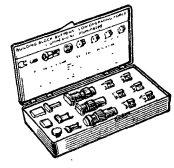
LAMPS (Sold in multiples of 10 only)

Stock No.	Mfr's Type	Volts	Amps	Base	Bulb Style	EACH 10-40	50-90	100-Up
749-9195	327	28	.04	Mid. Flanged	T-1¾	.61	.48	.39
749-9210	328	6	.20	Mid. Flanged	T-1¾	.48	.38	.31
749-9215	330	14	.08	Mid. Flanged	T-1¾	.83	.64	.52
749-9322	387	28	.04	Mid. Flanged	T-1¾	.71	.55	.45

ADAPT-A-SWITCH LIGHTED PUSHBUTTON SWITCH KIT

31 STOCK COMPONENTS BUILD 25,344 DIFFERENT VARIATIONS

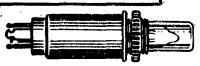
Everything you need to construct your own push buttons. No special tools are necessary. Actuators are either momentary or alternate action to meet circuit requirements. You can build up to 4-pole momentary and 3-pole alternate action push button switches. Included are: nine lenses, 3 round, 3 square, 3 rectangular; two momentary actuator indicators; one alternate actuator indicator: six contact blocks; one adapter for making any actuator an indicator only. Comes in attractive durable case, each component individually set. 6¾x1¼x3⅝".
717-1025. Shpg. wt. 5 oz...**Ea. 22.00** 2-Up..**16.70**



Switches: Toggle, 217-223, 225, 226, 228, 229—Pushbutton, 217, 218, 222-5, 227-9, 236, 238-242

ILLUMINATED SWITCHES

Illuminated Switches for Industry



GRAYHILL NEON AND INCANDESCENT SWITCHES

SERIES 40 LIGHTED PUSHBUTTON SWITCHES

Rated 115 VAC resistive, 1 amp. SPST, momentary contact. Low contact resistance. Voltage Breakdown, 1000 VAC. Insulation Resistance, 25,000 meg. Solder terminals, lamp and switch circuits. Mounting hole, 25/64". Lamp: neon, GE NE2-E or equiv.; incandescent, GE 1764 (20DC max.) or equiv. 1.85x.44" dia. Wt. 1 oz.

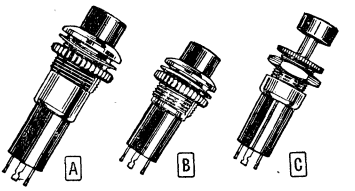
NEON LAMP TYPES

Stock No.	Mfr's Type	Contacts	Button Color	1-4	5-9	10-49	50-Up
801-0801	40-1	Normally open	Clear	2.94	2.58	2.45	1.84
801-0809	40-1	Normally open	Transparent Amber	2.94	2.58	2.45	1.84
801-0813	40-1	Normally open	Transparent Red	2.94	2.58	2.45	1.84
801-0805	40-1	Normally open	Frosted White	2.94	2.58	2.45	1.84
801-0840	40-2	Normally closed	Clear	3.24	2.84	2.70	2.02
801-0848	40-2	Normally closed	Transparent Amber	3.24	2.84	2.70	2.02
801-0852	40-2	Normally closed	Transparent Red	3.24	2.84	2.70	2.02
801-0844	40-2	Normally closed	Frosted White	3.24	2.84	2.70	2.02

INCANDESCENT LAMP TYPES

801-0901	40-100	Normally open	Clear	3.30	2.89	2.75	2.06
801-0923	40-100	Normally open	Transparent Amber	3.30	2.89	2.75	2.06
801-0927	40-100	Normally open	Transparent Red	3.30	2.89	2.75	2.06
801-0915	40-100	Normally open	Frosted White	3.30	2.89	2.75	2.06
801-0910	40-100	Normally open	Frosted Red	3.30	2.89	2.75	2.06
801-0905	40-100	Normally open	Frosted Green	3.30	2.89	2.75	2.06
801-0919	40-100	Normally open	Frosted Yellow	3.30	2.89	2.75	2.06
801-0951	40-102	Normally closed	Clear	3.60	3.16	3.00	2.25
801-0973	40-102	Normally closed	Transparent Amber	3.60	3.16	3.00	2.25
801-0977	40-102	Normally closed	Transparent Red	3.60	3.16	3.00	2.25
801-0965	40-102	Normally closed	Frosted White	3.60	3.16	3.00	2.25
801-0960	40-102	Normally closed	Frosted Red	3.60	3.16	3.00	2.25
801-0955	40-102	Normally closed	Frosted Green	3.60	3.16	3.00	2.25
801-0969	40-102	Normally closed	Frosted Yellow	3.60	3.16	3.00	2.25

ALTERNATE AND MOMENTARY ACTION PUSHBUTTON SWITCHES



Alternate action switches, except Type 46-125, which is momentary contact. All are SPST. Type 46-502 has standard mounting; Types 46-125 and 46-525 have bezel mounting. 115 VAC, 1/4 amp. 1000 VAC. Type 46-125, 1.554x0.625"; 46-502, 1.677x 0.375"; 46-525, 1.840x0.625". Av. shpg. wt. 2 oz.

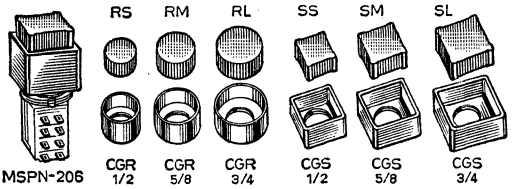
Stock No.	Type 46-	Fig.	Butt. Color	EACH 1-9	10-49	50-Up
801-1545	125R	B	Red	2.82	2.35	1.76
801-1540	125B	B	Black	2.82	2.35	1.76
801-1615	502R	C	Red	3.68	3.50	2.63
801-1610	502B	C	Black	3.68	3.50	2.63
801-1645	525R	A	Red	4.68	3.90	2.93
801-1640	525B	A	Black	4.68	3.90	2.93

ROWAN FC FUSEHOLDER, SWITCH AND PILOT LIGHT

115-volt, 60-Hz AC fuseholder, switch, and pilot light. Saves panel space, installation time and cost. Fully sintered silver-cadmium-oxide main-switch contacts have high arc resistance and extremely long life. Takes 6-amp quick or slow-lag 3AG fuse. Unit life: 50,000 cycles at 6 per minute. Use with Fast-on terminals. **FCA:** Separate circuits for main and pilot light. Main rated 6 amps. **FCB:** Same as FCA except one side of pilot light is common with main circuit. Mounts in 1/2" hole with two nuts. Suffix **F**—Plain Ferrule; **K**—Knurled Ferrule; **N**—Knurled Nut; **W**—Escutcheon requiring 3/4" dia. hole. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	EACH 1-4	5-9	10-99	100-499	500-999	1000-Up
565-8035	FCA-F	6.00	4.70	3.60	3.20	2.60	2.40
565-8039	FCA-K	6.00	4.70	3.60	3.20	2.60	2.40
565-8042	FCA-N	6.00	4.70	3.60	3.20	2.60	2.40
565-8057	FCA-W	6.23	4.88	3.75	3.35	2.75	2.55
565-8065	FCB-F	6.00	4.70	3.60	3.20	2.60	2.40
565-8069	FCB-K	6.00	4.70	3.60	3.20	2.60	2.40
565-8072	FCB-N	6.00	4.70	3.60	3.20	2.60	2.40
565-8087	FCB-W	6.00	4.70	3.60	3.35	2.75	2.55

ALCOSWITCH ILLUMINATED PUSHBUTTON AND ROCKER SWITCHES



MSPN ILLUMINATED PUSHBUTTON SWITCHES

Snap-action DPDT switches. Side terminals. Current rating 6, amps at 125 VAC, 3 amps at 250 VAC. Life: Over 20,000 operations. Black phenolic resin case. Solid-silver contacts. Mount in standard 15/32" hole. Order caps and lamps from tables below. ***Transparent caps available in Red, Yellow, Green, Amber, Blue, Clear. Specify Color when ordering—see How to Specify Color below.** Av. wt. 1 oz.

Stock No.	Type MSPN-	Action	EACH 1-4	5-9	10-24	25-49	50-Up
700-5514	206R	Momentary	5.28	4.80	3.26	2.88	2.40
700-5510	206N	Push on/off	5.28	4.80	3.36	2.88	2.40

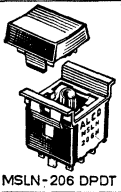
Stock No.	Mfr's Type	Description	PER PKG. OF 25 1-3	4-19	20-39
700-705X	RS	1/2" Round Cap*	2.75	2.03	1.30
700-704X	RM	5/8" Round Cap*	3.33	2.39	1.56
700-703X	RL	3/4" Round Cap*	4.12	3.10	2.32
700-716X	SS	1/2" Square Cap*	2.75	2.03	1.30
700-713X	SM	5/8" Square Cap*	3.33	2.39	1.56
700-711X	SL	3/4" Square Cap*	4.12	3.10	2.32

Stock No.	Type CG-	Chromed Guards Size	Style	Material	PER PKG. OF 25 1-3	4-19	20-39
700-0960	R-1/2	1/2"	Round	Brass	2.75	2.50	2.00
700-0961	R-5/8	5/8"	Round	Brass	3.56	3.00	2.50
700-0962	R-3/4	3/4"	Round	Brass	4.15	3.75	3.00
700-0964	S-1/2	1/2"	Square	Plastic	2.75	2.50	2.00
700-0965	S-5/8	5/8"	Square	Plastic	3.56	3.00	2.50
700-0966	S-3/4	3/4"	Square	Plastic	4.15	3.75	3.00

(LAMPS SOLD PER PKG. OF 10)

749-3087	379	Lamp: 6.3 V, 0.2 A	1-9. Ea. 8.90 10-Up. Ea. 6.40
749-3095	386	Lamp: 14 V, .08 A	1-9. Ea. 10.00 10-Up. Ea. 8.10
749-3099	388	Lamp: 28 V. .04 A	1-9. Ea. 10.10 10-Up. Ea. 8.20

MSLN ILLUMINATED ROCKER SWITCHES



MSLN-206 DPDT

New brilliance in a miniature DPDT switch that has a separate lamp circuit. Features convenient front panel lamp replacement. Entire switch housing snaps into .655x.728" hole. Rated 6 amps @ 125 VAC. ***Choice of 3 lens colors—Red, Black or Green; see How to Specify Color below.** †Momentary contact. Order lamps separately.

Stock No.	Type MSLN-	Action	EACH 1-9	10-24	25-49	50-99	100-499
700-542X	206N*	On-None-On	4.90	4.45	3.03	2.67	2.23
†700-544X	206R*†	None-On-On	5.25	4.75	3.23	2.85	2.38

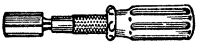
(LAMPS SOLD PER PKG. OF 10)

749-1500	378	Lamp: 6.3V, .200 A	1-9 Ea. 12.40 10-Up 10.10
749-1555	399	Lamp: 28.0V, .040 A	1-9 Ea. 10.10 10-Up 8.20

HOW TO SPECIFY COLOR

Allied Stock No. with an X suffix indicate a color choice and must be completed when ordering. To complete the Stock No. replace the X with the appropriate number code for color desired: **1—Green; 2—Blue; 3—Amber; 4—Clear or White; 5—Yellow; 6—Black; 9—Red.** For example, Stock No. 700-7051 is Alcoswitch Type RS transparent cap in Green color.

SWITCHCRAFT SWITCH WRENCHES

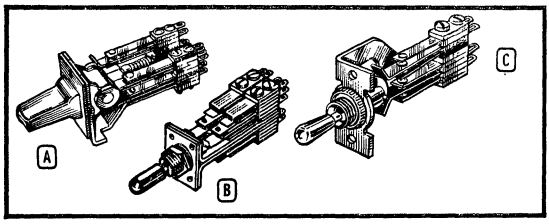


Fit knurled or milled-edge locknuts with toggle, lever and button switches and jacks. Adjustable sleeve. Wt., 10 oz.

Stock No.	Mfr's Type	Nut Size	EACH 1-9	10-24	25-49	50-99	100-Up
933-0107	A-1070	15/32"-32	6.00	4.50	4.13	3.75	3.00
933-0171	A-1071	1/4"-32	6.00	4.50	4.13	3.75	3.00

Switches: Lever, 218, 224-8, 232, 241—Rocker, 221, 227-9, 240—Lock, 222, 228—Slide, 223, 227

Illuminated Switches by SWITCHCRAFT® INC.



A MULTICOLOR-ILLUMINATED "LEVER-LITE" SWITCHES

Switch indicates each position in different illuminated colors. Nickel-silver springs. Fine-silver contacts rated 3 amps, 300 watts maximum, AC noninductive. Supplied with 6-volt lamp (28-volt lamp available on facing page). Mount in panels up to 3/32" thick. All are 2-position types, except *3-position types which have same contact form for both sections on each side. Series 25000 includes six color chips (red, green, amber, yellow, blue, white) replaceable in the field. Behind-panel size, 1 7/32x 39/64x2 1/4". Mount on 5/8" centers. Series 27000 has larger contoured lever and larger factory-installed color filters. On 2-position types, amber lights in "neutral" position, green lights in "down." On 3-position types, red lights in "up" position, amber in "neutral," green in "down." Behind-panel size, 1 7/32x 3/4x2 3/16". Mount on 3/4" centers. †N.O., center position "off." Contact forms on facing page. Shpg. wt., 3 oz.

SERIES 25000

Mfr's Type	Stock No. Locking Type	Stock No. Nonlocking Type	Action	Contact Form	EACH 1-9	10-24	25-49	50-99	100-Up
25201	933-7702	.....	SPST	1-A	3.88	2.91	2.67	2.43	1.94
25206	933-7710	933-7711	DPDT	2-C	4.84	3.63	3.33	3.03	2.42
25209	933-7716	933-7717	3PDT	3-C	5.56	4.17	3.82	3.48	2.78
*25304	933-7730	.....	SPST	1-A	4.40	3.30	3.03	2.75	2.20
*25306	933-7734	933-77 5	SPDT	1-C	4.84	3.63	3.33	3.03	2.42
*25308	933-7738	933-7739	DPST	2-A	5.36	4.02	3.69	3.35	2.68
*25312	933-7746	933-7747	DPDT	2-C	5.80	4.35	3.99	3.63	2.90

SERIES 27000

27206	933-7750	933-7751	DPDT	2-C	6.32	4.74	4.35	3.95	3.16
27212	933-7760	933-7761	4PDT	4-C	7.76	5.82	5.34	4.85	3.88
*27306	933-7770	.....	SPDT	1-C	6.32	4.74	4.35	3.95	3.16
*27307	933-7772	933-7773	SPDT†	1-C	6.44	4.83	4.43	4.03	3.22
*27312	933-7784	933-7785	DPDT	2-C	7.76	5.82	5.34	4.85	3.88
532	933-5932	Escutcheon Plate			.28	.21	.19	.18	.14

B "TELEVER" SWITCHES

Rugged telephone-type switches with "T-Beam" steel frame construction. Nylon rollers actuate nickel-silver springs, provide smooth switching action. Extra-long springs punched from special alloy ensure long, dependable life. Welded cross-bar palladium contacts rated 3 amps, 120 V AC noninductive, up to 3 amps, 300 watts maximum. All have tinned solder-lug terminals. Series 6000 is tapped for 3-48 mounting screws; standard telephone mounting centers, 1 7/32x1 3/16". Series 16000 has 1 5/32"-32 threaded mounting bushing. All have insulated black knob. 3-position types have same contact form for both sections on each side. Shpg. wt., 3 oz.

SERIES 6000 TWO-POSITION TYPES

6006	933-6706	.....	DPDT	2-C	4.44	3.33	3.05	2.78	2.22
60012	933-9211	933-9212	4PDT	4-C	5.92	4.44	4.07	3.70	2.96

SERIES 6000 THREE-POSITION TYPES

60312	933-9225	933-0226	DPDT	2-C	5.92	4.44	4.07	3.70	2.96
60324	933-9237	933-9236	4PDT	4-C	9.04	6.78	6.22	5.65	4.52
530	933-5936	Escutcheon Plate			.56	.42	.39	.35	.28

SERIES 16000 TWO-POSITION TYPES

16006	933-0956	933-0957	DPDT	2-C	4.64	3.48	3.19	2.90	2.32
160012	933-9512	933-9513	4PDT	4-C	6.32	4.74	4.35	3.95	3.16
160024	933-9524	933-9525	SPDT	8-C	9.24	6.93	6.35	5.78	4.62

SERIES 16000 THREE-POSITION TYPES

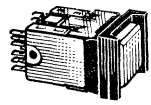
16038	933-7320	933-7321	SPDT	2-A	5.20	3.90	3.58	3.25	2.60
160312	933-9532	933-9532	DPDT	2-C	6.32	4.74	4.35	3.95	3.16
160324	933-9542	933-9543	4PDT	4-C	9.24	6.93	6.35	5.78	4.62

C "FEATHER-LEVER" SWITCHES

Miniature "Tini-Stack" switch stack of special nickel-silver springs with fine-silver contacts. 2 amps, 200 watts max., AC noninductive. Insulated black knob. Mount on 7/16" centers in 5/16" hole, or in panels up to 1/8" thick. *3-position types have same contact form for both sections on each side. †N.O., center position "off." 3 oz.

29203	933-7830	.....	SPDT	1-C	2.12	1.59	1.46	1.33	1.06
*29304	.....	933-7833	SPST	1-A	2.40	1.80	1.65	1.50	1.20
*29306	933-7836	.....	SPDT	1-C	2.72	2.04	1.87	1.70	1.36
*29307	933-7838	933-7839	SPDT†	1-C	2.76	2.07	1.90	1.73	1.38

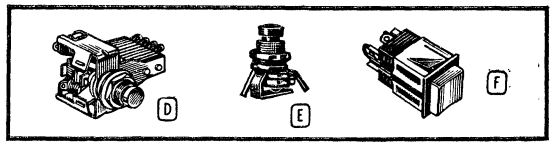
SERIES PL PUSH-LIGHT SWITCHES



"Push-Lite" switch is the first completely enclosed, lighted pushbutton switch which features long-life, highly-reliable leaf-spring switching. Standard pushbutton color is white. Molded crossbar palladium contacts rated at 2 amps, 200 watts, max; AC non-inductive load. Mount with clamp-type bracket, no hardware needed. Flange mounting requires 1"x.875" panel cutout. Barrier mounting requires 1 3/16"x.875" panel cutout. Depth behind panel only 1 3/4." "Push-Lite" switch accepts std. T-1 3/4 flange base lamps (not included) in either 6V, 28V or neon 115V. Use one lamp for single lamp type or two lamps of twin-lamp type when split-face lighting. Light dividers are used in lighting between twin-lamps.

MOUNTING BARRIERS (BLACK)

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-49	50-99	100-Up
933-3155	PL-102	End Barrier	.12	.09	.083	.075	.06
933-3160	PL-202	Center Barrier	.12	.09	.083	.075	.06



D ILLUMINATED "NF-LITE" PUSHBUTTON SWITCHES

Illuminated pushbutton switches indicate switching and circuit functions at a glance. Lighting circuit is independent of switching circuit. Fine-silver contacts rated 3 amps, 300 watts maximum, AC noninductive. Come with four color chips (red, amber, green, yellow) for changing color of pushbutton. Require 11/16" minimum, 1 5/16" maximum behind panel; mount in 3/8" hole in panels up to 1/4" thick. Less 6-volt or 28-volt lamp, lower right. 3 oz.

Stock No.	Mfr's Type	Action	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
933-6606	4106	DPDT	2-C	2.20	1.65	1.51	1.38	1.10
933-6609	4109	3PDT	3-C	2.84	2.13	1.95	1.78	1.42

E ILLUMINATED "LITTEL-LITE" PUSHBUTTON SWITCHES

Same as above, but illuminated pushbutton. Clear plastic button and shaft illuminated by a single 6 or 28 V lamp (less lamp, below). Rated at 3 amps, at 300 W maximum noninductive load. With four color chips (red, amber, green, yellow). Shpg. wt. 3 oz.

Stock No.	Mfr's Type	Action	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
933-5761	211S	SPST	1-A	1.80	1.35	1.24	1.13	.90
933-5763	213S	SPDT	1-C	2.12	1.59	1.46	1.33	1.06

F "UNISWITCH" ILLUMINATED/NON-ILLUMINATED SWITCHES

Low-cost momentary action pushbutton switches for computers, data processing, test and measuring devices, telephones, etc. *Illuminated (solder lug lighting terminals—takes P-2290 Lamp) or †non-illuminated. Only 11/16" square—mount in single panel cutout from panel front. Require 1 3/64 to 1 15/16" behind panel. "Adjusto-Clip" for instant "snap-lock" installation—may be set in any position for panels 3/64-17/64" thick. Bronze, silver-plated terminals. Phosphor bronze, silver-plated contactor. 250 mA., 30 W max., AC noninductive. SPST N.O. White. 2 oz. Lamp, 6V Bi-Pin, 2 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
933-2301	*LUS-05-1	1A	1.52	1.14	1.05	.95	.76
933-4150	†US-05-1	1A	1.20	.90	.83	.75	.60
933-3235	P-2290	Lamp	1.28	.96	.88	.80	.64

LAMPS FOR ILLUMINATED SWITCHES

CHICAGO MINIATURE. For all Switchcraft illuminated switches, including: "Little-Lite," "NF-Lite," "Lever-Lite." All take 6 or 28 V lamp. 2 oz.

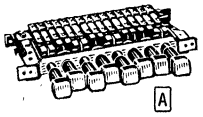
Stock No.	Type	Volts	PKG. OF 10
749-3376	1768	6	6.50
749-3058	335	28	11.00

LAMPS FOR SERIES 21000 AND 37000

Stock No.	Ind. No.	Desc.	Pkg. of 10 1-9	10-49
749-3051	328	6-volt	3.40	2.70
749-3048	327	28-volt	4.30	3.50

Switches: Rotary, 230-5—Snap, 235, 236—Thumbwheel (PC), 237—Ribbon/Mat/Foot, 239

SWITCHCRAFT® INC. Pushbutton Multi-Switches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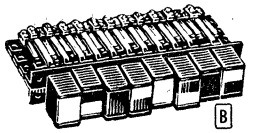

B

Pushbutton "Multi-Switch" components on this page may be used to assemble a complete "Multi-Switch" unit in the field. For a complete assembled unit you must order the proper frame and necessary stack switches for each station on the frame.

A SERIES 21000 ILLUMINATED FRAMES

Mounts on panels up to 3/8" thick, 3 5/16" depth behind panel. Buttons on 5/8" centers. Interlock function easily converts to non-lock or all-lock. Up-front lamp removal. Lights in actuated position. Supplied less stack switches. Av. wt. per station 2 oz.

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
933-7420	21200	2	8	14.18	9.57	8.77	7.98
933-7440	21400	4	11	23.96	16.17	14.82	13.48
933-7460	21600	6	15	33.73	22.77	20.87	18.98
933-7480	21800	8	17	43.56	29.40	26.95	24.50
933-9630	211000	10	21	53.78	36.30	33.28	30.25
933-9650	211200	12	24	63.56	42.90	39.33	35.75

LOCK-OUT BAR

Prevents operation of more than one button at a time. Mounts on back of 21000 Series frame. Supplied with mounting hardware.

933-2002	K-02	2	5	2.65	1.98	1.82	1.65
933-2004	K-04	4	5	2.88	2.16	1.98	1.80
933-2006	K-06	6	5	3.08	2.31	2.12	1.93
933-2008	K-08	8	5	3.32	2.49	2.28	2.08
933-2010	K-10	10	5	3.75	2.82	2.59	2.35
933-2012	K-12	12	5	4.20	3.15	2.89	2.63

B SERIES 37000 ILLUMINATED FRAMES

Only 3/4" h., 2 5/16" dp. behind panel. Illuminated buttons on 5/8" centers. Interlock with lock-out function standard. For other functions substitute for last digit of part no: non-lock (2), all-lock (3), push-to-lock, push-to-release (7). Less stack switches, lamps.

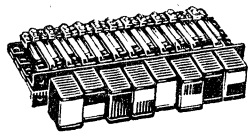
933-8321	37021	2	2	10.58	7.14	6.55	5.95
933-8341	37041	4	4	17.16	11.58	10.62	9.65
933-8361	37061	6	6	23.73	16.02	14.69	13.35
933-8381	37081	8	8	30.76	20.76	19.03	17.30
933-8401	37101	10	10	37.34	25.20	23.10	21.00
933-8421	37121	12	12	43.90	29.64	27.17	24.70

SWITCH STACKS FOR SERIES 21000, 35000, 37000

Rated 3A, 300 watts max., AC non-inductive load. Series 80P for switching circuit only. Order H83P (2 per station) for lighting circuit on Series 37000. *Series 21000. †Series 35000 and 37000.

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-24	25-49	50-Up
933-5625	71-P*	1-A	.71	.48	.44	.40
933-5633	72-P*	1-B	.71	.48	.44	.40
933-5645	73-P*	1-C	.93	.63	.58	.525
933-5657	74-P*	2-A	1.20	.81	.743	.675
933-5665	75-P*	2-B	1.20	.81	.743	.675
933-5678	76-P*	2-C	1.47	.99	.91	.83
933-5684	81P†	1-A	.71	.48	.44	.40
933-5685	82P†	1-B	.71	.48	.44	.40
933-5687	83P†	1-C	.93	.63	.58	.53
933-1424	H-83P†	1-C	1.29	.87	.80	.73

SERIES 37000 ILLUMINATED MULTI-SWITCH WITH DPDT CIRCUITRY



- Low, Silhouette Design
- 3 Lighting Arrangements

Multi-Switches similar to Series 35000 but have added feature of illuminated buttons for instantaneous identification of operation. Each pushbutton station serves as a color and legend coded panel indicator light. Front panel lamp replacement provides fast, efficient servicing with a minimum of effort. Switching mechanism may be wired for any of three separate lighting arrangements depending upon specific requirements: "L" type (button lights in "IN" position); "M" type (button lights in "OUT" position); "N" type (button lights in both "IN" and "OUT" positions simultaneously. Switches listed below are supplied with two "C" stack switches for each station. Switch frames are available less stack switches on special order. 3/4" high, 2 5/8" depth behind panel. Plungers mounted on 5/8" centers. All functions available. **Order below.**

INTERLOCK FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-4	5-9	10-24	25-49	50-Up
933-8235	37021K-1206	2	2	20.10	14.52	12.06	11.06	10.05
933-8241	37041K-1206	4	4	35.70	25.80	21.42	19.64	17.85
933-8261	37061K-1206	6	6	51.30	37.06	30.78	28.22	25.65
933-8281	37081K-1206	8	8	67.40	48.68	40.44	37.07	33.70
933-8290	37101K-1206	10	10	83.00	59.95	49.80	45.65	41.50
933-8294	37121K-1206	12	12	98.60	71.20	59.16	54.23	49.30

NON-LOCK FUNCTION

933-8322	37022-1206	2	2	20.10	14.52	12.06	11.06	10.05
933-8342	37042-1206	4	4	35.70	25.80	21.42	19.64	17.85
933-8362	37062-1206	6	6	51.30	37.06	30.78	28.22	25.65
933-8382	37082-1206	8	8	67.40	48.68	40.44	37.07	33.70
933-8402	37102-1206	10	10	83.00	59.95	49.80	45.65	41.50
933-8422	37122-1206	12	12	98.60	71.20	59.16	54.23	49.30

ALL-LOCK FUNCTION

933-9323	37023-1206	2	2	20.10	14.52	12.06	11.06	10.05
933-8343	37043-1206	4	4	35.70	25.80	21.42	19.64	17.85
933-8363	37063-1206	6	6	51.30	37.06	30.78	28.22	25.65
933-8383	37083-1206	8	8	67.40	48.68	40.44	37.07	33.70
933-8403	37103-1206	10	10	83.00	59.95	49.80	45.65	41.50
933-8423	37123-1206	12	12	98.60	71.20	59.16	54.23	49.30

PUSH-PUSH FUNCTION

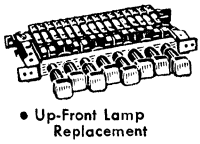
933-8327	37027-1206	2	2	20.10	14.52	12.06	11.06	10.05
933-8347	37047-1206	4	4	35.70	25.80	21.42	19.64	17.85
933-8367	37067-1206	6	6	51.30	37.06	30.78	28.22	25.65
933-8387	37087-1206	8	8	67.40	48.68	40.44	37.07	33.70
933-8407	37107-1206	10	10	83.00	59.95	49.80	45.65	41.50
933-8427	37127-1206	12	12	98.60	71.20	59.16	54.23	49.30

SOLENOID RELEASE

For Series 21000, 35000, 37000. Provides remote electrical release of depressed stations. For 115 VAC, 60 Hz. Series "J" for 21000 Series. Series "NJ" for 35000 and 37000 Series. With mounting bracket and screws. Shpg. wt. 4 oz.

Stock No.	Mfr's Type	Function	EACH 1-9	10-24	25-49	50-Up
933-1801	J-1	Interlock	8.45	5.70	5.23	4.75
933-1803	J-3	All-lock	8.90	6.00	5.50	5.00
933-2751	NJ-1	Interlock	8.90	6.00	5.50	5.00
933-2753	NJ-3	All-lock	8.90	6.00	5.50	5.00

SERIES 21000 ILLUMINATED MULTI-SWITCH WITH DPDT CIRCUITRY



- Up-Front Lamp Replacement
- Provides Front and Side Illumination

Quality-engineered illuminated "Multi-Switch" features positive-action switching for longevity as well as reliable service. Modern square button design boasts human-engineered styling for easy and sure operation. Provides both front and side illumination for extreme visibility. Knurled retaining collar assures quick and effortless up-front lamp replacement. Each station features DPDT circuitry for a wide variety of military, industrial and consumer switching applications. Special light-diffusing jeweled apparatus provides even distribution of illumination in quiet, pleasing tones. Push-button selectors light in "in" position for instantaneous indication of operating functions. "M" and "N" type lighting available on special order. Function and circuit changes in switching apparatus can be facilitated easily in the field. Interlock function quickly convert to non-lock as well as all-lock functions without extensive modification or adjustment. Entire unit mounts on panels up to 3/8" thick with 3 5/16" depth behind panel. Buttons mounted on 5/8" centers. With two "C" stack switches per station.

INTERLOCK FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-4	5-9	10-24	25-49	50-Up
933-7410	21200K-506	2	8	23.45	16.94	14.07	12.90	11.73
933-7435	21400K-506	4	11	38.95	28.13	23.37	21.42	19.48
933-7454	21600K-506	6	15	54.40	39.29	32.64	29.92	27.20
933-7474	21800K-506	8	17	69.95	50.52	41.97	38.47	34.98
933-9625	211000K-506	10	21	86.20	62.26	51.72	47.41	43.10
933-9645	211200K-506	12	24	94.05	73.63	61.17	56.07	50.98

PUSH-TO-LOCK-PUSH-TO-RELEASE FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-4	5-9	10-24	25-49	50-Up
933-7424	21207-506	2	8	23.45	16.04	13.32	12.21	11.10
933-7444	21407-506	4	11	38.95	28.13	23.37	21.42	19.48
933-7464	21607-506	6	15	54.40	40.16	33.36	30.58	27.80
933-7484	21807-506	8	17	69.95	52.29	43.44	39.82	36.20
933-9633	211007-506	10	21	86.20	64.74	53.79	49.31	44.83
933-9655	211207-506	12	24	94.05	76.84	63.84	58.52	53.20

Make Allied Electronics your one complete source for all your electronics needs. You get fast service, prompt handling and factory OEM prices. Simply contact the Allied Electronics facility nearest you. Complete list of addresses on page 3.

Switches: Toggle, 217-223, 225, 226, 228, 229—Pushbutton, 217, 218, 222-5, 227-9, 236, 238-242

Circuit Breakers by Wood Electric

SINGLE-POLE THERMAL TYPES

MODEL 507 MILITARY TYPE

Critically designed to meet the requirements of MIL-C-5809D and Drawing MS25244 for AC and DC circuits. Interrupts over 2000 amps. Maximum operating voltages are 250 volts AC and 32 volts DC. Units carry indefinitely 115% of rated load with ultimate trip at 138%. Trip time at 200% is approx. 25 seconds. Size, 1¾x¾x1". Shpg. wt., 1½ oz.

Stock No.	Mfr's Type	Amps	EACH 1-4	5-9	10-24	25-99	100-Up
989-6505	507-205-101	5	9.20	8.10	6.75	5.85	5.18
989-6524	507-507-101	7.5	9.20	8.10	6.75	5.85	5.18
989-6507	507-210-101	10	9.20	8.10	6.75	5.85	5.18
989-6510	507-215-101	15	9.20	8.10	6.75	5.85	5.18
989-6512	507-220-101	20	9.20	8.10	6.75	5.85	5.18
989-6514	507-225-101	25	9.20	8.10	6.75	5.85	5.18
989-6516	507-230-101	30	9.20	8.10	6.75	5.85	5.18
989-6518	507-235-101	35	9.20	8.10	6.75	5.85	5.18
989-6520	507-240-101	40	9.20	8.10	6.75	5.85	5.18
989-6522	507-250-101	50	9.20	8.10	6.75	5.85	5.18

MODEL 112 TOGGLE TYPE

Combination switch and circuit breaker. Carries 100% of rated load indefinitely, with ultimate trip at 135%. Tripping time at 200%, 3 sec. Interruption, over 3000 amps. For 250 VAC, 32 VDC. 2x¾x1¼". Shpg. wt., 2 oz.

989-6130	*112-205-101*	*5*	5.30	4.68	3.90	3.38	2.99
989-6154	112-507-101	7.5	5.30	4.68	3.90	3.38	2.99
989-6133	*112-210-101*	*10*	5.30	4.68	3.90	3.38	2.99
989-6136	*112-215-101*	*15*	5.30	4.68	3.90	3.38	2.99
989-6139	112-220-101	20	5.30	4.68	3.90	3.38	2.99
989-6142	112-225-101	25	5.30	4.68	3.90	3.38	2.99
989-6145	112-230-101	30	5.30	4.68	3.90	3.38	2.99
989-6148	112-235-101	35	5.30	4.68	3.90	3.38	2.99
989-6151	112-240-101	40	5.30	4.68	3.90	3.38	2.99
989-6152	112-250-101	50	5.30	4.68	3.90	3.38	2.99

MODEL 109 PUSH-PULL TYPE

Features push-pull button for opening or closing circuits. For 250 VAC, 32 VDC. Carries 100% rated load indefinitely, trips at 135%. Trip time at 200%, 12 sec. Interruption, over 5000 amps. 2x¾x1¼". Wt., 2 oz.

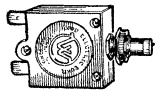
Stock No.	Mfr's Type	Amps	EACH 1-4	5-9	10-24	25-99	100-Up
989-6063	109-205-101	5	5.00	4.41	3.68	3.19	2.83
989-6090	109-507-101	7.5	5.00	4.41	3.68	3.19	2.83
989-6066	109-210-101	10	5.00	4.41	3.68	3.19	2.83
989-6069	109-215-101	15	5.00	4.41	3.68	3.19	2.83
989-6072	109-220-101	20	5.00	4.41	3.68	3.19	2.83
989-6075	109-225-101	25	5.00	4.41	3.68	3.19	2.83
989-6078	109-230-101	30	5.00	4.41	3.68	3.19	2.83
989-6081	109-235-101	35	5.00	4.41	3.68	3.19	2.83
989-6084	109-240-101	40	5.00	4.41	3.68	3.19	2.83
989-6087	109-250-101	50	5.00	4.41	3.68	3.19	2.83

MODEL 111 PUSH-PULL TYPE

Features same specifications as Model 109 above, but with faster trip time at 200% of only 1 second. Interruption over 100 A. 2 oz.

989-6116	111-201-101	1	10.80	9.50	7.92	6.86	6.07
989-6117	111-202-101	2	10.80	9.50	7.92	6.86	6.07
989-6118	111-203-101	3	10.80	9.50	7.92	6.86	6.07
989-6119	111-204-101	4	10.80	9.50	7.92	6.86	6.07

MODEL 374 PUSH-TO-RESET TYPE



For economical low current protection. Button extends to indicate overload. Operates to 250 VAC, 32 VDC. Carries 100% of rated load, with ultimate trip of 135%. Trip time, 25 seconds at 200%. Interruption over 1000%. Size, 1⅜x1 1/16x1⅜". Shpg. wt., 1½ oz.

989-6486	*374-201-101*	*1*	3.08	2.77	2.31	2.00	1.77
989-6487	*374-202-101*	*2*	3.08	2.77	2.31	2.00	1.77
989-6488	*374-203-101*	*3*	3.08	2.77	2.31	2.00	1.77
989-6489	374-204-101	4	3.08	2.77	2.31	2.00	1.77

MODEL 375 PUSH-TO-RESET TYPE

Same specifications as above, but with faster trip time of only 12 seconds at 200% and will interrupt 300 amps. Wt., 1½ oz.

989-6490	*375-205-101*	*5*	1.90	1.71	1.43	1.24	1.09
989-6491	375-207-101	7	1.90	1.71	1.43	1.24	1.09
989-6492	*375-210-101*	*10*	1.90	1.71	1.43	1.24	1.09
989-6496	375-215-101	15	1.90	1.71	1.43	1.24	1.09
989-6501	375-220-101	20	1.90	1.71	1.43	1.24	1.09

MAGNETIC TYPES

MODEL 130 SINGLE-POLE DC TYPE

For up to 50 VDC. Includes switch for aux. circuit. Carries 100% of rated load indefinitely, with ultimate trip at 120%. Trip time at 200%, approximately 15 milliseconds. Interrupts over 2000 amps at 50 volts DC. Size, ¾x2x2½". Shpg. wt., 4½ oz.

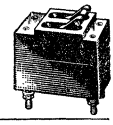
Stock No.	Mfr's Type	Amps	EACH 1-4	5-9	10-24	25-99	100-Up
989-6258	130-201-101	1	10.62	9.38	7.82	6.77	5.99
989-6259	130-202-101	2	10.62	9.38	7.82	6.77	5.99
989-6260	130-203-101	3	10.62	9.38	7.82	6.77	5.99
989-6261	130-204-101	4	10.62	9.38	7.82	6.77	5.99
989-6262	130-205-101	5	10.62	9.38	7.82	6.77	5.99
989-6264	130-207-101	7	10.62	9.38	7.82	6.77	5.99
989-6267	130-210-101	10	10.62	9.38	7.82	6.77	5.99
989-6273	130-215-101	15	10.62	9.38	7.82	6.77	5.99
989-6279	130-220-101	20	10.62	9.38	7.82	6.77	5.99
989-6285	130-225-101	25	10.62	9.38	7.82	6.77	5.99
989-6290	130-230-101	30	10.62	9.38	7.82	6.77	5.99
989-6295	130-235-101	35	10.62	9.38	7.82	6.77	5.99
989-6300	130-240-101	40	10.62	9.38	7.82	6.77	5.99
989-6310	130-250-101	50	10.62	9.38	7.82	6.77	5.99

MODEL 122 SINGLE-POLE AC TYPE

(Not illustrated.) Similar to Model 130 above, except no auxiliary switch. Designed for 60 Hz AC, up to 250 volts. Will carry 100% of rated load indefinitely, with ultimate trip at 125%. Trip time at 200% is approximately 5 seconds. Interrupts over 1000 amps at 250 volts AC. Size, ¾x2x2½". Shpg. wt., 4½ oz.

989-6179	122-201-101	1	8.16	7.20	6.00	5.20	4.60
989-6180	122-202-101	2	8.16	7.20	6.00	5.20	4.60
989-6181	122-203-101	3	8.16	7.20	6.00	5.20	4.60
989-6182	122-204-101	4	8.16	7.20	6.00	5.20	4.60
989-6183	122-205-101	5	8.16	7.20	6.00	5.20	4.60
989-6185	122-207-101	7	8.16	7.20	6.00	5.20	4.60
989-6188	122-210-101	10	8.16	7.20	6.00	5.20	4.60
989-6193	122-215-101	15	8.16	7.20	6.00	5.20	4.60
989-6198	122-220-101	20	8.16	7.20	6.00	5.20	4.60
989-6204	122-225-101	25	8.16	7.20	6.00	5.20	4.60
989-6210	122-230-101	30	8.16	7.20	6.00	5.20	4.60
989-6215	122-235-101	35	8.16	7.20	6.00	5.20	4.60
989-6221	122-240-101	40	8.16	7.20	6.00	5.20	4.60
989-6232	122-250-101	50	8.16	7.20	6.00	5.20	4.60

MODEL 190 TWO-POLE AC TYPE



For use up to 250 volts, 60 Hz AC. Both poles are interlocked and operate simultaneously. Carries 100% of rated load indefinitely, ultimate trip at 125%. Trip time at 200%, approx. 5 seconds. Interrupts over 1000 amps at 250 volts. 1½x2x2½". Wt., 9 oz.

Stock No.	Mfr's Type	Amps	EACH 1-4	5-9	10-24	25-99	100-Up
989-6336	190-201-101	1	21.12	18.63	15.53	13.46	11.90
989-6337	190-202-101	2	21.12	18.63	15.53	13.46	11.90
989-6338	190-203-101	3	21.12	18.63	15.53	13.46	11.90
989-6339	190-204-101	4	21.12	18.63	15.53	13.46	11.90
989-6340	190-205-101	5	21.12	18.63	15.53	13.46	11.90
989-6343	190-207-101	7	21.12	18.63	15.53	13.46	11.90
989-6346	190-210-101	10	21.12	18.63	15.53	13.46	11.90
989-6351	190-215-101	15	21.12	18.63	15.53	13.46	11.90
989-6356	190-220-101	20	21.12	18.63	15.53	13.46	11.90
989-6361	190-225-101	25	21.12	18.63	15.53	13.46	11.90
989-6366	190-230-101	30	21.12	18.63	15.53	13.46	11.90
989-6371	190-235-101	35	21.12	18.63	15.53	13.46	11.90
989-6376	190-240-101	40	21.12	18.63	15.53	13.46	11.90
989-6386	190-250-101	50	21.12	18.63	15.53	13.46	11.90

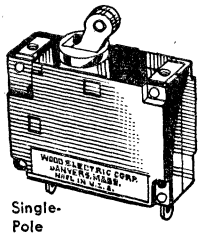
MODEL 220 THREE-POLE AC TYPE

For use up to 250 volts, 60 Hz AC. All three poles are interlocked and operate simultaneously. Carries 100% rated load indefinitely, with ultimate trip at 125%. Trip time; 200%, 5 sec. Interrupts over 1000 amps at 250 V. 2 9/32x2x2½". Shpg. wt., 14 oz.

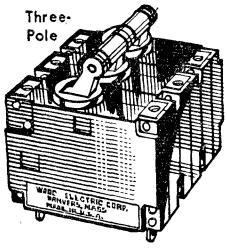
989-6411	220-201-101	1	32.60	28.71	23.93	20.74	18.34
989-6412	220-202-101	2	32.60	28.71	23.93	20.74	18.34
989-6413	220-203-101	3	32.60	28.71	23.93	20.74	18.34
989-6414	220-204-101	4	32.60	28.71	23.93	20.74	18.34
989-6415	220-205-101	5	32.60	28.71	23.93	20.74	18.34
989-6417	220-207-101	7	32.60	28.71	23.93	20.74	18.34
989-6420	220-210-101	10	32.60	28.71	23.93	20.74	18.34
989-6425	220-215-101	15	32.60	28.71	23.93	20.74	18.34
989-6430	220-220-101	20	32.60	28.71	23.93	20.74	18.34
989-6435	220-225-101	25	32.60	28.71	23.93	20.74	18.34
989-6440	220-230-101	30	32.60	28.71	23.93	20.74	18.34
989-6445	220-235-101	35	32.60	28.71	23.93	20.74	18.34
989-6450	220-240-101	40	32.60	28.71	23.93	20.74	18.34
989-6460	220-250-101	50	32.60	28.71	23.93	20.74	18.34

Wood and Heinemann Circuit Breakers

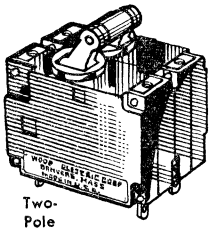
WOOD MINI-MAG HYDRAULIC-MAGNETIC CIRCUIT-BREAKERS



Single-Pole



Three-Pole



Two-Pole

Compact, lightweight, ruggedly-constructed units designed to fully protect circuits carrying up to 30 amperes at up to 250 volts, 60 Hz AC. They are accurately calibrated to carry 100% of rated load and to trip at between 101% and 125% of load. Trip-timing range at 200% of rated load is from 2 to 20 seconds.

In operation, a spring-loaded iron piston sealed in a silicone-fluid-filled nonmagnetic metal tube is energized by the load current, attracting the armature and opening the breaker contacts. The fluid produces a time-delay on moderate overloads. On heavy overloads the piston moves virtually instantaneously to give immediate circuit interruption. Operation is unaffected by ambient conditions. Terminals accept soldered, snap-on, crimped, or screw connections.

Humidity Resistance, meets MIL-STD-202 and MIL-STD-170. Dielectric Strength, 1100 VDC. Reset Time, instantaneous. Voltage Drop, 1.5 volts at 1 amp or more. Shock and Vibration, tested per MIL-STD-202. Operating Temperature, −40°C to +85°C. Insulation Resistance, 100 megs at 500 VDC. All parts fungus resistant. 2¼x2x1½". Av. wt. 1 oz.

TYPE 23001 BREAKER CAPS. For color coding

989-6690. Black **989-6691.** Brown
989-6692. Gray **989-6693.** Red
989-6694. Orange **989-6695.** Yel.
989-6696. Green **989-6697.** Blue
989-6698. White

1-9 ..... Each .08
10-24 ..... Each .07
25-99 ..... Each .06

SINGLE-POLE

Stock No.	Mfr's Type	Amps	EACH 1-4	5-9	10-25	26-99	100-Up
989-6528	511-201-101	1	6.46	5.38	4.49	3.89	3.44
989-6529	511-202-101	2	6.46	5.38	4.49	3.89	3.44
989-6530	511-203-101	3	6.46	5.38	4.49	3.89	3.44
989-6531	511-204-101	4	6.46	5.38	4.49	3.89	3.44
989-6532	511-205-101	5	6.46	5.38	4.49	3.89	3.44
989-6534	511-207-101	7	6.46	5.38	4.49	3.89	3.44
989-6537	511-210-101	10	6.46	5.38	4.49	3.89	3.44
989-6541	511-215-101	15	6.46	5.38	4.49	3.89	3.44
989-6546	511-220-101	20	6.46	5.38	4.49	3.89	3.44
989-6551	511-225-101	25	6.46	5.38	4.49	3.89	3.44
989-6556	511-230-101	30	6.46	5.38	4.49	3.89	3.44

TWO-POLE

989-6582	518-201-101	1	16.82	14.02	11.09	10.13	8.96
989-6583	518-202-101	2	16.82	14.02	11.09	10.13	8.96
989-6584	518-203-101	3	16.82	14.02	11.09	10.13	8.96
989-6585	518-204-101	4	16.82	14.02	11.09	10.13	8.96
989-6586	518-205-101	5	16.82	14.02	11.09	10.13	8.96
989-6588	518-207-101	7	16.82	14.02	11.09	10.13	8.96
989-6591	518-210-101	10	16.82	14.02	11.09	10.13	8.96
989-6596	518-215-101	15	16.82	14.02	11.09	10.13	8.96
989-6601	518-220-101	20	16.82	14.02	11.09	10.13	8.96
989-6606	518-225-101	25	16.82	14.02	11.09	10.13	8.96
989-6611	518-230-101	30	16.82	14.02	11.09	10.13	8.96

THREE-POLE

989-6637	525-201-101	1	25.04	22.09	18.41	15.95	14.11
989-6638	525-202-101	2	25.04	22.09	18.41	15.95	14.11
989-6639	525-203-101	3	25.04	22.09	18.41	15.95	14.11
989-6640	525-204-101	4	25.04	22.09	18.41	15.95	14.11
989-6641	525-205-101	5	25.04	22.09	18.41	15.95	14.11
989-6643	525-207-101	7	25.04	22.09	18.41	15.95	14.11
989-6646	525-210-101	10	25.04	22.09	18.41	15.95	14.11
989-6651	525-215-101	15	25.04	22.09	18.41	15.95	14.11
989-6656	525-220-101	20	25.04	22.09	18.41	15.95	14.11
989-6661	525-225-101	25	25.04	22.09	18.41	15.95	14.11
989-6666	525-230-101	30	25.04	22.09	18.41	15.95	14.11

HEINEMANN HYDRAULIC-MAGNETIC CIRCUIT BREAKERS

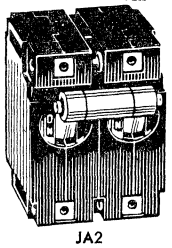
AM1

Dimensions in Inches	H	W	D
AM1	2.53	0.76	2.00
JA2	2.00	1.50	1.84
SM3	1.50	0.63	1.38
SM333	1.50	1.88	1.38

SERIES AM CIRCUIT BREAKERS—CURVE 2

Trip at 125% of rated load. Temp. stable, fungus and moisture resistant. Typical time delay at 200% is 2-20 sec. *With aux. switch for time delay; †without aux switch. **To order, insert Amperage in place of XX in Stock No.** Ex.: 812-00XX becomes 812-0001 for Type AM1-A2. Wt. 2 oz.

Stock No.	Mfr's Type	No. Poles	Volts	Amps	EACH 1-9	10-24	50-99	100-Up
812-02XX	AM1-B2	1	65DC*	Specify 1, 3, 5, 10, 20 30 or 50	9.52	6.17	5.60	5.04
812-03XX	AM1-B3	1	65DC†		7.91	5.12	4.65	4.19
812-00XX	AM1-A2	1	250AC 60Hz*		9.52	6.17	5.60	5.04
812-01XX	AM1-A3	1	250AC 60Hz†		7.91	5.12	4.65	4.19
812-05XX	AM2-B3	2	65DC		21.08	13.64	12.40	11.16
812-04XX	AM2-A3	2	250AC 60Hz		21.10	13.64	12.40	11.16
812-06XX	AM3-A3	3	250AC 60Hz		33.01	21.34	19.40	17.46
812-07XX	AM3-C3	3	250AC 400Hz		40.67	26.29	23.90	21.51

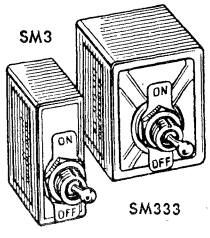


JA2

SERIES JA CIRCUIT BREAKERS—CURVE 2

Excellent where equipment size and weight must be kept as small as possible. Temperature stable, always carries 100% of rated load. Inherent fungus and moisture resistant. Tested for shock and vibration per MIL-STD-202 req. Guaranteed to trip at 125% load. Typical time delay at 200% of rated load is 2-20 sec. Terminals accept crimp-type, screw-type or soldered connections. Perfect where a large number of circuits centrally controlled from a small, consolidated panel are required. Special pivot action cleans contacts every time they are opened or closed. **See Order Info. above.** 4 oz.

Stock No.	Mfr's Type	No. Poles	Volts	Amps	EACH 1-9	10-49	50-99	100-Up
812-09XX	JA1-B3	1	50DC	Specify 1, 3, 5, 10, 20, 30	7.03	4.54	4.13	3.71
812-08XX	JA1-A3	1	250AC 60Hz		7.03	4.54	4.13	3.71
812-11XX	JA2-B3	2	50DC		18.25	11.79	10.73	9.65
812-10XX	JA2-A3	2	250AC 60Hz		18.25	11.79	10.73	9.65
812-12XX	JA3-A3	3	250AC 60Hz		28.76	18.59	16.90	15.21
812-13XX	JA3-C3	3	250AC 400Hz		34.13	22.05	20.05	18.05



SM333

SERIES SM SUBMINIATURE MILITARY CIRCUIT BREAKERS—CURVE 1

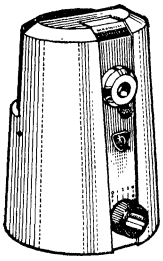
Fully sealed, lightweight, subminiature. Engineered for severe environmental service. Designed to MIL-C-39019 and MIL-STD-242 requirements. Easy installation, single hole mounting for single- or multi-pole models. Fully magnetic operation, guaranteed to hold rated load indefinitely—at any temperature. Typical time delay at 125% is 5-40 seconds. Solder-type terminals. Approved by NASA for aerospace applications. **See Order Info. in first listing above.** Av. wt. 1 oz.

812-15XX	SM3	1	50DC	Specify 1, 3, 5, 10, 15 or 20 amps & complete Stock No.	22.17	14.33	13.03	11.72
812-16XX	SM3	1	250AC 60Hz		22.17	14.33	13.03	11.72
812-17XX	SM33	2	50DC		40.23	25.99	23.63	21.26
812-18XX	SM33	2	250AC 60Hz		40.23	25.99	23.63	21.26
812-19XX	SM333	3	250AC 60Hz		57.36	37.07	33.70	30.33
812-20XX	SM333	3	250AC 400Hz		57.36	37.07	33.70	30.33

See Fuses on Pages 265-268

Fiber Optics and Flashtubes

AMERICAN OPTICAL FIBER OPTICS



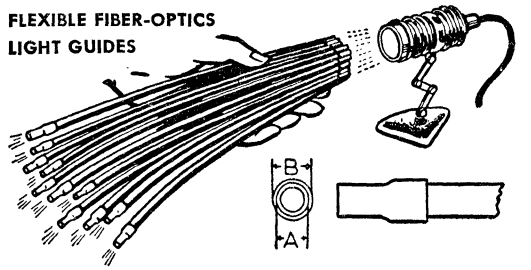
FIBER OPTIC ILLUMINATOR

MODEL II-80. For use with AO Light Guides. Provides an intense yet cool source of illumination for a wide variety of fiber optic applications—readouts, micro light pipes, optical displays and more. The quartz-iodine lamp provides a focused source of intense light for the light guides listed at right. Illuminator has a 4-level light switch and an efficient cooling fan. Lamp life ranges from 50 hours at the high setting to 500 hours at low setting. 7⅜x5⅛". 80 watts. 110-120 V, 60 Hz.

725-0500.....142.73

725-0400. EJY Replacement Bulb.....6.63

FLEXIBLE FIBER-OPTICS LIGHT GUIDES



Flexible light guides transmit light over a flexible path. Consist of bundles of optical fibers cemented and polished at each end. Guides have stainless steel end tips; encased in PVC sheath. Transmit light through visible and near infrared spectrum to a wave-length about 1.5 microns. Av. shpg. wt. 2 oz.

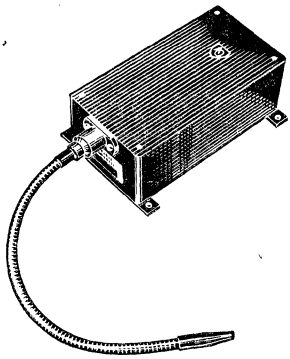
Stock No.	Type No.	Description	EACH
725-1100	LGM-1-A	Adapter for LGM-1 Light Guide	1.78
725-1200	LGM-2-A	Adapter for LGM-2 Light Guide	1.50
725-1300	LGM-3-A	Adapter for LGM-3 Light Guide	1.50
725-1500	LGM-5-A	Adapter for LGM-5 Light Guide	1.50

Stock No.	Mfr's Type	Min. Rad. of Bend	Bundle Dia.	A ±.003	B ±.004	Lgth.	EACH
725-1112	LGM-1	⅜"	.020"	.032"	.032"	12"	5.34
725-1124	LGM-1	⅜"	.020"	.032"	.032"	24"	7.13
725-1212	LGM-2	⅝"	.062"	.110"	.160"	12"	14.47
725-1224	LGM-2	⅝"	.062"	.110"	.160"	24"	15.59
725-1236	LGM-2	⅝"	.062"	.110"	.160"	36"	16.70
725-1248	LGM-2	⅝"	.062"	.110"	.160"	48"	17.81
725-1272	LGM-2	⅝"	.062"	.110"	.160"	72"	20.04
725-1312	LGM-3	¾"	.125"	.169"	.250"	12"	16.70
725-1324	LGM-3	¾"	.125"	.169"	.250"	24"	20.04
725-1336	LGM-3	¾"	.125"	.169"	.250"	36"	23.38
725-1348	LGM-3	¾"	.125"	.169"	.250"	48"	26.72
725-1372	LGM-3	¾"	.125"	.169"	.250"	72"	33.40
725-1512	LGM-5	1½"	.250"	.316"	.403"	12"	23.38
725-1524	LGM-5	1½"	.250"	.316"	.403"	24"	32.86
725-1536	LGM-5	1½"	.250"	.316"	.403"	36"	42.33
725-1560	LGM-5	1½"	.250"	.316"	.403"	60"	61.27
725-1572	LGM-5	1½"	.250"	.316"	.403"	72"	70.72

LIGHT SWITCH FOR REMOTE SENSING

A photoelectric sensing and relay system combined with a fiber optic probe for remote, non-contact sensing. Can be used conveniently for counting, code reading, proximity sensing, motion detection. Flexible fiber optic probe means easy installation into remote locations. Up to 10 million operations, 500 counts per minute, SPST contact. 24" light guide in goose-neck sheathing. 110 VAC, 50/60 Hz.

725-2000.....125.25

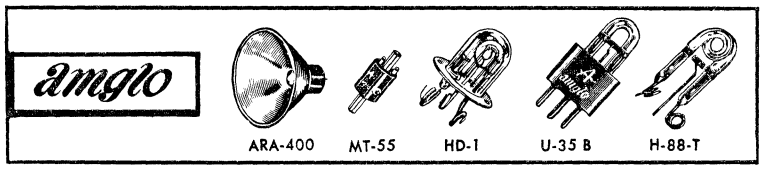


LIGHT TRANSMITTING CLAD ROD. Glass core with refraction index of 1.62 and glass cladding having an index of 1.52. Can be bent in Bunsen flame. Should not be bent to radius of under 2.5".

725-0316. Type CR-1-6. ⅛" dia. x 6". Wt., 2 oz.....2.55

725-0325. Type CR-1-12. ⅛" dia. x 12". Wt. 2 oz.....3.62

AMGLO FLASHTUBES AND ACCESSORIES FOR INDUSTRIAL USE



STROBOSCOPIC FLASHTUBES

U-35 Series Flashtubes. Stroboscopic tubes, non-polarized connections. 300-600 VDC. 20 joules/flash. Av. wt. 5 oz.

726-0900. U-35-B. With trigger band, base mount. 1-4..Ea. 10.27 5-Up.....Ea. 9.35

726-0920. U-35-T. With trigger band, no base. 1-4.....Ea. 9.66 5-Up.....Ea. 8.70

726-0930. U-35-0. No trigger band or base. 1-4.....Ea. 9.05 5-Up.....Ea. 8.15

726-0910. U-35-BS. Base, trigger band, silver stripe to facilitate triggering. 1-4.....Ea. 10.82 5-Up.....Ea. 9.75

HEAVY-DUTY FLASHTUBES

H-88 Series Flashtubes. Heavy-duty signal. stroboscopic, or photographic use. 8 oz.

726-0440. H-88-T. With trigger band. 1-4.....Ea. 11.71 5-Up.....Ea. 10.55

726-0450. H-88-0. Less trigger band. 1-4.....Ea. 11.10 5-Up.....Ea. 10.00

726-0430. H-88-B4. 4-pin plug-in base. 1-4.....Ea. 15.00 5-Up.....Ea. 13.50

726-0300. CE 525-45C. 525 μF discharge capacitor. 450 V, 53 joules storage. 1-4.....Ea. 16.11 5-Up.....Ea. 14.50

ENGINEERING MANUAL

726-0100. Flashtube Engineering Manual Vol. II. Design and theory of strobe-light circuits, 20 pgs. 1½ oz.....2.23

REFLECTOR ASSEMBLIES

ARA-400-SD-H-88-P4. Reflector assembly for use in stroboscopes, wheel and balancing equipment. Semi-diffused flat field surface for photographic applications. Max. input 80 joules. Operates at 350-600 volts. H-88 flashtube adjusted to 50° beam spread. Repetitive flashing: 60 per minute, 10 joules per flash; 100 per second, .1 joule per flash. Size, 4⁷⁄₃₂" diameter by 3⅞" deep. Shpg. wt. 6 oz.

726-0210. 1-4..Ea. 23.33 5-Up..Ea. 21.00

ARA-400-S-H-88-TP4. As above, with trigger coil; specular finish for applications where "hot spot" is required. Wt. 4 oz.

726-0220. 1-4..Ea. 26.65 5-Up..Ea. 24.00

ARA-400-S-H-88-P4. As above, specular finish; less trigger coil. Wt. 3 oz.

726-0230. 1-4..Ea. 23.33 5-Up..Ea. 21.00

ARA-300-SD-H-TP4. 3" diameter reflector assembly with H-88 flashtube adjusted to 50° beam spread. Trigger coil. For use in wheel balancer equipment. Max. input, 80 joules. Operates 350-600 volts. Repetitive flashing: 60 per minute, 10 joules/flash 100 per second, .1 joules/flash. 6 oz.

726-0200. 1-4..Ea. 26.65 5-Up..Ea. 24.00

IRON CORE TRANSFORMER

MT-55. Iron core trigger transformer for use with HD flashtubes. Output, 24 kV. (discharge 400 V at .5 μF); 12 kV (discharge 180 V at .2 μF). ⅞" diameter, 2" long. 4-lead output. Wt., 1½ oz.

726-0600. 1-4....Ea. 6.60 5-Up...Ea. 5.95

AIR CORE TRANSFORMER

ST-25. Air-core trigger transformer for H-88, U-35 flashtubes. Output: 7 kV (discharge 300 V at .2 μF); 4 kV (discharge 180 V at .2 μF). ½" diameter, ¾" long. ⅛ oz.

726-0700. 1-4....Ea. 3.27 5-Up...Ea. 2.95

PYREX-COVER FLASHTUBES

HD-Series Flashtubes. Ultra-high efficiency tubes in Pyrex cover. Av. wt. 6 oz.

726-0400. HD-1. Max. input, 60 joules at 450 V. 1-4....Ea. 13.32 5-Up...Ea. 12.00

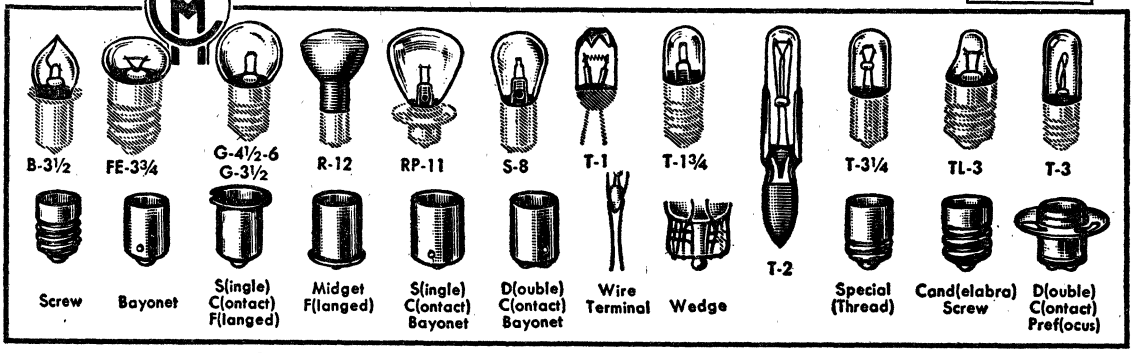
726-0410. HD-2. Max. input, 120 joules at 450 V. 1-4....Ea. 16.65 5-Up...Ea. 15.00

726-0420. HD-2A. Max. input, 250 houles at 900 V. 1-4....Ea. 20.12 5-Up...Ea. 16.85

Lighted Devices, Pages 245-261; Readouts, Pages 261-264

Lamps by Chicago-Miniature

LIGHTED DEVICES



ORDER LAMPS LISTED BELOW IN MULTIPLES OF 10 ONLY

Wide variety of miniature and subminiature incandescent lamps for such applications as aircraft, annunciators, appliances, automotive, bicycles, coin machines, flashlights, marine, medical, indicators, signs and house numbers, radio and TV, telephone, toys and novelties. Offer extra-long life, reliability, low cost, high light output for amount of current consumed, low operating cost. For illustrations of bulb and base styles referred to in table, and explanation of abbreviations, refer to Figure above. *Long life bulb. †Inside frosted. ‡Maximum rating (.59 amp minimum). §Maximum rating (.51 amp minimum).

Stock No.	Mfr's Type	Volts	Amps	Base	Bulb Style	Price Per Lamp 10-40	50-90	100-Up
749-8402	*PR-2*	2.38	.50	S.C. F.	B-3½	.18	.14	.12
749-8403	PR-3	3.57	.50	S.C. F.	B-3½	.18	.14	.12
749-8404	PR-4	2.33	.27	S.C. F.	B-3½	.18	.14	.12
749-8406	PR-6	2.47	.30	S.C. F.	B-3½	.18	.14	.12
749-8412	*PR-12*	5.95	.50	S.C. F.	B-3½	.18	.14	.12
749-8413	PR-13	4.75	.50	S.C. F.	B-3½	.18	.14	.12
749-9012	*12*	6.3	.15	Min. 2-pin	G-3½	.25	.19	.16
749-9013	*13*	3.7	.30	Screw	G-3½	.15	.12	.10
749-9014	*14*	2.47	.30	Screw	G-3½	.15	.12	.10
749-9024	*24E*	24	.035	Tel. Slide	T-2	.75	.68	.41
749-9025	*24X*	24	.035	Tel. Slide	T-2	.75	.68	.41
749-9040	*40*	6.3	.15	Screw	T-3¼	.13	.10	.08
749-9041	*41*	2.5	.50	Screw	T-3¼	.25	.20	.16
749-9043	43	2.5	.50	Bayonet	T-3¼	.25	.20	.16
749-9044	*44*	6.3	.25	Bayonet	T-3¼	.13	.10	.08
749-9045	*45*	3.2	.35	Bayonet	T-3¼	.21	.16	.13
749-9046	*46*	6.3	.25	Screw	T-3¼	.13	.10	.08
749-9047	*47*	6.3	.15	Bayonet	T-3¼	.13	.10	.08
749-9048	*48*	2.0	.06	Screw	T-3¼	.25	.20	.16
749-9049	48C	48	.035	Tel. Slide	T-2	.75	.68	.41
749-9050	*49*	2.0	.06	Bayonet	T-3¼	.21	.16	.13
749-9051	50	7.5	.22	Screw	G-3½	.16	.12	.10
749-9052	*51*	7.5	.22	Bayonet	G-3½	.13	.10	.08
749-9053	52	14.4	.10	Screw	G-3½	.32	.25	.21
749-9054	*53*	14.4	.12	Bayonet	G-3½	.14	.11	.09
749-9055	*55*	7.0	.41	Bayonet	G-4½	.14	.11	.09
749-9056	55C	55	.052	Tel. Slide	T-2	.75	.68	.41
749-9057	57	14	.24	Bayonet	G-4½	.15	.12	.09
749-9063	63	7.01	.63	S.C. Bayonet	G-6	.18	.14	.12
749-9067	67	13.5	.59	S.C. Bayonet	G-6	.19	.15	.12
749-9069	68	13.5	.59	D.C. Bayonet	G-6	.28	.22	.18
749-9081	*81*	6.5	1.02	S.C. Bayonet	G-6	.22	.17	.14
749-9082	*82*	6.5	1.02	D.C. Bayonet	G-6	.22	.17	.14
749-9088	88	6.75	1.99	D.C. Bayonet	S-8	.34	.27	.22
749-9089	88L*	6.75	1.99	D.C. Bayonet	S-8	.93	.72	.59
749-9093	*93*	12.8	1.04	S.C. Bayonet	S-8	.29	.23	.18
749-9112	112	1.2	.22	Screw	GTL-3	.15	.12	.10
749-9130	159	6.3	.15	Wedge	T-3¼	.25	.19	.16
749-9123	123	1.25	.30	Min. Screw	G-3½	.16	.13	.10
749-9125	130	6.3	.15	Min. Bayonet	G-3½	.20	.16	.13
749-9135	219	6.3	.25	Min. Bayonet	G-3½	.39	.31	.25
749-9140	*222*	2.25	.25	Screw	TL-3	.15	.12	.10
749-9145	239	6.3	.36	Min. Bayonet	T-3¼	.29	.23	.18
749-9150	240	6.3	.36	Bayonet	T-3¼	.26	.21	.17
749-9170	307	28	.67	S.C. Bayonet	S-8	.67	.52	.42
749-9175	3071F†	28.0	.67	S.C. Bayonet	S-8	.78	.61	.49
749-9180	*313*	28	.17	Bayonet	T-3¼	.31	.24	.20
749-9190	324	3	.19	Wire Term.	T-1¼	.58	.45	.37
749-9195	*327*	28	.04	Mid. Flanged	T-1¾	.61	.48	.39
749-9210	*328*	6	.20	Mid. Flanged	T-1¾	.48	.38	.31
749-9215	*330*	14	.08	Mid. Flanged	T-1¾	.83	.64	.52
749-9220	331	1.35	.06	Mid. Flanged	T-1¾	.74	.74	.60
749-9225	*334*	28.0	.04	Mid. Grooved	T-1¾	.92	.72	.58
749-9245	337	6	.20	Mid. Grooved	T-1¾	1.68	1.30	1.06
749-9250	338	2.7	.06	Mid. Flanged	T-1¾	.85	.66	.54
749-9260	*344*	10	.014	Mid. Flanged	T-1¾	1.34	1.04	.84
749-9265	345	6	.04	Mid. Flanged	T-1¾	1.08	.84	.68
749-9270	346	18	.04	Mid. Grooved	T-1¾	1.23	.95	.77
749-9285	370	18	.04	S.C. Midget	T-1¾	1.48	1.15	.93
749-9290	375	3	.015	S.C. Mid. F.	T-1¾	2.46	1.90	1.55
749-9305	380	6.3	.04	Mid. Flanged	T-1¾	2.06	1.60	1.30

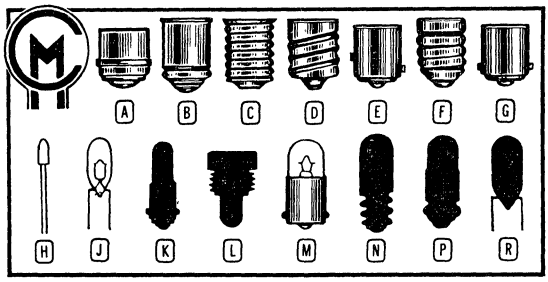
Stock No.	Mfr's Type	Volts	Amps	Base	Bulb Style	Price Per Lamp 10-40	50-90	100-Up
749-9310	*381*	6.3	.20	Mid. Flanged	T-1¾	1.10	.85	.69
749-9315	*382*	14	.08	Mid. Flanged	T-1¾	1.25	.97	.79
749-9321	*386*	14	.08	Mid. Grooved	T-1¾	1.50	1.16	.94
749-9322	*387*	28	.04	Mid. Flanged	T-1¾	.71	.55	.45
749-9323	*388*	28	.04	Mid. Grooved	T-1¾	1.49	1.16	.94
749-9337	407	4.9	.30	Screw	G-4½	.21	.16	.13
749-9345	425	5	.50	Screw	G-4½	.20	.16	.13
749-9360	502	5.1	.15	Min. Screw	G-4½	.16	.13	.10
749-9400	680	5	.060	Wire Term.	T-1	1.70	1.31	1.07
749-9405	682	5	.060	Sub-Mid. F.	T-1	2.06	1.59	1.29
749-9407	683	5	.060	Wire Term.	T-1	1.70	1.31	1.07
749-9412	685	5	.060	Sub-Mid. F.	T-1	2.06	1.59	1.29
749-9427	715	5	.115	Wire Term.	T-1	1.70	1.31	1.07
749-9440	*755*	6.3	.15	Min. Bay.	T-3¼	.31	.24	.20
749-9442	*756*	14	.08	Min. Bay.	T-3¼	.41	.32	.26
749-9444	757	28	.08	Bayonet	T-3¼	.46	.36	.29
749-9450	1016	12.8†	1.34‡	D.C. Index	SK8	.52	.41	.33
749-9460	1034	14	1.80§	D.C. Index	S-8	.40	.31	.25
749-9465	1073	12.8	1.80	S.C. Bayonet	S-8	.28	.22	.18
749-9475	1129	6.4	2.80	S.C. Bayonet	S-8	.30	.23	.19
749-9480	1130	6.4	2.80	D.C. Bayonet	S-8	.39	.31	.25
749-9485	*1133*	6.2	3.91	S.C. Bayonet	RP-11	.52	.40	.33
749-9490	1141	12.8	1.44	S.C. Bayonet	S-8	.28	.22	.18
749-9495	1251	28.0	.23	S.C. Bayonet	G-6	.48	.37	.30
749-9500	1252	24	.23	D.C. Bayonet	G-6	.54	.42	.34
749-9505	1445	18	.15	Bayonet	G-3½	.18	.14	.12
749-9507	1447	18.0	.15	Screw	G-3½	.20	.15	.13
749-9510	1458	20	.25	Bayonet	G-5	.34	.27	.22
749-9515	1480	6.5	2.75	S.C. Bayonet	T-5	1.04	.81	.66
749-9520	1487	14.0	.20	Screw	T-3¼	.25	.20	.16
749-9521	1488	14	.15	Bayonet	T-3¼	.27	.21	.17
749-9524	*1490*	3.2	0.16	Bayonet	T-3¼	.21	.16	.13
749-9527	*1493*	6.5	2.75	D.C. Bayonet	S-8	1.22	.94	.77
749-9530	1503	5.9	6.53	S.C. Perf.	RP-11	1.50	1.17	.95
749-9535	*1630*	6.5	2.75	D.C. Pref.	S-8	1.59	1.23	1.00
749-9540	1648	8.0	2.0	D.C. Bayonet	S-8	1.32	.90	.73
749-9563	1768	6	.20	Midget Screw	T-1¾	.90	.70	.59
749-9570	1769	2.5	.20	Midget Screw	T-1¾	1.07	.83	.67
749-9590	*1813*	14.4	.12	Min. Bayonet	T-3¼	.26	.21	.17
749-9595	*1815*	14.0	.20	Min. Bayonet	T-3¼	.23	.18	.14
749-9600	*1816*	13	.35	Min. Bayonet	T-3¼	.22	.17	.14
749-9605	*1819*	28	.04	Min. Bayonet	T-3¼	.33	.26	.21
749-9610	*1820*	28	.10	Min. Bayonet	T-3¼	.35	.28	.22
749-9615	*1822*	36	.10	Min. Bayonet	T-3¼	.62	.48	.39
749-9620	1828	37.5	.05	Min. Bayonet	T-3¼	.67	.52	.42
749-9625	*1829*	28	.075	Min. Bayonet	T-3¼	.35	.27	.22
749-9630	*1835*	55	.05	Min. Bayonet	T-3¼	.76	.59	.48
749-9635	*1847*	6.3	.15	Min. Bayonet	T-3¼	.17	.14	.11
749-9640	1850	5.0	.09	Min. Bayonet	T-3¼	.35	.27	.22
749-9645	1855	6.3	.80	Min. Bayonet	T-4½	.36	.28	.23
749-9650	1864	28.0	.17	Min. Bayonet	T-3¼	.44	.34	.28
749-9660	1869	10	.014	Wire Term.	T-1¾	1.15	.89	.72
749-9665	*1891*	14.0	.233	Min. Bayonet	T-3¼	.16	.12	.10
749-9670	*1892*	14.4	0.12	Min. Bayonet	T-3¼	.25	.20	.16
749-9675	1893	14.0	.33	Min. Bayonet	T-3¼	.18	.14	.11
749-9680	1895	14.0	.27	Min. Bayonet	G-4½	.21	.16	.13
749-9705	2128	3	.0125	Wire Term	T-1	3.97	3.08	2.50
749-9715	2180	6.3	.04	Wire Term.	T-1¾	1.10	.85	.69
749-9720	2181	6.3	.20	Wire Term.	T-1¾	.59	.46	.37
749-9721	2182	14	0.8	Wire Term.	T-1¾	.64	.49	.40

Items in ITALICS are Fast-Moving Types—Extra Quantities On Hand

Lamps by Chicago-Miniature

LIGHTED DEVICES

ORDER LAMPS LISTED BELOW IN MULTIPLES OF 10 ONLY



CM-8 SERIES SUBMINIATURE AND MIL SPEC LAMPS

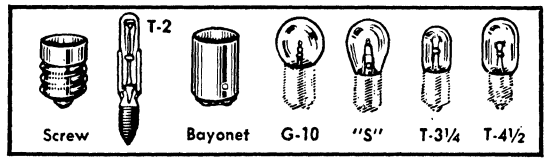
The lamps listed in this catalog are the more popular types available from Chicago Miniature. All AS Types are aged and selected for critical electrical applications. To order Chicago Miniature Lamps, specify lamp numbers listed and quantities desired. If your application requires a lamp not shown, please contact your local Allied Electronics facility.

Stock No.	Mfr's Type	Fig.	Volts	Amps	Base	Price Per Lamp 10-40	50-90	100-Up
749-9185	323	L	3.0	.19	Per Mil. 25236-323	1.39	1.08	.88
749-9200	327AS15	M	28.0	.04	Per Mil. 25237-327	2.01	1.56	1.26
749-9225	334	P	28.0	.04	Midget Grooved	.92	.72	.58
749-9230	334LSV	P	28.0	.06	Midget Grooved	1.69	1.31	1.06
749-9235	*335*	N	28.0	.04	Per Mil. 15612-2	1.42	1.10	.90
749-9240	336	P	14.0	.08	Midget Grooved	1.42	1.10	.90
749-9255	339AS25	...	6.0	.22	Midget Flanged	3.67	2.84	2.30
749-9280	367	M	10.0	.04	Midget Flanged	1.35	1.05	.85
749-9295	378	N	6.3	.20	Midget Screw	1.75	1.35	1.10
749-9300	379	P	6.3	.20	Midget Grooved	1.16	.90	.73
749-9320	385	M	28.0	.04	Midget Flanged	1.94	1.50	1.22
749-9330	397	P	10.0	.04	Midget Grooved	1.35	1.05	.85
749-9331	398	P	6.3	.20	Midget Grooved	1.05	.81	.66
749-9332	*399*	C	28.0	.04	Midget Screw	1.30	1.01	.82
749-9370	515	J	5.0	.115	Wire Terminal	.94	.73	.59
749-9375	580	J	5.0	.06	Wire Terminal	.94	.73	.59
749-9380	583	J	5.0	.06	Wire Terminal	.92	.72	.58
749-9385	634	J	6.0	.20	Wire Terminal	1.11	.86	.70
749-9400	680	...	5.0	.06	Wire Terminal	1.70	1.31	1.07
749-9401	680AS15	...	5.0	.06	Wire Terminal	1.97	1.52	1.24
749-9405	682	A	5.0	.06	Sub-Midget Flanged	2.06	1.59	1.29
749-9406	682AS15	A	5.0	.06	Sub-Midget Flanged	2.28	1.77	1.44
749-9407	683	...	5.0	.06	Wire Terminal	1.70	1.31	1.07
749-9408	683AS15	...	5.0	.06	Wire Terminal	1.97	1.52	1.24
749-9412	685	A	5.0	.06	Sub-Midget Flanged	2.06	1.59	1.29
749-9413	685AS15	A	5.0	.06	Sub-Midget Flanged	2.28	1.77	1.44
749-9427	715	...	5.0	.115	Wire Terminal	1.70	1.31	1.07
749-9429	715AS15	...	5.0	.115	Wire Terminal	1.97	1.52	1.24
749-9431	718	A	5.0	.115	Sub-Midget Flanged	2.06	1.59	1.29
749-9433	718AS15	A	5.0	.115	Sub-Midget Flanged	2.28	1.77	1.44
749-9545	1705	R	14.0	.08	Wire Terminal	.65	.50	.41
749-9550	1730	R	6.0	.04	Wire Terminal	1.08	.84	.68
749-9560	*1764*	R	28.0	.04	Wire Terminal	.53	.41	.33
749-9575	1775	N	6.3	.075	Midget Screw	1.10	.86	.69
749-9580	1784	R	6.0	.20	Wire Terminal	.73	.56	.46
749-9660	1869	R	10.0	.014	Wire Terminal	1.15	.89	.72
749-9700	2114	J	6.0	.06	Wire Terminal	.76	.59	.48
749-9725	2187	R	28.0	.04	Wire Terminal	.92	.72	.58
749-9740	6833	A	5.0	.060	Wire Terminal	2.42	1.87	1.52
749-9745	6838	...	28.0	.024	Wire Terminal	2.50	1.94	1.57
749-9746	6839	A	28.0	.024	Sub-Midget Flanged	3.05	2.36	1.92
749-9760	7210	...	5.0	.03	Wire Terminal	2.65	2.04	1.66
749-9773	7323	P	6.0	.22	Per Mil. 15612-1	1.38	1.07	.87
749-9795	8362	...	28.0	.04	Spec. Midget Flange	1.21	.94	.76
749-9800	8369	N	28.0	.065	Midget Screw	1.27	.99	.80
749-9810	8610	...	6.3	.20	Wire Terminal	.88	.68	.55
749-9823	8623	L	28.0	.04	Threaded Knurled	1.89	1.46	1.19
749-9827	8627	J	28.0	.04	Per Mil. 28135-1	1.16	.90	.73
749-9835	8635	...	28.0	.04	Spec. Screw	1.98	1.53	1.24
749-9840	8640	...	14.0	.08	Wire Terminal	.83	.65	.52
749-9861	8661	J	6.0	.04	Wire Terminal	1.34	1.04	.84
749-9866	8666	H	5.0	.08	Wire Terminal	2.42	1.87	1.52
749-9905	8805	J	5.0	.06	Wire Terminal	.76	.59	.48
749-9946	8846	...	5.0	.008	Wire Terminal	2.37	1.84	1.49
749-3005	CM8-60	G	6.0	5.5	S.C. Bayonet	1.05	.82	.66
749-3010	CM8-282	...	3.8	.33	Wire Terminal	3.15	2.43	1.97
749-3012	CM8-308	G	28.0	.67	D.C. Bayonet	1.69	1.32	1.06
749-3014	CM8-363	...	28.0	.04	Wire Terminal	.90	.70	.57
749-3016	CM8-373	B	2.5	.35	Midget Grooved	1.73	1.34	1.09
749-3020	CM8-428	...	5.0	.18	Midget Flanged	2.42	1.87	1.52

Lighted Devices, Pages 245-261; Readouts, Pages 261-264

CM-8 SERIES SUBMINIATURE AND MIL SPEC LAMPS (Cont'd)

Stock No.	Mfr's Type	Fig.	Volts	Amps	Base	Price Per Lamp 10-40	50-90	100-Up
749-3018	CM8-374	...	2.5	.35	Wire Terminal	1.54	1.19	.97
749-3022	CM8-503	E	6.3	.35	Min. Bayonet	3.62	2.81	2.28
749-3068	CM8-967	E	120	.025	Min. Bayonet	1.07	.83	.60



MINIATURE NEON-GLOW INDICATOR LAMPS

For 105-600 V, except ‡210-600 V. Screw types have series resistor in base for 105-125 V; others require external resistor. In **Base** column of table, below. D.C. means double contact; S.C., single contact; Mid. Flange, midget flanged; Bay., bayonet; Cand., candelabra. *AC starting voltage, DC starting V 40% higher. †High brightness. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Watts	*AC V	Bulb Style	Base	PRICE EACH
749-2105	A1B	1/17	65	T-2	Wire Term.	.21
749-2110	†A1C	1/17	95	T-2	Wire Term.	.22
749-2100	*A1A (NE-2)*	1/17	65	T-2	Wire Term.	.18
749-2160	*C7A (NE-2D)*	1/15	65	T-2	S.C. Mid. Flange	1.34
749-2115	*A9A (NE-2E)*	1/10	65	T-2	Wire Term.	.20
749-2155	†*C2A (NE-2H)*	1/5	.....	T-2	Wire Term.	.20
749-2165	†*C9A (NE-2J)*	1/5	105	T-2	S.C. Mid. Flange	1.34
749-2130	B4A (NE-7)	¼	55	T-4½	Wire Term.	1.10
749-2140	B6A (NE-21)	¼	55	T-4½	S.C. Bay. Cand.	1.65
749-8321	J5A (NE-30)	1	60	G-10	Edison	2.50
749-8335	L5A (NE-23)	1	60	G-10	D.C. Bay. Cand.	2.12
749-2145	*B7A (NE-45)*	¼	65	R-5½	Cand. Screw	1.53
749-2150	B9A (NE-48)	¼	65	T-4½	D.C. Bay. Cand.	1.25
749-2120	*B1A (NE-51)*	1/25	65	T-3¼	S.C. Bay. Min.	.44
749-2125	†*B2A (NE-51H)*	1/7	.....	T-3¼	S.C. Bay. Min.	.44
749-8325	‡J9A (NE-56)	1	60	S-11	Edison	2.53
749-8315	F3A (NE-57)	¼	55	T-4¼	Cand. Screw	1.76
749-8316	‡F4A (NE-58)	½	65	T-4½	Cand. Screw	1.65
749-8330	K1A (NE-84)	¼	95	T-2	Special Tel. Slide	1.09

MINIATURE NEON-GLOW CIRCUIT CONTROL LAMPS

T-2 style bulbs; have wire leads. Radioactive additive reduces breakdown voltage in darkness. Tinned 1" leads for easy soldering. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	DC Start Voltage	Design Current DC mA	PRICE EACH
749-8705	*5AB (NE 23)*	60-90	.3	.22
749-8707	5AG-A (NE-76)	68-76	.4	1.16
749-8710	*5AH (NE-83)*	60-100	10.0	.43
749-8713	5AJ (NE-86)	55-90	1.5	.40
749-8704	4AC (NE-97)	110-140	.5	.40

ARGON GLOW LAMP

Long-life lamp emits pale blue-violet light, near-ultraviolet radiation. Clear glass bulb. Bulb style, T-4½; rated ¼ watt. Candelabra screw base. Average life of 1000 hours. For 110-120 volts AC. Shpg. wt. 2 oz.

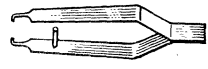
749-8320. J2A (AR-3) ..... Each 1.58

HIGH-OUTPUT LENS-END MINIATURE LAMPS

Focused beam, ideal for activating photoconductors in card or tape operations. 0.35 amp at 2.5 V, AC-DC. Midget grooved base except Type 2136, wire terminal. Overall diameter, .250". 1 1/16" long. Shpg. wt. 3 oz.

Stock No.	Mfr's Type	Style	PRICE PER LAMP 10-40	50-90	100-Up
749-9155	*253*	GTL-1¾	2.90	2.24	1.82
749-9160	*253X*	GTL-1¾	3.55	2.74	2.22
749-9165	261	GTL-1¾	5.70	4.40	3.57
749-9710	2136	GTL-1¾	4.20	3.25	2.64

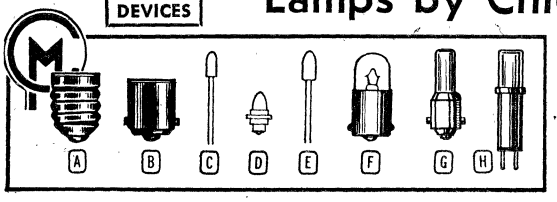
JONARD MINIATURE TWEEZER-TYPE EXTRACTOR



MODEL S-340. Stop guide prevents damage to small lamps, components, etc. Nickel-chrome steel. 3¼" long.
830-0386. 1-9..5.32 10-Up..3.20

LIGHTED DEVICES

Lamps by Chicago-Miniature



STANDARD VOLTAGE LAMPS—SOLD MULT. OF 10

Stock No.	Mfr's Type	Fig.	Volts	Watts	Bulb Style	EACH LAMP 10-40	50-90	100-Up
749-8703	*3S6/5*	A	120	3	S-6	.74	.55	.47
749-8720	*6S6*	A	115	6	S-6	.30	.24	.21
749-8721	6S6	A	145	6	S-6	.74	.55	.47
749-8722	6S6/DC	B	120	6	S-6	.52	.40	.37
749-8725	6T4½/1	A	115-125	6	T-4½	.99	.75	.59
749-8730	7C7	A	115-125	7	C-7	.28	.21	.18
749-8735	10C7	A	115-125	10	C-7	.41	.30	.26
749-8738	10C7DC	B	115-125	10	C-7	.52	.40	.30
749-8740	*10S6/10*	A	230	10	S-6	.83	.63	.47
749-8745	10S6/10	A	250	10	S-6	.83	.63	.47

LONG LIFE LAMPS

M.F., midget flanged. W.T., wire terminal. S.F., submidget flanged. Sold in Multiples of 10.

Stock No.	Mfr's Type	Fig.	Volts	Amps	Base	Bulb Style	EACH LAMP 10-40	50-90	100-Up
749-9205	*327LSV*	F	28.0	.06	M.F.	T-1¾	1.35	1.05	.85
749-9425	713	E	5.0	.075	W.T.	T-1	1.70	1.31	1.07
749-9426	714	D	5.0	.075	S.F.	T-1	2.06	1.59	1.29
749-9750	7153	C	5.0	.115	W.T.	T-¾	2.42	1.87	1.52

SMALLEST 5000-HOUR 120-VOLT LAMP

120 V, .025 A. Flat-top bulb. Sold Multiples of 10.

Stock No.	Mfr's Type	Fig.	Base	EACH LAMP 10-40	50-90	100-Up
749-3068	*CM8-967*	G	Bayonet	1.07	.83	.68
749-6600	CML-03026	H	Cartridge	1.49	1.27	1.04

CM39 SERIES LAMP FILTERS

Translucent silicone rubber (conforms to MIL-R-5847, Class III) caps for subminiature and miniature lamps. Impervious to color shift. Replaceable. Filter color emission rates conform to MIL specs. Resistant to ambient atmosphere, sunlight, salt spray, ozone and most acids. Temperature: −62°C to +225°C.

CM39-XX-X ORDERING INFORMATION

Replace XXX in Mfr's Type Number with numbers of filter desired. 1st and 2nd X's are replaced by Ref. No.—3rd X by color Number. Ex. CM39-09-06 is for T-2 lamp (09) and is blue (6).

Lamp/Filter Size	Filter Length	Ref. No.	Lamp/Filter Size	Filter Length	Ref. No.
T-¾	.230	02	T-1¾	.279	08
T-1	.3125	03	T-2	.522	09
T-1	.219	04	T-2	.272	10
T-1¼	.265	05	T-3¼	.672	11
T-1¾	.375	06	S-6	1.120	12
T-1¾	.3125	07	.....	.....	.....

Colors: Red-1; Blue/White-2; Clear-3; Amber-4; Green-5; Blue-6; Yellow-7.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
749-S	CM39-02-X thru CM39-10-X	.29	.27	.25	.22	.20	.18
749-S	CM39-11-X or CM39-12-X	.38	.35	.33	.29	.26	.23

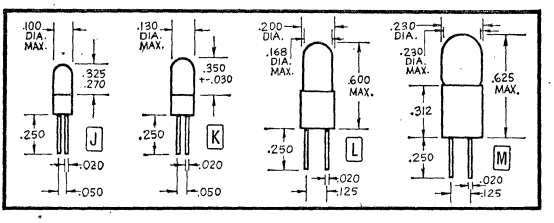
CM21 SERIES BI-PIN SOCKETS

CM21-1 accepts T¾ and T-1 Bi Pin Lamps; CM21-2 accepts T-1½ and T-1¾ Bi Pin Lamps. High quality teflon insulator press fit mounting. Mounting hole size: CM21-1; .131 ±.001 dia. CM21-2; .225 ±.001 dia.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-99	100-249	250-499	500-999	1000-2499
749-4101	CM21-1	.73	.67	.62	.55	.50	.44	.40
749-4102	CM21-2	.95	.87	.81	.72	.65	.58	.52

CM21-12-02 accepts T¾ and T-1; CM21-13-02 accepts T-1¼ and T-1¾ Bi-Pin Lamps. Press Fit Mounting Hole Size: CM21-12-02 .131 ±.001 dia. CM21-13-02; .225 ±.001 dia.

749-4122	CM21-12-02	.48	.45	.41	.37	.33	.29	.265
749-4123	CM21-13-02	.45	.41	.39	.34	.31	.27	.247



SUBMINIATURE INCANDESCENT BI-PIN LAMPS

Subminiature lamps with .020″ dia. bi-pin terminals. Size: T-¾ bulb, .100″ dia. x .270-.325″ long; T-1, .130″ dia. x .320-.380″ long; T-1¼, .200″ dia. x .600″ max.; T-1¾, .230″ dia. x .625″ max. Terminal Length: T-¾ and T-1, .190″; T-1¼ and T-1¾, .250″. *Indicates ±20%. †nominal. ‡indicates +10%. −20%. Sold in Multiples of 10 Only.

Stock No.	Type CM7-	Fig.	V	Amps	M.S. C.P.	Bulb Size	EACH LAMP 10-40	50-90	100-Up
749-2754	7112	J	5.0	.021	....	T-¾	4.52	3.50	2.84
749-2756	7114	J	5.0	.060	.05	T-¾	3.45	2.67	2.17
749-2757	7115	J	5.0	.060	.15	T-¾	3.45	2.67	2.17
749-2759	7117	J	5.0	.080	....	T-¾	3.45	2.67	2.17
749-2760	7118	J	5.0	.115	....	T-¾	3.45	2.67	2.17
749-2768	7258	K	3.0	.008*	....	T-1	2.82	2.18	1.77
749-2769	7259	K	3.0	.0125*	....	T-1	2.82	2.18	1.77
749-2772	7262	K	5.0	.017*	....	T-1	2.82	2.18	1.77
749-2773	7263	K	5.0	.030	....	T-1	2.65	2.06	1.67
749-2831	7680	K	5.0	.060	.03	T-1	2.06	1.59	1.29
749-2832	7683	K	5.0	.060	.05	T-1	2.06	1.59	1.29
749-2775	7265	K	5.0	.060	.15	T-1	2.55	1.97	1.60
749-2834	7715	K	5.0	.115	....	T-1	2.06	1.59	1.29
749-2852	8095	K	10.0	.027	....	T-1	3.17	2.45	1.99
749-2853	8097	K	12.0	.060	....	T-1	3.17	2.45	1.99
749-2839	7839	K	28.0	.024	....	T-1	3.05	2.36	1.92
749-2823	7580	L	5.0	.06	.03	T-1¼	1.93	1.50	1.21
749-2824	7583	L	5.0	.06	.05	T-1¼	1.93	1.50	1.21
749-2821	7515	L	5.0	.115	....	T-1¼	1.93	1.50	1.21
749-2830	7660	L	6.0	.04	....	T-1¼	2.26	1.75	1.42
749-2787	7309	L	6.0	.06	....	T-1¼	1.93	1.50	1.21
749-2825	7628	L	6.0	.20	....	T-1¼	1.93	1.50	1.21
749-2829	7646	L	14.0	.08	....	T-1¼	1.93	1.50	1.21
749-2826	7632	L	28.0	.04	....	T-1¼	1.93	1.50	1.21
749-2838	7838	M	2.7	.06	....	T-1¾	1.14	.88	.72
749-2850	7945	M	6.0	.04	....	T-1¾	1.14	.88	.72
749-2791	7328	M	6.0	.20	....	T-1¾	.83	.68	.55
749-2815	7380	M	6.3	.04	....	T-1¾	1.14	.88	.72
749-2814	7377	M	6.3	.075	....	T-1¾	.83	.65	.52
749-2816	7381	M	6.3	.20	.40	T-1¾	.92	.71	.58
749-2794	7349	M	6.3	.20	.55	T-1¾	.83	.65	.52
749-2793	7344	M	10.0	.014	....	T-1¾	1.25	.97	.79
749-2805	7367	M	10.0	.04	....	T-1¾	1.32	1.02	.83
749-2809	7371	M	12.0	.04	....	T-1¾	1.43	1.11	.90
749-2817	7832	M	14.0	.08	.30	T-1¾	.92	.71	.58
749-2792	7330	M	14.0	.08	.50	T-1¾	.83	.65	.52
749-2810	7373	M	14.0	.10†	....	T-1¾	1.71	1.33	1.08
749-2808	7370	M	18.0	.04‡	....	T-1¾	1.38	1.07	.87
749-2820	7459	M	22.0	.04	....	T-1¾	1.43	1.11	.90
749-2818	7387	M	28.0	.04	.30	T-1¾	.96	.75	.61
749-2790	7327	M	28.0	.04	.34	T-1¾	.83	.65	.52
749-2841	7876	M	28.0	.06	....	T-1¾	1.48	1.11	.90
749-2813	7376	M	28.0	.065	....	T-1¾	1.43	1.11	.90

CM20 SERIES SUBMINIATURE LENS END-LITE

CM-20-1 and -2 (right angle lens) are mounted in Bi-Pin cartridges. Clear anodized aluminum body; stainless steel terminals; nylon insulation. CM20-3 thru -7 are packaged in gold anodized aluminum sleeves with #24 AWG stranded wire leads. Type B insulation per MIL-W-16878. Semi-resilient thermosetting resin encapsulation. CM-20-5 thru -7 can be mounted on .250″ centers for card reader uses.

Spot Specifications: *Spot covers ⅛″ dia. target when projected ⅜″ from end of bulb at min. intensity of 750 foot-candles. †When projected 1″ from end of bulb, spot covers 1″ dia. at 350 foot-candles. §⅜″ from bulb, spot covers 1/16″ dia. at 750 foot-candles. Spot is narrow elliptical. ‡Same as CM20-3 except spot covers ⅛″ dia. target. Spot is round elliptical. **None, Lamp axially aligned. ½ oz.

Stock No.	Mfr's Type	Volts	Amps ±10%	EACH 1-4	5-9	10-99	100-499	500-Up
749-4001	CM20-1*	2.5	.350	3.30	2.65	2.21	1.83	1.58
749-4002	CM20-2†	2.5	.325	5.37	4.31	3.59	2.97	2.56
749-4003	CM20-3§	2.5	.350	4.10	3.28	2.73	2.26	1.95
749-4004	CM20-4‡	2.5	.350	4.05	3.23	2.70	2.23	1.93
749-4005	CM20-5**	2.5	.200	3.26	2.56	2.14	1.77	1.53
749-4006	CM20-6**	6.0	.200	3.27	2.63	2.19	1.81	1.56
749-4007	CM20-7**	28.0	.040	3.32	2.67	2.22	1.84	1.59

Make Allied Your One-Stop Source for All Your Needs

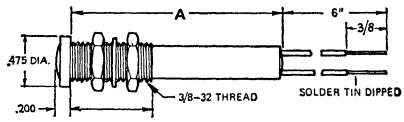
Lighted Devices by Chicago Miniature

CML SERIES TRI-A-LITE INDICATOR LAMPS

Provides red, green and yellow in single indicator. White in off position. Mounts in 19/64" hol.e 5 v, .115 amp per lamp.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-99	100-249	250-499	500-999	1000-Up
749-7500	CML9501-RGY	7.06	6.48	6.02	5.33	4.83	4.28	3.86
749-7501	CML9601-RGY	7.06	6.48	6.02	5.33	4.83	4.28	3.86
749-7502	CML9701-RGY	7.06	6.48	6.02	5.33	4.83	4.28	3.86
749-7503	CML9801-RGY	7.06	6.48	6.02	5.33	4.83	4.28	3.86

CM20 SERIES BEAM EMITTERS



Compact assemblies project narrow cones of infrared and luminous energies over distances of 7" to 16". An axially aligned target circle equal to half the diameter of the projected spot will be covered. Low power consumption (782 mW). Black anodized aluminum housing, wire leads. Thermosetting resin encapsulation.

Type	Design V	Design Ma	Focal Distance	Approximate MW/CM²	Approximate Ft. Candles	Spot Size	Av. Life Hours	"A" Dim.
CM20-8-01	2.3	.34	7-9"	3	25	1¼ to 1¾"	10,000	1.25"
CM20-9-01	2.3	.34	14-16"	1.5	21	1 to 1¼"	10,000	2.00"

Stock No.	Mfr's Type	1-9	10-24	25-49	50-99	100-Up
749-4008	CM20-8-01	20.51	18.15	16.44	14.60	13.15
749-4009	CM20-9-01	23.68	20.95	18.96	16.85	15.18

CM41 SERIES T-1 TRI-A-LITE

For use where space is at a premium and three different colored indicators are required to complete an indicator sequence. Appears white when off. Mounting hole is .410" nominal.

Ref. No.	Design Volt	Design Amp	MSCP Ref. Only	Average Life Hours	Ref. No.	Design Volt	Design Amp	MSCR Ref. Only	Average Life Hours
29	2.5	.320	.21	5,000	11	5.0	.115	.15	40,000
30	3.0	.120	.15	16,000	12	5.0	.125	.22	5,000
32	5.0	.06	.10-.20	5,000	14	10.0	.027	.10	10,000
07	5.0	.06	.05	100,000	15	12.0	.060	.15	16,000
33	5.0	.06	.15	5,000	16	14.0	.065	.15	16,000
10	5.0	.08	.16	3,000	17	18.0	.026	.15	16,000
22	5.0	.11	.15-.25	15,000	18	28.0	.024	.15	6,000

ORDERING INFORMATION

CM41 X X X X XX

CAP STYLE
Flush — 1
Short Cyl. — 2

LAMP REF. NO. (See Table)

Filter Color for position #1
Filter Color for position #2
Filter Color for position #3

FILTER COLOR TABLE

1—Red	3—Amber	5—White
2—Green	4—Blue	6—Yellow

Fill in XXXX by referring to Ordering Information above.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-99	100-249	250-499	500-999	1000-Up
749-S	CM41-XXXX-07	5.78	5.31	4.93	4.36	3.95	3.51	3.16
749-S	CM41-XXXX-10	6.84	6.28	5.83	5.16	4.68	4.15	3.74
749-S	CM41-XXXX-11	5.78	5.31	4.93	4.36	3.95	3.51	3.16
749-S	CM41-XXXX-12	6.95	6.38	5.93	5.24	4.75	4.22	3.80
749-S	CM41-XXXX-14	8.11	7.44	6.91	6.11	5.54	4.92	4.43
749-S	CM41-XXXX-15	8.11	7.44	6.91	6.11	5.54	4.92	4.43
749-S	CM41-XXXX-16	8.11	7.44	6.91	6.11	5.54	4.92	4.43
749-S	CM41-XXXX-17	8.71	8.00	7.43	6.57	5.95	5.28	4.76
749-S	CM41-XXXX-18	9.13	8.38	7.78	6.89	6.24	5.54	4.99
749-S	CM41-XXXX-22	4.70	4.32	4.01	3.55	3.21	2.85	2.57
749-S	CM41-XXXX-29	7.45	6.84	6.35	5.62	5.09	4.52	4.07
749-S	CM41-XXXX-30	8.11	7.44	6.91	6.11	5.54	4.92	4.43
749-S	CM41-XXXX-32	4.70	4.32	4.01	3.55	3.21	2.85	2.57
749-S	CM41-XXXX-33	6.30	5.78	5.37	4.75	4.30	3.82	3.44

CM21-6 TRI-A-LITE SOCKET

For use when easy replaceability of CM41 Series Tri-A-Lites is required. Pin sockets are numbered and conform to CM41 Series offset pins. Mounting hole is .436 .001 dia.

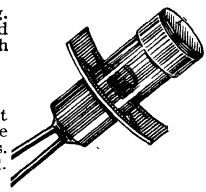
749-4116	CM21-6	1.55	1.42	1.32	1.17	1.06	.94	.848

CM22 T-1 ¾ INCANDESCENT PEANUT-LITES

High Temperature polycarbonate housing. 6" permanently potted AWG #24 insulated leads. Mtg. hole; .309" dia. nominal. With steel spring mtg. clip.

CM22 T-2 NEON PEANUT LITES

Low cost assembly with T-2 lamp that snaps into butyrate shell. Dumet wire leads can be soldered to lamp terminals. Short cyl. cap. Mtg. hole; .310" nominal. With mounting clip.



ORDERING INFORMATION

CM22 — XX — XX — XX

CAP STYLE
Macrodome — 01
Short Cylindrical — 02

LAMP REFERENCE NUMBER
See T-1 ¾ Lamp Table

CAP COLOR
01—Clear Transparent
02—Red Transparent
03—Amber Transparent
04—Green Transparent
05—White Translucent

OTHER COLORS AVAILABLE ON REQUEST

Example: CM22-1-02-20 Red Transparent Macrodome Cap with 6.3V .20 A Incandescent Lamp.

CM22 T-1¾ INCANDESCENT LAMP TABLE

Stock No.	Mfr's Type CM22-	Design V	Design A	MSCP Ref. Only	Av. Life Hours	EACH 1-9	10-24	25-99	100-249	250-Up
749-S	XX-XX-06	6.0	.20	.63	1,000	1.04	.95	.88	.78	.71
749-S	XX-XX-07	10	.014	.002	10,000	.93	.85	.79	.70	.63
749-S	XX-XX-08	10	.04	.08	5,000	.98	.90	.83	.74	.67
749-S	XX-XX-09	14	.08	.50	750	.93	.85	.79	.70	.63
749-S	XX-XX-10	18	.04	.15	10,000	1.26	1.16	1.08	.95	.86
749-S	XX-XX-11	28	.04	.34	7,000	1.09	1.00	.93	.82	.74
749-S	XX-XX-12	6	.04	.03	10,000	.98	.90	.83	.74	.67
749-S	XX-XX-13	6.3	.20	.40	50,000	1.30	1.20	1.11	.98	.89
749-S	XX-XX-15	1.35	.06	.01	500	1.04	.95	.88	.78	.71
749-S	XX-XX-17	2.5	.02	.22	500	1.04	.95	.88	.78	.71
749-S	XX-XX-18	2.7	.06	.04	6,000	1.04	.95	.88	.78	.71
749-S	XX-XX-19	6.3	.075	.22	500	1.04	.95	.88	.78	.71
749-S	XX-XX-20	6.3	.20	.55	3,000	1.04	.95	.88	.78	.71
749-S	XX-XX-27	6.3	.04	.02	50,000	1.13	1.04	.97	.86	.78
749-S	XX-XX-28	14	.08	.30	50,000	1.13	1.04	.97	.86	.78
749-S	XX-XX-29	28	.04	.30	25,000	1.13	1.04	.97	.86	.78
749-S	XX-XX-40	28	.04	.30	50,000	1.09	1.00	.93	.82	.74
749-S	XX-XX-43	3	.015	.004	10,000	1.71	1.57	1.46	1.29	1.17
749-S	XX-XX-52	14	.09	.50	10,000	.93	.85	.79	.70	.63
749-S	XX-XX-54	22	.04	.30	2,000	1.26	1.16	1.08	.95	.86
749-S	XX-XX-55	28	.06	.60	5,000	.93	.85	.79	.70	.63
749-S	XX-XX-79	5	.017	.018	8,000	1.13	1.04	.97	.86	.78

T-2 NEON LAMP TABLE

Lamp Number	Circuit Volts	Nominal Current Ma	Nominal Watts	Max. Starting VAC	Max. Starting VDC	X-Series Ohms	Av. Life Hours
A1A (NE-2)	105-125	.3	1/25	65	90	200,000	25,000
A9A (NE-2E)	105-125	1.0	1/10	65	90	62,000.	5,000
C2A (NE-2H)	105-125	2.0	¼	95	135	22,000	5,000

NOTE: Other Lamp Types Available on Special Order.

ORDERING INFORMATION

CM22 — 1000 — XX — XX

CAP STYLE
Short Cylindrical

NOTE: Standard Neon Lamp "snap-fits" into cap.

LAMP NUMBER
See T-2 Neon Lamp Table
01 Clear Transparent
02 Red Transparent
03 Amber Transparent
05 White Translucent

NOTE: Other colors available on special order.

Example: CM22-1000-03-A1A is Amber Translucent Short Cylindrical Cap with A1A Lamp.

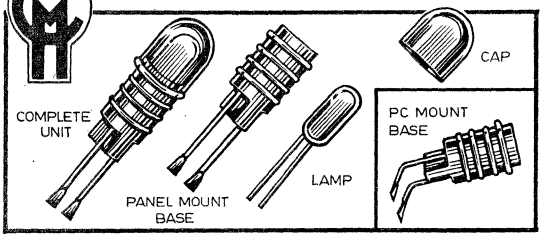
T-2 INCANDESCENT PRICING

Stock No.	Mfr's Type	EACH 1-9	10-24	25-99	100-249	250-499	500-999	1000-Up
749-S	CML00034X	1.28	1.18	1.10	.97	.88	.78	.702
749-S	CML00047X	1.28	1.18	1.10	.97	.88	.78	.702
749-S	CML00069X	1.28	1.18	1.10	.97	.88	.78	.702
749-S	CML00048X	1.33	1.22	1.13	1.00	.91	.81	.727
749-S	CML00035X	1.28	1.18	1.10	.97	.88	.78	.702
749-S	CML00033X	1.28	1.18	1.10	.97	.88	.78	.702
749-S	CML00068X	1.28	1.18	1.10	.97	.88	.78	.702
749-S	CML00026X	1.39	1.28	1.18	1.05	.95	.84	.759

See Page 251 for Complete Ordering Information Box

LIGHTED DEVICES

Lighted Devices by Chicago Miniature



CM-25 SERIES T-1 SUBMINIATURE INDICATOR LITES

Dimpled terminals for positive contact; internally flared lead guides for easy lamp insertion. Meet MS 90308. Gold plated beryllium copper term.; polycarbonate base, cap. Press-fits in .190" hole.

Stock No.	Mfr's Type CM25-	Description	EACH 1-9	10-99	100-499	500-999	1000-Up
749-5505	1005	Panel Mount Base	.75	.63	.53	.46	.41
749-5506	1006	PC Mount Base	.75	.63	.53	.46	.41
749-S	1002-XX	Cylindrical Cap	.21	.18	.17	.15	.13
749-S	1008-XX	Lens Cap	.21	.18	.17	.15	.13
749-S	1009-XX	Square Cap	.21	.18	.17	.15	.13
749-S	1007-XX	Round Cap	.21	.18	.17	.15	.13

Stock No.	Mfr's Type CM25-	Design V	Design Amp	MSCP Ref. Only	Av. Life Hrs.	EACH 1-9	10-24	25-99	100-249	250-Up
749-S	X-XXX-680	5.0	.060	.03	100000	1.73	1.60	1.48	1.31	1.19
749-S	X XXX-683	5.0	.060	.05	100000	1.73	1.60	1.48	1.31	1.19
749-S	X-XXX-713	5.0	.075	.09	25000	1.87	1.71	1.59	1.41	1.28
749-S	X-XXX-715	5.0	.115	.15	40000	1.73	1.60	1.48	1.31	1.19
749-S	X-XXX-2128	3.0	.0125	.001	16000	2.14	1.97	1.83	1.61	1.46
749-S	X-XXX-6022	5.0	.021	.034	10000	2.16	1.98	1.84	1.63	1.48
749-S	X-XXX-6150	5.0	.060	.15	5000	1.73	1.60	1.48	1.31	1.19
749-S	X-XXX-6838	28.0	.024	.15	16000	2.23	2.05	1.90	1.68	1.53
749-S	X-XXX-7201	1.5	.015	.01	5000	2.14	1.97	1.83	1.61	1.46
749-S	X-XXX-7207	3.0	.060	.03	100000	2.14	1.97	1.83	1.61	1.46
749-S	X-XXX-7210	5.0	.030	.03	75000	2.14	1.97	1.83	1.61	1.46
749-S	X-XXX-7218	10.0	.027	.10	10000	2.16	1.98	1.84	1.63	1.48
749-S	X-XXX-7219	12.0	.060	.15	16000	2.16	1.98	1.84	1.63	1.48
749-S	X-XXX-7220	18.0	.026	.15	16000	2.16	1.98	1.84	1.63	1.48
749-S	X-XXX-8111	14.0	.065	.15	16000	2.16	1.98	1.84	1.63	1.48
749-S	X-XXX-8601	2.5	.015	.001	10000	2 16	1.98	1.84	1.63	1.48
749-S	X-XXX-8602	5.0	.017	.005	10000	2.16	1.98	1.84	1.63	1.48
749-S	X-XXX-8846	3.0	.008	.001	16000	2.14	1.97	1.83	1.61	1.46

ORDERING INFORMATION

CM25—X—X—XX—XXXX

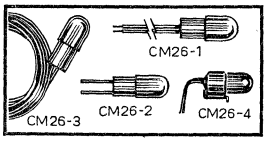
BASE STYLE
Panel Mount — 5
P. C. Mount — 6

CAP STYLE
Cylindrical 2
Round 7
Lens 8
Square 9

LAMP NUMBER
Complete From Lamp Table

CAP COLOR
01 Clear Transparent
02 Red Transparent
03 Yellow Transparent
04 Green Transparent
05 White Translucent
06 Blue Transparent
07 Red Translucent
08 Yellow Translucent
09 Green Translucent
10 Blue Translucent
11 Amber Translucent

Example: CM25-5-706-715 Panel Mount, Round, Blue Transparent Cap and 5V, .115A Lamp.



CM26 SERIES T-1 "PEANUT-LITE" SUBMINIATURE INDICATOR LITES

Hi-Temp polycarbonate housing. Low cost commercial sub for MS25446 and MS90308. Max. panel thickness 1/8". Mtg. hole .185 to .190" dia. Mtg. clip supplied.

Ref. No.	Design Volt	Design Amp	MSCP Ref. Only	Average Life Hours	Ref. No.	Design Volt	Design Amp	MSCP Ref. Only	Average Life Hours
03	3.0	.060	.03	100,000	11	5.0	.115	.15	40,000
04	5.0	.017	.005	10,000	14	10.0	.027	.10	10,000
35	5.0	.021	.034	10,000	15	12.00	.060	.15	16,000
19	5.0	.06	.05-.09	50,000	16	14.0	.065	.15	16,000
07	5.0	.060	.05	100,000	17	18.0	.026	.15	16,000
20	5.0	.11	.05-.11	25,000	18	28.0	.024	.15	40,000

ORDERING INFORMATION

CM26—X—XX—XX

TERMINATION
.750" Long Wire Leads 1
.312" Long .020" Nickel Pins 2
6" Long #26 AWG Stranded Wire 3
Right Angle Nickel Pins 4

NOTE: Other colors available.

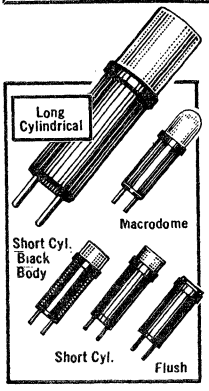
LAMP REFERENCE NUMBER
See Lamp Reference Table

CAP COLOR
05 White (Trl)
07 Red (Trl)
09 Amber (Trl)
10 Green (Trl)
11 Blue (Trl)

Example: CM26-1-07-19 Wire Lead with Red Cap and 5V .06A Lamp

Stock No.	Mfr's Type	EACH 1-9	10-24	25-99	100-249	250-499	500-999	1000-Up
749-S	CM26-1-XX-03	1.66	1.53	1.42	1.25	1.14	1.01	.909
749-S	CM26-1-XX-04	1.66	1.53	1.42	1.25	1.14	1.01	.909
749-S	CM26-1-XX-07	1.27	1.17	1.08	.96	.87	.77	.695
749-S	CM26-1-XX-11	1.27	1.17	1.08	.96	.87	.77	.675
749-S	CM26-1-XX-14	1.45	1.33	1.24	1.10	.99	.88	.794
749-S	CM26-1-XX-15	1.45	1.33	1.24	1.10	.99	.88	.794
749-S	CM26-1-XX-16	1.45	1.33	1.24	1.10	.99	.88	.794
749-S	CM26-1-XX-17	1.72	1.58	1.46	1.30	1.17	1.04	.939
749-S	CM26-1-XX-18	1.74	1.59	1.48	1.31	1.19	1.05	.949
749-S	CM26-1-XX-19	.91	.84	.78	.69	.62	.55	.499
749-S	CM26-1-XX-20	.91	.84	.78	.69	.62	.55	.499
749-S	CM26-1-XX-35	1.66	1.53	1.42	1.25	1.14	1.01	.909
749-S	CM26-2-XX-03	1.83	1.68	1.56	1.38	1.25	1.11	.999
749-S	CM26-2-XX-04	1.83	1.68	1.56	1.38	1.25	1.11	.999
749-S	CM26-2-XX-07	1.44	1.32	1.22	1.08	.98	.87	.785
749-S	CM26-2-XX-11	1.44	1.32	1.22	1.08	.98	.87	.785
749-S	CM26-2-XX-14	1.62	1.49	1.38	1.22	1.11	.98	.884
749-S	CM26-2-XX-15	1.62	1.49	1.38	1.22	1.11	.98	.884
749-S	CM26-2-XX-16	1.62	1.49	1.38	1.22	1.11	.98	.884
749-S	CM26-2-XX-17	1.88	1.73	1.61	1.42	1.29	1.14	1.03
749-S	CM26-2-XX-18	1.90	1.75	1.62	1.44	1.30	1.15	1.04
749-S	CM26-3-XX-19	1.08	.99	.92	.81	.74	.65	.589
749-S	CM26-2-XX-20	1.08	.99	.92	.81	.74	.65	.589
749-S	CM26-2-XX-35	1.83	1.68	1.56	1.38	1.25	1.11	.999
749-S	CM26-3-XX-03	1.87	1.71	1.59	1.41	1.28	1.13	1.02
749-S	CM26-3-XX-04	1.87	1.71	1.59	1.41	1.28	1.13	1.02
749-S	CM26-3-XX-07	1.48	1.36	1.26	1.12	1.01	.90	.81
749-S	CM26-3-XX-11	1.48	1.36	1.26	1.12	1.01	.90	.81
749-S	CM26-3-XX-14	1.66	1.53	1.42	1.25	1.14	1.01	.909
749-S	CM26-3-XX-15	1.66	1.53	1.42	1.25	1.14	1.01	.909
749-S	CM26-3-XX-16	1.66	1.53	1.42	1.25	1.14	1.01	.909
749-S	CM26-3-XX-17	1.92	1.76	1.64	1.45	1.31	1.17	1.05
749-S	CM26-3-XX-18	1.94	1.78	1.65	1.46	1.33	1.18	1.06
749-S	CM26-3-XX-19	1.12	1.03	.96	.85	.77	.68	.614
749-S	CM26-3-XX-20	1.12	1.03	.96	.85	.77	.68	.614
749-S	CM26-3-XX-35	1.87	1.71	1.59	1.41	1.28	1.13	1.02

CM26-4-XX-XX same pricing as CM26-3-XX-XX



CML SERIES "HIDE A LITE" INDICATOR LIGHTS

Appear white in off position and takes on color when activated. A glance ascertains which indicators are "on" in a multiple indicator panel. Ideal for use as warning lights or on systems control panels where signal and indicator speed are important. Clear anodized aluminum housing. Nylon insulation. Translucent polycarbonate caps. Meet MIL-L-3661 specs. Stainless steel terminals. Mounts in 9/32" hole.

ORDERING INFORMATION

CML—XX—4—XX—W/X

CAP STYLES
Flush 50
Short Cylindrical 60
Macrodome 70
Long Cylindrical 80

COLOR
R—Red
G—Green
B—Blue
A—Amber

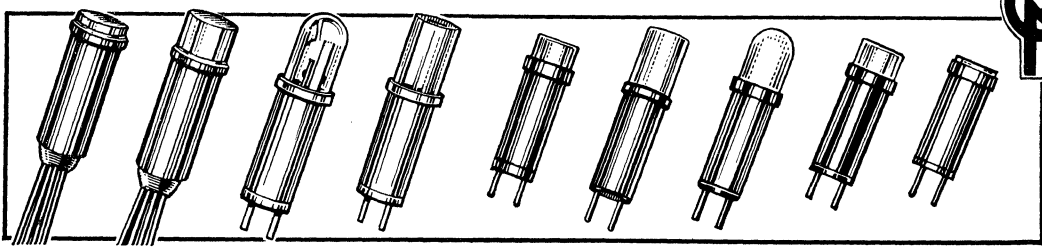
LAMP REFERENCE NUMBER*
See Lamp Reference Table

Stock No.	Mfr's Type CML-	Design Volt	Design Amp	MSCP Ref. Only	EACH 1-9	10-24	25-99	100-Up
749-S	XX417-W/X	2.5	.20	.22	1.77	1.63	1.51	1.34
749-S	XX413-W/X	6.3	.20	.40	1.92	1.76	1.64	1.45
749-S	XX420-W/X	6.3	.20	.55	1.77	1.63	1.51	1.34
749-S	XX428-W/X	14.0	.08	.30	1.92	1.76	1.64	1.45
749-S	XX453-W/X	14.0	.09	.50	2.21	2.03	1.89	1.67
749-S	XX410-W/X	18.0	.04	.15	1.92	1.76	1.64	1.45
749-S	XX454-W/X	22.0	.04	.30	1.92	1.76	1.64	1.42
749-S	XX444-W/X	28.0	.04	.30	1.92	1.76	1.64	1.45
749-S	XX445-W/X	28.0	.06	.34	2.16	1.98	1.84	1.45
749-S	XX455-W/X	28.0	.06	.60	2.31	2.12	1.97	1.67

See page 251 for Complete Ordering Information Box

Lighted Devices by Chicago Miniature

LIGHTED DEVICES



CML SERIES CARTRIDGE INDICATORS

Cartridge Indicators with incandescent or neon lamps operate at cool temperatures for long life. Mount in cartridge holder, or panel mounting with mounting clip (not included). Clear anodized aluminum housing; nylon insulation; transparent or translucent butyrate caps, color matched to industry standards. Meet requirements of MIL-L3661. Stainless steel pins are located off center for polarization. Mounts in 9/32" clearance hole. Available with hot stamped legends on special order. Caps also available in polycarbonate, resistant to color fading and high temperature. NOTE: Suggest Transparent Caps with Neon Lamp and Translucent Caps with Incandescent Lamps. Green and Blue should not be used with Neon lamps.

HOW TO ORDER CHICAGO MINIATURE PRODUCTS

The Chicago Miniature products listed on pages 248-251 require special handling in that the manufacturer's type number must be completed. Wherever an "X" appears in the type number, it must be replaced with code for desired item. Ordering tables appear in the listing for each series. To order CML Series: Refer to Ordering Information box at right. The Type Numbers shown in the listings on this page already show the lamp and ratings. The cap style, cap type and cap color must be completed by referencing the ordering information in box. For example, if the desired unit is a T-1¾ incandescent lamp number 015, the item will be listed under T-1¾ incandescent lamps as CML-XX015X. If flush pin cap style, butyrate transparent cap type and green cap color are desired, reference to the codes in the Ordering Information box shows that the completed Type Number should be CML-510152. Order by completed Type Number with 749-S as Stock Number. Delivery is from stock in most cases.

ORDERING INFORMATION

CML—X—X—XXX—X

CAP STYLE

- T-2 Incandescent, Pin 0
- Flush, Pin 5
- Short Cylindrical, Pin 6
- Macrodome, Pin 7
- Long Cylindrical, Pin 8

CAP COLOR

- 1—Red
- 2—Green
- 3—Amber
- 4—Blue
- 5—White
- 6—Yellow
- 7—Clear

CAP TYPE

- T-2 Incandescent 0
- Butyrate Transp. 1
- Butyrate Transl. 2
- Polycarbonate Transp. 3
- Polycarbonate Transl. 4

LAMP REFERENCE NUMBER

See Lamp Tables

Example: CML510077; Transparent Flush, Clear, Butyrate Cap 10V, 14 mA.

T-1¾ INCANDESCENT LAMPS

Stock No.	Mfr's Type CML-	Design Volt	Design Amp	MSCP Ref. Only	Av. Life Hours	EACH 1-9	10-24	25-99	100-249	250-499
749-S	XX006X	6.0	.20	.63	1,000	.92	.85	.78	.70	.63
749-S	XX007X	10.0	.014	.002	10,000	1.39	1.23	1.14	1.04	.93
749-S	XX008X	10.0	.04	.08	5,000	1.44	1.31	1.20	1.09	.97
749-S	XX009X	14.0	.08	.50	750	.90	.81	.75	.69	.61
749-S	XX010X	18.0	.04	.15	10,000	1.19	1.10	1.00	.90	.80
749-S	XX011X	28.0	.04	.34	7,000	.96	.89	.81	.73	.65
749-S	XX012X	6.0	.04	.03	10,000	.92	.84	.77	.71	.63
749-S	XX013X	6.3	.20	.40	50,000	1.08	.97	.90	.82	.73
749-S	XX015X	1.35	.06	.01	500	1.00	.93	.85	.77	.69
749-S	XX017X	2.5	.20	.22	500	1.04	.96	.89	.79	.71
749-S	XX018X	2.7	.06	.04	6,000	.97	.89	.81	.73	.67
749-S	XX019X	6.3	.075	.22	500	1.04	.96	.89	.79	.71
749-S	XX020X	6.3	.20	.55	3,000	1.06	.98	.89	.80	.77
749-S	XX027X	6.3	.04	.02	50,000	1.17	1.07	.98	.90	.80
749-S	XX028X	14.0	.08	.30	50,000	1.15	1.06	.97	.88	.78
749-S	XX029X	28.0	.04	.30	25,000	1.16	1.06	.97	.88	.79
749-S	XX040X	28.0	.04	.20	50,000	1.10	1.01	.94	.83	.75
749-S	XX043X	3.0	.015	.004	10,000	1.62	1.54	1.40	1.19	1.05
749-S	XX053X	14.0	.09	.50	10,000	1.48	1.36	1.26	1.12	1.01
749-S	XX054X	22.0	.04	.30	2,000	1.19	1.09	1.01	.89	.81
749-S	XX055X	28.0	.06	.65	5,000	1.58	1.45	1.34	1.19	1.08
749-S	XX079X	5.0	.017	.018	8,000	1.17	1.07	.98	.90	.80

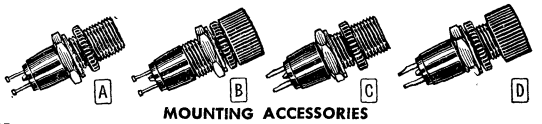
NEON LAMPS

Stock No.	Mfr's Type CML-	Nominal mA	Nominal Watt	Built In Res.	Aver. Life Hrs.	EACH 1-9	10-24	25-99	100-249	250-499
749-S	XX001X	0.3	1/25	None	25,000	.90	.83	.77	.68	.62
749-S	XX004X	0.8	1/10	None	25,000	.90	.83	.77	.68	.62
749-S	XX005X	1.2	1/9	22K	2,000	1.87	1.71	1.59	1.41	1.28
749-S	XX014X	1.7	1/45	33K	5,000	1.76	1.62	1.50	1.33	1.20
749-S	XX016X	2.0	1/4	22K	14,000	1.76	1.62	1.50	1.33	1.20
749-S	XX022X	1.9	1/4	None	25,000	.79	.72	.67	.59	.54
749-S	XX023X	1.0	1/10	56K	8,500	1.76	1.62	1.50	1.33	1.20
749-S	XX024X	0.7	1/15	100K	25,000	1.76	1.62	1.50	1.33	1.20
749-S	XX025X	0.7	1/15	None	25,000	.79	.72	.67	.59	.54
749-S	XX030X	0.9	1/8	47K	12,000	1.87	1.71	1.59	1.41	1.28
749-S	XX031X	0.35	1/16	150K	16,000	1.87	1.71	1.59	1.41	1.28
749-S	XX032X	0.3	1/25	220K	25,000	1.87	1.71	1.59	1.41	1.28
749-S	XX036X	0.7	1/15	None	25,000	.85	.78	.72	.64	.58
749-S	XX042X	1.0	1/10	56K	100,000	1.76	1.62	1.50	1.33	1.20

T-2 INCANDESCENT

Stock No.	Mfr's Type CML-	Design Volt	Design Amp	End Ft. Candles	Aver. Life Hours	EACH 1-9	10-24	25-99	100-249	250-499
749-S	00034X	6	.140	800	5,000	1.28	1.18	1.10	.97	.88
749-S	00047X	10	.017	100	5,000	1.28	1.18	1.10	.97	.88
749-S	00069X	12	.170	2,000	5,000	1.28	1.18	1.10	.97	.88
749-S	00048X	16	.017	150	5,000	1.33	1.22	1.13	1.00	.91
749-S	00035X	28	.040	2,000	5,000	1.28	1.18	1.10	.97	.88
749-S	00033X	48	.053	1,500	5,000	1.28	1.18	1.10	.97	.88
749-S	00068X	60	.050	2,600	5,000	1.28	1.18	1.10	.97	.88
749-S	00026X	120	.025	1,500	5,000	1.39	1.28	1.18	1.05	.95

CML SERIES CARTRIDGE HOLDERS



Panel mounting holders for T-1¾ or T-2 lamps. Body, collar and facing nut are black anodized aluminum. Molded phenolic insulation. Turret terminals are spring brass, gold over nickel plate; solder cup terminals are spring brass, tintilate plate. Polarized terminal pins. Types 10202-1 and 10203-1 have 9/32" knurled collar nut. Mount in round or "D" hole, .375" dia. in panels to 15/32" thick. *Front/rear mounting.

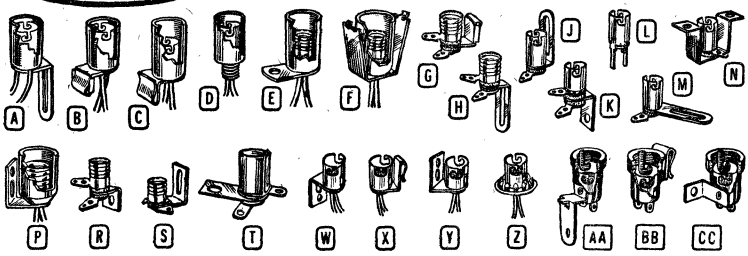
MOUNTING ACCESSORIES

*Low-cost clip for non-panel mounting; phenolic body.

Stock No.	Mfr's Type	Description	EACH 1-4	5-9	10-99	100-499	500-999
749-7990	CML-10380	Panel Mtg. Clip	.15	.11	.09	.08	.07
749-4113	CM21-3	Mounting Clip*	.39	.32	.26	.22	.19
749-4115	CM21-5	Right Angle Socket	1.28	1.03	.86	.71	.61
749-4124	CM21-14	Swage Mtg. Socket	.73	.59	.49	.40	.35

Stock No.	Mfr's Type CML-	Fig.	Mounting	Terminals	EACH 1-9	10-99	100-499	500-999	1000-Up
749-7980	10202-0	A	*	Turret	1.15	.96	.80	.69	.59
749-7981	10202-1	B	Front	Turret	1.25	1.04	.86	.74	.64
749-7985	10203-0	C	*	Solder	1.15	.96	.80	.69	.59
749-7986	10203-1	D	Front	Solder	1.25	1.04	.86	.74	.64

LEECRAFT Lampholders and Pilot Light Sockets



SERIES 200 MINIATURE BAYONET

Miniature bayonet sockets with insulating sleeves. Have .025 to .032" steel brackets; zinc-plated for corrosion resistance. Built-in 6" long #22 (7x30) wire leads ▪U.L. rated at 80°C., PVC insulated. Use T-3¼, G-3½ or G-4½ bulb. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Skt. Fig.	Bkt. Fig.	EACH 1-24	25-99	100-Up
844-1400	2-01	A	X	.65	.38	.32
844-1401	2-04	B	B	.65	.38	.32
844-1402	*2-06*	*A*	*A*	.65	.38	.32
844-1403	2-13	A	M	.65	.38	.32
844-1404	2-15	A	F	.65	.38	.32

SERIES 300 MINIATURE BAYONET

Miniature bayonet sockets in molded bakelite with wire leads. Type 3-30N complete with nut ▪U.L. and C.S.A. Listed. Use T-3¼, G-3½, G-4½ or NE-51 lamps. Av. shpg. wt., 1 oz.

844-2100	3-01	C	X	.69	.47	.38
844-2101	3-02	C	C	.69	.47	.38
844-2102	3-05	C	J	.69	.47	.38
844-2103	3-06	C	A	.69	.47	.38
844-2104	3-20	C	K	.69	.47	.38
844-2105	*3-30N*	*D*	*D*	.88	.66	.54

SERIES 400 CANDELABRA SCREW

Candelabra screw sockets in molded bakelite. #18 black and white wire leads 6" long with ends stripped ½". Type 4-40 snaps into 15/16" hole. Type 4-30N with nut. For both incandescent and neon-glow lamps. Use NE-45, S6 or 10C7 lamps. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Skt. Fig.	Bkt. Fig.	EACH 1-24	25-99	100-Up
844-2300	4-01	F	X	.69	.47	.38
844-2301	4-05	F	J	.69	.47	.38
844-2302	4-06	F	A	.69	.47	.38
844-2303	4-08	F	R	.69	.47	.38
844-2304	4-40	F	Z	.69	.47	.38
844-2305	4-30N	F	D	.88	.66	.54

SERIES 500 MINIATURE SCREW

Miniature screw sockets with solder terminals tinned for easy connection. Useful for low-voltage incandescent lamp applications. Heavily zinc-plated steel brackets resist corrosion. Use T-3¼, TL-3, or G-3½ lamps. *No bracket. Shpg. wt., 1 oz.

844-2401	5-01	G	X	.55	.37	.27
844-2404	5-04	G	B	.55	.37	.27
844-2405	5-05	G	J	.55	.37	.27
844-2406	*5-06*	*G*	*A*	.55	.37	.27
844-2407	5-07	G	*	.55	.37	.27
844-2408	5-08	G	R	.55	.37	.27
844-2413	5-13	G	M	.55	.37	.27

SERIES 600 CANDELABRA SCREW

Candelabra sockets with tinned solder terminals. Have .025 to .032" steel brackets; zinc-plated to fight corrosion. Use G6 or S6 lamps. *No bracket. Shpg. wt., 1 oz.

844-2500	6-01	H	X	.58	.40	.29
844-2501	6-04	H	B	.58	.40	.29
844-2502	6-05	H	J	.58	.40	.29
844-2503	6-06	H	H	.58	.40	.29
844-2504	6-07	H	*	.58	.40	.29
844-2505	6-08	H	R	.58	.40	.29
844-2506	6-11	H	N	.58	.40	.29
844-2507	6-13	H	M	.58	.40	.29

SERIES 700 MINIATURE BAYONET

Miniature bayonet sockets with insulated mounting brackets. Terminals are tinned for easy soldering. For low-voltage incandescent lamps as T-3¼, G-3½, and G-4½. *No bracket. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Skt. Fig.	Bkt. Fig.	EACH 1-24	25-99	100-Up
844-3100	7-01	K	X	.58	.34	.25
844-3102	7-04	K	B	.58	.34	.25
844-3103	7-05	J	J	.58	.34	.25
844-3104	7-06	K	A	.58	.34	.25
844-3105	7-07	K	*	.58	.34	.25
844-3106	7-08	K	R	.58	.34	.25
844-3107	*7-11*	*N*	*N*	.58	.34	.25
844-3108	*7-13*	*M*	*M*	.58	.34	.25
844-3109	7-15	K	F	.58	.34	.25
844-3110	*7-20*	*K*	*K*	.58	.34	.25
844-3111	*7-35*	*L*	*L*	.71	.52	.40

SERIES 11-200 CANDELABRA BAYONET

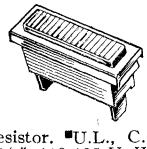
Single-contact candelabra bayonet socket. Has one 6" #18 (16x30) wire lead, with a 1/32" wall of PVC insulation ▪U.L. and C.S.A. rated at 80°C. Has .035 to .042" thick steel brackets, cadmium-plated to fight corrosion. For T-4½ bulb. Wt., 1 oz.

844-3300	11-271	Y	Y	.65	.47	.38
844-3301	11-272	Y	Y	.65	.47	.38

SERIES 12-200 CANDELABRA BAYONET

Double-contact candelabra bayonet sockets with wire leads. Contacts are mounted in an insulating bakelite disc and separated by small coils. Disc is spring-loaded to assure positive contact. #18-gauge (16x30) leads rated at 80° C. Rated 75 watts, 125 volts. Type 12-230BN with nut. Type 12-240 snaps into 15/16" hole. For incandescent and neon glow lamps as G6, S6, 10C7 and NE-48. ▪U.L. and C.S.A. Listed. Wt., 1 oz.

844-3601	12-201	X	X	.80	.54	.50
844-3612	12-212	X	E	.80	.54	.50
844-3640	12-240	Z	Z	.80	.54	.50
844-3671	12-271	Y	Y	.80	.54	.50
844-3672	12-272	Y	W	.80	.54	.50
844-3630	12-230BN	Z	D	.93	.74	.59



SERIES 31 AND 31T NEON LIGHTS

Rectangular lights have white nylon housing, chrome plated bezels. Neon lamp, plastic lens, dropping resistor. ▪U.L., C.S.A. Listed. 1 25/64x1 7/64x 21/32". 110-125 V. Wt. 2 oz.

SERIES 31 (6-Inch Wire Leads)

Stock No.	Mfr's Type	Lens Color	EACH 1-24	25-99	100-Up
844-5005	*31-2111-6*	*Red*	1.16	.93	.58
844-5015	31-2113-6	Amber	1.16	.93	.58
844-5025	31-2117-6	Clear	1.16	.93	.58
844-5035	31-2115-6	White	1.16	.93	.58

SERIES 31T (.250" Tabs)

844-5001	*31-2111T*	*Red*	1.16	.93	.58
844-5010	31-2113T	Amber	1.16	.93	.58
844-5020	31-2117T	Clear	1.16	.93	.58
844-5030	31-2115T	White	1.16	.93	.58

SERIES 1400 INTERMEDIATE SCREW

Intermediate screw sockets with wire leads. For incandescent and ozone lamps, as S-6 or S-11 intermediate lamps. ▪U.L. and C.S.A. Listed. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Skt. Fig.	Bkt. Fig.	EACH 1-24	25-99	100-Up
844-3700	14-71	P	P	.76	.55	.46
844-3701	14-72	P	W	.76	.55	.46

SERIES 1600 MIDGET SCREW

Midget screw sockets with solder terminals, tinned for easy connections. For P-2½ or T-1¾ lamps. Shpg. wt., 1 oz.

844-3900	16-08	R	R	.69	.47	.38

SERIES 1800 CANDELABRA SCREW

Candelabra screw base socket. For incandescent and neon-glow lamps, as S6 and NE-45. Rated 75 watts, 125 volts. Insulating sleeve for use over screw sleeve is supplied to meet ▪U.L. and C.S.A. requirements. *Bracket turned down. 1 oz.

844-4100	18-76	S	S*	.70	.45	.35
844-4200	18-79	S	S	.70	.45	.35

SERIES 25-00 MIDGET GROOVED

Subminiature midget-grooved sockets for midget-grooved base incandescent lamps as TL-1¾ and T-1¾ lens-end amps. Have two solder terminals. Provision for rapid lamp insertion; built-in ejection. 1 oz.

844-4408	25-08	T	R	.82	.60	.54
844-4412	25-12	T	T	.82	.60	.54
844-4405	25-05	T	J	.82	.60	.54
844-4406	25-06	T	A	.82	.60	.54

SERIES 25-200 MIDGET GROOVED

Subminiature midget-grooved sockets. Same as Series 25-00 above, but have two insulated wire leads. For TL-1¾ and T-1¾ lamps. Shpg. wt., 1 oz.

844-4500	25-208	T	R	.88	.66	.59
844-4501	25-212	T	T	.88	.66	.59
844-4777	25-277R	T	N	.88	.66	.59

SERIES 25-200-1 MIDGET-GROOVED

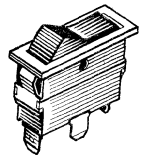
Subminiature midget-grooved sockets. Same as Series 25-00 above, but grounded types with single wire lead. Type 25-230N-1 with nut. Type 25-240-1 snaps into 15/16" hole. For TL-1¾ and T-1¾. 1 oz

844-4700	25-230N-1	D	D	1.06	.87	.73
844-4701	25-240-1	T	Z	.88	.66	.59

SERIES 57-00 CANDELABRA BAYONET

Double-contact candelabra bayonet with tabs. Rated 75 watts at 125 V. Zinc-plated steel brackets, .035-.042". For NE-48 or S6. Shpg. wt., 1 oz.

844-9724	57-24	CC	CC	.69	.47	.38
844-9741	57-41	AA	AA	.69	.47	.38
844-9745	57-45	BB	BB	.69	.47	.38



ROCK-A-LITE™

ILLUMINATED ROCKER TYPE SWITCH

SPST 10A switch with faceted lens. White housing. 125V and 250V units have neon lamp, others have incandescent. Snaps into 1.281x.395" hole. .250" male tab terms. Ratings: 71, 1/3W; 71H, 1/3W; 71G1, .20A; 71G3, .08A; 71G5, .04A. Red lens standard. Available on special order: green, amber, blue, white, clear. 6 oz.

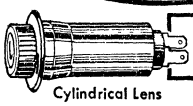
Stock No.	Mfr's Type	Voltage	EACH 1-24	25-99	100-Up
844-9810	71G1-2131T	6.3	1.82	1.34	1.23
844-9820	71G3-2131T	14	1.82	1.34	1.23
844-9830	71G5-2131T	28	1.82	1.34	1.23
844-9800	71-2131T	125	1.71	1.23	1.07
844-9840	71H-2131T	250	1.71	1.23	1.07

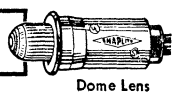
Lighted Devices, Pages 245-261; Readouts, Pages 261-264

LEECRAFT Indicator and Pilot Lights

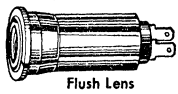
LIGHTED DEVICES

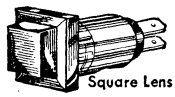
SNAPLITE NEON PILOT LIGHTS


Cylindrical Lens


Dome Lens

Available with 6" Wire Leads or 0.187" Tab Terminals


Flush Lens


Square Lens

Indicator lights with high-brightness neon lamps. Snap into ½" panel hole, no additional hardware required. Choice of four lens-cap styles. Built-in resistor, lamp replacement unnecessary during life of equipment. Insulated wire leads or 0.187" tab terminals (indicated by "T" in Type No.) ⅓-watt. Series 32 is for 110-125 volts. Series 35 (indicated by *) for 210-250 volts. U.L. Component Program-Recognized, and C.S.A. Listed. Shpg. wt., 1½ oz.

NEON LAMPS—CYLINDRICAL, DOME, FLUSH CAPS

Lens Color	Cylindrical Lens Stock No.	Cylindrical Lens Type 32-	Dome-Shape Lens Stock No.	Dome-Shape Lens Type 32-	Flush Lens Stock No.	Flush Lens Type 32-
Red	844-5100	*2111*	844-5150	*2211*	844-5200	*2311*
Amber	844-5110	2113	844-5160	2213	844-5210	2313
White	844-5120	2115	844-5170	2215	844-5220	2315
Clear	844-5130	2117	844-5180	2217	844-5230	2317
Red	844-5105	*2111T*	844-5155	*2211T*	844-5205	*2311T*
Amber	844-5115	2113T	844-5165	2213T	844-5215	2313T
White	844-5125	2115T	844-5175	2215T	844-5225	2315T
Clear	844-5135	2117T	844-5185	2217T	844-5235	2317T
Red	844-6200	*2111**	844-6210	2211*	844-6220	2311*
Amber	844-6205	*2113**	844-6215	2213*	844-6225	2313*

1-24, EA.	25-99, EA.	100-249, EA.	250-499, EA.	500-Up, EA.
1.08	.88	.54	.48	.436

ABOVE TYPES WITH CHROME BEZEL

Red	844-6000	*R2111*	844-6020	R2211	844-6040	R2311
Amber	844-6010	R2113	844-6030	R2213	844-6050	R2313
Red	844-6005	*R2111T*	844-6025	R2211T	844-6045	R2311T
Amber	844-6015	R2113T	844-6035	R2213T	844-6055	R2313T

1-24, EA.	25-99, EA.	100-249, EA.	250-499, EA.	500-Up, EA.
1.16	.95	.58	.523	.480

SQUARE LENS WITH CHROME BEZEL—110 VOLTS

Lens Color	6" Wire Leads Stock No.	6" Wire Leads Mfr's Type	Tab Terminals Stock No.	Tab Terminals Mfr's Type
Red	844-6060	*32R2911*	844-6065	*32R2911T*
Amber	844-6070	32R2913	844-6075	32R2913T
White	844-6080	*32R2915*	844-6085	32R2915T
Clear	844-6090	32R2917	844-6095	32R2917T

1-24, EA.	25-99, EA.	100-249, EA.	250-499, EA.	500-Up, EA.
1.16	.95	.58	.523	.480

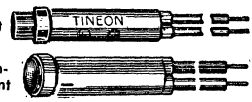
INCANDESCENT PILOT LAMPS WITH CHROME BEZEL

Like Type 32R, but with incandescent lamp. 6" wire leads. 1½ oz.

Lens Cap	Lens Color	6 Volts (200 mA) Stock No.	6 Volts Type 32R-	14 Volts (80 mA) Stock No.	14 Volts Type 32R-	28 Volts (40 mA) Stock No.	28 Volts Type 32R-
Cyl	Red	844-5400	G1-2111	844-5500	G3-2111	844-5700	G5-2111
Cyl	Grn	844-5403	G1-2112	844-5503	G3-2112	844-5703	G5-2112
Cyl	Amb	844-5407	G1-2113	844-5507	G3-2113	844-5707	G5-2113
Cyl	Blue	844-5410	G1-2114	844-5510	G3-2114	844-5710	G5-2114
Cyl	Wht	844-5413	G1-2115	844-5513	G3-2115	844-5713	G5-2115
Cyl	Clr	844-5417	G1-2117	844-5517	G3-2117	844-5717	G5-2117
Dome	Red	844-5420	G1-2211	844-5520	G3-2211	844-5720	G5-2211
Dome	Grn	844-5423	G1-2212	844-5523	G3-2212	844-5723	G5-2212
Dome	Amb	844-5427	G1-2213	844-5527	G3-2213	844-5727	G5-2213
Dome	Blue	844-5430	G1-2214	844-5530	G3-2214	844-5730	G5-2214
Dome	Wht	844-5433	G1-2215	844-5533	G3-2215	844-5733	G5-2215
Dome	Clr	844-5437	G1-2217	844-5537	G3-2217	844-5737	G5-2217
Flush	Red	844-5440	G1-2311	844-5540	G3-2311	844-5740	G5-2311
Flush	Grn	844-5443	G1-2312	844-5543	G3-2312	844-5743	G5-2312
Flush	Amb	844-5447	G1-2313	844-5547	G3-2313	844-5747	G5-2313
Flush	Blue	844-5450	G1-2314	844-5550	G3-2314	844-5750	G5-2314
Flush	Wht	844-5453	G1-2315	844-5553	G3-2315	844-5753	G5-2315
Flush	Clr	844-5457	G1-2317	844-5557	G3-2317	844-5757	G5-2317
Sq	Red	844-5460	G1-2911	844-5560	G3-2911	844-5760	*G5-2911*
Sq	Grn	844-5463	G1-2912	844-5563	G3-2912	844-5763	G5-2912
Sq	Amb	844-5467	G1-2913	844-5567	G3-2913	844-5767	G5-2913
Sq	Blue	844-5470	G1-2914	844-5570	G3-2914	844-5770	G5-2914
Sq	Wht	844-5473	G1-2915	844-5573	G3-2915	844-5773	G5-2915
Sq	Clr	844-5477	G1-2917	844-5577	G3-2917	844-5777	G5-2917

Series	1-24, EA.	25-99, EA.	100-249, EA.	250-499, EA.	500-Up, EA.
G1	1.53	1.21	.73	.704	.680
G3	1.47	1.25	.76	.739	.687
G5	1.47	1.21	.73	.709	.678

"TINEON" MINIATURE NEON INDICATOR LIGHTS



High-brightness neon indicator lamps in white nylon housing. Built-in resistor to suit applied voltage. Press-fit into 5/16" hole. Choice of flush-mounting or hi-hat lens; red, amber, white or clear lens. Plastic insulated 6" leads, 18-ga., stripped ½". Speed nut for maximum security. ⅓-watt at 125 V. U.L. Component Program-Recognized, and C.S.A. Listed. Av. shpg. wt., 1 oz.

STANDARD FLUSH MOUNT

Stock No.	Mfr's Type	Color	EACH 1-24	25-99	100-249	250-499	500-Up
844-6611	*36N2311*	*Red*	1.03	.82	.54	.485	.436
844-6613	*36N2313*	*Amber*	1.03	.82	.54	.485	.436
844-6615	36N2315	White	1.03	.82	.54	.485	.436
844-6617	36N2317	Clear	1.03	.82	.54	.485	.436

HI-HAT WITH ALUMINUM BEZEL

844-6400	*36EN2111*	*Red*	1.21	1.00	.65	.573	.482
844-6405	*36EN2113*	*Amber*	1.21	1.00	.65	.573	.482
844-6410	36EN2115	White	1.21	1.00	.65	.573	.482
844-6415	36EN2117	Clear	1.21	1.00	.65	.573	.482

FLUSH MOUNT WITH ALUMINUM BEZEL

844-6420	*36EN2311*	*Red*	1.21	1.00	.65	.573	.482
844-6425	36EN2313	Amber	1.21	1.00	.65	.573	.482
844-6430	36EN2315	White	1.21	1.00	.65	.573	.482
844-6435	36EN2317	Clear	1.21	1.00	.65	.573	.482

"TINEON" MINIATURE INCANDESCENT INDICATOR LIGHTS

Meet low-voltage characteristics in white nylon housing. Press-fit into 5/16" hole. Choice of 6, 14 or 28 V.; flush-mounting or hi-hat lens; red, green, amber, blue, white, or clear lens. Aluminum bezels. 6" insulated leads. With speed nut. Ratings: 6 V. types, 200 mA; 14 V., 80 mA; 28 V., 40 mA. U.L. Component Program-Recognized, and C.S.A. Listed. Av. shpg. wt., 1 oz.

INDICATOR LIGHTS WITH HI-HAT LENS (Prices Below)

Lens Color	6 Volts (200 mA) Stock No.	6 Volts Type 41EN-	14 Volts (80 mA) Stock No.	14 Volts Type 41EN-	28 Volts (40 mA) Stock No.	28 Volts Type 41EN-
Red	844-7000	G1-2111	844-7100	G3-2111	844-7200	G5-2111
Green	844-7005	G1-2112	844-7105	G3-2112	844-7205	G5-2112
Amber	844-7010	G1-2113	844-7110	G3-2113	844-7210	G5-2113
Blue	844-7015	G1-2114	844-7115	G3-2114	844-7215	G5-2114
White	844-7020	G1-2115	844-7120	G3-2115	844-7220	G5-2115
Clear	844-7025	G1-2117	844-7125	G3-2117	844-7225	G5-2117

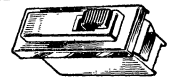
INDICATOR LIGHTS WITH FLUSH-MOUNT LENS (Prices Below)

Red	844-7030	G1-2311	844-7130	G3-2311	844-7230	*G5-2311*
Green	844-7035	G1-2312	844-7135	G3-2312	844-7235	G5-2312
Amber	844-7040	G1-2313	844-7140	G3-2313	844-7240	G5-2313
Blue	844-7045	G1-2314	844-7145	G3-2314	844-7245	G5-2314
White	844-7050	G1-2315	844-7150	G3-2315	844-7250	G5-2315
Clear	844-7055	G1-2317	844-7155	G3-2317	844-7255	G5-2317

PRICES FOR INCANDESCENT INDICATOR LIGHTS ABOVE

Series	1-24, EA.	25-99, EA.	100-249, EA.	250-499, EA.	500-Up, EA.
G1	1.60	1.14	.750	.710	.695
G3	1.53	1.21	.775	.745	.720
G5	1.50	1.14	.774	.716	.693

"SLIDELITE" PILOT INDICATOR/SLIDE SWITCH



For panels up to .090". Snaps into 1.281x .395" hole. Neon type rated ⅓ watt. Switch rated 3 A AC or 0.5 A DC. U.L., C.S.A. Listed. Chromed bezel. 6" leads. 6 oz.

Lens	Neon Stock No.	Neon Type 51-	6 V (200 mA) Stock No.	6 V Type 51G1-	14 V (80 mA) Stock No.	14 V Type 51G3-	28 V (40 mA) Stock No.	28 V Type 51G5-
Red	844-7501	2131	844-7700	2131	844-7750	2131	844-7800	2131
Grn	.....	.....	844-7705	2132	844-7755	2132	844-7805	2132
Amb	844-7503	2133	844-7710	2133	844-7760	2133	844-7810	2133
Blue	.....	.....	844-7715	2134	844-7765	2134	844-7815	2134
Wht	844-7505	2135	844-7720	2135	844-7770	2135	844-7820	2135

PRICES FOR SLIDELITES ABOVE

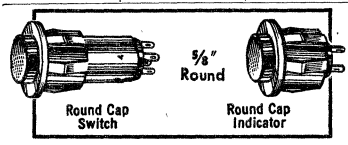
Series	Description	1-24, EA.	25-99, EA.	100-Up, EA.
51	Neon	1.69	1.19	1.106
51G1	6V Incand.	1.81	1.30	1.185
51G3	12-14V Incand.	1.81	1.30	1.151
51G5	28V Incand.	1.81	1.30	1.112

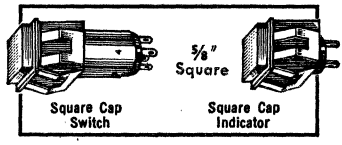
DIALCO

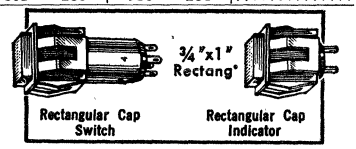
Pushbutton Switches and Lights

DIALCO INDEX

Series	Page	Series	Page	Series	Page	Series	Page	Series	Page	Series	Page	Series	Page	Series	Page	Series	Page
32	254	103	254	184	255	252	257	506	257	513	254	539	256	803	255	922	255
52	259	125	259	187	255	300	254	507	256	513	255	710	263	804	255	.....	
81	259	137	258	188	255	301	254	507	257	515	257	713	263	806	255	.....	
95	259	162	258	249	257	303	254	507	256	521	263	800	255	820	255	.....	
101	258	183	255	250	256	502	258	508	257	533	254	801	255	913	256	.....	







SERIES 513 SWITCHES AND SERIES 533 INDICATORS

Low-profile snap-in mounting. Series 513. Momentary action with N.C., N.O. or two-circuit (one N.C., one N.O.) types. Takes T-1¾ incandescent bulbs with midget flanged base from 6-28 V. Contact rating: 3 A res. at 125 VAC or 30 VDC. Series 533 are matching indicator base assemblies. Series 300 are caps for both series. Available in 5/8" sq. or rnd., or ¾x1". Switch and indicator bases have black bezels. *With barrier †without barrier. 1 oz.

SERIES 533 INDICATOR BASE ASSEMBLIES Order cap below.

Stock No.	Type 533-	Takes Cap	EACH 1-4	5-9	10-24	25-99	100-Up
770-1930	0601	5/8" Sq.	2.32	1.91	1.73	1.57	1.44
770-1940	0701	5/8" Rnd.	2.32	1.91	1.73	1.57	1.44
770-1950	0901*	¾x1"	2.32	1.91	1.73	1.57	1.44
770-1960	1001†	¾x1"	2.32	1.91	1.73	1.57	1.44

SERIES 513 SWITCH BASES—INCLUDES BEZEL, CLIP, SPANNER RING

Stock No.	Type 513-	Contacts	Bezel Uses Cap	EACH 1-4	5-9	10-24	25-99	100-Up
770-1725	0106-001	SPST-NO	5/8" Sq.	5.59	4.34	3.89	3.65	3.34
770-1726	0107-001	SPST-NO	5/8" Rnd.	5.59	4.34	3.89	3.65	3.34
770-1727	0109-001†	SPST-NO	¾" x 1"	5.59	4.34	3.89	3.65	3.34
770-1729	0110-001*	SPST-NO	¾" x 1"	5.59	4.34	3.89	3.65	3.34
770-1730	0206-001	SPST-NC	5/8" Sq.	5.59	4.34	3.89	3.65	3.34
770-1731	0207-001	SPST-NC	5/8" Rnd.	5.59	4.34	3.89	3.65	3.34
770-1732	0209-001†	SPST-NC	¾" x 1"	5.59	4.34	3.89	3.65	3.34
770-1734	0210-001*	SPST-NC	¾" x 1"	5.59	4.34	3.89	3.65	3.34
770-1735	0306-001	2-Circuit	5/8" Sq.	6.10	4.72	4.22	3.96	3.63
770-1736	0307-001	2-Circuit	5/8" Rnd.	6.10	4.72	4.22	3.96	3.63
770-1737	0309-001†	2-Circuit	¾" x 1"	6.10	4.72	4.22	3.96	3.63
770-1739	0310-001*	2-Circuit	¾" x 1"	6.10	4.72	4.22	3.96	3.63

SERIES 513 ALTERNATE ACTION SWITCHES

‡Switch Base only. Does not include bezel, clip, or spanner ring.

770-1741	1406-001	SPDT	5/8" Sq.	8.25	6.66	5.95	5.56	5.05
770-1742	1407-001	SPDT	5/8" Rnd.	8.25	6.66	5.95	5.56	5.05
770-1743	1409-001†	SPDT	¾" x 1"	8.25	6.66	5.95	5.56	5.05
770-1745	1410-001*	SPDT	¾" x 1"	8.25	6.66	5.95	5.56	5.05
770-1746	1506-001	2-Circuit	5/8" Sq.	8.25	6.66	5.95	5.56	5.05
770-1747	1507-001	2-Circuit	5/8" Rnd.	8.25	6.66	5.95	5.56	5.05
770-1748	1509-001†	2-Circuit	¾" x 1"	8.25	6.66	5.95	5.56	5.05
770-1750	1510-001*	2-Circuit	¾" x 1"	8.25	6.66	5.95	5.56	5.05
770-1744	1401-604‡	SPDT	.....	7.35	5.91	5.29	4.94	4.49
770-1749	1501-604‡	2-Circuit	.....	7.35	5.91	5.29	4.94	4.49

PUSHBUTTON SWITCH CAPS FOR SERIES 513 AND 533

5/8" SQUARE

Stock No.	Mfr's Type	Color	EACH 1-4	5-9	10-24	25-99	100-Up
770-1310	300-1871	Red	1.14	.91	.86	.80	.68
770-1311	300-1872	Green	1.14	.91	.86	.80	.68
770-1312	300-1873	Amber	1.14	.91	.86	.80	.68
770-1313	300-1874	Blue	1.14	.91	.86	.80	.68
770-1314	300-1875	White	1.14	.91	.86	.80	.68
770-1315	300-1876	Yellow	1.14	.91	.86	.80	.68

5/8" ROUND

770-1320	*301-1471*	*Red*	1.14	.91	.86	.80	.68
770-1321	301-1472	Green	1.14	.91	.86	.80	.68
770-1322	301-1473	Amber	1.14	.91	.86	.80	.68

5/8" ROUND (Cont'd)

Stock No.	Mfr's Type	Color	EACH 1-4	5-9	10-24	25-99	100-Up
770-1323	301-1474	Blue	1.14	.91	.86	.80	.68
770-1324	301-1475	White	1.14	.91	.86	.80	.68
770-1325	301-1476	Yellow	1.14	.91	.86	.80	.68

¾x1" RECTANGULAR

770-1330	*303-3471*	*Red*	1.22	1.01	.95	.88	.74
770-1331	303-3472	Green	1.22	1.01	.95	.88	.74
770-1332	303-3473	Amber	1.22	1.01	.95	.88	.74
770-1333	303-3474	Blue	1.22	1.01	.95	.88	.74
770-1334	303-3475	White	1.22	1.01	.95	.88	.74
770-1335	303-3476	Yellow	1.22	1.01	.95	.88	.74

A

B

ONE-INCH MOUNTING CLEARANCE LIGHTS

C

D

NON-OIL-TIGHT ASSEMBLIES

A Series 32-3101. 115-volt. Black phenolic; brass. Faceted lens. Candelabra base. Less S6 lamp. Underwriter's Laboratories Component-Program Recognized.

Stock No.	Mfr's Type	Color	EACH 1-4	5-9	10-24	25-99	100-249	250-Up
770-0256	32-3101-0431-302	Red	2.34	1.72	1.51	1.39	1.26	1.13
770-0257	32-3101-0432-302	Green	2.34	1.72	1.51	1.39	1.26	1.13
770-0258	32-3101-0433-302	Amber	2.34	1.72	1.51	1.39	1.26	1.13
770-0259	32-3101-0434-302	Blue	2.34	1.72	1.51	1.39	1.26	1.13
770-0260	32-3101-0435-302	White	2.34	1.72	1.51	1.39	1.26	1.13
770-0261	32-3101-0437-302	Clear	2.34	1.72	1.51	1.39	1.26	1.13

D Series 32-2901. Enclosed lamp. Convex lens; frosted back. Solid brass. Underwriter's Laboratories Component-Program Recognized. †Translucent, unfrosted. Less S6 lamp. 6" leads. Friction-fit chromed cap.

Stock No.	Mfr's Type	Color	EACH 1-4	5-9	10-24	25-99	100-249	250-Up
770-0250	32-2901-0111-302	Red	3.84	2.50	2.35	2.20	2.06	1.92
770-0251	32-2901-0112-302	Green	3.84	2.50	2.35	2.20	2.06	1.92
770-0252	32-2901-0113-302	Amber	3.84	2.50	2.35	2.20	2.06	1.92
770-0253	32-2901-0117-302	Clear†	3.84	2.50	2.35	2.20	2.06	1.92
770-0254	32-2901-0135-302	White	3.84	2.50	2.35	2.20	2.06	1.92

OIL-TIGHT ASSEMBLIES

B C Series 103-3101. Use S6 Candelabra screw base lamp. Glass lens gives 180° light spread. Assembly includes gasket for oil and water tight seal. 1⅜" center-to-center spacing. †Torpedo faceted lens. ‡Frosted-back dome lens.

Lens Color	Torpedo Lens (Fig. B)† Stock No.	Mfr's Type	Dome Lens (Fig. C)‡ Stock No.	Mfr's Type
Red	770-0650	103-3101-1331-403	770-0654	103-3101-1211-403
Green	770-0651	103-3101-1332-403	770-0655	103-3101-1212-403
Amber	770-0652	103-3101-1333-403	770-0656	103-3101-1213-403
White	770-0653	103-3101-1335-403	770-0657	103-3101-1235-403

1-4.....Each 4.08 5-9.....Each 3.17 10-24.....Each 2.92
25-99....Each 2.73 100-249....Each 2.37 250-Up.....Each 2.21

B C Series 103-3502. Accepts S6 bayonet base lamp. Glass lens gives light spread of 180°. 1⅜" center-to-center spacing. Includes gasket for water and oil tight seal.

Lens Color	Torpedo Lens (Fig. B)† Stock No.	Mfr's Type	Dome Lens (Fig. C)‡ Stock No.	Mfr's Type
Red	770-0662	103-3502-1331-403	770-0658	103-3502-1211-403
Green	770-0663	103-3502-1332-403	770-0659	103-3502-1212-403
Amber	770-0664	103-3502-1333-403	770-0660	103-3502-1213-403
White	770-0665	103-3502-1335-403	770-0661	103-3502-1235-403

1-4.....Each 4.47 5-9.....Each 3.48 10-24.....Each 3.22
25-99....Each 3.00 100-249....Each 2.61 250-Up.....Each 2.43

Further Quantity Breaks Available on Request

Lights, Switches and Accessories (Cont'd)

DIALCO

PRESS-TO-TEST INDICATOR LIGHTS

Permit pre-testing of lamps. 804-1710 and 803-1710 have 1" C. to C. spacing; mount in 5/8" diameter hole; use T-3¼ lamp. 801-1030 and 800-1030 have ¾" C. to C. spacing; mount in 15/32" hole; use T-1¾ lamp. Less lamps.

[A] SERIES 804-1710 WITH DIMMER

Stock No.	Mfr's Type	MIL No.	Lens Color
770-2180	804-1710-0337-504	MS25331-1	Clear
770-2175	804-1710-0331-504	MS25331-2	Red
770-2176	804-1710-0332-504	MS25331-3	Green
770-2177	804-1710-0333-504	MS25331-4	Amber

1-4.....Each 3.84 5-9.....Each 3.08
10-24.....Each 2.70 25-Up.....Each 2.49

[A] SERIES 803-1710 NON-DIMMER

Stock No.	Mfr's Type	MIL No.	Lens Color
770-2171	803-1710-0337-504	MS25331-5	Clear
770-2165	803-1710-0331-504	MS25331-6	Red
770-2166	803-1710-0332-504	MS25331-7	Green
770-2167	803-1710-0333-504	MS25331-8	Amber
770-2168	803-1710-0334-504	.....	Blue

1-4.....Each 3.41 5-9.....Each 2.81
10-24.....Each 2.47 25-Up.....Each 2.25

[B] SERIES 806-1710 NON-DIMMER

Stock No.	Mfr's Type	MIL No.	Lens Color
770-2189	806-1710-0437-504	.....	Clear
770-2192	806-1710-0431-504	.....	Red
770-2185	806-1710-0432-504	.....	Green
770-2186	806-1710-0433-504	.....	Amber
770-2187	806-1710-0434-504	.....	Blue

1-4.....Each 3.95 5-9.....Each 3.24
10-24.....Each 2.83 25-Up.....Each 2.59

[C] SERIES 801-1030 WITH DIMMER

770-2141	801-1030-0337-504	MS25041-1	Clear
770-2135	801-1030-0331-504	MS25041-2	Red
770-2136	801-1030-0332-504	MS25041-3	Green
770-2137	801-1030-0333-504	MS25041-4	Amber
770-2138	801-1030-0334-504	MS25041-10	Blue

1-4.....Each 3.31 5-9.....Each 2.60
10-24.....Each 2.29 25-Up.....Each 2.11

[C] SERIES 800-1030 NON-DIMMER

770-2129	800-1030-0337-504	MS25041-5	Clear
770-2125	800-1030-0331-504	MS25041-6	Red
770-2126	800-1030-0332-504	MS25041-7	Green
770-2127	800-1030-0333-504	MS25041-8	Amber
770-2128	800-1030-0334-504	MS25041-11	Blue

1-4.....Each 2.73 5-9.....Each 2.24
10-24.....Each 1.97 25-Up.....Each 1.81

820-2701 PRESS-TO-TEST SERIES

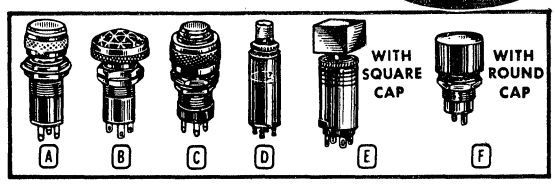
Conform to all applicable Military specs. Press-to-test assemblies (without dimmer) mount in 1" clearance hole. Approx. 1¼x3¼". Two binding screw terminals for "normal" circuit; one for "test". Use S6 bulbs with candelabra screw base. Less lamp, order below. *Translucent unfrosted. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Lens Color	EACH
770-2210	820-2701-0111-502	Red	
770-2150	820-2701-0112-502	Green	1-4.....8.64
770-2151	820-2701-0113-502	Amber	5-9.....7.07
770-2152	820-2701-0114-502	Blue	10-24.....6.29
770-2160	820-2701-1035-502	White*	25-99.....5.79
770-2154	820-2701-0116-502	Yellow	100-Up.....5.15
770-2155	820-2701-0117-502	Clear	

LAMPS FOR ABOVE
SOLD IN BOXES OF 10

Stock No.	Mfr's Type	Volts	A	Base	Bulb	EACH LAMP
749-2160	C7A	115	.....	Mid. Flange	T-2	1.10
749-2165	C9A	115	.....	S.C. Mid. Flange	T-2	1.10
749-9195	327	28	.04	Mid. Flange	T-1¾	.61
749-9310	381	6.3	.20	Mid. Flange	T-1¾	1.10

Lighted Devices, Pages 245-261; Readouts, Pages 261-264



PUSHBUTTON SWITCHES

[D] **Incandescent Illuminated Switch.** SPST—N.O., momentary contact. Gold plated contacts, 0.1 A at 125 VAC or 30 VDC, non-inductive. Uses T-1¾ lamp. Over 1 million operations. Rear mtg., 3/8" dia. hole; solder terminals. Less lamp.

Stock No.	Mfr's Type	Color	EACH
770-2352	922-1141-1631-523	Red	1-4.....5.22
770-2353	922-1141-1632-523	Green	5-9.....3.80
770-2354	922-1141-1633-523	Amber	10-24.....3.52
770-2356	922-1141-1634-523	Blue	25-99.....3.27
770-2357	922-1141-1635-523	White	100-Up.....3.03
770-2358	922-1141-1637-523	Clear	

[E] [F] ½" FRICTION-FIT PUSHBUTTON/LENS CAPS

Made to fit Illuminated Pushbutton Assemblies, and matching Indicator Light Base Assemblies, described below. Solid-color translucent face and sides. Have high-strength plastic lens. Square caps are non-rotatable for secure locking.

Color	Round Rotatable		Square (Non-Rotatable)	
	Stock No.	Mfr's Type	Stock No.	Mfr's Type
Red	770-1030	183-1471	770-1045	184-1871
Green	770-1031	183-1472	770-1046	184-1872
Amber	770-1032	183-1473	770-1047	184-1873
Blue	770-1033	183-1474	770-1048	184-1874
White	770-1034	183-1475	770-1049	184-1875
Yellow	770-1035	183-1476	.....	.....
Ivory	770-1036	183-1478	.....	.....

1-4.....Each .77 5-9.....Each .65 10-24.....Each .61
25-99.....Each .56 100-249.....Each .47
250-499.....Each .43 500-Up.....Each .39

[E] [F] ¾" FRICTION-FIT PUSHBUTTON/LENS CAPS

Non-rotatable pushbutton and lens cap assemblies provide secure locking of the socket terminal assembly in the mounting bushing. Designed to fit the indicator base assemblies described below. Square caps are non-rotatable for secure locking.

Color	Round (Keyed)		Square (Non-Rotatable)	
	Stock No.	Mfr's Type	Stock No.	Mfr's Type
Red	770-1120	188-1471	770-1110	187-1871
Green	770-1121	188-1472	770-1111	187-1872
Amber	770-1122	188-1473	770-1112	187-1873
Blue	770-1123	188-1474	770-1113	187-1874
White	770-1124	188-1475	770-1114	187-1875
Yellow	770-1125	188-1476	770-1115	187-1876
Ivory	770-1126	188-1478	770-1116	187-1878

1-4.....Each 1.14 5-9.....Each .91 10-24.....Each .86
25-99.....Each .80 100-249.....Each .68
250-499.....Each .63 500-Up.....Each .58

[E] [F] ILLUMINATED PUSHBUTTON SWITCH BASE ASSEMBLY

For use with friction-fit caps above. Require ½" mtg. holes. Rear mtg. for panels to 3/16" thick. Circuits: Type 0101, single, N.O.; Type 0201, single, N.C.; Type 0301, double, one N.O., one N.C.; Type 0601, Dry-Double, one N.O., one N.C.

Stock No.	Mfr's Type	EACH				
		1-4	5-9	10-24	25-99	100-Up
770-1728	*513-0101-604*	4.68	3.59	3.23	3.04	2.78
770-1733	513-0201-604	4.68	3.59	3.23	3.04	2.78
770-1738	*513-0301-604*	5.20	3.97	3.56	3.34	3.07
770-1740	513-0601-604	5.69	4.34	3.91	3.66	3.36

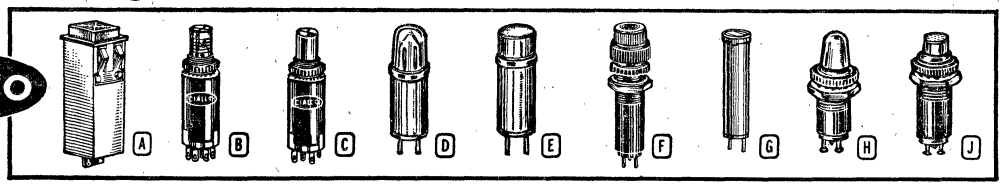
INDICATOR LIGHT BASE ASSEMBLIES

Type 183-9830-14-604 Front or Rear-Mounting Assembly. (Not illus.) For friction-fit caps, see above. Fits ½" diameter hole.
1-4.....Each 1.42 5-9.....Each 1.16 10-24.....Each 1.03
25-99.....Each .96 100-Up.....Each .87

Type 183-9730-14-602 Front Mounting Assembly Only. (Not illus.) For friction-fit caps, see above. Fits 15/32" diameter hole.
1-4.....Each 1.42 5-9.....Each 1.16 10-24.....Each 1.03
25-99.....Each .96 100-Up.....Each .87

Lights, Switches and Accessories

DIALCO



SERIES 539 FLASHING INDICATOR

[A] 25,000-hour high-brightness neon lamp flashes at a nominal rate of 130 flashes per minute. Connects to 115 VAC. Front-panel snap-in mounting in .755" (±.005") square hole. Overall length is 2.545". The lens system combines a polished reflector with a low profile cap and integral bezel. Unique refractive inner surface of cap directs light for both end-on and side angle visibility.

Lens Color	Flasher		Matching Indicator	
	Stock No.	Mfr's Type	Stock No.	Mfr's Type
Red	770-2006	539-1544-1891-001	770-2000	538-0066-1891-031
Amber	770-2016	539-1544-1893-001	770-2003	538-0066-1893-031
White	770-2016	539-1544-1895-001	770-2005	538-0066-1895-031

1-4.....Ea. 4.82 5-9.....Ea. 3.79 1-4...Ea. 2.24 5-9..Ea. 1.76
10-24..Ea. 3.53 25-99.....Ea. 3.27 10-24.Ea. 1.64 25-Up Ea. 1.52
NOTE: Black Bezel Standard—Also Available in Gray.

913 SERIES ILLUMINATED PUSHBUTTON SWITCH

[B] [C] New illuminated pushbutton switch with light action and short travel. Illumination of transparent pushbutton obtained from non-replaceable high brightness C2A(NE-2H) neon lamp (110-125 VAC operation only). Integral 33k current limiting resistor. Gold plated contacts rated 0.1 amp, 125 VAC; 0.1 amp 30 VDC. Single circuit (Illus. "C" above) or two circuit (Illus. "B" above). Rear mounts in 3/8" clearance hole in panels up to 1/8" thick.

Stock No.	Mfr's Type	Lens Color	Form	EACH 1-4	5-9	10-24	25-99	100-Up
770-2340	913-1156-1631-525	Red	N.O.	4.04	2.97	2.79	2.61	2.43
770-2341	913-1156-1633-525	Amber	N.O.	4.04	2.97	2.79	2.61	2.43
770-2342	913-1156-1635-525	White	N.O.	4.04	2.97	2.79	2.61	2.43
770-2343	913-1156-1637-525	Clear	N.O.	4.04	2.97	2.79	2.61	2.43
770-2344	913-1430-1631-525	Red	N.C.	4.04	2.97	2.79	2.61	2.43
770-2345	913-1430-1633-525	Amber	N.C.	4.04	2.97	2.79	2.61	2.43
770-2346	913-1430-1635-525	White	N.C.	4.04	2.97	2.79	2.61	2.43
770-2347	913-1430-1637-525	Clear	N.C.	4.04	2.97	2.79	2.61	2.43
770-2348	913-1436-1631-525	Red	T.C.	4.34	3.20	3.00	2.80	2.61
770-2349	913-1436-1633-525	Amber	T.C.	4.34	3.20	3.00	2.80	2.61
770-2350	913-1436-1635-525	White	T.C.	4.34	3.20	3.00	2.80	2.61
770-2351	913-1436-1637-525	Clear	T.C.	4.34	3.20	3.00	2.80	2.61

6-VOLT INCANDESCENT LAMP CARTRIDGES

Series 507-3906. Unbased T-1¾ lamps in aluminum sleeves, capped with plastic lenses. Operating life: 1000 hours. Stainless steel pins, nylon insul. For 6 volts, 200 milliamperes.

[D] Stovepipe		[E] Short Cylinder		Lens Color
Stock No.	Mfr's Type	Stock No.	Mfr's Type	
770-1546	507-3906-0971-600	770-1545	507-3906-1471-600	Red
770-1547	507-3906-0972-600	770-1548	507-3906-1472-600	Green
.....	.....	770-1549	507-3906-1473-600	Amber
.....	.....	770-1550	507-3906-1474-600	Blue
.....	.....	770-1551	507-3906-1475-600	White

1-4.....Ea. 1.48 5-9.....Ea. 1.32
10-24.....Ea. 1.17 25-99.....Ea. 1.07 100-Up.....Ea. .95

6.3 VOLT LONG-LIFE LAMP CARTRIDGES

[E] Series 507-3907. Same as 507-3906 Series, but for 6.3-volt, .04 ampere operation. 50,000 hour life. Short-cylinder type.

Stock No.	Mfr's Type	Lens Color	EACH
770-1552	507-3907-1471-600	Red	1-4.....2.04
770-1553	507-3907-1472-600	Green	5-9.....1.79
770-1554	507-3907-1473-600	Amber	10-24.....1.58
770-1555	507-3907-1474-600	Blue	25-99.....1.45
770-1556	507-3907-1475-600	White	100-Up.....1.29

6.3-VOLT LAMP CARTRIDGES

[E] Series 507-3909. Same as 507-3906 Series, but for 6.3-volt, 200-mA operation. 50,000 hour life. All are short-cylinder type.

Stock No.	Mfr's Type	Lens Color	EACH
770-1557	507-3909-1471-600	Red	1-4.....1.59
770-1558	507-3909-1472-600	Green	5-9.....1.39
770-1559	507-3909-1473-600	Amber	10-24.....1.23
770-1560	507-3909-1474-600	Blue	25-99.....1.12
770-1561	507-3909-1475-600	White	100-Up.... .99

14-VOLT LAMP CARTRIDGES

[E] Series 507-3914. For 14-volt, 80-mA operation. Short-cylinder type. Mount in 3/8" clearance hole. 50,000 hr. life.

Stock No.	Mfr's Type	Lens Color	EACH
770-1562	*507-3914-1471-600*	Red	1-4.....1.65
770-1563	507-3914-1472-600	Green	5-9.....1.47
770-1564	*507-3914-1473-600*	Amber	10-24.....1.30
770-1565	507-3914-1474-600	Blue	25-99.....1.19
770-1566	*507-3914-1475-600*	White	100-Up...1.06

28-VOLT LAMP CARTRIDGES

Series 507-3917. As above, but 28-V, 40-mA. Life: 1000 hours.

[D] Stovepipe		[E] Short Cylinder		Lens Color
Stock No.	Mfr's Type	Stock No.	Mfr's Type	
770-1520	507-3917-0971-600	770-1567	507-3917-1471-600	Red
770-1521	507-3917-0972-600	770-1568	507-3917-1472-600	Green
770-1522	507-3917-0973-600	770-1569	507-3917-1473-600	Amber
.....	.....	770-1570	507-3917-1474-600	Blue
770-1523	507-3917-0975-600	770-1571	507-3917-1475-600	White
.....	.....	770-1572	507-3917-1476-600	Yellow

1-4.....Ea. 1.37 5-9.....Ea. 1.27
10-24.....Ea. 1.12 25-Up.....Ea. 1.02

Series 507-3918. As above, but 25,000 hour operating life.

Stovepipe		Flat Lens		Lens Color
Stock No.	Mfr's Type	Stock No.	Mfr's Type	
770-1577	*507-3918-1471-600*	770-1573	507-3918-0371-600	Red
770-1578	507-3918-1472-600	770-1574	*507-3918-0372-600*	Green
770-1579	507-3918-1473-600	770-1575	*507-3918-0373-600*	Amber
770-1580	507-3918-1475-600	770-1576	507-3918-0375-600	White

1-4.....Ea. 1.69 5-9.....Ea. 1.50
10-24.....Ea. 1.32 25-Up.....Ea. 1.21

115-125 VOLT ASSEMBLY

[F] Series 250-8758. Indicator light for 115-125 volts, 60 Hz. Uses cartridge below. Rear-mount holder for 3/8" clearance.

Stock No.	Mfr's Type	Lens Color	EACH
770-1260	*250-8758-3331-504*	Red	1-9.....3.00
770-1261	250-8758-3332-504	Green	10-24.....1.70
770-1262	250-8758-3333-504	Amber	25-99.....1.57
770-1263	250-8758-3335-504	White	100-Up...1.41

[G] Lamp Cartridge 507-5824-0747-600. For the 250-8758 Series listed above.

770-1593 1-4.....Ea. 2.23 5-9.....Ea. 1.93
10-24.....Ea. 1.70 25-Up.....Ea. 1.29

REPLACEABLE NEON CARTRIDGES

Series 507-3835. Built-in NE-2E lamps. For 105-125 volts. Use external 56k resistor for bright light, 100k for medium light.

[D] Stovepipe		[E] Long Cylinder		Lens Color
Stock No.	Mfr's Type	Stock No.	Mfr's Type	
770-1530	507-3835-0931-600	770-1533	507-3835-1531-600	Red
770-1531	507-3835-0933-600	770-1534	507-3835-1533-600	Amber
.....	.....	770-1536	507-3835-1535-600	White
770-1532	507-3835-0937-600	770-1535	507-3835-1537-600	Clear

1-4.....Ea. 1.05 5-9.....Ea. 1.01
10-24.....Ea. .89 25-Up.....Ea. .81

Series 507-3836. Above, with NE-2H high-brightness lamp. Needs external 33k resistor for 110-125 V, long life; 22k for bright light.

770-1537	507-3836-0931-600	770-1544	507-3836-1531-600	Red
770-1538	507-3836-0933-600	770-1541	507-3836-1533-600	Amber
770-1539	507-3836-0935-600	770-1542	507-3836-1535-600	White
770-1540	507-3836-0937-600	770-1543	507-3836-1537-600	Clear

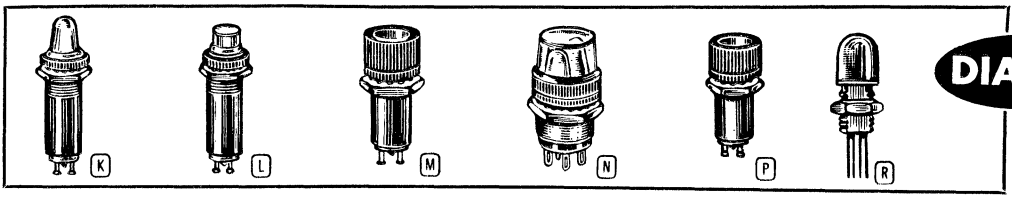
1-4.....Ea. 1.05 5-9.....Ea. 1.01
10-24.....Ea. .89 25-Up.....Ea. .81

LAMPS FOR ABOVE

(SOLD IN BOXES OF 10)

Stock No.	Type	Volts	Amp	Base	Bulb	EACH LAMP
749-2160	C7A	115	.....	Mid. Flange	T-2	1.10
749-2165	C9A	115	.....	S.C. Mid. Fl'ge	T-2	1.10
749-9195	327	28	.04	Mid. Flange	T-1¾	.61
749-9310	381	6.3	.20	Mid. Flange	T-1¾	1.10

Further Price Breaks Available Upon Request



DIALCO

REPLACEABLE NEON CARTRIDGES (Cont'd)

Series 507-4537. Built-in A1B lamp for 105-125 volt AC/DC. Built-in 56k resistor for bright light. Approximate operating life, 3000 hours. *Illustration on facing page.*

D Stovepipe		E Long Cylinder		Lens Color
Stock No.	Mfr's Type	Stock No.	Mfr's Type	
770-1581	507-4537-0931-640	770-1584	507-4537-1531-640	Red
770-1582	507-4537-0933-640	770-1585	507-4537-1533-640	Amber
770-1583	507-4537-0937-640	770-1586	507-4537-1537-640	Clear

1-4.....Each 1.42 5-9.....Each 1.36
10-24.....Each 1.20 25-Up.....Each 1.11

Series 507-4538. As above, but with A1C high-brightness lamp, and 22k built-in resistor for bright light. For 105-125 volts, AC. Approximate life, 3000 hours.

770-1587	507-4538-0931-610	770-1590	507-4538-1531-610	Red
770-1588	507-4538-0933-610	770-1591	507-4538-1533-610	Amber
770-1589	507-4538-0937-610	770-1592	507-4538-1537-610	Clear

1-4.....Each 1.42 5-9.....Each 1.36
10-24.....Each 1.20 25-Up.....Each 1.11

PERMANENT DATALITES

H Series 249-7840 Stovepipe. Non-replaceable A9A(NE-2E) lamps, less resistor. Fit 3/8" hole. 65 VAC or 90 VDC starting V. *Illustration on facing page.*

Stock No.	Mfr's Type	Lens Color	EACH
770-1220	249-7840-0931-504	Red	1-4.....1.72
770-1221	249-7840-0933-504	Amber	5-9.....1.39
770-1222	249-7840-0935-504	White	10-24.....1.30
770-1223	249-7840-0936-504	Yellow	25-Up.....1.22
770-1224	249-7840-0937-504	Clear	

J Series 249-7840. Same as Series 249-7840 above, but has cylindrical lens. *Illustration on facing page.*

770-1230	249-7840-1431-504	Red	1-4.....1.72
770-1231	249-7840-1433-504	Amber	5-9.....1.39
770-1232	249-7840-1435-504	White	10-24.....1.30
770-1233	249-7840-1436-504	Yellow	25-Up.....1.22
770-1234	249-7840-1437-504	Clear	

K Series 249-7841 Stovepipe. Same circuit as 249-7841 below, with 100k resistor for 105-125 V AC-DC.

770-1240	249-7841-0931-574	Red	1-4.....2.32
770-1241	249-7841-0933-574	Amber	5-9.....1.71
770-1242	249-7841-0935-574	White	10-24.....1.60
770-1243	249-7841-0936-574	Yellow	25-Up.....1.50
770-1244	249-7841-0937-574	Clear	

L Series 249-7841. Same circuit as 249-7841 above, but has cylindrical lens. With 100k resistor.

770-1250	*249-7841-1431-574*	Red	1-4.....2.32
770-1251	249-7841-1433-574	Amber	5-9.....1.71
770-1252	249-7841-1435-574	White	10-24.....1.60
770-1253	249-7841-1436-574	Yellow	25-Up.....1.50
770-1254	249-7841-1437-574	Clear	

CARTRIDGE ASSEMBLY AND HOLDERS

P *Type 508-7538-504.* Compact holder for 1 cartridge. Mounts in 3/8" clearance hole. Solder cup. Polar-terms. Less cartridge.
770-1609. 1-4.....Ea. 1.50 5-9.....Ea. 1.40
10-24.....Ea. 1.23 25-Up.....Ea. 1.12

LAMPS FOR ABOVE
SOLD IN BOXES OF 10

Stock No.	Type	Volts	Amp	Base	Bulb	EACH LAMP
749-2160	C7A	115	.....	Mid. Flange	T-2	1.10
749-2165	C9A	115	.....	S.C. Mid. Flange	T-2	1.10
749-9195	327	28	.04	Mid. Flange	T-1¾	.61
749-9310	381	6.3	.20	Mid. Flange	T-1¾	1.10

CARTRIDGE ASSEMBLY AND HOLDERS (Cont'd)

P *Type 508-7545-504.* Same as 508-7538 below, left, but uses 4537 and 4538 cartridges.
770-1610. 1-4.....Ea. 1.50 5-9.....Ea. 1.40
10-24.....Ea. 1.23 25-Up.....Ea. 1.12

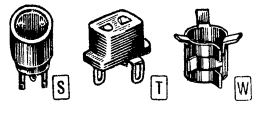
M Type 508-8745-504. Same as type 508-7545 above, but with turret terminals.
770-1612. 1-4.....Ea. 1.50 5-9.....Ea. 1.40
10-24.....Ea. 1.23 25-Up.....Ea. 1.12

N Type 253-6939-1437-504. Assembly for 2 cartridges. Mount in 3/4" diameter hole. Clear plastic lens, less cartridges.
770-1275. 1-4.....Ea. 4.70 5-9.....Ea. 3.84
10-24.....Ea. 3.41 25-Up.....Ea. 3.17

M Type 508-8738-504. Same as type 508-7538 below, left, but with turret terminals.
770-1611. 1-4.....Ea. 1.50 5-9.....Ea. 1.40
10-24.....Ea. 1.23 25-Up.....Ea. 1.12

CARTRIDGE CONNECTORS

S *Series 515-0012.* Molded phenolic insulation; solder cup terminals.
770-1830. 1-4.....Each .85
5-9.....Each .70
10-24.....Each .61
25-Up.....Each .53



T *Series 515-0050.* Molded phenolic with cadmium-plated copper solder lug terminals.
770-1837. 1-4.....Ea. .36 5-9.....Ea. .22
10-24.....Ea. .20 25-Up.....Ea. .19

W *Series 515-0051.* Speed Clip. Fastening device for direct mounting all Dialco plug-in cartridges.
770-1838. 1-4.....Ea. .15 5-9.....Ea. .11
10-24.....Ea. .10 25-Up.....Ea. .09

INCANDESCENT INDICATOR LIGHTS (.193"Mtg. Clearance)

R Series 252. Subminiature incandescent assemblies with non-replaceable lamp enclosed in high-impact plastic housing. Entire unit less than 5/8" long, less leads. Needs only .193" panel mtg. hole for clearance. Diameter of stovepipe lens cap is 7/32"; length, 9/32". Anti-rotation construction; 6" flexible wire leads. Lamp ratings: 5.0 volts @ .06 ampere for 60,000 hours; 6.3 V @ .07 ampere for 6000 hours. †Suffix of MIL No. MS25446-.

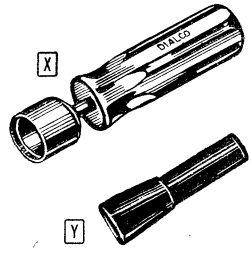
Stock No.	Type 252--9951-	†	Lens Color	EACH 1-4	5-9	10-24	25-99	100-249	250-Up
770-1270	0974	2	Blue	4.40	2.97	2.77	2.58	2.41	2.27
770-1268	0972	3	Green	4.40	2.97	2.77	2.58	2.41	2.27
770-1267	*0971*	4	Red	4.40	2.97	2.77	2.58	2.41	2.27
770-1271	0975	5	White	4.40	2.97	2.77	2.58	2.41	2.27
770-1269	0973	6	Amber	4.40	2.97	2.77	2.58	2.41	2.27
770-1266	0937	7	Clear	4.40	2.97	2.77	2.58	2.41	2.27

DIALCO WRENCHES AND PILOT BULB REMOVERS

X 506-0375 Wrench. For installation of series 913 switches. For 64 D.P. ST. Knurl, Class III.
770-1472.....5.28

X 506-0500 Wrench. Mounting wrench for series 928 indicator lights and series 513 switches.
770-1473.....5.28

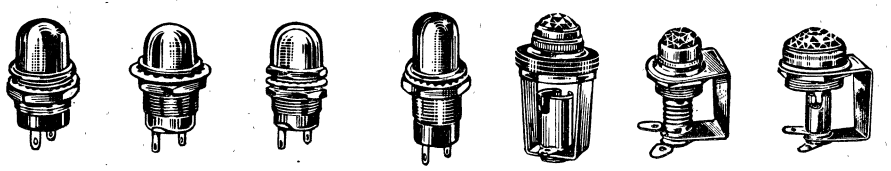
Y *506-0045 Remover.* For convenient installation and removal of T-3 1/4 and S6 lamps. Made of high-grade rubber for solid grip.
770-1470.....36



Y *506-0073 Remover.* Has two hollow ends that engage lamps tightly. One end for T-3¼ bulbs, the other for T-4½ bulbs. High-grade rubber.
770-1471.....36

Lights, Switches and Accessories

DIALCO



A B C D E F G

15/32" MOUNTING CLEARANCE LIGHTS (Cont'd)

TWO-TERMINAL PLASTIC INCANDESCENT INDICATOR LIGHTS WITH OMNIDIRECTIONAL LENSES

A Series 162-8430. Front Mount. Use 327 and 328 lamps (not supplied). 180° visibility. †Suffix of MIL No. MS25256-.

TRANSPARENT LENS TYPE

Stock No.	Type 162-8430-	†	Lens Color	EACH 1-4	5-9	10-24	25-99	100-249	250-Up
770-0910	*0931-502*	6	Red	1.72	1.39	1.22	1.11	1.00	.93
770-0911	0932-502	4	Green	1.72	1.39	1.22	1.11	1.00	.93
770-0912	0933-502	2	Amber	1.72	1.39	1.22	1.11	1.00	.93
770-0914	0937-502	8	Clear	1.72	1.39	1.22	1.11	1.00	.93
770-0919	*0975-502*	10	White	1.72	1.39	1.22	1.11	1.00	.93
770-0913	0934-502	12	Blue	1.72	1.39	1.22	1.11	1.00	.93

TRANSLUCENT LENS TYPE

770-0915	0971-502	...	Red	1.72	1.39	1.22	1.11	1.00	.93
770-0916	0972-502	...	Green	1.72	1.39	1.22	1.11	1.00	.93
770-0917	0973-502	...	Amber	1.72	1.39	1.22	1.11	1.00	.93
770-0918	0974-502	...	Blue	1.72	1.39	1.22	1.11	1.00	.93

B (E) Series 101-5030 Front Mount, 101-3830 Front or Back Mount. Front mount units need 17/32" mtg. hole; back mount, 15/32". Use T-1¾ lamp (not incl.). Has two terminals for solder connections and anti-rotation construction. With hardware. §White.

TRANSPARENT LENS

Stock No. (Front Mt.)	Mfr's Type	Stock No. (See Above)	Mfr's Type	Lens Color
770-0637	*101-5030-0931-201*	770-0629	101-3830-0931-201	Red
770-0638	101-5030-0932-201	770-0630	101-3830-0932-201	Green
770-0639	101-5030-0933-201	770-0631	101-3830-0933-201	Amber
770-0640	101-5030-0937-201	770-0632	101-3830-0937-201§	Clear

1-4.....Each 1.72 5-9.....Each 1.45 10-24.....Each 1.27
25-99....Each 1.14 100-249....Each 1.03 250-Up.....Each .95

TRANSLUCENT LENS

Stock No. (Front Mt)	Mfr's Type	Stock No. (See Above)	Mfr's Type	Lens Color
770-0633	101-5030-0971-201	770-0625	101-3830-0971-201	Red
770-0634	101-5030-0972-201	770-0626	101-3830-0972-201	Green
770-0635	101-5030-0973-201	770-0627	101-3830-0973-201	Amber
770-0636	101-5030-0975-201	770-0628	101-3830-0975-201§	Clear

1-4.....Each 1.72 5-9.....Each 1.45 10-24.....Each 1.27
25-99....Each 1.14 100-249....Each 1.03 250-Up.....Each .95

PLASTIC NEON INDICATORS WITH OMNIDIRECTIONAL LENSES

D Series 137-8836. Front Mount. Full 180° visibility. Use C7A (NE-2D) neon lamp; built-in 62k resistor for 105-125 volts. Less lamp. Fits 15/32" diameter hole. †Suffix of MIL No. MS25257-.

Stock No.	Mfr's Type 137-8836-	†	Lens Color	EACH 1-4	5-9	10-24	25-99	100-249	250-Up
770-0820	*-0931-552*	4	Red	2.73	2.33	2.03	1.84	1.66	1.53
770-0821	-0933-552	2	Amber	2.73	2.33	2.03	1.84	1.66	1.53
770-0822	-0937-552	6	Clear	2.73	2.33	2.03	1.84	1.66	1.53

D Series 137-8864.* At left below, but with 22k resistor. Uses C9A (NE-2J) neon lamp. *Use Series No. as Prefix.

Stock No.	Mfr's Type*	Lens Color	EACH 1-4	5-9	10-24	25-99	100-249	250-Up
770-0823	-0931-512	Red	2.73	2.33	2.03	1.84	1.66	1.53
770-0824	-0933-512	Amber	2.73	2.33	2.03	1.84	1.66	1.53
770-0825	-0935-512	White	2.73	2.33	2.03	1.84	1.66	1.53
770-0826	-0937-512	Clear	2.73	2.33	2.03	1.84	1.66	1.53

D Series 137-8864.* As above, but with 33k resistor for 25,000 hr. life. Use with C9A (NE-2J) lamp. Less lamp.

770-0827	-0931-532	Red	2.73	2.33	2.03	1.84	1.66	1.53
770-0828	-0933-532	Amber	2.73	2.33	2.03	1.84	1.66	1.53
770-0829	-0935-532	White	2.73	2.33	2.03	1.84	1.66	1.53
770-0830	-0937-532	Clear	2.73	2.33	2.03	1.84	1.66	1.53

MINIATURE BAYONET INCANDESCENTS (11/16" Mounting)

E Series 502-8140. For use between 2 and 55 volts. Faceted ½" lens. 11/16" mtg. hole. Less T-3¼ lamp.

Stock No.	Mfr's Type	Lens Color
770-1451	502-8140-2131-100	Red
770-1452	502-8140-2132-100	Green
770-1453	502-8140-2133-100	Amber

1-4.....Each 1.46 5-9.....Each 1.05 10-24.....Each .97
25-99.....Each .92 100-249.....Each .84 250-Up.....Each .79

OPEN FACETED INCANDESCENTS

F Series 502-8137, 8136. ½" lens. Use T-3¼ lamp. 11/16" mtg. hole. For use between 2 and 48 volts. Bayonet not illus.

Lens Color	Screw 8137 Stock No.	Mfr's Type	Bayonet 8136 Stock No.	Mfr's Type
Red	770-1443	502-8137-2131-102	770-1444	502-8136-2131-102
Green	770-1445	502-8137-2132-102	770-1446	502-8136-2132-102
Amber	770-1447	502-8137-2133-102	770-1448	502-8136-2133-102
Blue	.....	.....	770-1449	502-8136-2134-102
White	.....	.....	770-1450	502-8136-2135-102

1-4.....Each 1.11 5-9.....Each .81 10-24.....Each .74
25-99.....Each .70 100-249.....Each .65 250-Up.....Each .60

G Series 502-3241, 502-3214. 1" jewel; 1" mtg. hole. Bayonet type takes T-3¼ lamp. Candelabra type uses S6 lamp; not illustrated. For use between 6 and 145 volts.

Lens Color	Bayonet 3241 Stock No.	Mfr's Type	Candel. 3214 Stock No.	Mfr's Type
Red	770-1440	*502-3241-0431-302*	770-1430	502-3214-0431-302
Green	770-1441	502-3241-0432-302	770-1431	502-3214-0432-302
Amber	770-1442	502-3241-0433-302	770-1432	502-3214-0433-302

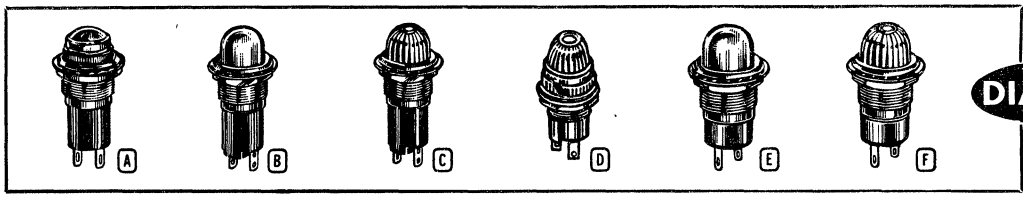
1-4.....Each 1.65 5-9.....Each 1.18 10-24.....Each 1.11
25-99....Each 1.03 100-249.....Each .97 250-Up.....Each .90

LAMPS FOR ABOVE
SOLD IN BOXES OF 10

Stock No.	Type	Volts	Amp	Base	Bulb	EA. Lamp
749-2160	C7A	115	.....	Mid. Flange	T-2	1.10
749-2165	C9A	115	.....	S.C. Mid. Flange	T-2	1.10
749-9195	327	28	.04	Mid. Flange	T-1¾	.61
749-9044	44	6-8	.25	Bayonet	T-3¼	.13
749-9310	381	6.3	.20	Mid. Flange	T-1¾	1.10

Cut costs by making "one order" purchases from Allied Electronics. You lower handling expense by reducing paperwork in purchasing and receiving. Further Quality Breaks Available on Request—Call Your Nearest Allied Branch.

Lighted Devices, Pages 245-261; Readouts, Pages 261-264



DIALCO

11/16" MOUNTING CLEARANCE LIGHTS

INCANDESCENT ASSEMBLIES

A Series 81-0410*. Meets MIL-L-3661B. Enclosed, aviation type socket shell. Convex, smooth-faced lens; frosted back. ½" black nickel-brass holder. Takes T-3¼ miniature bayonet lamp. 2¼" long, 11/16" clearance hole. Fits panel to ⅜". Type 0135-201 is unfrosted. U.L. Component Program-Recognized. Less lamp. *Use Series Number as Prefix when ordering.

Stock No.	Mfr's Type*	Lens Color	EACH 1-4	5-9	10-24	25-99	100-249	250-Up
770-0420	*-0111-201*	Red	1.95	1.45	1.28	1.21	1.13	1.03
770-0421	-0112-201	Green	1.95	1.45	1.28	1.21	1.13	1.03
770-0422	-0113-201	Amber	1.95	1.45	1.28	1.21	1.13	1.03
770-0419	-0117-201	Clear	1.95	1.45	1.28	1.21	1.13	1.03
770-0423	-0135-201	White	1.95	1.45	1.28	1.21	1.13	1.03

LOW-VOLTAGE ENCLOSED SIGNAL ASSEMBLIES

A Series 81-9110*. Convex lens; smooth face; frosted back. Use T-3¼ bayonet lamps. 2¼" long. 11/16" mtg. hole. Panels to ⅜". Less lamp. *Use Series No. as Prefix to order.

770-0438	*-0111-102*	Red	1.41	1.03	.96	.92	.80	.75
770-0439	-0112-102	Green	1.41	1.03	.96	.92	.80	.75
770-0440	-0113-102	Amber	1.41	1.03	.96	.92	.80	.75
770-0441	-0114-102	Blue	1.41	1.03	.96	.92	.80	.75

B Series 95-9110*. For use with miniature bayonet lamps. Solder terminals. Less T-3¼ lamp. *Use Series No. as Prefix to order.

770-0549	*-0931-102*	Red	1.26	.92	.86	.82	.71	.67
770-0550	-0932-102	Green	1.26	.92	.86	.82	.71	.67
770-0551	-0933-102	Amber	1.26	.92	.86	.82	.71	.67
770-0552	-0935-102	White	1.26	.92	.86	.82	.71	.67

OILTIGHT SERIES ASSEMBLIES

D Series 125-0408, 125-0463 Fluted Lens. Solder term. B1A (NE-51) lamp with 56k resistor; B2A (NE-51H) with 22k.

Lens Color	Type B1A NE-51 Stock No.	Mfr's Type	Type B2A NE-51H Stock No.	Mfr's Type
Red	770-0723	125-0408-1191-443	770-0729	125-0463-1191-413
Amber	770-0724	125-0408-1193-443	770-0730	125-0463-1193-413
Clear	770-0725	125-0408-1197-443	770-0731	125-0463-1197-413

1-4.....Ea. 3.26 5-9.....Ea. 2.32 10-24.....Ea. 2.10
25-99....Ea. 1.99 100-249....Ea. 1.85 250-Up.....Ea. 1.76

B Series 95-0410, 95-1310 Incandescent. Use with miniature bayonet T-3¼ lamp. Less lamp. *Use Series No. as Prefix to order.

SERIES 95-0410 SOLDER LUGS

Stock No.	Mfr's Type*	Lens Color	EACH 1-4	5-9	10-24	25-99	100-249	250-Up
770-0529	-0931-201	Red	1.67	1.23	1.09	1.02	.93	.88
770-0530	-0932-201	Green	1.67	1.23	1.09	1.02	.93	.88
770-0531	-0933-201	Amber	1.67	1.23	1.09	1.02	.93	.88

SERIES 95-1310 SCREW TERMINAL

770-0542	-0931-201	Red	1.42	1.34	1.18	1.10	1.00	.95
770-0543	-0932-201	Green	1.42	1.34	1.18	1.10	1.00	.95
770-0544	-0933-201	Amber	1.42	1.34	1.18	1.10	1.00	.95

NEON INDICATORS WITH BUILT-IN RESISTORS

C Series 52-0408, 52-0463. Fluted stovepipe lens. MIL-L-3661. Solder terminals. 52-0408 has 56k resistor for BIA (NE-51) lamp; 52-0463 has 22k for B2A (NE-51H) high-brightness lamp.

Lens Color	Type NE-51 Stock No.	Mfr's Type	Type NE-51H Stock No.	Mfr's Type
Red	770-0322	52-0408-0991-241	770-0332	*52-0463-0991-211*
Amber	770-0323	52-0408-0993-241	770-0333	52-0463-0993-211
White	770-0324	52-0408-0995-241	770-0334	52-0463-0995-211
Clear	770-0331	52-0408-0997-241	770-0335	52-0463-0997-211

1-4.....Ea. 1.97 5-9.....Ea. 1.45 10-24.....Ea. 1.29
25-99....Ea. 1.21 100-249....Ea. 1.11 250-Up.....Ea. 1.05

Series 52-1308, 52-1363. Same as left below, but screw terminals

Lens Color	Type NE-51 Stock No.	Mfr's Type	Type NE-51H Stock No.	Mfr's Type
Red	770-0343	52-1308-0991-241	770-0347	*52-1363-0991-211*
Amber	770-0344	52-1308-0993-241	770-0348	52-1363-0993-211
White	770-0345	52-1308-0995-241	770-0349	52-1363-0995-211
Clear	770-0346	52-1308-0997-241	770-0350	52-1363-0997-211

1-4.....Ea. 1.97 5-9.....Ea. 1.54 10-24.....Ea. 1.37
25-99....Ea. 1.27 100-249....Ea. 1.16 250-Up.....Ea. 1.10

LAMPS FOR ASSEMBLIES
SOLD IN BOXES OF 10

Stock No.	Type	Volts	Amp	Base	Bulb	Each Lamp
749-2160	C7A	115	.....	Mid. Flange	T-2	1.10
749-2165	C9A	115	.....	S.C. Mid. Flange	T-2	1.10
749-9044	44	6-8	.25	Bayonet	T-3¼	.13
749-9195	327	28	.04	Mid. Flange	T-1¾	.63
749-9310	381	6.3	.20	Mid. Flange	T-1¾	1.10

B Series 95-0408, 95-0463. For T-3¼ neon lamp. Meet MIL specs. Stovepipe lens. 110-125 V AC-DC. 2 1/16" long. U.L. Component Program-Recognized. C.S.A. Listed. Solder terminals.

Lens Color	Type B1A (NE-51) Stock No.	Mfr's Type	Type B2A (NE-51H) Stock No.	Mfr's Type
Red	770-0525	95-0408-0931-241	770-0532	95-0463-0931-211
Amber	770-0526	95-0408-0933-241	770-0533	95-0463-0933-211
White	770-0527	95-0408-0935-241	770-0534	95-0463-0935-211
Clear	770-0528	95-0408-0937-241	770-0535	95-0463-0937-211

1-4.....Ea. 1.97 5-9.....Ea. 1.45 10-24.....Ea. 1.29
25-99....Ea. 1.21 100-249....Ea. 1.11 250-Up.....Ea. 1.05

B Series 95-9108, 95-9163. Same as above, but plastic head, phenolic body. U.L. Component Program-Recognized.

Red	770-0545	95-9108-0931-142	770-0553	95-9163-0931-112
Amber	770-0546	95-9108-0933-142	770-0554	95-9163-0933-112
White	770-0547	95-9108-0935-142	770-0555	95-9163-0935-112
Clear	770-0548	95-9108-0937-142	770-0556	95-9163-0937-112

1-4.....Ea. 1.24 5-9.....Ea. 1.08 10-24.....Ea. 1.02
25-99.....Ea. .95 100-249.....Ea. .83 250-Up.....Ea. .78

INCANDESCENT INDICATOR LIGHT ASSEMBLIES

Each series consists of indicator light assembly and lens. 81-1059 has convex back-frosted lens or faceted unfrosted lens. Stovepipe unit consists of assembly with 95-3171 translucent lens or 52-3191 internally fluted lens. Both series take T-2 bulb (voltage range 6-120 volts); mount in 11/16" hole. Less lamp.

Lens Color	Stock No.	(E) Stovepipe Lens Translucent	Stock No.	(F) Stovepipe Lens Intern. Fluted
Red	770-0536	95-1059-3171-102	770-0336	52-1059-3191-102
Green	770-0537	95-1059-3172-102	770-0337	52-1059-3192-102
Amber	770-0538	95-1059-3173-102	770-0338	52-1059-3193-102
Blue	770-0539	95-1059-3174-102	770-0339	52-1059-3194-102
White	770-0540	95-1059-3175-102	770-0340	52-1059-3195-102
Yellow	770-0541	95-1059-3176-102	770-0341	52-1059-3196-102
Clear	.....	.....	770-0342	52-1059-3197-102

1-4.....Ea. 1.48 5-9.....Ea. 1.08 10-24.....Ea. .96
25-99.....Ea. .90 100-249.....Ea. .86 250-Up.....Ea. .79

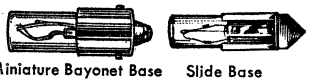
Lens Color	Stock No.	Convex Lens Back Frosted	Stock No.	Faceted Lens Unfrosted
Red	770-0424	81-1059-0111-102	770-0431	81-1059-0431-102
Green	770-0425	81-1059-0112-102	770-0432	81-1059-0432-102
Amber	770-0426	81-1059-0113-102	770-0433	81-1059-0433-102
Blue	770-0427	81-1059-0114-102	770-0434	81-1059-0434-102
White	770-0430	81-1059-0135-102	770-0435	81-1059-0435-102
Yellow	770-0428	81-1059-0116-102	770-0436	81-1059-0436-102
Clear	770-0429	81-1059-0117-102	770-0437	81-1059-0437-102

1-4.....Ea. 1.57 5-9.....Ea. 1.15 10-24.....Ea. 1.02
25-99.....Ea. .97 100-249.....Ea. .90 250-Up.....Ea. .83

LIGHTED DEVICES

Sylvania Pilot Lamps, Lenses, Sockets

EXTENDED-SERVICE PILOT LAMPS



Miniature Bayonet Base Slide Base

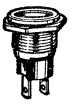
- 5000-Hr. Minimum Life
- Flat-Top Bulb
- Flare-Stem Design

All have T2 type bulbs, 1.075" long x ¼" dia. Slide or miniature bayonet bases. See listing at right for housings. Wt. 2 oz. **Order in Multiples of 10.**

Slide Base		Bayonet Base		Volts	Av. Watts	Av. Amps	End Foot-Candles
Stock No.	Type	Stock No.	Type				
937-3735	*6PSB*	937-3730	6MB	6	.8	.140	800
937-3820	*12PSB*	937-3815	12MB	12	2.0	.170	2400
937-3970	24PSB	937-3965	24MB	24	1.7	.073	2200
937-3995	*28PSB*	937-3990	28MB	28	1.1	.040	1900
937-4060	48PSB	937-4050	48MB	48	2.5	.053	1500
937-5000	*60PSB*	937-4090	60MB	60	3.0	.050	2400
937-5080	*120PSB*	937-5070	120MB	120	3.0	.025	1600

10-30.....Each .78 40-90.....Each .53
100-990.....Each .43 1000-Up.....Each .37

PHENOLIC UNIVERSAL HOUSINGS



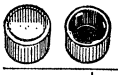
All metal parts nickel-plated. Rated 75 watts, 125 volts. U.L. Component-Program Recognized. Use AMP connector 42197-2, or leads can be soldered through holes in contacts. Lgth., 1 27/32". Max. pnl. thickness, 13/32". 2 oz.
937-6099. 1-3.....Each 1.10 4-9.....Each .79
10-99...Ea. .68 100-999...Ea. .55 1000-Up...Ea. .52

ASSEMBLED HOUSINGS AND LAMPS (Less lens)

Stock No.	Mfr's Type	Volts	Av. Watts	Av. Amps	End Foot-Candles
937-3740	6PSB/30099-0	6	.8	.140	800
937-3825	12PSB/30099-0	12	2.0	.170	2400
937-3975	*24PSB/30099-0*	24	1.7	.073	2200
937-4000	28PSB/30099-0	28	1.1	.040	1900
937-4070	48PSB/30099-0	48	2.5	.053	1500
937-5010	60PSB/30099-0	60	3.0	.050	2400
937-5090	*120PSB/30099-0*	120	3.0	.025	1600

1-3.....Ea. 1.89 4-9.....Ea. 1.41 10-99.....Ea. 1.31
100-999.....Ea. .98 1000-Up.....Ea. .89

END COLOR CAPS



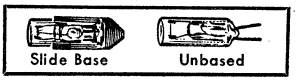
Profax and pyrex hard glass types. Profax for use below 1½ watts. For housings, this page. 2 oz.

Stock No.	Mfr's Type	Desc.	Color	EACH 10-99	100-499	500-999	1000-Up
937-7801	*38001-0*	Profax	Red	.135	.13	.10	.07
937-7802	*38002-0*	Profax	Yel	.135	.13	.10	.07
937-7803	*38003-0*	Profax	Wht	.135	.13	.10	.07
937-7804	*38004-0*	Profax	Grn	.135	.13	.10	.07
937-7805	*38005-0*	Profax	Blue	.135	.13	.10	.07
937-7871	*38071-0*	Pyrex	Red	.135	.13	.10	.07
937-7872	38072-0	Pyrex	Yel	.135	.13	.10	.07
937-7873	*38073-0*	Pyrex	Wht	.135	.13	.10	.07
937-7874	*38074-0*	Pyrex	Grn	.135	.13	.10	.07
937-7875	38075-0	Pyrex	Blue	.135	.13	.10	.07

LENSES FOR PILOT LIGHT ASSEMBLIES

For housings on this page. Made of high-temperature thermoplastic that operates satisfactorily up to 290° F. at 66 psi without signal distortion. Av. shpg. wt. 1 oz. **Order in multiples of 10.**

Color	JEWELED LENS Stock No.	Mfr's Type	CLEAR LENS Stock No.	Mfr's Type	OPAQUE LENS Stock No.	Mfr's Type
Red	937-6100	*30100-0*	937-6110	*30110-0*	937-6130	*30130-0*
Blue	937-6103	30103-0	937-6113	30113-0	.....	.....
Green	937-6102	*30102-0*	937-6112	*30112-0*	937-6132	30132-0
Amber	937-6106	30106-0	937-6111	*30111-0*	.....	.....
Yellow	.....	.....	937-6114	30114-0	937-6131	*30131-0*
Clear	.....	.....	937-6116	30116-0	.....	.....
White	.....	.....	.....	.....	937-6133	30133-0



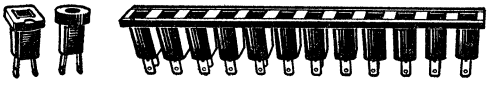
Slide Base Unbased

INDICATOR LAMPS AND SOCKETS

Long life, minimum 5000 hours. Electrical contact made with AMP connector 42197-2 or by soldering leads through holes in contacts. T2 bulb. *Cherry-red glow. Shpg. wt., 2 oz.

Order in Multiples of 10.

Volts	Current (mA)	End Foot-Candles	SLIDE BASE LAMPS Stock No.	Mfr's Type	EACH 10-30	40-90	100-990	1000-Up	UNBASED LAMPS Stock No.	Mfr's Type	EACH 10-30	40-90	100-990	1000-Up
4.0	35-45	200	937-3710	4ESB	.72	.48	.41	.34	937-3700	4ES	.54	.34	.31	.28
5.0	35-45	225	937-3715	*5ESB*	.72	.48	.41	.34	.....	.....	.....	.....	.....	.....
6.0	35-45	250	937-3725	*6ESB*	.72	.48	.41	.34	937-3720	6ES	.54	.34	.31	.28
10.0	35-45	450	937-3775	*10ESB*	.72	.48	.41	.34	937-3770	10ES	.54	.34	.31	.28
10.0	15-20	100	937-3765	*10CSB*	.72	.48	.41	.34	937-3760	*10CS*	.54	.34	.31	.28
10.0	9-11	*	937-3750	10ASB	.72	.48	.41	.34	937-3745	10AS	.72	.48	.41	.34
12.0	35-45	650	937-3810	*12ESB*	.72	.48	.41	.34	937-3800	12ES	.54	.34	.31	.28
16.0	35-45	900	937-3910	16ESB	.72	.48	.41	.34	937-3860	16ES	.54	.34	.31	.28
16.0	15-20	150	937-3855	16CSB	.72	.48	.41	.34	937-3850	16CS	.54	.34	.31	.28
18.0	35-45	1000	937-3915	18ESB	.72	.48	.41	.34	.....	.....	.....	.....	.....	.....
24.0	35-45	1100	937-3960	*24ESB*	.72	.48	.41	.34	937-3950	24ES	.54	.34	.31	.28
24.0	15-20	200	937-3945	24CSB	.72	.48	.41	.34	937-3940	24CS	.54	.34	.31	.28
28.0	35-45	1285	937-3985	28ESB	.72	.48	.41	.34	937-3980	28ES	.54	.34	.31	.28
48.0	35-45	2000	937-4040	*48ESB*	.81	.58	.51	.45	937-4030	48ES	.69	.43	.40	.34



INDICATOR SOCKETS (Single-Socket Type)

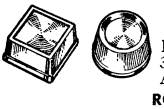
937-6150. *30150-0.* Round. Body: 55/64x½" dia. Flange: ⅝" dia. 2 oz.
10-30.....Ea. 4.05 40-90.....Ea. .25 100-990.....Ea. .20
937-6151. 30151-0. Rectangular. Same body size as above. Flange: ½x¾".
10-30.....Ea. 4.05 40-90.....Ea. .25 100-990.....Ea. .20

PANEL LIGHT SOCKETS

Type 30152-0 panel socket takes Series PSB slide base lamp. Black phenolic. U.L. Component-Program Recog. Lenses below. 30154-0 same, but for use without lens. 30153-0 is black nylon, takes slide base lamps above, lenses below. 2 oz.
937-6152. Type 30152-0. Panel Socket. 1-3.....Ea. .47
4-9.Ea. .36 10-99.Ea. .33 100-999.Ea. .28 1000-Up.Ea. .23
937-6154. Type 30154-0. Single Socket. 1-3.....Ea. .47
4-9..Ea. .36 10-99..Ea. .33 100-999..Ea. .28 1000-Up..Ea. .23
937-6155. Type 30153-0. Panel Socket. 1-3.....Ea. .45
4-9..Ea. .33 10-99..Ea. .31 100-999..Ea. .25 1000-Up..Ea. .21

STRIP SOCKETS (12 Sockets per Strip)

Overall depth, 55/64" (less pins). Sockets are 47/64"x½" dia.. 3 oz.
937-7250. *31250-0.* ½" center, alternate contacts. 1-3.....Ea. 4.45
4-9.....Ea. 2.98 10-99.....Ea. 2.66
100-999.....Ea. 2.24 1000-Up.....Ea. 2.18
937-7275. 31275-0. ¾" center, alternate contacts. 1-3.....Ea. 4.45
4-9.....Ea. 2.98 10-99.....Ea. 2.66
100-999.....Ea. 2.24 1000-Up.....Ea. 2.18
937-7350. *33250-0.* ½" ctr., individual contacts. 1-3.....Ea. 4.45
4-9.....Ea. 2.98 10-99.....Ea. 2.66
100-999.....Ea. 2.24 1000-Up.....Ea. 2.18
937-7375. *33275-0.* ¾" ctr., individual contacts. 1-3.....Ea. 4.45
4-9.....Ea. 2.98 10-99.....Ea. 2.66
100-999.....Ea. 2.24 1000-Up.....Ea. 2.18



LENSES FOR ABOVE SOCKETS

Polycarbonate lenses for Types 30152 and 30153 sockets above. Round and square types. Av. shpg. wt. 2 oz. **Order in Multiples of 10.**

Color	ROUND LENS Stock No.	Type	SQUARE LENS Stock No.	Type
Red	937-6160	*30160-0*	937-6170	*30170-0*
Clear	937-6161	30161-0	937-6171	30171-0
Amber	937-6162	*30162-0*	937-6172	*30172-0*
White	937-6163	*30163-0*	937-6173	*30173-0*
Green	937-6164	30164-0	937-6174	*30174-0*
Blue	937-6165	30165-0	937-6175	30175-0

10-30.....Ea. .23 40-90.....Ea. .21
100-990.....Each .05 1000-Up.....Each .12

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Lamps, Lenses, Digital Readout Tubes

LIGHTED DEVICES

SYLVANIA LAMPS AND LENSES

CARTRIDGE LAMPS

Black anodized metal sleeves and clear ends. Stainless steel, polarized pins. Dia., .290". Lgth.: *1.110" max.; †.912" max., less pins. 1 oz.

***PILOT LAMPS** (For Housings at Right)

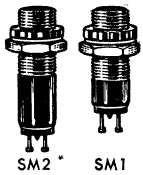
Stock No.	Mfr's Type	Volts	Average Watts	Average Amps	EACH 1-4	5-9	10-99	100-249	250-499	500-Up
937-3920	21	6	0.8	.140	1.21	1.07	.88	.79	.69	.59
937-4010	31	12	2.0	.170	1.21	1.07	.88	.79	.69	.59
937-4020	41	24	1.7	.073	1.21	1.07	.88	.79	.69	.59
937-4080	51	28	1.1	.040	1.21	1.07	.88	.79	.69	.59
937-5040	61	48	2.5	.053	1.21	1.07	.88	.79	.69	.59
937-5050	71	60	3.0	.050	1.21	1.07	.88	.79	.69	.59
937-5060	81	120	3.0	.025	1.21	1.07	.88	.79	.69	.59

†INDICATOR LAMPS (For Housings at Right, Above)

Stock No.	Mfr's Type	V	Av. Watts	Current Amperes Min.-Max.	EACH 1-3	4-9	10-99	100-249	250-499	500-Up
937-5901	901	4	.16	.035-.045	1.21	1.07	.88	.79	.69	.59
937-5905	905	5	.20	.035-.045	1.21	1.07	.88	.79	.69	.59
937-5909	909	6	.24	.035-.045	1.21	1.07	.88	.79	.69	.59
937-5914	914	10	.18	.015-.020	1.21	1.07	.88	.79	.69	.59
937-5915	915	10	.40	.035-.045	1.21	1.07	.88	.79	.69	.59
937-5918	918	12	.36	.035-.045	1.21	1.07	.88	.79	.69	.59
937-5925	925	16	.28	.015-.020	1.21	1.07	.88	.79	.69	.59
937-5926	926	16	.64	.035-.045	1.21	1.07	.88	.79	.69	.59
937-5930	930	18	.72	.035-.045	1.21	1.07	.88	.79	.69	.58
937-5953	933	24	.42	.015-.020	1.21	1.07	.88	.79	.69	.59
937-5934	934	24	.96	.035-.045	1.21	1.07	.88	.79	.69	.59
937-5938	938	28	1.12	.035-.045	1.21	1.07	.88	.79	.69	.59
937-5941	941	48	1.92	.035-.045	1.21	1.07	.88	.79	.69	.59
937-5913	913	10	.10	.009-.011	1.21	1.07	.88	.79	.69	.59

Allied Electronics Also Can Supply the Complete Line of Sylvania Subminiature Lamps for OEM's and Other Users

CARTRIDGE LIGHT HOUSINGS

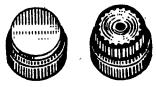


Cartridge housings accept either standard pilot lamps or indicator lamps at left. Made of black anodized aluminum per MIL-A-8625; base insulation of molded phenolic. Withstand environmental requirements of MIL-STD-202B as prescribed in MIL-L-3661A. Rated at 250 volts; maximum current, 1 amp. Breakdown voltage, 1000 V rms at 60 Hz. Easily installed from rear of panel with lockwasher and hex nut. *Solder lugs; others turret lugs. Wt., 1 oz.

FOR PILOT LAMPS Stock No.	Mfr's Type	Size, Dia. x L.	FOR INDICATOR LAMPS Stock No.	Mfr's Type	Size, Dia. x L.
937-3620	SM-2/300950	½x1⅜"	937-3600	SM-1/300970	½x1 11/32"
937-3625	SM-2A/300960	½x1⅜"	937-3605	SM-1A/300980	½x1 11/32"*

1-9.....Each 1.32 10-24.....Each .90 25-99.....Each .84
100-249...Each .75 250-499...Each .67 500-Up.....Each .61

CARTRIDGE LENSES (For Housings Above)

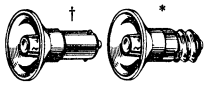


Polycarbon lenses have high working temperature, no melting, distortion. Black anodized aluminum bezels. Special inner surface provides almost total peripheral vision. Dia., .505". Transparent or translucent types. Av. shpg. wt., 1 oz.

TRANSPARENT LENS Stock No.	Type	Color	TRANSLUCENT LENS Stock No.	Type	Color
937-6140	301400	Amber	937-6145	301450	Yellow
937-6141	301410	Clear	937-6146	301460	White
937-6142	301420	Red	937-6147	301470	Red
937-6143	301430	Blue	937-6148	301480	Blue
937-6144	301440	Green	937-6149	301490	Green

1-3.....Ea. .54 4-9.....Ea. .32 10-99.....Ea. .28
100-999.....Ea. .26 1000-Up.....Ea. .25

SYLVANIA ANNUNCIATOR LAMPS



High-brightness, long life lamps for use in elevator panels, call boards, push-button stations, indicator control panels, etc. Feature environmental reliability and 5000 hour life rating. Self-contained reflector speeds assembly. Annunciator lamps are 1 3/16" in length, and are 7/8" wide at the reflector. *Candelabra base; †miniature bayonet base. 2 oz.

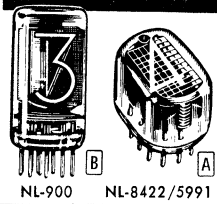
V	W	A	Candelabra Stock No.	Candelabra Mfr's Type	Bayonet Stock No.	Bayonet Mfr's Type
12	2.0	.170	937-3840	12RC 35121-0	937-3830	12RB 35221-0
60	3.0	.050	937-5030	60RC 35127-0	937-5020	60RB 35227-0
120	3.0	.025	937-5210	120RC 35128-0	937-5200	120RB 35229-0

1-3.....Each 1.21 4-9.....Each .81
10-99.....Each .76 100-999.....Each .63

NUMERICAL NEON-GLOW READOUT TUBES

Visible display is a red-orange neon glow in the form of desired character. Can easily be read even under high ambient light. Careful manufacturing techniques assure no variation of color or intensity. Under most difficult conditions, as display of one number only, life is in excess of four years. With different numbers life is much greater. Regular types have 5,000-8,000 hours. *200,000 hours or 20 year life. †Wide angle; ‡rectangular; §left hand decimal point. Av. wt., 4 oz.

NATIONAL ELECTRONICS, INC.



NL-900 NL-8422/5991

- Economy, plus long-life
- Built-in uniformity
- Simple, rugged construction
- Will not fade with age

SOCKETS FOR READOUT TUBES

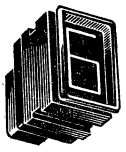
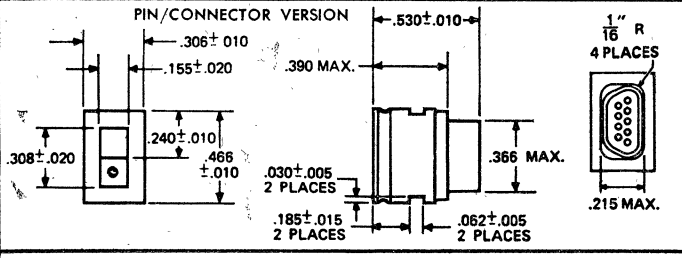
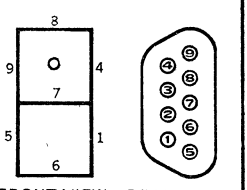
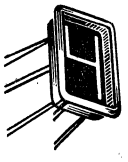
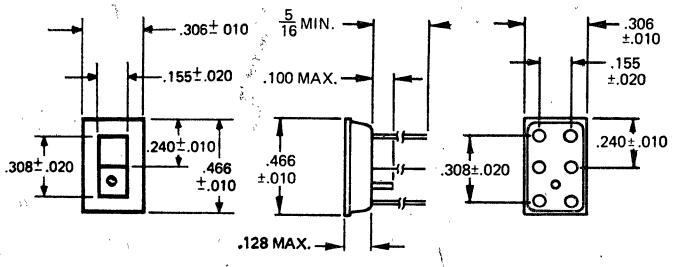
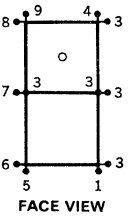
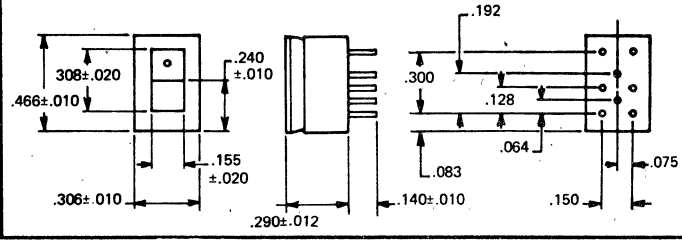
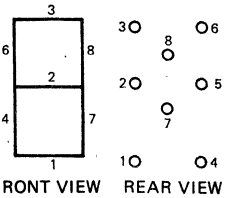
Stock No.	Type	EACH	Stock No.	Type	EACH	Stock No.	Type	EACH
776-5004	RTS-2	.75	776-5006	RTS-4	.90	776-5016	RTS-14	.40
776-5005	RTS-3	1.00	776-5007	RTS-5	1.25	776-5019	RTS-17	.40

Stock No.	Tube Type	Fig.	Description	Max. DC Ion V.	Min. DC Supp. V.	Cathode mA Peak	Av. Max.	Av. Min.	Pre-Bias V. Limits	Numerical Char. Ht.	Max. Tube Size Ht.	Dia.	Max. View Distance	Fits Socket	EACH
866-0170	*NL-7977/4032	A	End View (0-9)	170	170	2.0	1.4	0.7	50-120	.310"	.940"	.680"	14'	RTS-3	19.00
866-0133	NL-7009	A	End View (0-9)	170	170	2.0	1.2	0.7	50-75	.310"	.925"	.650"	14'	RTS-3	19.00
866-0182	*NL-8421/5092	A	†End View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.125"	1.080"	30'	RTS-2	15.65
866-0183	*NL-8422/5991	A	‡End View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	.862"	1.020"	30'	RTS-4	15.75
866-0123	NL-6844A	A	End View (0-9)	170	170	4.0	3.0	1.5	50-120	.610"	1.125"	1.080"	30'	RTS-2	11.00
866-0178	*NL-8091	A	†End View (0-9)	170	170	6.5	6.0	3.0	65-120	1.375"	1.980"	2.060"	65'	RTS-5	22.50
866-0139	*NL-7037	B	Side View (0-9)	200	200	10	10	6	65-120	2.000"	3.625"	2.030"	100'	RTS-5	26.00
866-0189	NL-8502/4021	A	End View (0-9)	120	120	2.0	1.4	0.7	50-75	.310"	.925"	.650"	14'	RTS-3	33.00
866-0080	*NL-809	A	§†End View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	.862"	1.020"	30'	RTS-4	17.35
866-0077	*NL-803	B	Side View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.937"	.875"	30'	RTS-17	9.00
866-0083	*NL-840/8754	B	Side View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.800"	.750"	30'	RTS-14	8.00
866-0084	*NL-841	B	§Side View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.800"	.750"	30'	RTS-14	8.40
866-0089	*NL-900	B	Side View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.375"	.750"	30'	RTS-14	9.00
866-0090	*NL-901	B	§Side View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.375"	.750"	30'	RTS-14	9.75
866-0174	*NL-8037/5031	A	End View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.125"	1.080"	30'	RTS-2	15.75
866-0120	*NL-5992	A	‡End View (±)	170	170	3.5	3.0	1.5	50-120	.610"	.862"	1.020"	30'	RTS-4	15.75
866-0199	*NL-50911	A	†End View (±)	170	170	3.5	3.0	1.5	50-120	.610"	1.125"	1.080"	30'	RTS-2	15.75
866-0184	*NL-8423/6091	A	†End View (0-9)	170	170	4.5	4.0	1.5	65-120	.808"	1.212"	1.350"	38'	RTS-2	19.00
866-0150	NL-7153	A	End View (0-9)	250	250	5.0	3.0	2.0	65-120	.808"	1.212"	1.350"	38'	RTS-2	14.50

Lighted Devices, Pages 245-161; Readouts, 261-264

Readouts by Chicago Miniature

Chicago Miniature's CM5 Series Readouts are seven segment filament displays featuring the optimum in character height/volume ratio. They require only 5/16"x1 5/32" panel space per digit so the designer can minimize the space required for the total display area. Among the features are wide angle viewing and the readability required for modern digitized display instruments. The low power consumption, .66 milliwatts per filament segment, allows them to be driven directly with existing integrated circuits. These units are capable of operation at thermal extremes of −55°C and +125°C, withstand vibration in accordance with MIL-STD-202 Method 201A, and withstand 10 Gs shock in each of three axes per MIL-STD-202 Method 202B. Color is clear face plates, also available in five other standard colors on special order.

PART	DIMENSIONS	SEGMENT OPERTG. CONNECTIONS
CM5-3 	PIN/CONNECTOR VERSION 	
CM5-5 	WIRE TERMINAL 	
CM5-11		

MATERIALS AND PHYSICAL CHARACTERISTICS Meet the material requirements of MIL-STD-454A and MIL-M-14

	CM5-5	CM5-11	CM5-3
Housing	Kovar	Diallyl Phthalate Type SDG per MIL-M-14	Diallyl Phthalate Type SDG per MIL-M14
Face Plate	Borosilicate Glass	Borosilicate Glass	Borosilicate Glass
Leads/Contacts	Kovar, gold plated .008-.01	Brass with gold over Nickel plating	Brass with gold over Nickel plating
Encapsulation	None	Epoxy	Epoxy
Weight	Less than 2 grams	Less than 2 grams	Less than 2 grams
Mating Connector	None needed	CM21-11 or equivalent	Cannon MDG-1-9P or Equivalent

SUPERIOR OPERATING CHARACTERISTICS

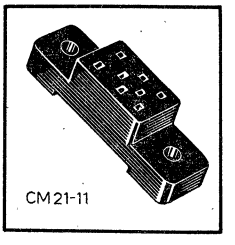
CHARACTERISTICS	VOLT	MAX.	TYP.	MIN.	UNITS
Brightness	4	12,000	8,000	4,000	Rel. Ft. Lamb.
Brightness Spread/Lamp	4	4,000	2,000	.....	Rel. Ft. Lamb.
Current per Segment	4	20	16.5	13	mA
Current Spread/Lamp	4	.....	1.3	.....	mA
Current Inrush Time	0-4	60	40	.....	m Sec.
Current Inrush Peak	4	120	100	.....	mA
Mean Time to First Filament Failure	4	.....	200,000	.....	Hrs.
Color Temperature	4	.....	1.680	.....	°K

RECOMMENDED OPERATING VOLTAGES

In Sunlight Ambient	.....	.....	4	.....	Volts
In High Artificial Light Ambient	.....	.....	3.5	.....	Volts
In Dark Ambient	.....	.....	2.0	.....	Volts

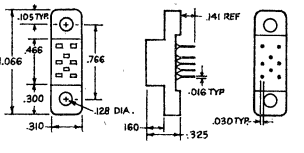
FULL PERFORMANCE IN EXTREME APPLICATIONS

- Operate at Thermal Extremes of −55°C and +125°C
- Withstand Vibration per MIL-STD-202, Method 201A
- Withstand 10G's Shock per MIL-STD-202, Method 202B


CM21-11

CM21-11 CONNECTOR

For use with CM5-11 readouts. The body is thermosetting plastic and the terminals are gold plated copper alloy, wire wrap or solderable.



PRICES

Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-Up
749-2503	CM5-3	25.00	22.30	20.43	19.50
749-2505	CM5-5	9.32	8.28	7.59	7.25
749-2511	CM5-11	17.20	15.28	14.00	13.37
749-4121	CM21-11	1.00	.96	.91	.81

Lighted Devices, Pages 245-261; Readouts, Pages 261-264

Dialite Solid-State Visual Displays

A B SOLID STATE DIODE-LITES™

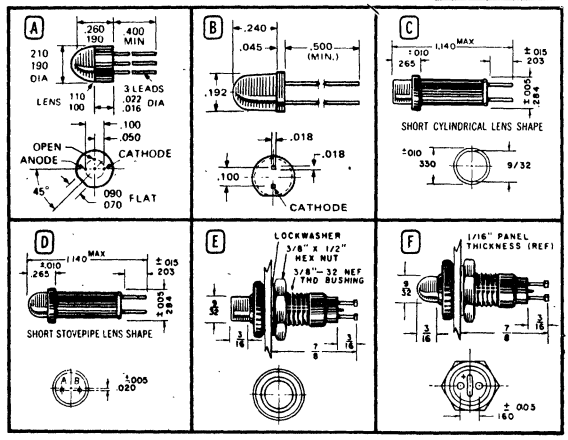
Light emitting lamps consist of gallium arsenide phosphide diode encapsulated in high grade plastic. High brightness, 1.0 mcd at 20 mA. IC compatible. Wide viewing angle. Vibration/shock resistant. Ambient temperature range: −40° to +100° C. Forward DC Current: 50 mA. Reverse Voltage: 3 V. Power Dissipation: 100 mW (derate 1.3 mW/° C above 25° C).

Color	Stock No.	Mfr's Type	Fig.	Stock No.	Mfr's Type	Fig.
Red	770-1927	521-9167	A	770-1925	521-9165	B
Clear	770-1928	521-9168	A	770-1926	521-9166	B

1-9.....Each 1.50 10-24.....Each 1.40 25-99.....Each 1.25
100-249...Each 1.00 250-499....Each .93 500-Up....Each .84

C to F DATALAMP CARTRIDGES AND ULTRAMINIATURE INDICATORS

Diode-Lite lamps with Fresnel lens in aluminum sleeve. Stainless steel pins, nylon insulation. 20 mA max.; 5% voltage tolerance. Operating temperature, −55° to +60° C. Series 507 are used with 508-8738, 508-7538 holders and speed clips (see page 257). Series 249 are in permanent holder.



SERIES 507 DATALAMP CARTRIDGES

V DC	Lens Color	C Short Cylindrical Lens Stock No.	C Short Cylindrical Lens Type 507-	D Short Stove Pipe Lens Stock No.	D Short Stove Pipe Lens Type 507-
3.6	Red	770-2601	4756-3331-500	770-2621	4756-3731-500
3.6	Amber	770-2603	4756-3333-500	770-2623	4756-3733-500
3.6	White	770-2605	4756-3335-500	770-2625	4756-3735-500
3.6	Clear	770-2607	4756-3337-500	770-2627	4756-3737-500
5	Red	770-2641	4757-3331-500	770-2661	4757-3731-500
5	Amber	770-2643	4757-3333-500	770-2663	4757-3733-500
5	White	770-2645	4757-3335-500	770-2665	4757-3735-500
5	Clear	770-2647	4757-3337-500	770-2667	4757-3737-500
6	Red	770-2671	4758-3331-500	770-2691	4758-3731-500
6	Amber	770-2673	4758-3333-500	770-2693	4758-3733-500
6	White	770-2675	4758-3335-500	770-2695	4758-3735-500
6	Clear	770-2677	4758-3337-500	770-2697	4758-3737-500
10	Red	770-2711	4759-3331-500	770-2731	4759-3731-500
10	Amber	770-2713	4759-3333-500	770-2733	4759-3733-500
10	White	770-2715	4759-3335-500	770-2735	4759-3735-500
10	Clear	770-2717	4759-3337-500	770-2737	4759-3737-500
14	Red	770-2751	4760-3331-500	770-2771	4760-3731-500
14	Amber	770-2753	4760-3333-500	770-2773	4760-3733-500
14	White	770-2755	4760-3335-500	770-2775	4760-3735-500
14	Clear	770-2757	4760-3337-500	770-2777	4760-3737-500

1-9.....Each 2.40 10-24.....Each 2.24
25-99.....Each 2.04 100-249.....Each 1.73
250-499.....Each 1.61 500-Up.....Each 1.46

28	Red	770-2791	4761-3331-500	770-2811	4761-3731-500
28	Amber	770-2793	4761-3333-500	770-2813	4761-3733-500
28	White	770-2795	4761-3335-500	770-2815	4761-3735-500
28	Clear	770-2797	4761-3337-500	770-2817	4761-3737-500

1-9.....Each 2.62 10-24.....Each 2.44
25-99.....Each 2.22 100-249.....Each 1.90
250-499.....Each 1.77 500-Up.....Each 1.61

SERIES 249 ULTRAMINIATURE INDICATORS

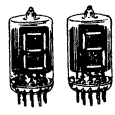
V DC	Lens Color	E Short Cylindrical Lens Stock No.	E Short Cylindrical Lens Type 249-	F Short Stove Pipe Lens Stock No.	F Short Stove Pipe Lens Type 249-
3.6	Red	770-2391	7867-3331-504	770-2411	7867-3731-504
3.6	Amber	770-2393	7867-3333-504	770-2413	7867-3733-504
3.6	White	770-2395	7867-3335-504	770-2415	7867-3735-504
3.6	Clear	770-2397	7867-3337-504	770-2417	7867-3737-504
5	Red	770-2431	7868-3331-504	770-2451	7868-3731-504
5	Amber	770-2433	7868-3333-504	770-2453	7868-3733-504
5	White	770-2435	7868-3335-504	770-2455	7868-3735-504
5	Clear	770-2437	7868-3337-504	770-2457	8878-3737-504
6	Red	770-2471	7869-3331-504	770-2491	7869-3731-504
6	Amber	770-2473	7869-3333-504	770-2493	7869-3733-504
6	White	770-2475	7869-3335-504	770-2495	7869-3735-504
6	Clear	770-2477	7869-3337-504	770-2497	7869-3737-504
10	Red	770-2511	7870-3331-504	770-2531	7870-3731-504
10	Amber	770-2513	7870-3333-504	770-2533	7870-3733-504
10	White	770-2515	7870-3335-504	770-2535	7870-3735-504
10	Clear	770-2517	7870-3337-504	770-2537	7870-3737-504
14	Red	770-2551	7871-3331-504	770-2561	7871-3731-504
14	Amber	770-2553	7871-3333-504	770-2563	7871-3733-504
14	White	770-2555	7871-3335-504	770-2565	7871-3735-504
†4	Clear	770-2557	7871-3337-504	770-2567	7871-3737-504

1-9.....Each 3.12 10-24.....Each 2.91
25-99.....Each 2.66 100-249.....Each 2.31
250-499.....Each 2.14 500-Up.....Each 1.96

28	Red	770-2581	7872-3331-504	770-2591	7872-3731-504
28	Amber	770-2583	7872-3333-504	770-2593	7872-3733-504
28	White	770-2585	7872-3335-504	770-2595	7872-3735-504
28	Clear	770-2587	7872-3337-504	770-2597	7872-3737-504

1-9.....Each 3.33 10-24.....Each 3.11
25-99.....Each 2.85 100-249.....Each 2.48
250-499.....Each 2.30 500-Up.....Each 2.11

RCA NUMITRON DIGITAL DISPLAYS

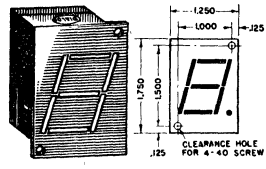


Low cost, low voltage displays offer sharp contrast and top reliability. Model DR2000 displays numbers 0-9. Model DR2010, numbers 0-9 with decimal point. Wide-spectrum light emission permits use of filters to obtain any color. Rugged, single-plane unit construction for reliable service with minimum 100,000 hours life expectancy. "Upfront" display permits wide viewing angle (140°) with display free of "clutter" and residual images. Simple voltage controls make brightness fully adjustable. Incandescent-type; free from induced or radiated interference. Mount in 9-pin miniature sockets or on PC boards. Recommended DC segment voltage: 3.5-5.0 V at 24 mA. Overall, .785" dia. x 1.875"; seated, 1.625". Wt. 2 oz.

Stock No.	Mfr's Type	EACH 1-4	EACH 5-9	EACH 10-Up
902-0300	DR2000	9.05	7.24	5.50
902-0310	DR2010	9.55	7.64	5.75

DIALCO SERIES 710 LIGHTED NUMERIC READOUT MODULES

Readout modules provide highly legible displays of one-inch characters. Bold angular digits allow error-free reading at over 30 feet, as well as close viewing. Unlighted segments are so reduced in visibility when viewed through the proper contrast filter as to merge into the background. Permanent mounting of either front or rear parts on a common support may be used, or the rear parts may be made movable and connected by flexible wiring. Lamp holders accept T-1¾ bulbs with midget flanged base. Shpg. wt. 8 oz.



Stock No.	Mfr's Type	Description	EACH 1-4	EACH 5-9	EACH 10-24	EACH 25-Up
770-2019	710-0300-005	Basic Module	8.52	6.79	6.28	5.80
770-2020	710-0301-005	With Decimal	9.79	7.79	7.22	6.66
770-2021	710-0302-005	With Colon	9.79	7.79	7.22	6.66

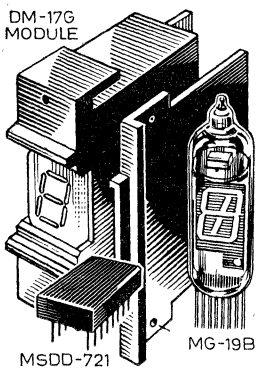
ACCESSORIES

Stock No.	Mfr's Type	Description	No. of Modules	EACH 1-4	EACH 5-9	EACH 10-24	EACH 25-Up
770-2025	712-0103-001	Window	1	.72	.53	.50	.48
770-2026	712-0103-002	Window	2	1.18	.88	.83	.79
770-2027	712-0103-003	Window	3	1.48	1.10	1.04	.98
770-2050	713-0100-001	Mtg. bracket	1	1.78	1.33	1.26	1.19
770-2051	713-0100-002	Mtg. bracke	2	2.58	1.93	1.82	1.73
770-2052	713-0100-003	Mtg. bracket	3	3.50	2.60	2.46	2.33

Lighted Devices, Pages 245-261; Readouts, Pages 261-264

Alco Readouts and Lamp Assemblies

NEON ELFIN READOUTS



MG-17G. Gas-filled, cold cathode, ultra-miniature display indicator 1.220″ high x .385″ diameter, character height .378″. Seven-segments display 0-to-9 and one decimal on flat ceramic base plate. For DC and pulsed operations.

ELFIN COMPLETE MODULES

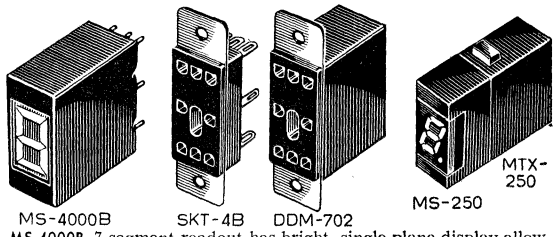
DM-17G. Factory-assembled plug-in module includes MG-17G Elfin indicator mounted on printed circuit board which contains the decoder-driver and logic. Limiting resistors are included. The Elfin tube is front-mounted and modules can be stacked together in multiples. End plates available to provide a completed bezel look. −721 and −722 accepts 4-line BCD inputs, −723 accepts count input. Optical filter integrated display appearance.

HYBRID BCK-TO-7 SEGMENT DECODER DRIVERS

MSDD-270 Series. With active low outputs to drive the cathodes of the ELFIN to display numeric characters 0 through 9. Supply voltage: 7 volts; input: 5.0 volts. Plastic/epoxy package with Dual-in-Line (DIP) configurations.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-499
700-4117	MG-17G	Neon, 7-Seg., 1 Dec.	6.14	4.95	4.25	3.75
700-1125	DM-17G-721	W/Decoder-Driver, Tube	24.50	19.75	17.00	15.04
700-1126	DM-17G-722	W/Dec.-Dvr.-Memory, Tube	28.52	23.00	19.90	17.46
700-1127	DM-17G-723	W/Dec.-Dvr.-Counter, Tube	28.98	23.35	20.20	17.81
700-1119	DM-17G-CC	Clock/Colon Module	4.90	3.95	3.42	3.05
700-1121	DM-17G-SM	Over-range/Symbol Module	20.58	16.60	13.79	12.81
700-1120	DM-17G-EP	Finished Eng Plate (Pr.)	2.24	1.80	1.53	1.35
700-1110	DM-17FL3	Filter for 3 Modules	1.11	.90	.78	.68
700-1111	DM-17FL4	Filter for 4 Modules	1.50	1.20	1.02	.90
700-5080	MSDD-721	BCD-to-7 Seg. Decoder-Dvr.	12.28	9.90	8.65	7.65
700-5081	MSDD-722	BCD-to-7Seg.Dec.-Dvr.w/Mem.	16.30	13.15	11.52	10.18
700-5082	MSDD-723	With Decade Counter	16.74	13.50	11.82	10.43
700-5083	MSDD-724	W/Decade Counter, Memory	22.22	17.95	15.70	13.86
700-5084	MSDD-728	With Up/Down Counter	25.70	20.75	18.25	16.10
700-5085	MSDD-729	W/Up/Down Counter, Memory	30.90	24.95	21.81	19.25

INCANDESCENT READOUT INDICATORS



MS-4000B. 7-segment readout has bright, single plane display allowing wide angle view. Character size: .325″ x .600″. Case: .552″ x 1.18″ x 1.18″, one-piece black metal matte. Long-life #683 T-1 lamps are separately lit by use of an external decoder-driver. Lamps: 3-5V @ 40-60 mA per segment. Current drain: 420 mA max. (numeral "8"). Power: .24 W (min.), 2.1 W (max.). Order socket separately.

MS-4100. As above, but has decimal point and slightly smaller figures, 0-to-9. External dimensions above.

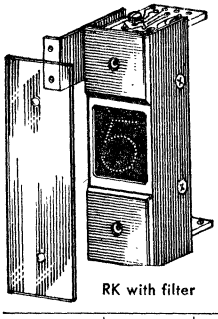
MS-250A. Smaller version of above, 0-to-9. Socket, plastic housing. Lamps: 2.5V @ 20 mA per segment. Current drain: 40 mA (min.), consumption: 160 mA (max.), 0.4 W (max.).

PLUG-IN DECODER DRIVER MODULES

Packaged module includes decoder-driver and plugs directly into mating readout: DDM-702 for MS-4100B and DDM-703 for MS-4000B. MTX-4000 for MS4000B and MTX-250 for MS-250A. Completely assembled. Color-coded leads.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-499
700-5055	MS-4000BR	3-5V Red Filter	8.00	6.45	5.48	4.84
700-5054	MS-4000BC	3-5V Clear Filter	8.00	6.45	5.48	4.84
700-7602	SKT-4B	MS-4000 Socket	.60	.48	.41	.36
700-5059	MS-4100BR	3-5V Red Filter	9.24	7.45	6.33	5.59
700-5058	MS-4100BC	3-5V Clear Filter	9.24	7.45	6.33	5.59
700-7605	SKT-41B	MS-4100 Socket	.60	.48	.41	.36
700-5052	MS-250AR	2.5V Red Filter	10.24	8.25	7.01	6.19
700-5051	MS-250AC	2.5V Clear Filter	10.24	8.25	7.01	6.19
700-1100	DDM-702	80 mA/Seg. w/Dec.	24.72	19.95	17.25	14.75
700-1101	DDM-703	80 mA/Seg. w/Ripple	24.72	19.95	17.25	14.75
700-6408	MTX-4000	Decimal-to-7 Decoder	15.94	12.85	10.92	9.64
700-6404	MTX-250	Decimal-to-7 Decoder	15.94	12.85	10.92	9.64

EDGE-LIT INCANDESCENT MINIATURE READOUT

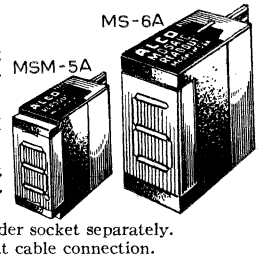

RK with filter

- Clear, Easy-to-Read Display
- Non-Yellowing Acrylic Plates
- Compact Case Fits Small Space

RK Series. In-line design provides clear, easy-to-read displays without focusing problems. Displays .55″ numerals 0-9, plus decimal. Engraved non-yellowing acrylic plates form numerals through selective lighting. Precision aluminum case, 2.56x.78x.83″, serves for installation in limited space. Uses T-1¾ lamps, 20,000-50,000-hour life. Solder terminals. Shpg. wt. 8 oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-499
700-7006	RK-6	6.3 volts	13.00	8.25	7.01	6.19
700-7014	RK-14	14 volts	13.00	8.25	7.01	6.19
700-7001	RK-FLV	Violet filter	.62	.40	.34	.30

INCANDESCENT MOSAIC READOUT INDICATORS



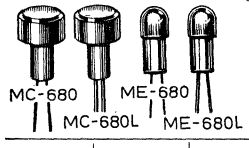
MS-6A & MS-14A. Single plane 0-to-9 and some alphabet. Two decimal points used as colon. Segment bars are closely linked. Figures: .800″ high. Body size: .834″ w. x 1.750″ h. x 1.562″ d. 50,000-hr. lamp life. Plug-in thru standard 10-terminal PC connector. Order socket separately.

MSM-5A. As above, but miniature. Lamps: 5V @ 60 mA. Figures: .475″ h. Body: .475″ w. x .985″ h. x1 .562″ d. 50,000-hr. lamp life. Plug-in thru 10-terminal PC connector. Order socket separately.

MSM-5AL. As above, but has 10″ flat cable connection.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-499
700-5040	MS-6A	6.3 volts	13.00	8.25	7.01	6.19
700-5049	MS-14A	14 volts	13.00	8.25	7.01	6.19
700-5070	MS-SKT-R	Right angle socket	2.16	1.55	1.32	1.16
700-5069	MS-SKT	Socket for MS	1.64	1.15	.98	.92
700-5066	MS-FLV	MS violet filter	.62	.40	.34	.30
700-5065	MS-FLR	MS red filter	.62	.40	.34	.30
700-5064	MS-FLG	MS green filter	.62	.40	.34	.30
700-5160	MSM-5A	3-5 volts	13.00	8.25	7.01	6.19
700-5163	MSM-5AL	3-5 volts	15.42	9.95	8.46	7.46
700-5155	MSM-SK	Socket for MSM	1.64	1.15	.98	.92

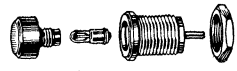
INCANDESCENT ASSEMBLIES



Ultraminiature—fits 3/16″ hole. 5 V 60 mA, 100,000 hrs. Has #683 T-1 lamp. Mounting ring. ME Series †: red, green, amber, blue, white. MC Series* red, green, yellow, blue, white. See note below.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-499	500-999
770-405N	ME680†	Pin Contacts	.95	.89	.59	.54	.45
770-406N	ME-680L†	6″ Leads	.95	.89	.59	.54	.45
770-390N	MC-680*	Pin Contacts	1.05	.99	.67	.60	.49
770-391N	MC-680L*	6″ Leads	1.05	.99	.67	.60	.49

T-1 AND T-1¾ LAMP ASSEMBLIES

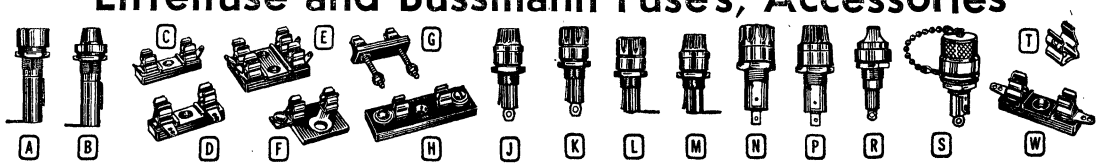


Relampable miniature holders have 3/8″ dia. lens. MCM-100 has 0.7″ length, mounts with 5/16-32 nut. MCM-175 is 1″ long, mounts with 3/8-32 nut. Specify lens color: red, green, amber, blue, white. Less lamp. Use 5, 6.3, 14 or 28 V lamp. See note below.

Stock No.	Type MCM-	Uses Lamp	EACH 1-9	10-24	25-99	100-499	500-999
700-393N	100	T-1 Submidget Flange	1.05	.99	.67	.60	.49
700-395N	175	T-1¾ Midget Flange	1.05	.99	.67	.60	.49

HOW TO ORDER ME, MC, MCM SERIES INCANDESCENT ASSEMBLIES: Complete Stock Number by inserting color code in place of N. Red (2); Green (5); Amber (3); Blue (6); White (9); Yellow (4).

Littelfuse and Bussmann Fuses, Accessories



LITTELFUSE FUSE MOUNTINGS AND HOLDERS

Fuse extractor panel mount posts and mounting, provide a quick, safe, and simple method of mounting fuses. Comes in a wide variety of sizes for a wide area of applications. Fit most fuses. High reliability. Shpg. wt. 2 oz.

INDUSTRIAL—FOR 3A AND 3AB

Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	10-99	100-499	500-999
845-0298	*341001*	A	Screw slot	.83	.64	.53	.42
845-0299	*342001*	B	Thumb knob	.83	.64	.53	.42
845-0401	*342012*	J	Extractor post	.58	.46	.38	.30
845-0402	*342014*	K	Miniature fuse post	.58	.46	.38	.30
845-0400	*342004*	L	Miniature fuse post	.69	.53	.45	.36
845-0404	*342022*	M	Miniature fuse post	.69	.53	.45	.36
845-0407	*342028*	L	Quick Connect 3/16" Term.	.68	.53	.45	.36
845-0408	*342038*	N	Quick Connect 3/16" Term.	.68	.53	.45	.36
845-0409	*342048*	M	Quick Connect 3/16" Term.	.68	.53	.45	.36
845-0410	*342058*	P	Quick Connect 3/16" Term.	.68	.53	.45	.36
845-0423	*350218*	D	Single Fuse Mounting	.28	.22	.18	.14
845-0424	*350288*	W	Single Fuse Mounting	.28	.22	.18	.14
845-0425	353001	G	Panel-type mounting	.81	.64	.54	.43
845-0426	*356001*	H	Screw terminals	.53	.42	.35	.28
845-0427	*357001*	C	Lug terminals	.28	.22	.18	.14
845-0428	*357002*	E	Double fuse mounting	.50	.40	.33	.26
845-0296	*101001*	T	Phosphor bronze clips	.04	.04	.03	.02
FOR 8AG							
845-0444	*372001*	B	Thumb knob	.83	.68	.57	.45
845-0446	383002	F	"Meter-back" mounting	.53	.43	.36	.29
845-0447	*387001*	C	Lug terminals	.28	.22	.18	.14
845-0448	387002	E	Double fuse mounting	.50	.40	.33	.26

MILITARY—MIL-F-19207A (*RF Shield)

Stock No.	Mfr's Type	MIL No.	Fig.	Post Description	EACH 1-9	10-99	100-499	500-999
845-0406	*342025*	FHN20G	L	3AG min.	1.82	1.39	1.14	.91
845-0405	342024	FHN26G2	J	3AG min.	1.76	1.34	1.10	.88
845-0297	340255	FHN26G2*	S	3AG min.	7.05	5.35	4.46	3.56
845-0403	342021	FHN26W	N	3AG	4.27	3.35	2.67	2.13
845-0445	372003	FHN31G2	B	8AG ext.	3.53	2.70	2.21	1.77

INDICATING TYPES—INDUSTRIAL *Fused circuit V 20A.

Stock No.	Type or MS No.	*Volt Range	Fig.	Knob Color	EACH 1-9	10-99	100-499	500-999
845-0411	344006	2½-7	R	Amber	4.15	3.14	2.62	2.09
845-0412	344012	7-16	R	Amber	4.15	3.14	2.62	2.09
845-0413	344024	16-32	R	Amber	4.15	3.14	2.62	2.09
845-0414	*344125*	100-125	R	Clear	2.55	1.93	1.61	1.28
845-0415	344250	200-250	R	Clear	2.55	1.93	1.61	1.28

INDICATING TYPES—MILITARY—MIL-F-19206A

845-0422	FHL-17G2	90-300	R	Clear	2.81	2.14	1.85	1.48
845-0416	FHL-18G2-1	12-22	R	Amber	4.24	3.23	2.77	2.22
845-0417	FHL-18G2-2	23-33	R	Amber	4.24	3.23	2.77	2.22
845-0418	FHL-18G2-3	34-45	R	Amber	4.24	3.23	2.77	2.22
845-0419	FHL-18G2-4	46-60	R	Amber	4.24	3.23	2.77	2.22
845-0420	FHL-18G2-5	61-80	R	Amber	4.24	3.23	2.77	2.22
845-0421	FHL-18G2-6	81-90	R	Amber	4.24	3.23	2.77	2.22

BUSSMANN MIL TYPE FUSES

MS90078-1-24=250V. 25-26=125V. All others 32V. Add a $9.00 stamping charge per item. Silver plating if required, is available on special order. Add a minimum of $6.00 per thousand. Note: Minimum Charge, $6.00. Avg. shpg. wt. 2 oz.

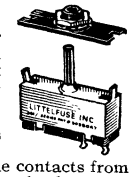
Amps	Stock No.	Buss Equiv.	MS No.	Type Desig.	EACH 5-95	100-495	500-Up
1/100	740-1701	AGC 1/100	MS90078-1	F02A250V	.68	.58	.44
1/32	740-1702	AGC 1/32	MS90078-2	F02A250V	.57	.49	.26
1/16	740-1703	AGC 1/16	MS90078-3	F02A250V	.28	.24	.18
1/8	740-1704	AGC 1/8	MS90078-4	F02A250V	.28	.24	.18
1/4	740-1705	AGC 1/4	MS90078-5	F02A250V	.17	.15	.11
3/8	740-1706	AGC 3/8	MS90078-6	F02A250V	.17	.15	.11
1/2	740-1707	AGC 1/2	MS90078-7	F02A250V	.17	.15	.11
3/4	740-1708	AGC 3/4	MS90078-8	F02A250V	.17	.15	.11
1	740-1709	AGC 1	MS90078-9	F02A250V	.12	.10	.08
1½	740-1710	AGC 1½	MS90078-10	F02A250V	.12	.10	.08
2	740-1711	AGC 2	MS90078-11	F02A250V	.12	.10	.08
3	740-1712	AGC 3	MS90078-12	F02A250V	.12	.10	.08
10	740-1713	GLH 10	.....	F02A125V	.09	.08	.06
15	740-1714	AGC 15	.....	F02A32V	.09	.08	.06
20	740-1715	AGC 20	.....	F02A32V	.09	.08	.06
1/100	740-1716	MDL 1/100	MS90078-16	F02B250B	.50	.43	.27

Amps	Stock No.	Buss Eqiv.	MS No.	Type Desig.	EACH 5-95	100-495	500-Up
1/32	740-1717	MDL 1/32	MS90078-17	F02B250V	.50	.43	.27
1/16	740-1718	MDL 1/16	MS90078-18	F02B250V	.38	.33	.24
1/8	740-1719	MDL 1/8	MS90078-19	F02B250V	.38	.33	.24
1/4	740-1720	MDL 1/4	MS90078-20	F02B250V	.38	.33	.24
3/8	740-1721	MDL 3/8	MS90078-21	F02B250V	.38	.33	.24
1/2	740-1722	MDL 1/2	MS90078-22	F02B250V	.38	.33	.24
3/4	740-1723	MDL 3/4	MS90078-23	F02B250V	.38	.33	.24
1	740-1724	MDL 1	MS90078-24	F02B250V	.38	.33	.24
1½	740-1725	MDX 1½	MS90078-25	F02B250V	.35	.30	.22
2	740-1726	MDX 2	MS90078-26	F02B250V	.35	.30	.22
5	740-1727	MDX 5	.....	.....	.28	.24	.18
8	740-1728	MDL 8	.....	.....	.28	.24	.18
10	740-1729	MDL 10	.....	.....	.28	.24	.18
15	740-1730	MDL 15	.....	.....	.28	.24	.18
20	740-1731	MDL 20	.....	.....	.28	.24	.18

LITTELFUSE MANUAL RESET CIRCUIT BREAKERS

TABLE OF CIRCUIT BREAKERS

Stock No.	Mfr's Type	* (Amps)	‡ (Amps)	Stock No.	Mfr's Type	* (Amps)	‡ (Amps)	EACH 1-9	10-99	100-499	500-999
845-0509	81502.5	1.65	2.89	845-0501	815.650	0.49	0.86	1.01	.84	.70	.56
845-0510	8152.75	1.92	3.33	845-0502	815.800	0.60	1.05	1.01	.84	.70	.56
845-0511	815003	2.10	3.67	845-0503	815001	0.65	1.14	1.01	.84	.70	.56
845-0512	8153.25	2.20	3.85	845-0504	8151.25	0.93	.163	1.01	.84	.70	.56
845-0513	815004	2.50	4.37	845-0505	81501.5	1.00	1.75	1.01	.84	.70	.56
845-0514	81504.5	3.00	5.25	845-0506	8151.75	1.20	2.10	1.01	.84	.70	.56
845-0515	815005	3.25	5.68	845-0507	815002	1 40	2.45	1.01	.84	.70	.56
845-0516	815006	3.90	6.82	845-0508	8152.25	1.50	2.62	1.01	.84	.70	.56
845-0517	815007	4.14	7.25	.....	.....	.....	.....	1.01	.84	.70	.56

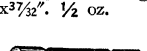


Manual reset circuit breakers for applications in most industrial and commercial equipment. Provide quick overload protection and ambient temperature compensation using separate bimetal elements for each function. Heavy duty precious metal contacts are used throughout the range of currents. "Trip free" feature prevents the contacts from being manually held closed when overload occurs. Molded phenolic base prevents warping. Available in 17 *hold current ratings from 0.49 amps through 4.14 amps. †Breakers with hold current ratings. of 0.165 amp through 4.14 amp are ■U.L. recog. Mounting adapter sold separately. 1 45/64x1 7/32x3 7/32". ½ oz.

FUSEMASTER RACK ASSORTMENT

Type 094047. Rack displays 300 fuses. Sixty individual compartments for easy self-service. Holds index card on back of rack. Ideal for servicemen, laboratories, etc. With 100 fuses, inventory control backboard, pressure-sensitive blank inventory labels, mounting screws. 100 fuses includes: TYPE 3AG—ten ¼-amp; ten ½-amp, five 1-amp; five 2-amp; five 5-amp. TYPE 3 AG SLO-BLO-ten ¼-amp; five ½-amp; five 1-amp; five 2-amp; five 3-amp; ten 5-amp. TYPE C—ten 3/10-amp. TYPE N—five 3/10-amp; five 4/10-amp; five ½-amp fuses. **845-0523.** Shpg. wt. 2 lbs. **Ea. 25.40** 2-Up..... **Ea. 19.14**

BUSSMANN KTK FUSES

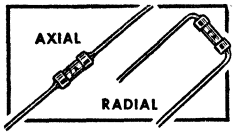


Used to protect power supplies, mobile communications equipment, etc. Rated 600 volts or less. U.L. listed. Wt. 2 oz.

Amps	Stock No.	EACH 5-95	100-495	500-Up	Amps	Stock No.	EACH 5-95	100-495	500-Up
1/8	740-0701	1.56	1.12	.94	6	740-0713	1.56	1.12	.94
1/4	740-0703	1.56	1.12	.94	10	740-0715	1.56	1.12	.94
1/2	740-0705	1.56	1.12	.94	15	740-0716	1.56	1.12	.94
1	740-0707	1.56	1.12	.94	20	740-0717	1.56	1.12	.94
2	740-0709	1.56	1.12	.94	25	740-0718	1.56	1.12	.94
3	740-0710	1.56	1.12	.94	30	740-0719	1.56	1.12	.94

Miniature, Subminiature Fuses and Holders

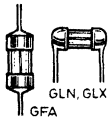
LITTELFUSE PICOFUSE MICROMINIATURE FUSES



For micro circuits of 125 volts or less where short circuit may be 300 amps at 125 VDC requiring fast action. Fuses can be encapsulated. Blow specifications: 100%. Four hours min.; 200%. 5 seconds max. 7/32x5/64". Shpg. wt., 1/5 gram, 2 oz. Sold in Pkgs. of 5.

SERIES 275000 AXIAL LEADS					SERIES 276000 RADIAL LEADS				
Stock No.	Amp	PER PKG. 1-4	5-95	100-Up	Stock No.	Amp	PER PKG. 1-4	5-95	100-Up
845-0044	1/8	3.12	2.34	1.95	845-0060	1/8	3.12	2.34	1.95
845-0045	1/4	3.12	2.34	1.95	845-0061	1/4	3.12	2.34	1.95
845-0046	3/8	3.12	2.34	1.95	845-0062	3/8	3.12	2.34	1.95
845-0047	1/2	3.12	2.34	1.95	845-0063	1/2	3.12	2.34	1.95
845-0048	3/4	2.75	2.07	1.73	845-0064	3/4	2.75	2.07	1.73
845-0049	1	2.75	2.07	1.73	845-0065	1	2.75	2.07	1.73
845-0053	2	2.75	2.07	1.73	845-0069	2	2.75	2.07	1.73
845-0055	3	2.75	2.07	1.73	845-0071	3	2.75	2.07	1.73
845-0056	4	2.75	2.07	1.73	845-0072	4	2.75	2.07	1.73
845-0057	5	2.75	2.07	1.73	845-0073	5	2.75	2.07	1.73

BUSSMANN TRON PIGTAIL FUSES



For use on circuits of 125 volts or less where available fault current is not over 50 amps. Figures in type No. indicate ampere rating. Leads are of #24 tinned copper wire for ratings 1/100 thru 5 amp—#18 tinned copper for 7 thru 15 amp. Sold in Pkg. of 10 only.

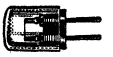
Stock No.	Mfr's. Type GFA-	PER PKG. 1-9	10-49	50-Up	Stock No.	Mfr's Type	PER PKG 1-9	10-49	50-Up
740-0160	1/100	6.25	5.00	4.20	740-0310	GLN 1/100	17.50	13.90	11.60
740-0161	1/32	6.25	5.50	4.20	740-0311	GLN 1/32	14.75	11.70	9.80
740-0162	1/20	6.25	5.00	4.20	740-0312	GLN 1/20	14.75	11.70	9.80
740-0163	1/16	6.25	5.00	4.20	740-0313	GLN 1/16	14.75	11.70	9.80
740-0164	1/10	6.25	5.00	4.20	740-0314	GLN 1/10	14.75	11.70	9.80
740-0165	1/8	6.25	5.00	4.20	740-0315	GLN 1/8	14.75	11.70	9.80
740-0166	15/100	6.25	5.00	4.20	740-0316	GLN 3/10	14.75	11.70	9.80
740-0167	2/10	6.25	5.00	4.20	740-0317	GLN 4/10	14.75	11.70	9.80
740-0168	1/4	6.25	5.00	4.20	740-0324	GLN 7	14.75	11.70	9.80
740-0169	3/10	6.25	5.00	4.20	740-0329	GLN 8	14.75	11.70	9.80
740-0170	4/10	6.25	5.00	4.20	740-0335	GLN 15	14.75	11.70	9.80
740-0171	1/2	6.25	5.00	4.20	740-0361	GLX15/100	19.00	15.10	12.60
740-0172	6/10	6.25	5.00	4.20	740-0362	GLX 2/10	19.00	15.10	12.60
740-0173	3/4	5.50	5.00	4.20	740-0363	GLX 1/4	19.00	15.10	12.60
740-0174	1	5.50	4.40	3.70	740-0364	GLX 1/2	19.00	15.10	12.60
740-0175	1 1/2	5.50	4.40	3.70	740-0365	GLX 6/10	19.00	15.10	12.60
740-0180	2	5.50	4.40	3.70	740-0366	GLX 3/4	19.00	15.10	12.6¢
740-0185	3	5.50	4.40	3.70	740-0367	GLX 1	19.00	15.10	12.60
740-0190	4	5.50	4.40	3.70	740-0368	GLX 1 1/2	19.00	15.10	12.60
740-0195	5	5.50	4.40	3.70	740-0369	GLX 2	19.00	15.10	12.60
740-0201	7	5.50	4.40	3.70	740-0374	GLX 3	19.00	15.10	12.60
740-0204	8	5.50	4.40	3.70	740-0379	GLX 4	19.00	15.10	12.60
740-0209	15	5.50	4.40	3.70	740-0384	GLX 5	19.00	15.10	12.60

LITTELFUSE AND BUSSMANN INSTRUMENT FUSES

Series 361000 or AGX. High-speed for test equipment. 250 volts max. *125 volts. 1x 1/4". 2 oz. Sold in Pkg. of 5 only.

Stock No.	Amp	PER PKG. 1-4	5-95	100-Up	Stock No.	Amp	PER PKG. 1-4	5-95	100-Up
845-0429	1/500	8.50	5.63	4.50	845-0437	3/8	.84	.53	.42
845-0430	1/200	3.62	2.40	1.92	845-0438	1/2	.84	.53	.42
845-0431	1/100	3.12	2.08	1.66	845-043	1	.60	.38	.30
845-0432	1/32	2.75	1.83	1.46	845-0440	1 1/2	.60	.38	.30
845-0433	1/16	1.75	1.15	.92	845-0441	2	.60	.38	.30
845-0434	1/10	1.37	.83	.66	845-0442	3*	.60	.38	.30
845-0435	1/8	1.37	.83	.66	845-0449	4*	.60	.38	.30
845-0436	1/4	.84	.53	.42	845-0443	5*	.60	.38	.30

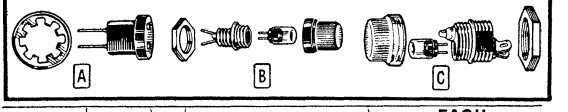
LITTELFUSE MICROFUSES



Type 273000. Submin. plug-in fuses with low res. and high-speed action. Glass cap for visible indication. Short-circuit interrupting capacity, 125 volts, 10,000 amps DC. Blowing specs: 100%, 4 hrs. min.; 200%, 5 sec. max. Holders below. †Mfr's type is Micro (amp) A, e.g. Micro 1/500 A. 1/4x1 1/32". 2 oz. SOLD IN PKGS. OF 5 ONLY.

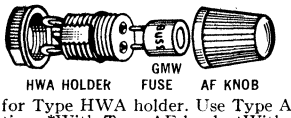
Stock No.	† Amp	PER PKG. 1-4	5-95	100-Up	Stock No.	† Amp	PER PKG. 1-4	5-95	100-Up
845-0010	1/500	6.85	4.28	3.42	845-0026	4/10	5.72	3.58	2.86
845-0011	1/200	6.85	4.28	3.42	845-0027	1/2	5.72	3.58	2.86
845-0012	1/100	6.85	4.28	3.42	845-0028	6/10	5.72	3.58	2.86
845-0013	1/64	6.85	4.28	3.42	845-0029	7/10	5.72	3.58	2.86
845-0014	1/32	6.85	4.28	3.42	845-0031	8/10	5.72	3.58	2.86
845-0015	1/20	5.72	3.58	2.86	845-0032	1	5.72	3.58	2.86
845-0016	1/16	5.72	3.58	2.86	845-0035	1 1/2	5.72	3.58	2.86
845-0017	1/10	5.72	3.58	2.86	845-0036	2	5.72	3.58	2.86
845-0018	1/8	5.72	3.58	2.86	845-0038	3	5.72	3.58	2.86
845-0022	2/10	5.72	3.58	2.86	845-0040	4	5.72	3.58	2.86
845-0023	1/4	5.72	3.58	2.86	845-0041	5	5.72	3.58	2.86
845-0024	3/10	5.72	3.58	2.86	.....	.....	.....	.....	.....

LITTELFUSE MICROFUSE HOLDERS



Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	10-49	50-99	100-Up
845-0076	281001	A	*Miniature P/C Mtg.*	.38	.29	.24	.20
845-0077	281002	B	Front Panel	1.02	.82	.68	.52
845-0078	282001	B	Front Panel Alum.	1.74	1.31	1.09	.87
845-0079	282002	B	Rear Panel Alum.	1.64	1.24	1.03	.83
845-0080	282007	B	R/F Shielded	3.02	2.27	1.89	1.51
845-0081	282008	B	R/F Shielded	2.96	2.22	1.85	1.48
845-0083	284004	C	2 1/2-7 V Indicating	2.80	2.20	1.84	1.47
845-0084	284005	C	7-16 V Indicating	2.80	2.20	1.84	1.47
845-0085	284006	C	16-32 V Indicating	2.80	2.20	1.84	1.47
845-0082	284003	C	100-125 V Indicating	2.06	1.55	1.29	1.03
845-0086	284107	C	12-22 V R/F Shielded	10.42	7.82	6.52	5.21
845-0087	284108	C	23-33 V R/F Shielded	11.75	8.83	7.36	5.88
845-0088	284109	C	34-45 V R/F Shielded	11.75	8.83	7.36	5.88
845-0089	284110	C	46-60 V R/F Shielded	11.75	8.83	7.36	5.88
845-0090	284111	C	61-80 V R/F Shielded	11.75	8.83	7.36	5.88
845-0091	284112	C	81-90 V R/F Shielded	11.75	8.83	7.36	5.88
845-0092	284113	C	91-125 V R/F Shielded	8.07	6.07	5.06	4.05

BUSSMANN GMW SUBMINIATURE FUSES AND HOLDERS

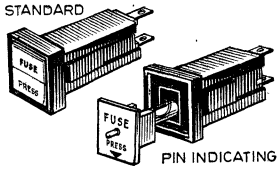


Type GMW subminiature prong-type fuse rated 125 V maximum; fault current 300 A maximum. Opens at 200% within 10 seconds or less. Size, 0.27-in. diameter, 1/4-in. long. Designed for Type HWA holder. Use Type AF knob for waterproof installation. *With Type AF knob. †Without Type AF knob. Av., 2 oz.

Stock No.	Amps	EACH 10-90	100-490	500-Up	Stock No.	Amps	EACH 10-90	100-490	500-Up
740-0442	1/10	.80	.64	.53	740-0447	1 1/2	.80	.64	.53
740-0443	1/4	.80	.64	.53	740-0448	2	.80	.64	.53
740-0444	1/2	.80	.64	.53	740-0453	3	.80	.64	.53
740-0445	3/4	.80	.64	.53	740-0458	4	.80	.64	.63
740-0446	1	.80	.64	.53	740-0463	5	.80	.64	.53

Stock No.	Description	EACH 10-90	100-490	500-Up
740-0499	Type HWA* Holder, fits all Type GMW fuses	1.02	.81	.68
740-0500	Type HWA† Holder, fits all Type GMW fuses	.90	.71	.60
740-0014	Type AF Knob, fits Type HWA holder	.12	.11	.09

NEW LITTELFUSE LOW PROFILE FUSE HOLDERS



For front or rear panel installation on computers, photocopiers, aircraft and marine equipment. No mounting hardware needed—snap-on terminals, snap-in holder. Types for 3AG standard or pin indicating fuses and 8AG fuses. Color-coded body and cap. Quick-connect solder terminals available in two widths. Withstands 1500 volts between terminals and terminals to ground. Withstands 10-55 Hz at 0.06" double amplitude vibration; withstands 50G for 11 msec. vibration. Rated 15 A at any voltage to 250 V. Mounts in 0.625" sq. hole in 1/32-1/8" thick panel.

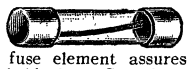
Stock No.	Mfr's Type	Description	EACH 1-9	10-99	100-499	500-999
845-066X	3486	Body, 3/16" terminal for 3AG fuse	.55	.42	.35	.28
845-068X	3488	Body, 1/4" terminal for 3AG fuse	.55	.42	.35	.28
845-086X	3786	Body, 3/16" terminal for 8AG fuse	.55	.42	.35	.28
845-088X	3788	Body, 1/4" terminal for 8AG fuse	.55	.42	.35	.28
845-061X	3480	Cap for 3AG or 8AG fuse	.19	.144	.12	.096
845-060X	3470	Cap for 3AG or 8AG—pin indicating	.22	.16	.14	.112

HOW TO ORDER

Bodies and caps available in 6 colors. Substitute Color Code number for X suffix in Allied Stock No.: Red—1; Green—2; Yellow—3; Blue—4; White—5; Black—7; Gray—9. Example: 3480 cap in yellow—845-0613.

Standard, Slo-Blow and Indicating Fuses

LITTELFUSE 3AG AND BUSSMANN TYPES AGC, MTH FUSES



Standard fuses for short time-lag applications. Protect delicate meters and test equipment—ideal for radios, amplifiers, transmitters, etc. Diagonal alignment of fuse element assures accurate blowing even when element is expanded by heat. Completely unaffected by high operating temperatures. Blowing specifications: 110% of rating, 4 hours minimum; 135%, 1-hour maximum; 200%, 10 seconds maximum; 250 V maximum, except *125 V and †32 V. **Note: Allied will supply Littelfuse or Bussmann types, whichever is in stock, unless specified.** ‡Indicates Littelfuse type 3AG/Bussmann type AGC, except §Littelfuse type 3AG/Bussmann type MTH. Size, 1¼x¼". Av. shpg. wt. 2 oz. **Sold only in pkgs. of 5.**

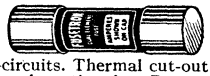
Stock No.	‡ Amps	PER PKG. 1-4	5-99	100-Up	Stock No.	‡ Amps	PER PKG. 1-4	5-99	100-Up
845-0100	*1/100*	3.13	2.08	1.66	845-0115	2	.56	.38	.30
845-0124	*1/32*	2.75	1.83	1.46	845-0116	*2-1/2*	.56	.38	.30
845-0125	*1/16*	1.24	.83	.66	845-0141	*3*	.56	.38	.30
845-0103	*1/8*	1.24	.83	.66	845-0143	*4§*	.68	.45	.36
845-0104	*15/100*	1.24	.83	.66	845-0144	*5§*	.68	.45	.36
845-0128	*3/16*	1.24	.63	.42	845-0145	*6*	.68	.45	.36
845-0106	*2/10*	1.24	.63	.42	845-0105	*8**	.56	.38	.30
845-0107	*1/4*	.80	.63	.42	845-0101	*4†*	.56	.38	.30
845-0131	*3/10*	.80	.63	.42	845-0102	*5†*	.40	.28	.22
845-0132	*3/8*	.80	.63	.42	845-0103	*6†*	.40	.28	.22
845-0110	*1/2*	.80	.63	.42	845-0200	*7-1/2†*	.40	.28	.22
845-0134	*6/10*	.80	.63	.42	845-0201	*10*	.40	.28	.22
845-0135	*3/4*	.80	.63	.42	845-0202	*15†*	.40	.28	.22
845-0113	*1*	.56	.38	.30	845-0173	*25†*	.40	.28	.22
845-0114	*1-1/2*	.56	.38	.30	845-0204	*30†*	.40	.28	.22

LITTELFUSE 3AG AND BUSSMANN TYPES MDL AND MDX FUSES

Slo-Blo fuses have high time-lag to withstand heavy surges, yet blow quickly on short circuits. Excellent where high inductive or capacitive surges or heavy starting currents are present. Carry 110% of rated load; 4 hours minimum; 135%, 1-hour maximum; 200%, 5 seconds minimum. Employ anti-fatigue construction—compound element with spring and resistor. Fuses rated up to 5 amps are U.L. recog., 125 V maximum, except *32 V maximum. **Note: Allied will supply Littelfuse or Bussmann types, whichever is in stock, unless specified.** ‡Indicates Littelfuse type 3AG (amp) ASB (e.g., 3AG 1/100 ASB) or Bussmann MDL, except §Littelfuse 3AG ASB or Bussmann MDX. Size, 1¼x¼". Av. shpg. wt. 2 oz. **Sold only in pkgs. of 5.**

Stock No.	‡ Amp	PER PKG. 1-4	5-99	100-Up	Stock No.	‡ Amp	PER PKG. 1-4	5-99	100-Up
845-0209	1/100	2.75	1.58	1.26	845-0228	1-2/10	1.63	1.08	.86
845-0210	*1/32*	2.75	1.58	1.26	845-0229	*1-1/4§*	1.63	1.08	.86
845-0211	*1/16*	1.75	1.15	.92	845-0230	*1-1/2§*	1.63	1.08	.86
845-0212	*1/10*	1.75	1.15	.92	845-0231	*1-6/10§*	1.63	1.08	.86
845-0213	*1/8*	1.75	1.15	.92	845-0232	*2§*	1.63	1.08	.86
845-0214	*15/100*	1.75	1.15	.92	845-0233	*2-1/2*	1.25	.83	.76
845-0215	.175	1.75	1.15	.92	845-0234	2-8/10	1.63	.83	.76
845-0216	*3/16*	1.75	1.15	.92	845-0235	*3§*	1.25	.83	.76
845-0217	*2/10*	1.75	1.15	.92	845-0236	*3-2/10§*	1.25	.83	.76
845-0218	*1/4*	1.75	1.15	.92	845-0237	*4§*	1.25	.86	.76
845-0219	*3/10*	1.75	1.15	.92	845-0238	*5§*	1.25	.83	.76
845-0220	*3/8*	1.75	1.15	.92	845-0239	*6-1/4**	1.25	.83	.76
845-0221	*4/10*	1.75	1.15	.92	845-0240	*7*§*	1.25	.83	.76
845-0222	*1/2*	1.75	1.15	.92	845-0242	*8**	1.25	.83	.76
845-0223	*6/10*	1.75	1.15	.92	845-0243	*10**	1.25	.83	.76
845-0224	7/10	1.75	1.15	.92	845-0244	*15**	1.25	.83	.76
845-0225	*3/4*	1.75	1.15	.92	845-0245	*20**	1.25	.83	.76
845-0226	8/10	1.75	1.15	.92	845-0246	*25**	1.25	.83	.76
845-0227	*1*	1.75	1.15	.92	845-0247	*30§*	1.25	.83	.76

BUSSMANN FUSETRON FNM FIBRE TUBE FUSES



Dual-element, slow-blowing fuses prevent needless blows resulting from high starting currents or sudden surges. Fuse link operates only on high overloads or short-circuits. Thermal cut-out functions on low overloads, slowly, giving a long time-lag. Protection is afforded against short-circuits or continued overloads. 250 V max. 1½x1³⁄₃₂". U.L. Recog. 2 oz. **Sold only in pkgs. of 10.**

Stock No.	Amp	PER PKG. 1-2	3-7	8-Up	Stock No.	Amp	PER PKG. 1-2	3-7	8-Up
740-0089	1/10	5.40	3.90	3.30	740-0106	3½	5.40	3.90	3.30
740-0090	2/10	5.40	3.90	3.30	740-0108	4	5.40	3.90	3.30
740-0091	3/10	5.40	3.90	3.30	740-0109	4½	5.40	3.90	3.30
740-0092	4/10	5.40	3.90	3.30	740-0110	5	5.40	3.90	3.30
740-0093	½	5.40	3.90	3.30	740-0115	6¼	5.40	3.90	3.30
740-0094	*6/10*	5.40	3.90	3.30	740-0120	7	5.40	3.90	3.30
740-0095	8/10	5.40	3.90	3.30	740-0125	10	5.40	3.90	3.30
740-0096	1	5.40	3.90	3.30	740-0130	12	5.40	3.90	3.30
740-0101	2	5.40	3.90	3.30	740-0135	15	5.40	3.90	3.30

LITTELFUSE TYPE 3AB MEDIUM LAG FUSES

Series 314000. Steatite enclosed arc-quenching, powder-filled fuses. U.L. Recog. to 15 A. Medium time lag. Shatter-proofed against quick shorts. For amplifiers, rectifiers, radios, etc. Max. volts 250, except *125. 1¼x¼". 2 oz. Complete type is 3AB (amp) A, e.g. 3AB ⅛A. **Sold only in pkgs. of 5.**

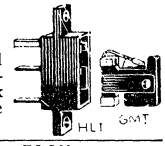
Stock No.	Amp	PER PKG. 1-4	5-99	100-Up	Stock No.	Amp	PER PKG. 1-4	5-99	100-Up
845-0250	1/8	1.10	.73	.58	845-0264	*5*	.97	.65	.52
845-0251	1/4	1.10	.73	.58	845-0265	*6*	.97	.65	.52
845-0252	3/8	1.10	.73	.58	845-0269	*8*	.97	.65	.52
845-0253	1/2	1.10	.73	.58	845-0271	*10*	.97	.65	.52
845-0254	3/4	1.10	.73	.58	845-0272	*12*	1.10	.73	.58
845-0255	*1*	1.10	.73	.58	845-0273	*15*	1.10	.73	.58
845-0259	*2*	1.10	.73	.58	845-0274	*20**	1.10	.73	.58
845-0262	*3*	1.10	.73	.58	845-0275	*25**	1.38	.90	.72

BUSSMANN FUSETRON MDR GLASS TUBE FUSES

Dual-element fuses give two-way protection. Fuse link operates instantaneously. 250-V max. 1½x1³⁄₃₂". U.L. Recog. 2 oz. **Sold only in pkgs. of 10.**

Stock No.	Amp.	PER PKG. 1-2	3-7	8-Up	Stock No.	Amp.	PER PKG. 1-2	3-7	8-Up
740-0800	1/10	5.50	4.40	3.70	740-0805	½	5.50	4.40	3.70
740-0802	2/10	5.50	4.40	3.70	740-0806	6/10	5.50	4.40	3.70
740-0803	3/10	5.50	4.40	3.70	740-0807	8/10	5.50	4.40	3.70
740-0804	4/10	5.50	4.40	3.70	.....	.....	.....	.....	.....

BUSSMANN GMT SIGNAL INDICATING FUSES



For multiple mounting of fuses in limited space, for protection of communication equipment, business machines, computers, etc. ¼x1¹⁵⁄₃₂" mounting space. Colors indicate fuse ampere rating. Shpg. wt. ⅓-lb. per 100.

Stock No.	Amps	Color of Ind.	EACH 1-9	10-99	100-499	500-Up
740-0410	18/100	Yellow	.60	.48	.40	.32
740-0411	¼	Violet	.60	.48	.40	.32
740-0412	½	Red	.60	.48	.40	.32
740-0413	65/100	Black	.60	.48	.40	.32
740-0414	¾	Brown	.60	.48	.40	.32
740-0415	1	Gray	.60	.48	.40	.32
740-0416	1⅓	White	.60	.48	.40	.32
740-0417	2	Orange	.60	.48	.40	.32
740-0422	3	Blue	.60	.48	.40	.32
740-0427	5	Green	.60	.48	.40	.32
740-0432	7½	Black-White	.60	.48	.40	.32
740-0437	10	Red-White	.60	.48	.40	.32

BUSSMANN FNA VISUAL INDICATING FUSE

As FNM, with indicating pin; actuates signal when in Buss Signal Fuse Block. **Sold only in pkgs. of 10.** *Dual tube.

Stock No.	Amp	PER PKG. 1-2	3-4	5-Up	Stock No.	Amp	PER PKG. 1-2	3-4	5-Up
740-0023	1/10	9.90	7.10	5.90	740-0032	3½	9.90	7.10	5.90
740-0024	2/10	9.90	7.10	5.90	740-0033	4	9.90	7.10	5.90
740-0025	3/10	9.90	7.10	5.90	740-0034	4½	9.90	7.10	5.90
740-0026	4/10	9.90	7.10	5.90	740-0035	5	9.90	7.10	5.90
740-0027	1/2	9.90	7.10	5.90	740-0036	6¼	9.90	7.10	5.90
740-0028	6/10	9.90	7.10	5.90	740-0037	7	9.90	7.10	5.90
740-0029	8/10	9.90	7.10	5.90	740-0038	10	9.90	7.10	5.90
740-0030	1	9.90	7.10	5.90	740-0039	12*	11.00	7.90	6.60
740-0031	2	9.90	7.10	5.90	740-0040	15*	11.00	7.90	6.60

BUSSMANN LAMP INDICATING FUSEHOLDERS

For panel mounting ¼x1 and ¼x1¼-inch fuses. Bayonet type knob. Molded phenolic body. Strong coil spring provides contact pressure at ends of fuse. Transparent knob. 20 Amp. max. Av. shpg. wt. 2 oz.

Stock No.	Mfr's. Type	Fuse Size	Circuit Voltage	Type Lamp	EACH 1-9	10-99	100-499	500-Up
740-0491	HKL-X	¼x1¼"	90-250	Neon	2.43	1.93	1.61	1.32
740-0497	HKX	¼x1¼"	22-33	Incand.	3.95	3.14	2.62	2.09
740-0494	HKT	¼x1¼"	13-22	Incand.	3.95	3.14	2.62	2.09
740-0495	HKU	¼x1¼"	4-6	Incand.	3.95	3.14	2.62	2.09
740-0490	HKL	¼x1"	90-250	Neon	2.43	1.93	1.61	1.28

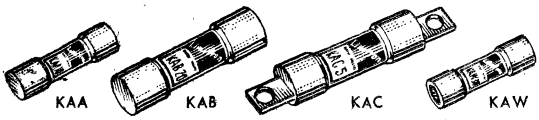
Rectifier, Indicating Fuses, Holders, and Blocks

LITTELFUSE 3AG INDICATING FUSES

Series 334000. Medium acting fuses employ a silver plated pin which extends from end when fuse is blown. Pin acts as a visual indication or may be used to actuate an alarm or light. Rating: ¾-5A, 125 V; 6-20 A, 32 V. All types carry 110% of rating four-hours minimum; 135%. One-hour maximum. Mfr's type is "Indicating" followed by Amps. 2 oz. **Sold only in Pkg. of 5.**

Amps	Stock No.	PER PKG. 1-4	5-95	100-Up	Amps	Stock No.	PER PKG. 1-4	5-95	100-Up
¾	845-027	3.38	2.23	1.78	6	845-0289	3.63	2.40	1.92
1	845-0280	2.63	1.75	1.40	8	845-0290	3.63	2.40	1.92
1½	845-0281	2.63	1.75	1.40	10	845-0291	3.63	2.40	1.92
2	845-0282	2.63	1.75	1.40	12	845-0292	3.63	2.40	1.92
3	845-0285	2.63	1.75	1.40	15	845-0293	3.63	2.40	1.92
4	845-0827	2.63	1.75	1.40	20	845-0294	3.63	2.40	1.92
5	845-0288	2.63	1.75	1.40					

BUSSMANN TRON RECTIFIER FUSES



Give safe short-circuit protection for systems with fault current to 200,000 amperes at 600 volts or less. Carry 100% of rating; open at 1000 seconds between 120% and 180% of rating; open within 1 second at 250% of rating. In table below, size is overall length by diameter, except * overall length by width, including terminals.

KAA SERIES (Max. Volts, 130. 1½x1³/₃₂".)

Amps	Stock No.	EACH 1-9	10-24	25-Up	Amps	Stock No.	EACH 1-9	10-24	25-Up
½	740-0501	1.56	1.17	.82	8	740-0520	1.56	1.17	.82
1	740-0502	1.56	1.17	.82	10	740-0523	1.56	1.17	.82
2	740-0505	1.56	1.17	.82	12	740-0526	1.56	1.17	.82
3	740-0508	1.56	1.17	.82	15	740-0529	1.56	1.17	.82
4	740-0511	1.56	1.17	.82	20	740-0532	1.56	1.17	.82
5	740-0514	1.56	1.17	.82	25	740-0535	1.56	1.17	.82
6	740-0517	1.56	1.17	.82	30	740-0538	1.56	1.17	.82

KAW SERIES (Max. Volts, 130. 1½x1³/₃₂".)

2	740-0655	1.56	1.17	.82	5	740-0664	1.56	1.17	.82
3	740-0658	1.56	1.17	.82	7	740-0667	1.56	1.17	.82
4	740-0661	1.56	1.17	.82	10	740-0670	1.56	1.17	.82

KAB SERIES (Max. Volts, 250. 2x⁹/₁₆"; *3⅛x1⁷/₃₂".)

1	740-0559	1.79	1.34	.99	10	740-0580	1.79	1.34	.99
2	740-0562	1.79	1.34	.99	12	740-0583	1.79	1.34	.99
3	740-0565	1.79	1.34	.99	15	740-0586	1.79	1.34	.99
4	740-0568	1.79	1.34	.99	20	740-0589	1.79	1.34	.99
5	740-0571	1.79	1.34	.99	25	740-0592	1.79	1.34	.99
6	740-0574	1.79	1.34	.99	30	740-0595	1.79	1.34	.99
8	740-0578	1.79	1.34	.99	70*	740-0602	9.90	7.40	5.20

KAC SERIES (Max. Volts, 600. 2⅞x⁹/₁₆".)

1	740-0623	2.40	1.80	1.33	10	740-0634	2.40	1.80	1.33
2	740-0626	2.40	1.80	1.33	12	740-0637	2.40	1.80	1.33
3	740-0629	2.40	1.80	1.33	15	740-0640	2.40	1.80	1.33
5	740-0632	2.40	1.80	1.33	30	740-0643	2.40	1.80	1.33

FUSE BLOCKS FOR TRON FUSES

Blocks for clip-mounted fuses have beryllium copper clips on bakelite base; blocks for bolt-down types—studs on bakelite base.

Stock No.	Mfr's Type	No. Poles	For Series	EACH 1-9	10-49	50-Up
740-2015	4515	1	KAA 1-30 AMP	.80	.60	.50
740-2020	4525	2	KAA 1-30 AMP	1.53	1.15	.96
740-2031	4535	3	KAA 1-30 AMP	2.28	1.70	1.42
740-1088	4386	1	KAB 1-30 AMP	1.15	.86	.72
740-1062	4287	2	KAB 1-30 AMP	2.28	1.70	1.42
740-1037	3959	3	KAB 1-30 AMP	3.55	2.66	2.22
740-0948	3531	1	KAB 35-60 AMP	2.50	1.87	1.56
740-0950	3604	3	KAB 35-60 AMP	8.45	6.34	5.28
740-0949	3595	1	KAC 1-30 AMP	2.10	1.58	1.31
740-0947	3528	2	KAC 1-30 AMP	4.20	3.15	2.62
740-0946	3525	3	KAC 1-30 AMP	6.30	4.73	3.94

DEARBORN

3-WIRE CIRCUIT MONITOR

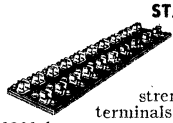
Type 5012B. Tests whether proper ground is available from three-wire AC outlets. Simply plug into three-wire receptacle. Lights indicate: Circuit Okay; Improper Ground; Improper Neutral Reverse Polarity; Reverse Ground and Power; Power is Off. Compact, for easy use anywhere.
768-9090. Wt. 6 oz. 5.95

BUSSMANN GLD INDICATING FUSES

Actuates a signal when used in HKA fuseholder or Signal Fuse Block. Fiber tube with silver-plated indicating pin that extends when fuse is blown. Dual-tube construction in sizes larger than 5 amps cannot be used in HKA fuseholder. Rated 125 V, except 8 amp and over, which are 32 V. ¼x1¼". Wt. 2 oz. **Sold only in Pkgs. of 5**

Amps	Stock No.	PER PKG. 1-4	5-95	100-Up	Amps	Stock No.	PER PKG. 1-4	5-95	100-Up
¾	740-0236	3.38	2.65	2.25	6	740-0259	3.63	2.90	2.40
1	740-0237	2.63	2.10	1.75	8	740-0264	3.63	2.90	2.40
1½	740-0238	2.63	2.10	1.75	10	740-0269	3.63	2.90	2.40
2	740-0239	2.63	2.10	1.75	12	740-0274	3.63	2.90	2.40
3	740-0244	2.63	2.10	1.75	15	740-0279	3.63	2.90	2.40
4	740-0249	2.63	2.10	1.75	20	740-0284	3.63	2.90	2.40
5	740-0254	2.63	2.10	1.75					

STANDARD FUSE BLOCKS



Available from 1-12 poles. Clips of strong spring bronze, albaloy plated with laminated black phenolic base. Highly resistant to corrosion with great gripping strength. Types 3823 and 3828 have soldered terminals on small base. Mtg. holes for #6 screw. Type 3833 has screw terminals on full base. Mtg. holes for #6 screw.

FOR ¼x1¼" FUSE

Stock No.	Mfr's Type	Base Dimension	No. Poles	EACH 1-9	10-99	100-499	500-Up
740-0951	3823-1	½x1⅝"	1	.28	.24	.20	.14
740-0952	3823-2	1⅛x1⅝"	2	.50	.45	.38	.25
740-0953	3823-3	1¾x1⅝"	3	.78	.70	.58	.39
740-0954	3823-4	2⅜x1⅝"	4	.98	.88	.73	.49
740-0955	3823-2	3x1⅝"	5	1.20	1.08	.90	.60
740-0956	3823-6	3⅝x1⅝"	6	1.40	1.26	1.05	.70
740-0957	3823-7	4¼x1⅝"	7	1.60	1.44	1.20	.80
740-0958	3823-8	4⅞x1⅝"	8	1.80	1.62	1.35	.90
740-0959	3823-9	5½x1⅝"	9	2.05	1.84	1.54	1.02
740-0960	3823-10	6⅛x1⅝"	10	2.28	2.04	1.70	1.14
740-0961	3823-11	6¾x1⅝"	11	2.50	2.25	1.88	1.25
740-0962	3823-12	7⅜x1⅝"	12	2.73	2.45	2.04	1.36

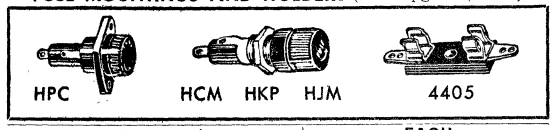
FOR ¼x1" FUSE

740-0971	3828-1	½x1⅜"	1	.28	.24	.20	.14
740-0972	3828-2	1⅛x1⅜"	2	.50	.45	.38	.25
740-0973	3828-3	1¾x1⅜"	3	.78	.70	.58	.39
740-0974	3828-4	2⅜x1⅜"	4	.98	.88	.73	.49
740-0975	3828-5	3x1⅜"	5	1.20	1.08	.90	.60
740-0976	3828-6	3⅝x1⅜"	6	1.40	1.26	1.05	.70
740-0977	3838-7	4¼x1⅜"	7	1.60	1.44	1.20	.80
740-0978	3828-8	4⅞x1⅜"	8	1.80	1.62	1.35	.90
740-0979	3828-9	5½x1⅜"	9	2.05	1.84	1.54	1.02
740-0980	3828-10	6⅛x1⅜"	10	2.28	2.04	1.70	1.14
740-0981	3828-11	6¾x1⅜"	11	2.50	2.25	1.88	1.25
740-0982	3929-12	7⅜x1⅜"	12	2.73	2.45	2.04	1.36

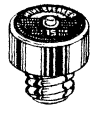
FOR ¼x1¼" FUSE

740-1000	3833-1	2⁵/₃₂x2⅜"	1	.53	.40	.33	.26
740-1001	3833-2	1¹¹/₁₆x2⅜"	2	1.05	.86	.66	.52
740-1002	3833-3	2¹⁹/₃₂x2⅜"	3	1.60	1.20	.99	.78
740-1003	3833-4	3½x2⅜"	4	2.13	1.60	1.32	1.04
740-1004	3833-5	4¹³/₃₂x2⅜"	5	2.65	2.00	1.65	1.30
740-1005	3833-6	5⁹/₁₆x2⅜"	6	3.18	2.40	1.98	1.56
740-1006	3833-7	6⁷/₃₂x2⅜"	7	3.70	2.80	2.31	1.82
740-1007	3833-8	7⅛x2⅜"	8	4.25	3.20	2.64	2.08
740-1008	3833-9	8½x2⅜"	9	4.78	3.60	2.97	2.34
740-1009	3833-10	8¹⁵/₁₆x2⅜"	10	5.30	4.00	3.30	2.60
740-1010	3833-11	9²⁷/₃₂x2⅜"	11	5.83	4.40	3.63	2.86
740-1011	3833-12	10¾x2⅜"	12	6.35	4.80	3.96	3.12

FUSE MOUNTINGS AND HOLDERS (Av. shpg. wt., 2 oz.)



Stock No.	Mfr's Type	For Fuses	EACH 1-9	10-99	100-499	500-Up
740-0498	*HPC*	13/32x1½"	.90	.68	.56	.48
740-0488	HCM	9/32x1¼"	.83	.62	.52	.44
740-0492	*HKP*	¼x1¼"	.58	.43	.36	.29
740-0489	*HJM*	1x¼"	.58	.43	.36	.29
740-2001	4405	1¼x¼"	.28	.20	.17	.14



MINITEC TYPE 152-002 MINI-BREAKER®

Converts Edison base fuse box into a circuit breaker. Built-in time delay for starting loads and surges. Simply replace fuse with breaker of proper rating. 3 oz.
768-0991. 15 Amp. 1-9 ..... 1.79 10-Up 1.49
768-9092. 20 Amp. 1-9 ..... 1.79 10-Up 1.49
768-9093. 30 Amp. 1-9 ..... 1.79 10-Up 1.49

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Dearborn/Belden Coax Cable, Connectors

COAX SECTION

MIL-C-17D POLYETHYLENE DIELECTRIC RG COAXIAL CABLES

For RF transmission line, antenna lead-in, test lead. Low-loss polyethylene dielectrics. Meet MIL-C-17D specifications. Allied will supply coaxial cable by Dearborn or Belden, whichever is in stock, unless specified.

RG No.	Cond. AWG	O.D.	Imp. Ohms	Cap. pF	Maximum Volts	Cable Jacket	100' SPOOLS Stock No.	100' SPOOLS EACH	500' SPOOLS Stock No.	500' SPOOLS EACH	1000' SPOOLS Stock No.	1000' SPOOLS EACH
5B/U	16 (Solid)	.335"	50	29.5	3000	IIA	NOW DESIGNATED AS 212/U					
8/U	13 (7x21)	.405"	50	29.5	5000	I	743-1070	17.53	743F1071	63.45	743F1072	126.98
8A/U	13 (7x21)	.415"	52	29.5	5000	IIA	NOW DESIGNATED AS 213/U					
9/U	13 (7x21)	.420"	50	30.0	5000	II Gray	743-1100	45.50	743F1101	195.00	743F1102	389.55
9B/U	13 (7x21)	.430"	50	30	5000	IIA	NOW DESIGNATED AS 214/U					
11/U	18 (7x26)	.405"	75	20.5	5000	I	743-1150	15.36	743X1151	54.53	743F1152	108.90
11A/U	18 (7x26)	.142"	75	20.5	5000	IIA	743-1160	16.03	743X1161	65.40	743F1162	130.20
14A/U	10 (Solid)	.558"	52	29.5	7000	IIA	NOW DESIGNATED AS 217/U					
17A/U	5 (Solid)	.885"	52	29.5	11000	IIA	NOW DESIGNATED AS 218/U					
55B/U	20 (Solid)	.206"	53.5	28.5	1900	IIIA	743-1640	13.36	743-1641	54.00	743X1642	108.00
58/U	20 (Solid)	.195"	53.5	28.5	1900	I	743-1670	6.14	743-1671	20.28	743X1672	40.58
58A/U	*21 (19x33)*	*.199"*	*50*	*29.5*	*1900*	*I*	743-1680	7.01	743-1681	23.18	743X1682	46.43
58C/U	*21 (19x33)*	*.199"*	*50*	*29.5*	*1900*	*IIA*	743-1820	7.51	743-1821	26.03	743X1822	52.06
59/U	22 (Solid)	.242"	73	21.0	2300	I	743-1840	7.51	743-1841	23.45	743X1842	46.88
59A/U	.023CW	.246"	75	20.5	2300	IIA	REPLACED BY 59B/U					
59B/U	.023CW	.246"	75	20.5	2300	I	743-1860	6.93	743-1861	28.32	743X1862	56.63
62/U	22CW	.250"	93	13.5	750	IIA	743-1880	8.01	743-1881	26.85	743X1882	53.63
62A/U	22CW	.240"	93	13.5	750	IIA	743-1890	7.26	743-1891	30.93	743X1892	59.88
63B/U	22CW	.415"	125	10	1000	I	743-1930	19.84	743X1931	80.85	743 F1932	147.00
71/U	22CW	.250"	95	13.5	750	IIA	REPLACED BY 71B/U					
71A/U	22CW	.250"	95	13.5	750	I	743-1970	14.72	743X1971	60.98	743X1972	122.55
71B/U	22CW	.250"	93	13.5	750	IIIA	743-1980	11.60	743X1981	45.75	743X1982	91.43
79B/U	22CW	.415"	125	10	1000	IIA	743-2140	36.32	743F2141	146.40	743F2142	271.13
108A/U	2—(7x28)	.235"	75	24.5	1000	IIA	743-2240	16.70	743-2241	62.25	743X2242	124.50
174/U	7/34CW	.105"	50	30	1500	I	743-2900	5.01	743-2901	16.50	743-2902	33.00
212/U	.0556S	.336"	50	29.5	3000	IIA	743-3270	59.61	743X3271	243.38	743F3272	442.50
213/U	13 (7x21)	.412"	50	30.5	3000	IIA	742-3280	16.70	743F3281	70.13	743F3282	140.25
214/U	13 (7x21)	.432"	50	30.5	3000	IIA	743-3290	60.12	743F3291	237.75	743F3292	475.50
215/U	13 (7x21)	.412"	50	30.5	3000	IIA	743-3300	28.22	743F3301	117.75	743F3302	234.00
217/U	10 (Solid)	.545"	50	29.5	7000	IIA	743-3320	52.58	743F3321	206.25	743F3322	393.57
218/U	.195C	.880"	50	30	11,000	IIA	743F3330	80.99	743F3331	351.00	743F3332	675.00
223/U	.035S	.216"	50	30	1900	IIA	743X3380	20.87	743F3381	82.50	743F3382	165.00

LOW-LOSS FOAM COAXIAL CABLE

Ideal for use in community TV installations; offer much lower loss than regular RG coaxial cables. Low attenuation and low capacitance. Cellular polyethylene reduces signal attenuation as much as 35%. 59/U ideal as color-TV antenna lead-in. Type Number is 8/U, not RG8/U. Do not include RG prefix on Foam Series. Bare copper, except *bare copperweld.

8/U	13 (7x21)	.405"	50	24.5	1500	I	743-4000	19.28	743X4001	77.10	743F4002	151.43
11/U	18 (7x26)	.405"	75	16.5	1300	I	743-4020	18.37	743X4021	69.53	743F4022	139.05
58/U	20 (Solid)	.195"	53.5	17.0	1000	I	743-4040	6.64	743-4041	23.25	743X4042	46.13
59/U	22 (Solid)*	.242"	73	17.3	1000	I	743-4070	8.35	743-4071	26.63	743X4072	51.00

MIL-C-17D TEFLON DIELECTRIC COAXIAL CABLE

RG No.	Conductor AWG	O.D.	Imp. Ohms	Cap. pF	Maximum Volts	Cable Jacket	100' SPOOLS Stock No.	100' SPOOLS EACH	500' SPOOLS Stock No.	500' SPOOLS EACH
141/U	199 (Solid)	.195"	50	29	1900	V	743-2550	73.76	743-2551	301.13
178B/U	30 (7x28)	.072"	50	29	1000	IX	743-2940	15.44	743-2941	60.00
179B/U	7x38	.105"	.75	19.5	1200	IX	743-3100	26.72	743-3101	104.25
180B/U	30 (7x38)	.142"	95	15	1500	IX	743-3130	35.07	743-3131	145.50
187/U	7x38	.110"	75	19.3	1200	VII	NEW DESIGN 187A/U			
187A/U	7x38	.110"	.75	19.5	1200	VII	743-3160	25.05	743-3161	102.00
188/U	7x.0067	.110"	50	29	1200	VII	NEW DESIGN 188 A/U			
188A/U	26 (7x.0067)	.106"	50	29	1200	VII	743-3180	25.05	743-3181	102.00
195/U	7x38	.155"	95	15.2	1500	VII	743-3190	52.63	743-3191	225.08
196A/U	30 (7x38)	.076"	50	29	1000	VII	743-3220	18.70	743-3221	71.25
225/U	7x38	.430"	50	29.5	5000	V	743-3500	379.49	.....	.....
316/U	7x38	.102"	50.0	29.0	1200	IX	743-3790	25.05	743-3791	99.75
115A/U	7x21	.415"	50	29.5	5000	V	743-2400	304.60	.....	.....

PLUGS AND RECEPTACLES FOR ABOVE CABLE (SEE PAGES 312-316 TO ORDER)

Cable Type	Plug UG-	Receptacle UG-	Cable Type	Plug UG-	Receptacle UG-	Cable Type	Plug UG-	Receptacle UG-	Cable Type	Plug UG-	Receptacle UG-
5B/U	18F	19F	55B	85	87	62	692	697	213	573A, B	568
	18B	19B		88	290A	62A	85	87	214	628	568
	18	19		188	58		260	290		59A	496
	18C	19C		536	231		932	931		59B	560
	18D	19D		536B	58A		603	231		21	231
8/U	959	290A	58	699	697		603A	58A		PL-259A	50-239
9/U	59D	496	58A	85	87		627A	568		1185	58
9B/U	21	23	58C	88	290	63B	PL-259A	SO-239		1185A	58
	PL-259A	50-239		88A	290		1003	231	215	943A	568
	PL-259	50-239		188	58	71	692	697		925	560
11/U	169S	58, 58A		536	281	61A	111/U	357/U		941A	58
11P/U	94A	231		536B	58A	71B	932	931		941B	58
14/U	707A	568		699	697		932A	931	218	167A	58
	204A	231	59	85	87		603	231		708	568
	204C	58, 58A	59A	692	697		627A	568		495D	560
17A/U	708A	586	59B	260	290		603A	58		495A	486
	495A	496		260A	290A	213	18	231	223	85	87
	495D	560		603	231		18B, 18C	58		88	290
	167A	58A		603A	58, 58A		18D, 18F	58		88A	290
	154	352		627	568		626A	568		709	568

DEARBORN

HOOKUP SECTION

Mil-Spec Hookup Wire

PVC AND IRRADIATED CROSS-LINKED PVC

TYPE "MW" TO MIL-W-76B HOOKUP WIRE

TYPE "MW". Uncovered 80° C. .016" PVC Insulation. Rated: 1000 volts. In black, brown, red, orange, yellow, green, blue, violet, grey, white. Tracer colors: white/black, white/brown, white/red, white/orange, white/yellow, white/green, white/blue, white/violet, white/grey. See Ordering Information.

Mfr's Type	Conductor AWG	MIL Type	NOM O.D.	100' Spools Solid Colors Stock No.	100' Spools Solid Colors EACH	1000' Spools Solid Colors Stock No.	1000' Spools Solid Colors EACH	1000' Spools Tracer Colors Stock No.	1000' Spools Tracer Colors EACH
302407	#24(7x32)	MWC24(7)U	.058"	768-770N	1.55	768-771N	9.00	768-77NN	10.50
302401	#24(solid)	MWC24(1)U	.055"	768-760N	1.50	768-761N	7.43	768-76NN	8.93
302207	#22(7x30)	MWC22(7)U	.065"	768-750N	1.74	768-751N	10.43	768-75NN	11.93
302201	#22(solid)	MWC22(1)U	.059"	768-740N	1.45	768-741N	8.48	768-74NN	9.98
302010	#20(10x30)	MWC20(10)U	.073"	768-730N	1.99	768-731N	11.85	768-73NN	13.35
302001	#20(solid)	MWC20(1)U	.066"	768-720N	1.72	768-721N	10.28	768-72NN	11.78
301816	#18(16x30)	MWC18(16)U	.080"	768-710N	2.47	768-711N	15.75	768-71NN	17.25
301801	#18(solid)	MWC18(1)U	.074"	768-700N	1.32	768-701N	13.20	768-70NN	14.70
301619	#16(19x29)	MWC16(19)U	.091"	768-690N	3.32	768-691N	23.03	768-69NN	24.53

TYPE "B" TO MIL-W-16878D HOOKUP WIRE

Uncovered .010" PVC insulation with −40°C to +105° C temperature range. 600-volt work range. Stranded conductor. In solid colors and 9 tracer, colors on white. Solid colors: black, brown, red, orange, yellow, green, blue, violet, grey, and white. Tracer colors: white/black, white/brown, white/red, white/orange, white/yellow, white/green, white/blue, white/violet, white grey. Check proper column for solid and tracer color pricing. Other colors available on special order. Ordering Information Below. Tracer colors 1000' only.

Mfr's Type	Conductor AWG	MIL Type	NOM O.D.	100' Spools Solid Colors Stock No.	100' Spools Solid Colors EACH	1000' Spools Solid Colors Stock No.	1000' Spools Solid Colors EACH	1000' Spools Tracer Colors Stock No.	1000' Spools Tracer Colors EACH
173207	#32(7x40)	B-32	.028"	768-660N	1.99	768-661N	12.93	.....	.....
173007	#30(7x38)	B-30	.032"	768-650N	1.64	768-651N	10.02	.....	.....
172807	#28(7x36)	B-28	.034"	768-640N	1.60	768-641N	9.11	.....	.....
172607	#26(7x34)	B-26	.038"	768-630N	1.60	768-631N	10.32	.....	.....
172407	#24(7x32)	B-24	.044"	768-610N	1.60	768-611N	9.51	768-61NN	11.01
172207	#22(7x30)	B-22	.051"	768-600N	1.75	768-601N	10.37	768-60NN	11.37
172007	#20(7x28)	B-20	.058"	768-580N	2.09	768-581N	12.45	768-58NN	13.95
171819	#18(19x30)	B-18	.068"	768-570N	2.59	768-571N	16.80	768-57NN	18.30
171619	#16(19x29)	B-16	.077"	768-550N	2.99	768-551N	20.70	768-55NN	22.20

TYPE "C" TO MIL-W-16878D HOOKUP WIRE

Single conductor, stranded tinned copper. Insulation PVC .017" wall thickness. Temp. rating: −55°C to +105°C. Voltage rating: 1000V . Colors: black, brown red, orange, green, blue, violet, yellow, grey and white. See Ordering Information Below.

Mfr's Type	Conductor AWG	MIL Type	Wall Thick	100' Spools Stock No.	100' Spools EACH	1000' Spools Stock No.	1000' Spools EACH
202419	#24(19x36)	C-24	.017"	768-662N	2.01	768-663N	14.60
202219	#22(19x34)	C-22	.017"	768-664N	2.16	768-665N	15.98
202019	#20(19x32)	C-20	.017"	768-666N	2.54	768-667N	20.01
201819	#18(19x30)	C-18	.017"	768-668N	2.70	768-669N	21.75

TYPE "D" TO MIL-W-16878D HOOKUP WIRE

Plastic, stranded T.C. conductor, with polyvinylchloride insulation. Operating temperature range: −55°C to +105°C. 3000-volt operating voltage limit. Available in white color only.

Mfr's Type	Conductor AWG	MIL Type	100' Spools Stock No.	100' Spools EACH	1000' Spools Stock No.	1000' Spools EACH
231419	#14(19x27)	D-14	768-6725	5.60	768-6730	49.40
231219	#12(19x25)	D-12	768-6715	8.94	768-6720	80.12
231037	#10(36x36)	D-10	768-6705	11.94	768-6710	106.58
238133	#8(133x29)	D-8	768-6745	31.43	768-6750	270.48
236133	#6(133x27)	D-6	768-6735	39.61	768-6740	341.04

TYPE "S" BUS HOOKUP WIRE— TO MIL-W-3861, QQ-W-343

Finest quality, soft-drawn solid copper wire. Tinned for easy soldering. Well suited for making non-insulated hookups in all types of electronic equipment. Excellent choice for grounding and tie-in circuits in high-fidelity and PA amplifiers. 18-gauge and 20-gauge types suitable for shortwave antennas.

Mfr's Type	Size	O.D.	100-Ft. Spool Stock No.	100-Ft. Spool Lbs.	100-Ft. Spool EACH	1000-Ft. Spool Stock No.	1000-Ft. Spool Lbs.	1000-Ft. Spool EACH
926	#26	.016"	768-0270	¼	1.04	768-0271	1	4.32
924	#24	.020"	768-0265	¼	1.07	768-0267	1½	4.88
922	#22	.025"	768-0260	¼	1.10	768-0261	2¼	5.88
920	#20	.032"	768-0253	¼	1.29	768-0255	3½	8.15
918	#18	.040"	768-0250	¼	1.74	768-0251	5¼	11.70

TYPES "B" AND "C" IRRADIATED CROSS LINKED PVC HOOKUP WIRE

MIL-W-16878D. Features a polyvinyl chloride insulation which has been cross-linked thru an irradiation process. Irradiated PVC is heat and burn-thru resistant and will not melt when a hot, 660°F, soldering iron is applied. Also eliminates shrink back when soldering. Cross linking increases the abrasion resistance and practically eliminates cold flow when wires are under pressure. TYPE "B" is rated 105°C, 1000V. U.L. Style is rated 80°C, 300 V peak for electronic use only. U.L. Style 1430 is rated 105°C, 300 V RMS, 600V peak for electronic use only. Supplied in 1000" Put-Up Only. Colors: white, black, red, green, yellow, blue. Other colors available on special order. F—suffix in type number means fused or bonded. See Table Below for Ordering.

Mfr's No.	MIL Type	U.L. Type	AWG	Insul. Thk's	Nom. O.D.	Stock No.	1000' EACH
252607	B-26	1429	26(7)	.010"	.039	768F982N	16.13
252607F	B-26	1429	26(7)	.010"	.039	768F983N	20.25
252407	B-24	1429	24(7)	.010"	.044	768F979N	15.22
252407F	B-24	1429	24(7)	.010"	.044	768F980N	19.35
252207	B-22	1429	22(7)	.010"	.050	768F976N	16.43
252207F	B-22	1429	22(7)	.010"	.050	768F977N	20.55
252007F	B-22	1429	20(7)	.010"	.058	768F973N	23.70
252007	B-20	1429	20(7)	.010"	.059	768F974N	18.08
251807F	B-18	1429	18(7)	.010"	.068	768F972N	32.18
251819	B-18	1429	18(19)	.010"	.068	768F971N	28.50
251619	B-16	1429	16(19)	.010"	.078	768F970N	33.98
252601	.....	1429	26(1)	.010"	.039	768F981N	14.78
252401	.....	1429	24(1)	.010"	.044	768F978N	13.20
252201	.....	1429	22(1)	.010"	.050	768F975N	15.23
272407	C-24	1430	24(7)	.016"	.058	768F989N	16.95
272207	C-22	1430	22(7)	.016"	.064	768F988N	19.13
272007	C-20	1430	20(7)	.016"	.072	768F987N	20.18
271819	C-18	1430	18(19)	.016"	.082	768F986N	29.25
271619	C-16	1430	16(19)	.016"	.092	768F985N	32.70
271419	C-14	1430	14(19)	.016"	.105	768F984N	50.03

ORDERING INFORMATION

Insert in place of N or NN in Stock No. number of color desired:

0-Black	5-Green	90-W/Black	95-W/Green
1-Brown	6-Blue	91-W/Brown	96-W/Black
2-Red	7-Violet	92-W/Red	97-W/Violet
3-Orange	8-Grey	93-W/Orange	98-W/Grey
4-Yellow	9-White	94-W/Yellow	

W&C: Coax, 269—Hookup 270-4—Audio, 274-281, 283—Misc., 282-4—Tubing/Acc., 285-290

Mil Spec Hookup Wire and Cable

HOOKUP SECTION

DEARBORN

TEFLON AND PVC

TEFLON TYPE "E" TO MIL-W-16878 D

Silver plated copper conductor, insulated with .010" extruded Teflon insulation, suitable for operational temperatures to +200° C. Resistant to heat, moisture and solvents. Rated: 600 V. 10 solid, 9 tracer colors. Solid: black, brown, red, orange, yellow, green, blue, violet, grey, white. Tracer: White/black, white/brown, white/red, white/orange, white/yellow, white/green, white/blue, white/violet, and white/grey. Check proper column for solid and tracer color pricing. See Below for Ordering Information.

Mfr's Type	Conductor AWG	MIL Type	NOM O.D.	100' Spools Solid Colors Stock No.	100' Spools Solid Colors EACH	1000' Spools Solid Colors Stock No.	1000' Spools Solid Colors EACH	1000' Spools Tracer Colors Stock No.	1000' Spools Tracer Colors EACH
13207	#32(7x40)	E-32	.029"	768-500N	4.51	768-501N	24.75	.....	.....
13007	#30(7x38)	E-30	.032"	768-490N	4.68	768-491N	24.75	.....	.....
12807	#28(7x36)	E-28	.035"	768-480N	4.93	768-471N	25.50	.....	.....
12607	#26(7x34)	E-26	.041"	768-460N	5.26	768-461N	29.25	.....	.....
12407	#24(7x32)	E-24	.046"	768-430N	5.68	768-431N	31.50	768-43NN	42.00
12419	#24(19x36)	E-24	.046"	768-440N	6.60	768-441N	39.00	.....	.....
12207	#22(7x30)	E-22	.052"	768-400N	6.26	768-401N	36.75	768-40NN	47.25
12219	#22(19x34)	E-22	.052"	768-420N	6.93	768-421N	41.48	.....	.....
12007	#20(7x28)	E-20	.061"	768-380N	7.52	768-381N	48.00	768-38NN	58.50
12019	#20(19x32)	E-20	.061"	768-390N	7.93	768-391N	49.50	.....	.....
11819	#18(19x30)	E-18	.070"	768-360N	10.35	768-361N	71.25	768-36NN	81.75
11619	#16(19x29)	E-16	.080"	768-350N	13.03	768-351N	89.55	768-35NN	100.05

TEFLON TYPE "E" MULTI-CONDUCTOR—SHIELDED AND JACKETED

TEFLON TAPE WRAP JACKET OVER SHIELD

Sintered, wrapped, jacketed overall. Each conductor stranded silver plated copper. Type E extruded TFE teflon, .010" color coded insulation. Braided silver plated copper shield, 90% coverage. Voltage Rating: 600 volts. Temperature Rating: −65°C to +200°C. Resistant to acids, alkalis, oil, flame. Color Code: 1st. Conductor: white; 2nd: black; 3rd: red.

Mfr's. Type	No. of Cond.	Conductor AWG Size	Conductor Stranding	Nom. O.D. at max. width high point	Stock No.	100' EACH
62401	1	24	19/36	.095"	768-0685	34.24
62402	2	24	19/36	.140"	768-0686	48.85
62403	3	24	19/36	.147"	768-0687	66.38
62201	1	22	19/34	.102"	768-5212	34.65
62202	2	22	19/34	.154"	768-5214	52.61
62203	3	22	19/34	.162"	768-5216	75.07
62001	1	20	19/32	.110"	768-5206	38.33
62002	2	20	19/32	.170"	768-5208	52.61
62003	3	20	19/32	.175"	768-5210	81.41
61801	1	18	19/30	.120"	768-5200	48.01
61802	2	18	19/30	.190"	768-5202	76.74
61803	3	18	19/30	.219"	768-5204	98.11

FEP EXTRUDED JACKET OVER SHIELD

Abrasion-resistant white Teflon jacket. Each conductor stranded silver plated copper. Type E extruded TFE teflon, .010" color coded insulation. Braided silver plated copper shield, 90% coverage. Voltage Rating: 600 volts. Temperature Rating: −65°C to +200°C. Resistant to acids, alkalis, oil, flame. Color Code: 1st. Conductor: white; 2nd: black; 3rd: red.

Mfr's Type	No. of Cond.	Conductor AWG Size	Conductor Stranding	Nom. O.D. at max. width high point	Stock No.	100' EACH
72401	1	24	19/36	.085"	768-5366	30.48
72402	2	24	19/36	.130"	768-5368	43.34
72403	3	24	19/36	.135"	768-5370	59.70
72201	1	22	19/34	.091"	768-0881	30.90
72202	2	22	19/34	.150"	768-5362	45.93
72203	3	22	19/34	.158"	768-5364	67.22
72001	1	20	19/32	.100"	768-5350	33.82
72002	2	20	19/32	.168"	768-5352	49.68
72003	3	20	19/32	.178"	768-5354	67.22
71801	1	18	19/30	.110"	768-5300	45.93
71802	2	18	19/30	.188"	768-5302	72.23
71803	3	18	19/30	.207"	768-5304	93.52

MULTI-COND., TYPE B, NYLON, SHIELD & JACKET

Stranded tinned copper conductors. .010 PVC insul.; color codes: 1: white; 2: black; 3: red. .003" nylon jacket, 90% coverage braided T.C. shield. Rated Temp: +105°C.

Mfr's. Type	No. of Cond.	Gauge Size	Strand-ing	Nom. Wall	Jkt. Thks.	Nom. O.D.	100' Spool Stock No.	100' Spool EA.	1000' Spool Stock No.	1000' Spool EA.
262401	1	24	19/36	.010"	.010"	.092"	768-6865	9.44	768-6870	79.88
262402	2	24	19/36	.010"	.016"	.152"	768-6875	14.28	768-1315	119.82
262403	3	24	19/36	.010"	.016"	.161"	768-6885	19.79	768X6890	169.15
262201	1	22	19/34	.010"	.010"	.100"	768-6835	10.44	768-6840	84.83
262202	2	22	19/34	.010"	.016"	.168"	768-6845	15.70	768X6850	131.63
262203	3	22	19/34	.010"	.017"	.178"	768-6855	21.71	768X6860	185.93
262001	1	20	19/32	.010"	.010"	.106"	768-6805	10.86	768-6810	89.63
262002	2	20	19/32	.010"	.019"	.186"	768-6815	17.25	768X6820	146.18
262003	3	20	19/32	.010"	.019"	.196"	768X6825	23.21	768X6830	199.50

ORDERING INFORMATION

Insert in place of N or NN in Stock No. no. of color desired:

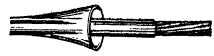
0—Black	5—Green	90—W/Black	95—W/Green
1—Brown	6—Blue	91—W/Brown	96—W/Black
2—Red	7—Violet	92—W/Red	97—W/Violet
3—Orange	8—Grey	93—W/Orange	98—W/Grey
4—Yellow	9—White	94—W/Yellow	

Allied offers the best percentage of order handling in the country. Cut down on paper work by ordering from Allied—we can supply most of your wire needs. Write, wire or phone your nearest Allied Electronics office. Our staff will assist you and expedite your order for fastest delivery.

TYPES I AND II AIRCRAFT HOOKUP WIRE TO MIL-W-5086A

Mfr's Type	MIL Type	Conductor Size	Conductor Strand	Nom. O.D.	lbs. per 100-Ft.	100' SPOOLS Stock No.	100' SPOOLS EACH	1000' SPOOLS Stock No.	1000' SPOOLS EACH
102219	AN-22	22	19/34	.068"	½	768-5421	3.49	768-5425	22.65
102019	AN-20	20	19/32	.078"	1	768-5417	3.69	768-5419	24.56
101819	AN-18	18	19/30	.088"	1	768-5413	4.86	768-5415	29.84
101619	AN-16	16	19/29	.098"	1¼	768-5409	5.08	768-5411	36.75
101419	AN-14	14	19/27	.117"	1¾	768-5405	6.65	768-5407	51.90
101219	AN-12	12	19/25	.137"	2½	768-5400	9.04	768-5402	70.86
112219	AN-22	22	19/34	.075"	¾	768-5458	4.66	768-5460	30.44
112019	AN-20	20	19/32	.085"	1	768-5453	5.26	768-5456	35.55
111819	AN-18	18	19/30	.095"	1¼	768-5448	5.90	768-5450	43.20
111619	AN-16	16	19/29	.105"	1½	768-5440	7.03	768-5442	49.43
111419	AN-14	14	19/27	.125"	1½	768-5436	8.52	768-5438	64.68
111219	AN-12	12	19/25	.143"	2¾	768-5431	10.77	768F5434	84.53
111049	AN-10	10	49/27	.189"	5	768-5427	18.49	768F5429	149.93
118133	AN-8	8	133/29	.240"	8	768-5475	36.66	768F5478	313.11
116133	AN-6	6	133/27	.293"	12	768F5471	48.28	768F5473	417.48
114133	AN-4	4	133/25	.355"	18	768F5467	65.46	768F5469	555.66
112665	AN-2	2	665/30	.425"	29	768F5462	94.10	768F5464	715.61
111817	AN-1	1	817/30	.470"	35	768F5444	100.20	768F5446	810.00

TYPE I



Mfr's Type 102219 thru 101219. Single conductor stranded tinned copper, white polyvinyl chloride insulation, clear nylon (polyamide) jacket overall. −55° to +105°C. Resists abrasives and chemicals.

TYPE II

Mfr's Type 111049 thru 111817. Same as Type I but with white glass braid, clear nylon jacket overall. Mfr's Type 112219 thru 111219. Same as Type II above but flame retardant nylon lacquered braid overall.

Hookup Wire—UL and CSA Types

DEARBORN

MTW MACHINE TOOL WIRE

600-volt. 90°C Rating. Stranded copper conductor. U.L. Listed. Supplied in 500′ spools. *Available in black, red, green and white. †Black, red and white. ‡Black only. See How to Order, below.

Stock No.	Mfr's. Type	Conductor Size	Wt. Lbs.	NOM OD	500′ Spools EACH
UL STYLE #1335 2/64″ INSUL.					
768-852N	*461816	18(16x30)	5.0	.113	12.49
768-850N	*461626	16(26x30)	7.1	.125	12.90
768-848N	*461419	14(19x27)	10.5	.139	17.48
768-846N	*461219	12(19x25)	14.5	.158	24.35
768X844N	*461019	10(19x.0234)	27.5	182	37.05
UL STYLE #1336 3/64″ INSUL.					
768-862N	†521419	14(19x27)	12.5	.165	18.30
768-859N	†521219	12(19x25)	15.5	.185	25.50
768X857N	†521019	10(19x.0234)	29.5	.214	38.25
768X856N	†520819	8(19x 0295)	37.0	.249	55.50
UL STYLE #1337 4/64″ INSUL.					
768U8670	‡530819	8(19x.0295)	43.0	.265	60.05
768U8660	‡530619	6(19x.0372)	58.5	315	96.08
768Z8650	‡530419	4(19x.0469)	85.0	.365	135.00
768Z8640	‡530219	2(19x.0591)	123.0	.440	202.50

UL STYLE #1061 SEMI-RIGID HOOKUP WIRE

Suitable for business machine applications. Voltage Rating: 300 volts. Temperature Rating: 10°C to +806°C. .009 PVC insulation over solid or stranded tinned copper. **Available in black, red, green or white—specify color. See How to Order, below.**

Mfr's Type	Conductor AWG	Wt., Lbs. 1000′	500′ Spools Stock No.	500′ Spools EACH	1000′ Spools Stock No.	1000′ Spools EACH
422601	#26(1)	1.5	768-836N	4.13	768-837N	7.35
422401	#24(1)	2.2	768-832N	4.43	768-833N	6.75
422201	#22(1)	3	768-826N	5.76	768-827N	9.08
422001	#20(1)	4.5	768-816N	6.85	768-817N	11.70
422607	#26(7/34)	1.5	768-840N	6.26	768-841N	10.32
422407	#24(7/32)	2.2	768-834N	5.85	768-835N	9.51
422207	#22(7/30)	3	768-828N	6.68	768-829N	10.37
422007	#20(7x28)	4.6	768-818N	7.18	768-819N	12.75
422010	#20(10x30)	4.6	768-822N	7.93	768-823N	13.05
421807	#18(7x26)	5.5	768-809N	9.19	768-810N	14.10
421816	#18(16x30)	7	768-814N	9.19	768-815N	16.25
421626	#16(26x30)	9	768-805N	11.49	768-806N	19.16

KYNAR* HOOKUP WIRE

Insulated. Made especially for automatic wiring equipment used for point to point terminations in back panel computer assemblies and other crowded areas. It's tough vinylidene fluoride insulation resists abrasion, acids, oil, alkalis, flame, moisture and fungus. Conductor is solid OFHC (oxygen free high conductivity). Temp. range to 125°C. U.L. rating to 105°C assigned. Sold on large hub wheels, 1000 ft. put up only. Specify color: red, blue, green and white. See How to Order, below.

Mfr's. P/N	AWG Size	Insul. Thk's	Nom. O.D.	U.L. Style	Stock No.	PER 1000′ HUB 1-4	5-9	10-Up
773001	30(1)	.005″	.0195″	1422	768-888N	37.50	25.00	22.50
772801	28(1)	.0035″	.020″	1423	768-887N	38.25	25.50	22.75
772601	26(1)	.005″	.027″	1422	768-886N	36.75	24.50	22.00
772401	24(1)	.010″	.042″	1327	768-885N	39.00	26.00	24.25

*PENNWALT T.M.

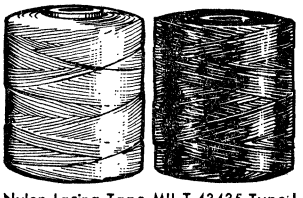
STYLE 1015—TEW—UL—CSA HOOKUP WIRE

Available in Sizes #22 through #10, Style 1028 for Size #8. 600 volts. 105°C Ratings. Stranded tinned copper conductor; PVC insulation. Letter "B" after part number indicates bonded tinned copper insulation. **Available in black, red green or white—specify color.** Other colors available on special order. See How to Order, below.

Mfr's Type	Conductor AWG	Wt., Lbs. 1000′	500′ Spools Stock No.	500′ Spools EACH	1000′ Spools Stock No.	1000′ Spools EACH
412207	#22(7x30)	6	768-798N	7.84	768-799N	12.42
412207B	#22(7x30)	6	768-800N	8.36	768-801N	13.67
412010	#20(10x30)	7.5	768-793N	9.56	768-794N	14.63
412010B	#20(10x30)	7.5	768-795N	10.10	768-796N	16.88
411816	#18(16x30)	9.8	768-788N	10.13	768-789N	17.91
411816B	#18(16x30)	9.8	768-790N	12.33	768-791N	19.62
411626	#16(26x30)	14	768-786N	13.80	768-787N	25.20
411441	#14(41x30)	20.3	768-784N	18.83	768X785N	37.65
411265	#12(65x30)	29	768-782N	33.82	768X783N	56.63
411000	#10(105x30)	55	768X780N	50.28	768U781N	85.13
418133	#8(133x29)	74	768X803N	83.50	768Z804N	144.75

HOW TO ORDER: Hook-Up Wire Listed Above. Complete Allied Stk. No. by Inserting Color Code in Place of N, Black: 0, Red: 2, Green: 5, Blue: 6, White: 9.

LACING TWINE AND TAPES



Nylon Lacing Tape MIL-T-43435 Type I (Supersedes MIL-T-713D)

NYLON LACING TAPE MIL-T-43435 TYPE I

Flat braided high-tenacity nylon yarn impregnated with microcrystalline fungicidal wax or impregnations to military specs. **Available in 500-yard spools. Wt. 1½ lbs.**

Stock No.	Mfr's Type	Test Tensile Strength	Width	Color	Finish	Spools, EACH 1-4	5-9	10-24	25-49	50-99
768-9107	805032W	50 lbs.	.090″	Natural	A	8.35	7.50	6.95	6.25	5.50
768-9106	805032B	50 lbs.	.090″	Black	A	9.26	8.30	7.76	7.20	6.20
768-9109	805036W	50 lbs.	.090″	Natural	W	8.35	7.80	7.25	6.75	5.90
768-9108	805036B	50 lbs.	.090″	Black	W	9.60	8.75	8.25	7.75	6.60
768-9111	805040W	50 lbs.	.090″	Natural	G	8.43	7.53	6.88	6.44	5.58
768-9110	805040B	50 lbs.	.090″	Black	G	9.60	8.75	8.25	7.75	6.25
768-9101	802534W	25 lbs.	.062″	Natural	W	5.34	4.80	4.42	4.13	3.65
768-9100	802534B	25 lbs.	.062″	Black	W	7.01	5.69	5.35	5.00	4.35

POLYESTER LACING TAPE MIL-T-43435 TYPE II

Flat braided polyester yarn impregnated with microcrystalline fungicidal wax or impregnations to meet military specifications. **Available in 500-yard spools. 1½ lbs.**

Stock No.	Mfr's Type	Test Tensile Strength	Width	Color	Finish	Spools; EACH 1-4	5-9	10-24	25-49	50-99
768-9113	805058W	50 lbs.	.090″	Natural	A	7.72	6.95	6.40	5.85	5.25
768-9112	805058B	50 lbs.	.090″	Black	A	9.02	8.10	7.55	7.00	6.00
768-9115	805062W	50 lbs.	.090″	Natural	W	7.72	6.95	6.40	5.85	5.00
768-9114	805062B	50 lbs.	.090″	Black	W	9.02	8.10	7.55	7.00	6.00

NYLON LACING TWINE MIL-T-713D TYPE P

Round twisted nylon fiber impregnated with microcrystalline wax. Provides excellent knot retention, excellent for lacing or spot ties. 70-lb. test has 550 yards per 1 lb. spool, 32-lb. test has 1100 yards per spool. Shpg. wt. 1 lb.

Stock No.	Mfr's Type	Test Tensile Strength	Nom. Diam.	Spool Length	Color	Finish	Spools, EACH 1-4	5-9	10-24	25-49	50-99
768-9117	807013W	70 lbs.	.039″	550 yds.	Natural	W	9.35	8.75	7.75	6.95	5.75
768-9116	807013B	70 lbs.	.039″	550 yds	Black	W	10.35	10.35	8.95	7.60	6.54
768-9105	804814W	48 lbs.	.029″	750 yds.	Natural	W	9.35	8.75	7.75	6.95	5.75
768-9104	804814B	48 lbs.	.029″	750 yds.	Black	W	10.35	10.35	8.95	7.60	6.54
768-9103	803215W	32 lbs.	.025″	1100 yds.	Natural	W	9.35	8.75	7.75	6.95	5.75
768-9102	803215B	32 lbs.	.025″	1100 yds.	Black	W	10.35	10.35	8.95	7.60	6.54

FINISHES AND COATINGS

W-WAX—MIL SPEC "B"

A microcrystalline fungicidal wax which exceeds military specifications, provides excellent knot retention and is suitable for either lacing or spot ties.

G-SYNTHETIC RUBBER—MIL SPEC "C"

A special continuous coating of fungicidal synthetic elastomer (rubber) which exceeds Mil Spec requirements, ties easily and has outstanding knot holding characteristics.

A-SYNTHETIC RESIN—MIL SPEC "E"

A synthetic rubber-like resin formulated with fungicidal ingredients. Handling characteristics are excellent, knot retention is outstanding; meets or exceeds Mil Spec requirements.

OPERATIONAL TEMPERATURE RANGES: −67°F to +250°F.

W&C: Coax, 269—Hookup, 270-4—Audio, 274-281, 283—Misc., 282-4—Tubing/Acc., 285-290

Alpha Wire and Cable

HOOKUP SECTION

ALPHA WIRE

ORDERING INFORMATION

To complete Allied's stock number for color desired, insert in place of "N" in stock number the following numeric designation for color desired: Black: 0; Brown: 1; Red: 2; Orange: 3; Yellow: 4; Green: 5; and White: 9. The listing for each series gives the available colors.

TYPE MW UNCOVERED HOOK-UP WIRE

Military hook-up wire is solid or extra flexible stranded tinned copper. Color-coded medium wall polyvinylchloride insulation. Nominal wall thickness is .016". Temperature rating: —40° to +80°C. Voltage rating, 1000 V. Meets MIL-W-76B specifications. Resistant to environmental and chemical abrasions such as acids, oil, alkalies, flame, moisture and fungus. 1000' spools only. **Available in white, black, red, or green—see note right.**

Stock No.	Mfr's Type No.	Type Designation	Conductor Size	Conductor Strand	Nom. O.D.	Wt., 1000' Lbs.	PER 1000' SPOOL
708-560N	1550	MW-C 24(7)U	24	7/32	.059"	2.8	9.19
708-561N	1551	MW-C 22(7)U	22	7/30	.064"	3.6	10.79
708-563N	1553	MW-C 20(10)U	20	10/30	.073"	4.8	12.14
708-565N	1555	MW-C 18(16)U	18	16/30	.084"	7.3	16.83
708-567N	1557	MW-C 16(26)U	16	26/30	.095"	11.2	23.38
708-569N	1559	MW-C 14(41)U	14	41/30	.110"	16.1	36.36
708-570N	1560	MW-C 12(65)U	12	65/30	.125"	24.9	51.20
708-571N	1561	MW-C 22(1)U	22	Solid	.060"	3.3	8.53
708-572N	1561/24	MW-C 24(1)U	24	Solid	.055"	2.5	7.55
708-573N	1563	MW-C 20(1)U	20	Solid	.066"	4.6	10.29
708-575N	1565	MW-C 18(1)U	18	Solid	.074"	6.9	13.31

TYPE B UNCOVERED HOOK-UP WIRE

Stranded, tinned-copper, color-coded. .010" polyvinylchloride insulation. Temperature rating: —55° to +105°C. Rated 600V. Resistant to acids, oil, alkalis, flame, moisture, fungus. Meets MIL-W-1678D. 1000' spools. **White, black or red—See note upper right.**

708-610N	1850	B-32	32	7/40	.028"	.6	12.53
708-611N	1851	B-30	30	7/38	.032"	.8	10.07
708-612N	1852	B-28	28	7/36	.034"	1.0	9.17
708-613N	1853	B-26	26	7/34	.038"	1.5	10.35
708-614N	1854	B-24	24	7/32	.043"	2.2	9.67
708-615N	1854/19	B-24	24	19/36	.043"	2.2	11.34
708-616N	1855	B-22	22	7/30	.050"	3.0	10.52
708-617N	1855/19	B-22	22	19/34	.050"	3.0	12.06
708-618N	1856	B-20	20	7/28	.058"	4.6	12.53
708-619N	1856/19	B-20	20	19/32	.058"	4.6	14.85
708-620N	1857	B-18	18	7/26	.068"	7.0	15.90
708-621N	1857/19	B-18	18	19/30	.068"	7.0	17.00
708-622N	1858/19	B-16	16	19/29	.077"	9.0	20.86
708-623N	1859/19	B-14	14	19/27	.091"	14.0	36.72

TYPE B PER MIL-W-16878D UNCOVERED PLASTIC PRE-BONDED TINNED COPPER CONDUCTOR

Each strand of conductor is double tinned, then heat-bonded together. An ideal construction where leads are to be cut and stripped for point-to-point wiring. Maintains flexibility of ordinary stranded wire, but reduces handling costs on production soldering jobs. With color-coded polyvinylchloride insulation; wall thickness, .010". Insulation meets requirements of MIL-W-16878D. Temperature rating: —55°C to +105°C. Rated at 600 volts. Resistant to such environmental and chemical abrasives as acids, alkalis, oil, flame, moisture, solvents and fungus. **Available in white, black and red—specify color. See note above right.**

Mfr's Type	Gauge (Strand)	Nom. O.D.	Wt., 100' Lbs.	100' Spool Stock No.	100' Spool EA.	1000' Spool Stock No.	1000' Spool EACH
3154	24 (7x32)	.044"	.3	708-700N	2.90	708-701N	13.38
3155	22 (7x30)	.051"	.4	708-702N	3.29	708-703N	16.85
3156	20 (7x28)	.059"	.5	708-704N	3.76	708-705N	21.88
3157	18 (7x26)	.070"	.7	708-706N	4.66	708-707N	30.83

TYPE ET MIL-W-16878D MINIATURE TEFLON WIRE

Single conductor stranded silver-plated copper with extruded TFE Teflon insulation. Comforms to all MIL-W-16878D specifications for plated copper wire. Temperature rating —65° C to +200°C. Voltage rating 300 volts. Resistant to chemical and environmental deterioration due to acid, alkalis, oil, flame, moisture, solvents and fungus. Color coded. Nominal wall thickness .010" Available in 100' spools only. **Choice of white, black, red and green—specify color —See note above right.** Av. shpg. wt. per 100' spool, ½ lb.

Stock No.	Mfr's Type	Conductor Size	Conductor Strand	Nom. O.D.	100' Spool EACH
708F652N	2852	28	7/36	.036"	9.90
708F653N	2853	26	7/34	.040"	10.35
708F654N	2854	24	19/36	.045"	11.76
708F655N	2854/7	24	7/32	.044"	10.25
708F656N	2855	22	19/34	.051"	13.06
708F657N	2855/7	22	7/30	.050"	12.00
708F658N	2856	20	19/32	.059"	16.67
708F659N	2856/7	20	7/28	.058"	14.81
708F660N	2857	18	19/30	.070"	19.37

MIL-W-16878D SHIELDED TEFLON CABLE

Each conductor stranded silver-plated copper, Type E with .010" extruded Teflon insulation per MIL specs. Rated at 600 volts. When shielded, a closely woven silver-plated copper shield is braided over the conductors. When braided, a Teflon impregnated fiberglass yarn is woven over the shield. Also with a sintered, wrapped white Teflon tape jacket fused over the shield. Temp., —65°C to +200°C. Numbers after / in Type No. are conductors; no / indicates 1 conductor. Av. shpg. wt., 1½ lbs. 100-Ft. Spool.

BRAID OVER SHIELD

Stock No.	Mfr's Type	AWG	Outer Dimensions	100' SPOOL
708-6400	2811	24 (19x36)	.081"	30.48
708-6401	2811/2	24 (19x36)	.126"	42.23
708-6402	2811/3	24 (19x36)	.133"	61.34
708-6403	2814	22 (19x34)	.088"	31.63
708-6404	2814/2	22 (19x34)	.137"	45.91
708-6405	2814/3	22 (19x34)	.144"	67.90
708-6406	2817	20 (19x32)	.097"	33.85
708-6407	2817/2	20 (19x32)	.154"	51.30
708-6408	2817/3	20 (19x32)	.163"	75.80
708-6409	2819	18 (19x30)	.106"	45.71
708-6410	2819/2	18 (19x30)	.174"	69.24
708-6411	2819/3	18 (19x30)	.185"	90.85

TEFLON TAPE WRAP OVER SHIELD

708-6415	2821	24 (19x36)	.095"	34.72
708-6416	2821/2	24 (19x36)	.140"	49.77
708-6418	2821/3	24 (19x36)	.147"	67.31
708-6420	2824	22 (19x34)	.102"	35.30
708-6422	2824/2	22 (19x34)	.154"	52.66
708-6424	2824/3	22 (19x34)	.162"	76.77
708-6426	2827	20 (19x32)	.110"	38.58
708-6427	2827/2	20 (19x32)	.170"	58.07
708-6428	2827/3	20 (19x32)	.175"	83.52
708-6429	2829	18 (19x30)	.120"	49.18
708-6430	2829/2	18 (19x30)	.190"	78.12
708-6431	2829/3	18 (19x30)	.219"	99.72

MIL-W-16878D TEFLON WIRE

Single conductor, stranded silver-plated copper. Extruded TFE Teflon insulation. Temp. rating, —65° to +200°C. Voltage rating: Type E, 600 volts; Type EE, 1000 volts. Nominal Wall Thickness: Type E, all are .010"; Type EE, *.014", †.017". **Available in White, Black, Red, Green, Yellow, Brown, Orange. §Indicates available in White only, **Indicates White, Black, Red or Green only. ††Not available in brown or orange. Specify Color—See note above.** Resistant to acids, alkalis, oil, flame, moisture and solvents. Av. shpg. wt. per spool: 100', ½ lb.; 1000', 4 lbs. *F in Stock Number denotes Shipment F.O.B. Factory Elizabeth, New Jersey.*

TYPE E—EXTRUDED—600 VOLTS

Mfr's Type	AWG	O.D.	100' Spool Stock No.	100' Spool EACH	1000' Spool** Stock No.	1000' Spool** EACH
5850	32 (7x40)	.029"	708-780N	4.31	708-781N	24.27
5851	30 (7x38)	.032"	708-782N	4.31	708-783N	24.27
5852	28 (7x36)	.036"	708-784N	4.53	708-785N	25.55
5853	26 (7x34)	.040"	708-787N	4.89	708-788N	29.07
5854	24 (19x36)	.045"	708-790N	5.96	708-791N	30.73
5854/7	14 (7x32)	.044"	708-793N	5.18	708-794N	30.73
5855	22 (19x34)	.051"	708-796N	4.23	708-798N	42.50
5855/7	22 (7x30)	.050"	708-799N	5.96	708-801N	37.44
5856	20 (19x32)	.059"	708-802N	7.53	708-803N	50.83
5856/7	20 (7x28)	.058"	708-805N	7.11	708F806N	48.96
5857	18 (19x30)	.070"	708-808N	10.12	708-809N	72.85
5858	16 (19x29)	.077"	708-820N	12.34	708F821N	91.47
5859††	14 (19x27)	.094"	708F823N	15.31	708F824N	148.41
5859/12§	12 (19x25)	.113"	708F8259	17.89	708F8269	174.90

TYPE EE—EXTRUDED—1000 VOLTS

5874**	24 (19x36)	.055"	708-828N	7.77	708F829N	53.84
5875**	22 (19x34)	.062"	708-840N	8.70	708F841N	60.74
5876**	20 (19x32)	.070"	708-843N	7.97	708F844N	75.80
5877**	18 (19x30)	.080"	708-845N	12.06	708F846N	94.08
5878*§	16 (19x29)	.089"	708-8609	12.17	708F8619	117.87
5879*§	14 (19x27)	.106"	708-8629	17.50	708F8639	171.06
5879/12†§	12 (19x25)	.124"	708-8649	18.87	708F8659	184.27

W&C: Coax, 269—Hookup, 270-4—Audio, 274-281, 283—Misc., 282-284—Tubing/Acc., 285-290

Wire and Cable

IMPORTANT ORDERING INFORMATION—HOOK-UP WIRE

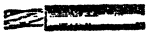
Where a color choice is provided below on hook-up wire, the Stock Number must be completed by filling in the appropriate numerical code for the color desired. This table lists all colors:

Each listing below states what colors are available for that particular series. The color codings are (put code in place of N in Stock Number):

0	Black	2	Red	4	Yellow	6	Blue	8	Gray
1	Brown	3	Orange	5	Green	7	Violet	9	White

Example: Belden No. 8598, Stock No. 732-348N. If black is desired Stock No. is 732-3480. If green, then 732-3485.

MIL 16878D—VINYL, 600 VOLT, 105° C



TYPE B. Tinned, stranded copper. In brown, red, orange, yellow, green white, black and blue—see ordering table above.

Mfr's Type	Gauge (Strand)	O. D.	Wt./100' Lbs.	100' Spools Stock No.	100' Spools EA.	1000-Ft. Spools Stock No.	1000-Ft. Spools EA.
8598	30 (7x38)	.032"	¼	732-348N	1.67	.....	.....
8597	28 (7x36)	.035"	¼	732-346N	1.63	.....	.....
8505	26 (7x34)	.039"	¼	732-277N	1.63	732-278N	10.40
8504	24 (7x32)	.044"	¼	732-274N	1.63	732-275N	9.70
8503	22 (7x30)	.050"	½	732-271N	1.78	732-272N	10.60
8502	20 (7x28)	.058"	½	732-266N	2.17	732-270N	13.90
8501	18 (7x26)	.068"	¾	732-263N	2.37	732-264N	16.20
8500	16(19x29)	.077"	1	732-260N	3.07	732-261N	21.60

MIL 16878D—VINYL INSULATION, 3000 VOLTS, 105° C

TYPE D. Tinned, stranded copper. In brown, red, orange, yellow, green, white, black, blue—see ordering table above.

8971	22 (7x30)	.090"	¾	732-728N	3.00	.....	.....
8970	20 (7x28)	.098"	¾	732-726N	3.54	.....	.....
8969	18 (7x26)	.108"	1¼	732-724N	3.90	.....	.....

MIL 16878D—TEFLON-INSULATED, 600 VOLTS, 200° C

TYPE E. Stranded, silver-coated copper wire. In brown, red, orange, yellow, green, white, black, and blue—see ordering table above. Av. wt. 100'/¾lb.

Mfr's Type	AWG (Strand)	O. D.	100-Ft. Spools Stock No.	100-Ft. Spools EACH	500-Ft. Spools Stock No.	500-Ft. Spools EACH
83001	28 (7x36)	.036"	732-750N	5.26	732-751N	15.95
83002	26 (7x34)	.041"	732-753N	5.67	732-754N	15.95
83003	24 (19x36)	.046"	732-756N	6.93	732-757N	20.45
83006	22 (19x34)	.052"	732-770N	7.59	732-771N	22.95
83007	20 (19x32)	.060"	732-773N	8.76	732-775N	27.30
83009	18 (19x30)	.071"	732-800N	11.77	732-802N	38.83
83010	16 (19x29)	.080"	732-804N	14.36	732-807N	48.53

MIL-W-76B—VINYL INSULATION, 1000 VOLTS, 80° C

TYPE MW. In brown, red, orange, yellow, green, white, black and blue—see ordering table above.

Mfr's Type	Gauge	O. D.	Wt./100' Lbs.	100-Ft. Spools Stock No.	100-Ft. Spools EACH
8525	24 (7x32)	.058"	½	732-313N	1.60
8530	22 (Solid)	.059"	½	732-326N	1.50
8524	22 (7x30)	.064"	½	732-310N	1.78
8529	20 (Solid)	.066"	½	732-323N	1.80
8523	20 (10x30)	.070"	½	732-288N	2.05
8522	18 (16x30)	.080"	¾	732-285N	2.50
8528	18 (Solid)	.074"	¾	732-320N	2.30
8531	16 (Solid)	.085"	1	732-329N	2.90
8521	16 (26x30)	.098"	1	732-283N	3.44
8520	14 (41x30)	.111"	1¾	732-280N	4.84
8527	12 (65x30)	.130"	3	732-317N	7.34

Mfr's Type	1000-Ft. Spools Stock No.	1000-Ft. Spools EACH	Mfr's Type	1000-Ft. Spools Stock No.	1000-Ft. Spools EACH
8525	732-314N	9.30	.....	.....	.....
8530	732-328N	8.55	8522	732-286N	16.75
8524	732-311N	10.95	8528	732-321N	14.70
8529	732-324N	10.80	8521	732-284N	24.00
8523	732-289N	13.60	8520	732-281N	37.50

MIL-W-76B—VINYL INSULATION, 600 AND 2500 V., 80° C

TYPE HW. Tinned stranded copper wire with heavy-wall insulation. 8585, 2500 V, all other 600 V; Wall thickness is .048" except Type 8585, .034". Available in red, white and black—see ordering table above.

Stock No.	Mfr's Type	Gauge	Wt., O. D.	Wt., Lbs.	100-Ft. Spool
732-344N	8585	16 (26x30)	.128"	1¾	4.14
732-342N	8584	14 (14x30)	.171"	3	7.08
732-341N	8583	12 (65x30)	.191"	3¾	9.51
732-340N	8582	10 (105x30)	.220"	5¼	14.59

U.L.-LISTED HOOKUP WIRE 105° C (CSA 600-V TYPE TEW)

Vinyl insulated hookup and lead wire. Tinned copper conductor. Available in eight insulation colors: brown, red, orange, yellow, green, white, black, and dark blue—please refer to ordering table above for insulation color code.

Mfr's Type	AWG (Stranding)	O. D.	Wt./100' Lbs.	STANDARD SPOOLS Stock No.	100'	Stock No.	500'	Stock No.	1000'
8920	22 (7x30)	.095"	¾	732-721N	2.02	.....	.....	732-722N	12.60
8919	20 (10x30)	.102"	1	732-720N	2.37	.....	.....	732-723N	16.00
8918	18 (16x30)	.112"	1¼	732-716N	2.93	.....	.....	732-717N	20.25
8917	16 (26x30)	.126"	1¾	732-713N	3.90	732-714N	14.70	.....	.....
8916	14 (41x30)	.141"	2½	732-710N	5.26	732-711N	20.10	.....	.....

RETRACTILE (COILED) MICROPHONE AND TELEPHONE CABLE

TELEPHONE

MICROPHONE

MICROPHONE: 8409 and 8490 are unshielded cords; 8499 has spiral wrap copper shield, others have aluminum Mylar tape shields. 8499 is single-conductor shielded cord; 8497 has one of its 3 conductors shielded; 8491 has two of its 4 conductors shielded. TELEPHONE: 8494 and 8495 unshielded. Spade term; strain relief.

Mfr's Type	For	No. Cond.	AWG (Stranding)	O. D.	Extends From	Extends To	Jacket	Shpg. Wt. Lbs.	Stock No.	EACH
8409	Microphone	4	28(7x36)	.165"	12"	6'	Neoprene	¼	732-2020	1.50
8490	Microphone	5	23(21x36)	.265"	11½"	6'	Neoprene	3½	732-2390	1.97
8491	Microphone	4	23(21x36)	.300"	12"	6'	Neoprene	¼	732-2391	2.27
8497	Microphone	3	23(21x36)	.250"	11½"	6'	Neoprene	¼	732-2397	1.97
8499	Microphone	1	24(45x40)	.160"	7½"	4'	Neoprene	¼	732-2399	1.33
8494	Telephone	4	23(21x36)	.245"	10"	4½'	Vinyl	¼	732-2394	2.71
8495	Telephone	3	23(21x36)	.220"	10"	4½'	Vinyl	¼	732-2395	1.83
8605	Microphone	1	24 (19x36)	.160"	21½"	12'	Vinyl	¼	732-3705	2.00

MINIATURE 75-OHM SHIELDED LOW-CAPACITY VIDEO CABLE

TYPE 8279. Miniature version of Type 8281 (at right). Tinned compacted conductor No. 23 AWG (7x31), polyethylene insulated, with tinned copper braid shield, black ployethylene jacket. 100% sweep tested. Capacitance, 21 pF/per foot. Attenuation: 4.9 dB at 100 MHz. Nominal impedance, 75 ohms. Nominal outside diameter: 0.220".

732-0954. 100-Ft. Spool. 3½ lbs.....Per Spool 12.35
732-0952. 250-Ft. Spool. 8¼ lbs.....Per Spool 24.75
732-0953. 500-Ft. Spool. 14¾ lbs.....Per Spool 49.50

75-OHM VIDEO CABLE

TYPE 8281. Transfers video signals in TV studios. Provides superior picture definition (color or black-and-white), ends periodicity problems. Inner conductor is #20 solid tinned copper, polyethylene insulated. Tinned-copper double braid shield. Jacket is black polyethylene. Nominal capacitance of 21 pF. Attenuation 2.7 dB at 100 MHz. For UHF TV and other high-frequency uses. Nominal outside dia.: 0.304". Velocity of propagation: 66%. 100% sweep.

732X0956. 500-Ft. Spool. 37 lbs.....Per Spool 116.90
732Z0957. 1000-Ft. Spool. 77 lbs.....Per Spool 210.00

Highest Percentage of Orders Filled in the Country

Control and Microphone Cable, Service Cord, Test Lead

AUDIO SECTION

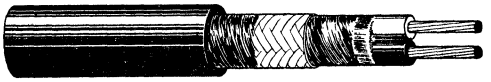
COLUMBIA

UNSHIELDED CONTROL CABLE

Rubber Insulation and Jacket

Each conductor 20 gauge, 26/30 stranding, tinned copper. Color-coded rubber insulation, rubber outer jacket. Nominal insulation thickness .020″, nominal jacket thickness .035″. Various applications include: control circuits, broadcast and studio use, traffic and fire alarm controls, other heavy duty multi-control applications are also possible. Extra limp. Resistant to all types of impact and abrasion.

Mfr's Type	No. of Cond.	Nom. O.D.	100′ Spool		500′ Spool	
			Stock No.	EACH	Stock No.	EACH
03602	2	.240″	758-0600	11.00	758-0601	45.00
03603	3	.255″	758-0602	10.50	758-0603	49.00
03604	4	.275″	758-0604	12.50	758Z0605	57.00
03605	5	.300″	758-0606	12.44	758Z0607	75.50
03606	6	.315″	758-0608	18.50	758Z0609	90.00
03610	10	.410″	758-0610	42.00	758-0611	210.00

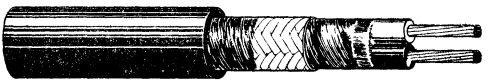


SHIELDED CONTROL/MICROPHONE CABLE

Neoprene Jacket—Heavy Duty

Tinned copper conductors, color-coded rubber insulation (18 ga.-.020″, 16 ga.-.025″), cabled, filled, cotton wrap, tinned copper braid shield, cotton wrap, neoprene jacket. Various applications include: microphones, control circuits, video and audio interconnecting cables, broadcast and studio use. Engineered to prevent cross-talk and eliminate hum pick-up. Extra limp. Resistant to oil, ozone, moisture, sunlight, abrasion.

Mfr's Type	No. of Cond.	AWG (Stranding)	Nom. O.D.	100′ Spool		500′ Spool	
				Stock No.	EACH	Stock No.	EACH
01201	1	18(41/34)	.240″	758-0001	15.50	758-0002	74.00
01202	2	18(41/34)	.295″	758-0003	19.00	758Z0004	91.00
01203	3	18(41/34)	.305″	758-0005	33.50	758Z0006	15.00
01204	4	18(41/34)	.330″	758-0007	39.00	758Z0008	191.00
01206	6	18(41/34)	.370″	758-0010	58.00	758Z0011	269.00
01212	12	18(41/34)	.555″	758Z0012	135.00	758Z0013	640.00
01602	2	16(65/34)	.335″	758-0400	33.00	758Z0401	158.00
01603	3	16(65/34)	.355″	758-0402	36.00	758Z0403	175.00
01604	4	16(65/34)	.385″	758-0404	41.00	758Z0405	195.00
01606	6	16(65/34)	.445″	758-0406	78.00	758Z0407	375.00



SHIELDED CONTROL/MICROPHONE CABLE

Rubber Jacket—Heavy Duty

Tinned copper conductors, color-coded rubber insulation .020″, cabled, filled, cotton wrap, tinned copper braid shield, cotton wrap, rubber jacket. Various applications include: microphones, control circuits, video and audio interconnecting cables, broadcast and studio use. Specially engineered to prevent cross-talk and eliminate hum pick-up. Extra limp. Resistant to strong impact and abrasion.

Mfr's Type	No. of Cond.	AWG (Stranding)	Nom. O.D.	100′ Spool		500′ Spool	
				Stock No.	EACH	Stock No.	EACH
01300	1	20(26/34)	.230″	758-0100	13.25	758Z0101	59.75
01302	2	20(26/34)	.270″	758-0102	14.10	758Z0103	67.50
01304	3	20(26/34)	.285″	758-0104	16.50	758Z0105	78.00
01306	4	20(26/34)	.305″	758-0106	18.00	758Z0107	88.00
01308	5	20(26/34)	.330″	758-0108	23.00	758Z0109	23.00
01310	6	20(26/34)	.345″	758-0110	28.00	758Z0111	135.00
01315	10	20(26/34)	.440″	758-0112	50.00	758Z0113	240.00
01316	12	20(26/34)	.525″	758-0114	69.50	.....	.....
01317	15	20(26/34)	.505″	758-0115	91.00	.....	.....

RUBBER TEST LEAD WIRE

Extra flexible stranded tinned copper conductor, rubber insulation. Extra limp. Designed to withstand extremely high voltages. Choice of red or black, three insulation thickness.

Mfr's Type	Insul. Thick. & Color	AWG (Stranding)	Nom. O.D.	100′ Spool		500′ Spool	
				Stock No.	EA.	Stock No.	EACH
01326	.040″ Red	20(41/36)	.125″	758-0124	3.34	758-0125	12.44
01326	.040″ Black	20(41/36)	.125″	758-0126	3.34	758-0127	12.44
01319	.047″ Red	20(41/36)	.140″	758-0116	3.54	758-0117	13.69
01319	.047″ Black	20(41/36)	.140″	758-0118	3.54	758-0119	13.69
01321	.045″ Red	18(65/36)	.140″	758-0120	3.79	758-0121	15.36
01321	.045″ Black	18(65/36)	.140″	758-0122	3.79	758-0123	15.36

SERVICE AND POWER CORD

Neoprene Jacket

Stranded bare copper conductors, color-coded rubber insulation, neoprene jacket overall. U.L. Listed. Resistant to oil, ozone, moisture, sunlight, abrasion and aging.

Mfr's Type	Size Cond. & Type	Volt Rating	Nom. O.D.	100′ Spool		250′ Spool	
				Stock No.	EACH	Stock No.	EACH
01477	18/2 SVO	300V	.250″	758-0214	8.60	758-0215	18.50
01478	18/2 SJO	300V	.305″	758-0216	9.50	758-0217	19.50
01479	18/3 SJO	300V	.330″	758-0218	11.75	758-0219	25.00
01481	16/2 SJO	300V	.330″	758-0220	11.50	758-0221	25.00
01482	16/3 SJO	300V	.360″	758-0222	16.50	758-0223	35.00
01484	18/2 SO	600V	.390″	758-0224	15.90	758Z0225	32.00
01485	18/3 SO	600V	.405″	758-0226	22.00	758Z0227	43.50
01487	16/2 SO	600V	.405″	758-0228	19.00	758Z0229	40.00
01488	16/3 SO	600V	.430″	758-0230	24.10	758Z0231	50.00

SERVICE AND POWER CORD

Rubber Jacket

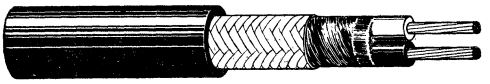
Stranded bare copper conductors, color-coded rubber insulation, rubber jacket overall. U.L. Listed. Various applications include power tools, appliances, business machines, etc.

Mfr's Type	Size Cond. & Type	Volt Rating	Nom. O.D.	100′ Spool		250′ Spool	
				Stock No.	EACH	Stock No.	EACH
01420	12/2 SV	300V	.250″	758-0200	5.76	758-0201	12.52
01425	18/2 SJ	300V	.305″	758-0202	8.00	758Z0203	14.00
01435	18/3 SJ	300V	.345″	758-02 4	9.80	758Z0205	19.80
01438	18/4 SJ	300V	.365″	758-0206	17.20	758Z0207	35.00
01445	16/2 SJ	300V	.325″	758-0208	10.85	758Z0209	18.75
01450	16/3 SJ	300V	.375″	758-0212	13.90	758Z0213	29.00
01446	16/4 SJ	300V	.395″	758-0210	19.50	758Z0211	39.00
01500	14/2 S	600V	.540″	758-0300	17.95	758Z0301	36.74
01505	14/3 S	600V	.565″	758-0302	25.47	758Z0303	51.70
01509	14/4 S	600V	.605″	758-0304	29.80	758Z0305	65.97
01510	12/2 S	600V	.580″	758Z0306	26.30	758Z0307	53.44
01515	12/3 S	600V	.635″	758Z0308	34.24	758Z0309	68.47
01517	10/2 S	600V	.650″	758Z0310	35.07	758Z0311	70.14
01519	10/3 S	600V	.760″	758Z0312	40.91	758Z0313	82.00

Make Allied your Headquarters for all your wire needs. Write, wire or phone your nearest Allied Electronics office. Our staff will assist you and expedite your order for fastest delivery.

W&C: Coax, 269—Hookup, 270-4—Audio, 274-281, 283—Misc., 282-4—Tubing/Acc., 285-290

Audio and Data Cable



SHIELDED MULTI-CONDUCTOR CABLE

Plastic Jacket

Each conductor 20 gauge 26/34 stranded tinned copper. Color-coded polyethylene insulation .015", cotton wrap, tinned copper braid shield, overall gray PVC jacket .035". Various applications include: control circuits, microphones, video and audio interconnecting cables, broadcast and studio use. Engineered to prevent cross talk and eliminate hum pick-up. Low capacitance.

Mfr's Type	No. of Cond.	Nom'l O.D.	100' Spool		500' Spool	
			Stock No.	EACH	Stock No.	EACH
01643	3	.250"	758-0408	10.45	758Z0409	52.00
01644	4	.260"	758-0410	12.80	758Z0411	58.00
01645	5	.275"	758-0412	13.70	758Z0413	68.00
01646	6	.300"	758-0414	23.50	758Z0415	115.00
01648	8	.330"	758-0416	28.50	758Z0417	135.00
01650	10	.375"	758-0418	42.50	758Z0419	192.00
01652	12	.380"	758-0420	63.00	758Z0421	305.00
01655	15	.410"	758-0422	90.00	758Z0423	435.00
01660	20	.455"	758-0424	122.00	758Z0425	590.00

SPIRAL SHIELDED AUDIO CABLE

PVC Jacket

Tinned copper conductors, color-coded PVC insulation, conductors twisted, tinned copper spiral shield, gray PVC jacket overall. Various applications include: recording studios, radio transmitters, sound systems, electronic circuits where shielding is required. Spiral shield allows ease of pigtail soldering. Offers high resistance to hum pickup and cross-talk.

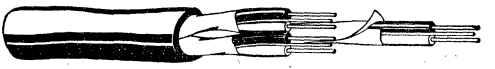
Mfr's Type	Size & No. of Cond.	Strand.	Nom'l O.D.	100' Spool		500' Spool	
				Stock No.	EA.	Stock No.	EA.
02882	22/2	7/30	.175"	758-0516	4.55	758-0517	20.20
01335	22/3	7/30	.190"	758-0130	7.55	758-0131	34.00
02888	20/2	10/30	.195"	758-0518	5.45	758-0519	23.00
02893	20/3	10/30	.210"	758-0522	8.80	758-0523	39.95
02892	18/2	16/30	.230"	758-0520	6.55	758-0521	29.40
02768	18/3	16/30	.235"	758-0514	8.40	758Z0515	37.70

BRAID SHIELDED AUDIO CABLE

PVC Jacket

Tinned copper conductor, color-coded PVC insulation, conductors twisted, tinned copper braid shield, gray PVC jacket overall. Applications include: recording studios, radio transmitters, sound systems, electronic circuits where shielding is required. Engineered to prevent cross-talk and hum pick-up.

Mfr's Type	Size & No. of Cond.	Strand.	Nom'l O.D.	100' Spools		500' Spools	
				Stock No.	EA.	Stock No.	EA.
02679	22/2	7/30	.185"	758-0502	6.80	758-0503	30.50
02678	22/3	7/30	.200"	758-0500	8.20	758-0501	36.50
02680	22/4	7/30	.210"	758-0504	13.60	758-0505	63.70
02681	20/2	10/30	.204"	758-0506	9.90	758-0507	45.00
01332	20/3	10/30	.214"	758-0128	12.20	758-0129	56.40
02683	20/4	10/30	.232"	758-0508	12.85	758-0509	62.20
02686	18/2	16/30	.224"	758-0510	12.50	758-0511	60.75
02687	18/3	16/30	.236"	758-0512	18.00	758-0513	84.20



INDIVIDUAL SHIELDED MULTIPLE PAIR AUDIO/DATA CABLE PVC Jacket

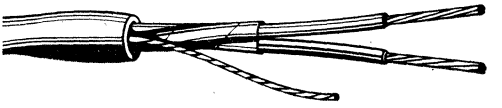
Tinned copper conductor, color-coded insulation (solid—.015" PVC, stranded—.008" polypropylene), each pair and its drain wire under Durafoil® aluminum foil/polyester shield, gray PVC jacket overall. Various applications include: RF and pulse applications requiring superior circuit isolation.

SOLID CONDUCTORS

Mfr's Type	No. Pairs	Cond. Size	Nom'l Jkt. Thick.	Nom'l O.D.	100' Spools		500' Spools	
					Stock No.	EACH	Stock No.	EACH
06035	3	22	.030"	.280"	758-0700	10.90	758Z0701	49.00
06036	6	22	.035"	.400"	758-0702	21.00	758Z0703	100.00
06037	9	22	.040"	.455"	758-0704	29.50	758Z0705	145.00
06039	11	22	.040"	.500"	758Z0708	35.00	758Z0709	170.00
06038	15	22	.045"	.555"	758Z0706	46.00	758Z0707	228.00

STRANDED CONDUCTORS

Mfr's Type	No. Pairs	Cond. Size	Nom'l Jkt. Thick.	Nom'l O.D.	100' Spools		500' Spools	
					Stock No.	EACH	Stock No.	EACH
06040	3	22	.030"	.270"	758-0710	12.55	758Z0711	58.50
06041	6	22	.035"	.395"	758-0712	24.50	758Z0713	121.00
06042	9	22	.040"	.440"	758Z0714	36.00	758Z0715	172.00
06043	11	22	.040"	.485"	758Z0716	41.50	758Z0717	203.00
06044	15	22	.045"	.540"	758Z0718	55.00	758Z0719	272.00
06045	19	22	.055"	.620"	758Z0720	73.00	758Z0721	360.00
06046	27	22	.070"	.760"	758Z0722	109.00	758Z0723	540.00



SHIELDED AUDIO CABLE MYLAR*/ALUMINUM FOIL

PVC Jacket

Tinned copper conductors, color coded polyethylene insulation conductors cabled wrapped with *flex foil® mylar supported aluminum foil shield, foil facing to outside, stranded tinned copper drain wire, gray PVC jacket overall. 100% shielded for recording studios, broadcast sound systems and electronic circuits where RF shielding is required.

Mfr's Type	Size & No. of Cond.	Strand	Nom. O.D.	500' Spool		1000' Spool	
				Stock No.	EACH	Stock No.	EACH
02513	24/2	7/32	.160	758-3667	17.00	758-3668	34.00
02514	22/2	7/30	.170	758-3671	17.50	758-3672	35.00
02526	22/2	7/30	.175	758-3698	22.00	758X3699	44.00
02523	22/2	7/30	.190	758-3687	28.75	758X3688	56.00
02524	20/2	10/30	.195	758-3691	22.00	758X3692	44.00
02425	20/3	10/30	.200	758-3607	27.75	758X3608	55.00
02534	18/2	16/30	.222	758-3643	26.50	758X3644	53.00
02535	18/3	16/30	.236	758X3647	35.20	758X3648	70.00
02536	16/2	26/30	.274	758X3651	39.00	758X3652	78.00
02537	16/3	26/30	.300	758X3655	53.50	758F3656	107.00

SHIELDED MINIATURE AUDIO CABLE MYLAR*/ALUMINUM FOIL

Same construction as above, except polypropylene insulation.

Mfr's Type	Size & No. of Cond.	Strand	Nom. O.D.	500' Spool		1000' Spool	
				Stock No.	EACH	Stock No.	EACH
02515	22/2	Solid	.125	758-3675	16.60	758-3676	33.20
02516	22/2	7/30	.135	758-3679	19.35	758-3680	38.70
02517	22/3	7/30	.145	758-3683	24.60	758-3684	49.20

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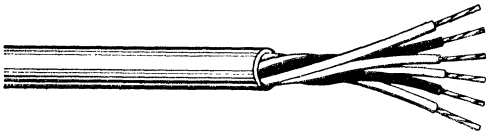
Cable and Cords

AUDIO AND ASSORTED

COLUMBIA

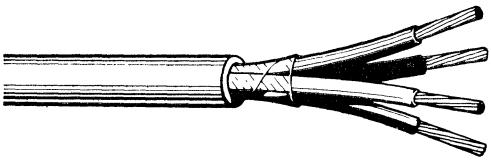


CONTROL CABLE MULTI-CONDUCTOR

Unshielded PVC

Tinned copper conductors, color coded PVC insulation, conductor cabled gray PVC jacket. Used for interconnecting cables for electronic equipment, control circuits, broadcast and studio use. Also temperature control systems.

Mfr's Type	No. of Cond.	AWG Strand.	Nom. O. D.	100' Spool Stock No.	100' Spool EACH	500' Spool Stock No.	500' Spool EACH
02404	4	18 (16/30)	.250	758-3457	8.70	758X3458	38.80
02420	5	18 (16/30)	.286	758-3485	10.80	758X3486	49.50
02421	7	18 (16/30)	.324	758-3489	14.20	758X3490	65.20
02422	9	18 (16/30)	.379	758-3493	19.40	758F3494	91.00
02412	12	18 (16/30)	.412	758-3481	26.10	758F3482	127.00
02423	15	18 (16/30)	.490	758-3497	36.10	758F3498	172.00
02424	19	18 (16/30)	.505	.....	.....	758F3603	197.50
02425	4	16 (26/30)	.375	758-3605	13.75	758F3606	64.00
02434	5	16 (26/30)	.405	758-3641	18.00	758F3642	76.00
02426	7	16 (26/30)	.455	758-3609	25.20	758F3610	113.00
02435	9	16 (26/30)	.525	.....	.....	758F3646	140.00
02427	12	16 (26/30)	.620	758X3613	41.00	758F3614	191.50
02428	15	16 (26/30)	.650	758X3617	57.00	758F3618	274.00
02429	19	16 (26/30)	.715	758F3621	71.00	758F3622	332.00

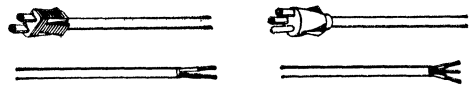


MULTI CONDUCTOR CABLE UN-PAIRED

- Widely Used in Public Address and Intercom Systems
- Chrome Gray Polyvinylchloride Jacket
- Utilize Both Tinned and Bare Copper Conductors
- Ideal for Remote Control Circuits, Telephones

Tinned copper conductors except Types 02754 and 02755 which are (*) bare copper. Color coded per insulation chrome gray PVC jacket for PA systems, unbalanced intercom systems, interconnecting cables, remote control circuits, telephones, etc

Mfr's Type	No. of Cond.	AWG	100' Spool Stock No.	100' Spool EACH	500' Spool Stock No.	500' Spool EACH	1000' Spool Stock No.	1000' Spool EACH
04008	2	22	758-4690	2.80	758-4691	10.00	758-4692	20.00
04310	3	22	.....	.....	758-5030	15.00	758-5031	29.75
04311	2	20	.....	.....	758-5035	14.75	758-5036	29.25
02754*	2	19	.....	.....	758-4025	13.45	758X4026	26.75
02755*	2	19	.....	.....	758-4030	19.40	758X4031	38.90
06348	2	22	.....	.....	758-5685	11.95	758-5686	28.30
04062	3	22	758-4829	3.65	758-4830	14.50	758-4831	29.00
04063	4	22	758-4834	4.75	758-4835	19.85	758X4836	39.70
04064	5	22	758-4839	5.50	758-4840	23.65	758X4841	47.30
04066	6	22	.....	.....	758-4850	32.00	758X4851	63.80
04088	7	22	.....	.....	758-5025	33.50	758X5026	66.80
04065	8	22	758-4845	9.00	758-4846	45.00	758F4847	88.50
04070	9	22	758-4865	9.85	758X4866	47.50	758X4867	94.75
04071	10	22	758-4870	10.75	758X4871	49.00	758X4872	97.75
04067	12	22	758-4855	12.00	758X4856	55.70	758X4857	111.40
04073	15	22	758-4875	20.30	758X4876	91.25	758F4877	182.00
04076	25	22	758-4885	31.00	758F4886	149.25	758F4887	298.00
06351	2	20	758-5690	3.80	758-5691	14.10	758X5692	28.20
06352	3	20	758-5695	5.40	758-5696	24.00	758X5697	47.90
06353	4	20	758-5700	6.80	758-5701	33.50	758X5702	66.50
02830	2	18	.....	.....	758-4050	22.75	758X4051	45.00
02831	3	18	.....	.....	758-4055	31.50	758X4056	62.50
02404	4	18	758-3457	8.70	758X3458	38.50	758X3459	77.00
02405	2	16	.....	.....	758X3461	28.00	758X3462	56.20
02409	2	14	.....	.....	758X3473	44.50	758F3474	89.00
02410	2	12	.....	.....	758F3477	62.25	758F3478	124.50



POWER SUPPLY AND REPLACEMENT CORDS

Molded plastic male cap on one end. Other end has outer jacket removed, conductors stripped and machine hanked. U.L. Listed. For portable tools, appliances, etc.

TWO CONDUCTOR

Stock No.	Mfr's Type	Size & Type	Lgth.	Rating @ 125V	Color	EACH
758-0800	20250	18/2 SV	6'	10A	Black	.80
758-0801	20252	18/2 SV	9'	10A	Black	.95
758-7206	20254	18/2 SV	12'	10A	Black	1.15
758-7245	20327	18/2 SVT	6'	10A	Black	.61
758-7665	24516	18/2 SJ	6'	10A	Black	.90
758-0802	20258	18/2 SJ	10'	10A	Black	1.00
758-7675	24546	18/2 SJT	6'	10A	Gray	.85
758-7677	24549	18/2 SJT	9'	10A	Gray	.95
758-7215	20260	16/2 SJ	8'	13A	Black	.95
758-0803	20262	16/2 SJ	10'	13A	Black	1.18

SMALL APPLIANCE CORDS

758-7680	24586	18/2 SPT-1	6'	10A	Brown	.27
758-7683	24596	18/2 SPT-1	6'	10A	White	.27
758-7682	24589	18/2 SPT-1	9'	10A	Brown	.33
758-7685	24590	18/2 SPT-1	9'	10A	White	.33

THREE CONDUCTOR

758-7255	20330	18/3 SVT	6'	10A	Gray	.80
758-7260	20331	18/3 SVT	8'	10A	Gray	.90
758-0804	20264	18/3 SJ	6'	10A	Black	1.00
758-7239	20314	18/3 SJ	8'	10A	Black	1.06
758-0810	20316	18/3 SJ	12'	10A	Black	1.48
758-7851	24936	18/3 SJT	6'	10A	Gray	1.00
758-7855	24939	18/3 SJT	9'	10A	Gray	1.20
758-0812	24926	16/3 SJ	6'	13A	Black	1.35
758-0811	20324	16/3 SJ	8'	13A	Black	1.45
758-7844	24929	16/3 SJ	9'	13A	Black	1.60
758-0813	24932	16/3 SJ	12'	13A	Black	1.80
758-7857	24946	16/3 SJT	6'	13A	Gray	1.35
758-7859	24949	16/3 SJT	9'	13A	Gray	1.60

EXTENSION CORDS

Black rubber. Molded plastic cap and connector. U.L. Listed. applications include: portable tools, appliances, business machines.

TWO CONDUCTOR

Stock No.	Mfr's Type	Size & Type	Length	Rating @ 125 V	EACH
758-0806	20272	18/2 SV	6'	10A-125V	.95
758-0814	26010	18/2 SJ	10'	10A-125V	1.45
758-0815	26025	18/2 SJ	25'	10A-125V	2.75
758-7450	23026	18/2 SJT	25'	10A	2.75
758-0816	26110	16/2 SJ	10'	13A-125V	1.65
758-7455	23112	16/2 SJT	12'	13A	1.90

THREE CONDUCTOR

758-0807	20288	18/3 SJ	10'	10A-125V	1.65
758-0817	26525	18/3 SJ	25'	10A-125V	3.20
758-0808	20294	16/3 SJ	15'	13A-125V	3.60
758-0818	26625	16/3 SJ	25'	13A-125V	5.40

TYPE SPT LAMP CORD & POWER CORD

Plastic lamp cord. U.L. Listed. Polarity ridge over one conductor. Rip type construction. For fans, lamps, radios, TV, stereo speakers, signs, etc. Available in brown only.

Mfr's Type	Size & No. Of Cond.	Strand	Nom. O.D.	100' Spool Stock No.	100' Spool EA.	250' Spool Stock No.	250' Spool EA.
01415	18/2	41/34	.107x.210	758-2213	3.15	758X2214	6.40

W&C: Coax, 269—Hookup, 270-4—Audio, 274-281, 283—Misc., 282-4—Tubing/Acc., 285-290

Sound and Intercom Cables—Magnet Wire

TEST PROD—SPEAKER WIRE

HIGH-GRADE MAGNET WIRE

PE-Plain Enamel Class A 105°C. Excellent properties: the oldest and most popular type of film insulated wire in use. Made to the most rigid specifications. Round bare copper single conductor covered with a continuous film of oleoresinous enamel. *Size and type.

Stock No.	*	Feet	EACH	Stock No.	*	Feet	EACH
768-0183	18PE	198	2.25	768-0215	30PE	3200	3.02
768-0185	20PE	313	2.33	768-0217	31PE	4410	3.03
768-0187	21PE	397	2.37	768-0219	32PE	4900	3.07
768-0189	22PE	501	2.40	768-0221	33PE	6441	3.09
768-0191	23PE	628	2.43	768-0223	34PE	7950	3.19
768-0193	24PE	798	2.53	768-0225	35PE	9002	3.55
768-0195	25PE	1094	2.63	768-0227	36PE	12,800	3.89
768-0197	26PE	1200	2.70	768-0229	37PE	15,898	4.37
768-0199	27PE	1583	2.82	768-0231	38PE	20,000	4.79
768-0211	28PE	1999	2.97	768-0233	39PE	25,188	5.34
768-0213	29PE	2780	3.00	768-0235	40PE	31,700	6.29

HEAVY FORMVAR MAGNET WIRE ON 1-LB. SPOOLS

HF-Heavy Formvar Class A 105°C Type T-2. Great film flexibility and resistance to abrasion and solvents. Round bare copper conductor covered with baked film insulation form a varnish base on a vinyl acetal resin. All HF Types have a double layer of film coating. *Size and Type. 1 lb.

Stock No.	*	Feet	EACH	Stock No.	*	Feet	EACH
768-0184	20HF	313	3.44	768-0216	31HF	4410	5.01
768-0186	21HF	397	3.49	768-0218	32HF	4900	5.09
768-0188	*22HF*	501	3.54	768-0220	33HF	6441	5.26
768-0190	23HF	628	3.59	768-0222	34HF	7950	5.47
768-0192	24HF	798	3.80	768-0224	35HF	9002	6.16
768-0194	25HF	1094	4.24	768-0226	36HF	12,800	6.84
768-0196	26HF	1200	4.42	768-0228	37HF	15,898	7.73
768-0198	27HF	1583	4.59	768-0230	38HF	20,000	8.61
768-0210	28HF	1999	4.77	768-0232	39HF	25,188	9.23
768-0212	29HF	2780	4.87	768-0234	40HF	31,700	11.38
768-0214	30HF	3200	4.92	.....	.....	.....	.....

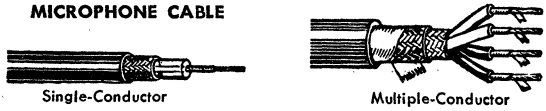
SHIELDED PLASTIC INTERCOM CABLE

A B C

Two-conductor shielded cable for intercoms, sound and PA systems, and other types of audio circuits that require shielding. All have plastic jackets with color-coded conductors. Fig. A has tinned copper-shield; Fig. B, spiral-type tinned copper shield; Fig. C, aluminum-wrapped shield with ground wire. Types 972202 and 972002 are shielded with aluminum foil Mylar backed shield—provides 100% shielding and is suitable for audio and data use where cross-talk must be reduced to a minimum.

Size	Nom. O.D.	Fig.	Mfr's Type	25-Ft. Spool Stock No.	25-Ft. Spool EA.	50-Ft. Spool Stock No.	50-Ft. Spool EA.	100-Ft. Spool Stock No.	100-Ft. Spool EA.
#22	.185″	A	742202	768-8840	2.63	768-8841	4.15	768-8842	6.90
#22	.195″	C	972202	768-9210	2.32	768-9211	3.20	768-9212	5.17
#20	.210″	C	972002	768-9200	2.68	768-9201	3.60	768-9202	6.36
#20	.195″	B	692002	768-8800	2.75	768-8801	4.40	768-8802	6.00
#22	.175″	B	692202	768-8808	2.43	768-8809	3.90	768-8810	4.80

MICROPHONE CABLE



Single-Conductor Multiple-Conductor

Plastic and rubber-jacketed mike cable with tinned, stranded copper conductors. All have tinned copper braided shield except *tinned copper spiral shield. Plastic-jacketed types have plastic insulation and rubber-jacketed types, rubber insulation. Multiple-conductor types are color coded. Single-conductor type is especially suitable for lapel or lavalier mikes; 2-conductor types, for low-impedance mikes; 6-conductor type, for power supply cable. †No. Conductors. Av. shpg. wt.: 25′ spool, 1 lb.; 100′ spool, 6 lbs.

PLASTIC JACKET (250 WVDC)

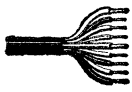
Mfr's Type	†	Size	O.D.	25-Ft. Spool Stock No.	25-Ft. Spool EA.	50-Ft. Spool Stock No.	50-Ft. Spool EA.	100-Ft. Spool Stock No.	100-Ft. Spool EA.
722201	1*	#22	.155″	768-8820	1.73	768-8821	3.20	768-8822	5.75
732202	2	#22	.231″	768-8830	4.15	768-8831	7.45	768-8832	11.45

RUBBER JACKET (600 WVDC)

Type 662-	†	Size	O.D.	100′ Spool Stock No.	100′ Spool EA.	250′ Spool Stock No.	250′ Spool EA.	500′ Spool Stock No.	500′ Spool EA.
001	1	#20	.230″	768-8705	12.98	768-8710	26.25	768-8715	50.55
002	2	#20	.270″	768-8720	14.86	768-8725	30.60	768U8730	61.05
003	3	#20	.285″	768-8735	16.67	768-8740	36.00	768X8745	70.50
004	4	#20	.305″	768-8750	18.60	768-8755	40.50	768X8760	78.75
006	6	#20	.345″	768-8765	28.39	768U8770	62.25	768X8775	123.00

MULTIPLE-CONDUCTOR INTERCOM CABLE (Not Paired)

U.L. APPROVED INNER CONDUCTORS



Grey plastic (.020″ thickness) jacketed cable with multiple, non-paired, 010″ PUC insulated, #22 stranded copper conductors. Excellent for permanent installation of speakers, control and intercom circuits. Color coded.

No. of Cond.	Nom. O.D.	Type 832-	100′ Spool Stock No.	100′ Spool EA.	No. of Cond.	Nom. O.D.	Type 832-	100′ Spool Stock No.	100′ Spool EA.
3	.145″	203	768-9149	4.09	12	.255″	212	768-9155	13.53
4	.170″	204	768-9150	5.37	15	.280″	215	768-9158	22.88
5	.175″	205	768-9151	6.18	30	.365″	230	768-9160	42.99
6	.185″	206	768-9152	9.27	40	.425″	240	768-9162	65.00
7	.190″	207	768-9153	9.60	50	.500″	250	768-9164	77.09
8	.200″	208	768-9154	10.00	60	.530″	260	768X9166	116.90

PAIRED UNSHIELDED INTERCOM CABLE (JACKETED)

U.L. APPROVED INNER CONDUCTORS

For intercom and telephone wiring. Color-coded conductors are No. 22 solid copper, cabled in twisted pairs with high-dielectric plastic jacket overall.

No. Cond.	Nom. O.D.	Type 852-	25-Ft. Spool Stock No.	25-Ft. Spool EA.	50-Ft. Spool Stock No.	50-Ft. Spool EA.	100-Ft. Spool Stock No.	100-Ft. Spool EA.
2 (1 pr.)	.130″	201	768-9168	1.85	768-9170	2.50	768-9172	3.00
6 (3 pr.)	.220″	203	768-9174	3.03	768-9176	4.78	768-9178	5.70
8 (4 pr.)	.255″	204	768-9179	4.59	768-9180	6.60	768-9181	10.50
12 (6 pr.)	.275″	206	768-9185	5.41	768-9186	7.20	768-9187	10.05

TEST PROD WIRE

Rugged, rubber-covered wire designed to withstand extremely high voltages. Offers extreme flexibility and limpness to facilitate testing. Breakdown voltage, 12kV for 20 AWG; 20kV for 18 AWG. Wt. per 100′, 2 lbs.

Type	Color	AWG	Str.	Insul. Thkns.	O.D.	Stock No.	100′ Spools, EA.	Stock No.	500′ Spools, EA.	Stock No.	1000′ Spools, EA.
982041	Red	#20	41x36	.046″	.137″	768-9252	4.09	768-9262	14.70	768-9272	27.90
982041	*Black*	#20	41x36	.046″	.137″	768-9250	4.09	768-9260	14.70	768-9270	27.90
981865	Red	#18	65x36	.047″	.144″	768-9222	4.59	768-9232	16.95	768-9242	32.85
981865	*Black*	#18	65x36	.047″	.144″	768-9220	4.59	768-9230	16.95	768-9240	32.85

"JUKE BOX" SPEAKER CABLE

Type A has two parallel 24-gauge conductors, both stranded—one tinned, one bare. Plastic insulation. Has .058x.115″ O.D. Available in gray or clear—specify color when ordering. Type B has two parallel 18-gauge conductors, 41x34 stranded. Has .115x.215″ O.D. Available in choice of black or gray—specify color desired when ordering. Shpg. wt. per 100 feet: 24 gauge, 1 lb.; 18 gauge, 2½ lbs.

Mfr's Type	Type	Ga.	Stock No. Clear	Stock No. Blk	Stock No. Gray	100′ Spool	Stock No. Clear	Stock No. Blk	Stock No. Gray	500′ Spool	Stock No. Clear	Stock No. Blk	Stock No. Gray	1000′ Spool
1242T	A	24	768-0361	.....	-0360	2.05	768-0367	.....	-0365	6.23	768-0371	.....	-0370	12.35
1182T	B	18	768-.....	-0330	-0332	4.67	768-.....	-0335	-0336	16.74	768X.....	-0340	-0339	33.48

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Wire and Cable

AUDIO SECTION **BELDEN**

STRAIN GAUGE CABLE

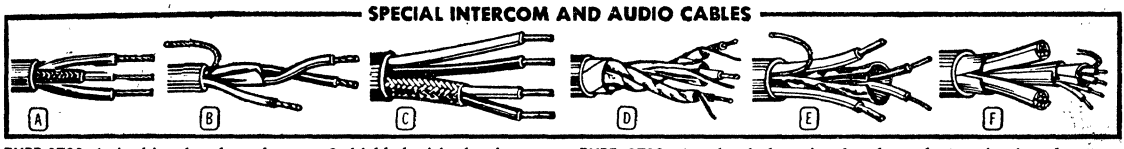
8434, 8723

8728, 8729

TYPE 8434: Conductors consist of 3 strands of tinned copper, and 4 strands of copperweld; 8723: conductors consist of 7 strands of tinned copper. Both types polyethylene insulated conductors, aluminized Mylar shields, chrome vinyl jacket. TYPE 8729: Conductors of tinned copper, polyethylene insulated, under Beldfoil aluminum Mylar shield, tinned drain wire, chrome vinyl jacket. TYPE 8728: Tinned copper, polypropylene insulated, cabled in pairs, each pair Beldfoil aluminum-polyester shielded with stranded copper drain wire, polyester film over each shield, overall Beldfoil shield and tinned drain wire, chrome vinyl jacket.

Mfr's Type	Size	Strands	O.D.	Wkg. Volts	Wt./100' Lbs.	Stock No.	100' Spool	Stock No.	500' Spool	Stock No.	1000' Spool
8434	25	7x33	.179"	400	2	732-2073	7.68	732-2071	31.15	732-2072	62.30
8723	22	7x30	.165"	400	2½	732-5009	7.68	732-5010	30.60	732U5011	61.20
8728	22	7x30	.188"	400	2¾	.....	.....	732-5018	46.15	732U5019	92.30
8729	22	19x34	.250"	600	4¼	.....	.....	732X5020	49.75	732U5021	99.50

SPECIAL INTERCOM AND AUDIO CABLES



TYPE 8722. 4 vinyl insulated conductors; 2 shielded with aluminum-"Mylar" wrapping; 2 unshielded. #20 stranded, tinned copper ground wire; chrome vinyl jacket.

TYPE 8724. Same as 8722 above, except has #22 gauge wire.

TYPE 8726. 12 conductors cabled in 3 quads. "Beldfoil" shield over 2 conductors of each quad, and clear "Mylar" shield over entire quad. Color-coded shields. Ground wire. Chrome vinyl jacket overall.

TYPE 8727. 28 conductor cable. Construction and all other specifications are identical with Type 8726 above.

TYPE 8730. 4 cond., polypropylene ins., Beldfoil shield over one pair, ground wire.

TYPE 8732. 4 polyethylene insulated cond. 1 pair tinned copper shielded. 1 pair unshielded. Chrome vinyl plastic jacket.

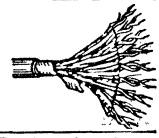
TYPE 8733. 3 conductors separately aluminum-"Mylar" shielded. Ground wire for each conductor is tinned, cadmium bronze ribbon under "Beldfoil" Z fold.

TYPE 8734. 3 vinyl insulated conductors. One conductor has a tinned copper shield. The other two conductors are unshielded. Has chrome vinyl jacket overall.

TYPE 8763. 3 polyethylene insulated conductors; aluminum-"Mylar" shield over 2 conductors; 1 unshielded. No 20 stranded ground wire. Chrome vinyl jacket overall.

Mfr's Type	Fig.	Cond.	AWG (Stranding)	O.D.	Wt./100' Lbs.	100-Ft. Std. Spool		500-Ft. Std. Spool		1000-Ft. Std. Spool	
						Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8722	E	4	20 (7x28)	.260"	3¾	.....	.....	732-5007	37.50	732U5008	75.00
8724	D	4	22 (7x30)	.165"	2¼	.....	.....	732-5012	29.85	732U5013	59.70
8726	F	12	22 (7x30)	.330"	7¼	732-5016	25.05	.....	.....	.....	.....
8727	E	28	22 (7x30)	.450"	14½	732-5017	51.10	.....	.....	.....	.....
8730	E	4	22 (7x30)	.250"	3¼	.....	.....	732-5022	37.50	732U5023	75.00
8732	C	4	22 (7x30)	.188x.296"	3	732-5026	8.60	732-5027	32.65	732U5028	65.30
8733	D	3	22 (7x30)	.205"	2½	732-5029	8.18	732-5030	31.15	732U5031	62.30
8734	A	3	22 (7x30)	.194"	2	732-5032	6.84	732-5033	25.75	732U5034	51.50
8763	B	3	20 (7x28)	.210"	3	.....	.....	732-5098	28.90	732U5099	57.80

INSTRUMENTATION CABLE (Multiple Pair Individually Shielded)



Heavy-duty, low-loss multi-conductor cable. Color-coded for quick, easy identification. Consists of pairs of tinned, solid and stranded copper conductors. Each pair has Beldfoil aluminum-Mylar tape shield that eliminates noise and crosstalk between pairs. Chrome vinyl jacket fights water, sun, oil and grease. Tear-resistant. All conductors are 22-gauge tinned copper. 300 volts suggested working voltage. Polypropylene insulation; maximum operating temperature, 105°C. *Vinyl insulation; maximum operating temperature, 80°C.

Mfr's Type	Pairs	O.D.	Wt./100' Lbs.	100-Ft. Std. Spool		500-Ft. Std. Spool		1000-Ft. Std. Spool	
				Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8767*	3	.270"	5	732-5105	12.69	732U5106	52.20	732Z5107	104.40
8768*	6	.394"	8½	732-5108	25.88	.....	.....	.....	.....
8764*	9	.440"	13	732-5100	35.40	.....	.....	.....	.....
8765*	11	.485"	14½	732-5101	42.58	.....	.....	732Z5102	369.00
8766*	15	.540"	19½	732-5103	58.78	732U5104	252.00	.....	.....
8769	19	.620"	26	732X5109	91.85	.....	.....	.....	.....
8777	3	.270"	5	732-5121	14.27	732X5122	60.80	732Z5123	121.60
8778	6	.394"	8½	732-5124	29.05	732Z5125	127.50	732Z5126	255.00
8774	9	.440"	13	732-5116	44.08	.....	.....	.....	.....
8775	11	.485"	15½	732-5117	51.60	.....	.....	.....	.....
8776	15	.540"	19	732-5118	69.96	732Z5119	294.00	732Z5120	588.00

STANDARD AND MINIATURE BROADCAST AUDIO CABLES

Two-conductor, color-coded broadcast audio cables come in standard and miniature size. TYPES 8437 and 8441 have braided, tinned copper shields; TYPES 8450 and 8451 have spiral-wrapped aluminum-Mylar shields. All types have tinned drain wires. Available in 100, 500 or 1000 foot spools. Average shpg. wt., per 100 feet, 2½ lbs. TYPE 8451 available in Black Vinyl or Gray jacket.

STANDARD CABLE

MINIATURE CABLE

Mfr's Type	AWG (Stranding)	Cap. pF	O.D.	Wkg. Volts	Mfr's Type	AWG (Stranding)	Cap. pF	O.D.	Wkg. Volts
8437	22 Solid	48	.200"	200	8450	22 Solid	40	.118"	200
8441	22 (16x34)	49	.210"	200	8451	22 (7x30)	34	.135"	200

PRICE PER SPOOL

Mfr's Type	Cable Size	Jacket	Wt./100' Lbs.	Stock No.	100' Spool	Stock No.	500' Spool	Stock No.	1000' Spool
8437	CBS	Black Vinyl	2½	.....	.....	732-2074	27.40	732X2075	54.80
8441	CBS	Black Vinyl	3	732-2078	7.68	732-2076	30.75	732X2077	61.50
8450	Miniature	Black Vinyl	1½	732-2102	5.01	732-2103	16.70	732-2104	33.45
8451	Miniature	Black Vinyl	1½	732-2108	5.27	732-2106	19.50	732-2107	39.00
8451	Miniature	Gray	1½	732-2105	5.27	732-2109	19.50	732-2110	31.00

INSULATED LITZ WIRE

TYPE 8817. Celenamel insulated 5x44 stranded copper, with one nylon wrap. Excellent for winding antenna primaries. Also for hand-wiring RF coils and IF coils. Outside diameter .008". 100-ft spool. Shpg. wt., ¼ lb.
732-6001 90

Wire and Cable

SPECIAL INSTRUMENTATION CABLES

TYPE 8725. Four pairs No. 20 (7x28) tinned copper cable is Belfoil shielded. Chrome vinyl outer jacket. 105°C maximum operating temperature. Rated at 400 WV. Only 27 pF capacitance per foot between conductors. O.D. .360". Conductors color-coded in following combinations: Black, Red, Green, White, White/Red, White/Black, White/Green, White/Yellow.

732U5014. 500-ft. Spool. Shpg. wt. 37 lbs. 141.11

732Z5015. 1000-ft. Spool. Shpg. wt. 77 lbs. 253.50

PAIRED VINYL INTERCOM AND TELEPHONE UNSHIELDED CABLE

Color-coded conductors cabled in pairs. Free from cross-talk and interference. Vinyl insulation for high dielectric strength. Weather and tear-resistant. "F" in Stock No. suffix—shipped from factory in Chicago.

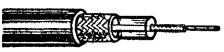
Mfr's Type	Cond.	AWG (Stranding)	O.D.	Wt./100' Lbs.	100-Ft. Spool		500-Ft. Spool		1000-Ft. Spool	
					Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8442	2	22 (7x30)	.165"	1¾	.....	.....	732-2079	12.00	732-2080	24.00
8740	2	22 solid	.150"	1½	732-5045	3.14	732-5046	10.05	732-5047	20.10
9740	2	18 (16x30)	.220"	2¾	.....	.....	732-7450	20.85	732X7451	41.70
8741	4	22 solid	.201"	3	732-5048	5.21	732-5049	18.85	732U5050	37.70
9744	4	22 (7x30)	.230"	2¾	.....	.....	732-7464	22.15	732X7465	44.25
8742	6	22 solid	.240"	4	732-5051	6.81	732-5052	26.25	732U5053	52.50
9745	6	22 (7x30)	.280"	2	.....	.....	732-7468	32.85	732X7469	65.70
9746	8	22 (7x30)	.295"	4.7	.....	.....	732X7470	42.00	732F7471	84.00
8743	12	22 solid	.305"	5	732-5054	11.18	732X5055	46.15	732U5056	92.30
8747	12	22 (7x30)	.340"	6	732-5064	13.52	732X5065	55.90	.....	.....
8744	18	22 solid	.354"	7	732-5057	16.53	732U5058	69.00	732Z5059	138.00
8748	18	22 (7x30)	.389"	8	732-5066	20.20	732U5067	86.65	732Z5068	173.30
8753	22	22 solid	.384"	9½	732-5072	20.85	732U5073	89.30	732Z5075	178.60
9747	24	22 (7x30)	.440"	12	.....	.....	732F7475	119.25	732F7476	238.50
9741	24	18 (16x30)	.690"	27	.....	.....	732F7453	255.00	732F7454	510.00
8754	26	22 solid	.409"	11	732-5076	23.38	732Z5077	100.50	732Z5078	201.00
8745	30	22 solid	.420"	11	732-5062	28.72	732Z5060	119.30	732Z5061	238.60
8749	30	22 (7x30)	.425"	14	732-5085	34.23	732Z5074	145.50	732Z5069	291.00
9742	30	18 (16x30)	.800"	35	.....	.....	732F7458	318.75	732F7459	637.50
8755	38	22 solid	.480"	14½	.....	.....	732Z5079	149.25	732Z5080	289.50
9748	38	22 (7x30)	.520"	16	.....	.....	732F7480	183.00	732F7481	366.00
9743	38	18 (16x30)	.880"	43	.....	.....	732F7461	402.75	732F7462	805.50
8756	46	22 solid	.510"	18	.....	.....	732Z5081	180.75	732Z5082	361.50
9749	46	22 (7x30)	.570"	20	.....	.....	732F7485	235.50	732F7486	471.00

TWO-CONDUCTOR UNSHIELDED CABLE

For PA and intercoms, speaker extensions. Copper, vinyl-insulated, tinned conductors, except TYPES 8481, 8482 and 8486—untinned. Cabled, chrome vinyl jackets, except TYPE 8795—rose gray vinyl jacket, polyethylene insulated. Resists water, oil, grease, sun and ozone. †Twisted-pair types without jacket.

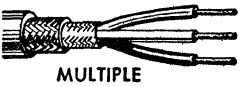
Mfr's Type	Cond.	AWG (Stranding)	O.D.	Wt./100' Lbs.	100-Ft. Spool		500-Ft. Spool		1000-Ft. Spool	
					Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8205	2	20 (10x30)	.190"	2¼	732-0902	4.25	732-0903	14.10	732U0904	28.20
†8460	2	18 (7x26)	.175"	2¼	732-2215	4.77	732-2216	16.90	732U2217	33.80
8461	2	18 (7x26)	.226"	3¼	732-2220	5.64	732-2221	20.85	732U2222	41.70
†8470	2	16 (19x29)	.195"	2½	.....	.....	732-2280	21.55	732U2281	43.10
8471	2	16 (19x29)	.256"	4	.....	.....	732-2284	28.35	732U2285	56.70
8473	2	14 (19x29)	.332"	6	.....	.....	732U2295	45.00	732U2296	90.00
8477	2	12 (19x25)	.384"	8¾	.....	.....	732U2310	63.00	732U2311	126.00

VINYL PLASTIC-COVERED MICROPHONE AND SHIELDED POWER-SUPPLY CABLE



SINGLE

MINIATURE

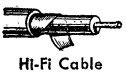


MULTIPLE

Lightweight, small-diameter cable with low loss, low capacitance. Resists ozone deterioration and chemical solvent action. Tinned copper-braid shield. 8411 is ideal for lapel or lavalier mikes. 8420 is miniature.

Mfr's Type	No. Cond.	AWG (Stranding)	Cap. pF	O.D.	Wkg. Volts	Wt./100' Lbs.	Stock No.	50' Spool	Stock No.	100' Spool	Stock No.	250' Spool	Stock No.	500' Spool
8401	1	25 (7x33)	25	.200"	5000	2¾	732-1990	3.77	732-1992	6.30	732-1993	13.20	732-1994	26.40
8411	1	25 (7x33)	34	.144"	3500	1¾	732-2025	2.90	732-2026	4.95	732-2027	10.45	732-2028	20.90
8422	2	22 (16x34)	18	.231"	1000	4	732-2057	5.67	732-2058	8.95	732-2059	19.75	732-2056	39.40
8403	3	20 (26x34)	25	.244"	600	5	732-2007	7.51	732-2008	12.60	732-2009	28.30	732X2006	56.60
8404	4	20 (26x34)	25	.255"	600	5½	.....	.....	732-2011	13.65	732-2012	31.15	732X2010	62.30
8405	5	20 (26x34)	25	.275"	600	5¾	.....	.....	.....	.....	732-2014	36.40	732X2013	72.80
8420	2	24 (45x40)	22	.185"	500	2½	732-2048	5.17	734-2049	8.85	732-2050	20.50	732X2051	41.00

AUDIO CABLES FOR HI-FI, STEREO AND PHONO APPLICATIONS



Hi-Fi Cable

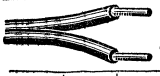
Phono Cable

Dual Channel

Stranded, tinned copper, vinyl or rubber insulation. 8421: Hi-Fi cable, spiral wrap 8430: Mono phono pickups. 8416: for stereo and language lab applications. 8417: Single, miniature audio connecting cable. 100% shield. *Use two cables for maximum channel separation. †.106x.213".

Mfr's Type	Jacket	No. Cond. & AWG	O.D.	Wt./100' Lbs.	25 Ft.		50 Ft.		100 Ft.		250 Ft.	
					Stock No.	EACH	Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8421	Chr. Vinyl	1-25 (7x33)	.180"	2¼	732-2052	2.23	732-2053	3.66	732-2054	6.00	732-2055	13.20
**8430*	Vinyl	2-32 (7x40)	.050"	¼	732-2197	1.16	.....	.....	.....	.....	732-2068	6.30
8416	Ch. Vinyl	2-25 (7x33)	†	2½	732-2036	2.40	732-2038	3.96	732-2039	7.05	732-2037	16.28
8417	Chr. Vinyl	1-25 (7x33)	.140"	1⅓	732-2040	1.83	732-2041	2.70	732-2042	5.03	732-2043	10.95

VINYL "JUKE BOX" SPEAKER CABLE



8782 has two parallel conductors No. 24 stranded (7x32) copper, one bare, one tinned. In chrome, white or clear vinyl. O.D., .058x.115". 8649 same except No. 20 stranded (7x28). Specify chrome or clear. O.D., .073x.146".

Mfr's Type	Wt., 100'	50' Spool	Stock No. Clear	Stock No. White	Stock No. Chr.	100' Spool	Stock No. Clear	Stock No. White	Stock No. Chr.	500' Spool	Stock No. Clear	Stock No. White	Stock No. Chr.	1000' Spool
8782	¾	1.42	732-5303	-5301	-5302	1.89	732-5313	-5311	-5312	6.30	732-5323	-5321	-5322	12.60
8649	1½	.....	.....	.....	.....	3.20	732-3772	.....	-3771	10.50	732-3782	.....	-3781	21.00	732-3792	.....	-3791	21.00

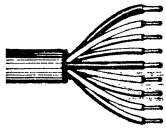
Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Wire and Cable

AUDIO SECTION

BELDEN

MULTIPLE-CONDUCTOR CABLE (NOT PAIRED)



Conductors are made of flexible, tinned copper stranded wire, with color-coded vinyl plastic insulation. Conductors are cabled together and enclosed overall in a chrome-vinyl plastic jacket. Resist oil, gasoline and weather. Waterproof jacket is also tear-resistant. Can be easily stripped for use. New types: 8489 for long runs, up to 180′, of rotor control cable; 8619 for sound systems, control wiring, remote control. Suggested working voltages: 22-gauge, 200 volts; 18-gauge, 400 volts; 16- and 14-gauge, 600 volts.

Mfr's Type	Cond.	AWG (Stranding)	O.D.	Wt./100′ Lbs.	100-Ft. Spool Stock No.	100-Ft. Spool EACH	500-Ft. Spool Stock No.	500-Ft. Spool EACH	1000-Ft. Spool Stock No.	1000-Ft. Spool EACH
8443	3	22 (7x30)	.150″	2	732-2081	4.07	732-2082	14.65	732-2083	29.30
8444	4	22 (7x30)	.168″	2½	732-2084	5.37	732-2085	19.95	732U2086	39.90
8445	5	22 (7x30)	.180″	2¾	732-2087	6.21	732-2088	23.85	732U2089	47.70
9430	7	22 (7x30)	.200″	3	.....	.....	732-7330	29.95	732X7331	59.85
8456	10	22 (7x30)	.260″	5¼	732-2120	12.02	732U2121	49.50	732U2122	99.00
8457	12	22 (7x30)	.260″	5½	732-2123	13.52	732X2128	56.25	732Z2129	112.50
8458	15	22 (7x30)	.320″	8	732-2200	22.87	732X2124	92.95	.....	.....
9431	20	22 (7x30)	.345″	9	.....	.....	732F7335	111.75	732F7336	223.50
8459	25	22 (7x30)	.370″	11½	732-2126	35.07	732Z2127	145.50	.....	.....
9432	30	22 (7x30)	.400″	12	.....	.....	732F7340	161.25	732F7341	322.50
9433	40	22 (7x30)	.455″	16	.....	.....	732F7345	212.65	732F7346	425.25
9434	50	22 (7x30)	.500″	20	.....	.....	732F7350	265.50	732F7351	531.00
8446	6	18, 22 (16x30)	.222″	4¼	732-2090	9.25	732-2091	36.60	732U2092	73.20
8447	7	18, 22 (16x20)	.246″	4¾	732-2093	10.68	732U2094	42.45	732U2095	85.20
8448	8	18, 22 (16x30)	.250″	5	732-2096	11.42	732U2097	46.50	732Z2098	93.00
8449	9	18, 22 (16x30)	.261″	5¼	732-2099	12.19	732U2100	50.25	732Z2101	100.50
8489	4	18 (16x30)	.250″	5¼	732-2365	9.75	732U2367	39.00	732U2368	78.00
8465	5	18 (16x30)	.272″	5¾	732-2241	12.09	732U2242	49.90	732Z2243	99.80
8467	7	18 (16x30)	.320″	8½	732-2250	15.94	732U2251	65.60	732Z2252	131.20
8469	9	18 (16x30)	.375″	10¼	732-2275	21.71	732Z2276	91.50	732Z2277	183.00
8466	12	18 (16x30)	.402″	13½	732-2247	29.22	732Z2248	128.25	.....	.....
8468	15	18 (16x30)	.490″	18¼	732-2270	40.58	732Z2271	172.50	732Z2273	345.00
8619	19	18 (16x30)	.505″	19	.....	.....	732Z3710	199.50	732-3711	399.00
9626	25	18 (16x30)	.600″	26	.....	.....	732F7410	262.50	732F7411	525.00
8620	4	16 (19x29)	.375″	8¼	732-3715	15.36	732X3716	64.50	732Z3717	129.00
9620	5	16 (19x29)	.405″	10¼	732-7385	20.00	732F7386	76.15	732F7387	152.25
8621	7	16 (19x29)	.455″	13	732-3719	28.22	732Z3720	114.00	.....	.....
9621	9	16 (19x29)	.510″	17	.....	.....	732F7391	141.00	732F7392	282.00
8622	12	16 (19x29)	.600″	21¼	732U3723	45.92	732X3724	192.00	732X3727	384.00
8623	15	16 (19x29)	.650″	26¾	732U3728	64.29	.....	.....	.....	.....
8624	19	16 (19x29)	.715″	42¼	732U3733	79.32	.....	.....	.....	.....
9622	25	16 (19x29)	.820″	46	.....	.....	732F7395	384.00	732F7396	768.00
8627	4	14 (19x27)	.495″	14¼	732-3740	27.38	.....	.....	.....	.....
9623	5	14 (19x27)	.560″	18	732-7400	33.40	732F7401	135.00	732F7402	270.00
8628	7	14 (19x27)	.630″	23	732-3743	46.42	.....	.....	.....	.....
9624	9	14 (19x27)	.750″	32	.....	.....	732F7404	225.75	732F7405	451.50
8629	12	14 (19x27)	.770″	38½	732X3746	78.15	.....	.....	.....	.....
9625	15	14 (19x27)	.900″	51	.....	.....	732F7407	382.50	732F7408	765.00

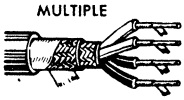
TYPE 50 NEOPRENE MULTIPLE CONTROL CABLE (NOT PAIRED)

9420	5	16 (65x34)	.520″	17	.....	.....	732F7300	147.00	732F7301	294.00
9422	7	16 (65x34)	.560″	21	.....	.....	732F7305	193.50	732F7306	387.00
9424	9	16 (65x34)	.645″	26	.....	.....	732F7309	246.00	732F7310	492.00
9425	12	16 (65x34)	.745″	36	.....	.....	732F7311	336.00	732F7312	672.00
9427	16	16 (65x34)	.800″	44	.....	.....	732F7320	425.25	732F7321	850.50
9429	20	16 (65x34)	.880″	54	.....	.....	732F7325	523.50	732F7326	1047.00

RUBBER, HYPALON AND NEOPRENE MICROPHONE AND SHIELDED POWER-SUPPLY CABLE

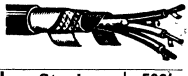
Recommended for high abrasion resistance and installations where cable must make tight bends or lie perfectly flat. Tinned conds., tinned copper-braid shield. Rubber-covered, except 8407, 8428: heavy-duty neoprene jacket; 8402, 8408: brown Hypalon jacket. 8413 is a miniature size.

MULTIPLE



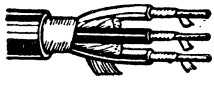
SINGLE

MINIATURE



Mfr's Type	No. Cond.	AWG (Stranding)	Cap. pF	O.D.	Wkg. Volts	Wt./100′ Lbs.	Stock No.	50′ Spool	Stock No.	100′ Spool	Stock No.	250′ Spool	Stock No.	500′ Spool
8402	2	20 (26x34)	42	.268″	600	6	.....	.....	732-2003	14.40	732-2004	34.35	732U2005	68.70
8408	2	16 (65x34)	50	.385″	600	10½	.....	.....	732-2017	24.75	732U2018	60.00	732U2019	120.00
8410	1	25 (7x33)	33	.245″	3000	4¼	732-2022	7.11	732-2023	11.90	732-2024	27.45	732U2021	54.90
8412	2	20 (26x34)	42	.268″	600	5¼	732-2029	7.84	732-2031	13.35	732-2032	30.60	732U2030	61.20
8426	6	20 (26x34)	40	.349″	600	9¼	.....	.....	732-2061	25.50	732U2062	62.70	.....	.....
8427	7	20 (26x34)	40	.360″	600	10¼	.....	.....	732-2063	28.05	.....	.....	.....	.....
8418	8	20 (26x34)	42	.386″	600	11½	.....	.....	732-2044	31.50	732U2045	76.50	.....	.....
8428	2	18 (41x34)	47	.295″	600	6¾	.....	.....	732-2065	17.25	.....	.....	732 U2064	81.00
8413	2	24 (45x40)	38	.190″	300	2¾	732-2033	7.68	732-2034	12.75	.....	.....	732 U2035	61.20
8407	4	16 (65x34)	37	.422″	600	15	.....	.....	732-2016	30.45	732U2015	73.50	.....	.....

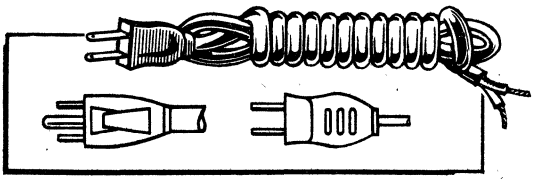
RUBBER-JACKETED SERVICE CORDS AND MULTIPLE-CONDUCTOR CABLES

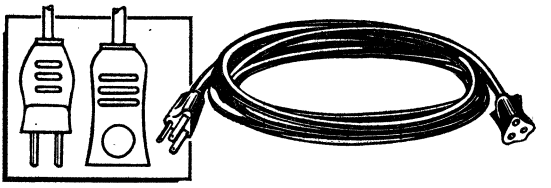


Cords and cables for use on appliances, power tools, Public Address systems, speakers, remote control circuits, extension cords, test equipment, press-to-talk intercom circuits, etc. Maximum voltage rating, 300 V at −60°C. Stranded copper conductors have rubber insulation, cabled with fillers, with black rubber jackets. Color-coded for fast, easy identification.

Mfr's Type	U. L. Type	No. Cond.	AWG (Stranding)	Cond.	O.D.	Wt./100′ Lbs.	Stock No.	100′ Spool	Stock No.	250′ Spool	Stock No.	500′ Spool	Stock No.	1000′ Spool
8452	SV	2	18 (41x34)	Bare	.245″	3¾	.....	.....	.....	.....	732X2111	34.95	732X2112	66.90
8478	SJ	2	18 (41x34)	Bare	.298″	5½	732-2315	9.11	732-2316	19.50	.....	.....	.....	.....
8472	SJ	2	16 (65x34)	Bare	.325″	6¾	732-2288	12.35	732-2289	26.70	.....	.....	.....	.....
8474	.....	2	14 (41x30)	Bare	.360″	8¼	732-2304	15.94	.....	.....	.....	.....	.....	.....
8479	.....	3	14 (41x30)	Bare	.380″	10¼	732-2319	18.53	732U2320	40.80	.....	.....	.....	.....
8453	SV	3	18 (41x34)	Tinned	.265″	4½	732-2113	11.02	.....	.....	732X2114	48.45	.....	.....
8454	.....	4	18 (41x34)	Tinned	.265″	5½	732-2115	12.75	.....	.....	732X2116	52.95	732X2117	105.90
8455	.....	5	3—20(26x34); 2—18(41x34)	Tinned	.280″	5½	732-2118	12.69	732-2119	28.50	.....	.....	.....	.....

U.L. Listed And C.S.A. Approved Cords And Power Cordage





REPLACEMENT CORDS

Flexible high quality cords. One end has molded black plastic straight plug (either 2 prong or 3 prong depending on 2 or 3 conductor cable). The other end of the jacket is stripped back 1½" with ⅝" of conductors stripped. Voltage rating: 300V. 3 conductor cord is used where 1 conductor is required for grounding. Black except (*) supplied in gray.

EXTENSION CORD SETS

Flexible, 2 or 3 conductor, high quality black rubber cords. Black molded plastic male plug one end, molded plastic female plug on other end. Will fit conventional sockets and plugs. Voltage rating: 300 V. 3 conductor cord used where 1 conductor requires grounding, such as for hand tools, garden edgers, and a wide variety of other electric and electronic items. *Gray.

2 CONDUCTOR REPLACEMENT CORDS

Mfr's Type	Cond. Size	Cond. Strd.	Rating Amps	U.L. Style	Cord Lgth.	Stock No.	EACH
9600	18/2	41/34	7	*SV	6′	768-3400	.70
9602	18/2	41/34	7	*SVT	6′	768-3402	.59
9604	18/2	41/34	7	SVT	6′	768-3404	.59
9606	18/2	16/30	7	SJ	8′	768-3406	.81
9608	18/2	16/30	7	SJ	10′	768-3408	.89
9610	16/2	26/30	10	SJ	8′	768-3410	.93
9612	16/2	26/30	10	SJ	10′	768-3412	1.10

3 CONDUCTOR REPLACEMENT CORDS

Mfr's Type	Cond. Size	Cond. Strd.	Rating Amps	U.L. Style	Cord Lgth.	Stock No.	EACH
9601	18/3	41/34	7	SV	6′	768-3401	.86
9603	18/3	41/34	7	SV	8′	768-3403	.96
9609	18/3	41/34	7	*SVT	6′	768-3409	.77
9615	18/3	16/30	7	SJ	6′	768-3415	.89
9617	18/3	16/30	7	SJ	8′	768-3417	1.02
9637	18/3	16/30	7	*SJT	8′	768-3437	.90
9643	18/3	16/30	7	SJO	8′	768-3443	1.09
9619	16/3	26/30	10	SJ	9′	768-3419	1.38

2 CONDUCTOR EXTENSION CORDS

Mfr's Type	Cond. Size	Cond. Strd.	Rating Amps	U.L. Style	Cord Lgth.	Stock No.	EACH
9620	18/2	41/34	7	SV	6′	768-3420	.99
9622	18/2	41/34	7	*SV	9′	768-3422	1.08
9624	18/2	16/30	7	SJ	10′	768-3424	1.13
9626	18/2	16/30	7	SJ	25′	768-3426	2.70
9628	16/2	26/30	10	SJ	10′	768-3428	1.19
9630	16/2	26/30	10	SJ	25′	768-3430	3.23
9632	16/2	26/30	10	SJ	50′	768-3432	4.73
9634	16/2	26/30	10	SJ	100′	768-3434	10.38

3 CONDUCTOR EXTENSION CORDS

Mfr's Type	Cond. Size	Cond. Strd.	Rating Amps	U.L. Style	Cord Lgth.	Stock No.	EACH
9636	18/3	16/30	7	SJ	10′	768-3436	1.45
9638	18/3	16/30	7	SJ	25′	768-3438	3.23
9639	18/3	16/30	7	SJ	50′	768-3439	6.23
9641	16/3	26/30	10	SJ	10′	768-3441	1.65
9640	16/3	26/30	10	SJ	15′	768-3440	3.50
9642	16/3	26/30	10	SJ	25′	768-3442	5.25
9644	16/3	26/30	10	SJ	50′	768-3444	10.15

2 CONDUCTOR VINYL LINE CORDS

Brown cord with a molded plastic plug on one end and other end conductors are split 1" and stripped and twisted ⅝".

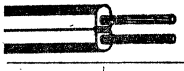
Mfr's Type	Cond. Size	Cond. Strd.	Nom. O.D.	U.L. Type	Length	Stock No.	EACH
9650	18/2	41/34	.110 x .207	SPT-1	6′	768-3450	.39
9651	18/2	41/34	.110 x .207	SPT-1	9′	768-3451	.49

FLEXIBLE RUBBER AND NEOPRENE SERVICE CORD AND POWER CABLE

High quality construction. All types except S.O. have rubber insulation and rubber jackets. S.O. types have neoprene jackets. All are U.L. Listed. For appliances, power tools and applications with other electrical products. Specify stranded spool length desired. Average shpg. wt. per 100′, 3 lbs.

Mfr's Type	U.L. Type	AWG Size	No. Cond.	Amps Cap.	Voltage Rating	O.D.	50′ Spools Stock No.	50′ Spools EACH	100′ Spools Stock No.	100′ Spools EACH	250′ Spools Stock No.	250′ Spools EACH
1182V	SV	18	2	5	300	.250″	768-0342	4.59	768-0343	7.20	768-0344	15.42
1182C	SJ	18	2	7	300	.300″	768-0311	5.76	768-0312	8.03	768-0313	19.11
1183C	SJ	18	3	7	300	.340″	768-0346	6.91	768-0347	11.76	768-0348	29.25
1184C	SJ	18	4	7	300	.360″	768-0350	13.97	768-0351	22.86	768X0352	47.03
1162C	SJ	16	2	10	300	.325″	768-0301	6.68	768-0302	11.78	768-0303	26.93
1163C	SJ	16	3	10	300	.355″	768-0305	10.13	768-0306	15.75	768X0307	34.80
1164C	SJ	16	4	10	300	.395″	768-0308	15.53	768-0309	25.43	768U0310	52.95
2142	S	14	2	15	600	.530″	768-0413	13.02	768-0414	21.00	768U0415	41.25
2143	S	14	3	15	600	.560″	768-0417	17.03	768-0418	30.30	768U0419	54.98
2144	S	14	4	15	600	.605″	768-0420	21.79	768U0421	36.00	768U0422	80.93
2122	S	12	2	20	600	.605″	768-0407	17.76	768U0408	31.50	768U0409	63.75
2123	S	12	3	20	600	.635″	768-0410	22.81	768U0411	33.00	768U0412	73.50
2102	S	10	2	25	600	.640″	768-0400	25.38	768U0401	37.58	768U0402	75.00
2103	S	10	3	25	600	.690″	768-0404	29.81	768U0405	44.55	768U0406	107.00
4142	SO	14	2	15	600	.530″	768-0435	17.95	768-0436	30.00	768X0437	55.13
4143	SO	14	3	15	600	.560″	768-0440	23.96	768-0441	40.25	768X0442	75.75
4144	SO	14	4	15	600	.605″	768-0445	27.38	768X0446	44.70	768Z0447	93.00
4123	SO	12	3	20	600	.635″	768-0430	29.92	768X0431	45.00	768Z0432	96.00
4103	SO	10	3	25	600	.690″	768-0425	41.83	768X0426	63.00	768Z0427	130.50

RUBBER (SP) LAMP CORD



Consist of two parallel #18 stranded copper wires. All types are polarity-ribbed. U.L. Listed. Available in 100, 500 and 1000 foot spools. Specify spool length desired from table below. Shpg. wt. per 100′, 3 lbs.

Mfr's Type	Type	Jacket	Color	100′ Spools Stock No.	100′ Spools EACH	500′ Spools Stock No.	500′ Spools EACH	1000′ Spools Stock No.	1000′ Spools EACH
1182S	SP	Rubber	Brown	768-0317	5.17	768-0319	20.52	768X0321	36.38
1182S	*SP*	*Rubber*	*Black*	768-0316	5.17	768-0318	20.52	768X0320	36.38

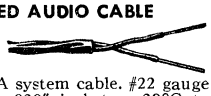
Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Alpha Wire and Cable

AUDIO SECTION

ALPHA WIRE

MULTI-CONDUCTOR UNSHIELDED AUDIO CABLE



Tinned copper covered with color-coded polyvinylchloride insulation. For unbalanced intercoms, as low voltage relay control cable, computer, PA system cable. #22 gauge with 7x30 stranding. .010″ wall thick.: .020″ jacket. −20°C to +60°C. 200 V.

Mfr's Type	Cond.	Nom. O.D.	Lbs.	Stock No.	100′ Spool
1176	6	.185″	2.6	708-5401	9.84
1177	7	.190″	2.8	708-5402	11.10
1178	8	.200″	3.5	708-5403	11.66
1179	9	.225″	3.8	708-5404	12.92
1180	10	.235″	4.2	708-5405	12.73
1181	12	.255″	5.0	708-5406	14.18
1181/15	15	.280″	6.2	708-5407	22.95
1181/20	20	.310″	8.2	708-5408	34.74
1181/25	25	.340″	10.0	708-5409	37.05
1181/30	30	.365″	12.3	708-5410	80.55

SHIELDED MICROPHONE CABLE

Plastic Jacketed. Have stranded, tinned copper conductors with color-coded polyethylene insulation. With gray, polyvinylchloride jacket overall. Types 1702 and 1705 have .020″ jacket; Type 1710 has .025″ jacket; others .030″ jacket. Wt., 2 lbs.

WITH BRAIDED SHIELD

Mfr's Type	Conductor No.	Conductor Size	O.D.	100′ Spool Stock No.	100′ Spool EACH	1000′ Spool Stock No.	1000′ Spool EACH
1703	1	24	.145″	708-6003	5.21	.....	.....
1704	1	24	.190″	708-6006	6.80	.....	.....
1706	1	20	.175″	708-6012	10.25	.....	.....
1710	2	22	.230″	708-6018	9.72	708-6020	77.76
1712	2	20	.240″	708-6028	14.56	.....	.....

WITH SPIRAL WRAP SHIELD

1702	1	26	.110″	708-6000	5.91	708-6002	42.12
1705	1	24	.110″	708-6009	6.68	708-6011	48.60
1709	2	24	.190″	708-6015	10.07	.....	.....

SHIELDED MULTI-CONDUCTOR CONTROL CABLES

Neoprene jacket overall. Stranded, tinned copper with color-coded rubber insulation. #18 gauge. Wall thickness, .020″. Cabled with fillers, cotton wrap, braided tinned copper shield. For outdoor usage in television rotator systems, etc. Operating temperature, −20°C to +60°C. Av. wt., 12 lbs.

Mfr's Type	No. of Cond.	Jkt. Size	Nom. O.D.	100′ Spool Stock No.	100′ Spool EACH
1454	6	.035″	.370″	708-5555	108.67
1456	8	.035″	.420″	708-5556	142.94
1458	10	.035″	.480″	708-5558	175.03
1459	12	.065″	.555″	708-5559	240.60

TYPE B PER MIL-W-16878D NYLON SHIELDED PLASTIC JACKET MULTI-CONDUCTOR CABLE

Each conductor is stranded tinned copper. With color-coded .010″ polyvinylchloride insulation; covered with clear, .003″ nylon (polymide) jacket. Conductors are cabled; surrounded by braided tinned copper shield providing 90% coverage. Overall white polyvinylchloride jacket. Resistant to acids, alkalis, oil, flame, moisture, solvents and fungus. Meets MIL-W-1678D specifications. Temperature rating: −55° C to +105° C. Rated 600 volts. Shpg. wt., 20 lbs.

Mfr's Type	No. of Cond.	Gauge (Strand)	100′ Spool Stock No.	100′ Spool EACH	1000′ Spool Stock No.	1000′ Spool EACH
3210	1	24 (19x36)	708-7200	10.44	708-7201	88.78
3211	2	24 (19x36)	708-7202	15.83	708U7203	132.31
3212	3	24 (19x36)	708-7204	21.91	708U7205	187.89
3220	1	22 (19x34)	708-7206	11.49	708X7207	93.77
3221	2	22 (19x34)	708-7208	17.33	708U7209	145.88
3222	3	22 (19x34)	708-7210	24.03	.....	.....
3230	1	20 (19x32)	708-7211	12.02	.....	.....
3231	2	20 (19x32)	708-7212	19.04	.....	.....
3232	3	20 (19x32)	708-7213	25.73	.....	.....

SHIELDED MICROPHONE CABLE

Neoprene-jacketed. Stranded, tinned-copper conductors. Rubber insulated, cotton wrapped; braided tinned-copper shield. Stranding #18, 41x34; #16, 65x34. Jacket, .035″. Wall thickness: 1449, .040″; 1450, 1451, 1452, .020″; 1450/16, .025″.

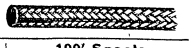
Stock No.	Mfr's Type	Cond. No.	Cond. Size	Wt., Lbs.	Nom. O.D.	PER 100′ Spool
708-5550	1449	1	18	3.7	.240″	24.00
708-5551	1450	2	18	5.4	.295″	31.55
708-5553	1451	3	18	6.7	.305″	58.33
708-5554	1452	4	18	8.1	.330″	71.43
708-5552	1450/16	2	16	8.7	.335″	60.70

SHIELDED MULTI-CONDUCTOR CONTROL CABLE

Chrome gray polyvinylchloride .035″ jacket overall. Stranded tinned copper; polyethylene insulation; braided shield. 600 volt operating voltage. #20 (26x34) gauge. Av. wt., per 100 ft., 8 lbs.

Mfr's Type	No. of Cond.	Wall Thk.	Nom. O.D.	100′ Spool Stock No.	100′ Spool EACH	1000′ Spool Stock No.	1000′ Spool EACH
1713	3	.014″	.250″	708-6031	12.42	.....	.....
1715	4	.014″	.260″	708-6037	15.10	.....	.....
1716	5	.014″	.275″	708-6040	16.35	.....	.....
1717	6	.014″	.300″	708-6043	34.40	708Z6045	297.89
1719	8	.014″	.330″	708-6051	43.42	708Z6052	384.96
1721	10	.014″	.375″	708-6056	53.87	708Z6058	473.55

SHIELDING AND BONDING CABLE



Woven, tinned copper braid per MIL Spec. QQ-B-575. Shielding coverage, 95% or more.

Mfr's Type	Approx. I.D.	No. of Wires	AWG Equiv.	Cap., Amps	100′ Spools Stock No.	100′ Spools EACH
2170	13/64″	192x34	11	46	708-6300	28.39
2171	1/4″	384x36	10	53	708-6301	38.41
2171/1	9/32″	120x30	9	60	708-6302	40.08
2172	3/8″	384x36	10	53	708-6303	39.58
2173	7/16″	240x30	6	90	708-6304	65.30
2174	1/2″	528x36	9	62	708-6305	54.28
2175	9/16″	480x30	3	145	708-6306	100.20
2175/1	21/32″	768x30	1	190	708-6307	153.64

Silver-plated copper braid manufactured per MIL Spec. QQ-B-575 Shielding coverage, 95% or more. Braid is self-supporting.

Mfr's Type	Approx. I.D.	No. of Wires	AWG Equiv.	Cap., Amps	100′ Spools Stock No.	100′ Spools EACH
2191	1/16″	48x36	19	11	708-6311	17.08
2193	7/64″	96x36	16	19	708-6313	30.59
2194	1/8″	120x36	15	25	708-6314	32.80
2195	5/32″	240x36	12	40	708-6315	62.19
2196	11/64″	168x36	14	32	708-6316	46.48
2197	13/64″	192x34	11	46	708-6317	87.36
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....

RETRACTILE NEOPRENE-JACKET POWER CORDS

High-quality multi-conductor power cord. Retracted lengths, 2 and 4-ft.; extend lengths, 12 and 25 ft. Recognized Under the Component Program of Underwriter's Laboratories, Inc.

TWO-FOOT RETRACTED LENGTHS

Stock No.	Mfr's Type	Conds. No.	Conds. Size	A	V	Coil O.D.	EACH
708-5302	660/2	2	18	7	300	7/8″	6.36
708-5313	663/2	4	18	5.6	300	1 1/2″	10.44
708-5315	665/2	3	16	10	300	1 1/2″	11.26
708-5321	671/2	4	16	8	600	1 7/8″	17.17
.....	.....	...	...	.....	.....	.....	.....
.....	.....	...	...	.....	.....	.....	.....

FOUR-FOOT RETRACTED LENGTHS

Stock No.	Mfr's Type	Conds. No.	Conds. Size	A	V	Coil O.D.	EACH
708-5304	660/4	2	18	7	300	7/8″	11.46
708-5312	662/4	3	18	7	300	1 1/2″	16.57
708-5314	664/4	2	16	10	300	1 1/2″	16.14
708-5316	666/4	4	16	8	300	1 5/8″	25.75
708-5320	670/4	3	16	10	600	1 7/8″	29.02
708-5351	760/4	3	18	7	300	1″	17.38

FLAT RIBBON CABLE MULTI-CONDUCTOR, PLASTIC INSULATION PER MIL-W-16878D, TYPE C

Stranded, tinned copper covered with color-coded, .016″ PVC insulation. Conductors bonded to form flat ribbon cable. Conductors fully color-coded and easily separated. #22 gauge with 7x30 stranding. Temperature rating: −55° C to +105° C. Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture, solvents and fungus. Supplied in 100′ spools only. Av. shpg. wt., 5 lbs.

Mfr's Type	No. of Cond.	Nom. O.D.	Stock No.	100′ Spool
3504	4	.065″x.260″	708-7504	16.82
3508	8	.065″x.520″	708-7508	27.10
3512	12	.065″x.780″	708-7512	43.90
3516	16	.065″x1.040″	708-7516	60.07
3520	20	.065″x1.300″	708-7520	73.95

W&C: Coax, 269—Hookup, 270-4—Audio, 274-281, 283—Misc., 282-4—Tubing/Acc., 285-290

BELDEN

ASSORTED TUBING

Wire and Cable

HIGH-VOLTAGE CABLE

High voltage cables for use by R&D organizations and power companies. Recommended for steady state DC voltages and pulse discharge systems. 8870 copperweld, cond. polyethylene, polyeth. ins., tinned copper braid. 8871 polyeth. rod, copper braid, cond. polyeth., polyeth. ins., copper braid. Both blk. polyeth. jkt.

Mfr's Type	AWG (Stranding)	O.D.	Working Voltage	Breakdown Voltage	Wt./100' Lbs.	25' Spool Stock No.	25' Spool EACH	100' Spool Stock No.	100' Spool EACH
8870	22 (Solid-Copperweld)	.440"	80,000	160,000	8	.....	.....	732-6010	43.25
8871	16 (Braided-Copper)	.830"	200,000	400,000	25	732-6011	48.84	732U6012	175.50

FLEXIBLE COPPER BRAID SHIELDING AND BONDING CABLE

Flexible tinned copper braiding for shielding conductors and cables of all sizes. Provides approximately 90% shield coverage when applied over recommended dia. Braided in tubular form for easy shielding of any wiring. Stranding column below indicates number of AWG tinned solid copper wires braided together to form complete shield.

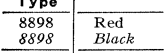
Mfr's Type	AWG Stranding	Approx. Cir Mil Area	Oval MAX. I.D. (Inch)	Flat Width (Inch)	Wt./100' Lbs.	50-Ft. Spool Stock No.	50-Ft. Spool EACH	250-Ft. Spool Stock No.	250-Ft. Spool EACH
8660	96x34	3800	5/32	7/32	1½	732-4023	3.20	732-4024	13.05
8668	120x34	4700	3/16	5/16	2	732-4031	4.40	732-4032	17.25
8661	192x34	7600	½	9/16	3	732-4025	5.07	732-4026	21.45
8669	336x34	13.300	5/8	11/16	5	732-4033	10.95	732-4034	46.95
8662	576x34	22,900	—	19/32	7½	732-4027	15.44	732-4028	67.50
8663	168x34	6700	5/16	7/16	3	732-4029	5.44	732-4030	23.10
8670	480x30	48,000	—	¾	15	732-4035	24.54	732-4036	105.75
8671	864x36	21,600	—	11/16	7½	732-4037	17.93	732-4038	78.30
8672	528x36	13,200	—	9/16	5	732-4039	12.52	732-4040	51.00

CATHODE-RAY-TUBE LEAD

High-dielectric, corona-resistant, minimum-surface-leakage, CRT cables. Conductive polyethylene bonded to conductor to provide uniform voltage stress distribution, polyethylene insulated, vinyl jacket.

Mfr's Type	AWG (Stranding)	O.D.	Working Voltage	Wt./100' Lbs.	100-Ft. Std. Spool Stock No.	100-Ft. Std. Spool EACH	500-Ft. Std. Spool Stock No.	500-Ft. Std. Spool EACH
8866	18 (41x34)	.208"	40,000	2¾	732-6004	7.26	732-6005	27.90
8868	22 (7x30)	.150"	25,000	1¼	732-6006	4.04	732-6007	13.80
8869	22 (7x30)	.120"	17,000	1¼	732-6008	3.34	732-6009	11.35

TEST-PROD WIRE



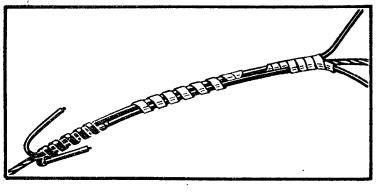
STANDARD. Rubber-covered limp, flexible conductor withstands extremely high voltages. No. 18 stranded tinned copper, with cotton wrapping. Puncture voltage: Type 8898, 29,000 volts; Type 8899, 20,000 volts.

Mfr's Type	Color	AWG (Stranding)	O.D.	Rubber Insul.	Working Voltage	Wt./100' Lbs.	STANDARD SPOOLS Stock No.	25'	Stock No.	100'	Stock No.	500'
8898	Red	18 (65x36)	.230"	.088"	10,000	3¾	732-6034	2.53	732-6035	5.97	732-6036	25.00
8898	*Black*	18 (65x36)	.230"	.088"	10,000	3¾	732-6031	2.53	732-6032	5.97	732-6033	25.00
8899	*Red*	18 (65x36)	.144"	.045"	5000	1¾	732-6043	1.53	732-6044	4.41	732-6045	16.20
8899	*Black*	18 (65x36)	.144"	.045"	5000	1¾	732-6037	1.53	732-6038	4.41	732-6039	16.20
8899	Green	18 (65x36)	.144"	.045"	5000	1¾	732-6140	1.53	732-6141	4.41	732-6142	16.20
8899	Yellow	18 (65x36)	.144"	.045"	5000	1¾	732-6110	1.53	732-6111	4.41	732-6112	16.20
MINIATURE. Similar to above. Puncture voltage. 10,000 volts.												
8890	Red	24 (45x40)	.066"	.019"	1000	½	732-6021	1.26	732-6022	2.85	732-6023	12.00
8890	Black	24 (45x40)	.066"	.019"	1000	½	732-6018	1.26	732-6019	2.85	732-6020	12.00

COILED CORD. Pair of tinned copper cables with red and black rubber insulation. Retract to 8 inches; stretch to 5 feet. No. 20 AWG (42x36). O.D., .173". Handles 5000 volts working, 20,000 volts puncture. Type 8878 has prods. Av. shpg. wt. per pair, ½ lb.

732-6013. Type 8878....Per Pair 4.14 732-6014. Type 8879. Without Prods.....Per Pair 1.77

NEWMAN HELI-TUBE SPIRALLY CUT EXPANDABLE PLASTIC CABLE HARNESS



• Protects Against Abrasion • Retains Cable Flexibility

Plastic cable harness features strong gripping ability plus excellent flexibility. Ideal for wrapping wire bundles in a variety of electronic circuits and components. Allows individual wires, taps or lead-offs to enter or break out of the harness at any point. Constructed of clean, virgin resins for outstanding flexibility and working ease. Available in four colors for easy circuit identification. Wraps on like tape, reduces labor costs in production lines and assembly stations. Finish is impermeable to moisture and resists chemicals and solvents—non-staining and non-toxic. Protects against abrasion. Can be used with any type of cable clamp. Order from table, (*) .030" wall. (†) .020" wall.

Allow 2 to 3 weeks for delivery of Teflon cable wrap. Minimum order, ¼" or larger is 20 feet. ⅛", 50 feet.

Stock No.	Mfr's Type	O.D.	Description	Per 100' Spool 1-9	10-49	50-Up
872-3301	HT1/8C	⅛"	Clear Polyethylene	3.25	2.70	2.40
872-3303	HT1/4C	¼"		5.40	4.50	4.00
872-3305	HT3/8C	⅜"		8.30	7.50	6.08
872-3307	HT1/2C	½"		12.00	11.20	8.64
872-3371	HT1/8UR	⅛"	Black Polyethylene (Ultraviolet Resistant)	3.60	4.00	2.65
872-3373	HT1/4UR	¼"		6.00	5.50	4.60
872-3375	HT3/8UR	⅜"		9.00	8.35	6.68
872-3377	HT1/2UR	½"		12.80	12.00	9.44
872-3321	HT1/8FR	⅛"	White Rulan (Fire Resistant)	4.35	3.60	3.20
872-3323	HT1/4FR	¼"		7.20	6.64	5.52
872-3325	HT3/8FR	⅜"		10.70	9.80	8.07
872-3327	HT1/2FR	½"		15.20	13.60	11.04
872-3331	HT1/4FR-B	¼"	Black Rulan	8.28	7.64	6.35
872-3341	HT1/8N	⅛"	Nylon (Natural)	6.75	6.20	5.20
872-3343	HT1/4N	¼"		12.40	10.10	8.94
872-3345	HT3/8N	⅜"		22.40	20.40	18.83

Stock No.	Mfr's Type	O.D.	Description	Per 50' Spool 1-19	20-49	50-199	200-Up
872-3309	HT3/4C	¾"	Clear Polyeth.	8.00	7.35	6.00	4.45
872-3379	HT3/4UR	¾"	Black Polyeth.	8.45	7.80	6.45	5.40
872-3381	HT1/2UR-G	½"	Gray Polyeth.	7.60	7.20	5.87	4.25
872-3347	HT1/2N	½"	Nylon (Nat.)	17.20	16.60	16.40	12.90

TEFLON CABLE WRAP (See Ordering Info Above)

Stock No.	Mfr's Type	O.D.	PER FOOT 20-999	1000-4999	5000-Up
872F3351	HT1/8T1*	⅛"	.55	.45	.43
872F3353	HT1/8T2†	⅛"	.30	.28	.27
872F3355	HT1/4T	¼"	1.10	.90	.85
872F3357	HT3/8T	⅜"	1.70	1.40	1.33
872F3359	HT1/2T	½"	2.20	1.80	1.70
872F3360	HT3/4T	¼"	4.40	3.60	3.40
872F3361	HT1T	1"	6.00	4.90	4.70

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Shrinkable Tubing and Wire-Strippers

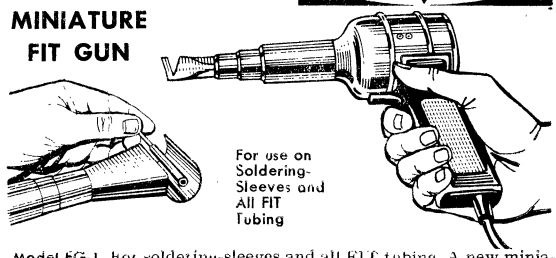
ALPHA FIT SHRINKABLE PRODUCTS

Choice of: **Polyvinyl Chloride** **Polyolefin** **Kynar** **Teflon**

- Highest quality
- Made for most any application

FIT Type	Characteristics
FIT-105	Irradiated PVC: Flexible and resistant to abrasion. Color: Black only.
FIT-221	Irradiated Polyolefin: Flexible, abrasion resistant, non-flammable, (Except clear). Color: 5 solid colors plus clear.
FIT-295	Irradiated semi-rigid Polyolefin: Extremely tough, high mechanical strength. Color coded by size.
FIT-300	Surface-irradiated Polyolefin: Outer wall shrinks, inner wall melts. Moisture proof, high mechanical strength.
FIT-350	Semi-rigid Kynar: Non-flammable tough fluoro-carbon, high-temperature solvent resistant. Color: clear.
FIT-500	Teflon: Non-flammable, tough fluoro-carbon, extreme temperature resistance, chemically inert, low coefficient of friction. Color: clear.

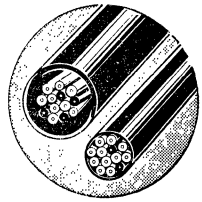
NEW MINIATURE FIT GUN



Model FG-1. For soldering-sleeves and all FIT tubing. A new miniature heat gun that has been developed for shrinking all FIT tubing as well as soldering sleeves. A durable, electric motor driven unit delivers a high volume of air to the nozzle. Easily replaceable heat elements. 3 position switch. Light-weight. Use as bench or hand unit. Features: Amperage rating-7. Operating Voltage 115AC. Complete with all accessories. Typical temperatures: 175°C (347°F)-without adapter. 205°C (401°F)-with adapter only. 203°C (446°F-with tubing reflector. 340°C (664°F)-with fit-sleeve reflector.
708-3770. 1-9.....Each 39.00 10-Up.....Each 36.75

FIT-105 FLEXIBLE TUBING

Size	Min. I.D.	Recov. I.D.*	Wall Thick.	Stock Number	Wt., Lbs.	Per 25' Coil	Stock Number	Wt., Lbs.	Per 100' Coil 1	Per 100' Coil 2-4
3/64"	.046"	.023"	.020"	708-3804	.1	2.84	708-3807	.1	11.34	8.87
1/16"	.062"	.031"	.020"	708-3810	.1	3.05	708-3813	.3	12.08	9.45
3/32"	.093"	.046"	.020"	708-3817	.1	3.47	708-3820	.5	13.81	10.82
1/8"	.125"	.062"	.020"	708-3823	.2	3.68	708-3827	1.1	14.60	12.08
3/16"	.187"	.093"	.025"	708-3830	.3	4.46	708-3833	1.4	17.85	14.70
1/4"	.250"	.125"	.025"	708-3837	.4	5.67	708-3840	1.4	22.58	18.64
3/8"	.375"	.187"	.030"	708-3843	.5	6.25	708-3847	2.0	24.89	20.58
1/2"	.500"	.250"	.030"	708-3850	.8	7.09	708-3853	4.5	28.30	23.36
3/4"	.750"	.375"	.035"	708-3857	1.3	9.45	708-3860	5.0	37.85	31.29
1"	1.000"	.500"	.040"	708-3863	2.2	13.65	.....	.....	.....	.....
1 1/2"	1.500"	.750"	.045"	708-3867	3.9	23.52	.....	.....	.....	.....
2"	2.000"	1.000"	.050"	708-3870	5.6	34.65	.....	.....	.....	.....



Irradiated Polyvinylchloride (PVC) provides snug, flexible insulation. Excellent for insulation over splices. Supplied at "Min. I.D." size; shrinks to *"Recov. I.D." size in only 7 seconds when heated to 325° F. **Black only.** Av. shpg. wt. per 100 ft., 1½ lbs. Inquire for larger quantities than those shown.

708-3820. FIT-105-MS-2 Assortment. Ten 6" lengths each of four sizes from 3/8 thru 1" (40 pieces). Wt., ½ lb.....**Each 10.77**

708-3801. FIT-105-MS-1 Assortment. Ten 6" lengths each of six sizes from 3/64 thru 1/4" (60 pieces). Wt., ½ lb.....**Each 5.38**

FIT-221 SHRINKABLE TUBING

4-FOOT LENGTHS (Av. shpg. wt. 1½ lbs.)

Stock No.	Black	Red	White	Size	Min. I.D.	Recov. I.D.*	Wall Thick	25/BOX 1-4	25/BOX 5-9
708X	3918	3909	3910	3/64"	.050"	.023"	.016"	18.50	13.10
708X	3926	3917	3918	1/16"	.062"	.031"	.017"	19.43	13.80
708X	3924	3925	3926	3/32"	.093"	.046"	.020"	22.45	15.95
708X	3931	3932	3933	1/8"	.125"	.062"	.020"	24.00	17.00
708X	3939	3040	3941	3/16"	.191"	.089"	.020"	29.25	20.70
708X	3947	3948	3949	1/4"	.250"	.125"	.025"	36.70	26.00
708X	3955	3956	3957	3/8"	.378"	.178"	.025"	40.65	28.85

Stock No.	Black	Red	White	Size	Min I.D.	Recov. I.D.*	Wall Thick	5/BOX 1-4	5/BOX 5-9
708X	3963	3964	3965	1/2"	.500"	.250"	.025"	9.24	6.55
708X	3971	3972	3973	3/4"	.750"	.375"	.030"	12.32	8.74
708X	3979	3980	3981	1"	1.000"	.500"	.035"	17.25	12.23
708X	3987	3988	3989	1 1/2"	1.500"	.750"	.040"	27.14	19.25
708X	3993	3994	3995	2"	2.000"	1.000"	.045"	37.48	26.58

Stock No.	Black	Red	White	Size	Min. I.D.	Recov. I.D.*	Wall Thick	5/BOX 1-4	5/BOX 5-9
708X	4000	4001	4002	3"	3.000"	1.500"	.050"	23.78	16.86
708X	4008	4009	4010	4"	4.000"	2.000"	.055"	34.64	24.56

FIT-221 Assortments. 6" lengths, assorted colors. Wt. ½ lb.
708-3901. FIT-221MS1. 3/64 thru 3/16" (30 lengths).....Each 5.13
708-3902. FIT-221MS2. 1/4 thru 1/4" (16 lengths).....Each 10.25

Replaces FIT-275. Shrinks (2:1) to *recovered inside diameter in 7 seconds. Polyolefin extruded tubing in an expanded form. Slips over irregularly shaped material. When temperature of approx. 275° F. is applied for 7 seconds, it returns to its predetermined size. Select color desired and read down column for size desired to complete Stock No.

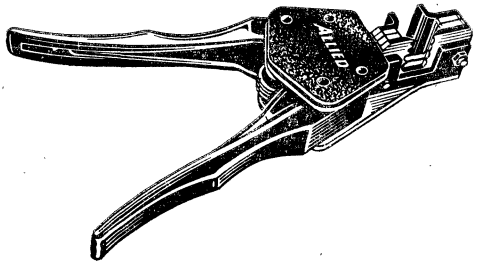
6-INCH LENGTHS (Av. shpg. wt. 4 oz.)

Stock No.	Black	Red	White	Size	Min. I.D.	Recov. I.D.*	Wall Thick	No. Lgths. Per Box
708-	3904	3905	3906	3/64"	.050"	.023"	.016"	40
708-	3912	3913	3914	1/16"	.062"	.031"	.017"	36
708-	3920	3921	3922	3/32"	.093"	.046"	.020"	32
708-	3927	3928	3929	1/8"	.125"	.062"	.020"	28
708-	3935	3936	3937	3/16"	.191"	.089"	.020"	24
708-	3943	3944	3945	1/4"	.250"	.125"	.025"	20
708-	3951	3952	3953	3/8"	.378"	.178"	.025"	16
708-	3959	3960	3961	1/2"	.500"	.250"	.025"	14
708-	3967	3968	3969	3/4"	.750"	.375"	.030"	12
708-	3975	3976	3977	1"	1.000"	.500"	.035"	8
708-	3983	3984	3985	1 1/2"	1.500"	.750"	.040"	5
708-	3990	3991	3992	2"	2.000"	1.000"	.045"	3
708-	3996	3997	3998	3"	3.000"	1.500"	.050"	2
708-	4004	4005	4006	4"	4.000"	2.000"	.055"	1

Price of 6-inch tubing PER BOX.....4.12

ALLIED 600 HAND WIRE-STRIPPER

Model 600. Speeds up any work requiring that wire be stripped of its insulation quickly and cleanly. Extremely rugged automatic single-squeeze hand wire-stripper is so easy to use that anyone can become adept at wire stripping in almost no time at all. Strips both solid and stranded wire with equal facility. Practically eliminates nicking and cutting of wire, won't crush wire, or won't fray ends of insulation left on wire. Strips up to a full 7/8 inch with one light squeeze on the comfortably contoured handles. Jaws automatically stay open after stripping off insulation to allow removal of wire before blades snap back to starting position. Rugged, advanced design is toolbox proof . . . built to take the hardest use. Permanently self-lubricating internal mechanism assures long life and minimum finger pressure for operation.
704-1001. For 16-26 Gauge wire. Shpg. wt. 10 oz.....Each 6.95
704-1002. Type AL-8826. Replacement Blades.....Each 2.95



ALPHA electronic WIRE

TUBING SECTION

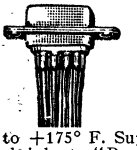
Alphlex "Fit" Shrinkable Tubing

FIT-300 POLYOLEFIN MOISTUREPROOF TUBING

Moistureproof encapsulation of components, etc. Outer wall shrinks while inner wall melts to fill all voids. Supplied at "Min I.D." shrinks to "Recov. I.D." at 275° F. *Heavy-walled for use where much meltable material is required. Wt.: 4' lengths, 1½ lbs.; 6", 4 oz.

Size	Color	Min. I.D.	Recov. I.D.	Wall Thick.	4-FOOT LENGTHS Stock No.	Lengths Per Pkg.	PER PKG.	6-INCH LENGTHS Stock No.	Lgths. Per Box	Per Box
1/8"	Brown	.125"	.023"	.038"	708X4110	25	51.00	708-4105	14	4.68
3/16"	Gray	.060"	.012"	.043"	708X4120	25	62.30	708-4115	12	4.68
1/4"	White	.080"	.015"	.047"	708X4130	25	77.70	708-4125	10	4.68
3/8"	Red	.375"	.135"	.050"	708X4150	25	86.60	708-4145	8	4.68
1/2"	Blue	.500"	.195"	.055"	708X4160	5	20.40	708-4155	6	4.68
3/4"	Yellow	.750"	.313"	.065"	708X4170	5	31.50	708-4165	4	4.68
9/16"	Blue	.300"	.050"	.100"*	708X4140	25	177.30	708-4135	4	4.68

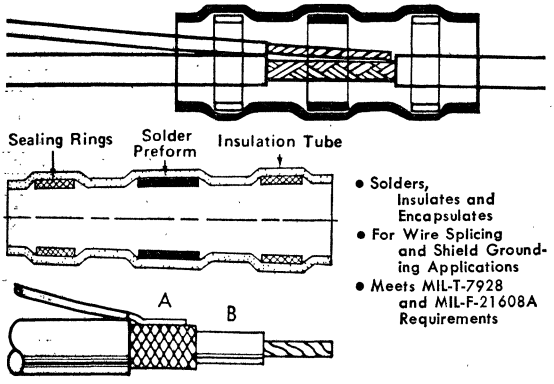
FIT-350 IRRADIATED KYNAR™ SHRINKABLE TUBING



Tough semi-rigid polyvinylidene fluoride that can be repeatedly flexed, bent, or twisted without losing its mechanical or electrical strength. Withstands continuous operating temperatures of —55° to +175° F. Supplied at "Min I.D." size; shrinks to "Recov. I.D." when heated to 347° F. 2:1 shrinkage ratio. Longitudinal shrinkage only 5%. Non-flammable, will never cold flow or melt. Clear only. Av. shpg. wt.: 6" lengths, 4 oz.; 4' lengths, 1 lb.

Size	Min. I.D.	Recov. I.D.	Recov. Wall Thickness	4-FOOT LENGTHS Stock No.	Lgths. Per Box	PER BOX	6-INCH LENGTHS Stock No.	Lgths. Per Box	PER BOX
3/64"	.046"	.023"	.010"	708X4336	25	20.95	708-4303	32	4.80
1/16"	.063"	.031"	.010"	708X4312	25	22.90	708-4309	28	4.80
3/32"	.093"	.046"	.010"	708X4318	25	27.30	708-4315	24	4.80
1/8"	.125"	.062"	.010"	708X4324	25	30.00	708-4321	20	4.80
3/16"	.187"	.093"	.010"	708X4330	25	46.70	708-4327	16	4.80
1/4"	.250"	.125"	.012"	708X4336	25	58.55	708-4333	12	4.80
3/8"	.375"	.187"	.012"	708X4342	25	77.20	708-4339	8	4.80
1/2"	.500"	.250"	.012"	708X4348	5	29.35	708-4345	4	4.80
3/4"	.750"	.375"	.017"	708X4355	5	53.95	708-4352	2	4.80
1"	1.000"	.500"	.019"	708X4361	5	99.20	708-4358	1	4.80

FIT® SOLDERING SLEEVES



- Solders, Insulates and Encapsulates
- For Wire Splicing and Shield Grounding Applications
- Meets MIL-T-7928 and MIL-F-21608A Requirements

Pre-packaged soldering sleeve prepares a reliable, uniform solder joint. Sleeve consists of an irradiated, heat-shrinkable, polyolefin sleeve containing a preform of fluxed solder at the center and a thermoplastic sealing ring on each end. When placed over a cable shield and ground lead or splice, and briefly heated, the outer sleeve shrinks and the solder and thermoplastic inserts melt to form insulated, encapsulated soldered termination. Can be used in shield ground applications, as junctions, or as stub splice.

Type FSH: For use on teflon, irradiated and other high-temperature insulations. Solder melting temperature, 361° F.

Type FSL: For use on vinyl, vinyl-nylon and other thermoplastic insulations. Solder melting temperature, 293° F.

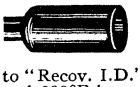
Stock No.	Mfr's Type	Diameter (As Shield Termination) Max.	Min.	Pkg. Quantity	PER PKG.
708-4370	FSH-1	.125"	.055"	25	4.16
708-4371	FSH-1	.125"	.055"	100	14.83
708-4372	FSH-1	.125"	.055"	1000	131.60
708-4373	FSH-2	.200"	.100"	25	4.33
708-4374	FSH-2	.200"	.100"	100	15.48
708-4375	FSH-2	.200"	.100"	1000	137.62
708-4376	FSH-3	.300"	.160"	25	5.91
708-4377	FSH-3	.300"	.160"	100	21.49
708-4378	FSH-3	.300"	.160"	1000	192.15
708-4380	FSL-1	.125"	.055"	25	4.16
708-4381	FSL-1	.125"	.055"	100	14.83
708-4382	FSL-1	.125"	.055"	1000	131.60
708-4383	FSL-2	.200"	.100"	25	4.33
708-4384	FSL-2	.200"	.100"	100	15.48
708-4385	FSL-2	.200"	.100"	1000	137.62
708-4386	FSL-3	.300"	.160"	25	5.91
708-4387	FSL-3	.300"	.160"	100	21.49
708-4388	FSL-3	.300"	.160"	1000	192.15

MOLDED FIT-CAPS

When heated, shrinks to form permanent encapsulations without molding, potting, use of special tools. Supplied at "Min. I.D." shrinks to "Recov. I.D." when heated to 275°F. Black. Pkg., 6 oz.

Stock No.	Mfr's Type	Min. I.D.	Recov. I.D.	Wall Thick.	Nom. Length	Per Pkg. of 25
708-3721	21	.16"	.08"	.04"	1.12"	9.90
708-3722	22	.25"	.12"	.05"	1.15"	11.97
708-3723	23	.36"	.18"	.06"	1.40"	15.68
708-3724	24	.50"	.25"	.07"	1.87"	20.63
708-3725	25	.75"	.37"	.08"	2.70"	30.53
708-3726	26	1.00"	.50"	.09"	3.50"	40.85
708-3727	27	1.50"	.75"	.10"	4.00"	53.65
708-3728	28	2.00"	1.00"	.11"	4.50"	66.00

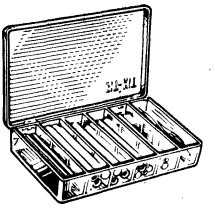
IRRADIATED POLYOLEFIN FIT-CAPS



Short lengths of semi-rigid tubing sealed on one end. Tight-fitting mechanical bond over terminations. Flame and abrasion resistant polyolefin. Supplied at "Min. I.D." size, shrinks (2:1) to "Recov. I.D." within 7 seconds when a temp. of between 275° and 300°F is applied. Forms a moisture-resistant seal over one or more wires. **Pkgs. of 100.** Wt., 6 oz.

Stock No.	Mfr's Type	Min. I.D.	Recov. I.D.	Wall Thick.	Nom. Length	Color	Per Pkg. of 100
708-3701	1	.063"	.025"	.016"	3/4"	White	5.60
708-3706	2	.125"	.050"	.020"	1"	Red	7.01
708-3703	3	.250"	.100"	.025"	1 1/4"	Grey	9.47
708-3705	5	.350"	.175"	.035"	1 1/3"	Brown	11.93
708-3704	4	.500"	.250"	.040"	1 1/2"	Black	27.69

FIT® TUBING KIT



Perfect engineering or prototype sampler kit. Contains a wide variety of sizes and colors of all Alpha FIT Tubing types, packaged in a handy compartmented plastic case. FIT tubings are supplied in the expanded state. Heat application shrinks tubing to a skin-tight covering. Especially designed for laboratory, prototype and service work. Shpg. wt. 2 lbs.
708-3775 ..... 11.00

Allied Electronics Can Supply the Entire Line of Alpha and Alphlex Heat Shrinkable Tubing. For Complete Price and Delivery Information on Types Not Listed or Larger-Than-Shown Quantities. Simply Contact the Allied Electronics Facility Nearest You. See Page 3 for Addresses.

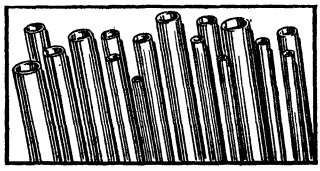
W&C: Coax, 269—Hookup, 270-4—Audio, 274-281, 283—Misc., 282-4—Tubing/Acc., 285-290

Alpha Tubing and Lacing Tape

TUBING SECTION

ALPHA electronic WIRE

TEFLON EXTRUDED FLEXIBLE TUBING



Tubing with a high degree of resistance to fatigue and repetitive stresses. High temperature "Class C" thin, flexible insulation will not melt or flow as conventional thermoplastic. Spaghetti extruded from pure teflon TFE fluorocarbon resins—free of contaminants, stresses; uniform density and color. Non-flammable; unharmed by soldering irons; moistureproof. Chemically inert; coeff. of friction lower than any other known solid. Diel. strength, 500-1000 V/mil. No variation of electrical properties from −67° to 260°C, or 60 Hz to 100 MHz. Meets MIL-I-22129C, AMS 3653 B, MIL-I-315B, MIL-104-C. Natural color only. Av. shpg. wt. 5 oz.

TFT-250 STANDARD-WALL TEFLON TUBING

Stock No.	AWG Size	Nominal Inside Dia.	Nominal Wall Thick.	100' Spools, EACH 1	2-4	5-9	10-Up
708-5024	24	.022"	.012"	10.01	8.01	6.89	5.52
708-5022	22	.027"	.012"	11.23	8.98	7.62	6.09
708-5020	20	.034"	.016"	15.19	12.15	10.31	8.37
708-5018	18	.042"	.016"	18.70	14.68	12.50	9.84
708-5014	14	.066"	.016"	24.03	18.96	15.81	12.60
708-5012	12	.085"	.016"	27.41	22.02	18.25	15.20

TFT-200 THIN-WALL TEFLON TUBING

708-4930	30	.012"	.009"	9.00	6.62	5.95	5.34
708-4928	28	.015"	.009"	8.00	5.70	5.28	4.39
708-4926	26	.018"	.010"	7.70	5.60	5.03	3.99
708-4924	24	.022"	.010"	7.70	5.60	5.03	4.32
708-4922	22	.027"	.010"	9.50	7.12	6.08	4.84
708-4920	20	.034"	.012"	12.00	9.33	7.78	6.15
708-4919	19	.038"	.012"	12.50	9.70	8.34	6.66
708-4918	18	.042"	.012"	12.98	10.73	9.04	7.24
708-4917	17	.047"	.012"	14.18	11.46	9.79	7.92
708-4916	16	.053"	.012"	14.53	12.67	10.53	8.64
708-4915	15	.059"	.012"	14.58	12.79	10.83	8.80
708-4914	14	.066"	.012"	16.04	13.76	11.55	9.35
708-4913	13	.076"	.012"	17.17	15.62	12.67	10.55
708-4912	12	.085"	.012"	18.48	16.63	13.63	11.35
708-4911	11	.095"	.012"	20.45	18.61	15.08	12.56
708-4910	10	.106"	.012"	22.04	19.36	15.84	13.54
708-4909	9	.118"	.015"	24.95	23.34	20.94	19.03
708-4908	8	.133"	.015"	26.80	25.75	23.15	21.03
708-4907	7	.148"	.015"	29.45	27.99	25.30	22.98
708-4906	6	.166"	.015"	31.86	30.28	27.50	25.05
708-4905	5	.186"	.015"	34.85	33.93	30.88	28.18

ZIP-31 PLASTIC ZIPPER-TUBING

Designed to harness, cover, and protect electrical cables. Zip to close or open. Fabricated from .020" polyvinyl sheet of MIL-I-631D, Grade C materials. Rated 759 V/mil; tensile strength, 3810 PSI. Flexible from −86°C to +105°C. One slider with each 25' of tubing. Order tubing ¼" larger than total O.D. of wires to be covered. **Available in black or clear.**

Stock No. Clear	Stock No. Black	Mfr's Type (I.D.)	Wt., Lbs.	100-FT. COILS, EACH 1-4	5-9	10-Up
708-5202	708-5201	ZIP-31-½"	4	45.00	37.20	34.80
708-5211	708-5210	ZIP-31-⅝"	4½	45.60	37.80	35.40
708-5221	708-5220	ZIP-31-¾"	5	46.20	38.40	36.00
708-5231	708-5230	ZIP-31-1"	6¼	48.00	39.60	37.20
708-5241	708-5240	ZIP-31-1¼"	6½	50.40	41.40	39.00
708-5251	708-5250	ZIP-31-1½"	7	52.20	43.20	40.80
708-5261	708-5260	ZIP-31-2"	10	55.20	45.60	43.20

708-3629. Type AB 295 Extra Metal Sliders. For above. 2 oz. Each .058

ALPHLEX PVC-105 PLASTIC TUBING

- Extremely High Tensile Strength
- Available in Sizes 24 Through ⅝"
- Clear, Red or Black Color

Plastic tubing meets MIL-1-631D, ASTM-D876 and ASTM-D922 specifications. Extremely high tensile strength. (Type F, Form U, Grade C, Class 1, Category 1.) Designed for general electronic, aircraft and electrical uses.

Sizes 24 to 10. Have 0.016" wall thickness, except sizes 24 and 22, 0.012". Available in clear, black or red. Wt. per 100', 5 oz.

Stock No. Black	Red	Clear	Size	Nom. I.D.	Per 100-Ft. Coil 1-4	5-9	10-Up
708-4726	708-4727	708-4728	24	.022"	2.43	2.01	1.80
708-4718	708-4719	708-4720	22	.027"	2.44	2.12	1.81
708-4710	708-4711	708-4712	20	.034"	2.49	2.16	1.85
708-4701	708-4702	708-4703	18	.042"	2.58	2.23	1.88
708-4694	708-4695	708-4696	16	.063"	2.72	2.35	1.96
708-4685	708-4686	708-4687	14	.066"	2.89	2.49	2.04
708-4678	708-4679	708-4680	12	.085"	3.07	2.64	2.16
708-4670	708-4671	708-4672	10	.106"	3.27	2.81	2.35

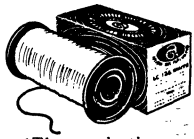
Sizes 8 to 2. All have .020" wall thickness. Available in clear, black or red. Av. shpg. wt. per 100 ft., 10 oz.

Stock No. Black	Red	Clear	Size	Nom. I.D.	Per 100-Ft. Coil 1-4	5-9	10-Up
708-4661	708-4662	708-4663	8	.133"	4.57	3.89	3.16
708-4655	708-4656	708-4657	6	.166"	5.19	4.41	3.52
708-4648	708-4649	708-4650	4	.208"	6.00	5.08	3.97
708-4640	708-4641	708-4642	2	.263"	6.91	5.84	4.50

Sizes 0 to ⅝". Wall thicknesses: size 0, .020"; *.025"; †.030". Available in clear or black. Av. wt. per 100' coil, 5 lbs.

Stock No. Black	Clear	Size	Nom. I.D.	Per 100-Ft. Coil 1-4	5-9	10-Up
708-4600	708-4601	0	.330"	7.98	6.73	5.14
708-4604	708-4605	5/16"*	.312"	9.42	7.94	6.04
708-4610	708-4611	⅜"*	.375"	10.81	9.09	6.91
708-4615	708-4616	½"*	.500"	12.77	10.64	8.07
708-4621	708-4622	⅝"†	.625"	18.38	15.30	11.73

ELECTRONIC NYLON FLAT BRAIDED TAPE



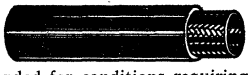
Wide contact area with the insulation eliminates flow away from contact point. Flexible, easy to use. When knotted, will not slip, recommended for all types of harness work. Resistant to fungus, flame, acids, abrasions. High tensile strength. *Rubber-like resin, melting point above 190°F. †Micro-crystalline wax, melting point above 130°F. ‡Fungistatic synthetic rubber. §Thermoplastic synthetic resin, melting point above 350°F. 3/32" wide, .014" thick except LC-134 (1/16"x.010"). 500-yd. spools (LC-132, 500-yd. tube).

Mfr's Type	Finish	White Stock No.	SPOOL	Black Stock No.	SPOOL
LC-132	GE*	708-4401	8.45	708-4400	9.14
LC-134	MW†	708-4406	5.41	708-4405	6.09
LC-136	MW†	708-4409	8.45	708-4408	9.14
LC-140	SR‡	708-4412	8.45	708-4411	9.14
LC-143	AM§	708-4416	8.45	708-4415	9.14

For Complete Price and Delivery Information on Alpha Products Not Listed Contact the Allied Electronics Facility Nearest You.

See Page 3 for Addresses.

PLASTIC-IMPREGNATED FIBER GLASS TUBING TYPE PIF-130



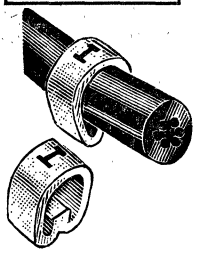
- Insulation Will Not Crack, Peel or Lose Its Dielectric Values
- High Chemical and Abrasion Resistance, Heat Stability
- For Continuous Operation at 130°C
- Meets MIL-L-3190B, Grade B

Toughest, most pliable of insulating materials, formulated to provide the maximum in electrical characteristics, chemical resistance, heat stability, abrasion resistance. Tubing is constructed from an inorganic fiberglass base sleeving coated with tough, flexible plastic insulation. Recommended for conditions requiring continuous operation at up to 130°C. Neither the fiber glass base sleeving nor the plastic base will support combustion. Conforms to MIL-L-3190B, Grade B. 100-ft. Coil. Av. wt., 2 lbs.

Stock No.	Gauge Size	Wall Thickness Max.	Min.	Approx. I.D.	EACH 1-4	5-Up
708-4524	24	.022"	.016"	.022"	6.65	3.90
708-4522	22	.022"	.016"	.027"	6.65	4.05
708-4520	20	.022"	.016"	.034"	6.78	4.15
708-4518	18	.022"	.016"	.042"	6.89	4.25
708-4516	16	.028"	.020"	.053"	7.10	4.40
708-4514	14	.028"	.020"	.066"	7.55	4.60
708-4512	12	.028"	.020"	.085"	7.77	4.90
708-4510	10	.028"	.020"	.106"	8.45	5.50
708-4508	8	.028"	.020"	.133"	9.45	6.05
708-4506	6	.028"	.020"	.166"	10.89	6.80
708-4504	4	.036"	.026"	.208"	12.00	8.20
708-4502	2	.036"	.026"	.234"	15.12	10.30

WIRE/CABLE ACCESSORIES

Electrovert Wiring, Cable Accessories



SLIP-ON "Z" MARKERS

Cable markers permanently identify every wire or group or wires for instant recognition. Install in seconds. Features flexible "accordion" type backs for easy installation, sturdy grip. Durable P.V.C. material. Comply with J.I.C., MIL-E-5400B (ASG), MIL-E-4158A (USAF). White with black marking. **Specify letter (A-Z) or numeral (0-9) desired when ordering and add suffix as indicated in table* below.** Solid in packages of 50. Wt. 6 oz.

Stock No.*	Mfr's Type	For Cable Dia.	PER PACKAGE OF 50 1-9	10-49	50-99	100-249
787-60NN	Z22P	.045"-.065"	.70	.60	.58	.52
787-58NN	Z20P	.066"-.085"	.70	.60	.58	.52
787-56NN	Z18P	.086"-.115"	.70	.60	.58	.52
787-54NN	Z16P	.110"-.135"	.70	.60	.58	.52
787-52NN	Z14P	.130"-.160"	.70	.60	.58	.52
787-50NN	Z12P	.150"-.175"	.70	.60	.58	.52
787F49NN	Z10P	.170"-.195"	.70	.60	.58	.52
787F48NN	Z9P	.190"-.215"	.75	.62	.61	.53
787F47NN	Z8P	.210"-.250"	.83	.70	.69	.62
787F46NN	Z7P	.245"-.295"	.85	.74	.72	.65
787F45NN	Z6P	.290"-.360"	1.25	1.00	.98	.88
787F44NN	Z4-1P	.355"-.460"	1.32	1.15	1.12	1.01

*ORDERING INFORMATION FOR "Z" AND "C" MARKERS

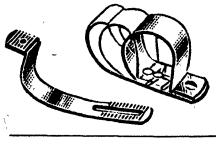
Select letter (A-Z) or numeral (0-9) desired† from table below; then add appropriate suffix (00 thru 46) to Stock No. of Type "Z" or "C" marker, replacing the NN in the Stock Number.

†	Suffix	†	Suffix	†	Suffix	†	Suffix	†	Suffix	†	Suffix
0	00	6	06	C	23	I	29	0	35	U	41
1	01	7	07	D	24	J	30	P	36	V	42
2	02	8	08	E	25	K	31	Q	37	W	43
3	03	9	09	F	26	L	32	R	38	X	44
4	04	A	21	G	27	M	33	S	39	Y	45
5	05	B	22	H	28	N	34	T	40	Z	46

CLIP-ON "C" MARKERS

Can be used either before wiring, or after wiring and terminal connection has been completed. Constructed of rigid, durable PVC material for longest life. Use for single wire or cable assembly. One size fits a given range of cable diameters. **Specify letter (A-Z) on numeral (0-9) and add appropriate suffix from table* above.** Wt. 6 oz. **Packages of 50 only.**

Stock No.*	Mfr's Type	For Cable Dia.	PER PACKAGE OF 50 1-9	10-99	100-249	250-499
787-30NN	C9P	.250"-.280"	1.47	1.19	1.08	.96
787-31NN	C10P	.280"-.315"	2.52	1.98	1.78	1.60
787-32NN	C11P	.315"-.350"	2.65	2.06	1.86	1.68
787-33NN	C12P	.350"-.400"	2.82	2.21	1.99	1.79
787-34NN	C13P	.400"-.460"	3.02	2.35	2.12	1.91
787-35NN	C14P	.460"-.510"	3.27	2.54	2.29	2.06
787-36NN	C15P	.510"-.570"	3.70	2.87	2.89	2.33
787F92NN	C2P	.080"-.100"	1.05	.82	.74	.67
787F93NN	C3P	.100"-.118"	1.05	.82	.74	.67
787F94NN	C4P	.118"-.138"	1.05	.82	.74	.67
787F95NN	C5P	.138"-.156"	1.07	.86	.78	.69
787F96NN	C6P	.156"-.187"	1.13	.90	.82	.73
787F97NN	C7P	.187"-.218"	1.27	1.03	83	.83
787F98NN	C8P	.218"-.250"	1.40	1.12	1.01	.90



ADJUSTABLE "P" CLIPS

Ratchet teeth for positive locking under any conditions. Lightweight virgin nylon. Abrasion resistant. Tensile strength, 11,000 psi; melting point, 482-500° F-self extinguishing; endurance, 3000 psi-no failures to 2,000,000 cycles. Wt. 8 oz. **Multiples of 100 only.**

Stock No.	Size No.	Bundle Dia. Min.-Max.	PER 100 100-200	300-500	600-900
787-2500	AP-0	1/8"-3/16"	4.40	3.50	2.75
787-2501	AP-1	3/16"-1/4"	4.56	3.53	2.85
787-2502	AP-2	1/4"-3/8"	4.80	3.70	3.00
787-2503	AP-3	3/8"-9/16"	5.84	4.50	3.65
787-2504	AP-4	9/16"-7/8"	7.60	5.80	4.75
787-2505	AP-5	7/8"-1 3/16"	10.00	7.90	6.25
787-2506	AP-6	1 3/16"-1 1/2"	12.40	8.75	7.75
787-2507	AP-7	1 1/2"-1 3/4"	17.40	13.40	10.75
787-2508	AP-8	1 3/4"-2"	17.84	13.50	11.15

ELECTRO-TY CABLE TIES

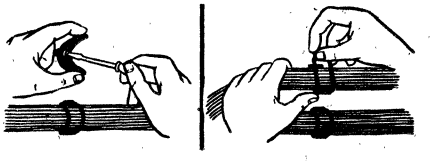
These cable ties offer maximum service for heavy-duty applications. Manufactured to meet MS17821 and MS18034 standards. Constructed of virgin nylon for extremely lightweight and abrasion resistant service. Have high tensile strength for long-lasting service under rugged conditions. Low absorption rate assures resistance to deterioration from elemental wear. Resist many common solvents, oils, alkalis, etc. Available in sizes from 1/16" to 4" in diameter. Order from table listed below. Av. sh. wt. 12 oz. **Packages of 100.**

Stock No.	Mfr's Type	Bundle Dia. Min.-Max.	Mil No.	PER 100 1-4	5-Up
787-4019	EL-AC	1/16"-1"	4	2.50	2.25
787-4039	EL-BC	1/16"-1 5/16"	1	4.25	3.90
787-4049	EL-CC	1/16"-4 3/16"	2	10.00	9.00
787-4069	EL-DC	3/16"-4"	3	14.60	12.00

ELECTRO-TY CABLE TIES—MULTIPLES OF 1000

Stock No.	Mfr's Type	Bundle Dia. Min.-Max.	Mil. No.	PER 1000 1-4	5-Up
787-4020	EL-AM	1/16"-1"	4	19.00	16.00
787-4040	EL-BM	1/16"-1 5/16"	1	28.60	25.60
787-4050	EL-CM	1/16"-4 3/16"	2	59.70	54.50
787-4070	EL-DM	3/16"-4"	3	93.10	86.00

CRADLE CLIPS



Facilitates on-the-spot wiring changes without replacement or tools. Takes only five seconds per fixing point. Binders and cradles of durable nylon construction; clips of heavy-duty neoprene. Sturdy and secure design construction will withstand vibrations without any damage to wire insulation. Color: black. In sizes from 1/8" to 2" diameters. *With captive nut. **Cradle with captive clip. Av. shpg. wt. 2 lbs.

RECOMMENDED COMBINATIONS

Diameter of Cable Form	Supported Wiring Cradle	Clip	Unsupported Wiring Binder	Clip
1/8"-5/16"	CO+NO		.....	.....
1/4"-5/8"	C1	N1	B1	N1
1/2"-11/16"	C1	N3	B1	N5
11/16"-11/16"	C2	N3	B12	N3
15/16"-1 1/16"	C2	N5	B12	N5
1"-1 1/4"	C3	N3	B2	N3
1 1/4"-1 1/2"	C3	N5	B2	N5
1 1/2"-2"	C3	N7	B2	N7
Over 2"	Use combination of above sizes			

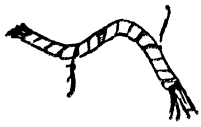
ORDERING INFORMATION

Mfr's Type	Description	PKG. OF 100 Stock No.	EA./PKG.	PKG. OF 1000 Stock No.	EA./PKG.
CO-NO**	Cradle & Clip	787-3995	9.72	787-4000	88.35
C1	Cradle	787-2699	6.65	787-2700	60.50
C2	Cradle	787-2707	7.85	787-2702	71.60
C3	Cradle	787-2709	8.35	787-2704	75.90
C1-M*	Cradle	787-2706	15.20	787-2701	138.00
C2-M*	Cradle	787-2708	24.80	787-2703	225.25
C3-M*	Cradle	787-2710	25.70	787-2705	232.90
B1	Binder	787-2600	5.50	787-2601	50.35
B12	Binder	787-2611	6.55	787-2612	59.60
B2	Binder	787-2603	7.80	787-2602	70.80
N1	Clip	787-4300	3.65	787-4301	32.50
N3	Clip	787-4302	4.90	787-4303	44.50
N5	Clip	787-4304	7.00	787-4305	63.00
N7	Clip	787-4305	8.60	787-4307	78.30

All Merchandise Listed Above is Sold in Standard Package Shown Only

Electrovert Wiring Accessories

SPIROBAND SPIRAL WRAPPING



For electric harness and cables. Slightly flexible; retains shape indefinitely. Permits lead-offs or additions at any point. Handles easily without special tools or skills. Choice of five materials, including nylon and Teflon*. *Registered DuPont trademark.

NATURAL POLYETHYLENE

Stock No.	Mfr's Type	Bundle Dia. Min.-Max.	Std. Coil, Feet	SPOOL 1-9	10-49	50-99
787F4350	SP 1/8 CP	1/16"-1/2"	100	3.10	2.90	2.40
787F4351	SP 1/4 CP	3/16"-2"	100	5.15	4.80	4.00
787F4352	SP 3/8 CP	3/16"-3"	50	3.90	3.65	3.05
787F4353	SP 1/2 CP	3/8"-4"	25	3.54	3.30	2.79
ULTRAVIOLET-RESISTANT POLYETHYLENE (BLACK)						
787F4379	SP 1/8 UV	1/16"-1/2"	100	3.20	3.00	2.50
787F4380	SP 1/4 UV	3/16"-2"	100	5.25	4.90	4.20
787F4381	SP 3/8 UV	5/16"-3"	50	4.08	3.80	3.18
787F4382	SP 1/2 UV	3/8"-4"	25	3.75	3.50	2.92
FIRE-RETARDANT RULAN						
787F4360	SP 1/8 FR	1/16"-1/2"	100	4.30	4.00	3.40
787F4361	SP 1/4 FR	3/16"-2"	100	9.55	8.90	7.40
787F4362	SP 3/8 FR	5/16"-3"	50	7.13	6.65	5.55
787F4363	SP 1/2 FR	3/8"-4"	25	7.15	6.70	5.56
NYLON (TO 250° F)						
787F4366	SP 1/8 NN	1/16"-2"	100	9.95	9.20	7.55
787F4367	SP 1/4 NN	3/16"-2"	100	17.95	16.85	14.40
787F4368	SP 3/8 NN	5/16"-3"	50	26.05	25.20	22.85
787F4369	SP 1/2 NN	3/8"-4"	25	13.66	14.42	11.96

TEFLON SPIROBAND WRAPPING (TO 500° F)

Stock No.	Mfr's Type	Bundle Dia. Min.-Max.	Std. Coil, Feet	PER 1000 FEET 1-3	4-19	20-Up
787F4375	SP 1/8 TF	1/16"-2"	25	37.50	32.50	27.50
787F4376	SP 1/4 TF	3/16"-2"	25	43.75	38.75	33.75
787F4377	SP 3/8 TF	5/16"-3"	25	81.25	72.75	64.25
787F4378	SP 1/2 TF	3/8"-4"	25	128.75	110.00	92.50

STRAPPING AND STUDS

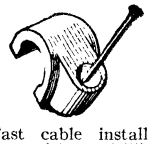
Plastic cable strapping complete with securing studs. Made of high grade polyvinylchloride. Insures the rapid securing of bundles of wires or cables; suitable for all types of cable, or any form diameter. Ideal for economically securing or grouping unsupported wires.

Stock No.	Mfr's Type	Material	Width	PER ROLL, LENGTH OF 100'	500'	1000'
787F2550	AV5	PVC	5/16"	3.45	15.55	28.00
787F2553	AV8	PVC	1/2"	5.65	26.60	47.90

787-2559. Type AVS Stud. For securing strapping above. Package of 1000 ..... PER PKG. 6.00

HIATT CABLE CLIPS FOR COAXIAL CABLE APPLICATIONS

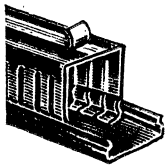
Stock No.	Mfr's Type	Inside Diameter	PER 1000 1-3	4-9
787-4202	H-2	.10"	12.50	9.60
787-4203	H-3	.14"	12.85	11.50
787-4204	H-4	.16"	13.45	12.20
787-4205	H-5	.20"	15.35	13.40
787-4206	H-6	.24"	16.30	14.40
787-4207	H-7	.275"	16.90	15.70
787-4208	H-8	.31"	21.60	19.20
787-4209	H-9	.35"	22.90	20.20
787-4210	H-10	.40"	24.00	21.50
787-4211	H-11	.43"	24.60	21.90



Fast cable installation without drilling or screwing. Push-fit on wire or cable for simple installation. Nails fixed in clips for easy attachment. In multiples of 1000 only. Wt. per 1000, 2 lbs.

Allied Electronics can supply the entire line of Electrovert Wiring and Cabling Accessories. Contact your nearest Allied Electronics facility for price and delivery information on items not shown in this Catalog or for large-production-quantity pricing.

ELECTRO-DUCT



High-impact vinyl duct won't peel, chip, or crack even under adverse conditions. Withstands temperatures of up to 150°F. Temporary adhesive mounting permits drilling and lining up mounting holes with ease. CSA approved. Includes channel and cover. Standard length, 6 feet. Sold in multiples of 6 feet only. Shpg. wt. 2 lbs. **Order By the Foot.** Gray color. Also available in White.

Stock No.	Mfr's Type	Nominal W & H	Std. Ctn.	PER FOOT Under 200 ft.	200-999 ft.	1000-1999 ft.
789X1010	1010A-G	1x1"	96'	.64	.51	.48
789X1020	1020A-G	1x2"	90'	.85	.67	.62
789X1030	1030A-G	1x3"	60'	1.04	.83	.76
789X2030	2030A-G	2x3"	36'	1.21	.95	.87

PLASTIC SPEED FASTENER

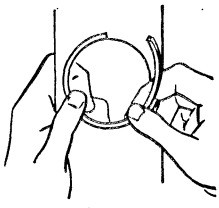
For mounting wiring duct to panel. Designed for 1/16" dia. mounting hole. Simple push-fit for secure mounting. Shpg. wt. 3 oz.
787-4308. Type QR-316 ..... PER 100 1.65

CABLE TIE MOUNTING BASE

For mounting bundles of wires with cable ties. Secured with one screw. Mounting base is positioned parallel to cable run so that it does not extend beyond harness diameter. Offers additional advantage of holding the cable tie captive while harness is positioned. Cable ties listed on preceding page.

Stock No.	Mfr's Type	Used with Cable Tie	PKG. 100 1-4	5-9
787-4309	TC-A	EL-A	3.00	2.40
787-4310	TC-M	EL-B, EL-C, EL-D	6.90	5.45

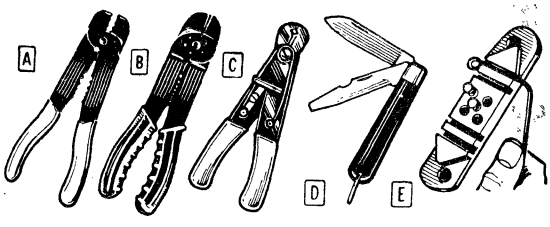
POLYETHYLENE GROMMET STRIPS



One strip only application to round, square, rectangular and oval holes. From 20 gauge to 1/4" thick. Meet MIL-C-17D, MIL-W-76B and MIL-C-915A specifications. Easy application; no special tools needed. Sold only in multiples as shown below. Order by the foot. Shpg. wt. 8 oz. *GS6 CP in 50-Foot Package Only.

Stock No.	Mfr's Type	Application Min. Max.	Pkg.*	PER PKG. 1-9	10-49	50-Up
787-4110	GS2 CP	.020-.039	100 ft.	4.40	3.95	3.75
787-4105	GS2 ACP	.040-.062	100 ft.	4.79	4.45	3.95
787-4115	GS3 CP	.063-.099	100 ft.	5.12	4.75	4.15
787-4120	GS4 CP	.100-.144	100 ft.	5.89	5.45	4.90
787-4125	GS5 CP	.145-.187	100 ft.	10.29	9.35	8.60
787-4150	GS6 CP*	.187-.250	50 ft.	14.85	13.20	11.20

ARCHER HANDY WIRE/CABLE TOOLS



A CRIMPING TOOL. Crimps solderless terminals, shears screws.
910-5941. Shpg. wt. 1 lb. 4.95

B CRIMPING TOOL. Cuts, strips wires. With terminals.
910-5903. Shpg. wt. 1 1/2 lbs. 1.29

C WIRE STRIPPER/CUTTER. For all standard wire sizes.
910-5931. Shpg. wt. 1/2 lb. 1.39

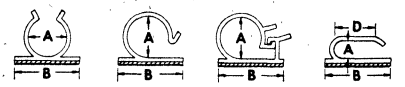
D POCKET KNIFE. Has knife plus wire scraper/screw driver.
910-5932. Shpg. wt. 1/4 lb. 1.59

E WIRE BENDING JIG. Bends eye, curves. Up to 1/4" dia. wire.
910-5920. Shpg. wt. 1/4 lb. 1.00

WIRE/CABLE ACCESSORIES

Cable Accessories, Wire Markers, Heat Guns

RICHCO KWIK-KLIP

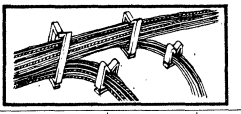


U-CLIP (KKU) C-CLIP (KKC) L-CLIP (locking) (KKL) C-CLIP (KKF)

Strip off protective backing and press in place permanently. For anchoring cable, tubing, pipe, rod. Strong, resilient PVC. *Holds 3 leads. KKL is locking type. Shpg. wt. 10 oz.

Stock No.	Mfr's Type	Dia. In.	W.xL. In.	PER PKG. 100		
				1	2-4	5-49
911-2042	KKU-2	1/8	3/4x3/4	6.00	3.95	3.75
911-2044	KKU-4	1/4	3/4x3/4	6.50	4.35	3.85
911-2046	KKU-6	3/8	3/4x3/4	7.50	4.75	4.25
911-2048	KKU-8	1/2	1x1	8.00	5.15	4.65
911-2052	KKU-12	3/4	1x1	12.00	7.45	6.45
911-2002	KKC-2	1/8	3/4x3/4	6.00	3.95	3.75
911-2004	KKC-4	1/4	3/4x3/4	6.50	4.35	3.85
911-2005	KKC-5	5/16	3/4x3/4	7.00	4.55	4.05
911-2006	KKC-6	3/8	3/4x3/4	7.50	4.75	4.25
911-2008	KKC-8	1/2	1x1	8.00	5.15	4.65
911-2012	KKC-12	3/4	1x1	12.00	7.45	6.45
911-2024	KKL-4	1/4	3/4x3/4	6.50	4.35	3.95
911-2028	KKL-8	1/2	1x1	8.50	5.95	5.45
911-2032	KKL-12	3/4	1x1	12.50	7.45	6.95
911-2020	KKF-10x4*	5/8x3/4	3/4x3/4	8.50	5.95	5.45

RICHLOK WIRE SADDLES



Nylon saddles used to channel a group or bundle of wires. Have a pointed insert that is compressed and easily snapped into punched or drilled .187" dia. holes in a metal chassis., where they lock.

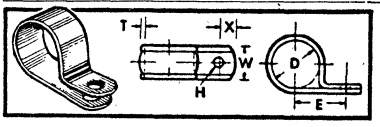
Stock No.	Mfr's Type	Inside Ht., In.	Outside Ht., In.	PER PKG. OF 100		
				1	2-4	5-49
911-5091	WS-1N	.225	.510	1.75	1.60	1.35
911-5092	WS-2N	.450	.715	1.83	1.70	1.40
911-5093	WS-3N	.800	1.070	2.40	2.40	2.10
911-5094	WS-4N	1.120	1.390	2.60	2.30	1.95

RICHCO PLASTIC CABLE TIES

Bind cables into harness. Plastic except *nylon. Supplied in packages of 1000. Av. shpg. wt. per pkg. 4 oz.

Stock No.	Mfr's Type	Size	Color	PER PKG. OF 1000		
				1	2-4	5-24
911-0610	EZ-10	4"	Red	11.25	10.75	9.50
911-0602	EZ-2*	5"	Nylon	22.10	16.00	14.05
911-0605	EZ-5	5"	Yellow	13.75	11.85	10.30
911-0609	EZ-9	6"	Blue	16.25	14.55	12.75
911-0614	EZ-14	10"	Red	27.00	19.75	15.65
911-0620	EZ-20	8"	Red	21.87	15.60	12.90

RICHCO CABLE CLIPS



DIMENSIONS (INCHES)

Type	D	E	X	Type	D	E	X
E-2	1/8	.360	7/32	N-2	1/8	.310	5/32
E-3	3/16	.423	7/32	N-3	3/16	.373	5/32
E-4	1/4	.457	7/32	N-4	1/4	.407	5/32
E-5	5/16	.498	7/32	N-5	5/16	.448	5/32
E-6	3/8	.529	7/32	N-6	3/8	.479	5/32
E-7	7/16	.560	7/32	N-7	7/16	.510	5/32
E-8	1/2	.592	7/32	N-8	1/2	.542	5/32
E-9	9/16	.623	7/32	N-9B	9/16	.623	13/64
E-10	5/8	.654	7/32	N-10B	5/8	.654	13/64
E-11	11/16	.752	7/32	N-11B	11/16	.752	13/64
E-12	3/4	.783	7/32	N-12B	3/4	.783	13/64
E-14	7/8	.845	7/32	N-14B	7/8	.845	13/64
E-16	1	.908	7/32	N-16B	1	.908	13/64

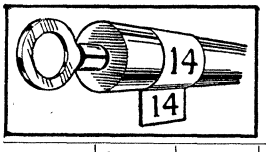
ETHYL CELLULOSE. Withstand age, moisture, corrosion, shock, vibration and temperatures from −40° to +185° F. Meet MIL-242A. T=.060"; W=1/2"; H=.204". Pkg. 100. Av. shpg. wt. 6 oz.

Stock No.	Mfr's Type	PER PKG. 100			
		1-9	10-24	25-99	100-Up
911-0552	E-2	1.13	1.05	.95	.85
911-0553	E-3	1.17	1.10	1.00	.95
911-0554	E-4	1.17	1.15	1.05	1.00
911-0555	E-5	1.20	1.18	1.08	1.03
911-0556	E-6	1.25	1.22	1.13	1.08
911-0557	E-7	1.30	1.27	1.17	1.12
911-0558	E-8	1.38	1.32	1.22	1.17
911-0559	E-9	1.52	1.42	1.32	1.25
911-0560	E-10	1.73	1.52	1.44	1.37
911-0561	E-11	1.77	1.59	1.50	1.43
911-0562	E-12	1.85	1.65	1.55	1.47
911-0564	E-14	2.10	1.74	1.63	1.55
911-0566	E-16	2.20	2.20	2.08	1.90

NYLON. Resist temperatures from −60° to +250°F. Types N-2 to N-8: T=.040"; W=3/8"; H=.167". Types N-9B to N-16B; T=.060"; W=1/2"; H=.204". Meet MIL-P17091A. Pkg. 100. Av. shpg. wt. 6 oz.

Stock No.	Mfr's Type	PER PKG. OF 100			
		1-24	25-99	100-Up	
911-2402	N-2	1.35	1.20	1.13	
911-2403	N-3	1.38	1.29	1.15	
911-2404	N-4	1.50	1.43	1.25	
911-2405	N-5	1.65	1.56	1.40	
911-2406	N-6	1.70	1.65	1.50	
911-2407	N-7	1.90	1.75	1.60	
911-2408	N-8	1.95	1.80	1.65	
911-2409	N-9B	2.35	2.10	1.85	
911-2410	N-10B	2.50	2.15	1.90	
911-2411	N-11B	2.65	2.25	2.00	
911-2412	N-12B	2.75	2.40	2.20	
911-2414	N-14B	2.80	2.45	2.30	
911-2416	N-16B	3.00	2.65	2.50	

BRADY SELF-STICKING MINIATURE WIRE MARKERS

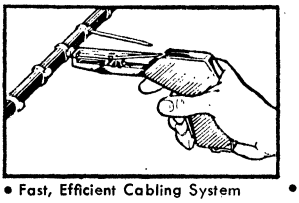


Type B-700MM. Preprinted, 1/2"-long miniature markers for wire under 0.150". Wrap or flag wires for permanent or temporary identification. Stick to any insulation. Resist heat to 300°F, oil, solvents. Meet industry standard codes. Consecutive numbers. Av. shpg. wt. 2 oz.

Stock No.	Consecutive Numbers	Markers Per Card	PER CARD					
			1-99	100-499	500-999	1000-2499	2500-4999	5000-9999
739-3150	0-49	150	.33	.30	.27	.243	.228	.211
739-3151	50-99	150	.33	.30	.27	.243	.228	.211
739-3152	100-132	99	.33	.30	.27	.243	.228	.211
739-3153	133-165	99	.33	.30	.27	.243	.228	.211
739-3154	166-198	99	.33	.30	.27	.243	.228	.211

Type B-600 Extra-Durable Wire Markers. Heavy-duty 1 1/2" "Mylar" for wires up to .150" dia. Temp. range: −20°F to +300°F. *On individual number insert no. desired in place of NN in Stk. No., eg to order no. "0" order 739-3100; to order no. "24" order 739-3124. Consecutive numbers or *indivdual.

739-31NN	0-25*	36	.24	.22	.20	.178	.166	.154
739-3003	1-33	33	.24	.22	.20	.178	.166	.154
739-3006	34-66	33	.24	.22	.20	.178	.166	.154
739-3009	67-99	33	.24	.22	.20	.178	.166	.154
739-3012	100-124	25	.24	.22	.20	.178	.166	.154
739-3000	A-Z	26	.24	.22	.20	.178	.166	.154



PANDUIT

GS-2B GUN TYPE CABLING TOOL

• Fast, Efficient Cabling System • Pre-set Strap Tension and Cutoff

Gun-type cabling tool provides quick and efficient binding. Works faster than spot tieing, taping or other conventional methods. One adjustable clamp replaces a complete range of clamps. Uniform strap tension with any bundle. Direct feed with preset strap cutoff and controlled strap tension. Cut off occurs only when preset tension is reached. Used to install standard and miniature Sta-strap cable ties, clamp and identification markers. Meets applicable MIL specifications. Shpg. wt. 1 lb.

881-2000 ..... 29.95

GS4H GUN-TYPE CABLING TOOL

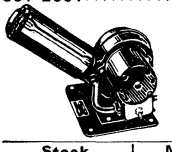
Heavy-duty harnessing tool handles the ten largest sizes of Sta-Strap cable ties. Similar in appearance to GS-2B, above. Two-position knob can be adjusted to suit the precise cable tying job. Handles standard to extra-long heavy-duty ties, identification markers and clamps. For fast, efficient heavy-duty cabling and tying with a minimum of effort. Meets applicable MIL specifications. Cut-off occurs only when pre-set tension point is attained. Shpg. wt. 2 lbs.

881-2001 ..... 59.95

MASTER HEAT GUN BLOWERS

Two heat gun models that deliver instant heat up to 1000° F without the danger of an open flame. Perfect for use with "shrinkable" tubing, forming plastics, and forced drying. Type HG-501 produces heat from 500 to 750° F, and Type HG-751 from 750 to 1000° F. With 8-ft. neoprene cord. Accessories sold below. 115 VAC.

861-1604. *Type HG-501.* 14 amps. Shpg. wt., 5 lbs. 49.90
861-1605. *Type HG-751.* 20 amps. Shpg. wt., 5 lbs. 59.95
861-1606. *Type 100 Nozzle Adapter.* Shpg. wt., 1/4 lb. 2.95
861-1607. *Type 145 Baffle Plate.* For tubing to 3/4" dia. 1/4 lb. ... 2.75
861-1608. *Type 150 Baffle Plate.* For tubing to 1 1/4" dia. 1/4 lb. .. 2.95



MASTER AIR HEATER BLOWERS

Maintain continuous flow of heated air where you need it. For portable use or permanent mounting. Overall length, 12" (except Type AH-301, 9"). With 8-ft. cord. For 110-120 volts, 60 Hz AC.

Stock No.	Mfr's Type	Amps	Temp. (F)	Wt., Lbs.	EACH
861-1600	AH-301	10	300°	7	56.65
861-1601	AH-501	14	500°	8 1/4	59.95
861-1602	AH-751	18	750°	8 1/4	78.35

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

ALLIED Your Complete Source for . . .

- Connectors—Commercial and Military Types
- Printed Circuit Boards
- Electronics Hardware
- Breadboard Components and Accessories
- Dial and Graphics Kits

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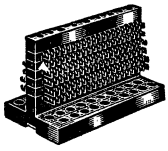
ADC PRODUCTS TERMINAL BLOCKS

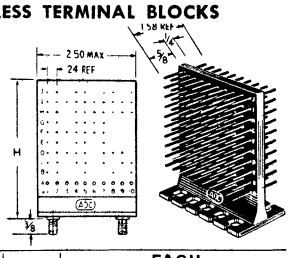
SOLDER-TYPE TERMINAL BLOCKS



Rugged units for design and construction use in telephone circuits, computers, recording studios, broadcast stations, or wherever many circuits are in operation. Each unit has a one-piece molded black phenolic base; individual terminal separators are also of molded black phenolic. Polished phenolic surface surrounding terminals assures easy removal of solder flash. Terminals are .040″ thick plated brass, 20 terminals per row. Terminal rows are graduated in length for ease of wiring, and are identified by numbering imprinted along the top row. Base, 6 1/16x3″. Av. shpg. wt., 1½ lbs.

Stock No.	Mfr's Type	No. Rows	No. of Terms.	Block Height	EACH 1-9	EACH 10-Up
719-1102	PJ-102	2	40	2¼″	4.65	3.88
719-1103	PJ-103	3	60	2 19/32″	5.85	4.88
719-1104	PJ-104	4	80	2 15/16″	7.05	5.88
719-1105	PJ-105	5	100	3 9/32″	8.25	6.88
719-1106	PJ-106	6	120	3⅝″	9.45	7.88

"WRAPID" SOLDERLESS TERMINAL BLOCKS



Use any wrapping tool to make solderless wrapped wire connections. Even inexperienced operators can make one connection each 5 seconds. Block and fanning strip are molded of high-impact glass-filled Nylon. Have brass terminals. Letters and numbers identify terminals. Cadmium-chromate plated mtg. studs. 4 oz.

Stock No.	Mfr's Type	No. of Terminals	"H" Dim.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-Up
719-1604	PJ-604	40	1.75″	4.08	3.27	2.72	2.18
719-1606	PJ-606	60	2.25″	4.94	4.00	3.33	2.66
719-1608	PJ-608	80	2.75″	6.00	4.80	4.00	3.20
719-1610	PJ-610	100	3.25″	6.75	5.50	4.58	3.65
719-1612	PJ-612	120	3.25″	8.25	6.60	5.50	4.40

FAHNESTOCK and H.H. SMITH SPRING CLIPS

A

B

C

Offer positive, reliable contact. Easy to connect and disconnect. *Made of bronze; †H. H. Smith clips are brass, nickel-plated All others solid brass. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Fig.	Length	Width	Max. Wire	Mtg. Hole	EACH 1-99	EACH 100-999	EACH 1000-Up
795-0301	2	A	1″	⅜″	#10	#8	.05	.04	.038
920-0587	534†	A	1″	⅜″	#10	#6	.05	.04	.036
795-0302	3	A	1 1/16″	⅜″	#10	#8	.05	.04	.038
795-0309	10	A	¾″	5/16″	#14	#6	.03	.02	.018
920-0586	533†	A	¾″	5/16″	#14	#6	.03	.028	.031
920-0597	539†	A	⅝″	7/32″	#16	#4	.03	.028	.031
795-0304	5	B	1 1/16″	⅜″	#10	#8	.05	.04	.038
795-0314	15*	B	½″	7/32″	#16	#4	.03	.02	.18
920-0588	535†	C	1½″	5/16″	#14	#6	.13	.11	.099
920-0589	536†	C	2 1/16″	⅜″	#10	#8	.16	.13	.117

NU-WAY SNAPS AND STUDS

D

E

F

Used to make or break temporary electrical connections in an instant. Ideal for fast testing of circuits. Equally suitable for permanent wire connections when you're in a hurry. Snap connectors (E) fit threaded studs (D), listed below. May be cascaded together for multiple connections. Snaps have solder lug. Stud has threaded screw shaft with nut for either panel or chassis mounting. Shpg. wt. per 100, 12 oz. Sold in Packages of 100.

Stock No.	Fig.	Description	Size	PRICE PER PKG. 1-4	5-9	10-24	25-Up
873-0810	E	Snaps	7/16″Dx7/8″L	14.90	12.00	9.20	8.55
873-0812	D	Threaded Stud	½″Dx6 3/32″L	10.70	8.55	6.60	6.10

F Terminal Lugs. Type 1479. Screw-mount to chassis, terminal boards, etc. 2 solder lugs; one wire-wrap, other grooved. Wt. 1 oz.
920-1475. 1-9 ..... Each .09 100-499 ..... Each .07
500-999 ..... Each .063 1000-Up ..... Each .057

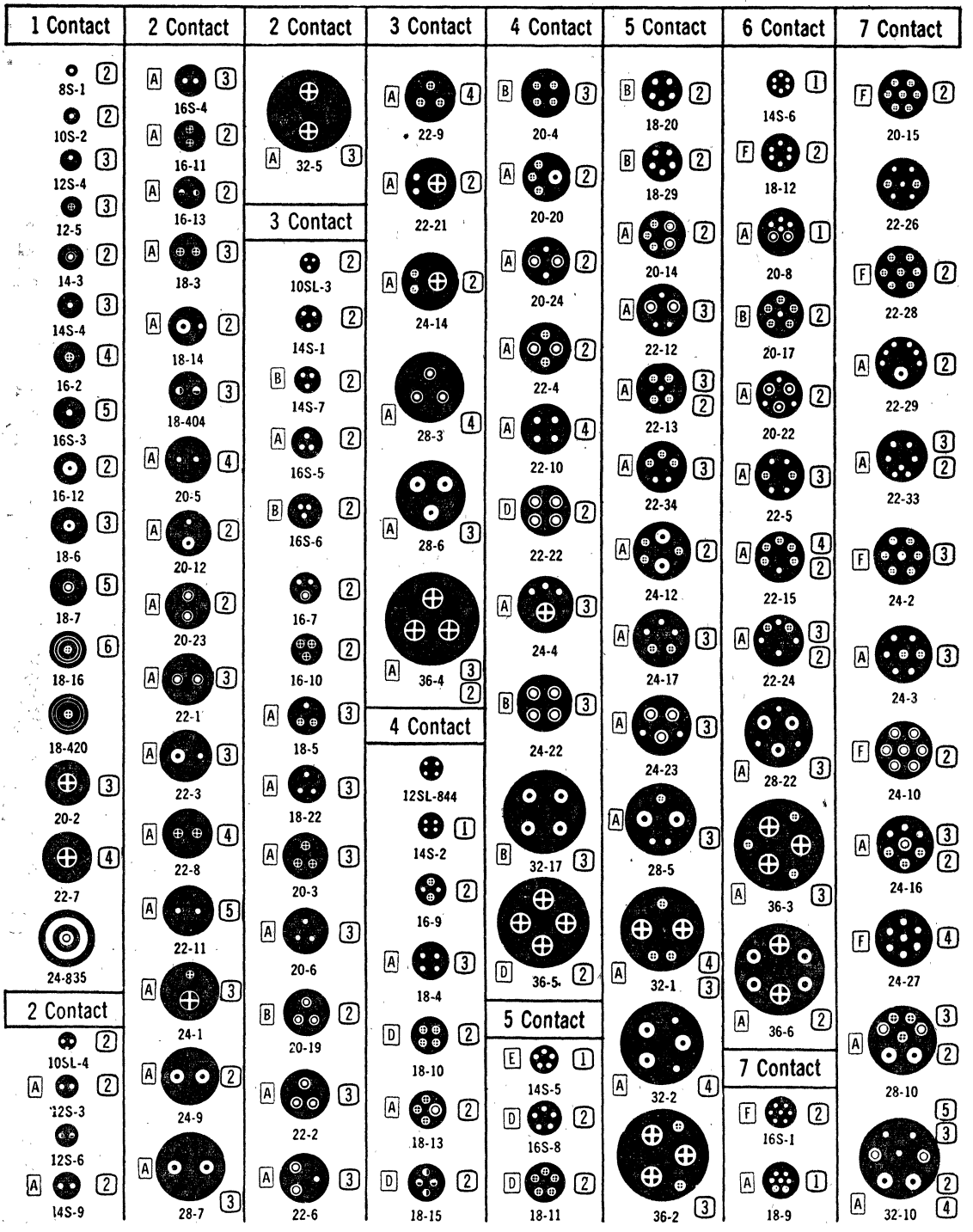
AMPHENOL MS Connector Insert Arrangements

SERVICE RATINGS

SERVICE		1	2	3	4	5	6
Max. Operating Sea Level Volts	DC	250	700	1250	1750	2450	4200
	AC (rms)	200	500	900	1250	1750	3000

CURRENT RATINGS

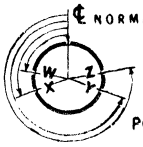
CONTACT SIZE	20	16	12	8	4	0
AMPERES	10	22	41	73	135	245



See Following Pages for Amphenol MS Connector Listings

MS Connector Insert Arrangements

BUNKER RAMO AMPHENOL



FRONT VIEW OF POSITIONS

See Pages 294, 295 for Connector Listings. Contact sizes correspond in number coding to wire sizes.

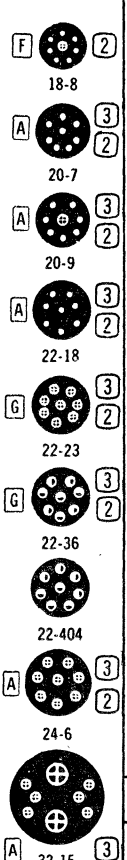
CODE OF WIRE SIZES

20 16 12 8 4 0 COAX IRON CONSTANTAN

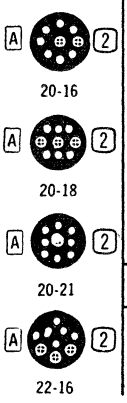
ALTERNATE INSERT POSITIONS AVAILABLE

- A W, X, Y or Z
- B W, X or Y
- C W, Y or Z
- D X or Y
- E X
- F W or Z
- G W or Y

8 Contact



9 Contact



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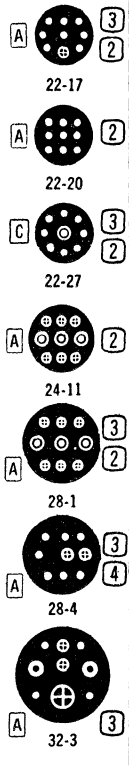
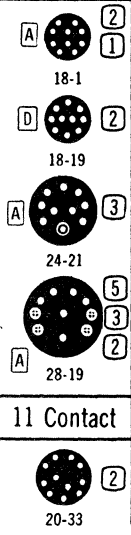
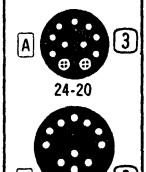


10 Contact

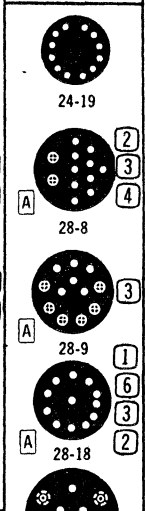


11 Contact

11 Contact

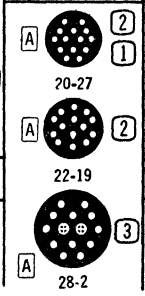


12 Contact

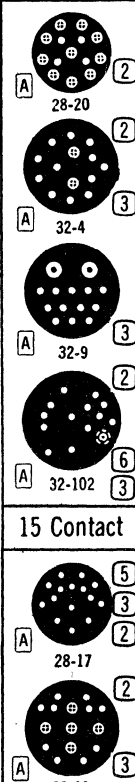


13 Contact

14 Contact



14 Contact



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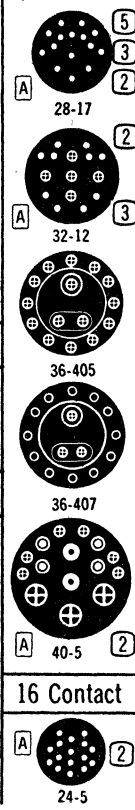

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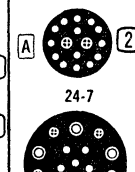

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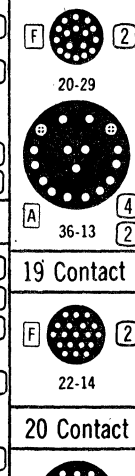

19 Contact

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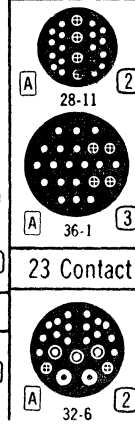

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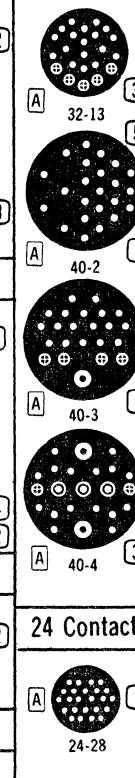
23 Contact



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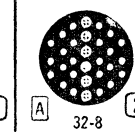

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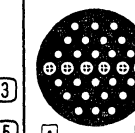
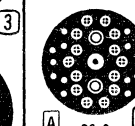
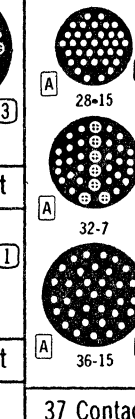


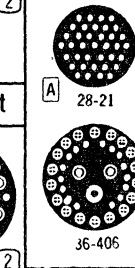
31 Contact



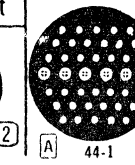
35 Contact



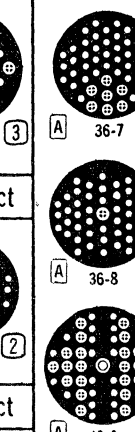
37 Contact



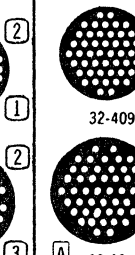
42 Contact



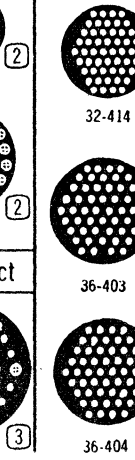
47 Contact



48 Contact



52 Contact



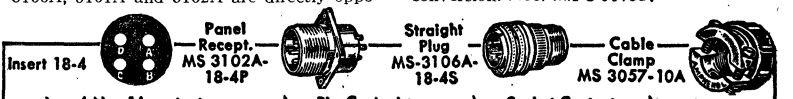
See Following Pages for Amphenol MS Connector Listings

MS Receptacles and Mating Plugs

HOW TO ORDER

Simply select desired receptacle or mating plug (pages 292-293), then shell style. Paired-off listing shows mating plugs and receptacles on the same line. Specify Stock Number, then add connector Type Number. For example: 712XXXXA (stock number) —3100A-8S-1P (type number).

Explanation of Series Nos. E.g.: 3102A-18-11P. "A" stands for solid shell ("B" split shell). "18" indicates shell size in 16ths of 1". "P"—pin; "S"—socket type. Mates for 3100A, 3101A and 3102A are directly opposite, on facing page. Require cable clamp (see page 296) except 3102A. Contacts are silver plated, and solder cups tinned. Aluminum shells with cadmium plate and O.D. conversion. Meet MIL-C-5015D.



Positions W, X, Y, Z Available from Stock as indicated below. Add 5c Extra Per Connector.

RECEPTACLES												MATING PLUGS								
Shell Style Insert	No. Contacts	Positions				MS3100A EACH		MS3101A EACH		MS3102A EACH		Shell Style Insert	Series 3106A EACH		Series 3106B EACH		Series 3108A EACH		Series 3108B EACH	
		W	X	Y	Z	1-9	10-49	1-9	10-49	1-9	10-49		1-9	10-49	1-9	10-49	1-9	10-49	1-9	10-49
10S-2P	1					3.27	2.10	2.65	1.72	1.22	.79	10S-2S	2.89	1.86	.....	.....	4.53	2.92	.....	.....
10S-2S	1					3.31	2.13	2.70	1.75	1.26	.82	10S-2P	2.87	1.84	.....	.....	4.46	2.87	.....	.....
10SL-3P	3					2.07	1.33	3.07	1.98	1.56	1.02	10SL-3S	2.48	1.61	.....	.....	4.42	2.84	2.31	1.48
10SL-4P	2					2.04	1.32	2.92	1.87	1.56	1.02	10SL-4S	2.41	1.56	.....	.....	4.40	2.83	2.26	1.45
12S-4P	1					2.31	1.48	2.70	1.75	1.28	.83	12S-4S	2.18	1.40	.....	.....	5.07	3.26	2.83	1.83
12S-4S	1					2.31	1.48	2.70	1.75	1.28	.83	12S-4P	2.18	1.40	.....	.....	5.07	3.26	2.83	1.83
12SL-844P	4					.....	.....	.....	.....	2.89	1.86	12SL-844S	5.36	3.45	.....	.....	8.04	5.17	.....	.....
14S-1P	3					2.37	1.53	2.92	1.87	1.54	1.00	14S-1S	2.41	1.56	2.92	1.87	4.92	3.19	2.70	1.75
14S-1S	3					2.41	1.56	2.96	1.90	1.56	1.02	14S-1P	2.37	1.53	2.89	1.86	4.90	3.16	2.65	1.72
14S-2P	4					2.35	1.51	2.89	1.86	1.52	.99	14S-2S	2.52	1.64	3.00	1.93	5.05	3.24	2.83	1.83
14S-2S	4					2.52	1.64	3.03	1.94	1.70	1.08	14S-2P	2.33	1.51	2.87	1.84	4.88	3.15	2.63	1.70
14S-5P	5		X			2.61	1.68	3.13	2.02	1.78	1.14	14S-5S	2.70	1.75	3.22	2.07	5.27	3.38	2.98	1.91
14S-5S	5		X			2.70	1.75	3.24	2.08	1.89	1.22	14S-5P	2.61	1.68	3.07	1.98	5.14	3.30	2.89	1.86
14S-6P	6					2.70	1.75	3.24	2.08	1.89	1.22	14S-6S	2.74	1.77	3.27	2.10	5.31	3.41	3.03	1.94
14S-6S	6					2.74	1.77	3.31	2.13	1.94	1.25	14S-6P	2.70	1.75	3.22	2.07	5.27	3.38	2.98	1.91
14S-7P	3	X	X	X		2.37	1.53	2.92	1.87	1.54	1.00	14S-7S	2.41	1.56	2.92	1.87	4.92	3.19	2.70	1.75
14S-7S	3	X	X	X		2.41	1.56	2.96	1.90	1.56	1.02	14S-7P	2.37	1.53	2.89	1.86	4.90	3.16	2.65	1.72
14S-9P	2	X	X	X	X	2.26	1.45	2.74	1.77	1.41	.91	14S-9S	2.28	1.47	2.74	1.77	4.81	3.10	2.59	1.66
14S-9S	2	X	X	X	X	2.28	1.47	2.83	1.83	1.43	.93	14S-9P	2.26	1.45	2.72	1.76	4.79	3.09	2.52	1.64
16-9P	4					3.33	2.15	3.42	2.20	2.04	1.32	16-9S	3.57	2.30	.....	.....	6.51	4.19	4.31	2.78
16-9S	4					3.70	2.40	3.85	2.48	2.48	1.61	16-9P	3.20	2.05	.....	.....	6.12	3.94	3.94	2.54
16-10P	3					3.24	2.08	3.33	2.15	1.94	1.25	16-10S	3.42	2.20	.....	.....	6.36	4.09	4.20	2.70
16-10S	3					3.59	2.32	3.68	2.38	2.31	1.48	16-10P	3.03	1.94	.....	.....	5.99	3.87	3.83	2.47
16-11P	2	X	X	X	X	3.00	1.93	3.13	2.02	1.76	1.12	16-11S	3.24	2.08	.....	.....	6.21	3.99	3.98	2.56
16-11S	2	X	X	X	X	3.37	2.18	3.50	2.26	2.11	1.36	16-11P	2.87	1.84	.....	.....	5.77	3.73	3.59	2.32
16S-1P	7	X			X	3.00	1.93	3.27	2.10	1.91	1.23	16S-1S	3.00	1.93	3.72	2.41	6.62	4.27	3.55	2.29
16S-1S	7	X			X	3.33	2.15	3.57	2.30	2.22	1.44	16S-1P	2.70	1.75	3.48	2.24	6.32	4.06	3.24	2.08
16S-4P	2	X	X	X	X	2.65	1.72	2.92	1.87	1.54	1.00	16S-4S	2.48	1.61	3.24	2.08	6.06	3.91	2.98	1.91
16S-4S	2	X	X	X	X	2.74	1.77	3.00	1.93	1.67	1.07	16S-4P	2.35	1.51	3.13	2.02	5.97	3.84	2.89	1.86
16S-5P	3	X	X	X	X	2.87	1.84	3.07	1.98	1.76	1.12	16S-5S	2.61	1.68	3.35	2.16	6.23	4.00	3.13	2.02
16S-5S	3	X	X	X	X	2.92	1.87	3.20	2.05	1.83	1.18	16S-5P	2.52	1.64	3.31	2.13	6.14	3.95	3.03	1.94
16S-8P	5		X	X		2.96	1.90	3.22	2.07	1.87	1.21	16S-8S	2.72	1.76	3.50	2.26	6.34	4.08	3.27	2.10
16S-8S	5		X	X		3.03	1.94	3.31	2.13	1.94	1.25	16S-8P	2.63	1.70	3.37	2.18	6.25	4.02	3.20	2.05
18-1P	10	X	X	X	X	3.70	2.40	4.20	2.70	2.59	1.66	18-1S	3.92	2.52	4.57	2.95	7.56	4.86	4.75	3.06
18-1S	10	X	X	X	X	4.07	2.61	4.53	2.92	2.89	1.86	18-1P	3.57	2.30	4.27	2.75	7.23	4.64	4.42	2.84
18-3P	2	X	X	X	X	2.98	1.91	3.42	2.20	1.83	1.18	18-3S	3.50	2.26	4.20	2.70	7.17	4.62	4.33	2.80
18-3S	2	X	X	X	X	3.66	2.37	4.16	2.67	2.50	1.62	18-3P	2.83	1.83	3.50	2.26	6.49	4.17	3.66	2.37
18-4P	4	X	X	X	X	3.00	1.93	3.48	2.24	1.87	1.21	18-4S	3.07	1.98	3.72	2.41	6.80	4.37	3.96	2.55
18-4S	4	X	X	X	X	3.27	2.10	3.68	2.38	2.07	1.33	18-4P	2.87	1.84	3.55	2.29	6.51	4.19	3.68	2.38
18-5P	3	X	X	X	X	2.89	1.86	3.33	2.15	1.70	1.08	18-5S	3.07	1.98	3.72	2.41	6.80	4.37	3.96	2.55
18-5S	3	X	X	X	X	3.27	2.10	3.68	2.38	2.07	1.33	18-5P	2.70	1.75	3.37	2.18	6.36	4.09	3.57	2.30
18-8P	8	X			X	3.70	2.40	4.20	2.70	2.59	1.66	18-8S	3.83	2.47	4.53	2.92	7.52	4.84	4.68	3.01
18-8S	8	X			X	3.98	2.56	4.42	2.84	2.83	1.83	18-8P	3.57	2.30	4.27	2.75	7.23	4.64	4.42	2.84
18-9P	7	X	X	X	X	3.55	2.29	3.98	2.56	2.35	1.51	18-9S	3.61	2.33	4.31	2.78	7.32	4.71	4.53	2.92
18-9S	7	X	X	X	X	3.83	2.47	4.27	2.75	2.63	1.70	18-9P	3.35	2.16	4.07	2.61	7.01	4.53	4.22	2.72
18-10P	4		X	X		3.59	2.32	4.07	2.61	2.41	1.56	18-10S	3.83	2.47	4.53	2.92	7.52	4.84	4.68	3.01
18-10S	4		X	X		3.98	2.56	4.42	2.84	2.83	1.83	18-10P	3.42	2.20	4.16	2.67	7.10	4.57	4.29	2.76
18-11P	5		X	X		3.59	2.32	4.07	2.61	2.41	1.56	18-11S	3.57	2.30	4.27	2.75	7.23	4.64	4.42	2.84
18-11S	5		X	X		3.70	2.40	4.20	2.70	2.59	1.66	18-11P	3.42	2.20	4.16	2.67	7.10	4.57	4.29	2.76
18-12P	6	X			X	3.35	2.16	3.83	2.47	2.18	1.40	18-12S	3.42	2.20	4.16	2.67	7.10	4.57	4.29	2.76
18-12S	6	X			X	3.59	2.32	4.07	2.61	2.41	1.56	18-12P	3.22	2.07	3.92	2.52	6.86	4.42	4.07	2.61
18-16P	1					3.27	2.10	3.68	2.38	2.07	1.33	18-16S	3.61	2.33	4.31	2.78	7.32	4.71	4.53	2.92
18-16S	1					3.83	2.47	4.27	2.75	2.63	1.70	18-16P	3.07	1.98	3.72	2.41	6.80	4.37	3.96	2.55
20-4P	4	X	X	X		3.72	2.41	4.03	2.59	2.37	1.53	20-4S	4.68	3.01	5.23	3.37	8.48	5.45	5.47	3.52
20-4S	4	X	X	X		4.29	2.76	4.55	2.94	2.92	1.87	20-4P	4.18	2.69	4.68	3.01	7.91	5.10	4.90	3.16
20-7P	8	X	X	X	X	3.72	2.41	4.03	2.59	2.37	1.53	20-7S	4.46	2.87	5.01	3.21	8.26	5.31	5.27	3.38
20-7S	8	X	X	X	X	4.09	2.62	4.31	2.78	2.70	1.75	20-7P	4.18	2.69	4.68	3.01	7.91	5.10	4.90	3.16
20-9P	8	X	X	X	X	4.07	2.61	4.29	2.76	2.65	1.72	20-9S	4.53	2.92	5.03	3.23	8.28	5.32	5.29	3.40
20-9S	8	X	X	X	X	4.16	2.67	4.33	2.80	2.72	1.76	20-9P	4.42	2.84	4.92	3.19	8.21	5.29	5.23	3.37
20-15P	7	X				4.18	2.69	4.40	2.83	2.72	1.77	20-15S	6.01	3.88	6.56	4.21	9.83	6.32	6.82	4.38
20-15S	7	X			X	5.64	3.63	5.90	3.80	4.27	2.75	20-15P	4.55	2.94	5.05	3.24	8.30	5.35	5.31	3.41

Quantity Discounts: 50-99 multiply 1-9 price by .572. For 100-Up multiply 1-9 price by .516.

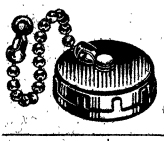
Receptacles and Plugs (Cont'd)

BUNKER RAMO AMPHENOL

Shell Style Insert	No. of Contacts	Positions W	X	Y	Z	Series 3100A EACH 1-9	10-49	Series 3101A EACH 1-9	10-49	Series 3102A EACH 1-9	10-49	Shell Style Insert	Series 3106A EACH 1-9	10-49	Series 3106B EACH 1-9	10-49	Series 3108A EACH 1-9	10-49	Series 3108B EACH 1-9	10-49
20-16P	9	X	X	X	X	4.20	2.70	4.42	2.84	2.83	1.83	20-16S	4.86	3.13	5.38	3.46	8.63	5.54	5.62	3.62
20-16S	9	X	X	X	X	4.46	2.87	4.70	3.02	3.07	1.98	20-16P	4.57	2.95	5.07	3.26	8.37	5.38	5.36	3.45
20-17P	6	X	X	X		4.16	2.67	4.33	2.80	2.72	1.76	20-17S	5.40	3.48	5.95	3.83	9.19	5.82	6.21	3.99
20-17S	6	X	X	X		5.03	3.23	5.29	3.40	3.61	2.33	20-17P	4.53	2.92	5.03	3.23	8.28	5.32	5.29	3.40
20-18P	9	X	X	X	X	4.33	2.80	4.62	2.98	2.98	1.91	20-18S	5.23	3.37	5.71	3.67	8.98	5.78	5.90	3.80
20-18S	9	X	X	X	X	4.81	3.10	5.05	3.24	3.42	2.20	20-18P	4.75	3.06	5.29	3.40	8.52	5.49	5.51	3.55
20-21P	9	X	X	X	X	4.07	2.61	4.29	2.76	2.65	1.72	20-21S	4.66	2.99	5.16	3.32	8.43	5.42	5.40	3.48
20-21S	9	X	X	X	X	4.27	2.75	4.53	2.92	2.89	1.86	20-21P	4.42	2.84	4.92	3.19	8.21	5.29	5.23	3.37
20-22P	6	X	X	X	X	4.79	3.09	5.03	3.23	3.37	2.18	20-22S	6.01	3.88	6.56	4.21	9.83	6.32	6.82	4.38
20-22S	6	X	X	X	X	5.64	3.63	5.90	3.80	4.27	2.75	20-22P	5.14	3.30	5.66	3.64	8.95	5.76	5.95	3.83
20-23P	2	X	X	X	X	4.03	2.59	4.27	2.75	2.63	1.70	20-23S	4.79	3.09	5.39	3.41	8.54	5.50	5.53	3.56
20-23S	2	X	X	X	X	4.40	2.83	4.66	2.99	3.00	1.93	20-23P	4.40	2.83	4.90	3.16	8.17	5.27	5.16	3.32
20-27P	14	X	X	X	X	4.29	2.76	4.55	2.94	2.92	1.87	20-27S	5.71	3.26	6.34	3.62	10.02	5.71	6.60	3.77
20-27S	14	X	X	X	X	4.70	3.02	4.92	3.19	3.33	2.15	20-27P	4.68	3.01	5.23	3.37	8.48	5.45	5.47	3.52
20-29P	17	X			X	4.66	2.99	4.88	3.15	3.27	2.10	20-29S	5.53	3.56	6.06	3.91	9.30	5.99	6.32	4.06
20-29S	17	X			X	5.16	3.32	5.40	3.48	3.72	2.41	20-29P	5.03	3.23	5.53	3.56	8.82	5.68	5.77	3.73
20-33P	11					4.62	2.98	4.86	3.13	3.24	2.08	20-33S	5.14	3.30	5.64	3.63	8.91	5.73	5.90	3.80
20-33S	11					4.75	3.06	5.01	3.21	3.35	2.16	20-33P	5.01	3.21	5.51	3.55	8.78	5.65	5.73	3.69
22-2P	3	X	X	X	X	4.55	2.94	4.75	3.06	2.92	1.87	22-2S	5.53	3.56	6.23	4.00	9.70	6.24	6.51	4.19
22-2S	3	X	X	X	X	5.53	3.56	5.73	3.69	3.94	2.54	22-2P	4.55	2.94	5.23	3.37	8.72	5.61	5.51	3.55
22-4P	4	X	X	X	X	4.70	3.02	4.90	3.16	3.07	1.98	22-4S	5.36	3.45	5.99	3.87	9.52	6.11	6.32	4.06
22-4S	4	X	X	X	X	5.36	3.45	5.53	3.56	3.68	2.38	22-4P	4.70	3.02	5.38	3.46	8.89	5.71	5.66	3.64
22-5P	6	X	X	X	X	4.40	2.83	4.62	2.98	2.74	1.77	22-5S	4.42	2.84	5.07	3.26	8.61	5.53	5.40	3.48
22-5S	6	X	X	X	X	4.42	2.84	4.66	2.99	2.83	1.83	22-5P	4.40	2.83	5.05	3.24	8.54	5.50	5.38	3.46
22-9P	3	X	X	X	X	3.92	2.52	4.09	2.62	2.26	1.45	22-9S	4.92	3.19	5.62	3.62	9.11	5.86	5.95	3.83
22-9S	3	X	X	X	X	4.92	3.19	5.16	3.32	3.33	2.15	22-9P	3.92	2.52	4.55	2.94	8.04	5.17	4.86	3.13
22-10P	4	X	X	X	X	3.92	2.52	4.09	2.62	2.26	1.45	22-10S	4.07	2.61	4.70	3.02	8.21	5.29	5.03	3.23
22-10S	4	X	X	X	X	4.07	2.61	4.27	2.75	2.41	1.56	22-10P	3.92	2.52	4.55	2.94	8.04	5.17	4.86	3.13
22-14P	19	X	X	X	X	5.23	3.37	5.40	3.48	3.57	2.30	22-14S	5.97	3.84	6.62	4.27	10.15	6.53	6.93	4.46
22-14S	19	X	X	X	X	5.97	3.84	6.21	3.99	4.31	2.78	22-14P	5.23	3.37	5.86	3.77	9.35	6.03	6.21	3.99
22-18P	8	X	X	X	X	4.31	2.78	4.55	2.94	2.70	1.75	22-18S	4.40	2.83	5.05	3.24	8.54	5.50	5.38	3.46
22-18S	8	X	X	X	X	4.40	2.83	4.62	2.98	2.74	1.77	22-18P	4.31	2.78	5.01	3.21	8.50	5.46	5.31	3.41
22-19P	14	X	X	X	X	5.14	3.30	5.36	3.45	3.50	2.26	22-19S	5.23	3.37	5.86	3.77	9.35	6.03	6.21	3.99
22-19S	14	X	X	X	X	5.23	3.37	5.40	3.48	3.57	2.30	22-19P	5.14	3.30	5.77	3.73	9.26	5.96	6.12	3.94
22-22P	4		X	X		5.27	3.38	5.47	3.52	3.59	2.32	22-22S	6.60	4.24	7.23	4.64	10.79	6.93	7.56	4.86
22-22S	4		X	X		6.60	4.24	6.82	4.38	4.92	3.19	22-22P	5.27	3.38	5.90	3.80	9.41	6.07	6.23	4.00
22-23P	8	X		X		5.03	3.23	5.27	3.38	3.37	2.18	22-23S	6.47	4.16	7.10	4.57	10.59	6.81	7.45	4.78
22-23S	8	X		X		6.47	4.16	6.67	4.30	4.81	3.10	22-23P	5.03	3.23	5.66	3.64	9.19	5.92	5.99	3.87
22-36P	8	X		X		22.71	14.61	22.91	14.73	21.08	13.56	22-36S	24.85	15.98	25.52	16.42	29.03	18.67	25.81	16.60
22-36S	8	X		X		24.85	15.98	25.09	16.12	23.23	14.95	22-36P	22.71	14.61	23.39	15.04	26.87	17.28	23.67	15.23
24-2P	7	X		X		5.29	3.40	5.31	3.41	3.35	2.16	24-2S	6.49	4.17	7.67	4.92	10.94	7.04	7.06	4.54
24-2S	7	X		X		6.36	4.09	6.38	4.10	4.46	2.87	24-2P	5.38	3.46	6.56	4.21	9.85	6.33	5.97	3.84
24-5P	16	X	X	X	X	5.86	3.77	5.90	3.80	3.96	2.55	24-5S	6.69	4.31	7.86	5.07	11.16	7.18	7.30	4.70
24-5S	16	X	X	X	X	6.60	4.24	6.62	4.27	4.68	3.01	24-5P	5.97	3.84	7.15	4.60	10.44	6.72	6.56	4.21
24-6P	8	X	X	X	X	5.49	3.53	5.51	3.55	3.57	2.30	24-6S	7.23	4.64	8.43	5.42	11.75	7.55	7.82	5.03
24-6S	8	X	X	X	X	7.15	4.60	7.17	4.62	5.27	3.38	24-6P	5.60	3.60	6.80	4.37	10.09	6.49	6.21	3.99
24-7P	16	X	X	X	X	6.12	3.94	6.14	3.95	4.20	2.70	24-7S	6.69	4.31	7.86	5.07	11.16	7.18	7.30	4.70
24-7S	16	X	X	X	X	6.60	4.24	6.62	4.27	4.68	3.01	24-7P	6.23	4.00	7.41	4.75	10.68	6.86	6.82	4.38
24-10P	7	X			X	7.63	4.91	7.67	4.92	5.71	3.67	24-10S	8.87	5.70	9.98	6.43	13.29	8.55	9.48	6.08
24-10S	7	X			X	8.76	5.64	8.78	5.65	7.17	4.62	24-10P	7.71	4.96	8.91	5.73	12.22	7.86	8.30	5.35
24-12P	5	X	X	X	X	6.82	4.38	6.84	4.41	4.88	3.15	24-12S	8.26	5.31	9.48	6.08	12.70	8.19	8.87	5.70
24-12S	5	X	X	X	X	8.15	5.25	8.17	5.27	6.25	4.02	24-12P	6.91	4.45	8.10	5.22	11.35	7.30	7.52	4.84
24-20P	11	X	X	X	X	5.47	3.52	5.49	3.53	3.55	2.29	24-20S	5.62	3.62	6.82	4.38	10.11	6.50	6.23	4.00
24-20S	11	X	X	X	X	5.51	3.55	5.53	3.56	3.59	2.32	24-20P	5.53	3.56	6.71	4.32	9.98	6.43	6.14	3.95
24-27P	7	X			X	4.68	3.01	4.70	3.02	2.74	1.77	24-27S	4.90	3.16	6.12	3.94	9.41	6.07	5.51	3.55
24-27S	7	X			X	4.81	3.10	4.86	3.13	2.92	1.87	24-27P	4.79	3.09	5.97	3.84	9.24	5.95	5.38	3.46
24-28P	24	X	X	X	X	6.38	4.10	6.47	4.16	4.53	2.92	24-28S	7.34	4.73	8.52	5.49	11.83	7.61	7.91	5.10
24-28S	24	X	X	X	X	7.23	4.64	7.30	4.70	5.36	3.45	24-28P	6.51	4.19	7.63	4.91	11.00	7.07	7.10	4.57
28-2P	14	X	X	X	X	5.99	3.87	6.67	4.30	4.20	2.70	28-2S	6.67	4.30	7.30	4.70	11.11	7.15	7.34	4.73
28-2S	14	X	X	X	X	6.38	4.10	7.06	4.54	4.62	2.98	28-2P	6.27	4.03	6.86	4.42	10.68	6.86	6.93	4.46
28-9P	12	X	X	X	X	6.34	4.08	6.97	4.49	4.55	2.94	28-9S	7.17	4.62	7.80	5.02	11.61	7.47	7.86	5.07
28-9S	12	X	X	X	X	6.93	4.46	7.58	4.88	5.14	3.30	28-9P	6.60	4.24	7.19	4.63	11.03	7.08	7.30	4.70
28-11P	22	X	X	X	X	6.82	4.38	7.47	4.81	5.01	3.21	28-11S	8.50	5.46	9.11	5.86	12.94	8.33	9.19	5.92
28-11S	22	X	X	X	X	8.26	5.31	8.91	5.73	6.47	4.16	28-11P	7.01	4.53	7.67	4.92	11.48	7.40	7.71	4.96
28-12P	26	X	X	X		7.06	4.54	7.71	4.96	5.29	3.40	28-12S	8.50	5.46	9.11	5.86	12.94	8.33	9.19	5.92
28-12S	26	X	X	X		8.26	5.31	8.91	5.73	6.47	4.16	28-12P	7.32	4.71	7.91	5.10	11.77	7.57	8.02	5.16
28-15P	35	X	X	X	X	7.91	5.10	8.61	5.53	6.14	3.95	28-15S	9.41	6.07	9.98	6.43	13.82	8.90	10.11	6.50
28-15S	35	X	X	X	X	9.13	5.89	9.83	6.32	7.34	4.73	28-15P	8.17	5.27	8.82	5.68	12.60	8.11	8.89	5.71
28-16P	20	X	X	X	X	6.97	4.49	7.67	4.92	5.23	3.37	28-16S	7.32	4.71	7.91	5.10	11.77	7.57	8.02	5.16
28-16S	20	X	X	X	X	7.06	4.54	7.71	4.96	5.29	3.40	28-16P	7.23	4.64	7.86	5.07	11.68	7.51	7.91	5.10
28-17P	15	X	X	X	X	5.95	3.83	6.60	4.24	4.16	2.67	28-17S	6.60	4.24	7.19	4.63	11.03	7.08	7.30	4.70
28-17S	15	X	X	X	X	6.34	4.08	6.97	4.49	4.55	2.94	28-17P	6.21	3.99	6.82	4.38	10.59	6.81	6.82	4.38
28-18P	12	X	X	X	X	5.73	3.69	6.38	4.10	3.94	2.84	28-18S	6.51	4.19	7.15	4.60	10.94	7.04	7.19	4.63
28-18S	12	X	X	X	X	6.27	4.03	6.93	4.46	4.46	2.87	28-18P	5.99	3.87	6.62	4.27	10.44	6.72	6.69	4.31
28-20P	14	X	X	X	X	6.86	4.42	7.54	4.85	5.05	3.24	28-20S	7.86	5.07	8.50	5.46	12.31	7.93	8.54	5.50
28-20S	14	X	X	X	X	7.63	4.91	8.28	5.32	5.82	3.75	28-20P	7.10	4.57	7.71	4.96	11.53	7.43	7.80	5.02
28-21P	37	X	X	X	X	8.17	5.27	8.97	5.70	6.36	4.09	28-21S	9.57	6.15	10.18	6.54	13.95	8.97	10.22	6.58
28-21S	37	X	X	X	X	9.26	5.96	9.94	6.39	7.52	4.84	28-21P	8.43	5.42	9.02	5.81	12.88	8.27	9.11	5.86
32-7P	35	X	X	X	X	8.67	5.57	9.24	5.95	6.69	4.31	32-7S	12.49	8.04	12.55	8.08	17.72	11.39	13.10	8.41
32-7S	35	X	X	X	X	11.03	7.08	11.61	7.47	9.02	5.81	32-7P	10.15	6.53	10.20	6.57	15.32	9.85	10.70	6.87
36-10P	48	X	X	X	X	11.77	5.89	12.01	6.27	8.82	4.62	36-10S	13.86	7.33	14.12	7.40	19.48	10.74	14.75	7.71
36-10S	48	X	X	X	X	12.66	6.39	12.97	6.78	9.74	5.14	36-10P	12.92	6.81	13.18	6.86	18.57	10.17	13.82	7.19

See Ordering and Quantity Discount Information on page 294

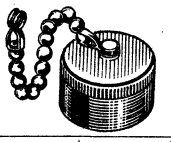
Connector Accessories



9760 DUST CAPS FOR RECEPTACLES

Have internal threads for use with Amphenol MS3100A, MS3101A, and MS3102A receptacles. Provides dust-proofing and protection from live circuits. Includes beaded chains for mounting. Av. wt. 2 oz.

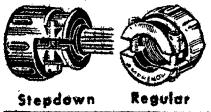
Stock No.	MS Type	Fits Shell	EACH 1-9	10-49	50-99	100-Up
712-2538A	9760-10	10S, 10SL	.70	.55	.45	.36
712-2540A	9760-12	12, 12S, 12SL	.77	.62	.51	.41
712-2542A	9760-14	14, 14S	.85	.66	.55	.44
712-2544A	9760-16	16, 16S	.92	.73	.61	.48
712-2546A	9760-18	18	1.10	.86	.72	.57
712-2548A	9760-20	20	1.21	.95	.78	.63
712-2550A	9760-22	22	1.38	1.08	.89	.72
712-2552A	9760-24	24	1.60	1.25	1.05	.84
712-2554A	9760-28	28	1.91	1.51	1.25	1.00
712-2556A	9760-32	32	2.22	1.75	1.45	1.17
712-2558A	9760-36	36	2.46	1.94	1.61	1.29



9760 DUST CAPS FOR PLUGS

Male caps and chains for plugs MS3106 and MS3108. Has external threads. Provide protection against live circuits and keep out dirt and dust when connector is not in use. Av. wt. 2 oz.

Stock No.	MS Type	Fits Shell	EACH 1-9	10-49	50-99	100-Up
712-2539	9760-10P	10S, 10SL	1.06	.83	.69	.55
712-2541	9760-12P	12, 12S, 12SL	1.17	.91	.76	.61
712-2543	9760-14P	14, 14S	1.34	1.05	.87	.69
712-2545	9760-16P	16, 16S	1.52	1.19	.99	.79
712-2547	9760-18P	18	1.54	1.22	1.02	.81
712-2549	9760-20P	20	1.61	1.25	1.05	.84
712-2551	9760-22P	22	2.00	1.57	1.31	1.05
712-2553	9760-24P	24	2.40	1.88	1.57	1.25
712-2555	9760-28P	28	2.51	1.98	1.65	1.32
712-2557	9760-32P	32	3.70	2.90	2.42	1.94
712-2559	9760-36P	36	3.83	3.00	2.51	2.00



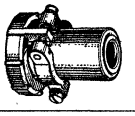
Stepdown Regular

CABLE CLAMP

SERIES 3057. For jacketed cable or wires protected by tubing. Supports at plug or receptacle. Use with rubber bushing for firm grip. *Stepdown. 3½ oz.

Stock No.	MS Type 3057	Fits Shell	EACH 1-9	10-49	50-99	100-Up
712-2500A	3057-3	8S, 10S	.84	.57	.51	.46
712-2501A	3057-4	12, 12S	.76	.53	.47	.42
712-2503A	3057-6	14, 14S	.76	.53	.47	.42
712-2505A	3057-8	16, 16S	.82	.56	.50	.45
712-2507A	3057-10	18	.82	.57	.50	.47
712-2533A	97-3057-10-6*	18	1.24	1.08	.90	.71
712-2509A	3057-12	20, 22	.96	.70	.63	.50
712-2534A	97-3057-12-6*	20, 22	1.32	1.13	.95	.76
712-2511A	3057-16	24, 28	1.12	.85	.76	.62
712-2513A	3057-20	32	1.54	1.13	.95	.86
712-2515A	3057-24	36	2.08	1.56	1.28	1.15
712-2517A	3057-28	40	2.90	1.99	1.75	1.60

MS3057A CABLE CLAMP AND BOOT



Strong and lightweight. Both clamping halves float, so that cable is always centered, affording maximum strain relief. AN3420 boot provides support and weather-proofing. Extra boots may be used for small cable outside diameter. Shpg. wt. 5 oz.

Stock No.	MS Type	Fits Shell	EACH 1-9	10-49	50-99	100-Up
712-2502	3057-4A	10SL, 12, 12	1.10	.84	.75	.61
712-2504	3057-6A	12SL, 14, 14	1.12	.85	.76	.62
712-2506	3057-8A	16, 16S	1.16	.86	.77	.63
712-2508	3057-10A	18	1.20	.89	.80	.66
712-2510	3057-12A	20, 22	1.32	.99	.89	.73
712-2512	3057-16A	24, 28	1.66	1.24	1.11	.92
712-2514	3057-20A	32	2.16	1.62	1.24	1.20
712-2516	3057-24A	36	2.66	1.99	1.77	1.48

AN3420 TELESCOPING BOOTS

Rubber bushing specifically designed for MS3057A cable clamp. Protects wire bundles and unjacketed cables from possible damage by cable clamp. Telescope for use with cable that is too small in relation to the MS connector used. 1½ oz.

Stock No.	Type No.	Cable O.D.	EACH 1-9	10-49	50-99	100-Up
712-2579	9779-513-3	0.130	.12	.09	.08	.07
712-2580	9779-513-4	0.220	.12	.09	.08	.07
712-2581	9779-513-6	0.312	.14	.10	.09	.08
712-2582	9779-513-8	0.437	.14	.10	.09	.08
712-2583	9779-513-10	0.562	.18	.13	.12	.11
712-2584	9779-513-12	0.625	.18	.13	.12	.11
712-2585	9779-513-16	0.750	.22	.16	.15	.13
712-2586	9779-513-20	0.937	.32	.24	.21	.19
712-2587	9779-513-24	1.250	.38	.28	.25	.23

SERIES 86 STANDARD TYPE CP PLUGS

Bakelite plugs for use as chassis connectors. Retainer-ring mounting. Use adapter plate below for replacement mtg. With mtg. ring for 1 11/64" holes. †Have guide post and aligning key. Av. wt., 2 oz.

Stock No.	Mfr's Type	Pins	EACH 1-49	50-99	100-249	250-499	500-999	1000-Up
713-3602	86-CP4	4	.30	.25	.22	.17	.17	.15
713-3603	86-CP5	5	.30	.25	.22	.17	.17	.15
713-3604	86-CP6	6	.32	.27	.24	.19	.19	.16
713-3605	86-CP7S	7-Small	.33	.28	.25	.19	.19	.14
713-3606	*86-CP8†*	*Octal*	.32	.27	.24	.19	.19	.17
713-3607	86-CP9†	9	.33	.28	.25	.19	.19	.17
713-3610	*86-CP11†*	*11*	.34	.28	.25	.20	.20	.17
713-3611	86-CP12†	12	.35	.29	.26	.20	.20	.17

Adapter Plate Type 12-001-03. Nickel-plated steel. For all Type CP plugs above. 1½" to 1⅞" centers. Wt., 1 oz.
713-0085.....Each .06

JONARD CONTACT INSERTION AND REMOVAL TOOLS

Insertion Tool

Removal Tool

- Make Changing Contacts a Snap • Color-Coded for Easy Identification
- Can Be Used With All Standard Connectors • Protective Probe Guards

Jonard contact insertion and removal tools are precision-made to give reliable service with standard Amphenol, Bendix, Cannon, Cinch, etc., connectors. Designed specifically for ease of operation and handling. Light and well-shaped aluminum handles assure proper gripping and manipulation of tool-steel probes. Probe tips are highly finished and polished to protect connectors and contacts. All tools are color-coded to provide easy identification of different size contacts. Visual indicator bands for easy guidance of contact removal and insertion on connectors. Protective probe guards prevent accidental damage when tools are not in use. Kits consist of the three different size tools in a zippered leather case. Conform to Federal and Military standards. Av. tool wt. 1 oz.; Kit, 6 oz.

INSERTION TOOLS

Stock No.	Type No.	MS-	Description	EACH 1-3	4-Up
830-0201	A-12	24256A12	Yellow, for #12 contact	15.00	12.50
830-0202	A-16	24256A16	Blue, for #16 contact	15.00	12.50
830-0203	A-20	24256A20	Red, for #20 contact	15.00	12.50
830-0352	KA-260	Kit, incl. one each of above. 6 oz.		43.20	36.00

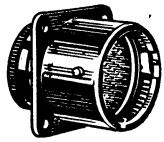
REMOVAL TOOLS

Stock No.	Type No.	MS-	Description	EACH 1-3	4-Up
830-0367	R-12	24256R12	Yellow, for #12 contact	19.20	16.00
830-0368	R-16	24256R16	Blue, for #16 contact	19.20	16.00
830-0369	R-20	24256R20	Red, for #20 contact	19.20	16.00
830-0355	KR-260	Kit, incl. one each of above. 6 oz.		54.00	45.00

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

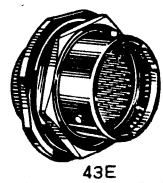
ASTRO 348 SUBMINIATURE CONNECTORS

Provide user with 0.085" contact spacing. Superior design qualifies these connectors for use even where size may not be a deciding factor. Positive coupling, triple-track bayonet system with coupling ring mechanically captivated; front release, rear serviceable contacts. 100% "No-Scoop" design on long style 30E and 36E; balance are 50% "No-Scoop". Prevents accidental damage to pin contacts, even when blind mating. (Long and standard sizes do not intermate.) Ground fingers for added EMI protection. Crimp contacts are held in the molded retention disc by the rear nut; a twist of the nut releases them for wiring changes, a second twist locks them securely in place. Environmental performance is equivalent to MIL-C-81511B. Contacts are size AWG 22; accept solid or stranded wires, AWG sizes 22, 24, and 26. Wire sealing range, .030" to .054" dia. Av. shpg. wt. 2½ oz.

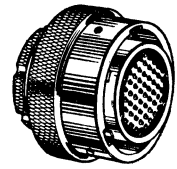


40E SQUARE FLANGE

41E CABLE RECEPTACLE



43E "D" HOLE RECEPTACLE

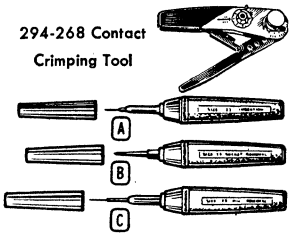


46E PLUG

Stock No.	Type 348-	EACH 1-9	10-24	25-99
713-7500	30E10-12P1	29.25	19.58	17.70
713-7501	30E10-12S1	33.30	20.44	18.48
713-7502	30E14-37P1	36.10	29.45	26.61
713-7503	30E14-37S1	43.40	33.87	30.61
713-7504	30E16-55P1	46.10	33.57	30.34
713-7505	30E16-55S1	51.75	40.37	36.49
713-7506	30E18-85P1	50.25	35.73	32.29
713-7507	30E18-85S1	66.70	47.80	43.17
713-7508	30E22-121P1	68.50	46.33	41.88
713-7509	30E22-121S1	96.70	62.14	56.16
713-7510	30E24-155P1	75.10	55.48	50.14
713-7511	30E24-155S1	102.50	76.29	68.95
713-7512	36E10-12P1	33.70	20.75	18.75
713-7513	36E10-12S1	36.20	19.43	17.56
713-7514	36E14-37P1	46.10	31.45	28.42
713-7515	36E14-37S1	51.75	36.21	32.72
713-7516	36E16-55P1	45.25	36.21	32.73
713-7517	36E16-55S1	61.15	43.04	38.90
713-7518	36E18-85P1	55.75	38.63	34.91
713-7519	36E18-85S1	73.50	50.85	45.93
713-7522	36E22-122P1	71.75	57.20	51.69
713-7523	36E22-122S1	96.75	73.00	65.97
713-7524	36E24-155P1	75.00	65.36	59.07
713-7525	36E24-155S1	108.50	83.31	75.29
713-7535	40E10-12P1	31.60	20.95	18.93
713-7536	40E10-12S1	26.00	21.13	19.10
713-7539	40E14-37P1	37.70	30.24	27.33
713-7540	40E14-37S1	36.10	33.03	29.85
713-7543	40E16-55P1	37.75	34.47	31.15
713-7544	40E16-55S1	42.75	38.89	35.15
713-7547	40E18-85P1	45.90	36.61	33.09
713-7548	40E18-85S1	59.50	44.43	40.15

Stock No.	Type 348-	EACH 1-9	10-24	25-99
713-7556	41E10-12P1	21.48	16.11	14.56
713-7557	41E10-12S1	21.62	16.29	14.72
713-7560	41E14-37P1	34.70	30.27	27.36
713-7561	41E14-37S1	35.80	33.03	29.85
713-7564	41E16-55P1	41.75	34.46	31.15
713-7565	41E16-55S1	48.00	38.89	35.15
713-7568	41E18-85P1	46.10	36.61	33.09
713-7569	41E18-85S1	59.50	44.45	40.17
713-7576	43E10-12P1	31.50	22.17	20.04
713-7577	43E10-12S1	31.60	22.36	20.20
713-7580	43E14-37P1	35.50	24.76	22.38
713-7581	43E14-37S1	41.25	33.90	30.64
713-7584	43E16-55P1	42.25	35.91	32.45
713-7585	43E16-55S1	50.25	40.33	36.45
713-7588	43E18-85P1	47.75	37.44	33.84
713-7589	43E18-85S1	61.20	45.28	40.93
713-7600	46E10-12P1	29.65	19.56	17.68
713-7601	46E10-12S1	30.20	19.74	17.84
713-7604	46E14-37P1	36.00	30.10	27.21
713-7605	46E14-37S1	39.80	32.86	29.70
713-7608	46E16-55P1	40.85	34.50	31.18
713-7609	46E16-55S1	47.60	38.92	35.18
713-7612	46E18-85P1	46.40	37.39	33.79
713-7613	46E18-85S1	55.75	44.59	40.29

CONNECTOR ACCESSORY TOOLS



A 294-278 Pin/Socket Insertion. 12 oz.
713-7472...Ea. 16.50 2-Up...13.50

B 294-286 Pin Contact Removal. 12 oz.
713-7474...Ea. 11.80 2-Up....9.60

C 294-287 Socket Contact Removal. 9 oz.
713-7476...Ea. 28.00 2-Up...22.80

294-268 Contact Crimping Tool. 1 lb.
713-7478....Ea. 161.00 2-Up....130.50

294-1551 Contact Locator. Shpg. wt. 8 oz.
713-7480.....Ea. 21.80 2-Up.....17.70

MINIATURE 165 AN CONNECTORS

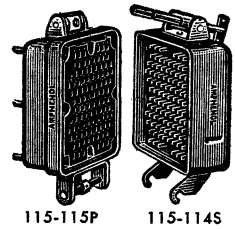
Pressureproof and weatherproof miniature AN connectors. Widely used in instrumentation and miniaturized electronic equipment. Connectors are available in two shell sizes.

Contacts are gold over silver plating. Aluminum shells feature quick bayonet coupling. Small receptacles mount in 13/16" hole; secure through four 1/8" holes on 25/32" centers. Large receptacles require 1 1/16" hole with four 1/8" holes on 1 5/16" centers. Plugs are 2 1/16" long. Small plugs are 57/64" dia.; large plugs are 1 9/64" in dia. Rated: 500 volts rms, except *600 volts. All have strain relief clamps. Shells are aluminum with neutral-color chromium finish. Dielectric material is diallyl phthalate. All have "O" ring seals. Av. shpg. wt., 3 oz.

Stock No.	Type No.	Contacts and Ampere Rating	Description	EACH 1-9	10-49	50-Up
SMALL SHELL—5 No. 20 CONTACTS						
713-5570	165-33	*5 @ 7.5	Male Plug	5.12	4.10	3.23
713-5573	165-34	*5 @ 7.5	Female Plug	6.95	5.56	4.43
713-5576	165-35	*5 @ 7.5	Male Recept.	3.64	2.90	2.32
713-5579	165-36	*5 @ 7.5	Female Recept.	4.40	3.52	2.79
SMALL SHELL—9 No. 20 CONTACTS						
713-5526	165-13	9 @ 7.5	Male Plug	5.30	4.26	3.40
713-5529	165-14	9 @ 7.5	Female Plug	8.20	6.55	5.21
713-5532	165-15	9 @ 7.5	Male Recept.	3.94	3.16	2.51
713-5535	165-16	9 @ 7.5	Female Recept.	5.05	4.04	3.22
SMALL SHELL—12 No. 20 CONTACTS						
713-5516	165-9	12 @ 7.5	Male Plug	5.60	4.49	3.58
713-5518	165-10	12 @ 7.5	Female Plug	8.35	6.69	5.32
713-5520	165-11	12 @ 7.5	Male Recept.	4.20	3.38	2.68
713-5523	165-12	12 @ 7.5	Female Recept.	6.90	5.54	4.40
LARGE SHELL—24 No. 20 CONTACTS						
713-5550	165-25	24 @ 7.5	Male Plug	9.60	7.69	6.12
713-5553	165-26	24 @ 7.5	Female Plug	12.60	10.11	8.04
713-5556	165-27	24 @ 7.5	Male Recept.	6.60	5.30	4.24
713-5559	165-28	24 @ 7.5	Female Recept.	8.80	7.05	5.61

SERIES 115 50-AND 100-CONTACT VISE-LOCKED CABLE CONNECTORS

Accommodate 50 or 100 #16 wires. Vise action of screw lock provides leverage for attaching and detaching plug. Inserts have molded-in numbers to facilitate wiring and checking of circuits. Solder-cup contacts are free-floating for alignment in mating but cannot rotate. AN-type cable clamps with aluminum housings also listed. Approx. size of shells: 100-contact, 3½x3½x1 11/32"; 50-contact, 2 31/32x2¼x1 11/32". Rated at 750 V, 60 Hz AC max. at sea level. Shpg. wt., 1 lb.



115-115P 115-114S

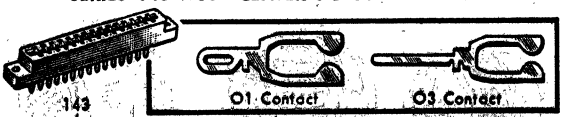
Stock No.	Type 115-	Description and Number of Contacts	EACH 1-4	5-9	10-Up
713-4305	30P-1000	Male Plug—100	58.00	38.62	35.11
713-4316	31S-1000	Female Receptacle—100	60.00	40.13	36.48
713-4320	32P	Male Receptable—100	57.90	38.52	35.02
713-4332	14P	Male Plug—50	38.88	25.05	22.79
713-4335	115S	Female Receptacle—50	50.30	34.37	31.10
713-4338	115P	Male Receptacle—50	38.98	25.68	23.39
713-4341	114S	Female Plug—50	49.40	33.74	30.56
713-4352	949	Cable Clamp—100	24.80	16.60	15.09
713-4363	1391	Cable Clamp—50	20.38	13.45	12.23

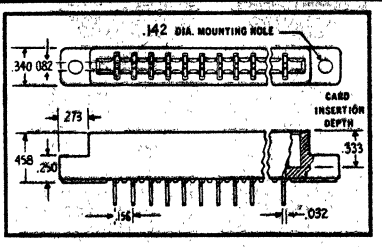
ATTENTION BUYERS

Make Allied Electronics your "one-stop" center for all your component needs. Allied Electronics has the world's largest stock of industrial components—ready for fast shipment and at OEM prices. See page 3 or back cover for the location of the Allied Electronics facility nearest you.

AMPHENOL Printed Circuit Card-Edge Connectors

SERIES 143 .156" CENTER PC CONNECTORS

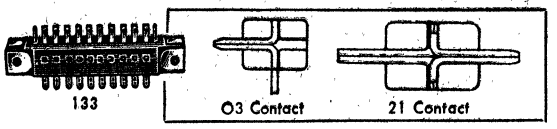


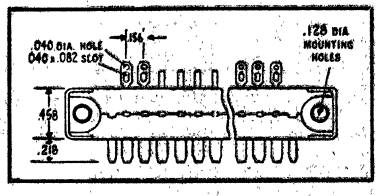


Mate with standard .054 to .070" PC board and Series 133 plugs below. Compact bodies are molded of diallyl phthalate dielectric. Excellent insertion characteristics. Long spring base of contact prevents "setting". Drop at 2 amps is approx. 5 millivolts. May be polarized by 143-953 key when used with 133 Series. Last 2 digits in Type No. indicate tail style. Type 01, eyelet contact; Type 03, .040x.400" pin contact. Gold-flashed albaloy contacts. Rated 600 V rms at 5 amps. Breakdown voltage, 5400 VDC at sea level. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-49	50-99	100-249	250-999	1000-Up
713-4800	143-006-01	6	1.20	1.04	.87	.73	.63	.56
713-4809	143-010-01	10	1.40	1.16	.97	.82	.70	.62
713-4816	143-012-01	12	1.45	1.21	1.01	.85	.73	.64
713-4825	143-015-01	15	1.50	1.25	1.04	.88	.75	.67
713-4833	143-018-01	18	1.92	1.44	1.20	1.01	.86	.77
713-4841	143-022-01	22	2.02	1.68	1.41	1.18	1.01	.90
713-4802	143-006-03	6	1.38	1.14	.96	.80	.69	.61
713-4811	143-010-03	10	1.72	1.29	1.08	.91	.78	.69
713-4818	143-012-03	12	1.77	1.33	1.11	.93	.80	.71
713-4827	143-015-03	15	1.82	1.37	1.15	.96	.83	.73
713-4835	143-018-03	18	2.10	1.58	1.32	1.11	.95	.84
713-4843	143-022-03	22	2.50	1.87	1.57	1.31	1.13	1.00
713-4895	143-953	Polar Key	.04	.04	.03	.03	.02	.02

SERIES 133 .156" CENTER PC PLUGS

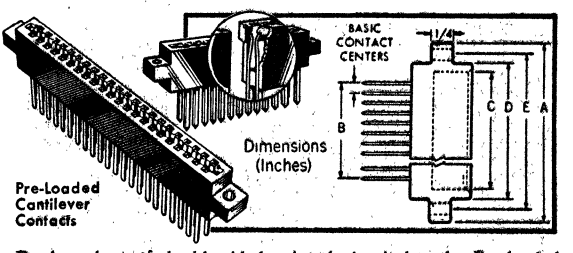




Mate with 143 Series shown above. Molded of diallyl phthalate dielectric; have brass, cadmium-plated guide pins; cadmium-plated end caps and gold-over-albaloy-plated brass contacts. Two .128" holes for bolting to wiring board. Contacts are not subject to damage by mating or unmating at angle. Last two digits in Type No. indicate tail style. Type 03 with .042" dia. contact may be dip soldered to a board for applications similar to using the board itself for mating. Type 21 PC plug has eyelet tail for easy cable plug-in to printed circuit board. Operating voltage rating: 600 volts rms at sea level. Current rating: 5 amps. Average contact breakdown voltage: 3250 volts DC at sea level. Average shpg. wt. 2 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-49	50-99	100-249	250-999	1000-Up
713-4702	133-006-21	6	2.65	1.77	1.48	1.24	1.06	.94
713-4712	133-010-21	10	2.67	2.00	1.67	1.40	1.20	1.07
713-4723	133-012-21	12	3.70	2.45	2.05	1.72	1.48	1.31
713-4729	133-015-21	15	3.60	2.39	2.00	1.68	1.44	1.28
713-4735	133-018-21	18	4.07	2.70	2.26	1.90	1.63	1.44
713-4743	133-022-21	22	3.92	2.93	2.45	2.06	1.76	1.57
713-4700	133-006-03	6	2.60	1.73	1.44	1.21	1.04	.92
713-4710	133-010-03	10	2.90	1.93	1.62	1.36	1.16	1.03
713-4721	133-012-03	12	3.35	2.23	1.86	1.56	1.34	1.19
713-4727	133-015-03	15	3.02	2.27	1.90	1.59	1.36	1.21
713-4733	133-018-03	18	3.97	2.64	2.21	1.85	1.59	1.41
713-4741	133-022-03	22	4.15	2.77	2.31	1.94	1.66	1.48

SERIES 261 WIRE-WRAP PC CONNECTORS

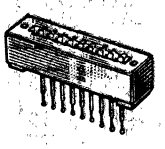


Dual readout of double-sided printed circuit boards. Pre-loaded cantilever-type contacts are assembled into dielectric with precise spacing for automatic solderless wrap terminations. Tail length is sufficient for three wire wraps plus space for bussing or PC board next to block. Contacts are confined in dielectric to determined pre-load force for fixed, definite separation eliminating possibility of shorts. Gold-plated phosphor bronze contacts rated at 5.0 amps. Voltage rating: 300 V rms at sea level. Minimum voltage breakdown: 1800 V rms. Contact resistance: 6.0 milliohms max. .025" square tail, with 50001-type contact. Key replaces one pair of contacts. See dimensions in tables below. Av. shpg. wt. 3 oz.

Contacts	A	B	C	D	E
.100" CENTER DIMENSIONS					
15	2.474	1.400	1.720	1.874	2.156
18	2.774	1.700	2.020	2.174	2.456
22	3.174	2.100	2.420	2.574	2.856
30	3.974	2.900	3.220	3.374	3.656
36	4.574	3.500	3.820	3.974	4.256
43	5.274	4.200	4.520	4.674	4.956
.125" CENTER DIMENSIONS					
15	2.824	1.750	2.070	2.224	2.506
18	3.199	2.125	2.445	2.599	2.881
22	3.699	2.625	2.945	3.099	3.381
28	4.449	3.375	3.695	3.849	4.131
36	5.449	4.375	4.695	4.849	5.131
43	6.324	5.250	5.570	5.724	6.006
.156" CENTER DIMENSIONS					
15	3.258	2.184	2.504	2.658	2.940
18	3.726	2.652	2.972	3.126	3.408
22	4.350	3.276	3.596	3.750	4.032
28	5.286	4.212	4.532	4.686	4.968
36	6.534	5.460	5.780	5.934	6.216
43	7.626	6.552	6.872	7.026	7.308

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-49	50-99	100-249	250-999	1000-Up
.100" CENTER								
713-7206	261-10018-2	15	2.80	2.44	2.05	1.72	1.47	1.30
713-7207	261-10028-2	18	3.22	2.80	2.34	1.97	1.68	1.49
713-7208	261-10022-2	22	3.76	3.27	2.74	2.29	1.97	1.74
713-7209	261-10030-2	30	4.70	4.09	3.42	2.87	2.46	2.18
713-7210	261-10036-2	36	5.46	4.75	3.97	3.38	2.86	2.53
713-7211	261-10043-2	43	6.35	5.53	4.62	3.88	3.32	2.95
.125" CENTER								
713-7412	261-12515-2	15	2.80	2.44	2.05	1.72	1.47	1.30
713-7413	261-12518-2	18	3.22	2.80	2.34	1.97	1.68	1.49
713-7414	261-12522-2	22	3.76	3.27	2.74	2.79	1.97	1.74
713-7415	261-12528-2	28	4.70	4.09	3.42	2.87	2.46	2.18
713-7416	261-12536-2	36	5.46	4.75	3.97	3.38	2.86	2.53
713-7417	261-12543-2	43	6.35	5.53	4.62	3.88	3.32	2.95
.156" CENTER								
713-7418	261-15615-2	15	3.35	2.92	2.44	2.05	1.75	1.56
713-7419	261-15618-2	18	3.88	3.38	2.84	2.37	3.03	1.81
713-7420	261-15622-2	22	4.48	3.90	3.27	2.73	2.35	2.08
713-7421	261-15628-2	28	5.50	4.79	4.01	3.37	2.88	2.55
713-7422	261-15636-2	36	6.91	6.01	5.03	4.23	3.62	3.21
713-7423	261-15643-2	43	8.16	7.10	5.93	4.98	4.27	4.01
713-7428	261-70005	Pol. key	.04	.04	.03	.03	.02	.02

SERIES 64 EDGE BOARD RECEPTACLES



Economy-type miniature receptacles accept boards .032" thick. For low-voltage applications. .075" centers. Gold over silver-plated, heat-treated beryllium-copper contacts. Contact resistance: .010 ohms. Current rating: 1.0 amp. Voltage rating: 750 volts AC rms at sea level. Mineral-filled diallyl pthalate insulator. Shpg. wt. 2 oz.

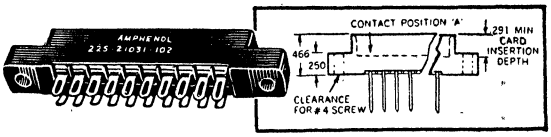
Stock No.	Mfr's Type	Dimen. A	Dimen. B	Contacts	EACH 1-9	10-49	50-99	100-Up
713-2186	64-17	.95"	.83"	9	1.12	.94	.79	.68
713-2187	64-18	1.40"	1.28"	15	2.72	2.28	1.91	1.64

Make Allied Electronics Your Headquarters for Amphenol Connectors

Printed Circuit Card-Edge Connectors

AMPHENOL SERIES 225 PRINTED CIRCUIT CONNECTORS

SERIES 225 .156″ CENTERS PC CONNECTORS WITH SOLDER EYELETS OR DIP SOLDER PINS

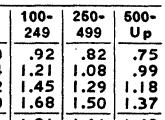


Solder eyelet and dip solder straight pin connectors in Amphenol's 117 suffix series economy line. Bifurcated bellows contacts with gold plating over copper. Rated 5 amps at 600 VAC. Contacts on .156″ centers with .140″ row spacing. Electrical grade phenolic dielectric. 5000 megohms insulation resistance. Fit boards .054 to .071″ thick. Bifurcated design guarantees two points of positive contact. Double spring action and a wide flexing range make contacts gentle on PC surfaces, yet exert a firm wiping action. Card slot provides guidance for misalinged boards. Two rows of independent contacts. Solder eyelet tails accept up to two #18 AWG wires. Dip solder contacts are .310″ long and fit a .043″ minimum diameter hole. Av. shpg. wt. 2 oz.

Stock No.	Type 225-	Contacts	Tail-Style	EACH 1-49	50-99	100-249	250-499	500-Up
713-6132	*20621-401*	*12*	*Eyelet*	1.31	1.10	.92	.82	.75
713-6134	21021-401	20	Eyelet	1.73	1.44	1.21	1.08	.99
713-6136	21521-401	30	Eyelet	2.06	1.72	1.45	1.29	1.18
713-6138	21821-401	36	Eyelet	2.39	2.00	1.68	1.50	1.37
713-6140	22221-401	44	Eyelet	2.58	2.16	1.81	1.61	1.48
713-6142	22821-401	56	Eyelet	3.95	3.31	2.77	2.47	2.26
713-6144	*23621-401*	*72*	*Eyelet*	4.60	3.85	3.23	2.87	2.63
713-6146	*24321-401*	*86*	*Eyelet*	5.28	4.42	3.71	3.30	3.02
713-6133	*20621-404*	*12*	*Pin*	1.31	1.10	.92	.82	.75
713-6135	21021-404	20	Pin	1.73	1.44	1.21	1.08	.99
713-6137	21521-404	30	Pin	2.06	1.72	1.45	1.29	1.18
713-6139	21821-404	36	Pin	2.39	2.00	1.68	1.50	1.37
713-6141	22221-404	44	Pin	2.58	2.16	1.81	1.61	1.48
713-6143	*22821-404*	*56*	*Pin*	3.95	3.31	2.77	2.47	2.26
713-6145	*23621-404*	*72*	*Pin*	4.60	3.85	3.23	2.87	2.63
713-6147	*24321-404*	*86*	*Pin*	5.28	4.42	3.71	3.30	3.02

SERIES 225 POLARIZING KEYS

225-645 over contact key can be used with wire-wrapable connectors on .100″ and .125″ centers. 225-594 between-contact key for .125″ center wire-wrapables.



713-6102. Type 225-645 Key.....Each .04
713-6101. Type 225-594 Key.....Each .04

Guide to Selecting PC Card Edge Connectors

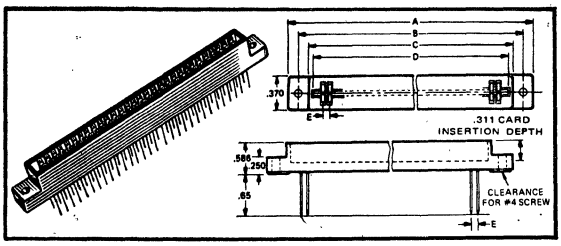
Allied stocks a complete line of printed circuit connectors covering spacings from .075″ to .156″ centers in a variety of contact styles. Come in single and dual readout in a great range of contact positions. The chart below will help you locate the type needed faster and with more efficiency than ever before. Insulator column in table below uses abbreviations P for Phenolic and DP for Diallyl Pthalate.

Centers	Series	Mfgr.	Insulator	Contact Types: Eyelet	Dip Solder	PC Tab	Wire Wrap	Page
.156″	143	Amphenol	DP	X		X		298
.156″	225	Amphenol	P	X	X	X		299
.156″	261	Amphenol	P				X	298
.156″	50	Cinch	DP	X	X			300
.156″	6007	Elco	DP	X				299
.156″	6022	Elco	DP	X				299
.156″	600	Vector	DP	X	X			352
.125″	225	Amphenol	P				X	299
.125″	261	Amphenol	P				X	298
.100″	225	Amphenol	P				X	299
.100″	261	Amphenol	P				X	298
.100″	50	Cinch	DP				X	300
.075″	64	Amphenol	DP			X		298

For connectors that mount to P.C. card and mating plugs see Elco 5000 and 7000 series shown on pgs. 301 and 302.

Card edge connectors for special printed boards and integrated circuit boards are shown on pages 108-110.

SERIES 225 PRINTED CIRCUIT CONNECTORS WITH WIRE WRAPABLE TERMINATIONS

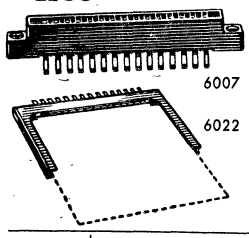


Provide an economical and reliable connector for either automatic or hand wire wrapping applications. Bifurcated bellows contacts on .100x.200, or .125x.250 grid spacings provide for smooth positive, two-point mating action no matter how irregular the board surface. Contacts are confined in dielectric to determined pre-load force for fixed definite separation eliminating possibility of shorts. Provide dual readout of double-sided PC boards. Electrical grade phenolic dielectric. Phosphor bronze contacts plated gold over copper. For .054 to .071″ boards. Current rating: 5 amps. Voltage rating: 600 VAC at sea level. Terminations are .65″ long. Av. shpg. wt. 3 oz.

Contacts	A	B	C	D	E
.125″ CONTACT CENTERS					
44	3.680	3.380	3.080	2.945	.125
60	4.680	4.380	4.080	3.945	.125
86	6.305	6.005	5.705	5.570	.125
100	7.180	6.880	6.580	6.445	.125
.100″ CONTACT CENTERS					
44	3.155	2.855	2.555	2.420	.100
60	3.955	3.655	3.355	3.220	.100
86	5.255	4.955	4.655	4.520	.100
100	5.955	5.655	5.355	5.220	.100

Stock No.	Type 225-	Contacts	Centers	EACH 1-49	50-99	100-249	250-999	1000-Up
713-6150	804-22	44	.125	3.35	2.80	2.35	2.01	1.79
713-6151	804-30	60	.125	4.43	3.71	3.11	2.66	2.36
713-6157	804-43	86	.125	6.16	5.15	4.32	3.70	3.29
713-6153	804-50	100	.125	6.93	5.79	4.86	4.16	3.70
713-6157	805-22	44	.100	3.35	2.80	2.35	2.01	1.79
713-6158	805-30	60	.100	4.43	3.71	3.11	2.66	2.36
713-6159	805-43	86	.100	6.16	5.15	4.32	3.70	3.29
713-6160	805-50	100	.100	6.93	5.79	4.86	4.16	3.70

ELCO 6007-6022 PC CARD-EDGE CONNECTOR



One-piece connectors for 1/16″ module boards. Ribbon-type, phosphor bronze contacts, gold-plated over nickel-base plating. 7.5-amp rating. Dual-contact terminations are .046″ by .125″ straight tab wire hole. Glass-filled, diallyl phthalate insulation. Polarization: between contact positions, without losing contacts. .128″ diameter mounting holes. Type 6022 as 6007 but with extended card guides. .156″ spacing. 3 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-49	50-99	100-249	250-Up
778-0364	00-6007-022-940-002	22	2.33	2.12	1.70	1.38
778-0368	00-6007-036-980-002	36	2.71	2.46	1.97	1.60
778-0372	00-6007-044-980-002	44	2.99	2.72	2.18	1.77
778-0385	00-6022-022-940-002	22	2.54	2.37	2.11	1.94
778-0387	00-6022-044-980-001	44	3.20	2.98	2.66	2.45

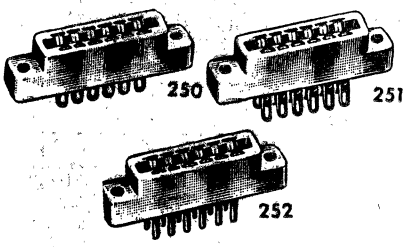
778-2072. 60-6002. 3124 Polarizing Tab. Type B.....Ea. .04

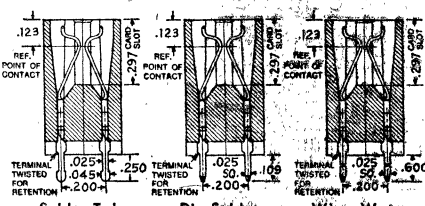
TRIPLE A BATTERY BINDING POSTS

Easy-to-install binding posts. Have hole tapers 5/8 to 3/4″ diameter. Wt. 1 oz.
540-9999. 1-5....Each .84 6-29....Each .76
30-59.....Each .68 60-Up.....Each .61

Printed Circuit Board Connectors

CINCH-JONES BIFURCATED-CONTACT CARD-EDGE CONNECTORS





Three terminal styles available in sizes having 15/30 to 43/86 contacts. Insulators, with or without mounting lugs, molded of diallyl phthalate, Type SDG-F. Barriers between contacts accept polarization keys. Cantilever contact design handles 1/16" thick single or double sided boards. Construction combines minimum insertion force with maximum contact pressure. Selective gold plating for concentration of gold in area of contact wear. 2 oz.

Designed for minimum PC card wear, low insertion force and positive contact with PC board. For 1/16" PC boards with .156" contact spacing. Glass-filled diallyl phthalate insulation, SDGF per MIL-M-14F. Phosphor-bronze contacts with .00003" minimum Sel-Rex gold-plate. Two flexing surfaces instead of one for positive contact—offset irregularities in PC boards. Plastic polarizing key available (listed separately) 830 VAC (rms) rating. Current, 5 amps. Series 250 and 251 have solder tab contacts. Series 252 have contact tails for dip soldering to fit .051" diameter holes. Series 253 have wire wrap termination. "M" in type number indicates beryllium copper contacts with 50 micro-inches of gold finish per MIL-C-2109 A. Av. shpg. wt. 2 oz.

250 SERIES SINGLE-READOUT

Stock No.	Mfr's Type 50-	Contact Pos.	No. of Cont.	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
750-1100	6A-20	6	6	1.47	1.29	1.03	.87	.69	.65
750-1101	6A-20M	6	6	1.87	1.66	1.33	1.10	.88	.84
750-1105	*10A-20*	*10*	*10*	1.95	1.73	1.39	1.15	.93	.89
750-1106	10A-20M	10	10	2.62	2.32	1.85	1.55	1.24	1.17
750-1110	12A-20	12	12	2.22	1.96	1.64	1.30	1.04	.99
750-1119	*15A-20*	*15*	*15*	2.60	2.29	1.82	1.53	1.22	1.15
750-1120	15A-20M	15	15	3.62	3.14	2.51	2.10	1.68	1.60
750-1124	*18A-20*	*18*	*18*	3.00	2.62	2.09	1.74	1.39	1.33
750-1125	18A-20M	18	18	4.15	3.65	2.91	2.43	1.95	1.85
750-1137	22A-20	22	22	3.50	3.06	2.45	2.04	1.62	1.55
750-1138	22A-20M	22	22	4.92	4.31	3.45	2.86	2.29	2.18
750-1155	25A-20	25	25	4.15	3.65	2.91	2.43	1.95	1.85

251 SERIES DOUBLE-READOUT

750-1111	12A-30	6	12	1.47	1.29	1.03	.87	.69	.65
750-1129	20A-30	10	20	1.95	1.73	1.39	1.15	.93	.89
750-1130	20A-30M	10	20	2.62	2.32	1.85	1.55	1.24	1.17
750-1150	24A-30	12	24	2.22	1.96	1.64	1.30	1.04	.99
750-1157	*30A-30*	*15*	*30*	2.60	2.29	1.82	1.53	1.22	1.15
750-1158	30A-30M	15	30	3.62	3.14	2.51	2.10	1.68	1.60
750-1166	36A-30M	18	36	4.15	3.65	2.91	2.43	1.95	1.85
750-1173	*44A-30*	*22*	*44*	3.50	3.06	2.45	2.04	1.62	1.55
750-1174	44A-30M	22	44	4.92	4.31	3.45	2.86	2.30	2.18
750-1185	50A-30	25	50	4.15	3.65	2.91	2.43	1.95	1.85

252 SERIES DOUBLE-READOUT

750-1116	12B-10	6	12	1.47	1.29	1.03	.87	.69	.65
750-1134	20B-10	10	20	1.95	1.79	1.39	1.15	.93	.89
750-1151	24B-10	12	24	2.22	1.96	1.64	1.30	1.04	.99
750-1162	30B-10	15	30	2.60	2.29	1.82	1.53	1.22	1.15
750-1169	36B-10	18	36	3.00	2.62	2.09	1.74	1.39	1.33
750-1177	44B-10	22	44	3.50	3.06	2.45	2.04	1.62	1.55

253 SERIES DOUBLE-READOUT

750-1118	12B-20	6	12	3.62	3.14	2.52	2.10	1.68	1.60
750-1136	20B-20	10	20	4.46	3.94	3.15	2.63	2.10	2.00
750-1152	24B-20	12	24	4.92	4.34	3.47	2.89	2.31	2.19
750-1164	30B-20	15	30	5.57	4.92	3.94	3.29	2.63	2.50
750-1171	36B-20	18	36	6.36	5.52	4.41	3.68	2.95	2.79
750-1179	44B-20	22	44	7.15	6.30	5.05	4.20	3.36	3.19

SOLDER TAB

Stock No.	Mfr's Type 60-	No. of Cont.	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
750-1163	30C-10	15/30	3.32	2.67	2.23	1.79	1.70	1.57
750-1178	44C-10	22/44	3.86	3.08	2.57	2.06	1.94	1.85
750-1189	72C-10	36/72	5.03	4.02	3.35	2.68	2.53	2.41
750-1193	80C-10	40/60	5.30	4.24	3.53	2.82	2.67	2.54
750-1197	86C-10	43/86	5.63	4.50	3.75	3.00	2.83	2.70

DIP SOLDER

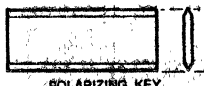
750-1165	30C-20	15/30	3.27	2.62	2.18	1.74	1.65	1.57
750-1180	44C-20	22/40	3.86	3.08	2.57	2.06	1.94	1.85
750-1190	72C-20	36/72	5.03	4.02	3.35	2.68	2.53	2.41
750-1194	80C-20	40/80	5.30	4.24	3.53	2.82	2.67	2.54
750-1198	86C-20	43/86	5.63	4.50	3.75	3.00	2.83	2.70

WIRE WRAP

Type 50-PK-3 Polarizing Pin. For between contact polarization—does not reduce contact position.

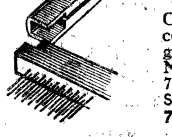
750-1167	30C-30	15/30	3.32	2.67	2.23	1.79	1.70	1.62
750-1181	44C-30	22/44	3.91	3.13	2.62	2.11	1.99	1.90
750-1191	72C-30	36/72	5.08	4.07	3.40	2.73	2.58	2.46
750-1195	80C-30	40/80	5.35	4.29	3.58	2.87	2.72	2.59
750-1199	86C-30	43/86	5.68	4.55	3.80	3.05	2.88	2.75
750-1104	50-PK-3	.....	.07	.05	.04	.033	.032	.031

CINCH-JONES POLARIZING KEYS



Two types available; *for "in contact" polarization—takes up one contact position; †for "between-contact" polarization—does not reduce contact position.

POLARIZING KEY
OEM. Part No. 474-11-76-229
DIST. Part No. 50 PK 3



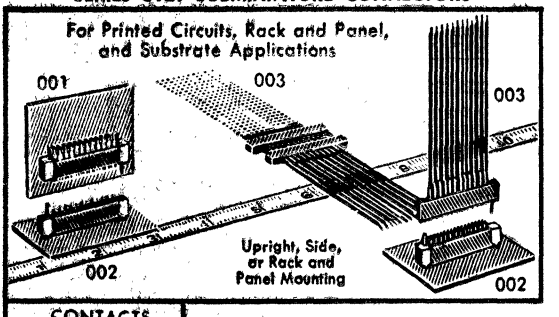
Stock No.	Type 50PK-	EACH 1-24	25-49	50-99	100-249
750-1102	*1	.07	.05	.04	.033
750-1103	†2	.06	.05	.04	.031

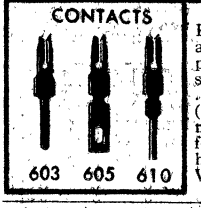
TYPE 50-GP-1 CARD GUIDE POST

Can be assembled with any 251 or 253 series connector with clearance mounting holes. Card guide constructed of durable polypropylene. Nylon polarizing key. Phosphor bronze QQ-B-750 contacts. Diallyl phthalate insulator, Type SDG-F per MIL-M-14. Green color.
750-1099. 1 oz. 1-24.....28 25-Up.....21

ELCO VARICON

SERIES 8129 SUBMINIATURE CONNECTORS





For printed circuit, flexible cable, and rack and panel applications. One-piece diallyl phthalate insulator. With metal pin and socket guide. Single row of contacts on .100" spacing. 3 types (illus., left): Type 603 (upright mounting) and Type 610 (side mounting) have printed circuit termination for cards to 3/32"; Type 605 (rack and panel) has wirehole taper tab for .078" base tab. Wt. 2 oz.

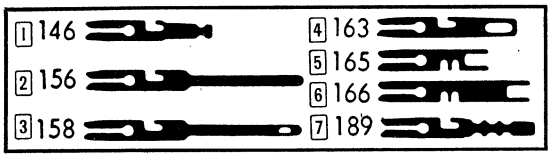
Stock No.	Mfr's Type 00-8129-	Contact Type	Contacts	Brackets	EACH 1-24	25-49	50-99	100-Up
778-1304	006-610-001	610	6	Side Mount	1.80	1.54	1.39	1.12
778-1324	009-610-001	610	9		2.25	1.72	1.55	1.25
778-1345	012-610-001	610	12		2.10	1.82	1.64	1.32
778-1364	015-610-001	610	15		2.22	1.98	1.78	1.44
778-1300	006-603-002	603	6	Upright	1.80	1.44	1.30	1.04
778-1320	009-603-002	603	9		2.00	1.62	1.46	1.17
778-1340	012-603-002	603	12		2.10	1.72	1.55	1.25
778-1360	015-603-002	603	15		2.25	1.88	1.69	1.36
778-1302	006-603-003	603	6	None	1.50	1.20	1.08	.87
778-1322	009-603-003	603	9		1.72	1.38	1.24	1.00
778-1342	012-603-003	603	12		2.05	1.48	1.33	1.07
778-1362	015-603-003	603	15		1.90	1.64	1.48	1.19
778-1303	006-605-003	605	6	None	1.50	1.20	1.08	.87
778-1323	009-605-003	605	9		1.72	1.38	1.24	1.00
778-1344	012-605-003	605	12		2.05	1.48	1.33	1.07
778-1363	015-605-003	605	15		1.90	1.64	1.48	1.19

778-2066. Model 60-8129, 4311 Polarizing Pin. Takes up one contact position. 1-99.....04 100-Up.....02

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Elco Varicon® Receptacles and Plugs

VARICON CONTACT TYPES



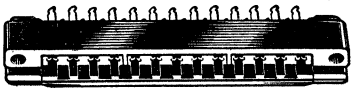
SPECIFICATIONS. All Series. Diallyl phthalate insulation. Gold-flashed, nickel-plated phosphor-bronze contacts rated 10 amps. Maximum contact resistance, 0.006 milliohm.

SERIES 5007 .200″ RECEPTACLES

Similar to Series 5006, but end sections have guides and mounting holes for direct mounting to chassis. Mate with Series 5000 plugs and strips, facing page. Accept 1/16″ module card, have card guide. .200″ spacing. **Specify Type Number of contact termination desired in place of ***.** Wt., 2 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-49	50-99	100-249	250-Up
777A112X	00-5007-012-***-001	12	2.48	2.23	1.80	1.49
777A119X	00-5007-019-***-001	19	3.68	3.31	2.67	2.21
777A120X	00-5007-020-***-001	20	3.88	3.49	2.81	2.33
777A124X	00-5007-024-***-001	24	4.56	4.10	3.31	2.74

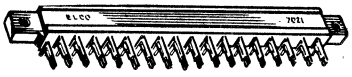
SERIES 5009 .200″ OPEN END RECEPTACLES



Single row of contacts on .200″ spacing. Two .128″ mounting holes. Polarize without loss of contacts. Mate with Series 5000 contact strips. Open-end card slot for any width 1/16″ module card, except ‡3/32″. Position with polarizing tabs below. **Specify Type Number of contact termination desired in place of ***.** Av. shpg. wt., 2 oz.

777A202X	00-5009-012-***-001	12	2.56	2.30	1.86	1.54
777A216X	00-5009-016-***-001	16	3.16	2.84	2.29	1.90
777A222X	‡00-5009-022-***-002	22	4.14	3.73	3.00	2.48
778-2070	60-5006.3414 Pol. Tab for 1/16″ Card		EACH .038			
778-2071	60-5006.3424 Pol. Tab for 3/32″ Card		EACH .038			

SERIES 7021 .100″ PLUGS



Double-tier plugs with .100″ spacing. For circuit boards 1/16″ thick. Mate with 7000 Series receptacles which do not have card guides. Rigid insulator maintains exact spacing between contacts, reduces card warp. Av. shpg. wt., 2 oz.

778-0508	00-7021-017-000-001	17	3.25	2.14	1.73	1.43
778-0511	00-7021-023-000-001	23	3.95	2.61	2.10	1.74
778-0515	00-7021-029-000-001	29	4.70	3.10	2.49	2.06
778-0523	00-7021-035-000-001	35	5.37	3.55	2.86	2.36
778-0531	00-7021-041-000-001	41	6.95	3.94	3.18	2.63

MINIATURE VARICON CONNECTORS

5023 with Center Guides

For 1/16″ module cards. Can be polarized without losing contact. Long molded card guides. Series 5023 shown with center guide (sold less guide). When guide is used, 2—14-contact receptacles are formed. *Less contacts, below. Mates with 5000 series strip, Page 302.

SERIES 5023 RECEPTACLES

One row of contacts on .200″ ctrs. Two .128″ mtg. holes. 4 oz.

Stock No.	Mfr's Type 00-5023-	Contact Type	Contacts	EACH 1-9	10-49	50-99	100-Up
778-0350	014-217-001	Wire Hole	14	5.60	4.92	4.43	3.57
778-0353	033-217-001	Wire Hole	33	7.56	6.94	6.25	5.03
778-0349	014-000-001	Varilok*	14	2.75	2.26	2.03	1.64
778-0352	033-000-001	Varilok*	33	2.97	2.62	2.36	1.90

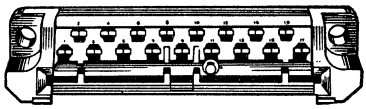
60-5023.3117 Center Guide. For 33-contact size only. Wt., 1 oz.
778-2086.....58

TABS AND CONTACTS

Stock No.	Mfr's Type	Description		EA.	2-Up
778-2070	60-5006.3414	Polarizing Tab	PKG./100	.038	.038
778-2073	60-8017.0313	Varilok Contact	PKG./100	8.20	6.50

HOW TO COMPLETE STOCK AND MFR'S TYPE NUMBERS
In place of X in Allied Stock Number, add the key 1, 2, 3, 4, 5, 6, or 7 pertaining to contact style wanted—see illustration at left. To complete Mfr's Type Number, add 3-figure code of contact wanted in place of ***. Example: 777A112X, Mfr's Type 00-5007-012-***-001 and you desire Style Key (146)—Order 777A1121, Mfr's Type 00-5007-012-146-001.

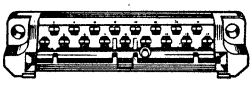
SERIES 7001 .100″ RECEPTACLES



Double row of contacts on .200″ spacing. .125″ between rows. Mate with Series 7022 or with 7000 Series Contact Strips (page 302). For 1/16″ module card except †no card guide. **Specify Type Number of contact termination desired in place of ***.** Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-49	50-99	100-249	250-Up
777A217X	00-7001-017-***-001	17	3.92	3.53	2.84	2.35
777A317X	†00-7001-017-***-002	17	3.92	3.53	2.84	2.35
777A223X	00-7001-023-***-001	23	4.48	4.03	3.25	2.69
777A323X	†00-7001-023-***-002	23	4.48	4.03	3.25	2.69
777A229X	00-7001-029-***-001	29	5.08	4.57	3.68	3.05
777A329X	†00-7001-029-***-002	29	5.08	4.57	3.68	3.05
777A230X	00-7001-035-***-001	35	5.76	5.18	4.18	3.46
777A231X	00-7001-041-***-001	41	6.38	5.74	4.63	3.83
777A330X	†00-7001-041-***-002	41	6.38	5.74	4.63	3.83
777A232X	00-7001-041-***-001	47	7.12	6.41	8.16	4.27

SERIES 7008 .100″ RECEPTACLES



Double row contacts, .125″ between rows, .200″ centers. Rows are offset .100″. Mate with Series 7022 plugs or with Series 7000 Contact Strips (page 302). For 1/16″ PC cards except †no card guides. **Specify Type No. of contact termination desired in place of ***.** Av. shpg. wt., 2 oz.

777A233X	00-7008-017-***-001	17	3.92	3.53	2.84	2.35
777A331X	†00-7008-017-***-002	17	3.92	3.53	2.84	2.35
777A234X	00-7008-023-***-001	23	4.48	4.03	3.25	2.69
777A332X	†00-7008-023-***-002	23	4.48	4.03	3.25	2.69
777A235X	00-7008-029-***-001	29	5.08	4.57	3.68	3.05
777A333X	†00-7008-029-***-002	29	5.08	4.57	3.68	3.05
777A236X	00-7008-035-***-001	35	5.76	5.18	4.18	3.46
777A334X	†00-7008-035-***-002	35	5.76	5.18	4.18	3.46
777A237X	00-7008-041-***-001	41	6.38	5.74	4.63	3.83
777A335X	†00-7008-041-***-002	41	6.38	5.74	4.63	3.83
778-2070	60-5006, 3414 Polarizing Tab		Each .038			

SERIES 7022 .100″ PLUGS

Double-tier miniature plugs. .100″ spacing. Fit boards 1/16″ thick. Mate with 7000 Receptacles above.

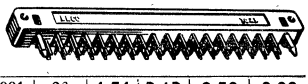
778-0534	00-7022-017-000-001	17	3.10	2.14	1.73	1.43
778-0538	00-7022-023-000-001	23	3.78	2.61	2.10	1.74
778-0542	00-7022-029-000-001	29	4.48	3.10	2.49	2.06
778-0546	00-7022-035-000-001	35	5.15	3.55	2.86	2.36
778-0550	00-7022-041-000-001	41	5.70	3.94	3.18	2.63
778-0554	00-7022-047-000-001	47	6.48	4.46	3.60	2.98

SERIES 7024 MINIATURE .100″ VARICON RECEPTACLES

Double row. Mate with 7023 Polarized at even positions. Open ended 1/16″ card slot, guide socket. **Specify contact for ***.** Av. shpg. wt., 2 oz.

777A238X	00-7024-017-***-001	17	3.92	3.53	2.84	2.35
777A239X	00-7024-023-***-001	23	4.44	4.00	3.22	2.66
777A240X	00-7024-029-***-001	29	5.00	4.50	3.63	3.00
777A241X	00-7024-035-***-001	35	5.58	5.02	4.05	3.35
777A242X	00-7024-041-***-001	41	6.16	5.54	4.47	3.70
778-2070	60-5006. 3414 Polarizing Tab		Each .038			

SERIES 7023 MINIATURE .100″ VARICON PLUGS

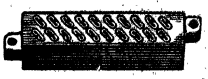


Mate with 7024 above. Mtg. flanges have .128″ diameter holes. For 1/16″ PC card. Guide pins. Av. wt., 2 oz.

778-0569	00-7023-023-000-001	23	4.54	3.13	2.52	2.09
778-0573	00-7023-029-000-001	29	5.20	3.60	2.90	2.40
778-0577	00-7023-035-000-001	35	5.90	4.07	3.28	2.71
778-0581	00-7023-041-000-001	41	6.55	4.54	3.65	3.02

Elco Varicon™ Contact Strips, Pin Receptacles

VARICON™ .100″ TAPER-PIN RECEPTACLES



7014-Bottom

7009 & 7012 - Top

These Elco receptacles feature Varicon contacts that accept two Series 53 Tapered Pin Contacts and card guides. Mounting holes are .128″ diameter. Each receptacle consists of two rows of contacts, spaced .200″ within each row. Rows are .125″ apart and offset .100″ from each other. Accept a 1/16″ printed circuit card. Can be polarized without losing contact. Phosphor-bronze contacts are nickel-plated and gold-flashed for superior conductivity. Rated 10 amps. Insulation: Diallyl phthalate, glass-filled per MIL-M-14F Type SDGF specifications. Av. ship. wt. 6 oz.

SERIES 7009

Permits mounting of adjacent receptacles on .600″ centers. *Supplied without board guides. †Polarizing tab. For 7022 plugs or 7000 Contact Strips.

Stock No.	Mfr's Type	Contacts	EACH 1-49	50-99	100-249	250-Up
778-0274	00-7009-024-193-001	24	8.90	7.38	5.95	4.92
778-0278	00-7009-034-193-001	34	10.00	8.06	6.50	5.38
778-0279	00-7009-034-193-002*	34	10.00	8.06	6.50	5.38
778-0282	00-7009-040-193-001	40	11.17	8.86	7.13	5.90
778-0283	00-7009-040-193-002*	40	11.17	8.86	7.13	5.90
778-7020	†60-5006. 3414 Pol. Tab.					Each .02

SERIES 7012 Supplied only with board guides.

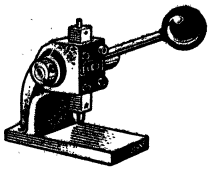
778-0290	00-7012-023-193-001	23	8.08	7.27	5.86	4.85
778-0292	00-7012-035-193-001	35	9.24	8.32	6.70	5.54
778-0294	00-7012-047-193-001	47	11.90	9.81	7.90	6.54

SERIES 7014

Straight through, open-end card slot. Supplied without card guides.

Stock No.	Mfr's Type	Contacts	EACH 1-49	50-99	100-249	250-Up
778-0298	00-7014-020-193-001	20	8.70	7.83	6.31	5.22

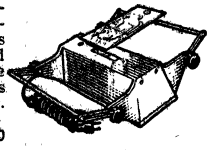
MODEL 06-1856-01 HAND STAKER



Specifically designed for proper staking of Varicon contacts. Contact retention, 45 lbs. after staking. For general laboratory and experimental uses. Ram dimensions, 1/2x1/2x2 1/2″. Ram stroke, 13/16″. Height of opening, 1 1/8″. Throat depth from center of ram, 1″. Working surface, 2x2 7/8″. Rugged metal construction. Shpg. wt., 3 lbs.

778-2487. Ea. 69.00 2-Up.....55.00

MODEL 06-1751-02 HEATING PLATEN



Varicon PC contacts are supplied on plastic strips to facilitate staking and soldering operations. Heating platen supplies proper heat to melt plastic strips and facilitate removal after contacts have been staked and soldered to board, avoids possibility of bending contacts. 10″ long. 110-120 V, AC or DC. Wt., 5 lbs.

778-2481. Ea. 100.00 2-Up.....82.00

VARICON "MICROCON" CONTACTS

Miniature "Varicon" contacts, see above right. For .100″ in line and .050″ offset contact spacing patterns. "Stand-off" types have a single stake termination. 90° card edge mounted types have terminations for staking to printed circuit base or module cards. Type 60-8240.0312 has an extended tail. Type 60-8240.0313 same as 60-8240.0303 illustrated, except for 1/16″ PC. Contacts are phosphor bronze, nickel-plated, gold-flashed. 100 per pkg. Wt., 1 1/2 oz.

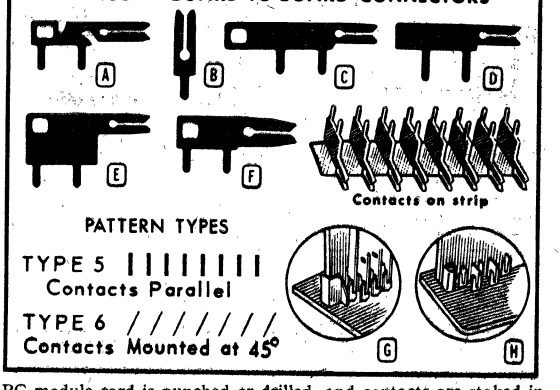
60-8240.0303

60-8240.0513

Stock No.	Mfr's Type	For PC	Application	PER PKG. 1-4	5-499	500-Up
778-2046	60-8240.0312	1/16″	"Stand-Off"	6.25	4.00	3.50
778-2045	60-8240.0303	1/32″	Card Edge	6.25	4.00	3.50
778-2047	60-8240.0313	1/16″	Card Edge	6.25	4.00	3.50
778-2048	60-8240.0513	1/16″	"Stand-Off"	6.25	4.00	3.50

Allied is a member of Elco's ADAP (Authorized Distributor Assembly Program), and can supply the complete Varicon series from stock, even in sizes not listed. Connectors for other board thicknesses may also be supplied. Contact the Allied Electronics facility nearest you for complete price and delivery information.

VARICON® BOARD-TO-BOARD CONNECTORS



PC module card is punched or drilled, and contacts are staked in and soldered to form male part of connector. Contact staking is accomplished by using contacts supplied in plastic strip for handling and support. Hole pattern on .200″ grid, .052″ hole dia.

Varicon Contact Strips. 30 contacts mounted on a plastic strip with .200″ spacing. Varicon fork-like contacts have four mating coined surfaces. Made of phosphor-bronze, contacts are nickel-plated and gold-flashed. Rated at 10 amps. *Pattern Type. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	*	Description	EACH 1-9	10-Up
778-1850	02-030-111-5200	A	5	45° for 1/16″ Board	2.10	1.50
778-1856	02-030-113-6200	B	6	Stand-off for 1/16″	2.10	1.50
778-1864	02-030-114-6200	B	6	Stand-off for 3/32″	2.10	1.50
778-1872	02-030-115-6200	B	6	Stand-off for 1/8″	2.10	1.50
778-1879	02-030-135-5200	C	5	Lower Board 1/16″	2.10	1.50
778-1890	02-030-147-5200	D	5	Lower Board less wire hole	2.10	1.50
778-1884	02-030-137-5200	E	5	Upper Board 1/16″	2.40	1.65
778-1842	02-030-013-5200	F	5	Plug—Ser. 5000 1/16″	2.10	1.50

Guide Pins and Brackets. Series 5101 brackets are mounted either to the mother or module board with furnished eyelets. Series 5201 brackets are for mounting to mother board. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Description	For PC Board	EACH
778-2058	62-5101.4012	G	Guide Bracket	1/16″	.07
778-2059	62-5201.4012	G	Rt. Guide Bracket	1/16″	.07
778-2060	62-5201.4022	G	Left Guide Bracket	1/16″	.07
778-2061	62-5301.4012	H	Female Guide Pin	1/16″	.08
778-2062	62-5301.4112	H	Male Guide Pin	1/16″	.08

F PLUGS FOR ALL SERIES 5000 RECEPTACLES

For 5006, 5007, 5009 Series receptacles on facing page. Phosphor bronze, nickel-plated gold-flashed contacts rated 10 amps. For 1/16″ cards. Av. shpg. wt. 2 oz. Price is for EACH.

Stock No.	Mfr's Type	No. of Contacts	1-9	10-Up
778-1646	02-012-013-5200	12	.75	.60
778-1673	02-014-013-5200	14	.95	.70
778-1685	02-015-013-5200	15	.99	.75
778-1693	02-016-013-5200	16	1.05	.80
778-1805	02-019-013-5200	19	1.22	.95
778-1812	02-020-013-5200	20	1.25	1.00
778-1819	02-022-013-5200	22	1.40	1.10
778-1826	02-023-013-5200	23	1.48	1.15
778-1834	02-024-013-5200	24	1.55	1.20
778-1842	02-030-013-5200	30	1.90	1.50

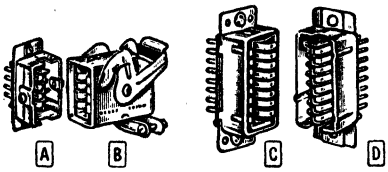
PLUGS FOR ALL SERIES 7000 RECEPTACLES

Hole pattern on .100″ grid. .052″ hole diameter. Require two contact strips, one for lower tier and one for upper tier. 2 oz.

Stock No.	Contacts	Fig.	Mfr's Type	Tier	EACH	10-Up
778-1652	24	C	02-012-135-5200	Lower	.75	.60
778-1653		E	02-012-137-5200	Upper	.83	.66
778-1687	29	C	02-015-135-5200	Lower	.94	.75
778-1675		E	02-014-137-5200	Upper	.97	.77
778-1696	34	C	02-017-135-5200	Lower	1.08	.85
778-1697		E	02-017-137-5200	Upper	1.19	.94
778-1699	35	C	02-018-135-5200	Lower	1.13	.90
778-1697		E	02-017-137-5200	Upper	1.19	.94
778-1814	40	C	02-020-135-5200	Lower	1.25	1.00
778-1815		E	02-020-137-5200	Upper	1.40	1.10
778-1836	47	C	02-024-135-5200	Lower	1.25	1.20
778-1828		E	02-023-137-5200	Upper	1.60	1.27
778-1840	51	C	02-026-135-5200	Lower	1.65	1.30
778-1839		E	02-025-137-5200	Upper	1.74	1.38

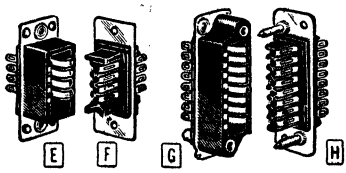
See Wire, Cable, Tubing and Accessories on Pages 269-290

Amphenol and Cinch Jones Connectors



BLUE RIBBON CONNECTORS

- Self-Cleaning Spring Contacts
- Matching Positive Polarization
- Low Insertion, Removal Forces
- For Heavy-Duty Applications



For multi-circuit connection, switching and re-routing. Gold-plated spring contacts. Low insertion and removal forces. Diallyl phthalate dielectric meets government specs. Stainless steel mounting plates.

*End cable outlet; †side cable outlet. S in Type No. indicates socket contacts; P indicates plug contacts. For wire up to No. 16. Rated 5 amps at 750 volts DC. Av. shpg. wt. 4 oz.

A B SERIES 26 BARRIER POLARIZED CONNECTORS WITH KEYED LATCH SHELLS

(Fig. A) MALE			EACH					(Fig. B) FEMALE			EACH				
Contacts	Stock No.	Mfr's Type	1-4	5-9	10-49	50-99	100-Up	Contacts	Stock No.	Mfr's Type	1-4	5-9	10-49	50-99	100-Up
8	713-0629	26-4301-8S*	8.72	6.90	5.81	4.71	4.24	8	713-0637	26-4401-8P	4.32	3.42	2.88	2.34	2.10
8	713-0647	26-4501-8S†	8.07	6.39	5.37	4.37	3.92								
8	713-0628	26-4301-8P*	7.17	5.68	4.77	3.87	3.49	8	713-0638	26-4401-8S	5.25	4.17	3.51	2.84	2.57
8	713-0646	26-4501-8P*	7.17	5.68	4.77	3.87	3.49								
16	713-0631	26-4301-16S*	9.70	7.70	6.47	5.25	4.72	16	713-0639	26-4401-16P	5.67	4.51	3.78	3.07	2.77
16	713-0649	26-4501-16S†	9.70	7.70	6.47	5.25	4.72								
16	713-0630	26-4301-16P*	8.97	7.12	5.99	4.87	4.38	16	713-0640	26-4401-16S	6.45	5.10	4.28	3.48	3.13
16	713-0648	26-4501-16P†	8.97	7.12	5.99	4.87	4.38								
24	713-0633	26-4301-24S*	11.35	8.98	7.56	6.14	5.51	*24*	713-0641	*26-4401-24P*	6.42	5.07	4.26	3.47	3.11
24	713-0651	26-4501-24S†	10.97	8.69	7.31	5.94	5.33								
24	713-0632	26-4301-24P*	9.90	7.98	6.71	5.44	4.90	24	713-0642	26-4401-24S	7.25	5.76	4.84	3.93	3.53
24	713-0629	26-4501-24P†	9.90	7.98	6.71	5.44	4.50								
32	713-0635	26-4301-32S*	12.27	9.72	8.17	6.64	5.97	32	713-0643	26-4401-32P	7.10	5.63	4.74	3.84	3.47
32	713-0653	26-4501-32S†	12.10	9.59	8.07	6.54	5.88								
32	713-0634	26-4301-32P*	11.20	8.89	7.48	6.06	5.46	32	713-0644	26-4401-32S	7.37	6.49	5.46	4.43	3.99
32	713-0652	26-4501-32P†	11.20	8.89	7.48	6.06	5.46								

C D SERIES 26 BARRIER POLARIZED CONNECTORS—KEYED SHELLS

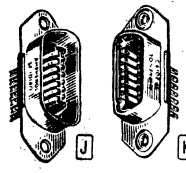
(Fig. C) MALE			EACH					(Fig. D) FEMALE			EACH				
Contacts	Stock No.	Mfr's Type	1-4	5-9	10-49	50-99	100-Up	Contacts	Stock No.	Mfr's Type	1-4	5-9	10-49	50-99	100-Up
8	713-0614	26-4101-8P	2.52	2.20	1.86	1.51	1.36	8	713-0623	26-4201-8S	3.20	2.54	2.14	1.74	1.56
16	713-0615	26-4101-16P	4.22	3.33	2.81	2.27	2.05	16	713-0624	26-4201-16S	4.37	3.46	2.92	2.36	2.12
24	713-0616	26-4101-24P	4.85	3.84	3.23	2.63	2.36	24	713-0625	26-4201-24S	5.22	4.14	3.49	2.83	2.53
32	713-0617	26-4101-32P	5.57	4.41	3.71	3.01	2.70	32	713-0626	26-4201-32S	6.07	4.80	4.05	3.28	2.95

E F SERIES 26 BARRIER POLARIZED CONNECTORS

(Fig. E) MALE			EACH					(Fig. F) FEMALE			EACH				
Contacts	Stock No.	Mfr's Type	1-4	5-9	10-49	50-99	100-Up	Contacts	Stock No.	Mfr's Type	1-4	5-9	10-49	50-99	100-Up
8	713-0603	26-182	1.57	1.23	1.04	.84	.75	8	713-0604	26-183	2.45	1.94	1.62	1.33	1.19
8	713-0610	26-4100-8P	1.27	1.12	.94	.76	.69	8	713-0618	26-4200-8S	2.10	1.81	1.55	1.26	1.12
16	713-0611	*26-4100-16P*	2.37	2.10	1.77	1.43	1.29	*16*	713-0619	*26-4200-16S*	3.37	2.67	2.25	1.82	1.63
24	713-0612	26-4100-24P	2.85	2.52	2.13	1.73	1.55	24	713-0620	26-4200-24S	3.57	3.16	2.66	2.16	1.94
32	713-0613	26-4100-32P	3.70	2.94	2.47	2.00	1.80	32	713-0621	26-4200-32S	4.77	3.77	3.17	2.58	2.31

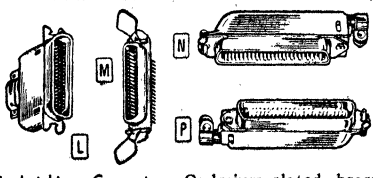
G H SERIES 26 PIN-POLARIZED CONNECTORS

(Fig. G) MALE			EACH					(Fig. H) FEMALE			EACH				
Contacts	Stock No.	Mfrs Type	1-4	5-9	10-49	50-99	100-Up	Contacts	Stock No.	Mfr's Type	1-4	5-9	10-49	50-99	100-Up
16	713-0600	*26-159-16*	2.82	2.25	1.90	1.54	1.38	*16*	713-0605	*26-190-16*	3.62	2.86	2.41	1.96	1.76
24	713-0601	26-159-24	3.20	2.54	2.13	1.73	1.56	*24*	713-0606	*26-190-24*	4.32	3.42	2.88	2.34	2.10
32	713-0602	26-159-32	3.65	3.20	2.69	2.19	1.97	*32*	713-0607	26-190-32	5.10	4.04	3.39	2.76	2.48



SERIES 57 MICRO-RIBBON® CONNECTORS

- Precision Molded Diallyl Phthalate Inserts
- Self-Cleaning Ribbon Contacts for Long Life
- Gold-Plated Contacts Rated 5 Amps at 700 VDC
- High-Impact Strength for Positive Connections



Make possible routing of many circuits through one small connector. Inserts molded of diallyl phthalate with high-impact strength and excellent dielectric. Self-cleaning ribbon contacts gold-plated over silver. Float bushings allow .020". Rated 5 amps, 700 VDC.

J K Chassis-to-Chassis Connectors. Clear iridite-finished brass shells. Wire up to #22. Description above. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-49	50-99	100-Up
713-1700	57-10140	14-Contact Plug	2.50	1.64	1.34	1.21
713-1711	57-20140	14-Contact Socket	2.30	1.70	1.37	1.24
713-1702	57-10240	24-Contact Plug	3.32	2.19	1.90	1.60
713-1713	57-20240	24-Contact Socket	3.42	2.25	1.83	1.64
713-1704	57-10360	36-Contact Plug	3.77	2.52	2.05	1.84
713-1715	57-20360	36-Contact Socket	3.87	2.59	2.10	1.89
713-1706	57-10500	50-Contact Plug	4.07	3.34	2.70	2.42
713-1717	57-20500	50-Contact Socket	5.05	3.38	2.73	2.46

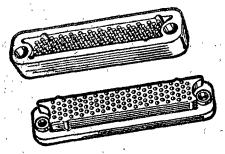
L M Cable-to-Chassis Latching Connectors. Cadmium-plated brass shells; clear chromate finish. Description above. Av. 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-49	50-99	100-Up
713-1722	*57-30140*	*14-Contact Plug*	4.27	3.16	2.57	2.32
713-1726	*57-40140*	*14-Contact Socket*	2.80	2.09	1.70	1.53
713-1723	*57-30240*	*24-Contact Plug.*	4.47	3.48	2.81	2.54
713-1727	*57-40240*	*24-Contact Socket*	3.35	2.47	2.01	1.81
713-1724	*57-30360*	*36-Contact Plug*	5.75	4.26	3.44	3.12
713-1728	*57-40360*	*36-Contact Socket*	3.60	2.67	2.16	1.94
713-1725	*57-30500*	*50-Contact Plug*	6.27	4.66	3.79	3.41
713-1729	*57-40500*	*50-Contact Socket*	4.70	3.50	2.82	2.54

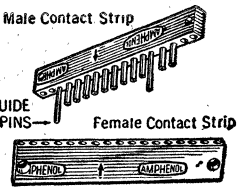
N P Cable-to-Cable Connectors. Right-angle hoods with cable clamps and dust caps. Mate with 50-contact units above. Av. 2 oz.

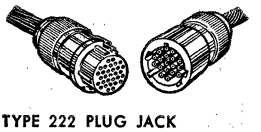
713-1708	*57-10500-7*	*50-Cont. Plug*	5.32	3.95	3.21	2.78
713-1719	57-20500-7	50-Cont. Socket	6.27	4.10	3.41	3.05

Cable and Chassis Connectors



Type 220 Type 221





TYPE 222 PLUG JACK

TYPE 223

All Connectors Sold Less Contacts

SERIES 220 "MICRO-RAC" CONNECTORS

52 or 104 contacts in smallest possible space. Float mounting; spring-loaded alignment posts. Polarized mono-block construction; contact identification numbers molded in. 52 contact size, 1.888" long by .677" wide; 1.492" mounting centers. 104 contact, 3.017 x .677"; 2.611" mounting centers. Less contacts, right. Av. wt., 1½ oz.

Stock No.	Mfr's Type	Contacts	Description	EACH 1-9	10-49	50-99	100-Up
713-5807	220-1N052	52	Plug	1.77	1.42	1.24	1.06
713-5809	220-2N052	52	Receptacle	1.54	1.23	1.08	.92
713-5811	220-5	52	Cable Clamp	1.38	1.10	.97	.83
713-5808	220-1N104	104	Plug	2.20	1.76	1.54	1.32
713-5810	220-2N104	104	Receptacle	1.91	1.53	1.34	1.15
713-5812	220-6	104	Cable Clamp	1.43	1.14	1.00	.86

SERIES 221 MICRO-MINIATURE STRIP CONNECTORS

Use full length as is, or cut to specific length. Almost any configuration can be produced quickly and easily by cutting and stacking strips. Two or more strips can be staked or epoxied together for multi-row connector. When stacked, layer to layer, contact centers are .100" for both connectors. Use guide pins at least every 3 inches for mating alignment as well as keying. Guide pins replace both a pin and socket contact; also one contact hole is utilized when staking or cutting connector. Supplied less contacts and guide pins. See listing, right. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Contacts	Description	Spacing	EACH 1-9	10-49	50-99	100-Up
713-5860	*221-1560*	*60*	*6" Plug*	*.100"*	.80	.64	.56	.53
713-5861	*221-1660*	*60*	*6" Recept.*	*.100"*	.66	.53	.47	.44
713-5862	221-2553	53	4" Plug	.075"	.71	.57	.49	.46
713-5864	*221-2653*	*53*	*4" Recept.*	*.075"*	.60	.48	.43	.40

SERIES 222 "MIGHTY MITE" CIRCULAR CONNECTORS

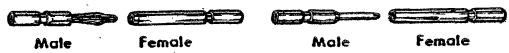
Highly reliable micro-miniature connectors for cable-to-cable or cable-to-chassis applications. .085" centers. Five keys are molded into connector to insure proper alignment. Contact identification numbers molded into the polycarbonate resin dielectric. 19-contact size, .621" dia. x 2.618" long; 31-contact, .746" x 2.948"; 61-contact, .966" x 3.530". Less contacts, right. Av. shpg. wt., 1½ oz.

Stock No.	Mfr's Type	Contacts	Description	EACH 1-9	10-49	50-99	100-Up
713-5901	222-11N19	19	Plug	1.04	.83	.67	.57
713-5904	222-12N19	19	Receptacle	.84	.67	.54	.46
713-5920	222-518	19	Cable Clamp	1.74	1.39	1.13	.96
713-5902	222-11N31	31	Plug	1.03	.82	.66	.57
713-5906	222-12N31	31	Receptacle	.83	.66	.54	.46
713-5921	222-519	31	Cable Clamp	1.85	1.48	1.20	1.02
713-5907	222-12N61	61	Receptacle	.89	.71	.57	.49
713-5922	222-520	61	Cable Clamp	4.24	3.39	2.74	2.33

SERIES 223 "TINY TIM" RACK AND PANEL CONNECTORS

For circuit modules, either potted-in or surface mounted; micro-miniature cable-to-cable use. Meet MIL-C-8384B. Contact spacing, .100" centers on each row. Screw mount. Less contacts, below. 1½ oz.

Stock No.	Mfr's Type	Contacts	Description	Mtg. Ctrs.	EACH 1-9	10-49	50-99	100-Up
713-5950	*223-1105*	*5*	*Plug*	*.593"*	.63	.50	.41	.35
713-5955	*223-1205*	*5*	*Recept.*	*.593"*	.60	.48	.38	.33
713-5951	223-1109	9	Plug	.793"	.55	.44	.35	.30
713-5956	223-1209	9	Recept.	.793"	.60	.48	.38	.33
713-5952	223-1117	17	Plug	1.193"	.65	.52	.42	.36
713-5957	223-1217	17	Recept.	1.193"	.61	.49	.39	.34



Male Female Male Female

"WIRE-FORM" "RELIA-TAC"

INDIVIDUAL "WIRE-FORM" AND "RELIA-TAC" CONTACTS

For Series 220-223; rated 3 amps. Both types take 22, 24, 26 solid wire; 24, 26 stranded wire. Relia-Tac also takes 28 solid wire. Wire-Form male, gold-clad copper alloy wire members in copper sleeves; both male and female, electroless gold plated over copper. Size, .403 x .050". Relia-Tac, gold-over-nickel on copper alloy body. Male, .389 x .050"; female, .404 x .050". Guide pins will fit either type. Note: Relia-Tac does not mate with Wire-Form. Av. shpg. wt. per pkg. 1 oz. Sold in Packages of 100.

Stock No.	Mfr's Type	Description	PRICE PER PKG. 1-3	4-9	10-49	50-Up
713-5801	*220-P01*	*Wire-Form Male*	9.36	7.50	6.60	5.50
713-5804	*220-S01*	*Wire-Form Female*	4.12	3.30	3.00	2.50
713-5802	*220-P02*	*Relia-Tac Male*	7.88	6.30	5.50	4.70
713-5805	*220-S02*	*Relia-Tac Female*	19.75	15.80	13.80	11.90

713-5853. *221-535 Universal Guide Pins*.....1-9.....20....10-Up .17

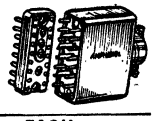
"WIRE-FORM" AND "RELIA-TAC" CONTACT TOOLS

Hand crimping tool, adjustable 4-indent miniature to MIL-T-22520. Requires contact locator bushing for specific contact used. Tool handle requires insertion bit or correct removal bit to accommodate desired contact. See Table below. Av. shpg. wt., 12 oz.

Stock No.	Mfr's Type	Description	For Contact	EACH	2-Up EACH
713-8105	357-100	Hand Crimp Tl.	.....	127.00	95.00
713-8113	357-300-1	Contact Locator	220-S01/S02/P01	25.60	20.80
713-8120	357-300-8	Contact Locator	220-P02	25.60	20.80
713-8005	356-200	Tool Hdle. Only	.....	4.06	3.52
713-8017	356-400-11	Insertion Bit	ALL	6.86	5.50
713-8018	356-400-12	Removal Bit	220-S01	7.00	5.60
713-8019	356-400-13	Removal Bit	220-P01	5.64	4.50
713-8020	356-400-14	Removal Bit	220-S02	6.25	5.00
713-8021	356-400-15	Removal Bit	220-P02	5.94	4.75

MULTICONTACT PLUGS AND SOCKETS

Shielded cable and chassis connectors. Non-rotating gold over silver-plated contacts. Interlocking barriers prevent shorting. 900 V, 60 Hz AC. *Insert only; all others with can. "A" in desc. column—cable type, "B"—chassis type. Av. shpg. wt., 3 oz.



Stock No.	Mfr's Type	Contacts #16	#20	Desc.	EACH 1-24	25-49	50-99	100-Up
713-4535	126-804*	2	9	B—plug	1.31	1.03	.81	.67
713-4536	126-805*	2	9	B—socket	1.33	1.06	.84	.70
713-4540	126-809	2	9	A—plug	2.10	1.68	1.32	1.10
713-4539	126-808	2	9	A—socket	2.14	1.72	1.36	1.13
713-4507	126-151*	3	12	B—plug	1.65	1.36	1.07	.88
713-4506	126-150*	3	12	B—socket	1.31	1.03	.81	.67
713-4508	126-152	3	12	A—plug	3.30	2.63	2.08	1.72
713-4509	126-153	3	12	A—socket	2.50	2.05	1.62	1.35
713-4537	126-806*	4	16	B—plug	2.08	1.63	1.28	1.06
713-4538	126-807*	4	16	B—socket	1.60	1.30	1.02	.85
713-4542	126-811	4	16	A—plug	3.28	2.61	2.06	1.71
713-4541	126-810	4	16	A—socket	2.80	2.28	1.80	1.49

AC CONNECTOR ASSEMBLIES

A B C

For use with Amphenol Type 61, 160, 78S and 86CP plugs and sockets. All are made of sturdy drawn steel except Type 61-61 which is a cadmium-plated steel shell. Type 61-61 recessing shell fits 1 7/16" hole; is furnished with 5/32" mounting holes on 1¾" mounting centers. Used to lower bottom of sockets, plugs and connectors 1 3/16" below mounting surface. Caps permit cable-to-chassis and cable-to-cable applications for Type 61, 78S and 86CP plugs and sockets. Type 3-13 has end rubber grommet for up to 7/16" thick cable. Type 3-24 has clamp for up to ⅜" thick cable. Types 3-13 and 3-24 have black Japan finish; are 1 1/16" long. Av. wt. 3 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-24	25-49	50-249	250-499	500-Up
713-0013	3-13	A	Black plug cap	.18	.14	.11	.098	.084
713-0024	3-24	B	Black plug cap	.29	.23	.19	.161	.138
713-2123	61-61	C	Recessing shell	.19	.15	.12	.101	.086

Miniature Rack and Panel Connectors

AMPHENOL SERIES 17 CONNECTORS AND ACCESSORIES

"MIN RAC" RACK AND PANEL CONNECTORS

Miniature connectors with "Poke-Home" contacts. Zytel 101 dielectric. Contacts are gold-over-silver plated. Cadmium-plated steel shells. Rated 5 amps. 0° to 230° F. Tools to crimping, insertion, or removal of contacts below. *Solder receptacles. †Solder plugs. ‡Cable clamp assemblies. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
713-0214	17-10090*	9	1.94	1.55	1.29	1.03	.95	.86
713-0218	17-10150*	15	2.78	2.23	1.84	1.47	1.35	1.23
713-0221	17-10250*	25	4.13	3.30	2.73	2.20	2.00	1.83
713-0224	17-10370*	37	5.85	4.68	3.86	3.11	2.81	2.58
713-0227	17-10500*	50	7.50	6.00	4.95	3.99	3.64	3.33
713-0230	17-20090†	9	1.41	1.13	.94	.75	.69	.63
713-0232	17-20150†	15	1.94	1.55	1.29	1.03	.95	.86
713-0234	17-20250†	25	2.72	2.18	1.79	1.44	1.30	1.19
713-0236	17-20370†	37	3.75	3.00	2.49	2.00	1.78	1.64
713-0238	17-20500†	50	4.77	3.82	3.15	2.53	2.31	2.11
713-0202	17-310-01‡	9	1.19	.95	.76	.68	.57	.52
713-0204	17-311-01‡	15	1.24	.99	.78	.71	.59	.54
713-0206	17-312-01‡	25	1.27	1.02	.82	.74	.62	.57
713-0208	17-313-01‡	37	1.34	1.07	.86	.77	.64	.59
713-0210	17-314-01‡	50	1.36	1.09	.87	.79	.65	.60

"POKE-HOME" CONNECTOR TOOLS

Top-quality connector tools for long life, steady service. Hand crimping tool, adjustable 4-indent miniature to MIL-T-22520, needs contact locator bushing. Tool handle requires insertion bit or correct removal bit for desired contact. See Table Below. Wt., 6 oz.

Stock No.	Mfr's Type	Description	For Contact	EACH 1	2-Up
713-8105	357-100	Hand Crimp Tool	.....	127.00	95.00
713-8115	357-300-2	Contact Locator	.....	25.60	20.80
713-8005	356-200	Tool Handle Only	.....	4.06	3.25
713-8010	356-400-1	Insertion Bit	ALL	11.90	9.50
713-8013	356-400-5	Removal Bit	Female	6.55	5.25
713-8014	356-400-6	Removal Bit	Male	5.64	4.50

MIN-RAC FIXED CONTACT CONNECTORS

Feature captivated contacts for solder termination after connector is installed. Interchangeable with original Poke-Home® series connectors. Lightweight, rugged construction. Glass-filled nylon dielectric for great rigidity. Current Rating: 7.5 amps max. Voltage Rating: 500 V rms at sea level. Temp. Range: −55° to +125°C. Shell: cadmium plated cold rolled steel. Contacts: gold over copper plated brass. Wire size: up to #20. (Available in gold irradiate shells on special order.)

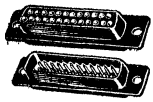
Stock No.	Mfr's Type 17-	Contacts	Description	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
713-0255	80090-16	9	Recep.	1.86	1.49	1.23	.99	.91	.83
713-0257	80150-16	15	Recep.	2.72	2.18	1.81	1.45	1.33	1.21
713-0258	80250-16	25	Recep.	4.15	3.32	2.75	2.21	2.02	1.85
713-0260	80370-16	37	Recep.	5.80	4.64	3.83	3.09	2.78	2.55
713-0262	80500-16	50	Recep.	7.50	6.00	4.94	3.99	3.62	3.31
713-0270	90090-16	9	Plug	1.44	1.04	.86	.69	.63	.58
713-0272	90150-16	15	Plug	1.84	1.47	1.22	.98	.89	.82
713-0273	90250-16	25	Plug	2.65	2.12	1.76	1.41	1.29	1.18
713-0275	90370-16	37	Plug	3.53	2.90	2.40	1.93	1.76	1.61
713-0277	90500-16	50	Plug	4.70	3.76	3.11	2.50	2.29	2.09

MIN-RAC HIGH DENSITY CONNECTORS

Subminiature high density connectors have contact centers only .075", yet each #24 size contact carries 3 amps at 500 V rms. Offer up to 100% more circuits than original Poke-Home series. Temp. Range: −55° to +125°C. Glass-filled nylon dielectric. Cadmium plated shell with chromate finish. Plug contacts: leaded copper. Socket contacts: phosphor bronze. Av. wt. 2 oz.

Stock No.	Mfr's Type 17-	Contacts	Description	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
713-0256	80140-1	14	Recep.	3.10	2.41	2.07	1.95	1.71	1.63
713-0259	80260-1	26	Recep.	3.88	3.11	2.97	2.61	2.47	2.29
713-0261	80440-1	44	Recep.	5.40	4.32	4.16	3.66	3.50	3.23
713-0263	80650-1	65	Recep.	7.24	5.79	5.09	4.91	4.48	4.25
713-0264	80980-1	98	Recep.	10.05	8.04	7.06	6.85	6.25	5.95
713-0271	90140-1	14	Plug	2.39	1.91	1.72	1.60	1.41	1.35
713-0274	90260-1	26	Plug	3.14	2.51	2.37	2.11	1.97	1.89
713-0276	90440-1	44	Plug	4.14	3.31	3.17	2.80	2.66	2.49
713-0278	90650-1	65	Plug	5.35	4.28	3.79	3.64	3.35	3.13
713-0279	90980-1	98	Plug	7.30	5.84	5.17	4.99	4.61	4.32

CINCH SERIES "D" SUBMINIATURE CONNECTORS



Have pin and socket insert, gold-plated copper alloy contacts, cadmium-plated steel shells. Mark I Golden "D": monoblock with diallyl phthalate glass fiber insulation. Meets MIL-M-14F Type SDG. Insul. res., over 5000 megohms, per MIL-STD-202A, method 302. "Original D" connectors have 2-piece nylon insert. *Digits indicate number of contacts. "F" in Mfr's Type No., indicates floating mtg. Suffix "P," male connector; "S," female. Shpg. wt., 2 oz.

ORIGINAL "D"

Stock No.	*Mfr's Type	Flange Size	EACH 1-9	10-49	50-99	100-249	250-Up
750-0120	DE-9P	1 13/64x31/64"	1.38	1.12	.95	.75	.69
750-0121	DE-9S	1 13/64x31/64"	1.92	1.60	1.34	1.07	.98
750-0020	DA-15P	1 17/32x31/64"	1.90	1.58	1.33	1.06	.97
750-0021	DA-15S	1 17/32x31/64"	2.82	2.35	1.95	1.55	1.43
750-0024	DAF-15P	1 17/32x31/64"	2.70	2.25	1.87	1.49	1.37
750-0025	DAF-15S	1 17/32x31/64"	3.64	3.00	2.61	2.02	1.84
750-0050	DB-25P	2 5/64x31/64"	2.78	2.29	1.91	1.52	1.40
750-0051	DB-25S	2 5/64x31/64"	4.38	3.59	2.99	2.40	2.19
750-0054	DBF-25P	2 5/64x31/64"	3.66	3.02	2.53	2.03	1.85
750-0055	DBF-25S	2 5/64x31/64"	5.26	4.33	3.60	2.89	2.64
750-0082	DC-37P	2 23/32x31/64"	3.76	3.12	2.59	2.09	1.91
750-0083	DC-37S	2 23/32x31/64"	6.18	5.09	4.24	3.39	3.12
750-0100	DD-50P	2 5/8x39/64"	4.92	4.06	3.38	2.72	2.49
750-0101	DD-50S	2 5/8x39/64"	8.12	6.71	5.60	4.46	4.10

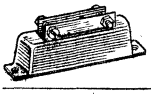
MARK I GOLDEN "D"

Stock No.	*Mfr's Type	Flange Size	EACH 1-9	10-49	50-99	100-249	250-Up
750-0126	DEM-9P	1 13/64x31/64"	2.68	2.22	1.85	1.48	1.35
750-0127	DEM-9S	1 13/64x31/64"	3.70	3.06	2.56	2.06	1.88
750-0033	DAM-15P	1 17/32x31/64"	3.86	3.20	2.66	2.13	1.95
750-0034	DAM-15S	1 17/32x31/64"	5.50	4.55	3.79	3.02	2.78
750-0068	DBM-25P	2 5/64x31/64"	5.68	4.71	3.94	3.15	2.89
750-0069	DBM-25S	2 5/64x31/64"	8.46	6.99	5.84	4.66	4.27
750-0088	DCM-37P	2 23/32x31/64"	7.96	6.58	5.49	4.39	4.02
750-0089	DCM-37S	2 23/64x31/64"	12.00	9.98	8.31	6.64	6.10
750-0106	DDM-50P	2 5/8x39/64"	10.32	8.54	7.11	5.70	5.21
750-0107	DDM-50S	2 5/8x39/64"	15.82	13.08	10.90	8.72	7.99

MARK II GOLDEN "D"

Plugs have snap-in crimp type contacts in monoblock insulator—improves temp. characteristics, moisture resistance. Snap-in crimp type contacts eliminate soldering and cut assembly time. Shock, vibration, insulation, moisture and corrosion resistance stds. meet MIL-STD-202A. Takes up to #20 AWG stranded wire. 5 amp rating. Has stainless steel float mtg. rivets and washers. Shpg. wt., 2 oz.

Stock No.	*Mfr's Type	Flange Size	EACH 1-9	10-49	50-99	100-249	250-Up
750-0130	DESM-9P	1 7/32x31/64"	4.54	3.29	2.92	2.61	2.33
750-0131	DESM-9S	1 7/32x31/64"	5.40	3.79	3.45	3.11	2.76
750-0132	DESMF-9P	1 7/32x31/64"	5.32	3.94	3.47	3.05	2.73
750-0133	DESMF-9S	1 7/32x31/64"	6.18	4.43	3.98	3.54	3.15
750-0040	DASM-15P	1 35/64x31/64"	6.96	4.88	4.44	4.00	3.55
750-0041	DASM-15S	1 35/64x31/64"	8.46	5.93	5.40	4.85	4.32
750-0042	DASMF-15P	1 35/64x31/64"	7.74	5.52	4.99	4.43	3.94
750-0043	DASMF-15S	1 35/64x31/64"	9.22	6.58	5.93	5.29	4.70
750-0072	DBSM-25P	2 3/32x31/64"	9.60	7.07	6.44	5.45	4.88
750-0069	DBSM-25S	2 3/32x31/64"	11.52	8.95	8.15	6.63	5.88
750-0074	DBSMF-25P	2 3/32x31/64"	10.38	7.71	6.97	5.88	5.27
750-0075	DBSMF-25S	2 3/32x31/64"	12.32	9.60	8.68	7.07	6.27
750-0092	DCSM-37P	2 47/64x31/64"	12.34	9.62	7.88	7.07	6.27
750-0093	DCSM-37S	2 47/64x31/64"	17.38	12.32	11.19	9.59	8.79
750-0094	DCSMF-37P	2 47/64x31/64"	13.12	9.27	8.41	7.50	6.66
750-0095	DCSMF-37S	2 47/64x31/64"	18.16	12.97	11.74	10.02	9.18
750-0110	DDSM-50P	2 41/64x39/64"	16.98	13.31	11.93	9.37	8.59
750-0111	DDSM-50S	2 41/64x39/64"	22.52	16.60	15.10	12.50	11.36
750-0112	DDSMF-50S	2 41/64x39/64"	23.30	17.25	15.63	12.93	11.75



JUNCTION SHELLS

Low-carbon steel clamp with weather resistant cadmium plating. Exceeds 50-hour salt spray test; meet MIL-STD-202A. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-249	250-Up
750-0046	DA-19678-1	1.20	.99	.82	.66	.60
750-0078	DB-19678-2	1.42	1.16	.98	.78	.71
750-0098	DC-19678-3	1.68	1.39	1.16	.92	.84
750-0114	DD-19678-4	1.82	1.51	1.25	1.01	.92

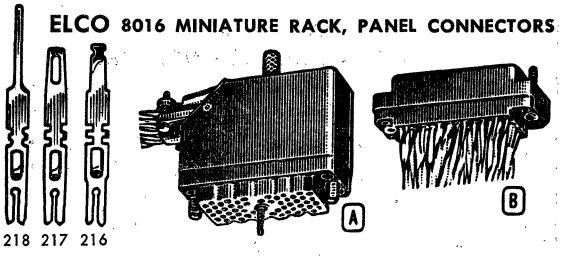
SCREW LOCK ASSEMBLIES. For junction shells above. Same corrosion-resistant construction. *Female; †male. Shpg. wt., 1 oz.

Stock No.	Type D20-	For Shell Size	EACH 1-9	10-49	50-99	100-249	250-Up
750-0015	*418-2	DA, DB, DC, DD, DE	.48	.38	.33	.26	.24
750-0016	†419	DA, DB, DC, DE	.30	.24	.20	.16	.15
750-0017	†420	DD	.44	.36	.29	.14	.22

See Wire, Cable, Tubing and Accessories on Pages 269-290

Connectors, Contacts, Terminal Strips, Tools

ELCO 8016 MINIATURE RACK, PANEL CONNECTORS



Cable clamp on cover available for top or side entrance. Diallyl phthalate insulation. Contact rating 8.5 amps. FN, fixed nut; AS, actuating screw. *Indicates no. of contacts. **Available with or without installed contacts. Specify 216, 217 or 218 in place of XXX in Mfr's Type for installed contacts. Order separate Varicon contacts or Varilok crimp-type contacts and insertion tool at right.** Av. shpg. wt. 8 oz.

A RECEPTACLES (Less Contacts and Cover)

Stock No.	Mfr's Type 00-8016-	Lock	*	EACH 1-9	10-49	50-99	100-Up
777A0319	-020-000-707	FN	20	3.02	2.38	2.14	1.73
777A0323	-020-000-708	AS	20	4.87	3.82	3.44	2.77
777A0356	-038-000-707	FN	38	3.62	2.86	2.57	2.07
777A0360	-038-000-708	AS	38	5.47	4.32	3.89	3.13
777A0391	-056-000-707	FN	56	4.40	3.46	3.11	2.51
777A0395	-056-000-708	AS	56	6.10	4.90	4.41	3.55
777A0436	-090-000-707	FN	90	5.45	4.30	3.87	3.12
777A0440	-090-000-708	AS	90	7.30	5.74	5.17	4.16
777A0476	-120-000-707	FN	120	6.02	4.82	4.34	3.49
777A0480	-120-000-708	AS	120	7.97	6.28	5.65	4.55

RECEPTACLES with Installed Contact, Less Cover

777A0318	-020-XXX-707	FN	20	5.47	4.32	3.89	3.13
777A0322	-020-XXX-708	AS	20	7.35	5.76	5.18	4.18
777A0335	-038-XXX-707	FN	38	8.37	6.56	5.90	4.76
777A0390	-056-XXX-707	FN	56	9.50	8.88	7.99	6.44
777A0394	-056-XXX-708	AS	56	11.02	10.34	9.31	7.50
777A0435	-090-XXX-707	FN	90	12.50	13.00	11.70	9.43
777A0475	-120-XXX-707	FN	120	19.50	16.44	14.80	11.92
777A0479	-120-XXX-708	AS	120	21.00	17.88	16.09	12.96

B PLUGS (Less Contacts and Cover Assembly)

777A0311	-020-000-701	AS	20	4.57	3.58	3.22	2.60
777A0315	-020-000-702	FN	20	2.72	2.14	1.93	1.55
777A0341	-038-000-701	AS	38	5.17	4.08	3.67	2.96
777A0348	-038-000-702	FN	38	3.32	2.62	2.36	1.90
777A0381	-056-000-701	AS	56	5.95	4.66	4.19	3.38
777A0386	-056-000-702	FN	56	4.10	3.22	2.90	2.33
777A0431	-090-000-701	AS	90	6.97	5.50	4.95	3.99
777A0433	-090-000-702	FN	90	5.15	4.04	3.64	2.93
777A0466	-120-000-701	AS	120	7.67	6.02	5.42	4.36
777A0470	-120-000-702	FN	120	5.82	4.58	4.12	3.32

PLUGS with Installed Contact, Less Cover Assembly

777A0310	-020-XXX-701	AS	20	6.27	5.52	4.97	4.00
777A0314	-020-XXX-702	FN	20	4.62	4.08	3.67	2.96
777A0340	-038-XXX-701	AS	38	9.85	7.74	6.97	5.61
777A0347	-038-XXX-702	FN	38	8.00	6.78	6.10	4.92
777A0380	-056-XXX-701	AS	56	12.85	10.10	9.09	7.32
777A0430	-090-XXX-701	AS	90	16.07	14.22	12.80	10.31
777A0465	-120-XXX-701	AS	120	19.45	17.64	15.86	12.79
777A0469	-120-XXX-702	FN	120	19.00	16.20	14.58	11.75

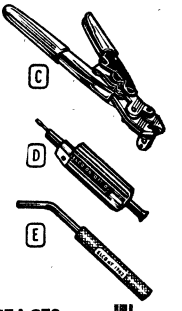
COVER ASSEMBLIES (**Cable Clamp Mounting)

Stock No.	Mfr's Type	**	Size	EACH 1-9	10-49	50-99	100-Up
777A0570	30-8016-9890	Side	20	3.07	2.42	2.18	1.75
777A0487	30-8016-9811	Top	20	3.07	2.42	2.18	1.75
777A0486	30-8016-9810	Side	38	3.25	2.56	2.30	1.86
777A0497	30-8016-9820	Top	38	3.25	2.56	2.30	1.86
777A0509	30-8016-9830	Side	56	3.37	2.66	2.39	1.94
777A0519	30-8016-9840	Top	56	3.37	2.66	2.39	1.94
777A0488	30-8016-9812	Side	90	3.67	2.90	2.61	2.10
777A0489	30-8016-9813	Top	90	3.67	2.90	2.61	2.10
777A0490	30-8016-9814	Side	120	4.32	3.38	3.04	2.45
777A0491	30-8016-9815	Top	120	4.32	3.38	3.04	2.45

LARGE WIRE CLAMP COVERS

777A0520	30-8016-9850	Side	38	3.25	2.56	2.30	1.86
777A0539	30-8016-9860	Top	38	3.25	2.56	2.30	1.86
777A0549	30-8016-9870	Side	56	3.37	2.66	2.39	1.93
777A0559	30-8016-9880	Top	56	3.37	2.66	2.39	1.93

ELCO CRIMPING EQUIPMENT

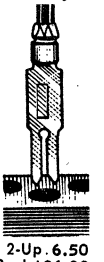


C **Type 06-7515-01 Hand Crimper.** Designed for Varilok contact #60-8017-0313 in lab, model shop and prototype applications.
778-2505. 3 lbs....Ea. 69.50 2-Up..59.00

D **Type 06-1877-04 Extraction Tool.** Designed to extract Varilok contacts from their insulator quickly and easily without damage to either contacts or insulator.
778-2490. 10 oz...Ea. 12.80 2-Up..10.70

E **Type 06-1742-04 Insertion Tool.** Provides positive method for inserting contacts into insulator by applying pressure on contacts directly at end of insulation crimp.
778-2450. 10 oz....Ea. 4.30 2-Up...3.70

VARILOK CRIMPED-WIRING CONTACTS

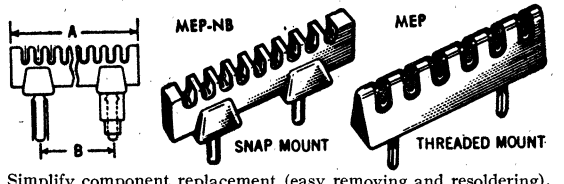


Ingenious self-locking, crimp-type contacts. Make solderless connections between wire and contact by simply crimping wire directly to the contact. A portion of the crimped contact grips the wire insulation for strain relief. Designed to accommodate all sizes of wire from 18 gauge to 30 gauge. Can be crimped to the wire independently of other assembling procedures, then easily be inserted into any insulator hole location. When inserted, Varilok contacts lock into position using spring balance for permanence, and will not twist, turn, or bend out of alignment. Easily removed with extraction tool. 8.5 amp rating. Available loose in packages of 100 or on reels of 1800 contacts per reel.
778-2073. Type 60-8017-0313. 2 oz. Per Pkg...Ea. 8.20 2-Up.6.50
778-2074. Type 60-8017-0323. Wt. 4 lbs.....Per Reel 126.00

VARICON CONTACTS AND INSERTION TOOL

For Series 8016 and 8017 rack and panel connectors. **Available in packages of 100.** Av. shpg. wt. per package, 2 oz.
777 A0586. Model 216. Has .087" taper tab term....Per Pkg. 7.00
777 A0587. Model 217. Solder/.098" taper tab term..Per Pkg. 7.00
777 A0588. Model 218. Wire wrap termination.....Per Pkg. 7.00
778 A2506. Type 06-7638-01 Contact Insertion Tool.....Each 16.30

ALCOSTRIP MEP, MEH CERAMIC TERMINAL STRIPS



Simplify component replacement (easy removing and resoldering). Permanent bond between metal and ceramic. Tinned copperplate on silvered ceramic for easy soldering. Withstand excessive heat. Snap or thread mounting. Dielectric strength: more than 10 seconds at 1500 VDC between terminals. Nominal insulation resistance: over 1000 megohms at 500 VDC megger. Steatite terminal strip, polypropolyne bushing. Mfd. in Japan under license by Tektronix. *No. of terminals. Av. shpg. wt. 4 oz.

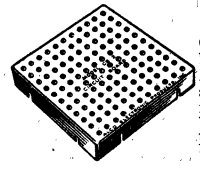
SNAP MOUNT TYPES

Stock No.	Type MEP-	Dimensions "A"	"B"	EACH 1-9	10-24	25-99	100-499	500-Up
700-6540	NB-5*	.885"	.490"	.82	.66	.44	.396	.363
700-6542	NB-7*	1.165"	.490"	1.01	.81	.54	.486	.446
700-6544	NB-9*	1.445"	.750"	1.08	.87	.58	.522	.479
700-6548	NB-13*	2.140"	1.500"	1.38	1.11	.74	.666	.611
700-6555	NB-20*	3.020"	2.520"	2.06	1.65	1.10	.99	.908

THREAD MOUNT TYPES

Stock No.	Type MEP-	Dimensions "A"	"B"	EACH 1-9	10-24	25-99	100-499	500-Up
700-8032	2*	.650"	.....	45	.36	.24	.216	.198
700-8034	4*	1.161"	.512"	.56	.45	.30	.27	.248
700-8036	6*	1.673"	1.024"	.75	.60	.40	.36	.33
700-8038	8*	2.185"	1.535"	.93	.75	.50	.45	.413
700-8040	10*	2.697"	2.047"	1.08	.87	.58	.522	.479
700-8042	12*	3.209"	2.560"	1.23	.99	.66	.594	.545

CB-1 CIRCUIT BOARD

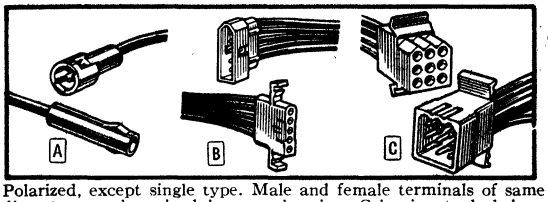


Circuit board modules provide an excellent base for various types of breadboarding. Designed especially to accept the MEP-NB and MEH-NB series of Alcostrips which may be inserted or removed as desired. Units may be fastened together to form larger board. High strength. 5x6".
700-1020. Shpg. wt. 4½ oz. 95

See Wire, Cable, Tubing and Accessories on Pages 269-290

Nylon Connectors and Connector Kits

WALDOM MOLEX NYLON CONNECTORS



Polarized, except single type. Male and female terminals of same diameter can be mixed in same housing. Crimping tools below. Rated 250 volts per circuit. U.L. Listed. Less contacts. **Sold only in packages of 5 or 10 as indicated.**

MINIATURE CONNECTORS

Stock No.	Mfr's Type	Descrip.	Fig.	No. of Circ.	Amps per Circ.	Per Pkg. of 10 1-9	10-49	50-Up
992-1230	03-06-2011	Plug	A	1	5	.95	.655	.455
992-1210	03-06-1011	Recep.	A	1	5	.85	.565	.39
992-1231	03-06-2031	Plug	B	3	5	1.65	1.10	.815
992-1211	03-06-1031	Recep.	B	3	5	1.85	1.24	.915
992-1232	03-06-2041	Plug	B	4	5	3.65	2.46	1.83
992-1212	03-06-1041	Recep.	B	4	5	3.60	2.43	1.83

STANDARD CONNECTORS

Stock No.	Mfr's Type	Descrip.	Fig.	No. of Circ.	Amps per Circ.	Per Pkg. of 10 1-9	10-49	50-Up
992-1280	03-09-2011	Plug	A	1	12	.95	.645	.445
992-1260	03-09-1011	Recep.	A	1	12	.80	.555	.385
992-1281	03-09-2021	Plug	B	2	12	1.90	1.25	.94
992-1261	03-09-1021	Recep.	B	2	12	1.90	1.27	.945
992-1282	*03-09-2031*	Plug	B	3	12	1.60	1.09	.76
992-1262	03-09-1031	Recep.	B	3	12	1.65	1.10	.765
992-1283	03-09-2041	Plug	B	4	9	2.25	1.53	1.06
992-1263	03-09-1041	Recep.	B	4	9	2.30	1.56	1.08

Stock No.	Mfr's No.	Descrip.	Fig.	No. of Circ.	Amps per Circ.	Per Pkg. of 5 1-19	20-99	100-up
992-1284	03-09-2052	Plug	B	5	9	1.30	.895	.63
992-1264	03-09-1052	Recep.	B	5	9	1.65	1.14	.82
992-1285	03-09-2061	Plug	C	6	9	1.45	.99	.66
992-1265	03-09-1061	Recep.	C	6	9	1.45	.99	.66
992-1286	03-09-2091	Plug	C	9	9	1.55	1.05	.73
992-1266	03-09-1091	Recep.	C	9	9	1.65	1.10	.75
992-1287	03-09-2121	Plug	C	12	7.5	1.60	1.07	.74
992-1267	03-09-1121	Recep.	C	12	7.5	1.75	1.20	.84
992-1288	03-09-2151	Plug	C	15	7.5	2.45	1.66	1.15
992-1268	03-09-1151	Recep.	C	15	7.5	2.80	1.88	1.30

Stock No.	Mfr's No.	Descrip.	Fig.	No. of Circ.	Amps per Circ.	Per Pkg. of 5 1-19	20-99	100-up
992-1233	03-06-2054	Plug	B	5	5	1.20	.82	.65
992-1213	03-06-1055	Recep.	B	5	5	1.55	1.05	.73
992-1234	03-06-2062	Plug	C	6	5	1.15	.79	.57
992-1214	03-06-1061	Recep.	C	6	5	1.35	.92	.64
992-1235	03-06-2081	Plug	B	8	5	.95	.68	.47
992-1215	03-06-1081	Recep.	B	8	5	1.20	.82	.65
992-1236	03-06-2091	Plug	C	9	5	1.25	.85	.61
992-1216	03-06-1091	Recep.	C	9	5	1.40	.97	.69
992-1237	03-06-2121	Plug	C	12	5	1.30	.895	.63
992-1217	03-06-1121	Recep.	C	12	5	1.45	.99	.66
992-1238	03-06-2151	Plug	C	15	5	2.10	1.43	1.00
992-1218	03-06-1151	Recep.	C	15	5	2.40	1.63	1.14
992-1240	03-06-2361	Plug	C	36	4	3.55	2.40	1.67
992-1220	03-06-1361	Recep.	C	36	4	3.70	2.51	1.74

PIN TERMINALS FOR ABOVE HOUSINGS

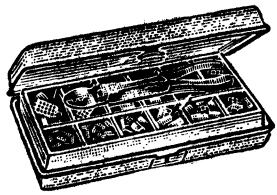
Spring tempered tin-plated brass. .093″ dia. types fit standard housing; .062″ dia. types fit miniature housings. **SOLD IN PKGS/100**

Stock No.	Mfr's No.	Configuration	Mating Dia.	For Wire Size	Price Per Pkg. 1-9	10-49	50-up
992-1160	*02-09-1103*	Female	.093″	18-14	4.00	2.53	1.87
992-1170	02-09-2103	Male	.093″	18-14	4.00	2.53	1.87
992-1173	02-09-2118	Male	.093″	24-18	4.00	2.53	1.87
992-1163	02-09-1118	Female	.093″	24-18	4.00	2.53	1.87
992-1120	*02-06-2103*	Male	.062″	22-18	4.40	3.75	2.62
992-1110	02-06-1103	Female	.062″	22-18	4.40	3.75	2.62
992-1123	02-06-2132	Male	.062″	30-22	4.40	3.75	2.62
992-1113	02-06-1132	Female	.062″	30-22	4.40	3.75	2.62

CRIMPING TOOLS (includes an Ejector Tool)

Stock No.	Hand Tool	For Pin Types	Each	Stock No.	Prod. Tool	For Pin Types	Each
992-1010	HT-1919	1103-2103†	5.95	992-1020	HTR-1031C	1103-1118†	65.00
992-1012	HT-1921	2103-1132*	5.95	992-1028	HTR-2262	1103-1132*	75.00

(†) Use prefix 02-09. (*) use prefix 02-06.



WALDOM MOLEX CABLE CONNECTOR DESIGNER KITS

Ideal for the creative designer, repairman or experimenter. Everything under one lid, eliminates need of searching for proper connectors or tools. Covers all circuit capacities with male and female housings, terminals and crimping tool. Separate compartments for connector elements, numbered and described for easy part reordering. Lightweight, unbreakable case has snap-lock to avoid spills and mix-ups. Manual, prototype crimping tool made of hardened steel, is specially balanced and weighted for easy operation. Provides excellent, uniform crimps every time. Also strips and cuts wire. An extractor tool is also provided with each crimping tool to assist in circuit changes or corrections.

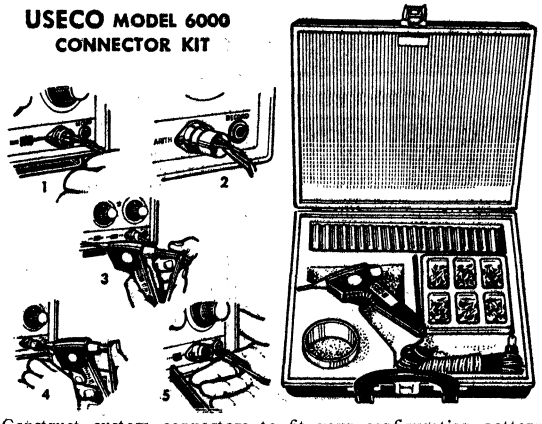
MODEL WM-72. Contains all parts needed to assemble male and female connectors from single circuit to 36 circuit designs (250 V and up to 5 amps per circuit); totals 56 connectors. All have pin terminal size 0.062″ dia. With crimping tool, pin terminal ejector tool and case. Shpg. wt. 7 lbs.

992-0972 ..... Each 39.60 2-Up ..... Each 29.95

MODEL WM-50. Same as WM-72 listed above but parts cover from single circuit to 15 circuit designs (250 V and up to 12 amps per circuit); and totals 45 complete connectors only. All have pin terminal size 0.093″ dia. With crimping tool, pin terminal ejector tool and case. Shpg. wt. 6 lbs.

992-0950 ..... Each 33.30 2-Up ..... Each 24.95

USECO MODEL 6000 CONNECTOR KIT



Construct custom connectors to fit your configuration pattern easily and simply right on the job. Reduce research and development costs and cut expended time on high priority projects. Complete kit is easily transported—can be carried right to the job and operated on standard line voltage. Thermal gun injects polyethylene plastic into mold to make a permanent male or female connector. Encases socket pins and wire in a firm, stable polyethylene block to form a solid, dependable connector of your own connection pattern. Ideal for potting connector shells, for tube sockets, or for use in any potting operation or stress relief application. Easy steps illustrated above: (1) Insert contacts with cable attached into existing connector. (2) Cut off length of plastic strip and form a reservoir to accept plastic material. (3) Insert plastic cartridge into heat gun and (4) extrude material into reservoir. Allow to cool. Remove plastic strip. (5) Complete connector. Kit comes in fitted-foam attache case complete with thermal gun, polyethylene cartridges, #16 and #20 pins and sockets and 6′ of mylar stripping.

971-0560. Shpg. wt. 7 lbs. ..... 1-9 Ea. 72.00 10-Up Ea. 65.00

Stock No.	Mfr's Type	Descrip.	PRICE PER PKG. (100 in pkg.) 1-9	10-24	25-49	50-Up
971-0566	6016P	#16 Pin	4.84	4.34	3.86	3.05
971-0567	6016S	#16 Socket	10.43	9.66	8.40	6.70
971-0568	6020P	#20 Pin	10.23	9.03	8.10	6.60
971-0569	6020S	#20 Socket	18.78	16.40	14.73	12.10

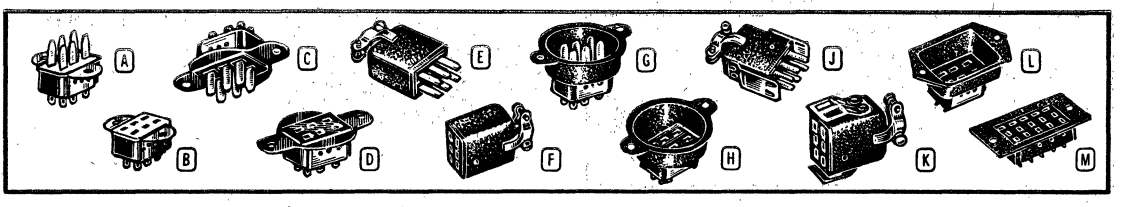
POLYETHYLENE CARTRIDGES

Stock No.	Type No.	PRICE PER PKG. (25 in pkg.) 1-3	4-9	10-19	20-39	40-Up
971-0565	6015	5.50	4.25	3.75	3.50	3.25

HEAT GUN AND MYLAR STRIPS

Stock No.	Type No.	Description	EACH 1-2	3-Up
971-0562	6002	Heat Gun	11.87	8.95
971-0570	6025	Mylar Strips (6 ft.)	.77	.75

CINCH Cinch-Jones Series 300 Plugs, Sockets



Compact multi-circuit connectors. Phosphor-bronze "knife-switch" type socket contacts engage both sides of flat plug contacts. All plugs and sockets are polarized to eliminate possibility of incorrect insertion. Plugs having from 24 to 33 contacts have special long polarizing pin in approximate center position to assure correct insertion and removal. Heavy-duty plug and socket contacts are cadmium-plated. Plug contacts are 5/32" wide by 3/64" thick. Black bakelite body is encased in black, crystal-finish metal cap. All caps have fiber insulators. DB Type sockets have a deep bracket for recessed mountings. SB Types have shallow bracket for flush mounting. Built to eliminate internal moisture traps. Snap-in socket contacts permit external prewiring and are "locked-in" to withstand wiring stress. Rated at 730 volts rms at 10 amps. *2-contact units have round shells; others are rectangular. 7 oz.

A AB PLUGS FOR CHASSIS MOUNTING

Contacts	Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-Up
2*	750-0404	P-302-AB	.33	.26	.23	.19	.18
3	750-0410	P-303-AB	.37	.29	.25	.21	.20
4	750-0416	P-304-AB	.41	.33	.28	.23	.22
6	750-0422	*P-306-AB*	.50	.41	.35	.27	.26
8	750-0429	P-308-AB	.59	.46	.39	.32	.30
10	750-0436	P-310-AB	.66	.52	.44	.36	.34
12	750-0442	P-312-AB	.74	.60	.48	.39	.37
15	750-0449	P-315-AB	1.00	.79	.66	.51	.49
18	750-0456	P-318-AB	1.19	.96	.79	.64	.61
21	750-0463	P-321-AB	1.49	1.19	1.00	.79	.76
24	750-0470	P-324-AB	1.81	1.45	1.20	.97	.92
33	750-0491	P-333-AB	2.73	2.18	1.82	1.45	1.39

B AB SOCKETS FOR CHASSIS MOUNTING

*2**	750-0609	*S-302-AB*	.35	.28	.24	.20	.19
3	750-0618	*S-303-AB*	.39	.32	.26	.22	.21
4	750-0624	*S-304-AB*	.43	.35	.29	.24	.23
6	750-0630	*S-306-AB*	.56	.43	.37	.29	.28
8	750-0637	*S-308-AB*	.66	.52	.44	.36	.34
10	750-0644	*S-310-AB*	.77	.62	.51	.41	.38
12	750-0650	*S-312-AB*	.92	.72	.62	.48	.45
15	750-0657	*S-315-AB*	1.16	.93	.77	.62	.59
18	750-0664	S-318-AB	1.33	1.06	.88	.71	.67
21	750-0671	S-321-AB	1.64	1.32	1.09	.86	.83
24	750-0678	S-324-AB	1.94	1.55	1.31	1.03	1.00
27	750-0685	S-327-AB	2.26	1.81	1.50	1.20	1.14
30	750-0692	S-330-AB	2.59	2.08	1.73	1.39	1.32
33	750-0699	S-333-AB	2.90	2.31	1.92	1.53	1.47

C FP PLUGS WITH FLUSH PLATE

6	750-0427	P-306-FP	.72	.59	.47	.38	.39
8	750-0434	P-308-FP	.79	.64	.53	.42	.40
12	750-0447	P-312-FP	.96	.76	.64	.49	.47

D FP SOCKETS WITH FLUSH PLATE

2*	750-0613	S-302-FP	.58	.45	.38	.30	.28
3	750-0622	S-303-FP	.60	.47	.40	.32	.30
4	750-0628	*S-304-FP*	.65	.50	.43	.35	.33
6	750-0635	*S-306-FP*	.76	.61	.49	.40	.38
8	750-0642	S-308-FP	.86	.69	.59	.46	.44
10	750-0648	S-310-FP	.99	.78	.66	.51	.49
12	750-0655	S-312-FP	1.11	.88	.75	.61	.58

E CCT PLUGS WITH CABLE CLAMPS

*2**	750-0405	*P-302-CCT*	.67	.53	.44	.36	.34
3	750-0411	*P-303-CCT*	.74	.60	.48	.39	.37
4	750-0417	*P-304-CCT*	.78	.63	.51	.41	.39
6	750-0424	*P-306-CCT*	.88	.71	.60	.46	.44
8	750-0431	*P-308-CCT*	.97	.77	.65	.50	.48
10	750-0438	*P-310-CCT*	1.06	.84	.71	.58	.53
12	750-0444	*P-312-CCT*	1.14	.92	.77	.62	.59
15	750-0451	*P-315-CCT*	1.52	1.22	1.03	.81	.78
18	750-0458	*P-318-CCT*	1.79	1.43	1.19	.96	.89
21	750-0465	P-321-CCT	2.13	1.71	1.43	1.13	1.08
24	750-0472	P-324-CCT	2.50	2.00	1.68	1.34	1.27
27	750-0479	P-327-CCT	2.87	2.28	1.90	1.52	1.45
30	750-0486	P-330-CCT	3.22	2.57	2.15	1.72	1.63
33	750-0493	P-333-CCT	3.57	2.86	2.38	1.90	1.81

F CCT SOCKETS WITH CABLE CLAMPS

*2**	750-0610	*S-302-CCT*	.69	.57	.46	.37	.36
3	750-0619	*S-303-CCT*	.76	.61	.49	.40	.38
4	750-0625	*S-304-CCT*	.80	.65	.53	.42	.41
6	750-0632	*S-306-CCT*	.93	.74	.62	.48	.46

F CCT SOCKETS WITH CABLE CLAMPS (Cont'd)

Contacts	Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-Up
8	750-0639	*S-308-CCT*	1.04	.82	.69	.57	.51
10	750-0646	S-310-CCT	1.17	.95	.78	.63	.60
12	750-0652	S-312-CCT	1.33	1.06	.87	.70	.67
15	750-0659	S-315-CCT	1.70	1.37	1.13	.89	.85
18	750-0666	S-318-CCT	1.92	1.53	1.29	1.03	.98
21	750-0673	S-321-CCT	2.28	1.83	1.52	1.21	1.16
24	750-0680	S-324-CCT	2.64	2.12	1.76	1.41	1.34
27	750-0687	S-327-CCT	2.99	2.40	2.01	1.60	1.51
30	750-0694	S-330-CCT	3.38	2.71	2.26	1.81	1.72
33	750-0701	S-333-CCT	3.73	2.98	2.50	2.00	1.89

G RP PLUGS WITH RECESSED PLATES

2*	750-0409	P-302-RP	.63	.49	.42	.34	.33
4	750-0415	P-304-RP	.70	.57	.46	.38	.36
6	750-0428	P-306-RP	.81	.65	.50	.42	.41
8	750-0435	P-308-RP	.93	.74	.62	.48	.46

H RP SOCKETS WITH RECESSED PLATES

2*	750-0614	S-302-RP	.66	.51	.43	.35	.34
4	750-0629	S-304-RP	.72	.59	.48	.39	.37
6	750-0636	S-306-RP	.83	.67	.57	.44	.42
8	750-0643	S-308-RP	1.00	.79	.67	.53	.49

J CCT-L PLUGS WITH CABLE CLAMPS AND LATCHES

2*	750-0406	P-302-CCT-L	.83	.67	.57	.44	.42
3	750-0412	P-303-CCT-L	.89	.72	.61	.47	.45
4	750-0418	*P-304-CCT-L*	.96	.76	.64	.49	.47
6	750-0425	*P-306-CCT-L*	1.06	.84	.70	.57	.53
8	750-0432	*P-308-CCT-L*	1.12	.89	.76	.61	.58
10	750-0439	P-310-CCT-L	1.22	.99	.82	.66	.63
12	750-0445	P-312-CCT-L	1.32	1.05	.87	.70	.67
15	750-0452	P-315-CCT-L	1.70	1.37	1.13	.89	.85
21	750-0466	P-321-CCT-L	2.29	1.84	1.53	1.22	1.17

K CCT-K SOCKETS WITH KEEPERS

2*	750-0611	S-302-CCT-K	.85	.69	.59	.44	.42
3	750-0620	S-303-CCT-K	.93	.74	.62	.48	.46
4	750-0626	*S-304-CCT-K*	.98	.78	.65	.50	.48
6	750-0633	*S-306-CCT-K*	1.09	.86	.72	.59	.56
8	750-0640	S-308-CCT-K	1.20	.97	.80	.65	.62
10	750-0647	S-310-CCT-K	1.34	1.07	.88	.71	.68
12	750-0653	S-312-CCT-K	1.49	1.19	1.00	.79	.76

L DB RECESSED SOCKETS FOR CHASSIS MOUNTING

4	750-0627	S-304-DB	.87	.70	.60	.46	.44
6	750-0634	S-306-DB	1.00	.79	.66	.51	.49
8	750-0641	S-308-DB	1.10	.87	.74	.60	.56
12	750-0654	S-312-DB	1.37	1.08	.92	.72	.69
15	750-0661	S-315-DB	1.61	1.30	1.08	.85	.81
18	750-0668	S-318-DB	1.87	1.49	1.24	1.01	.96
21	750-0675	S-321-DB	2.23	1.79	1.48	1.18	1.12
30	750-0696	S-330-DB	3.30	2.64	2.21	1.76	1.68

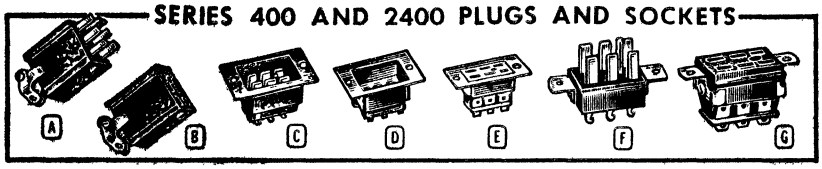
M SB FLUSH SOCKETS FOR CHASSIS MOUNTING

15	750-0663	S-315-SB	1.61	1.30	1.08	.85	.81
18	750-0670	S-318-SB	1.87	1.49	1.24	1.01	.96
21	750-0677	S-321-SB	2.23	1.79	1.48	1.18	1.12
24	750-0684	S-324-SB	2.58	2.07	1.73	1.39	1.31
27	750-0293	S-327-SB	2.93	2.33	1.94	1.55	1.48
30	750-0698	S-330-SB	3.30	2.64	2.21	1.76	1.68
33	750-0705	S-333-SB	3.64	2.92	2.44	1.93	1.85

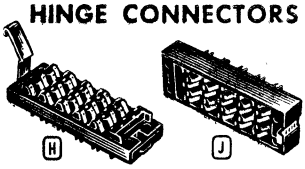
Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Cinch Plugs, Sockets, Jacks and Connectors

SERIES 400 AND 2400 PLUGS AND SOCKETS



HINGE CONNECTORS



SERIES 400 AND 2400. Series 400 rated 1100 V rms @ 15 amps. Series 2400 rated 1700 V rms @ 15 amps. Polarizing pins. Prongs ¼" wide, 1/16" thick. Bakelite. Phosphor bronze contacts. Series 2400 mates with Series 400—interchangeable mechanically. Wt., 7 oz.

A CCT PLUGS WITH CABLE CLAMPS

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0506	*P-404-CCT*	4	1.53	1.23	1.03	.82	.78
750-0512	*P-406-CCT*	6	1.76	1.41	1.18	.95	.89
750-0518	*P-408-CCT*	8	1.95	1.55	1.30	1.05	1.00
750-0524	P-410-CCT	10	2.25	1.80	1.50	1.20	1.13
750-0530	*P-412-CCT*	12	2.46	1.96	1.63	1.31	1.24
750-0553	P-2402-CCT	2	1.42	1.13	.95	.75	.71
750-0558	P-2404-CCT	4	1.61	1.28	1.08	.86	.82
750-0563	P-2406-CCT	6	1.81	1.45	1.20	.97	.91
750-0568	P-2408-CCT	8	2.00	1.60	1.34	1.07	1.02
750-0573	P-2410-CCT	10	2.21	1.76	1.47	1.17	1.11
750-0578	P-2412-CCT	12	2.30	1.85	1.54	1.23	1.16

B CCT SOCKETS WITH CABLE CLAMPS

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0708	S-402-CCT	2	1.52	1.22	1.02	.81	.78
750-0714	*S-404-CCT*	4	1.82	1.46	1.22	.97	.91
750-0720	*S-406-CCT*	6	2.12	1.70	1.41	1.12	1.07
750-0726	*S-408-CCT*	8	2.40	1.93	1.61	1.28	1.23
750-0732	S-410-CCT	10	2.71	2.17	1.82	1.48	1.38
750-0738	S-412-CCT	12	3.02	2.40	2.01	1.61	1.53
750-0771	S-2406-CCT	6	1.91	1.52	1.27	1.03	.97
750-0776	S-2408-CCT	8	2.12	1.70	1.41	1.12	1.07
750-0781	S-2410-CCT	10	2.32	1.85	1.54	1.24	1.17
750-0786	S-2412-CCT	12	2.52	2.02	1.68	1.34	1.28

C DB RECESSED PLUGS FOR CHASSIS MOUNTING

750-0501	P-402-DB	2	1.08	.86	.71	.58	.54
750-0507	P-404-DB	4	1.31	1.05	.87	.69	.66
750-0511	P-406-DB	6	1.53	1.23	1.03	.82	.78
750-0519	P-408-DB	8	1.76	1.41	1.18	.95	.89
750-0525	P-410-DB	10	2.00	1.59	1.33	1.07	1.02
750-0531	P-412-DB	12	2.23	1.79	1.49	1.18	1.12

D DB RECESSED SOCKETS FOR CHASSIS MOUNTING

750-0767	S-2404-DB	4	1.39	1.11	.93	.74	.70
750-0772	S-2406-DB	6	1.59	1.27	1.06	.84	.81
750-0777	S-2408-DB	8	1.79	1.42	1.19	.96	.89
750-0782	S-2410-DB	10	1.97	1.58	1.31	1.06	1.01
750-0787	S-2412-DB	12	2.17	1.74	1.46	1.16	1.10

E SB FLUSH SOCKETS FOR CHASSIS MOUNTING

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0711	S-402-SB	2	1.17	.93	.79	.63	.60
750-0717	S-404-SB	4	1.49	1.19	1.01	.80	.76
750-0723	S-406-SB	6	1.82	1.46	1.22	.97	.91
750-0729	S-408-SB	8	2.14	1.72	1.44	1.13	1.08
750-0798	S-410-SB	10	2.47	1.96	1.64	1.32	1.25
750-0741	S-412-SB	12	2.78	2.23	1.86	1.49	1.41
750-0774	S-2406-SB	6	1.50	1.20	1.01	.80	.76
750-0779	S-2408-SB	8	1.70	1.35	1.13	.90	.86
750-0789	S-2412-SB	12	2.10	1.67	1.40	1.11	1.06

F AB PLUGS WITH ANGLE BRACKETS

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0504	P-404-AB	4	1.00	.80	.66	.51	.49
750-0510	P-406-AB	6	1.17	.93	.79	.63	.60
750-0516	P-408-AB	8	1.35	1.08	.89	.71	.68
750-0522	P-410-AB	10	1.52	1.22	1.03	.82	.78
750-0528	P-412-AB	12	1.71	1.37	1.13	.90	.86

G AB SOCKETS WITH ANGLE BRACKETS

750-0712	S-404-AB	4	1.22	.97	.81	.65	.62
750-0718	S-406-AB	6	1.49	1.10	1.01	.80	.76
750-0724	S-408-AB	8	1.76	1.41	1.17	.94	.88
750-0736	S-412-AB	12	2.30	1.84	1.53	1.23	1.17

SERIES 37. Maximum no. contacts in minimum space. Designed for easy engagement and disengagement to eliminate contact damage. Castings of black bakelite. Heavy duty phosphor-bronze, cadmium-plated contacts, rated at 4.5 amperes. Wt., 9 oz.

H SOCKET WITHOUT LOCK

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
750-1063	37F20	20	3.28	2.87	2.29	1.92	1.52	1.45
750-1065	37F30	30	3.92	3.43	2.74	2.29	1.83	1.73
750-1067	37F40	40	4.58	4.01	3.21	2.67	2.14	2.04
750-1069	37F50	50	5.23	4.58	3.66	3.05	2.44	2.31
750-1071	37F60	60	5.85	5.16	4.12	3.43	2.74	2.60
750-1079	37F100	100	8.50	7.43	5.95	4.96	3.96	3.77

J MATING PLUG WITH LOCK

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
750-1082	37M20L	20	3.63	3.19	2.54	2.12	1.70	1.61
750-1084	37M30L	30	4.30	3.77	2.99	2.51	2.01	1.92
750-1086	37M40L	40	4.93	4.34	3.47	2.88	2.31	2.21
750-1088	37M50L	50	5.60	4.91	3.92	3.27	2.63	2.49
750-1090	37M60L	60	6.28	5.47	4.37	3.65	2.92	2.77
750-1092	37M70L	70	6.90	6.05	4.83	4.03	3.23	3.07
750-1098	37M100L	100	8.85	7.76	6.21	5.18	4.14	3.93

CONNECTOR CAPS FOR SERIES 37

Black wrinkle finish. Formed fiber liners. Cable hole size: 20-contact units, ¾"; 30, 40, 50-contact units, 13/16x1"; 60 and 100-contact units, 13/16x1½". Wt., 3 oz.

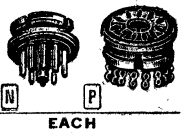
Stock No.	Mfr's Type	Contacts	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
750-1054	37C20	20	5.05	4.43	3.55	2.96	2.37	2.26
750-1055	37C30	30	5.13	4.48	3.58	2.98	2.39	2.28
750-1056	37C40	40	5.18	4.53	3.62	3.01	2.42	2.30
750-1057	37C50	50	5.23	4.58	3.66	3.05	2.44	2.31
750-1058	37C60	60	5.30	4.62	3.70	3.09	2.46	3.34
750-1062	37C100	100	5.50	4.82	3.84	3.22	2.56	2.44

202 CONNECTORS

Dependable, two-contact polarized connectors with ¾"-27 threaded fittings. P-202-B and S-202-B have 1" mounting centers. In Mfr's Type No. prefix "P" denotes male connector, prefix "S" denotes female. Use S-202B with P-202-CCT for cable extension. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Fig.	EACH 1-24	25-99	50-99	100-249	250-Up
750-0403	*P-202-CCT*	*L*	1.20	.95	.81	.64	.60
750-0607	*S-202-CCT*	*K*	1.23	.97	.82	.65	.61
750-0402	P-202-B	M	1.53	1.26	1.06	.84	.72
750-0606	*S-202-B*	*M*	1.46	1.17	.97	.78	.74
750-0608	*S-202-CCT-THR*	*K*	1.61	1.30	1.08	.85	.83

MULTI-CONTACT PLUGS & SOCKETS



Mount in 1 11/64" keyed hole (use 8RO retainer ring, see table below). Type 8PB fits octal socket; 11RB takes 11PB plug; 16F shield fits all. Wt., 1 oz.

Stock No.	Type	Fig.	Description	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
750-0962	8PR	N	8-Contact Plug	.33	.26	.22	.19	.16	.15
750-1025	11PB	N	11-Contact Plug	.40	.35	.25	.22	.19	.17
750-1027	11RB	P	11-Contact Socket	.40	.35	.27	.23	.19	.18
750-1047	16F	....	Snap-on Shield	1.02	.94	.80	.63	.50	.46
750-0971	8RO	....	Retainer Ring	.17	.12	.11	.10	.08	.07

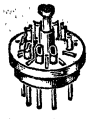
MINIATURE HEXAGON CONNECTORS

HEX NUT TYPE — LOCKING CLIP (Socket Type) — HOOD & CLAMP (Pin Type)

Molded of Amphenol Blue 1-501 dielectric (diallyl phthalate). Silver-base-plated contacts are gold-finished to prevent tarnishing or corrosion. All hardware is nickel-plated brass. Voltage breakdown: 2000 volts rms, 60 Hz at sea level; 700 volts rms, 60 Hz at 50,000 feet. Current rating, 7.5 amps. Hex-nut types are for panel mounting in 33/64″ hole. Hex-nut locking-clip type requires 25/64″ dia. mounting hole in panel. Locking-clip types mate with hood and cable-clamp types where the locking feature is required to provide strain relief for soldered connections. Locking ring on cable clamp swivels 30° for engaging with panel-mounted locking clip. Dia. of hex-nut types, 5/8″; cable-clamp types, 3/4″ (length, 1 15/16″). Wt., 5 oz.

Stock No.	Mfr's Type	Contacts	Fig.	EACH 1-9	10-49	50-99	100-Up
713-4500	126-010	5-Pin	B	.91	.73	.59	.48
713-4515	126-191	7-Pin	B	1.08	.86	.68	.56
713-4502	126-012	9-Pin	B	1.24	.99	.79	.65
713-4526	*126-217*	*5-Pin*	*D*	2.00	1.60	1.27	1.06
713-4517	*126-195*	*7-Pin*	*D*	2.20	1.76	1.40	1.16
713-4529	*126-220*	*9-Pin*	*D*	2.38	1.90	1.50	1.25
713-4525	*126-216*	*5-Pin*	*C*	.98	.78	.62	.52
713-4519	126-197	7-Pin	C	1.05	.92	.73	.62
713-4528	*126-219*	*9-Pin*	*C*	1.33	1.06	.85	.70
713-4501	126-011	5-Socket	A	1.45	1.16	.92	.77
713-4516	126-192	7-Socket	A	1.84	1.47	1.16	.97
713-4503	126-013	9-Socket	A	2.28	1.82	1.44	1.20
713-4532	*126-223*	*5-Socket*	*D*	2.59	2.07	1.64	1.37
713-4518	126-196	7-Socket	D	2.98	2.38	1.88	1.57
713-4531	*126-222*	*9-Socket*	*D*	3.40	2.72	2.16	1.79
713-4527	*126-218*	*5-Socket*	*C*	1.55	1.24	.98	.82
713-4520	*126-198*	*7-Socket*	*C*	1.94	1.55	1.23	1.03
713-4530	*126-221*	*9-Socket*	*C*	2.38	1.90	1.50	1.25

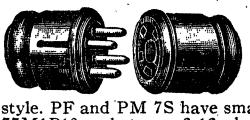
MINIATURE TYPE CP PLUGS—FOR TUBE SOCKETS



Molded from diallyl phthalate dielectric; incorporates a molded-in strain relief post. Utilizes retainer-ring mounting. Contacts gold over silver plating. Also available with rubber plug caps in end and side cable outlet styles. Voltage rating: 1500 V rms at 5 amps. Overall seated height, 13/16″. Overall width: Type 86-896, 11/16″; 86-895, 55/32″; 86-897, 7/8″; 86-894, 3/4″. Pin circle diameter: for 7 pin plugs, 3/8″; for 9 pin plugs, 15/32″. Wt., 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-49	50-99	100-249	250-499	500-Up
713-3641	86-896	7-Pin	1.20	.96	.86	.663	.663
713-3640	86-895	7-Pin with Cap	1.34	1.07	.96	.742	.742
713-3642	89-897	9-Pin with Cap	1.45	1.16	1.04	.807	.807
713-3639	86-894	7-Pin Side Output Cap	1.65	1.32	1.19	.920	.920

SERIES 78 FEMALE AND 86 MALE CONNECTORS



Matching male and female protected terminals with unbreakable metal caps. Accommodate cables up to 3/8″. Cap can be removed with a screwdriver. PF and PM 8 are octal. PF9, PM9, PF11, PM11, octal style. PF and PM 7S have small contacts. 86-PM12 fits Amphenol 77M1P12 socket; use 3-13 plug cap. 1 3/16x1 3/32″. Av. wt., 3 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-49	50-99	100-249	250-499	500-Up
713-2915	*78-PF4*	*4*	.55	.44	.38	.30	.30
713-2916	78-PF5	5	.56	.45	.39	.31	.31
713-2917	78-PF6	6	.59	.47	.41	.32	.32
713-2918	78-PF7S	7S	.61	.49	.43	.33	.33
713-2919	*78-PF8*	*8*	.55	.44	.38	.30	.30
713-2920	78-PF9	9	.58	.46	.41	.32	.32
713-2921	*78-PF11*	*11*	.63	.50	.43	.34	.34
713-3613	*86-PM4*	*4*	.59	.47	.42	.32	.32
713-3615	86-PM5	5	.59	.47	.42	.33	.33
713-3617	86-PM6	6	.61	.49	.43	.34	.34
713-3619	86-PM7S	7S	.63	.50	.44	.34	.34
713-3621	*86-PM8*	*8*	.61	.49	.44	.34	.34
713-3623	86-PM9	9	.63	.50	.44	.35	.35
713-3625	*86-PM11*	*11*	.64	.51	.45	.35	.35
713-3627	86-PM12	12	.65	.52	.46	.35	.35

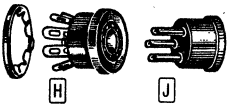
Amphenol Cable Clamp Type 79-CC4. For above connectors. Relieves strain on soldered connections. Shpg. wt., 1 oz.
713-3004. 1-24.....Ea. .11 25-49.....Ea. .09 50-99.....Ea. .08
100-249.....Ea. .07 250-499.....Ea. .05 500-Up.....Ea. .05

MINIATURE SPECIAL-PURPOSE CABLE CONNECTORS

Series 91: For shielded or unshielded cables. Black phenolic elements in cadmium-plated brass shells, held by set screws in side. Polarized contact spacing prevents incorrect insertion. Accommodates cables to 1/4″ dia. Suffix "L" in Type No.—long (1 3/16″); "S"—short (1 3/16″). Series 78: Receptacles, drawn-steel mounting plate. Last numeral in Type No. denotes number of contacts. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-4050	91-MPF3L	E	.64	.51	.44	.38	.34	.30
713-4051	91-MPF3S	E	.63	.50	.43	.37	.33	.30
713-4052	91-MPF4L	E	.69	.55	.47	.41	.36	.33
713-4053	91-MPF4S	E	.66	.53	.46	.40	.35	.32
713-4054	91-MPM3L	F	.53	.42	.36	.32	.28	.25
713-4055	*91-MPM3S*	*F*	.53	.42	.36	.32	.28	.25
713-4056	*91-MPM4L*	*F*	.59	.47	.41	.35	.31	.28
713-4057	91-MPM4S	F	.59	.47	.41	.35	.31	.28
713-4058	91-MPM5L	F	.61	.49	.42	.36	.32	.29
713-4059	91-MPM6L	F	.60	.48	.41	.36	.31	.28
713-2906	*78-PCG3*	*G*	.63	.50	.41	.37	.286	.286
713-2907	78-PCG4	G	.75	.60	.50	.45	.344	.344
713-2908	78-PCG5	G	.78	.62	.52	.47	.361	.361
713-2909	78-PCG6	G	.80	.64	.53	.48	.366	.366

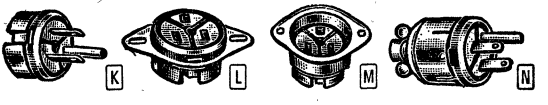
MINIATURE SERIES 78 SOCKETS AND SERIES 71 PLUGS



Series 78 are retainer-ring sockets that mount in 5/8″ round or "D" shaped hole with retainer ring supplied. Made of black bakelite. Series 71 are compact, high-dielectric miniature plugs. Have nickel-plated brass prongs recessed to prevent shorts from pulled-back insulation. Contacts polarized for proper connections. Rated 5 amps at 500 volts. For cables with up to six conductors. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Fig.	Contacts	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-2925	*78-S3S*	*H*	*3*	.19	.15	.13	.11	.09	.09
713-2927	78-S4S	H	4	.27	.22	.19	.17	.13	.13
713-2929	78-S5S	H	5	.29	.23	.20	.18	.14	.14
713-2931	78-S6S	H	6	.30	.24	.20	.18	.14	.14
713-2355	*71-3S*	*J*	*3*	.20	.16	.13	.12	.09	.09
713-2360	71-4S	J	4	.24	.19	.16	.14	.11	.11
713-2366	71-5S	J	5	.26	.21	.17	.15	.12	.12
713-2374	71-6S	J	6	.30	.24	.20	.18	.14	.14

STANDARD AND GROUNDING PLUGS, SOCKETS



61 series is 2 pole; 160 series is 2 pole with grounding lug. Black Nylon rated 15 A at 120 V AC/DC. *U.L. Recog. except Fig. K types which mount in 1 11/64″ keyed hole with retaining ring supplied. Fig. L types have molded-in mtg. plates except, §retaining-ring-mounted plate; require 1 9/32″ mtg. holes and have 5/32″ slotted holes on 1 1/2″ to 1 7/8″ ctrs., except 61-M1P-61F, 1 3/16″ mtg. hole, 5/32″ holes on 1 1/2″ ctrs. Fig. M types mount in 1 7/16″ hole, have two 5/32″ holes on 1 3/4″ ctrs. †7/16″ I. D. grommet instead of 3/8″ clamp. Wt., 3 oz.

Stock No.	Mfr's Type	Fig.	Desc.	EACH 1-49	50-99	100-249	250-499	500-Up
713-2112	*61-M*	*K*	*male*	.49	.39	.34	.30	.27
713-2101	*61-F*	*K*	*female*	.45	.36	.31	.27	.25
713-2113	*61-M1*	*L*	*§male*	.58	.46	.40	.35	.32
713-2102	*61-F1*	*L*	*§female*	.53	.42	.37	.32	.29
713-2117	*61-M1P-61F*	*L*	*female*	.49	.39	.34	.30	.27
713-2115	*61-M10*	*M*	*male*	.70	.56	.49	.43	.39
713-2110	*61-F10*	*M*	*female*	.66	.53	.46	.40	.37
713-5210	*160-10N*	*K*	*female*	1.03	.82	.71	.63	.57
713-5211	*160-11N*	*K*	*male*	1.23	.98	.85	.68	.63
713-5202	*160-2N*	*L*	*female*	1.10	.88	.76	.67	.61
713-5204	*160-3N*	*L*	*male*	1.51	1.21	1.06	.92	.84
713-5203	*160-4N*	*M*	*female*	1.28	1.02	.89	.78	.71
713-5205	*160-5N*	*M*	*male*	1.68	1.34	1.17	1.03	.93
713-5206	160-6N	†N	female	1.15	.92	.81	.70	.64
713-5207	160-7N	†N	male	1.45	1.16	1.01	.88	.80
713-5208	*160-8N*	*N*	*female*	1.23	.98	.86	.75	.68
713-5209	*160-9N*	*N*	*male*	1.53	1.22	1.06	.93	.84

See Wire, Cable, Tubing and Accessories on Pages 269-290

Hubbell and Eagle Electrical Connectors

HARVEY HUBBELL CONNECTORS

MIDGET-SIZE CONNECTORS

2-WIRE NONPOLARIZED TYPES

Type 7428 male cap and Type 7427 female connector are brown bakelite with metal cable clamps for 5/16 to 1/2" O.D. cords. Type 7466 male base and Type 7468 female base are bakelite with metal housings. Rated 10 amps at 250 V; 15 amps, 125 V. Wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-4	5-9	10-49	50-Up
813-7428	7428	A	Male Cap	.79	.60	.53	.46
813-7427	7427	B	Female Conn.	1.46	1.10	.98	.85
813-7466	7466	C	Male Base	1.72	1.30	1.16	1.01
813-7468	7468	D	Female Base	2.10	1.58	1.40	1.23

3-WIRE POLARIZED TYPES

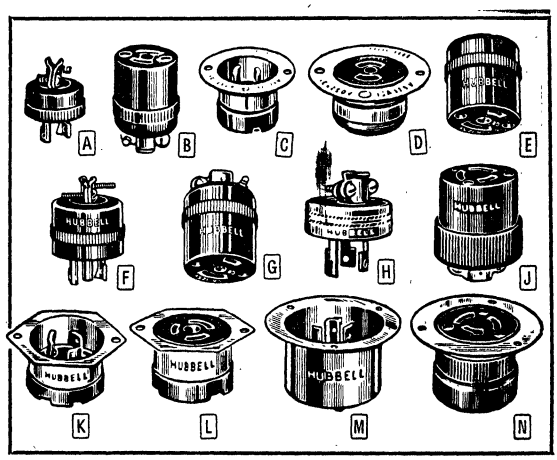
Similar to above connectors, but for use with 3-conductor cables. Insulation is black bakelite. Clamps will accommodate cords from 9/32" to 27/64" O.D. Polarization prevents incorrect connection. Rated 10 amps at 250 V, or 15 amps at 115 V. Wt., 3 oz.

813-7485	7485	A	Male Cap	1.90	1.43	1.27	1.11
813-7484	7484	B	Female Conn.	2.72	2.05	1.82	1.59
813-7486	7486	C	Male Base	2.42	1.82	1.62	1.41
813-7487	7487	D	Female Base	2.95	2.22	1.98	1.73

3-WIRE GROUNDING TYPES

Midget "Twist Lock" series designed specifically for 15 amp, 125 V grounding applications. Hollow brass grounding sleeve in cap mates with brass split pin to provide safe, positive connection. All are 1 5/32" dia. *With cord grips. Wt., 3 oz.

813-7591	7591	E	Female Conn.	3.16	2.38	2.12	1.85
813-7593	7593	F	Female Conn.*	3.33	2.51	2.23	1.95
813-7594	7594	G	Male Cap*	2.48	1.87	1.66	1.45



Feature unique "Twist Lock" design for positive, lock-fast electrical connections. Units lock with a twist of the cap—simply plug in—twist—and they lock! Never disconnect accidentally regardless of the treatment they are subjected to. Insure a maximum of safety and a minimum of time-loss. Meet National Electrical Code Standard ■U.L. Recog.

STANDARD-SIZE CONNECTORS

3-WIRE POLARIZED TYPES

Type 7572 male cap, Type 7556 male base and Type 7557 female base have rust-resistant metal housings. Type 7555 female connector is bakelite. Clamps take cords from 19/64" to 9/16" O.D. All are rated 10 amps at 250 V; 15 amps, 125 V. *Armored. Wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-4	5-9	10-49	50-Up
813-7572	8582	H	Male Cap*	2.24	1.09	1.50	1.31
813-7555	7555	J	Female Conn.	3.56	2.68	2.38	2.08
813-7556	7556	K	Male Base	2.95	2.22	1.98	1.73
813-7557	7557	L	Female Base	3.27	2.46	2.18	1.91

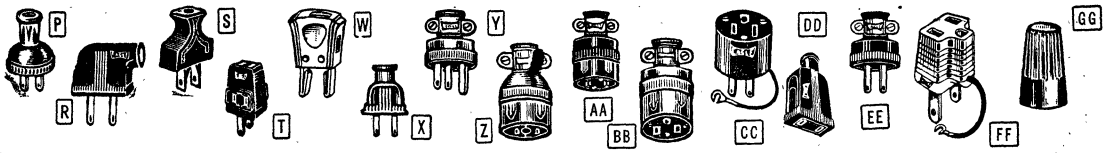
STANDARD-SIZE CONNECTORS (Cont'd)

HEAVY-DUTY 3-WIRE POLARIZED TYPES

Type 7311 male cap, Type 7327 male base and Type 7328 female base have rust-resistant metal housings. Type 7313 female connector is bakelite. Clamps take cords from 7/16" to 3/4" O.D. Rated 20 amps at 250 V, or 10 amps at 575 V. *Armored. Wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-4	5-9	10-49	50-Up
813-7331	7311	H	Male Cap*	3.23	2.43	2.16	1.89
813-7313	7313	J	Female Conn.	4.97	3.74	3.32	2.91
813-7327	7327	M	Male Base	2.83	2.88	2.56	2.24
813-7328	7328	N	Female Base	5.87	4.42	3.93	3.44

EAGLE ELECTRICAL ACCESSORIES, ALL U.L. LISTED



P TYPE 179 RUBBER HANDLE PLUG. Approved for 2-wire 15 amp use. Use with Fig. L for extension cords. Wt. 4 oz.
785-0179. 1-24...Ea. .22 25-99...Ea. .19
100-Up...Ea. .17

R Type 84B Flat Rubber Side-Outlet Plug. Prongs molded into vinyl; insulated binding screws. Rated 15 amps at 125 volts. Shpg. wt. 2 oz.
785-0084. 1-24...Ea. .28 25-99...Ea. .25
100-Up...Ea. .22

S Type 919B BAKELITE PLUG. With finger grip. Cap size, 5/8x1 7/16x1 3/16". Screw terminals. 15 amps. Brown. 4 oz.
785-0919. 1-24...Ea. .21 25-99...Ea. .18
100-Up...Ea. .16

T TYPE 400B VINYL CUBE TAP. Brass spring prongs. 3-way outlet. Rated 15 amps at 125 volts. Shpg. wt. 8 oz.
785-0400. 1-24...Ea. .33 25-99...Ea. .29
100-Up...Ea. .26

W TYPE C900B JIFFY PUSH-PULL PLUG. No wire stripping. Push POSJ cable through hole in cap. Pull for pos. conn. 6 oz.
785-0009. 1-24...Ea. .18 25-99...Ea. .16
100-Up...Ea. .14

X TYPE 183B FLAT RUBBER PLUG. Molded cap. Easily disassembled. Screw terminal wiring. Rated 15 amps at 125 V. Shpg. wt. 3 oz.
785-0183. 1-24...Ea. .26 25-99...Ea. .23
100-Up...Ea. .20

Y TYPE 203 PARALLEL GROUND PLUG. Rubber handle. "U" ground. 3-wire. Two fit standard duplex receptacle. 2 oz.
785-0203. 1-9...Ea. .80 10-24...Ea. .72
25-Up...Ea. .64

Z TYPE 178 RUBBER LINE CORD CONNECTOR. Dia., 1 1/4". Rated 15 amps at 125 volts. Cable clamp. Shpg. wt. 3 oz.
785-0178. 1-24...Ea. .60 25-99...Ea. .54
100-Up...Ea. .48

AA TYPE 224 LARGE PARALLEL-SLOTS CONNECTOR. Rubber handle cap. Bronze contacts. Cable clamp. Rated 15 amps at 125 volts. Shpg. wt. 3 oz.
785-0224. 1-9...Ea. .65 10-24...Ea. .58
25-Up...Ea. .52

BB TYPE 222 PARALLEL GROUND RUBBER CONNECTOR. 3 bronze contacts. 15 amps @ 125 V. Cord hole, 3/5". Cable clamp. Shpg. wt. 3 oz.
785-0222. 1-9...Ea. 1.57 10-24...Ea. 1.41
25-Up...Ea. 1.25

CC TYPE 832 BAKELITE PARALLEL GROUND ADAPTER: Adapts 3-prong plugs for use in standard 2-prong AC outlets. Double-wipe contacts 15 amps @ 125 V 3 3/4" lead with "C" lug. Shpg. wt. 3 oz.
785-0832. 1-9...Ea. .56 10-24...Ea. .50
25-Up...Ea. .44

DD TYPE 86B FLAT RUBBER CORD CONNECTOR. Matches Figs. D, H. Double-wipe contacts. Insulated screws. 3 oz.
785-0086. 1-9...Ea. .60 10-24...Ea. .54
25-Up...Ea. .48

EE TYPE 202 LARGE RUBBER HANDLE PLUG. Cord hole dia., 3/5". Cord clamps. 3 oz.
785-0202. 1-9...Ea. .37 10-24...Ea. .33
25-Up...Ea. .29

FF TYPE 419 VINYL PARALLEL GROUND ADAPTER. Same function as Fig. CC. Lead with "C" lug. 15 amps @ 125 V. 3 oz.
785-0419. 1-9...Ea. .35 10-24...Ea. .31
25-Up...Ea. .28

GG SOLDERLESS WIRE CONNECTOR. Strip wire end; push into connector, screw cap down—wire firmly interconnected. ■U. L. Listed. Av. shpg. wt. 1 1/4 lbs. Per Pkg. 12.

Stock No.	Mfr's Type	Wire Size	EACH 1-99	100-Up
785-0033	33	16-18	.02	.01
785-0044	44	14-18	.02	.015
785-0066	66	12-18	.03	.02

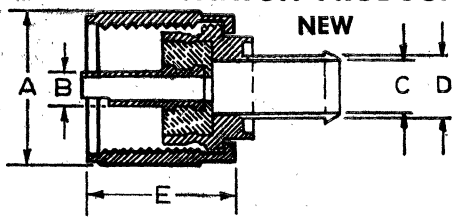
ELMENCO FUSED PLUGS

Cylindrical receptacles capable of holding two 10 amp fuses. Less 3AG fuses (see Index). Wt. 3 oz.
782-5050. 1-9. Ea. .80 10-49. Ea. .64
50-Up...Ea. .54

■Recognized Under the Component Program of Underwriter's Laboratories, Inc.

PL-259–Type Connectors for Production Cost Savings

SAXTON PRODUCTS CO. SEMI-SOLDERLESS CONNECTORS



- REPLACE OLD STYLE PL-259'S
- CRIMP WITH ORDINARY PLIERS

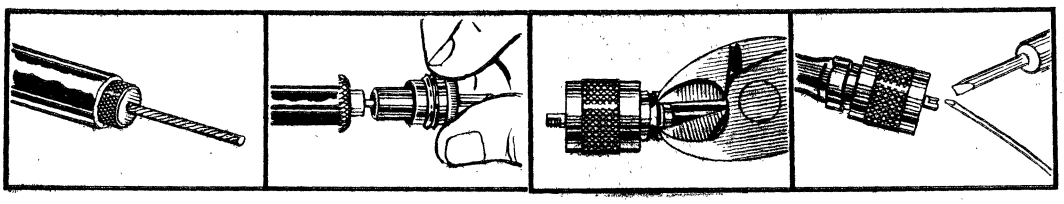
DIMENSIONS

Type	A	B	C	D	E
8SS259	.710"	.156"	.297"	.330"	.735"
58SS259	.710"	.156"	.125"	.150"	.735"
59SS259	.710"	.156"	.150"	.185"	.735"
82SS259	.710"	.156"	.190"	.215"	.735"

- Semi-solderless
- Simplified Stripping
- Need No Adapter
- No Internal Shield Soldering Required
- Reusable
- Increased Strain Relief
- Positive Electrical Contact
- Simplified Installation

PL-259 TYPE CONNECTORS

1. Can be used with all popular types and sizes of coaxial cable, both foil and braid types.
2. Cable preparation and stripping is vastly simplified.
3. No special tools required.
4. Reduces possibility of shorts due to poor soldering and stray strands.
5. Insertion loss reduced to minimum
6. Patent-pending design saves time and eliminates troublesome shield soldering.
7. Only soldering required is standard spot soldering of center conductor to connector tip.
8. Provides increased strain relief between Connector and cable.
9. No adapters required.



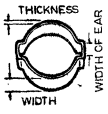
1. Prepare Cable — 2. Push On Connector — 3. Crimp "Hold Tight" Collar — 4. Spot Solder Tip

STEP 1. PREPARE CABLE. Slip "Hold Tight" Collar and Cap onto cable. Place wire on diagram and cut as indicated.

STEP 2. INSTALLATION. (1) Brush back "Braided Shield" away from dielectric. (2) Place "base" of connector over dielectric and slowly push connector under brushed back braided shield until approximately ½ of base is under braided shield: press down (brushed back) braided shield tightly around connector base. (3) With a twisting motion, firmly push connector onto cable as far as it will go. Center conductor will be visible in cut out portion of hollow pin. (4) Screw cap completely onto connector until it spins freely.

STEP 3. LOCKING THE COLLAR. (1) Slip "Hold Tight" Collar over bulge (created in jacket by base of connector) to within approximately ¼" of connector. (2) Crimp "Hold Tight" Collar with crimping tool, pincers, a pair of side cutters or an ordinary pair of slip-joint pliers.

STEP 4. SOLDERING. Spot solder tip as with any standard PL259. For RG-8 and 11/U Cable use Saxton connector No. 8S259. For RG-58/U Cable use Saxton connector No. 58SS259. For RG-59/U use Saxton connector No. 59SS259. For all channel cable use Saxton connector No. 82SS259.

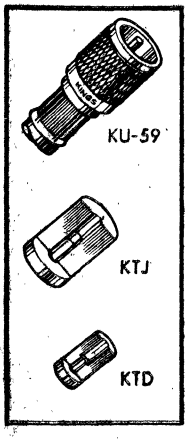


SAXTON "HOLD-TIGHT" COLLAR

Crimp with crimping tool or with an ordinary pair of side cutters, pincers, or ordinary pair of pliers. Squeeze each side only once to close clamp properly.

Stock No.	Mfr's Type	EACH 1-24	25-99	100-499	500-999	1000-Up
589-0008	8SS259	.85	.75	.622	.525	.497
589-0058	58SS259	.85	.75	.622	.525	.497
589-0059	59SS259	.85	.75	.622	.525	.497
589-0082	82SS259	.85	.75	.622	.525	.497

KINGS K-GRIP JR. CONNECTORS AND TOOLS



FULLY CRIMPED PL-259 TYPE CONNECTORS CUT ASSEMBLY TIME

Small, lightweight versions of standard RF connectors, with positive lock-thread coupling. Use of special hex forming tool, plus recommended trim jigs, results in mechanically strong, electrically consistent connections. Serrations on connector always grip cable braid firmly and securely.

Stock No.	Mfr's Type	Series	For RG/U Cable Type	Description	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
836-1254	KU59-46	UHF	58, 58A, 58C/U	Plug	.90	.73	.61	.55	.50	.47
836-1252	KU59-44	UHF	59, 59A, 59B, 62, 62A/U	Plug	.90	.73	.61	.55	.50	.47
836-1251	KU59-43	UHF	11, 11A/U	Plug	.90	.73	.61	.55	.50	.47
836-1250	KU59-42	UHF	8, 8A, 213/U	Plug	.90	.73	.61	.55	.50	.47

"K-GRIP" JR. TRIM JIGS CRIMPING TOOL AND DIES

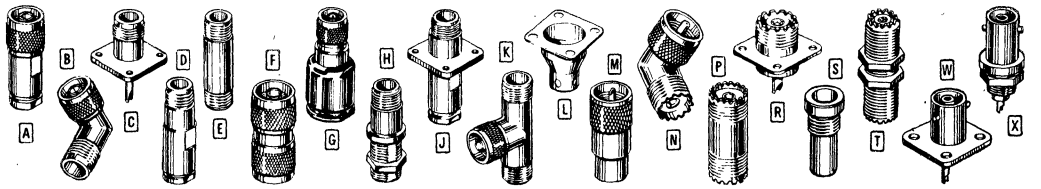
Quickly and accurately crimps many sizes of cable. Finger-grip styling for portability. Interchangeable die feature permits fast and simple conversions. Tool does not release until sleeve is fully crimped. For RG-55, 58, 141, 142 and 223/U cable, use die KTH-1001 (sleeve cavity: .213"; contact cavity: .069"). For RG-59, 62, 71 and 210/U cable, use die KTH-1002 (sleeve cavity: .255"; contact cavity: .100"). For RG-8, 11 and 213/U cable, use die KTH-1003 (sleeve cavity: .384"; contact cavity: .100"). One tool takes all dies.

Conn. Type KU-	Replaces Old Type	Stock No.	Jacket Trim Jig Type No.	EA.	Stock No.	Dielectric Trim Jig Type No.	EA.	Stock No.	Crimp Die KTH-	EA.
59-46	PL-259/UG-175	836-1190	KTJ-12	9.00	836-1171	KTD-34	5.63	836-1180	1001	52.50
59-44	PL-259/UG-176	836-1190	KTJ-12	9.00	836-1170	KTD-33	5.63	836-1181	1002	52.50
59-42/43	PL-259	836-1189	KTJ-11	9.00	836-1172	KTD-35	5.63	836-1182	1003	52.50

836-1179, Type KTH-1000 Universal Crimp Tool . . . . . Ea. 86.25 2-Up 65.00

See Wire, Cable, Tubing and Accessories on Pages 269-290

BUNKER RAMO AMPHENOL and King Coaxial Connectors



WEATHERPROOF COAXIAL CONNECTORS—STANDARD AND TARNISH RESISTANT

Meet MIL Specs. Amphenol Type—1050 (Astroplate) and King Type TR5 (Tarnish Resistant) are plated to take constant handling and are resistant to abrasions. (**) indicates item can be used with K-Grips, see listing at end of coaxial pages. †See footnote on bottom of page.

TYPE N CONNECTORS. 1500 volts. 50 ohms except (*) 70 ohms.

Silver Stock No.	Military No.	Tarnish Proof Finish: Stock No.††	Tarnish Proof Finish: †Type -1050	Tarnish Proof Finish: Stock No.	Tarnish Proof Finish: Type TR5	Description	Fig.	For RG/U Cables	EACH 1-24	25-99	100-499	500-999	1000-Up
713-3310	UG-21B/U	713-3311	82-61	836-0955	KN-59-106	Plug	A	8, 9, 10	1.44	1.18	.99	.85	.75
713-3325	UG-21C/U	.....	82-96	.....	.....	Plug	A	8, 9, 10	1.68	1.38	1.16	1.00	.88
713-3342	UG-21D/U**	713-3343	82-202	.....	.....	Plug	A	8, 9, 10	1.68	1.38	1.16	1.00	.88
713-3312	UG-22B/U	.....	82-62	.....	.....	Panel Jack	J	8, 9, 10	2.21	1.81	1.52	1.31	1.16
713-3313	UG-23B/U	.....	82-63	.....	.....	Jack	D	8, 9, 10	1.77	1.45	1.22	1.05	.93
713-3345	UG-23D/U	.....	82-209	.....	.....	Jack	D	8, 9, 10	2.00	1.64	1.38	1.19	1.05
713-3314	UG-27A/U	.....	82-64	.....	.....	Angle Adapter	B	.....	3.37	3.06	2.57	2.22	1.95
713-3327	UG-27B/U	.....	82-98	.....	.....	Angle Adapter	B	.....	4.04	3.31	2.78	2.40	2.11
713-3348	UG-27C/U	.....	82-213	836-1025	KN-99-47	Angle Adapter	B	.....	3.38	2.78	2.33	2.01	1.77
713-3328	UG-28A/U	.....	82-99	.....	.....	"T" Adapter	K	.....	4.23	3.47	2.91	2.51	2.21
713-3315	UG-29A/U	.....	82-65	.....	.....	Adapter	E	.....	2.29	1.88	1.58	1.36	1.20
713-3330	UG-29B/U	.....	82-101	836-1027	KN-99-50	Adapter	E	.....	2.00	1.64	1.38	1.19	1.05
713-3316	UG-30/U	.....	82-66	.....	.....	Bulkhead Adapter	H	.....	4.56	3.74	3.14	2.71	2.39
713-9845	UG-30D/U	.....	91100	.....	.....	Bulkhead Adapter	H	.....	3.91	3.20	2.69	2.32	2.04
713-3339	UG-57B/U	713-3340	82-100	836-1023	KN-99-44	Adapter	F	.....	2.51	2.06	1.73	1.49	1.31
713-3337	.....	.....	82-112*	.....	.....	Panel Receptacle	C	.....	2.28	1.87	1.57	1.35	1.19
713-3300	UG-58/U	713-3301	82-24*	836-0974	KN-79-54	Panel Receptacle	C	.....	1.18	.96	.81	.70	.62
713-3335	UG-58A/U	713-3336	82-97	836-0970	KN-79-40	Panel Receptacle	C	.....	1.15	.94	.79	.68	.50
713-3318	UG-94A/U	.....	82-84*	.....	.....	Plug	A	11, 12, 13	2.40	1.97	1.65	1.42	1.25
713-3321	UG-95A/U	.....	82-89	.....	.....	Jack	D	11, 12, 13	2.51	2.06	1.73	1.49	.....
713-3302	UG-107A/U	.....	82-36	.....	.....	"T" Adapter	K	.....	5.42	4.44	3.73	3.22	.....
713-3331	UG-107B/U	.....	82-102	836-1026	KN-99-48	"T" Adapter	K	.....	5.69	4.67	3.92	3.38	2.98
713-9759	UG-536/U	713-9761	34000	836-0960	KN-59-121	Plug	A	58, 141	2.47	2.02	1.70	1.47	1.29
713-9763	UG-536B/U**	713-9762	34025	.....	.....	Plug	A	55, 58	1.71	1.41	1.18	1.02	.90
.....	UG-556B/U**	.....	.....	836-0835	KN-19-86	Jack	A	55, 58, 142, 223	2.90	2.42	1.83	1.58	.....
713-9768	UG-603A/U	.....	34525	.....	.....	Plug	A	59, 62, 71	2.56	2.10	1.76	1.52	.....
713-3378	UG-680/U	.....	82-811	.....	.....	Plug	X	.....	2.56	2.10	1.76	1.52	1.34
713-3332	UG-167A/U	.....	82-104	.....	.....	Plug	G	17, 18	7.48	6.13	5.15	4.44	.....
713-3351	UG-1185/U	.....	82-312	.....	.....	Plug	A	8, 9, 87A	1.84	1.51	1.27	1.10	.97
713-3352	UG-1186/U	.....	82-313	.....	.....	Jack	D	8, 9, 87A	2.24	1.83	1.54	1.33	1.17
713-3385	.....	.....	82-835	.....	.....	Angle Plug	B	87A	4.84	3.97	3.33	2.87	2.53

TYPE HN CONNECTORS. For high voltage applications. 5000 volts. 50 ohms.

713-3303	UG-59A/U	.....	82-38	.....	.....	Straight Plug	A	8, 9, 10	4.27	3.50	2.94	2.54	2.23
713-3376	UG-59B/U	.....	82-804	836-0723	KH-59-47	Straight Plug	A	8, 9, 10	3.79	3.11	2.61	2.25	1.98
.....	UG-59E/U**	.....	.....	836-0720	KH-59-44	Plug	A	8, 9, 11, 213, 214	4.76	3.97	3.01	2.61	.....
713-3323	UG-496/U	.....	82-92	836-0762	KH-79-12	Panel Receptacle	C	.....	3.28	2.69	2.26	1.95	1.72
713-3377	UG-560/U	.....	82-805	836-0761	KH-79-11	Panel Receptacle	C	.....	3.76	3.08	2.59	2.24	1.97
713-3354	UG-1213/U	.....	82-320	.....	.....	Straight Plug	A	8, 9, 87A	5.39	4.42	3.71	3.20	2.82
713-3384	.....	.....	82-833	.....	.....	Angle Plug	B	8, 9, 10	8.16	6.69	5.62	4.85	4.27
713-3381	.....	.....	82-816	.....	.....	Straight Plug	A	54A	4.72	3.87	3.25	2.80	2.47

TYPE C AND LC CONNECTORS. For high voltage applications. 500 volts. 50 ohms.

713-3364	UG-568/U	.....	82-504	836-0650	KD-89-08	Panel Receptacle	W	.....	2.24	1.83	1.54	1.33	1.17
713-3370	UG-573A/U	.....	82-530	.....	.....	Plug	A	8, 9, 10	2.72	2.23	1.87	1.61	1.42

UHF COAXIAL CONNECTORS AND TARNISH RESISTANT

Meet government specs. (*) Polystyrene insulation. (†) Mica filled insert. Non-constant impedance. Average shpg. wt. 2 oz.

UHF SMALL SINGLE CONTACT. For any RF application.

713-3508	UG-106/U, M-360	713-3509	83-1H	.....	.....	Hood	L	8, 9, 10, 11	.54	.44	.37	.32	.28
713-3549	UG-111/U	713-3550	83-750	.....	.....	Plug	M	59, 62, 71	1.12	.92	.77	.66	.59
713-3546	UG-175/U	713-3547	83-185	836-1301	KU-89-06	Reducing Adapter	S	25, 55, 58	.19	.15	.13	.11	.10
713-3544	UG-176/U	713-3545	83-168	836-1300	KU-89-05	Reducing Adapter	S	59, 62, 71	.20	.17	.14	.12	.11
713-3552	UG177/U	713-3553	83-765	836-1306	KU-89-11	Hood	L	29, 55, 58	.49	.40	.34	.29	.26
713-3556	UG-230/U, 49482	.....	83-776	.....	.....	Plug	M	55, 59, 62, 71	1.76	1.44	1.21	1.04	.92
713-3506	UG-363/U, PL-274	713-3507	83-1F	.....	.....	Straight Adapter	T	.....	3.01	2.47	2.07	1.79	1.57
713-3502	UG-646/U, M-359	713-3503	83-1AP*	.....	.....	Angle Adapter	N	.....	1.77	1.45	1.22	1.05	.93
713-3522	M-358, 49119	713-3523	83-1T*	.....	.....	"T" Adapter	K	.....	3.18	2.61	2.19	1.89	1.66
713-3535	M-359A, 49192	.....	83-58	.....	.....	Angle Adapter	N	.....	2.41	1.98	1.66	1.43	1.26
713-3511	PL-258, 49191	713-3512	83-1J*	.....	.....	Straight Adapter	P	.....	1.21	.99	.83	.72	.63
713-3518	PL-259, 49190	713-3519	83-1SP†	.....	.....	Plug	M	8-13, 63, 65	.61	.50	.42	.36	.32
713-3561	PL-259, 49190	713-3562	83-822	.....	.....	Plug	M	8, 9	.91	.75	.63	.54	.48
713-3551	PL-259A, 49195	.....	83-756	.....	.....	Plug	M	8-12	1.73	1.42	1.19	1.03	.90
713-3520	PL-259A, 49195	713-3521	83-1SPN†	.....	.....	Plug	M	8-13, 63, 65	1.19	.98	.82	.71	.62
713-3514	SO-239, 49194	713-3515	83-1R	.....	.....	Panel Receptacle	R	.....	.60	.49	.41	.35	.31
713-3516	SO-239	713-3517	83-1RTY†	.....	.....	Panel Receptacle	R	.....	.97	.80	.67	.58	.51
713-3558	SO-239A	713-3559	83-798	.....	.....	Panel Receptacle	R	.....	1.47	1.20	1.01	.87	.77
713-3500	.....	713-3501	83-1AC	.....	.....	Cap & Chain	....	.....	.86	.70	.59	.51	.45
713-3536	.....	.....	83-59	.....	.....	Angle Plug	....	.....	5.01	4.11	3.45	2.98	2.62

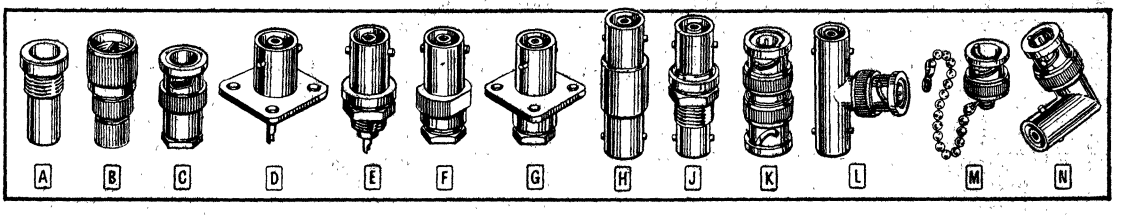
†Amphenol Standard Type Number, add-1050 to Type Only Where Shown as Available Under Stock Number††.

See Page 269 for RG-type Coax Cable

UHF COAXIAL CONNECTORS AND TARNISH RESISTANT—CONTINUED †See Footnote at Bottom of Page

UHF SMALL TWIN CONTACT. For use with 2 conductor coax cables.

Stock No.	Military Type	Tarnish Proof Finish: Stock No.††	Type -1050†	Stock No.	Type TR5	Description	Fig.	For RG/U Cables	EACH 1-24	25-99	100-499	500-999	1000-Up
713-3532	UG-102/U, PL-284	.....	83-22SP	836-1255	KU-59-47	Plug	....	.....	1.70	1.39	1.17	1.01	.89
713-3530	UG-103/U, SO-264	.....	83-22R	.....	.....	Panel Receptacle	....	.....	1.39	1.14	.96	.83	.73
713-3528	UG-104/U, PL-293	.....	83-22AP	.....	.....	Angle Adapter	....	.....	2.90	2.38	2.00	....	....
713-3537	.....	.....	83-65	.....	.....	Reducing Adapter	A	59, 62, 71	.32	.26	.22	.19	.17
SOLDERLESS TYPE UHF CONNECTORS													
713-3563	.....	.....	83-850	.....	.....	Plug	B	11	3.76	3.08	2.59	....	....
713-3565	.....	.....	83-851	.....	.....	Plug	B	8	2.53	2.07	1.74	1.50	1.32



COAXIAL CONNECTORS—STANDARD AND TARNISH RESISTANT

Amphenol Type-1050 (Astroplate) and King Type TR5 (Tarnish Resistant) are plated to take constant handling and are resistant to abrasions. (**) indicates item can be used with K-Grips, see listing at end of coaxial pages. †See footnote bottom of page.

Stock No.	Military Type	Tarnish Proof Finish: Stock No.††	Type -1050†	Stock No.	Type TR5	Description	Fig.	For RG/U Cables	EACH 1-24	25-99	100-499	500-999	1000-Up
713-1002	UG-88/U	713-1003	31-002	836-0366	KC-59-139	Plug	C	55, 58	.74	.61	.51	.44	.39
713-1024	UG-88B/U	713-1025	31-018	.....	.....	Plug	C	55, 58	.93	.76	.64	.55	.44
713-1040	UG-88C/U**	713-1041	31-202	836-0368	KC-59-141	Plug	C	55, 58, 142, 123	.80	.66	.55	.47	.42
	UG-88E/U**	.....	.....	836-0370	KC-59-145	Plug	C	55, 58, 142, 123	1.01	.85	.64	.55	....
713-1006	UG-89E/U	713-1007	31-005	.....	.....	Jack	F	55, 58	1.28	1.05	.88	.76	.67
713-1046	UG-89B/U	.....	31-205	.....	.....	Jack	F	55, 58	1.18	.96	.81	.70	.62
	UG-89C/U**	.....	.....	836-0260	KC-39-43	Jack	F	55, 58, 142, 223	.97	.80	.61	.53	....
713-1030	CW-123A/U	713-1031	31-026	836-0432	KC-89-48	Cap and Chain	M	.....	.58	.48	.40	.35	.30
713-1008	CW-155/U	.....	31-007	.....	.....	Cap Only	....	.....	.36	.30	.25	.22	.19
713-1022	CW-159/U	.....	31-017	.....	.....	Cap and Chain	M	.....	1.16	.95	.80	.69	.61
713-9554	UG-185	.....	4500	.....	.....	Panel Receptacle	D	.....	1.36	1.11	.93	.80	.71
713-1020	UG-254A/U	.....	31-016	.....	.....	Bulkhead Receptacle	E	.....	5.55	4.55	3.82	3.30	2.90
713-1016	UG-260/U	713-1017	31-012	836-0276	KC-51-02	Plug	C	59, 62, 71	.83	.68	.57	.49	.43
713-1026	UG-260A/U	713-1027	31-021	.....	.....	Plug	C	59, 62, 71	.94	.77	.65	.56	.49
713-1058	UG-260B/U	713-1059	31-212	836-0365	KC-59-122	Plug	C	59, 62, 71, 210	.93	.76	.64	.55	.49
.....	UG-260D/U**	.....	.....	836-0372	KC-59-147	Plug	C	59, 62, 71, 210	1.01	.85	.64	.55	....
.....	UG-260E/U**	.....	.....	836-0365	KC-59-122	Plug	C	59, 62, 71	1.13	.95	.72	.61	....
713-1018	UG-261/U	.....	31-015	.....	.....	Jack	F	59, 62, 71	1.48	1.21	1.02	.88	.78
713-1060	UG-261B/U	.....	31-215	836-0265	KC-39-53	Jack	F	59, 62, 71	1.42	1.17	.98	.85	.74
713-1014	UG-262/U	.....	31-011	.....	.....	Panel Jack	G	59, 62, 71	1.61	1.32	1.11	.96	.84
713-1056	UG-262B/U	.....	31-211	836-0222	KC-19-164	Panel Jack	G	59, 62, 71	1.64	1.35	1.13	....	....
713-1009	UG-274/U	713-1010	31-008	.....	.....	"T" Adapter	L	.....	2.48	2.04	1.71	1.48	1.30
713-1052	UG-274A/U	713-1053	31-208	.....	.....	"T" Adapter	L	.....	2.72	2.23	1.87	1.61	1.42
.....	UG-274B/U	.....	.....	836-0496	KC-99-31	"T" Adapter	L	.....	2.83	2.35	1.78	1.54	....
713-1004	UG-290/U	713-1005	31-003	836-0426	KC-79-56	Panel Receptacle	D	.....	.87	.71	.60	.52	.46
713-1042	UG-290A	713-1043	31-203	.....	.....	Panel Receptacle	D	.....	.93	.76	.64	.55	.49
713-1000	UG-291/U	.....	31-001	.....	.....	Panel Jack	G	55, 58	1.44	1.18	.99	.85	.75
713-1038	UG-291B/U	.....	31-201	.....	.....	Panel Jack	G	55, 58	1.50	1.23	1.03	.89	....
713-1012	UG-306/U	713-1013	31-009	.....	.....	Angle Adapter	N	.....	2.22	1.82	1.53	1.32	1.16
713-9806	UG-414/U	.....	47000	.....	.....	Panel Recpt. Adapt.	....	.....	2.05	1.68	1.41	1.22	1.07
713-1092	UG-447/U	.....	31-817	836-0418	KC-79-33	Panel Receptacle	D	.....	1.19	.98	.82	.71	.62
713-1066	UG-491A/U	713-1067	31-218	.....	.....	Adapter	K	.....	2.54	2.08	1.75	1.51	1.33
713-1070	UG-492A/U	713-1071	31-220	836-0490	KC-99-33	Bulkhead Adapter	J	.....	2.90	2.38	2.00	1.73	1.52
713-9569	UG-625/U	713-9571	5575	836-0427	KC-79-48	Bulkhead Receptacle	E	.....	.83	.68	.57	.49	.43
713-1078	UG-625B/U	713-1079	31-236	836-0422	KC-79-47	Bulkhead Receptacle	E	.....	.86	.70	.59	.51	.45
713-1034	UG-657/U	713-1035	31-102	836-0416	KC-79-43	Bulkhead Receptacle	E	.....	1.32	1.08	.91	.79	.69
713-1048	UG-909/U	713-1049	31-206	.....	.....	Bulkhead Jack	....	55, 58	1.74	1.43	1.20	1.04	.91
713-1050	UG-910/U	.....	31-207	.....	.....	Bulkhead Jack	....	59, 62, 71	1.83	1.50	1.26	1.09	.96
713-1080	UG-911A/U	.....	31-237	836-0432	KC-79-74	Bulkhead Receptacle	E	.....	2.38	1.95	1.64	1.42	1.25
713-1082	UG-912/U	.....	31-238	.....	.....	Bulkhead Receptacle	E	.....	2.15	1.76	1.48	1.28	1.12
.....	UG-912A/U	.....	.....	836-0424	KC-79-79	Bulkhead Receptacle	E	.....	1.90	1.58	1.20	1.03	....
713-1044	UG-913/U	.....	31-204	836-0977	KC-89-28	Angle Plug	....	55, 58	3.43	2.81	2.36	2.04	1.79
713-1068	UG-914/U	713-1069	31-219	836-0495	KC-99-30	Adapter	H	.....	1.38	1.13	.95	.82	.72
713-9834	UG-1033/U	.....	84975	.....	.....	Plug	C	122	1.83	1.50	1.26	1.09	.96
713-1072	UG-1094/U	713-1073	31-221	836-0420	KC-79-35	Bulkhead Receptacle	E	.....	.74	.61	.51	.44	.39
713-1098	UG-1094A/U	713-1099	31-2221	836-0421	KC-79-46	Bulkhead Receptacle	E	.....	1.03	.85	.71	.61	.54
713-1074	UG-1098/U	.....	31-222	836-0435	KC-79-77	Angle Receptacle	....	.....	2.98	2.44	2.05	1.77	1.56

MHV MINIATURE HIGH VOLTAGE CONNECTORS

Single contact types. Feature bayonet lock coupling for quick connect and disconnect. Av. shpg. wt. 3 oz.

713-9751	UG-931/U	.....	27000	836-1295	KU-79-12	Panel Receptacle	....	58, 59	2.13	1.75	1.47	1.27	1.12
713-9755	UG-932/U	.....	28000	836-1238	KU-59-24	Straight Plug	....	58, 59	2.21	1.81	1.52	1.31	1.16
.....	UG-932A/U**	.....	.....	836-1430	KV-59-26	Plug	....	59, 62, 71, 210	1.96	1.63	1.23	1.07	....

†Amphenol Standard Type Number, Add-1050 to Type Only Where Shown as Available Under Stock Number.

Coaxial Connectors

KINGS K-GRIPS AND K-GRIP GUIDE

K-GRIP GUIDE

The following is a guide for what K-Grips to use with the connectors listed on the preceding pages keyed with an (**). For UG/21 D, E, 59E/U use 1, 5. For UG/88C use 2, 4. For UG/88 D, E, F, and 89C use 2, 4, 6. For UG/260 C, D, E use 3. For UG/536B use 2, 4, 6. For UG/556B use 2, 4. For UG/573B use 1, 5. For UG/909B use 2, 4. For UG/932A use 3.

K-GRIPS FOR RF CONNECTORS

Stock No.	Mfr's Type	For RG/U Cable	Key *	EACH 1-24	25-49	50-99	100-249	250-Up
836-1110	KS-89-04	8, 11, 213	1	.74	.62	.52	.47	.43
836-1111	KS-89-05	58	2	.54	.45	.37	.34	.31
836-1112	KS-89-06	59, 62, 210	3	.54	.45	.37	.34	.31
836-1119	KS-89-17	55, 142, 223	4	.53	.44	.36	.33	.30
836-1122	KS-89-24	9, 214	5	.80	.67	.56	.51	.46
836-1126	KS-89-31	58		.65	.54	.45	.41	.37

- Holds Cable
- Eliminates Braid Combing
- Holds Dielectric In Position
- Simplifies Inspection

K-Grips for RF connectors

Key (*) refers to reference numbers used in K-Grip guide explanation above.

"BETWEEN SERIES" ADAPTERS

Provide positive connection between RF connectors. Non-constant impedance but minimize resistance. See footnote p. 314. 3 oz.

Stock No.	Military No.	Tarnish Proof Finish ††Stock No.	Type -1050†	Stock No.	Type TR5	Description	EACH 1-24	25-99	100-499	500-999	1000-Up
713-1094	UG-201/U	713-1095	31-830	.....	.....	N female and BNC male	2.99	2.45	2.06	1.78	1.57
713-1062	UG-201A/U	713-1063	31-216	836-1020	KN-99-35	N female and BNC male	2.03	1.67	1.40	1.21	1.06
713-1032	UG-273/U	713-1033	31-028	836-0497	KC-99-34	BNC male and UHF 49194	1.60	1.31	1.10	.95	.84
713-1064	UG-349A/U	713-1065	31-217	.....	.....	N male and BNC female	3.01	2.47	2.07	1.79	1.57
713-0828	.....	.....	27-28	.....	.....	BNC female to 50 ohm screw-on subminax male	2.44	2.00	1.68	1.45	1.28
713-9553	UG-146/U	.....	4400	.....	.....	UHF female and N male	3.86	3.17	2.66	2.30	2.02
713-9529	UG-255/U	713-9531	2900	.....	.....	BNC male and UHF female	2.57	2.11	1.77	1.53	1.35

MB MINIATURE RF COAXIAL CONNECTORS

Low cost coaxial connectors. All have bayonet lock. Maximum ratings: 500 MHz, 500 volts 400°F. See footnote p. 314. 3 oz.

Stock No.	Military No.	Tarnish Proof Finish ††Stock No.	Type -1050†	Stock No.	Type TR5	Description	EACH 1-24	25-99	100-499	500-999	1000-Up
713-9793	.....	.....	45000	.....	.....	Plug for RG-58/U	1.61	1.32	1.11	.96	.....
713-9799	.....	.....	46025	.....	.....	Receptacle (Kel-F)	1.23	1.01	.85	.73	.65

TWINAX WEATHERPROOF RF CONNECTORS

95-ohm twin-conductor weatherproof polarized connectors, for use up to 200 MHz. For use with cable type RG-22/U. Military No.: *UG-421/U; †UG-422/U. Av. shpg. wt. 2 oz.

6275

6225

Stock No.	Mfr's Type	Description	EACH 1-24	25-99	100-499	500-999	1000-Up
713-9578	6275*	RG-22/U plug	3.76	3.08	2.59	2.24	1.97
713-9576	6225†	Sq. flange socket.	3.93	3.23	2.71	2.34	2.06

COAXIAL RF PLUG-INS

Commonly used on drawer-type chassis for direct plug-in connections. Rated for 2000 volts. Plug and receptacle mount in 5/16" dia. hole. Military No.: *UG-1050/U; †UG-1051/U. Wt. 1 oz.

2175

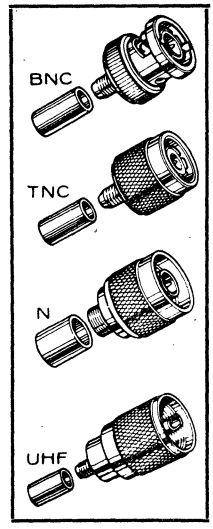
2225

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-99	100-499	500-999	1000-Up
713-9516	2225*	Male	.96	.79	.66	.57	.50
713-9515	2175†	Female	1.07	.88	.74	.64	.56

KINGS "K-GRIP JR." RF CONNECTORS

Small, lightweight versions of standard RF connectors, reduced to the essentials. Designed for fast, uniform assembly with hex forming tool and trim jigs, for mechanically strong and electrically consistent connections. Special serrations grip cable braid securely. Type TR-4 tarnish-resistant finish. **BNC Series:** Bayonet coupling for small-dia. RG/U cables of 50-ohm impedance; 1500 V rms. **TNC Series:** Positive lock thread coupling with low noise level; 50-ohm; 1500 V rms test. **N Series:** Positive lock thread coupling; 50-ohm; 2500 V rms. **UHF Series:** Positive lock thread coupling. Jacks are not illustrated. 1 oz.

Stock No.	Mfr's Type	Series	For RG/U Cable Type	Description	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
836-0250	KC39-26	BNC	58, 141	Jack	1.52	1.33	1.11	.92	.84	.76	.73
836-0252	KC39-28	BNC	59, 62, 210	Jack	1.52	1.33	1.11	.92	.84	.76	.73
836-0350	KC59-78	BNC	58, 141	Plug	1.27	1.11	.92	.77	.70	.64	.61
836-0351	KC59-79	BNC	59, 62, 120	Plug	1.30	1.17	.97	.80	.73	.66	.63
836-0352	KC59-80	BNC	55, 142, 223	Plug	1.30	1.13	.95	.79	.72	.65	.62
836-0360	KC59-98	BNC	58, 141	Plug	1.25	1.08	.90	.75	.68	.62	.58
836-0065	KA39-17	TNC	58, 141	Jack	1.70	1.44	1.20	1.00	.91	.83	.78
836-0115	KA59-44	TNC	58, 141	Plug	2.25	1.91	1.60	1.33	1.21	1.10	1.05
836-0116	KA59-45	TNC	55, 142, 223	Plug	2.25	1.91	1.60	1.33	1.21	1.10	1.05
836-0117	KA59-46	TNC	59, 62, 210	Plug	2.25	1.91	1.60	1.33	1.21	1.10	1.05
836-0850	KN39-30	N	8, 11, 213	Jack	2.37	2.04	1.69	1.41	1.28	1.16	1.10
836-0950	KN59-67	N	8, 11, 213	Plug	2.15	1.84	1.53	1.28	1.16	1.05	.99
836-0951	KN59-68	N	9, 214	Plug	2.15	1.84	1.53	1.28	1.16	1.05	.99
836-1220	KU59-02	UHF	8, 11, 213	Plug	1.00	.85	.70	.58	.53	.48	.46
836-1224	KU59-07	UHF	58, 141	Plug	1.00	.85	.70	.58	.53	.48	.46
836-1225	KU59-08	UHF	59, 62, 210	Plug	1.00	.85	.70	.58	.53	.48	.46
836-1233	KU59-16	UHF	WE724, Belden 8231	Plug	1.10	.92	.77	.64	.58	.53	.51
836-1238	KU59-24	UHF	9, 214	Plug	1.00	.85	.70	.58	.53	.48	.46

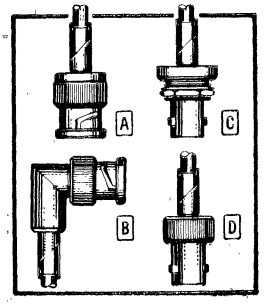


See Page 269 for RG-type Coax Cable

BNC and "Subminax" Connectors

CRIMP OR SOLDER "QUICK-CRIMP" BNC'S

Permits crimp or solder connection to cable. Even when center contact is crimped, connector maintains constant impedance. Costs are appreciably reduced because crimping cuts assembly time 66% or more. VSWR is identical to std. solder-type BNC's up to 10,000 MHz. Connectors may be used with other than 50-ohm cable for non-impedance match. Rated 500 V, max. Impedance, 50 ohms. VSWR, 1.25:1 max. (straight plug and jack). Cable retention equal to cable braid. Teflon dielectric. Bronze female and outer contact. Male contact and all other parts are brass. Center contacts gold plated; other parts silver plated. Sizes: plug, 1 17/64x9/16" dia.; right-angle plug, 1 9/16x1 1/8x9/16" dia.; cable jack, 1 11/32x9/16" dia.; bulkhead jack, 1 5/16x1 1/16" dia.—1/2" "D" mounting hole. Av. wt., 2 oz.



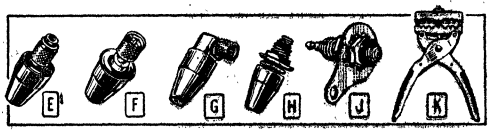
Stock No.	Mfr's Type	Fig.	Sim. to UG/-U	Description	Use With Amphenol RG/U Cable	EACH 1-9	10-24	25-99	100-499	500-999	1000-Up
713-9784	*36775*	*A*	*88E*	*Plug*	*58, 58A, 58C, 141*	1.32	1.12	.92	.77	.66	.59
713-9787	36875	A	88E	Plug	55, 55A, 142, 223	1.32	1.12	.92	.77	.66	.59
713-9785	36800	D	89C	Cable Jack	58,58A,58C,59/A/B,62,141	1.79	1.48	1.21	1.02	.88	.78
713-9769	34625	A	260B	Plug	71	1.43	1.21	.99	.83	.72	.63
713-9818	*68175*	*A*	*260B*	*Plug*	*59, 62, 71, 140, 210*	1.30	1.10	.91	.76	.66	.58
713-9817	68150	D	261C	Cable Jack	59, 62, 71, 140, 210	1.98	1.68	1.38	1.16	1.00	.....
713-9860	95700	C	909B	Blkhd. Jack	55, 55A, 142, 223	2.64	2.24	1.83	1.54	1.33	.....
713-9861	95725	C	909B	Blkhd. Jack	58, 58A, 58C, 59 141, 210	2.54	2.16	1.77	1.49	1.29	1.13
713-9862	95750	C	910B	Blkhd. Jack	59/A/B, 62/A/C, 140	2.64	2.24	1.83	1.54	1.33	1.17
713-9856	95600	B	913A	Angle Plug	58, 58A, 58C, 141	4.90	4.17	3.42	2.87	2.48	2.18
713-9857	95625	B	913A	Angle Plug	62/A/C, 140, 59, 210	5.07	4.31	3.54	2.97	.....	.....
713-0919	*31-026*	....	.....	*Cap/Chain*	*Use with all receptacles*	.68	.58	.48	.40	.35	.30

CRIMPING TOOLS FOR "QUICK-CRIMP" BNC CONNECTORS

Quality industrial crimping tools for use with "Quick-Crimp" BNC connectors. Connector reliability depends on proper use of good crimping tools. These heavy-duty tools have extra-long handles and narrow jaws of cold, hardened steel. Easy spring-loaded ratchet action assures uniform, secure crimp. Highly efficient design permits crimping in less than ten seconds. Crimp is so effective that the wires will break before they can be pulled from the contact crimped section. Average shpg. wt., 1 lb.

Stock No.	Type No.	Use With RG/U Cable	EACH	2-Up
713-6305	227-350	55, 55B, 58, 58A, 58C, 141, 142, 223	108.00	78.00
713-6306	227-375	59, 59A, 59B, 62, 62A, 62C, 140, 210	108.00	78.00
713-6323	227-932-1	For crimping center contact of all above connectors	115.00	83.00

"SUBMINAX" CRIMP OR SOLDER RF CONNECTORS

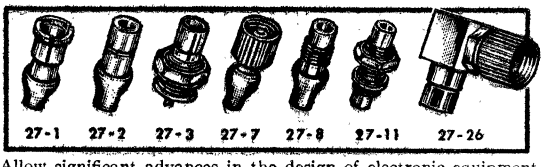


Series 5116 subminiature RF connectors feature captivated contacts for high resistance to cable strain due to mechanical stress, weather and other adverse operating conditions, etc. Female contacts are made of beryllium copper with gold over silver plating; male contacts and all other metal parts are brass with gold over silver plating. All connectors durable Teflon dielectrics. Series 5116 RF connectors offer constant impedance, low VSWR and low insertion loss for maximum electrical efficiency. They are interchangeable with other manufacturers' designs. Rated at 500 volts, peak. All RF connectors listed below have 50 ohm impedance except 057400, 95 ohms. Average shpg. wt., 1 oz. Type 227-911 crimping tool is designed for quick, easy operation—crimps cable braid to connector and assures solid secure connection. Shpg. wt., 1 lb.

Stock No.	Type 5116-	For RG Cable	Fig.	EACH 1-9	10-24	25-99	100-499	500-999	1000-Up
713-9318	037475	178A	F	3.54	3.05	2.50	2.10	1.81	1.60
713-9323	037600	178B	G	5.70	4.84	3.97	3.33	.....	.....
713-9328	037700	196	E	5.84	4.95	3.04	2.55	.....	.....
713-9331	037800	196A	H	5.90	5.01	4.11	3.45	.....	.....
713-9357	058350		J	4.40	3.83	3.14	2.64	2.28	2.01
713-9322	037575	174, 188, 188A	F	3.80	3.22	2.64	2.22	1.92	1.69
713-9342	037875	174, 188, 188A	H	5.90	5.01	4.11	3.45	.....	.....
713-9353	057400		J	4.16	3.54	2.91	2.44	.....	.....

713-6316. 227-911 Crimp Tool. (Fig. K)....Eq. 22.00 2-Up....16.00

"SUBMINAX" PUSH-ON AND SCREW-ON RF CONNECTORS

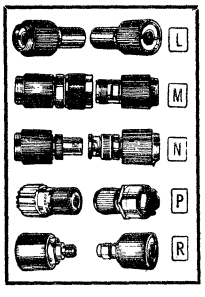


Allow significant advances in the design of electronic equipment. Feature full-size electrical characteristics compressed into a space-saving and weight-saving design. For Amphenol subminiature coaxial cable. Low-resistance gold-plated bodies and contacts. Screw-on and push-on types cannot be intermixed; impedances must match. 50-ohm types except *75 ohms. Require †227-900 or ‡227-901 tool below. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-499	500-999	1000-Up
713-0801	27-1†	Push-on	1.01	.86	.70	.59	.51	.45
713-0802	27-2†	Push-on	1.07	.91	.75	.63	.54	.48
713-0803	27-3	Push-on	1.45	1.23	1.01	.85	.73	.65
713-0815	27-15*	Push-on	1.56	1.32	1.08	.91	.79	.69
713-0807	27-7†	Screw-on	.98	.83	.68	.57	.49	.43
713-0808	27-8†	Screw-on	1.17	.99	.81	.68	.59	.....
713-0809	27-9	Screw-on	.86	.73	.60	.50	.43	.38
713-0810	27-10†	Screw-on	1.45	1.23	1.01	.85	.73	.65
713-0811	27-11	Screw-on	2.36	2.00	1.64	1.38	1.19	.....
713-0826	27-26†	Screw-on	2.38	2.02	1.66	1.39	2.20	1.06
713-0834	27-34	Screw-on	2.83	2.40	1.97	1.65	1.42	1.25
713-0819	27-19*‡	Screw-on	1.36	1.15	.94	.79	.68	.60
713-0821	27-21*	Screw-on	1.58	1.34	1.10	.92	.79	.70

713-6313. Type 227-900 Crimping Tool.† Eq. 27.00 2-Up....19.50
713-6314. Type 227-901 Crimping Tool.‡ Eq. 27.00 2-Up....19.50

APC-7 PRECISION MICROWAVE RF CONNECTOR AND ADAPTERS



Precision 7mm 50 ohm sexless connector designed for rigid air line and ALJAK coax with frequencies up to 18 GHz. Maximum VSWR, 1.039 @ 18 GHz. Leakage level, 120 dB down. DC contact resistance, .001 ohm. Outstanding features are predictable electrical length, high degree of responsibility, low insertion loss and definable electrical and mechanical mating plane with all parts captive. With test certificate and wooden shipping case. Shpg. wt., 1 lb. Adapters make the APC-7 interchangeable with other manufacturers' connectors. *SWR @ 9 GHz. †SWR @ 12.4 GHz. Wt., 3 oz.

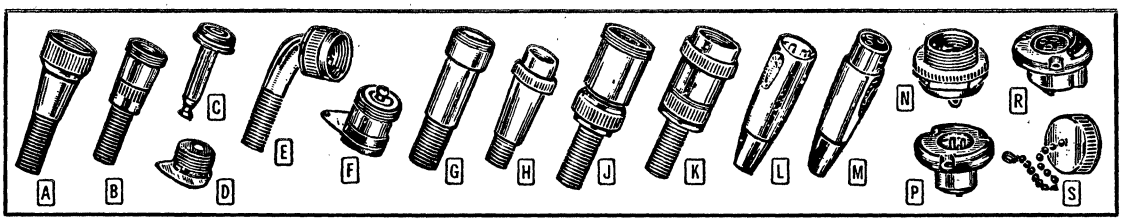
Stock No.	Type 131-	Adapts to	Max. SWR	Length X Dia.	Fig.	EACH	2-Up
713-4604	1025	N Fem.	1.08*	1 13/64x1 3/16"	M	61.50	50.00
713-4608	1035	N Male	1.08*	1 13/16x1 3/16"	M	61.50	50.00
713-4606	1027	BNC Fem.	1.12	1 39/64x1 3/16"	N	61.50	50.00
713-4610	1037	BNC Male	1.12	1 23/32x1 3/16"	N	61.50	50.00
713-4607	1028	OSM Fem.	1.07†	1 11/32x1 3/16"	P	61.50	50.00
713-4611	1038	OSM Male	1.15	1 3/8x1 3/16"	P	61.50	50.00
713-4602	1022	GR 874	1.06	2 1/16x1"	R	114.00	75.00
713-4603	1023	GR 900	1.04	2 3/16x1 1/16"	R	184.00	125.00

L 713-4612. 131-1050 APC-7 Connector. Eq. 54.00 2-Up....40.00

For Amphenol SMA Series—See Page 317

Audio Connectors

BUNKER RAMO AMPHENOL



Receptacles are for chassis mounting; plugs and jacks are used on cables. Plugs fit either jacks or receptacles.

SERIES 75 SINGLE-BUTTON-CONTACT TYPES

Standard connectors with 5/8", 27 threads. Types marked with * require 3/8" mtg. holes. Types marked with †are miniature connectors approximately half the size and weight of standard counterparts with same specifications. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
713-2710	*75 MC1F*	*A*	*Straight plug*	.87	.70	.60	.53	.46	.42
713-2718	*75 MC1M*	*B*	*Cable plug*	.60	.48	.42	.36	.32	.29
713-2729	75 MC1P	C	Phone plug adap.	.85	.68	.58	.51	.45	.40
713-2740	**75 PC1M*	*D*	*Receptacle open*	.60	.48	.42	.36	.32	.29
713-2715	75 MC1FA	E	90° cable jack	1.85	1.48	1.27	1.11	.97	.88
713-2707	*75 CL PC1M	F	Recept., shorting	.85	.68	.58	.51	.44	.40
713-2770	†75 3	F	Locknut recept.	.66	.53	.45	.40	.35	.31

SERIES 80 SINGLE AND DOUBLE-PIN-CONTACT TYPES

For shielded cables, single and two-conductor coaxial cables, photo cell leads, etc. Center contacts are pin and socket type. *Single-contact. †Polarized, double-contact. Av. shpg. wt., 4 oz.

713-3100	*80 C	N	Female recept.	.75	.60	.52	.45	.40	.36
713-3104	*80-M	H	Male cable plug	.95	.76	.65	.57	.50	.45
713-3106	†*80-MC2F*	*G*	*Fem. cable jack*	1.06	.85	.73	.64	.56	.50
713-3107	†*80-MC2F1*	*H*	*Fem. cable plug*	1.06	.85	.73	.64	.56	.50
713-3105	†*80-MC2M*	*H*	*Male cable plug*	1.00	.80	.68	.60	.52	.47
713-3109	†80-MC2M1	G	Male cable jack	1.00	.80	.68	.60	.52	.47
713-3110	†*80-PC2F*	*N*	*Female recept.*	.85	.68	.58	.51	.44	.40
713-3111	†*80-PC2M*	*N*	*Male receptacle*	.82	.66	.56	.49	.43	.39

S Type 75-CCC1 Cap and Chain. Seals open chassis units against dirt. Used with Series 75 and 80 receptacles. Shpg. wt., 2 oz.
713-2704. 1-9.....**Each .58** **10-49**.....**Each .47**
50-99.....**Each .43** **100-Up**.....**Each .35**

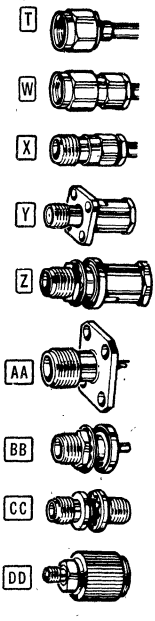
S Type 91-CCC3 Cap and Chain. Seals open chassis units against harmful dirt and dust. For use with Series 91 connectors. 2 oz.
713-4005. 1-9.....**Each .62** **10-49**.....**Each .50**
50-99.....**Each .43** **100-Up**.....**Each .38**

SMA CONNECTORS

One hundred mating cycles with no APP. Shells are made of high strength, heat treated beryllium copper—three times stronger than stainless steel! Maximum SWR for mated pair of SMA solder-type for 0.141" semi-rigid cable is 1.09 to 12.4 GHz and 1.13 through 18 GHz. This is below the limits of MIL-C-39012. All Amphenol SMA connectors assembled with Amphenol Tool Kits.

Stock No.	Mfr's Type	Fig.	Desc.	EACH 1-9	10-24	25-99	100-Up
713-8713	901-113	T	Plug	2.10	1.68	1.38	1.16
713-8705	901-105	W	Plug	2.60	2.08	1.70	1.43
713-8711	901-111	....	Plug	2.81	2.25	1.85	1.55
713-8707	901-107	....	Plug	3.85	3.08	2.52	2.12
713-8706	901-106	X	Jack	2.20	1.76	1.44	1.21
713-8708	901-108	....	Jack	3.45	2.76	2.26	1.90
713-8703	901-103	....	Plug	4.82	3.86	3.17	2.66
713-8704	901-104	....	Jack	4.18	3.35	2.75	2.31
713-8721	901-121	Y	Jack	5.33	4.27	3.50	2.94
713-8722	901-122	Z	Jack	4.75	3.80	3.12	2.62
713-8701	901-101	....	Plug	3.92	3.14	2.57	2.16
713-8702	901-102	....	Crimp	3.36	2.69	2.20	1.85
713-8709	901-109	....	Plug	3.92	3.14	2.57	2.16
713-8710	901-110	....	Jack	3.56	2.85	2.33	1.96
713-8712	901-112	AA	Receptacle	3.61	2.89	2.37	1.99
713-8716	901-116	BB	Receptacle	3.10	2.48	2.04	1.71
713-8717	901-117	....	Receptacle	3.16	2.53	2.07	1.74
713-8718	901-118	....	Plug Adap.	4.68	3.75	3.07	2.58
713-8719	901-119	....	Jack Adap.	3.02	2.42	1.99	1.67
713-8720	901-120	CC	Jack Adap.	4.01	3.21	2.63	2.21
713-4620	131-1074	DD	Adap.	38.00	35.00	.....	.....
713-4621	131-1075	....	Adap.	38.00	35.00	.....	.....
713-4622	131-1076	....	Adap.	38.00	35.00	.....	.....
713-4623	131-1077	....	Adap.	38.00	35.00	.....	.....

713-8795. 901-2500 Tool Kit. Ea. 17.50 2-Up 12.50



See Audio Cables on Pages 274-281, 283

SERIES 91—3, 4 AND 6-CONTACT TYPES

Microphone connectors for use with portable equipment. Polarized to eliminate incorrect insertions. Clamps eliminate stress on soldered connections *3-contact type. †4-contact type. ‡6-contact type. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
713-4011	*91-MC3F	J	Fem. cable jack	1.64	.131	.97	.85	.74	.67
713-4012	*91-MC3F1	K	Fem. cable plug	1.48	1.18	1.01	.88	.77	.70
713-4013	**91-MC3M*	*K*	*Male cable plug*	1.39	1.11	.95	.83	.73	.66
713-4014	*91-MC3M1	J	Male cable jack	1.32	1.06	.91	.79	.70	.63
713-4033	**91-PC3F*	*N*	*Female recept.*	1.00	.80	.69	.60	.52	.47
713-4035	**91-PC3M*	*N*	*Male receptacle*	.90	.72	.67	.54	.47	.43
713-4017	†91-MC4F	J	Fem. cable jack	1.46	1.17	1.00	.88	.77	.69
713-4018	†91-MC4F1	K	Fem. cable plug	1.54	1.23	1.05	.92	.80	.73
713-4019	†*91-MC4M*	*K*	*Male cable plug*	1.45	1.16	.99	.87	.76	.69
713-4020	†91-MC4M1	J	Male cable jack	1.39	1.11	.96	.83	.73	.66
713-4034	†*91-PC4F*	*N*	*Female recept.*	.95	.76	.66	.57	.50	.45
713-4037	†91-PC4M	N	Male receptacle	.91	.73	.62	.54	.48	.43
713-4025	‡91-MC6F	J	Fem. cable jack	1.50	1.20	1.04	.90	.79	.72
713-4027	‡*91-MC6M*	*K*	*Male cable plug*	1.46	1.17	1.01	.88	.77	.69
713-4043	‡*91-PC6F*	*N*	*Female recept.*	1.03	.82	.70	.61	.54	.49

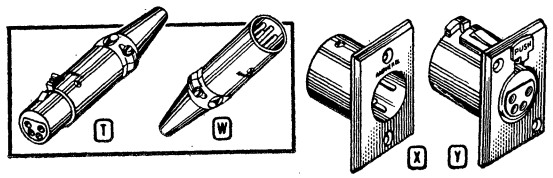
SERIES 91 "QUIK" 3 AND 4-CONTACT TYPES

Locked connection made by inserting plug in jack; released by light pressure on lock button. Gold-plated (over silver) bronze contacts. Dielectric is diallyl phthalate, shells are finished in satin nickel. *3-contact type. †4-contact type. Av. shpg. wt., 4 oz.

713-4085	*91-853	L	Male cable plug	2.36	1.89	1.62	1.41	1.24	1.12
713-4086	**91-854*	*M*	*Fem. cable plug*	3.14	2.51	2.16	1.89	1.65	1.49
713-4087	*91-855	P	Male receptacle	1.84	1.47	1.26	1.10	.96	.87
713-4088	*91-856	R	Female recept.	4.35	3.48	2.99	2.61	2.29	2.07
713-4089	†91-857	L	Male cable plug	2.52	2.02	1.74	1.52	1.33	1.20
713-4090	†91-858	M	Fem. cable plug	3.56	2.85	2.45	2.14	1.87	1.69
713-4091	†91-859	P	Male receptacle	1.99	1.59	1.37	1.20	1.05	.95
713-4092	†91-860	R	Female recept.	4.69	3.75	3.22	2.81	2.46	2.23

EXCELLITE MICROPHONE CONNECTORS

Straight Cord Plugs **Wall Mounting Receptacles**

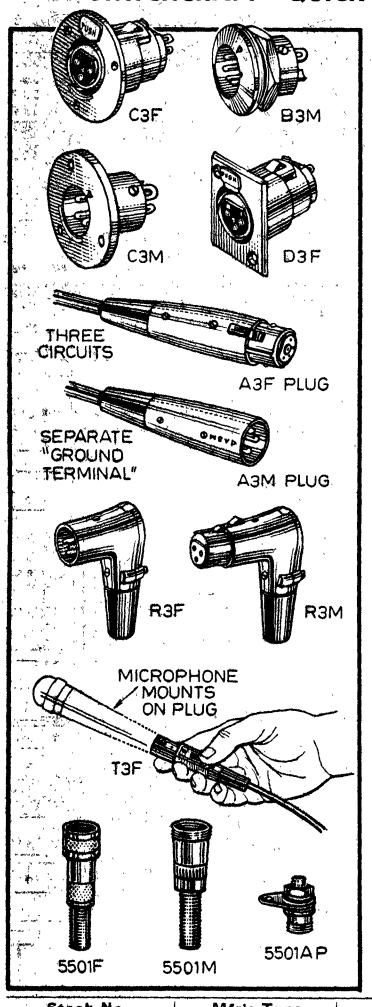


Rugged ABS molded plastic bodies give lightweight, durable construction at a low price. Satin-nickel plating gives effective shielding for high-impedance circuits. Positive gripping cable clamps (fit up to 5/16" O.D.). Push-button lock and release. Voltage rating: test; 1400 V rms, service; 133 V rms. *3-contact type. †4-contact type. ‡5-contact type. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
713-4061	*91-454	T	Female plug	1.77	1.42	1.20	1.07	.92	.87
713-4065	†91-458	T	Female plug	2.25	1.80	1.50	1.34	1.16	1.10
713-4069	‡91-462	T	Female plug	3.88	3.10	2.62	2.32	2.02	1.90
713-4060	*91-453	W	Male plug	1.50	1.20	1.02	.90	.78	.74
713-4064	†91-457	W	Male plug	1.66	1.33	1.14	.99	.86	.81
713-4068	‡91-461	W	Male plug	2.65	2.12	1.83	1.62	1.40	1.25
713-4062	*91-455	X	Male recept.	1.36	1.09	.92	.80	.70	.66
713-4066	†91-459	X	Male recept.	1.62	1.30	1.10	.96	.84	.78
713-4070	‡91-463	X	Male recept.	2.06	1.65	1.42	1.23	1.07	1.02
713-4063	*91-456	Y	Female recept.	2.48	1.98	1.69	1.47	1.29	1.21
713-4067	†91-460	Y	Female recept.	2.38	1.90	1.62	1.41	1.28	1.16
713-4071	‡91-464	Y	Female recept.	3.50	2.80	2.40	2.10	1.82	1.71

Audio Connectors

SWITCHCRAFT "QUICK-GROUND" MALE AND FEMALE AUDIO CONNECTORS



3, 4 AND 5-CONTACT PLUGS AND RECEPTACLES

Connectors offer up to 5-contact versatility by means of up to four circuit contacts plus electrically integrated "ground terminal" on shell. Insert-mounting screws assure quick and firm mechanical connection. Silver-plated, chromate-dipped brass and phosphor bronze pin and socket contacts provide reliable low-loss electrical connection. Neoprene cable strain relief bushing keyed to shell; ribbed for easy access to male plugs. Both male and female connectors have die-cast zinc alloy construction and satin-nickel finish for extra long life. Females have nickel-plated nut and washers. All receptacles are three-contact types which will mate with all standard audio connectors. *Single hole mounting. Av. wt. 2 oz. **Phone or write for larger quantity pricing.**

Stock No.	Mfr's Type	Cannon Equivalent	Description	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
932-0002	*A3F*	XLR-3-11C	*3 con. Fem. Plug*	1.96	1.47	1.35	1.23	.98	.931
932-0003	*A3M*	XLR-3-12C	*3 con. Male Plug*	1.68	1.26	1.16	1.05	.84	.798
932-0004	A4F	XLR-3-11C	4-con. Fem. Plug	2.44	1.83	1.68	1.53	1.22	1.16
932-0005	A4M	XLR-3-12C	4-con. Male Plug	1.80	1.35	1.24	1.13	.90	.855
932-0009	B3M	XLR-3-13N	*Male Receptacle	2.40	1.80	1.65	1.50	1.20	1.14
932-0010	B4M	XLR-4-14N	Male Receptacle	2.52	1.89	1.75	1.58	1.26	1.20
932-0012	*C3M*	XLR-3-14	*Male Receptacle*	1.28	.96	.88	.80	.64	.608
932-0011	C3F	XLR-3-13	Fem. Receptacle	2.55	1.92	1.76	1.60	1.28	1.22
932-0018	C4M	XLR-4-14	Male Receptacle	1.39	1.05	.963	.875	.70	.665
932-0017	C4F	XLR-4-13	Fem. Receptacle	2.66	2.01	1.84	1.68	1.34	1.27
932-0030	*D3F*	XLR-3-31	*Fem. Receptacle*	2.65	1.98	1.82	1.65	1.32	1.25
932-0035	D4F	XLR-4-31	Fem. Receptacle	2.74	2.07	1.90	1.73	1.38	1.31

RIGHT-ANGLE CONNECTORS

Fine features of connectors above plus right-angle configuration which reduces "cable clutter." No. in Mfr's Type indicates number of contacts. Wt. 2 oz.

Stock No.	Mfr's Type	Cannon Equivalent	Description	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
932-0160	R3F	XLR-3-15	Female plug	4.39	3.30	3.03	2.75	2.20	2.09
932-0163	R4F	XLR-4-15	Female plug	5.00	3.75	3.44	3.13	2.50	2.38
932-0166	R5F	XLR-5-15	Female plug	6.80	5.10	4.68	4.25	3.40	3.23
932-0161	R3M	.....	Male plug	4.06	3.06	2.81	2.55	2.04	1.94
932-0164	R4M	.....	Male plug	4.20	3.15	2.89	2.63	2.10	2.00
932-0167	R5M	.....	Male plug	6.00	4.50	4.13	3.75	3.00	2.85

STRAIGHT CORD PLUGS WITH ON/OFF SWITCH

Ideal for entertainers and broadcast work. Built-in switch permits instant fingertip control of audio. Raised knob on switch permits easy control of microphone without having to look at the mike. Switch knob is quickly and easily actuated by thumb while holding cord plug and microphone in hand. Low-profile switch knob prevents inadvertent operation of switch. Switch built into connector shell provides inline DPDT control of up to four cable conductor circuits. Switch rated 1 amp, 125 VAC or 0.5 amp, 125 VDC. Female connectors have "quick-ground" features as above. Wt. 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
932-0203	T3F	3-con. plug	6.00	4.50	4.13	3.75	3.00	2.85
932-0204	T4F	4-con. plug	6.40	4.80	4.40	4.00	3.20	3.04
932-0205	T5F	5-con. plug	8.00	6.00	5.50	5.00	4.00	3.80

"MINI-CON" MICROPHONE-TYPE CONNECTORS

For use with single-conductor shielded cables to 3/16" O.D. Coupling ring on 5501F removable for quick change of female to male. Cable-braid spring clamped to body by hollow set screw. 5501 MP fits 3/16" hole. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Description	1-9 EA.	10-24 EA.	25-49 EA.	50-99 EA.	100-249 EA.	250-Up EA.
932-1620	5501 F	Female	.64	.48	.44	.40	.32	.304
932-1622	5501 MP	Male	.52	.39	.36	.33	.26	.247
932-1623	5501 MP	Panel male	.48	.36	.33	.30	.24	.228

I.T.T. CANNON AUDIO CONNECTORS

3 and 4-contact connectors with clamp and resilient socket insulator. Integral cable-clamp and push-action latchlock. First digit in Mfr's Type shows no. of contacts. Three 15-amp or four 10-amp contacts. *Wall-type receptacles; †panel-type receptacles. Av. wt. 4 oz.

Stock No.	Mfr's Type	Description	1-4 EA.	5-9 EA.	10-49 EA.	50-UpEA.
819-8261	XLR-3-15	Female (socket insert)	6.65	4.84	4.44	4.04
819-8283	XLR-4-15	Female (socket insert)	6.70	4.89	4.48	4.08
819-8252	XLR-3-11C	Female (socket insert)	2.15	1.57	1.44	1.31
819-8253	XLR-3-11SC	As above, steel shell	6.87	4.99	4.58	4.16
819-8273	XLR-4-11C	Female (socket insert)	2.72	1.99	1.82	1.66
819-8274	XLR-411SC	As above, steel shell	6.92	5.08	4.66	4.24
819-8254	XLR-3-12C	Male (pin insert)	1.87	1.36	1.25	1.14
819-8255	XLR-3-12SC	As above, steel shell	4.97	3.98	3.65	3.32
819-8275	XLR-4-12C	Male (pin insert)	2.00	1.45	1.33	1.21
819-8277	XLR-4-12SC	As above, steel shell	5.60	4.10	3.76	3.42

WALL AND PANEL RECEPTACLES

Stock No.	Mfr's Type	Description	EACH 1-4	5-9	10-49	50-Up
819-8256	XLR-3-13*	Female (socket insert)	3.10	2.25	2.06	1.88
819-8278	XLR-4-13*	Female (socket insert)	3.20	2.33	2.14	1.95
819-8258	XLR-3-13N†	Female (socket insert)	3.80	3.05	2.80	2.55
819-8280	XLR-4-13N†	Female (socket insert)	4.32	3.15	2.89	2.63
819-8259	XLR-3-14*	Male (pin insert)	1.40	1.03	.94	.86
819-8281	XLR-4-14*	Male (pin insert)	1.42	1.06	.97	.88
819-8260	XLR-3-14N†	Male (pin insert)	3.42	2.48	2.28	2.07
819-8282	XLR-4-14N†	Male (pin insert)	3.65	2.68	2.46	2.24
819-8262	XLR-3-31*	Female (socket insert)	3.22	2.35	2.15	1.96
819-8284	XLR-4-31*	Female (socket insert)	3.00	2.41	2.21	2.01
819-8263	XLR-3-32*	Male (pin insert)	1.82	1.33	1.22	1.11
819-8285	XLR-4-32*	Male (pin insert)	2.37	1.75	1.61	1.46
819-8264	XLR-3-35*	Female (socket insert)	7.22	5.77	5.29	4.81
819-8265	XLR-3-35-2G*	As above, Dual ganged	14.57	10.61	9.72	8.84

TYPE P 3-CONTACT RECEPTACLES AND PLUGS

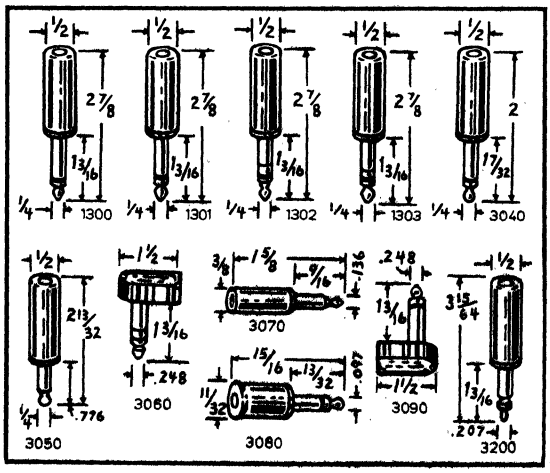
For up to No. 10 wires. 30-amp contacts. Av. wt. 4 oz.

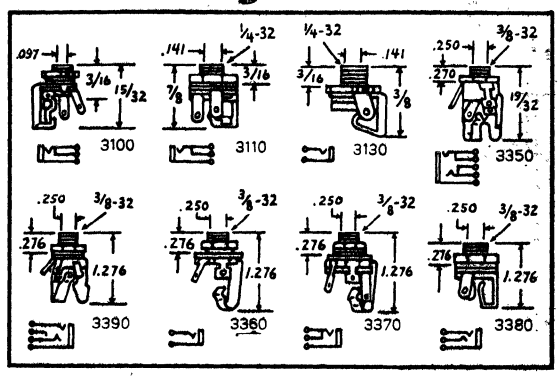
Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-Up
819-8213	P3-13	Wall socket, female	7.85	6.31	5.36	4.73
819-8214	P3-14	Wall mount, male (pin)	6.50	5.20	4.42	3.90
819-8211	P3-CG-11S	Cable plug, female (skt)	9.80	8.62	7.33	6.47
819-8212	P3-CG-12S	Cable plug, male (pin)	9.00	7.92	6.73	5.94

Allied offers complete stocks and fast shipment of industrial quantities at OEM prices, prompt off-the-shelf delivery for all your electronics needs. Contact the nearest Allied Electronics facility for information on prices and delivery.

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Allied Phone, Phono, Extension Plugs and Jacks





PHONE PLUGS

Made to standard dimensions to mate with all standard items. Nickel-plated brass and Delrin. Solder connections are tinned.

STANDARD ¼" TYPE

Stock No.	Mfr's Type	Color	Description	EACH 1-49	50-99	100-499	500-999	1000-Up
706-3001	1300B	Black	2-cond. Screw term. Mates w/jacks 3360, 3370.	.54	.46	.35	.33	.29
706-3002	1300R	Red		.54	.46	.35	.33	.29
706-3003	1300M	Metal		.75	.64	.49	.46	.40
706-3010	1301B	Black	2-cond. Solder term. Mates w/jacks 3360, 3370.	.61	.52	.40	.37	.33
706-3011	1301R	Red		.61	.52	.40	.37	.33
706-3012	1301M	Metal		.71	.64	.48	.44	.40
706-3020	1302B	Black	3-cond. Solder term. Mates w/jacks 3380, 3390.	.74	.66	.50	.47	.42
706-3021	1302R	Red		.74	.66	.50	.47	.42
706-3022	1302M	Metal		.93	.81	.62	.58	.515
706-3030	1303B	Black	3-cond. Screw term. Mates w/jacks 3380, 3390.	.84	.72	.55	.51	.45
706-3031	1303R	Red		.84	.72	.55	.51	.45
706-3032	1303M	Metal		.99	.86	.65	.62	.55
706-3051	3060B	Black	Right angle type. 3-cond. Screw Terminals. Mates, 3380, 3390.	.96	.82	.62	.59	.52
706-3053	3060R	Red		.96	.82	.62	.59	.52
706-3052	3060M	Metal		1.05	.90	.68	.64	.56
706-3060	3090B	Black	Right angle type. 2-cond. Screw Terminals. Mates with 3360 and 3370.	.78	.69	.52	.49	.43
706-3062	3090R	Red		.78	.69	.52	.49	.43
706-3061	3090M	Metal		.87	.74	.57	.53	.47

MILITARY SPECIFICATION TYPE

706-3040	3040B	Black	Mil PJ055. 2-cond. Solder Term.	1.00	.85	.65	.61	.54
706-3050	3050B	Black	Mil PJ054. 2-cond. Solder Term.	1.00	.85	.65	.61	.54
706-3200	3200B	Black	Mil PJ068. 3-cond. Solder Screw Term.	2.76	2.35	1.78	1.66	1.48

MINIATURE AND SUB-MINIATURE TYPES

706-3054	3070B	Black	2-cond. Solder Terminals. Mates w/3110 and 3130.	.50	.44	.33	.31	.279
706-3056	3070R	Red		.50	.44	.33	.31	.279
706-3055	3070M	Metal		.68	.61	.46	.43	.39
706-3057	3080B	Black	2-conductor. Solder Term. Mates with jack 3100.	.48	.41	.31	.296	.26
706-3059	3080R	Red		.48	.41	.31	.296	.26
706-3058	3080T	Tan		.48	.41	.31	.296	.26

PHONE JACKS

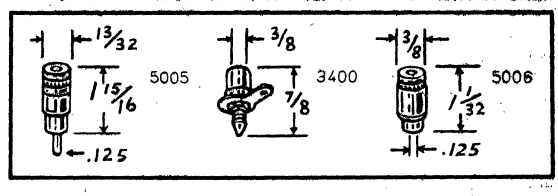
Designed to highest quality for trouble-free mating with plugs of different manufacture. Nickel plated brass and brass springs for long life. Extra heavy-duty insulators.

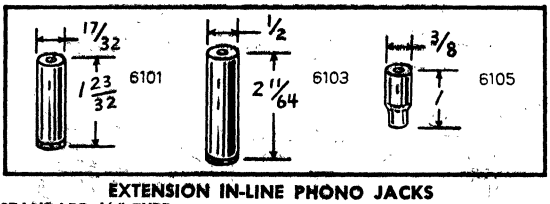
MINIATURE AND SUB-MINIATURE TYPES

Stock No.	Mfr's Type	Color	Description	EACH 1-49	50-99	100-499	500-999	1000-Up
706-3063	3100	Metal	2-conductor. Fits plug 3080.	.36	.30	.23	.22	.195
706-3064	3110	Metal	2-conductor. Closed circuit. Fits plug 3070.	.33	.29	.21	.20	.185
706-3066	3130	Metal	2-conductor. Open circuit. Fits plug 3070.	.30	.26	.197	.18	.165
706-3350	3350	Metal	Stereo Phono Jack. Fits Plugs 1302, 1303, 3060.	.77	.66	.50	.47	.41

STANDARD ¼" TYPE

Stock No.	Mfr's Type	Color	Description	EACH 1-49	50-99	100-499	500-999	1000-Up
706-3390	3390	Metal	3-cond. Closed Circuit. Fits 1302, 1303, 3060.	.57	.49	.37	.35	.31
706-3360	3360	Metal	2-conductor. Open Circuit. Fits 1300, 1301, 3040, 3090.	.30	.26	.197	.18	.165
706-3370	3370	Metal	2-cond. Closed Circuit. Fits 1300, 1301, 3040, 3090	.33	.29	.22	.21	.19
706-3380	3380	Metal	3-cond. Open Circuit. Fits 1302, 1303, 3060.	.38	.34	.26	.24	.22





EXTENSION IN-LINE PHONO JACKS

STANDARD ¼" TYPE

706-3401	6101	Metal	2-conductor	.90	.77	.59	.55	.49
706-3403	6103	Metal	3-conductor	1.05	.90	.68	.64	.56

MINIATURE

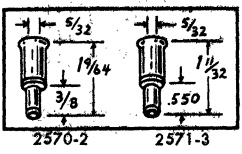
706-3405	6105	Metal	2-conductor	.84	.74	.56	.537	.46

PHONO PLUGS AND JACKS

Precision shaped guarantees firm contact. Well-anchored insulators prevent turning and wires pulling loose.

STANDARD SIZE FITS ALL PHONO PLUG AND JACKS

Stock No.	Mfr's Type	Color	Description	EACH 1-49	50-99	100-499	500-999	1000-Up
706-3396	5005	Metal	Phono Plug. ¼" size. Shielded handle.	.30	.26	.197	.18	.165
706-3400	3400	Metal	Phono Jack. Front mount in ⅜" hole.	.23	.19	.145	.139	.124
706-3397	5006	Metal	In-line Phono Jack.	.38	.34	.26	.24	.22

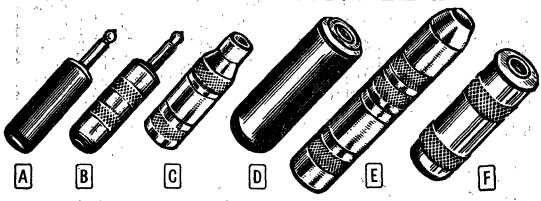


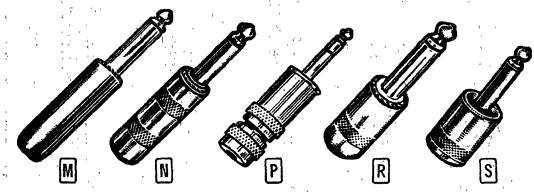
AC ADAPTER COAXIAL JACKS

For use on many types of AC equipment such as AC adapters, battery chargers as well as imported equipment.

Stock No.	Mfr's Type	Color	Description	Each 1-99	100-299	300-499	500-Up
706-0570	2570	Green	.080 I.D./.218 O.D.	.39	.351	.273	.234
706-0571	2571	Red	.097 I.D./.218 O.D.	.39	.351	.273	.234
706-0572	2572	Blue	.080 I.D./.195 O.D.	.45	.405	.315	.27
706-0573	2573	Tan	.097 I.D./.195 O.D.	.45	.405	.315	.27

SWITCHCRAFT INC. Plugs and Extension Jacks





"TINI-PLUGS" SUBMINIATURE PHONE PLUGS

A B For use with "Tini-Jax" listed on following page. 1⅝" overall length. 2-conductor. Handles are plastic or nickeled brass. §Screw terminals; all others solder terminals. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Handle	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
932-1335	*740§*	*A*	*Black*	.76	.57	.523	.475	.38	.361	.342
932-1339	745§	A	Red	.76	.57	.523	.475	.38	.361	.342
932-1343	*750*	*A*	*Black*	.57	.54	.495	.45	.36	.342	.324
932-1347	*755*	*A*	*Red*	.57	.54	.495	.45	.36	.342	.324
932-1354	*770§*	*B*	*Shield*	1.04	.78	.715	.65	.52	.494	.468
932-1362	*780*	*B*	*Shield*	1.00	.75	.688	.625	.50	.475	.45

G *Type 125 "Tini-Extension Jax."* 2-conductor; with solder-lug terminals. Mate with "Tini-Plugs." Av. shpg. wt., 2 oz.
932-0965. 1-9 Ea. 1.20 10-24 Ea. .90 25-49 Ea. .83 50-99 Ea. .75
100-249.....Ea. .60 250-499.....Ea. .57 500-Up.....Ea. .54

"EXTENSION JAX" CABLE EXTENSION JACKS

D E F Open circuit. Fit std. ¼" plugs. 1 1/16" O.D. 2 5/32" long; 121 and 131, ½" O.D., 2½" long. Black handles, plastic; shielded are nickeled brass. §Screw terminals, others solder. 3 oz.

2-CONDUCTOR TYPES

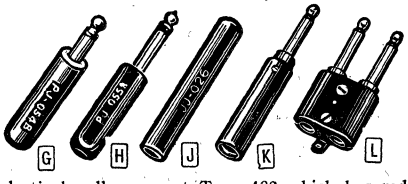
932-0884	80§	D	Black	1.16	.87	.798	.725	.58	.55	.52
932-0908	*88*	*D*	*Black*	1.04	.78	.715	.65	.52	.494	.468
932-0957	*120§*	*F*	*Shield*	1.52	1.14	1.05	.95	.76	.72	.68
932-0961	*121*	*E*	*Shield*	1.60	1.20	1.10	1.00	.80	.76	.72

3-CONDUCTOR TYPES

932-0970	*131*	*E*	*Shield*	2.00	1.50	1.38	1.25	1.00	.95	.90
932-1378	830§	D	Black	1.52	1.14	1.05	.95	.76	.72	.68
932-1440	1230§	F	Shield	1.96	1.47	1.35	1.23	.98	.931	.882

MILITARY-TYPE "LITTEL-PLUGS" AND EXTENSION JACK

A series of connectors made to meet requirements of military specifications. Terminals pre-tinned brass. All have plural internal interlock; parts will not shift once in position. Black plastic handles, except Type 482 which has red handle. All plugs have screw terminals; meet MIL-P-642A specs, Type 820 ext. jack meets MIL-J-642A—fits Type 430 plug. 4 oz.



2-CONDUCTOR TYPES

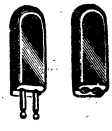
Stock No.	Mfr's Type	Fig.	JAN Type	EACH 1-9	10-24	25-49	50-99	100-246	250-Up
932-1235	412	L	PJ-289	3.92	2.94	2.70	2.45	1.96	1.86
932-1244	430	G	PJ-054 B	1.20	.90	.83	.75	.60	.57
932-1247	440	G	PJ-055 B	1.20	.90	.83	.75	.60	.57
932-1374	820	J	JJ-026	1.68	1.26	1.16	1.05	.84	.798

3-CONDUCTOR TYPES

932-1258	480	H	PJ-068	2.88	2.16	1.98	1.80	1.44	1.37
932-1260	482	K	PJ-051	3.20	2.40	2.20	2.00	1.60	1.52
932-1261	483	K	PJ-051B	3.20	2.40	2.20	2.00	1.60	1.52

TYPE 410 PLUG AND TYPE 810 JACK

Miniature, 2-cond. extension jack and mating plug. Plug is Signal Corps Type PJ-291; jack, JJ-048. 2-piece, molded construction with EM-1 insulation per MIL-P-3412. Plug has solder-cup terminals; jack, solder lugs. After wiring, shells must be cemented. Overall size (engaged), 2⅝x1 7/32x7/32". 3 oz.



Stock No.	Mfr's Type	Desc.	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
932-1230	410	Plug	.84	.63	.578	.525	.42	.399	.378
932-1370	810	Jack	1.12	.84	.77	.70	.56	.532	.504

"LITTEL-PLUG" PHONE PLUGS

Fit std. ¼" phone jacks, except S250 and S280 have .206"-dia. sleeve to mate S-11 "Littel-Jax;" R280 has short sleeve for Revere recorders. §Screw terminals, others solder terminals. Plugs with solder terminals have cable clamp. Metal (shielded) handles are nickel plated brass. Handles, 1 11/16" long; ½" diameter. Av., 4 oz.

2-CONDUCTOR TYPES

Stock No.	Mfr's Type	Fig.	Handle Color	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
932-1033	*240§*	*M*	*Black*	.76	.57	.523	.475	.38	.361	.342
932-1036	245§	M	Red	.76	.57	.523	.475	.38	.361	.342
932-1039	*250*	*M*	*Black*	.72	.54	.495	.45	.36	.342	.324
932-0196	*S250*	*M*	*Black*	.76	.57	.523	.475	.38	.361	.342
932-1041	*255*	*M*	*Red*	.72	.54	.495	.45	.36	.342	.324
932-1053	*270§*	*N*	*Metal*	1.08	.81	.743	.675	.54	.513	.486
932-1056	*280*	*N*	*Metal*	1.04	.78	.715	.65	.52	.494	.468
932-0188	R280	N	Metal	1.32	.99	.908	.825	.66	.627	.594
932-0198	S280	N	Metal	1.04	.78	.715	.65	.52	.494	.468

3-CONDUCTOR TYPES

932-1044	*260§*	*M*	*Black*	1.20	.90	.825	.75	.60	.57	.54
932-1050	*267*	*M*	*Black*	1.08	.81	.743	.675	.54	.513	.486
932-1060	*290§*	*N*	*Metal*	1.40	1.05	.963	.875	.70	.665	.63
932-1064	*297*	*N*	*Metal*	1.32	.99	.908	.825	.66	.627	.594

STANDARD PHONE PLUGS

¼" plugs. Metal (shielded), red or black bakelite handles; 2 1/16" long, ¾" dia., except *1" long. 170 and 190A have 2 1/16x1 1/16" 2-piece handle with cable clamp for ¼" cable. Av. shpg. wt., 5 oz.

2-CONDUCTOR TYPES WITH SCREW TERMINALS

932-0760	*40*	*M*	*Black*	.80	.60	.55	.50	.40	.38	.36
932-0808	*45*	*M*	*Red*	.80	.60	.55	.50	.40	.38	.36
932-0880	*70*	*N*	*Metal*	1.06	.96	.88	.80	.64	.608	.576
932-0987	160*	S	Metal	1.04	.78	.715	.65	.52	.494	.468
932-0990	170	P	Metal	1.64	1.23	1.13	1.03	.82	.779	.738

3-CONDUCTOR TYPES WITH SOLDER TERMINALS

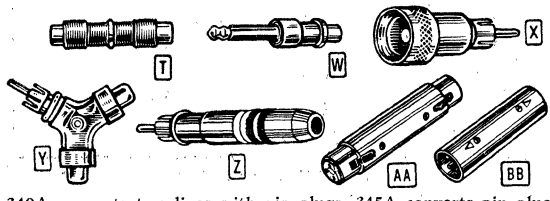
932-0860	60	M	Black	1.08	.81	.743	.675	.54	.513	.486
932-0925	90*	S	Metal	1.36	1.02	.935	.85	.68	.646	.612
932-0994	190	N	Metal	1.56	1.17	1.07	.975	.78	.741	.702
932-0995	190A	P	Metal	1.96	1.47	1.35	1.23	.98	.931	.882

"LUG-PLUG" PHONE PLUGS

Low-cost, two-conductor phone plugs. All fit standard ¼" jacks. Have solder terminals. Exterior parts bright nickel plated. Type 350 has black plastic handle 1⅝" long, ½" diameter. Type 380 has shielded, bare metal handle. 1" long. Av. shpg. wt., 4 oz.

932-1147	350	M	Plastic	.64	.48	.44	.40	.32	.304	.288
932-1210	380	R	Metal	.80	.60	.55	.50	.40	.38	.36

JACK ADAPTERS AND CONNECTORS



349A connects two lines with pin plugs. 345A converts pin plug to phone plug. 338B pin plug with mike connector. 389 3-contact mike receptacle input to same output. 390 3-pin mike plug to equipment with this output. Av. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	1-9	10-24	25-Up
932-1144	*349A*	*T*	Double-ended Phono Pin Jack	1.04	.78	.72
932-1138	*345A*	*W*	Phono Pin Jack; Phone Plug	1.24	.93	.85
932-1124	338B	X	Mic; Phono Pin Plug	1.24	.93	.85
932-1103	330F	Y	2 Phono Pin Jacks; Phono Pin Plug	1.72	1.29	1.18
932-1117	*336A*	*Z*	Phone Jack; Phono Pin Plug	1.68	1.26	1.16
932-1219	389	AA	Double-ended 3-contact recept.	4.00	3.00	2.75
932-1220	*390*	*BB*	Double-ended 3-pin plug	3.35	2.52	2.31

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Phone Jacks and Phone Plugs

SWITCHCRAFT INC.

"SF-JAX" SHORT-FRAME JACK

Ruggedly designed jacks requiring a minimum of panel depth. Short frame supports springs parallel to mtg. surface. Long springs without "forms" assure minimum fatigue. Tubing runs through entire stack and frame. Overall length: Series 20, 1 29/32". Frame, twin nut and stack screws made of cadmium-plated steel. Take std. 1/4" plugs. Fit 3/8" dia. hole. Av. shpg. wt., 3 oz.

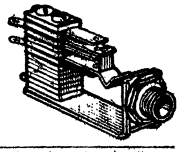
2-CONDUCTOR TYPE

Stock No.	Mfr's Type	Diagram	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-0568	22A	II	.84	.578	.525	.42	.399	.378

3-CONDUCTOR TYPE

932-0580	24B	VII	1.12	.77	.70	.56	.532	.504

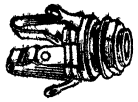
"LF-JAX" LONG-FRAME JACKS



Long frame supports springs perpendicular to mounting surface. Action of mating plug with long springs insures maximum spring life. 3 cond. 3A max. Tubing press-fit through stack for tight assembly. Lgth., 3 3/8". Fit 3/8" hole. For std. 1/4" plugs. Nut, washer. 3 oz.

932-0720	32B	III	1.00	.688	.625	.50	.475	.45
932-0732	34B	VI	1.20	.825	.75	.60	.57	.54

"LITTEL-JAX" PHONE JACKS



For standard 1/4" phone plugs, except *S-11, which takes S250, S280, and 385 plugs, and †C-12B, which takes 480 military-type "Littel-Plug," and **14B, which takes standard "Littel-Plugs." Stereo "Littel-Jax" Type 14B is for switching out speakers when 3-wire stereo headphones are plugged in. Dual, normally closed contacts open both circuits when 3-cond. standard Littel-Plug is inserted. All are 3/4" dia., 1 9/32" overall lgth., and have 3/8" dia. threaded shank, 9/32" long, except §3/8" long. With nut and washer. Av. wt., 3 oz.

2-CONDUCTOR TYPES

Stock No.	Mfr's Type	Diagram	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-0480	*11*	I	.44	.303	.275	.22	.209	.198
932-0013	C-11	I	.64	.44	.40	.32	.304	.288
932-0076	§L-11	I	.52	.358	.325	.26	.247	.234
932-0189	*S-11	I	.48	.33	.30	.24	.228	.216
932-0485	*12A*	II	.48	.33	.30	.24	.228	.216
932-0014	C-12A	II	.76	.523	.475	.38	.361	.342
932-0077	§L-12A	II	.56	.385	.35	.28	.266	.252

3-CONDUCTOR TYPES

932-0486	*12B*	III	.56	.385	.35	.28	.266	.252
932-0015	†C-12B	III	.76	.523	.475	.38	.361	.342
932-0505	13B	IV	.80	.55	.50	.40	.38	.36
932-0509	***14B*	VII	1.04	.715	.65	.52	.494	.468

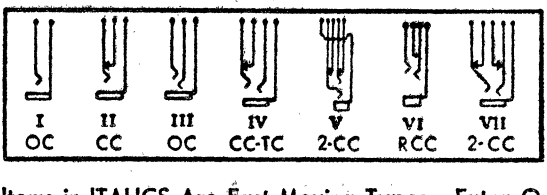
MICRO-JAX AND MICRO-PLUGS

Ultraminiature 2-conductor plugs and jack. Plugs only 1 1/64" long. Mate TR-2A jack, 17/32" long. Take cables to 7/64" dia. Screw-on shield handles and cable clamps. Jack has nylon insulation, nickel alloy springs, solder lugs. Can be used as open or closed circuit. Fits .190" hole. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-1386	*850*	Plug (black handle)	.68	.468	.425	.34	.323	.306
932-1389	*855*	Plug (red handle)	.68	.468	.425	.34	.323	.306
932-1395	*880*	Plug (silver handle)	.68	.468	.425	.34	.323	.306
932-0234	*TR-2A*	Jack (silver)	.52	.358	.325	.26	.247	.234

JACK SCHEMATIC DIAGRAMS

In the schematic diagrams shown below, OC indicates open circuit; CC, closed circuit; TC, transfer circuit; RCC, ring closed circuit.



"MT-JAX" AND "T-JAX" SWITCHBOARD-TYPE JACKS

Rugged, press-welded steel frame. All types have nickel-silver-alloy springs to ensure maximum spring life and corrosion resistance. Military types beginning with "MT" meet MIL-J-641(A), and have welded-crossbar palladium contacts. Nonmilitary types beginning with "T" have fine silver contacts. Standard 1/4" bushing. Size: 1 3/16" wide, 9/16" high, and 3 7/16" overall length. Shpg. wt., 3 oz.

2-CONDUCTOR TYPES

Stock No.	Mfr's Type	Diagram	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-0112	MT-332A	II	1.20	.83	.75	.60	.57	.54
932-0219	T-332A	II	1.04	.72	.65	.52	.494	.468

3-CONDUCTOR TYPES

932-0113	MT-332B	III	1.20	.83	.75	.60	.57	.54
932-0220	T-332B	III	1.04	.72	.65	.52	.494	.468
932-0115	MT-334B	V	1.44	.99	.90	.72	.684	.648
932-0224	T-334B	V	1.28	.88	.80	.64	.608	.576

"HI-D JAX"

High-density phone jack for commercial applications. Only 5/8" square; weighs only 7 1/8 grams—especially suitable for PCs. Nickel-silver-plated springs. Mount in 3/8" hole in panels up to 5/32" thick. Take standard 2 and 3-conductor 1/4" plugs. With hdwe. *For stereo. 2 oz.

2-CONDUCTOR TYPES

Stock No.	Mfr's Type	Diagram	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-0940	*111*	I	.44	.303	.275	.22	.209	.198
932-0941	*112A*	II	.48	.33	.30	.24	.228	.216

3-CONDUCTOR TYPES

932-0942	*112B*	III	.52	.358	.325	.26	.247	.234
932-0944	113B	IV	.68	.468	.425	.34	.323	.306
932-0950	113F	VI	.68	.468	.425	.34	.323	.306
932-0952	*114B	VII	.76	.523	.475	.38	.361	.342

N-Series "Hi-D" Jax. Prefix "N" on manufacturer's Type No. designates nylon bushing. Insulates sleeve terminal from mounting panel, eliminating possible source of noise and crosstalk. Specifications same as above. *For stereo applications. 2 oz.

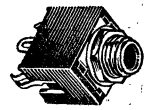
2-CONDUCTOR TYPES

932-0039	N-111	I	.56	.385	.35	.28	.266	.252
932-0140	*N-112A*	II	.60	.413	.375	.30	.285	.27

3-CONDUCTOR TYPES

932-0141	N-112B	III	.64	.44	.40	.32	.304	.288
932-0143	*N-114B	VII	.84	.578	.525	.42	.399	.378

"TINI-D-JAX" ENCLOSED PHONE JACK



Completely enclosed, subminiature 2-conductor phone jacks. Fully insulated molded plastic housing protects nickel-plated contact springs. Mate with "Tini-Plugs." 1/2" long, 3/8" wide, 5/8" depth behind panel. Bushing 1/4"-32 thd. x .203" long. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Diagram	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-0975	*142A*	II	.52	.358	.325	.26	.247	.234

"TINI-JAX" MINIATURE PHONE JACKS

Extra small, 2-conductor jacks for use with "Tini-Plugs," elsewhere in this section. Miniature types with all features of "Littel-Jax" above, yet only one-third the size. 21/32" long; fit 1/4" dia. hole. 2 oz.

932-0796	*41*	I	.44	.303	.275	.22	.209	.198
932-0802	*42A*	II	.48	.33	.30	.24	.228	.216

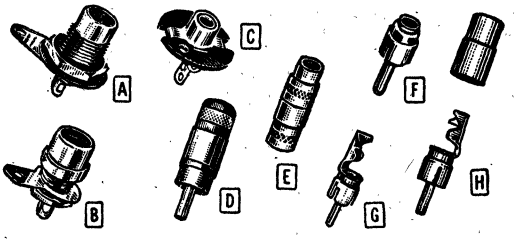
JACK COVERS

Rugged spring-loaded covers. Provide dust- and moisture-proof seals over jack openings. Use with conventional 3/8"-32 threaded bushing jacks. Special locknut seals into rubber washer inside cover. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Color	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-1280	*512*	Nickel	1.08	.743	.675	.54	.513	.486
932-1283	515	Black	1.08	.743	.675	.54	.513	.486
932-1287	520	Gray	1.08	.743	.675	.54	.513	.486

Phone and Phono Jacks and Plugs

SWITCHCRAFT



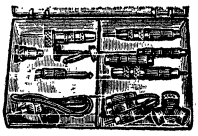
PHONO JACKS AND PLUGS

Series 3501, 3502 and 3503. Easy-to-install phono jacks and phono plugs. 3501FR for rear panel mounting in 3/8" hole—fits panel to 13/64" thick. 3501FP for front panel mtg. in 1/4" hole—fits panel to 1/8". 3501F and 3501M are std. 2-cond. audio connectors. 3503 extension jack is shielded, has removable 13/32" O.D. shell with cable clamp. 3502 has 13/32" O.D. shielded handle. 3501MC is unshielded, has 3/8" O.D. shell with crimping-type cable clamp.

Series 3508. Provides color coded phono plugs with cable clamp and "snap-on" plastic handles in red, black or white—simplify stereo wiring. Av. shpg. wt., 3 oz.

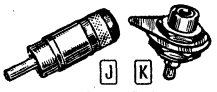
Stock No.	Mfr's Type	Fig.	Description	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-1503	*3501FR*	*A*	*Jack*	.40	.28	.25	.20	.19	.18
932-1502	*3501FP*	*B*	*Jack*	.32	.22	.20	.16	.15	.14
932-1501	*3501F*	*C*	*Jack*	.12	.08	.075	.06	.057	.054
932-1509	3503	E	Ext. Jack	.56	.39	.35	.28	.27	.25
932-1506	*3502*	*D*	*Plug*	.44	.30	.28	.22	.21	.20
932-1505	*3501 MC*	*G*	*Plug*	.12	.083	.075	.06	.057	.054
932-1504	*3501 M*	*F*	*Plug*	.08	.06	.05	.04	.038	.036
932-1522	*3508-1*	*H*	*Plug, Red*	.20	.14	.13	.10	.095	.09
932-1523	3508-2	H	Plug, Black	.20	.14	.13	.10	.095	.09
932-1526	3508-5	H	Plug, White	.20	.14	.13	.10	.095	.09

HANDY 331A ADAPTER KIT



932-1108. 11 audio adapters, one cable. One each: 25AF25—36" shielded cable with plug each end; 25Y mike-con., Y adapter.; 330F1 Y adapt.; 332A, 2 cond. phone jack for female mike output; 334A, phono jack to phono plug; 336A, phone in. to phone out.; 336B, phone in. to jack out.; 345, jack in. to plug out.; two each: Type 44 adapter; male mike to phone plug: 349 coupler, phono jacks each end. 1 lb. **14.00**

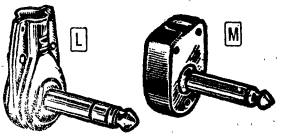
RF PHONO JACK AND PLUG



Nylon insulation. 2-conductor. Jack for front-of-panel mounting. With hardware. Plug has long screw-on handle for easy gripping and cable clamp for cord-strain relief. 2 oz.

932-1520	3507	J	Plug	.68	.47	.43	.34	.323	.306
932-1516	3505F	K	Jack	.52	.36	.33	.26	.247	.234

FLAT PHONE PLUGS



1/4" flat phone plugs for use where space is limited. Ideal for back-of-chassis use. Have removable plastic cap for easy connection of wire leads. Tip rods are 13/16" long. All metallic parts of nickel plated brass. Types 220 and 225 accept standard phone tips. Take cables to .250" O.D. Type S-230 has .206" dia. sleeve. Screw type terminals except *solder. Types 228 and 238 are shielded. 4 oz.

2 CONDUCTOR

Stock No.	Mfr's Type	Fig.	Handle Color	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-1015	*220*	*M*	*Black*	1.12	.77	.70	.56	.532	.504
932-1018	225	M	Red	1.12	.77	.70	.56	.532	.504
932-1020	227*	M	Black	.88	.605	.55	.44	.418	.396
932-1022	228*	L	Metal	1.00	.69	.63	.50	.475	.45

3 CONDUCTOR

932-1025	230	M	Black	1.36	.94	.85	.68	.646	.612
932-0194	S-230	M	Black	1.72	1.18	1.08	.86	.817	.774
932-1027	235	M	Red	1.36	.94	.85	.68	.646	.612
932-1029	237*	M	Black	1.32	.91	.83	.66	.627	.594
932-1031	*238**	*L*	*Metal*	1.44	.99	.90	.72	.684	.648

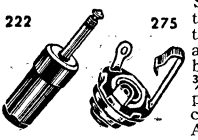
SWITCHCRAFT

THICK-PANEL MOUNTING PHONE JACKS

Have extra long bushings for use in panels up to 1 1/4" thick. Ideal for wall paneling and hi-fi installations. Jacks are shielded for microphone use. Take standard 1/4" phone plugs. Require 15/32" mounting hole. Both have solder terminals and cord-strain relief clamp. Length, 2 5/16". Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Cond.	Use With "Littel Plugs"	EACH 1-24	25-49	50-99	100-249	250-499	500-999
932-0980	151	2	240, 245, 250, 255, 270, 280	1.32	.91	.83	.66	.627	.594
932-0983	152B	3	260, 267, 269, 297	1.44	.99	.90	.72	.684	.648

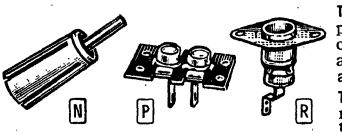
H. H. SMITH PHONE PLUGS AND JACKS



Standard 1/4" plug. Type 222 and 252 are two conductor with screw terminals, others three conductor, solder terminals. Type 222 and 227 have plastic barrel; others brass barrel. Open circuit jacks 275 and 277 have 3/8"—32 shank 9/32" long; require 1" behind panel. 275 for two circuit, 277 for three circuit. Complete with mounting hardware. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-49	50-99	100-249	250-Up
920-0264	*222*	*Phone Plug (black)*	.71	.63	.57	.51
920-0263	222	Phone Plug (red)	.71	.63	.57	.51
920-0273	227	Phone Plug (black)	1.08	.90	.80	.73
920-0272	227	Phone Plug (red)	1.08	.90	.80	.73
920-0274	228	Phone Plug (brass)	1.08	.90	.80	.73
920-0304	252	Phone Plug (brass)	1.12	1.01	.90	.82
920-0333	275	Std. Phone Jack	.37	.33	.30	.27
920-0335	277	Std. Phone Jack	.49	.44	.39	.35

MOTOROLA-TYPE PLUG, JACK; RCA PHONO JACKS



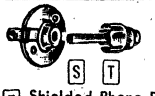
TYPE 1200. Motorola-type plug designed to connect coaxial antenna lead-in to automobile radio; pin diameter 1/8". Shpg. wt., 1 oz.

TYPE 1207. Motorola female connector mounts in 15/32" hole. 1 oz.

TYPE 1214. Two standard RCA-type phono jacks on a 1 1/2x1" base. Use on phono players and recording units. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-99	100-999	1000-4999	5000-Up
920-1200	*1200*	*N*	*Motorola Type Plug*	.13	.102	.092	.084
920-1214	1214	P	Double Phono Jack	.12	.096	.088	.062
920-1207	1207	R	Motorola Jack	.23	.18	.162	.146

N.T.T. PHONO PIN PLUG, JACK

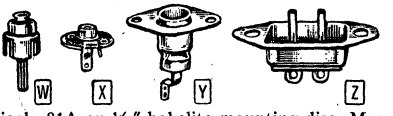


S Single-Prong Jack. For use with pin plug below. On 1/16" bakelite disc. 11/16" mounting centers. Wt. 1 oz.

T Shielded Phono Pin Plug. Excellent for radios, phonos, etc. Pin diameter, 1/8". Length, 9/16". Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Desc.	Fig.	EACH 1-99	100-299	300-499	500-999	1000-Up
868-0424	*A10132*	*Jack*	*S*	.09	.08	.045	.039	.034
868-0425	*MP101*	*Plug*	*T*	.06	.05	.038	.034	.029

CINCH PLUGS AND JACKS



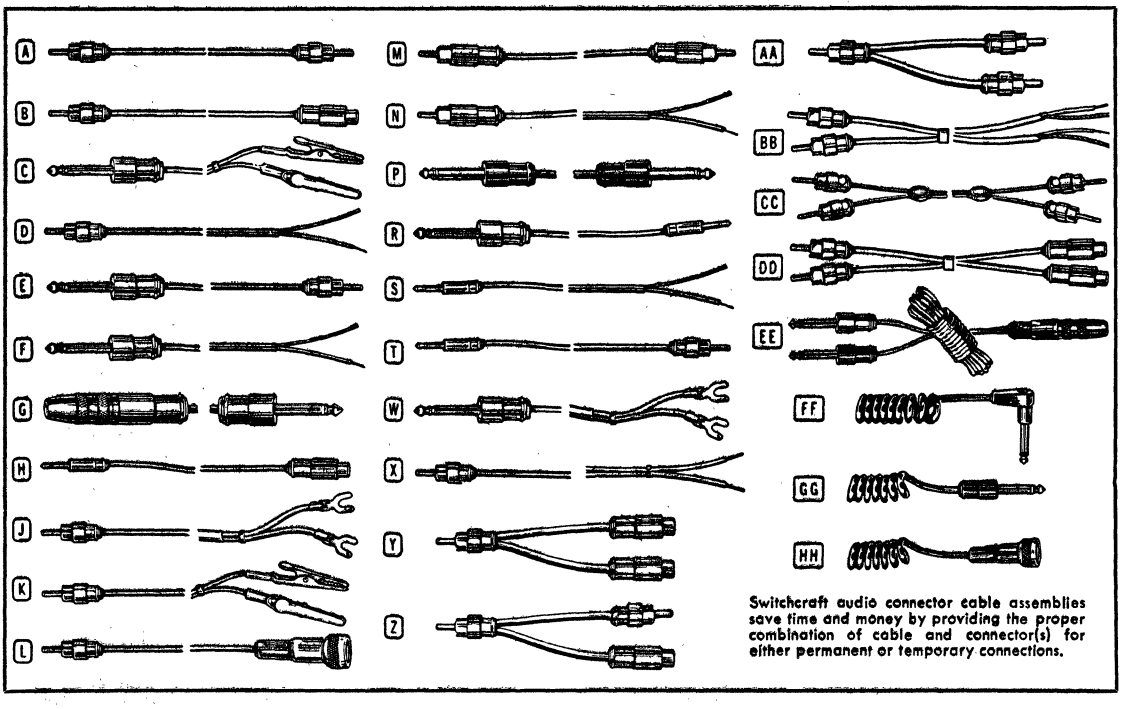
Top-quality plugs and jacks for use with hi-fi systems, auto radios, TV sets, transceivers. Type 13A phono pin plug fits 81A jack. 81A on 1/16" bakelite mounting disc. Mounting centers: 81A, 11/16"; 81F, 15/16"; 2RP1, 1 1/4". Plug Type 2RP and 2RP1 are sub-panel-mounting plugs. Each is 1 5/8x5/8x5/16". Type 2RP1 has one-piece contact. 81F is used extensively on auto radios. 13A fits many audio and radio applications. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-24	25-49	50-99	100-Up
750-1035	*13A*	*W*	*Phono Pin Plug*	.10	.09	.08	.07
750-1230	*81A*	*X*	*Single Phono Pin Jack*	.17	.11	.10	.09
750-1233	81F	Y	Ant. Conn. (Flange)	.27	.19	.17	.14
750-0830	2RP	Z	Recessed Plug	.20	.15	.13	.11
750-0831	2RP1	.	Recessed Plug	.15	.11	.10	.09

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Audio Connector Cables

SWITCHCRAFT INC.



Switchcraft audio connector cable assemblies save time and money by providing the proper combination of cable and connector(s) for either permanent or temporary connections.

Highest quality shielded and unshielded cables. Connections soldered for dependability. Connectors of unbreakable Tenite are molded directly to cable—protects against moisture; minimizes noise; virtually eliminates short-circuits and provides positive electrical connection. Built-in cable clamps support cable, eliminate strain on plug terminals. *Unshielded cable. †Coiled cord jacket is high-quality neoprene. ‡Stripped and tinned, ready for easy soldering into circuit—no insulation removal required. §3-conductor cable and/or connectors. **Terminations are as illustrated. Av. shpg. wt., 8 oz.

A—pin plugs; B—pin plug/jack; C—phone plug/clips; D—pin plug/tinned; E—phone plug/pin plug; F—phone plug/tinned; G—phone plug/jack; H—tiny plug/pin jack; J—pin plug/lugs; K—pin plug/clips; L—mike con./pin plug; M—long handle pin plugs; N—long handle pin plug/tinned; P—phone plugs; R—tiny plug/phone plug; S—tiny plug/tinned; T—tiny plug/pin plug; W—phone plug/lugs; X—pin plug/tinned; Y—pin plug/jacks; Z—pin jack/plugs; AA—pin plugs; BB—pin plugs/tinned; CC—pin plugs; DD—pin plugs/jacks; EE—phone plugs/3 con. jack; FF—right angle phone plug; GG—phone plug; HH—mike connector.

Stock No.	Mfr's Type	Fig.	Lgth.	EACH 1-9	10-24	25-49	50-99	100-Up
932-0582	25AC25	A	1.5′	1.12	.84	.77	.70	.56
932-0583	25AF25	A	3′	1.24	.93	.853	.775	.62
932-0592	25AK25	A	6′	1.52	1.14	1.05	.95	.76
932-0607	25AN25	A	10′	2.08	1.56	1.43	1.30	1.04
932-0585	25AF82	B	3′	1.40	1.05	.963	.875	.70
932-0596	25AK82	B	6′	1.84	1.38	1.27	1.15	.92
932-0610	25AN82	B	10′	2.08	1.56	1.43	1.30	1.04
932-0353	05CN86*	C	10′	2.44	1.83	1.68	1.53	1.22
932-0361	05CT86*	C	20′	3.08	2.31	2.12	1.93	1.54
932-0586	25AF84‡	D	3′	1.00	.75	.685	.623	.50
932-0600	25AK84‡	D	6′	1.20	.90	.825	.75	.60
932-0611	25AN84‡	D	10′	1.68	1.26	1.16	1.05	.84
932-0685	25AR84‡	D	15′	2.32	1.74	1.60	1.45	1.16
932-0322	05AK25	E	6′	2.04	1.53	1.41	1.28	1.02
932-0328	05AN25	E	10′	2.80	2.10	1.93	1.75	1.40
932-0336	05AR25	E	15′	3.08	2.31	2.12	1.93	1.54
932-0326	05AK84‡	F	6′	1.84	1.38	1.27	1.15	.92
932-0332	05AN84‡	F	10′	2.32	1.74	1.60	1.45	1.16
932-0340	05AR84‡	F	15′	2.80	2.10	1.93	1.75	1.40
932-0324	05AK80	G	6′	2.68	2.01	1.85	1.68	1.34
932-0330	05AN80	G	10′	3.60	2.70	2.48	2.25	1.80
932-0338	05AR80	G	15′	4.08	3.06	2.81	2.55	2.04
932-0407	10BK81§	G	6′	4.92	3.69	3.39	3.08	2.46
932-0412	10BN81§	G	10′	6.12	4.59	4.21	3.83	3.06
932-0417	10BU81§	G	25′	8.92	6.69	6.14	5.58	4.46
932-0769	40DF82	H	3′	1.80	1.35	1.24	1.13	.90
932-0779	40DK82	H	6′	2.56	1.92	1.76	1.60	1.28
932-0790	40DN82	H	10′	2.96	2.22	2.04	1.85	1.48
932-0626	25CN85*	J	10′	1.52	1.14	1.05	.95	.76
932-0632	25CT85*	J	20′	2.24	1.68	1.54	1.40	1.12
932-0627	25CN86*	K	10′	2.32	1.74	1.60	1.45	1.16
932-0633	25CT86*	K	20′	2.68	2.01	1.85	1.68	1.34
932-0603	25AK87	L	6′	2.52	1.89	1.74	1.58	1.26
932-0683	26AR26	M	15′	2.68	2.01	1.85	1.68	1.34
932-0680	26AN84	N	10′	1.88	1.41	1.30	1.18	.94
932-0320	05AK05	P	6′	2.68	2.01	1.85	1.68	1.34
932-0327	05AN05	P	10′	3.60	2.70	2.48	2.25	1.80

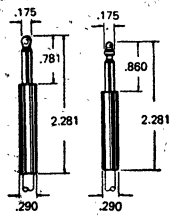
Stock No.	Mfr's Type	Fig.	Lgth.	EACH 1-9	10-24	25-49	50-99	100-Up
932-0342	05AU05	P	25′	4.72	3.54	3.25	2.95	2.36
932-0405	10BK10§	P	6′	4.92	3.69	3.39	3.08	2.46
932-0409	10BN10§	P	10′	6.12	4.59	4.21	3.83	3.06
932-0414	10BU10§	P	25′	8.92	6.69	6.14	5.58	4.46
932-0765	40DF05	R	3′	2.40	1.80	1.65	1.50	1.20
932-0774	40DK05	R	6′	2.80	2.10	1.93	1.75	1.40
932-0784	40DN05	R	10′	3.08	2.31	2.12	1.93	1.54
932-0770	40DF84‡	S	3′	1.84	1.38	1.27	1.15	.92
932-0780	40DK84‡	S	6′	2.04	1.53	1.41	1.28	1.02
932-0791	40DN84‡	S	10′	2.56	1.92	1.76	1.60	1.28
932-0767	40DF25	T	3′	2.16	1.62	1.49	1.35	1.08
932-0776	40DK25	T	6′	2.56	1.92	1.76	1.60	1.28
932-0787	40DN25	T	10′	2.92	2.19	2.01	1.83	1.46
932-0360	05CT85*	W	20′	2.40	1.80	1.65	1.50	1.20
932-0625	25CN84*	X	10′	1.44	1.08	.99	.90	.72
932-0724	33OF1	Y	4″	2.00	1.50	1.38	1.25	1.00
932-0775	33OF2	Z	4″	2.00	1.50	1.38	1.25	1.00
932-0726	33OF3	AA	4″	2.00	1.50	1.38	1.25	1.00
932-0342	25FF84‡	BB	3′	2.96	2.22	2.04	1.85	1.48
932-0649	25FK84‡	BB	6′	3.32	2.49	2.29	2.08	1.66
932-0654	25FN84‡	BB	10′	3.84	2.88	2.64	2.40	1.92
932-0637	25FF25	CC	3′	3.32	2.49	2.29	2.08	1.66
932-0646	25FK25	CC	6′	3.84	2.88	2.64	2.40	1.92
932-0651	25FN25	CC	10′	4.60	3.45	3.17	2.88	2.30
932-0641	25FF82	DD	3′	3.04	2.28	2.09	1.90	1.52
932-0648	25FK82	DD	6′	3.52	2.64	2.42	2.20	1.76
932-0653	25FN82	DD	10′	4.16	3.12	2.86	2.60	2.08
932-0368	05FH81§	EE	4′	4.48	3.36	3.08	2.80	2.24
932-0525	15LH84†	FF	4′	2.68	2.01	1.85	1.68	1.34
932-0373	05LH84†	GG	4′	2.68	2.01	1.85	1.68	1.34
932-0895	87LH84†	HH	4′	2.76	2.07	1.90	1.73	1.38
932-0380	05LT05†	GG/GG**	20′	7.52	5.64	5.17	4.70	3.76
932-0381	05LT15†	GG/FF**	20′	7.52	5.64	5.17	4.70	3.76
932-0382	05LT87†	GG/HH**	20′	7.52	5.64	5.17	4.70	3.76

ADC Jacks, Plugs, Panels and Patch Cords

BANTAM JACK PANELS

Compact patch fields for modern communications equipment. Double row panel holds 96 jacks (48 pairs), twice as many as standard size panel. Extruded black anodized aluminum panel, 1¾x19".

Stock No.	Mfr's Type	Description	EACH 1-4	5-9	10-Up
719-0086	PJ-731	Double row panel (less jacks)	20.30	19.20	16.00
719-0038	PJ-739	Panel with 48 pair PJ-839 jacks	123.11	116.40	97.00

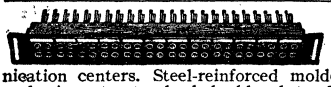


BANTAM PATCH CORDS

- Fully Shielded
- Durable Plastic Jackets
- 2 and 3-Conductor Styles

Shielded cables with plastic jackets, molded-on plugs, brass plug components and integral cord strain reliefs. Double-plug patch cords are also available, with either two or three conductors. Plug Size: 2-conductor, .290" dia. x 2.281" long with .175" dia. tip, .781" long; 3-conductor, .290" dia. x2.281" long with .175" dia. tip, .850" long.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-Up
719-0070	PJ-701	6" long, 2-conductor	3.80	3.60	3.00
719-0071	PJ-702	12" long, 2-conductor	3.85	3.66	3.05
719-0073	PJ-704	24" long, 2-conductor	3.99	3.78	3.15
719-0075	PJ-706	36" long, 2-conductor	4.12	3.90	3.25
719-0076	PJ-708	48" long, 2-conductor	4.24	4.02	3.35
719-0078	PJ-711	6" long, 3-conductor	4.55	4.32	3.60
719-0079	PJ-712	12" long, 3-conductor	4.62	4.38	3.65
719-0081	PJ-714	24" long, 3-conductor	4.76	4.50	3.75
719-0083	PJ-716	36" long, 3-conductor	4.89	4.62	3.85
719-0084	PJ-718	48" long, 3-conductor	5.01	4.74	3.95



STD. JACK PANELS

For use in TV, radio, recording studios, communication centers. Steel-reinforced molded phenolic panels fit 19" rack. Accepts standard double plugs; ⅝" spacing between rows. PJ-37 commonly used for "Line," "Equip," jack sets. 3½ lbs.

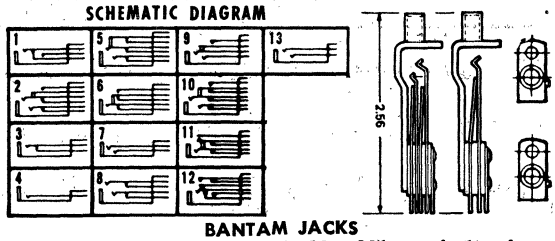
Stock No.	Mfr's Type	Rows	No. Jacks	Jack Type	Panel Ht.	EACH 1-9	10-Up
719-1030	PJ-30	Double	52	Less jacks	1¾"	12.90	10.72
719-1390	PJ-390	Double	52	PJ-339	1¾"	64.80	54.00
719-1031	PJ-31	Double	48	Less jacks	2⅛"	9.45	7.88
719-1342	PJ-341	Double	48	PJ-318	2⅛"	42.75	35.63
719-1391	PJ-391	Double	48	PJ-339	2⅛"	57.30	47.75
719-1033	PJ-33	Single	24	Less jacks	1¾"	8.52	7.10
719-1343	PJ-343	Single	24	PJ-318	1¾"	25.14	20.95
719-1393	PJ-393	Single	24	PJ-339	1¾"	32.40	27.00
719-1036	PJ-36	Single	26	Less jacks	1¾"	8.70	7.25
719-1396	PJ-396	Single	26	PJ-339	1¾"	35.10	29.25

PATCH CORDS

Nylon braid jacket, tinsel conductors, thermoplastic insulation. Molded plug body, brass components. *Cone-shaped tip prevents momentary shorts between tip and ring contacts.

Stock No.	Mfr's Type	Description	EACH 1-24	25-Up
2-CONDUCTOR SHIELDED				
719-1011	PJ-11	1-ft. cord with PJ-1 plugs	6.60	5.50
719-1012	PJ-12	2-ft. cord with PJ-1 plugs	6.75	5.63
719-1013	PJ-13	3-ft. cord with PJ-1 plugs	6.90	5.75
719-1014	PJ-14	4-ft. cord with PJ-1 plugs	7.13	5.94
719-1052	PJ-52	2-ft. cord, PJ-055B plugs	4.20	3.50
719-1054	PJ-54	4-ft. cord, PJ-055B plugs	4.86	4.05
719-1056	PJ-56	6-ft. cord, PJ-055B plugs	5.79	4.83
3-CONDUCTOR SHIELDED				
719-1072	PJ-72	2-ft. cord*	6.42	5.35
719-1074	PJ-54	4-ft. cord*	7.14	5.95
719-1076	PJ-76	6-ft. cord*	7.98	6.65
719-1081	PJ-81	1-ft. cord, PJ-051R plugs	5.49	4.57
719-1082	PJ-82	2-ft. cord, PJ-051R plugs	5.82	4.85
719-1083	PJ-83	3-ft. cord, PJ-051R plugs	6.15	5.12
719-1084	PJ-85	4-ft. cord, PJ-051R plugs	6.48	5.40
719-1172	PJ-172	2-ft. cord with PJ-7 plugs	20.40	17.00
719-1174	PJ-174	4-ft. cord with PJ-7 plugs	21.60	18.00
719-1176	PJ-176	6-ft. cord with PJ-7 plugs	22.50	18.75
2-CONDUCTOR UNSHIELDED				
719-1472	PJ-472	2-ft. cord, PJ-047R plugs	5.25	4.38
719-1474	PJ-474	4-ft. cord, PJ-047R plugs	5.76	4.80
719-1476	PJ-476	6-ft. cord, PJ-047R plugs	6.33	5.27

SCHEMATIC DIAGRAM



BANTAM JACKS

For miniature Bantam Jack Panels. Meet Mil specs for long frame telephone jacks. Come in 2- and 3-conductor styles.

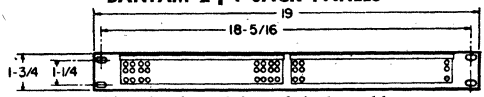
Stock No.	Mfr's Type	Conductors	Contact Form	Stack Height	EACH 1-99	100-Up
719-1803	PJ-803	2	Fig. 1	13/32"	.90	.60
719-1805	PJ-805	3	Fig. 2	43/64"	1.30	.85
719-1818	PJ-818	2	Fig. 3	13/32"	.78	.52
719-1823	PJ-823	2	Fig. 4	27/64"	.66	.44
719-1824	PJ-824	3	Fig. 5	43/64"	1.32	.88
719-1836	PJ-836	2	Fig. 6	⅝"	1.23	.82
719-1838	PJ-838	3	Fig. 7	35/64"	.75	.50
719-1839	PJ-839	3	Fig. 8	17/32"	1.05	.70

BANTAM LITES. High brilliance, half-size line lamp draws 50 mA at 24 V (6 or 12 V optional). Mount in Bantam Jack Panels.

Stock No.	Mfr's Type	Description	EACH 1-24	25-Up
719-1850	PJ-850	Lamp socket	.84	.70
719-1862	PJ-862	Bantam lamp	.66	.55
719-172X	PJ-729	Cap* (specify (8) red, (7) green, (9) white, (6) amber)	.15	.13

*In place of X, complete Stock No. by using color prefix no. shown in description.

BANTAM 2+1 JACK PANELS



Maximum patching density. 48 3-cond. jacks; solder or wrap term.

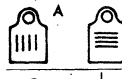
Stock No.	Type	Description	EA., 1-9	EA., 10-Up
719-1721	PJ-721	19" panel with PJ-821 jacks	210.00	175.00
719-1722	PJ-721W	19" panel with PJ-821W jacks	230.00	194.50

2- AND 3-CONDUCTOR PLUGS

Single and twin plugs, 2- or 3-conductor. *See Bantam Lites for order info.

Stock No.	Mfr's Type	WE-Equiv.	Description	EACH 1-24	25-Up
719-095X	PJ-051	WE-310	3-cond. *(spec. (8) red; (1) black)	1.32	1.10
719-096X	PJ-055	None	2-cond. *(spec. (8) red; (1) black)	.78	.65
719-1327	PJ-327	WE-327	Twin 2-conductor, black shell	2.55	2.13
719-1007	PJ-7	WE-425	Twin 3-conductor plug	5.40	4.50
719-1001	PJ-1	WE-241	Twin 2-conductor, black shell	2.55	2.13

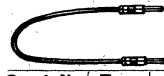
FRAME STYLE



TELEPHONE AND WRAPID JACKS

Standard size telephone jacks for patch cords except *Wrapid jacks with wrapped solderless term. †For PJ-047, -1, -327. ‡For PJ-051, -7.

Stock No.	Mfr's Type	WE Equiv.	Contacts	Frame	Stack Ht.	EACH 1-99	100-Up
719-1123	PJ-123	223-A	Fig. 4	A	7/16"	.60	.40
719-1203	PJ-203	203-A	Fig. 1	A	9/16"	.78	.52
719-1240	PJ-240	240-C	Fig. 2	C	¾"	1.23	.82
719-1241	PJ-241	241-A	Fig. 9	A	¾"	1.02	.68
719-1280	PJ-280	280-C	Fig. 10	C	23/32"	1.80	1.20
719-1318	PJ-318	218-A	Fig. 3	A	½"	.66	.44
719-1336	PJ-336	236-A	Fig. 11	C	19/32"	1.14	.76
719-1338	PJ-338	438-C	Fig. 12	C	13/16"	1.23	.82
719-1339	PJ-339	239-A	Fig. 8	A	9/16"	.92	.62
719-1410	PJ-410	410-A	.....	Twin	†	2.40	2.00
719-1482	PJ-482	482-A	.....	Twin	‡	2.70	2.25
719-1238	PJ-238W*	.....	Fig. 13	A	.....	.72	.48
719-1340	PJ-339W*	.....	Fig. 8	A	.....	1.05	.70
719-1483	PJ-482W*	.....	.....	Twin	.....	2.80	2.34



COAXIAL PATCH CORDS

Choice of three lengths, with plugs on each end. Impedance, 75 ohms.

Stock No.	Type	Description	1-9 EA.	10-24 EA.	25-Up EA.
719-0072	CC-1072	12" with CP-1041 plugs	7.21	6.00	4.80
719-0074	CC-1074	24" with CP-1041 plugs	7.51	6.25	5.00
719-0076	CC-1076	36" with CP-1041 plugs	7.81	6.50	5.20
719-0172	CC-1172	12" with CP-1141 plugs	7.21	6.00	4.80
719-0174	CC-1174	24" with CP-1141 plugs	7.51	6.25	5.00
719-0176	CC-1176	36" with CP-1141 plugs	7.81	6.50	5.20

*Where X Appears in Allied Stock No., Replace With Color Prefix Number

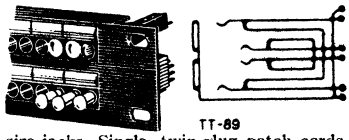
Jack Panels, Patch Boards and Cords

SWITCHCRAFT STANDARD JACK PANELS

Excellent standard jacks for switching and distribution of audio signals in broadcasting stations, theaters, PA installations, etc. Double-row steel-reinforced black phenolic panels. Mounting brackets slotted to fit all standard 19″ relay racks. Plastic covered designation strips. *With military-type MT-332A jacks. †Telephone-T-332A jacks. §Less jacks; wt. 1¾ lbs. 2⅛x19x1¾″. Av. wt. 5½ lbs.

Stock No.	Mfr's Type	Jacks	1-4	EACH 5-24	25-49	50-99	100-Up
932X1490	2400	48§	12.60	9.45	8.66	7.88	6.30
932X1492	2432A	24 pr.†	58.80	44.10	40.43	36.75	29.40
932X1497	2532A	24 pr.*	69.80	52.35	47.99	43.63	34.90

SWITCHCRAFT MINIATURE JACK PANELS



TT-89

Series TT "tini-telephone" components have new design to fill industry's need for a reliable, compact patch-field system. Jack panels handle 96 jacks. Meet mil. spec. for full-size jacks. Single, twin-plug patch cords, space-saving switches, jewel-assembly lamp jacks.

TINI-TELEPHONE JACK PANELS

Stock No.	Mfr's Type	Description	EACH 1-4	5-24	25-Up
932-1459	1600	Blank panel	24.00	18.00	16.50
932-1472	1632A	With Jacks	116.00	87.00	79.75
932-1475	1634B	With Jacks	147.20	110.40	101.20
932-1480	1700	Blank panel	28.00	21.00	19.25
932-1484	1789	With Jacks	208.00	156.00	143.00

TINI-TELEPHONE PATCH CORDS

Stock No.	Mfr's Type	Length (in.)	Plug Type	EACH 1-9	10-24	25-Up
932-0260	TT-101	6	2 cond., single	4.47	3.36	3.08
932-0263	TT-104	24	2 cond., single	4.72	3.54	3.25
932-0268	TT-122	12	3 cond., single	5.52	4.14	3.80
932-0270	TT-124	24	3 cond., single	5.67	4.26	3.91
932-0275	TT-144	24	3 cond., twin	5.92	4.44	4.07

TINI-TELEPHONE JACKS

Stock No.	Mfr's Type	Stack Height	EACH 1-9	10-24	25-49	50-Up
932-0245	TT-31	27/64″	.96	.72	.66	.60
932-0246	TT-32A	13/32″	1.16	.87	.80	.73
932-0247	TT-32B	15/32″	1.12	.84	.77	.70
932-0250	TT-34B	½″	1.36	1.02	.94	.85
932-0255	TT-89	1 1/16″	4.00	3.00	2.75	2.50

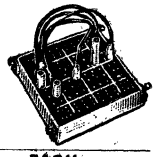
TINI-TELEPHONE SWITCH (SPDT)

932-0276	TT-303L	½″	3.00	2.25	2.06	1.88

TINI-TELEPHONE LAMP JACK

Stock No.	Type	Description	1-9, EA.	10-24, EA.	25-49, EA.	50-Up, EA.
932-0279	TT-420	Lamp Jack	1.04	.78	.72	.65
932-0277	TT-405	Jewel Assy.	.98	.21	.19	.18

VECTOR PATCH BOARDS



Used for test panels, automation equipment, paging, etc. Independent gold-flashed wrap-around contacts spaced on .265″ centers; rated at 5 amps and 1000 VAC. Less than .002 ohm contact resistance. Satin black phenolic except *ivory epoxy paper. Brackets for flush or recessed mounting. 8 oz.

Stock No.	Mfr's Type	Contacts and Size	EACH 1-4	5-49	50-Up
977-0701	PB110-2	10/.60x2.98″	4.87	4.25	3.83
977-0703	PB210-2	20/.86x2.98″	6.37	4.45	4.01
977-0705	PB510-2	50/1.66x.298″	9.67	6.45	5.81
977-0707	*PB1010	100/3.25x3.25″	16.12	10.97	9.87
977-0710	PB1010-2	100/2.98x2.98″	16.27	10.85	9.77
977-0714	PB1020-2	200/2.98x5.63″	32.40	21.66	19.44
977-0716	PB1520-2	500/4.31x5.63″	48.60	32.35	29.12

Patchcord. For above. .090″ diameter nickel-plated prongs. Colors by length: 6″, black; 9″, yellow; 15″, blue. Shpg. wt., 8 oz.

Lght.	Single Conductor Each End: Stock No.	Mfr's Type	Pkg. of 25 1-9	10-Up	Piggy Back Each End: Stock No.	Mfr's Type	EACH 1-9	10-Up
6″	977-0560	*K2.06*	5.70	3.04	977-0568	K9.06	1.87	.93
9″	977-0561	*K2.09*	5.77	3.08	977-0569	K9.09	1.87	.93
15″	977-0562	K2.15	6.62	3.53	977-0570	K9.15	1.87	.93

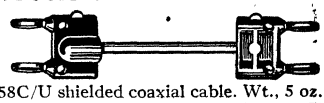
POMONA CRIMP MALE BNC PATCH CORDS

- Solder-Bonded
- Ultra-Reliable
- From 12″ to 60″

Crimp male BNC connector on both ends. Comparable to UG88E/U except (†) has UG88E/U on both ends and (*) has double banana plug one end, UG88E/U other end. Last 2 digits in Type No. indicate length in inches. Wt. 4 oz.

Stock No.	Mfr's Type	EACH 1-4	5-9	10-24	25-49	50-Up
885-0552	2249-C-12	7.25	4.85	4.37	4.13	3.40
885-0553	2249-C-24	7.25	4.85	4.37	4.13	3.40
885-0554	2249-C-36	7.25	4.85	4.37	4.13	3.40
885-0555	2249-C-48	7.25	4.85	4.37	4.13	3.40
885-0556	2249-C-60	7.25	4.85	4.37	4.13	3.40
885-0064†	BNC-C-36	8.92	5.95	5.36	5.06	4.17
885-0234*	2 BC-BNC-36	8.92	5.95	5.36	5.06	4.17

PATCH CORDS WITH DOUBLE PLUG ON EACH END



36″ cords with an MDP plug on each end. Type 2BA-36 is 2-conductor 18-gauge twisted wire. Type 2BB-36 is shielded microphone cable. 2BC-36 is RG58C/U shielded coaxial cable. Wt., 5 oz.

Stock No.	Mfr's Type	Color	EACH 1-4	5-9	10-24	25-49	50-Up
885-0208	2BA-36	Gray	7.42	4.95	4.45	4.21	3.47
885-0214	2BB-36	Gray	7.42	4.95	4.46	4.21	3.47
885-0227	2BC-36	Black	7.42	4.95	4.46	4.21	3.47

DOUBLE-PLUG TYPE. Above, but 2 alligator clips on one end. 2BB-AL-36; mike cable. 2BC-AL-36: coax cable. Shpg. wt. 4 oz.

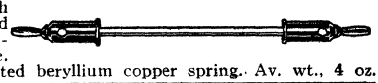
885-0219	2BB-AL-36	Gray	8.92	5.95	5.36	5.06	4.37
885-0231	2BC-AL-36	Black	8.92	5.95	5.36	5.06	4.17

MODEL "B" BANANA PLUG PATCH CORDS

Vertical and horizontal stacking. One-piece heat-treated beryllium copper spring. Rated 15 amps continuous; 30 intermittent. 18-gauge wire. 10,000 WVDC. Shpg. wt. 5 oz.

Stock No.	Mfr's Type	Color	Lgth. In.	EACH 1-9	10-24	25-49	50-99	100-Up
885-0030	B-4	Black	4	2.25	1.50	1.35	1.28	1.05
885-0031	B-4	Red	4	2.25	1.50	1.35	1.28	1.05
885-0031	B-8	Black	8	2.25	1.50	1.35	1.28	1.05
885-0034	B-8	Red	8	2.25	1.50	1.35	1.28	1.05
885-0037	*B-12*	*Black*	*12*	2.25	1.50	1.35	1.28	1.05
885-0038	*B-12*	*Red*	*12*	2.25	1.50	1.35	1.28	1.05
885-0041	*B-18*	*Black*	*18*	2.25	1.50	1.35	1.28	1.05
885-0042	*B-18*	*Red*	*18*	2.25	1.50	1.35	1.28	1.05
885-0045	*B-24*	*Black*	*24*	2.25	1.50	1.35	1.28	1.05
885-0046	*B-24*	*Red*	*24*	2.25	1.50	1.35	1.28	1.05
885-0049	*B-36*	*Black*	*36*	2.25	1.50	1.35	1.28	1.05
885-0050	*B-36*	*Red*	*36*	2.25	1.50	1.35	1.28	1.05
885-0053	*B-48*	*Black*	*48*	2.37	1.55	1.40	1.33	1.10
885-0054	*B-48*	*Red*	*48*	2.37	1.55	1.40	1.33	1.10
885-0057	B-60	Black	60	2.50	1.60	1.45	1.38	1.15
885-0058	B-60	Red	60	2.50	1.60	1.45	1.38	1.15

MODEL 1440 HORIZONTAL STACKING PATCH CORD



One banana plug each end. Fit any standard banana jacks. 18-gauge stranded wire.
One-piece nickel-plated beryllium copper spring. Av. wt., 4 oz.

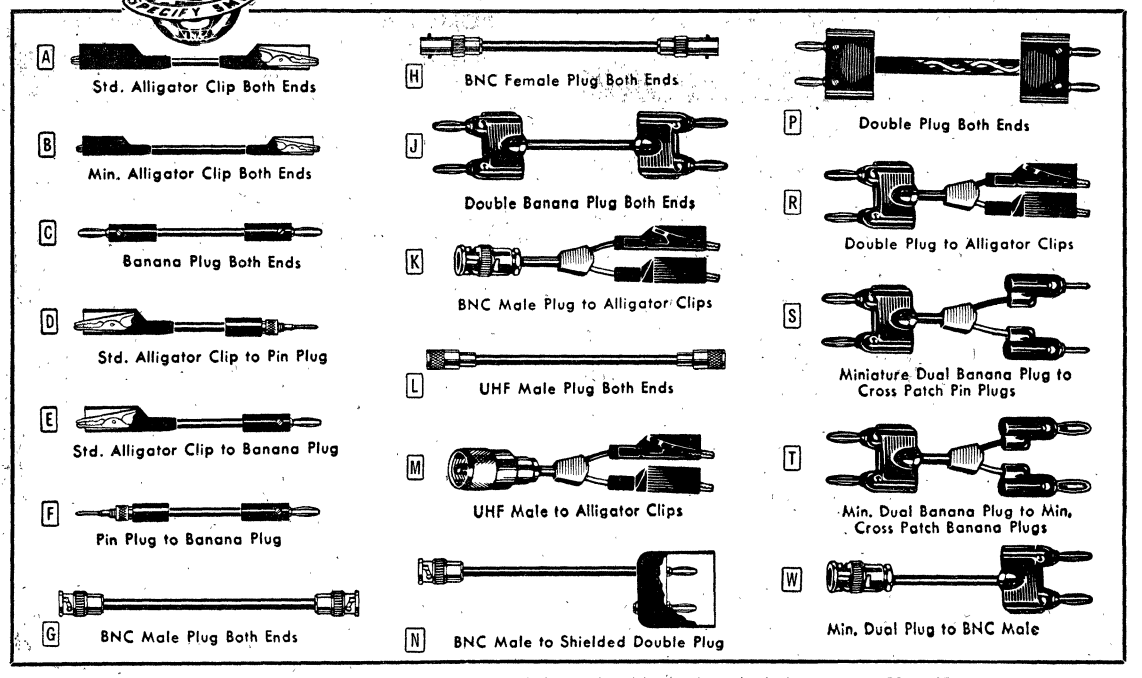
885-0354	1440-12	Black	12	1.87	1.25	1.13	1.06	.88
885-0355	1440-12	Red	12	1.87	1.25	2.13	1.06	.88
885-0358	1440-24	Black	24	1.87	1.25	1.13	1.06	.88
885-0359	1440-24	Red	24	1.87	1.25	1.13	1.06	.88
885-0362	1440-36	Black	36	1.87	1.25	1.13	1.06	.88
885-0363	1440-36	Red	36	1.87	1.25	1.13	1.06	.88

PIN-TIP VERTICAL STACKING PATCH CORDS

Durable, extra-flexible-lead patch cords for ease of handling and long life. Gold-flashed brass pin-tip, 0.080″ diameter, ½″ long. Tip jacks accept 0.080″ diameter pin. Extra-flexible poly-vinyl-insulated wire. Operating temperature, 0° C to +105° C. Rated 5 amps continuous, 10 amps intermittent. 5000 WVDC. 5 oz.

885-0139	P-4	Black	4	2.62	1.75	1.58	1.50	1.23
885-0140	P-4	Red	4	2.62	1.75	1.58	1.50	1.23
885-0143	P-8	Black	8	2.62	1.75	1.58	1.50	1.23
885-0144	P-8	Red	8	2.62	1.75	1.58	1.50	1.23
885-0147	P-12	Black	12	2.62	1.75	1.58	1.50	1.23
885-0148	P-12	Red	12	2.62	1.75	1.58	1.50	1.23
885-0151	P-18	Black	18	2.62	1.75	1.58	1.50	1.23
885-0152	P-18	Red	18	2.62	1.75	1.58	1.50	1.23
885-0155	P-24	Black	24	2.62	1.75	1.58	1.50	1.23
885-0156	P-24	Red	24	2.62	1.75	1.58	1.50	1.23
885-0159	P-36	Black	36	2.62	1.75	1.58	1.50	1.23
885-0160	P-36	Red	36	2.62	1.75	1.58	1.50	1.23

H.H. Smith Jumpers and Patch Cords



Big selection of jumpers, and standard patch cords. Unshielded leads use #18 AWG 20,000-V insulated wire. Handles are tenite and/or molded bakelite. Cadmium-plated steel clips; nickel-plated brass tips; vinyl plastic boots. Have No. 20, 5000-volt insulation. Shielded leads use RG58C/U coax cable, except †RG11A/U; ‡low-capacity cable; §twisted pair. Shpg. wt. 5 oz. *Specify Color.

UNSHIELDED JUMPERS

Stock No.	Mfr's Type	Ft.	Color	Fig.	EACH 1-9	10-24	25-49	50-99	100-Up
920-1683	*1596-12-102*	*1*	*Red*	*A*	.77	.57	.54	.51	.46
920-1684	1596-12-103	1	Black	A	.77	.57	.54	.51	.46
920-1685	*1596-36-102*	*3*	*Red*	*A*	.82	.61	.58	.55	.49
920-1686	1596-36-103	3	Black	A	.82	.61	.58	.55	.49
920-1687	*1596-60-102*	*5*	*Red*	*A*	.87	.65	.62	.59	.52
920-1690	1596-60-103	5	Black	A	.87	.65	.62	.59	.52
920-1688	*1597-12-102*	*1*	*Red*	*B*	.77	.57	.54	.51	.46
920-1689	1597-12-103	1	Black	B	.77	.57	.54	.51	.46
920-1691	1597-36-102	3	Red	B	.82	.61	.58	.55	.49
920-1692	1597-36-103	3	Black	B	.82	.61	.58	.55	.49
920-1693	1597-60-102	5	Red	B	.87	.65	.62	.59	.52
920-1694	1597-60-103	5	Black	B	.87	.65	.62	.59	.52
920-1950	1863-12-102	1	Red	C	.97	.72	.68	.65	.58
920-1951	1863-12-103	1	Black	C	.97	.72	.68	.65	.58

Stock No.	Mfr's Type	Ft.	Color	Fig.	EACH 1-9	10-24	25-49	50-99	100-Up
920-1953	*1863-36-102*	*3*	*Red*	*C*	1.02	.76	.72	.68	.61
920-1954	*1863-36-103*	*3*	*Black*	*C*	1.02	.76	.72	.68	.61
920-1956	1863-60-102	5	Red	C	1.07	.80	.76	.72	.64
920-1957	1863-60-103	5	Black	C	1.07	.80	.76	.72	.64
920-1960	1865-36-102	3	Red	D	1.22	.91	.86	.82	.73
920-1961	1865-36-103	3	Black	D	1.22	.91	.86	.82	.73
920-1963	1865-60-102	5	Red	D	1.28	.95	.90	.86	.76
920-1966	*1866-36-102*	*3*	*Red*	*E*	1.28	.95	.90	.86	.76
920-1967	*1866-36-103*	*3*	*Black*	*E*	1.28	.95	.90	.86	.76
920-1968	1866-60-102	5	Red	E	1.35	1.02	.97	.92	.82
920-1969	1866-60-103	5	Black	E	1.35	1.02	.97	.92	.82
920-1970	1868-36-103	3	Black	F	.95	.71	.67	.64	.57
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COAXIAL CABLE SHIELDED STANDARD PATCH CORDS

920-1650	*1589-12*	*1*	*Black*	*G*	6.41	5.35	5.08	4.82	4.28
920-1652	1589-36	3	Black	G	6.66	5.55	5.27	5.00	4.44
920-1654	*1589-60*	*5*	*Black*	*G*	6.88	5.75	5.46	5.18	4.60
920-1672	1869-36	3	Black	H	7.10	6.30	5.99	5.67	5.04
920-1674	1869-60	5	Black	H	7.50	6.50	6.18	5.85	5.20
920-1610	1580-12	1	Black	J	5.21	4.35	4.13	3.92	3.48
920-1613	1580-36	3	Black	J	5.46	4.55	4.32	4.10	3.64
920-1615	1580-60	5	Black	J	5.68	4.75	4.51	4.28	3.80
920-1586	1537-12–	1	Gray	K	6.41	5.35	5.08	4.82	4.28
920-1588	1537-36–	3	Gray	K	6.66	5.55	5.27	5.00	4.44

920-1590	1537-60‡	5	Gray	K	6.88	5.75	5.46	5.18	4.60
920-1980	1872-36†	3	Black	M	6.66	5.55	5.27	5.00	4.44
920-1982	1872-60†	5	Black	M	6.88	5.75	5.46	5.18	4.60
920-1987	1873-36‡	3	Black	N	7.10	6.30	5.99	5.67	5.04
920-1988	1873-60‡	5	Black	N	7.50	6.50	6.18	5.85	5.20
920-1976	1871-36†	3	Black	L	6.66	5.55	5.27	5.00	4.44
920-1978	1871-60†	5	Black	L	6.88	5.75	5.46	5.18	4.60
920-1560	1530-36§	4	Gray	P	5.46	4.55	4.32	4.10	3.64
920-1564	1531-36§	3	Gray	R	6.66	5.55	5.27	5.00	4.44
920-1568	1531-60	5	Gray	R	6.88	5.75	5.46	5.18	4.60

MINIATURE SHIELDED PATCH CORDS

Butyrate handles per Fed. Spec. L-P349A, Type 3, class MS. RG-174/U coax. cable. Miniature dual banana plugs mate with miniature dual binding posts or banana jacks having ½" ctrs.

*Cross-patch pin plugs have .080" tip and jack in rear, banana jack in rear, banana jack in side. ‡Color coded red/black. §Standard dual banana plug one end, miniature other end. †Min. both ends.

Stock No.	Mfr's Type	Ft.	Color	Fig.	EACH 1-9	10-24	25-49	50-99	100-Up
920-1576	1535-12*	1	Red/Blk‡	S	6.41	5.35	5.08	4.82	4.28
920-1579	1535-36*	3	Red/Blk‡	S	6.66	5.55	5.27	5.00	4.44
920-1581	1535-60*	5	Red/Blk‡	S	6.88	5.75	5.46	5.18	4.60
920-1695	1599-12†	1	Gray	L	5.21	4.35	4.13	3.92	3.48
920-1697	1599-36†	3	Gray	L	5.46	4.55	4.32	4.10	3.64
920-1699	1599-60†	5	Gray	L	5.68	4.75	4.51	4.28	3.80
920-1832	1738-12	1	Blk/Red‡	T	6.41	5.35	5.08	4.82	4.28
920-1834	1738-36	3	Blk/Red‡	T	6.66	5.55	5.27	5.00	4.44

Stock No.	Mfr's Type	Ft.	Color	Fig.	EACH 1-9	10-24	25-49	50-99	100-Up
920-1836	1738-60	5	Blk/Red‡	T	6.88	5.75	5.46	5.18	4.60
920-1820	1729-12§	1	Black	L	5.21	4.35	4.13	3.92	3.48
920-1822	1729-36§	3	Black	L	5.46	4.55	4.32	4.10	3.64
920-1824	1729-60§	5	Black	L	5.68	4.75	4.51	4.28	3.80
920-1850	1748-12	1	Gray	W	6.41	5.35	5.08	4.82	4.28
920-1852	1748-36	3	Gray	W	6.66	5.55	5.27	5.00	4.44
920-1854	1748-60	5	Gray	W	6.88	5.75	5.46	5.18	4.60
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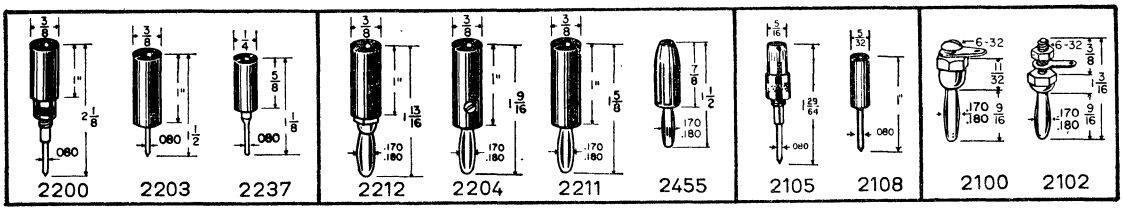
Items in ITALICS Are Fast-Moving—Extra Quantities on Hand

Allied® Tip and Banana Plugs and Jacks

Allied Electronics' own tip and banana plugs and jacks, in insulated and non-insulated styles. All types are accurately molded and machined of U.S.A.-made materials, then rigidly inspected to assure precision quality. Check our wide selection for all your electronic requirements. Tip and banana jacks are supplied with hex mounting nut.



INSULATED AND NON-INSULATED TIP PLUGS

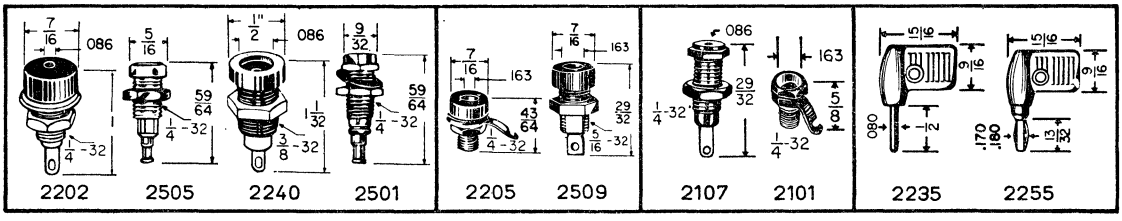
Nickel-plated brass construction for heavier current applications. Handles are molded thermosetting plastic except Type 2237 which is molded butyrate. Types 2105 and 2108 are non-insulated tip plugs. All are rated 12 amps AC. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-299	300-499	500-Up
706-0200	*2200*	*Black*	Solderless; wire tightens securely under knurled collar.	.20	.17	.15	.135
706-0201	*2200*	*Red*		.20	.17	.15	.135
706-0237	*2237*	*Black*	Hollow phone tip; solder-type.	.14	.12	.108	.097
706-0238	*2237*	*Red*		.14	.12	.108	.097
706-0204	2203	Black	Short tip plug for applications where minimum metal can be exposed.	.16	.13	.118	.106
706-0205	2203	Red		.16	.13	.118	.106
706-0105	2105	Nickel-plated	Solderless, all metal. Wire fastens under knurled collar.	.18	.15	.135	.122
706-0108	2108	Nickel-plated	Standard solid phone tip; solder type	.04	.03	.027	.024

INSULATED AND NON-INSULATED BANANA PLUGS

Types 2212, 2204, 2211, 2455 insulated unbreakable handles. Types 2100 and 2102 are non-insulated.

Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-299	300-499	500-Up
706-0213	*2212*	*Black*	Hex brass body; internal brass stud for solderless or solder connection.	.36	.30	.27	.243
706-0214	*2212*	*Red*		.36	.30	.27	.243
706-0206	*2204*	*Black*	Lead wire conn.; set screw thru handle.	.30	.25	.225	.203
706-0207	*2204*	*Red*		.30	.25	.225	.203
706-0211	*2211*	*Black*	Wire solders to plug or stud; or stud locks wire for solderless connection.	.30	.25	.225	.203
706-0212	*2211*	*Red*		.30	.25	.225	.203
706-0455	*2455*	*Black*	Nylon. Solderless connection.	.30	.25	.225	.203
706-0456	*2455*	*Red*		.30	.25	.225	.203
706-0100	2100	Nickel-plated	Panel-mtg. type; 6-32 tapped body.	.30	.25	.225	.203
706-0102	2102	Nickel-plated	Threaded-shank type; sprint tip.	.30	.25	.225	.203



INSULATED TIP JACKS

Nylon-insulated except 2202, molded plastic insulation. Nickel-plated brass bodies, hex nut. Accept std. phone tip plugs. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-299	300-499	500-Up
706-0202	2202	Black	Phosphor-bronze spring. Plastic head. Extruded fiber washer for mtg. in 5/16" hole in panel to 3/8".	.18	.15	.135	.122
706-0203	2202	Red		.18	.15	.135	.122
706-0505	2505	Black	Wrap-around type. Hex head. Mount in 1/4" hole in panels to 1/4".	.25	.21	.189	.17
706-0506	2505	Red		.25	.21	.189	.17
706-0240	*2240*	*Black*	Phosphor-bronze spring. Mount in 3/8" hole in panels to 5/16". Rated 5000 V.	.27	.20	.18	.162
706-0241	*2240*	*Red*		.27	.20	.18	.162
706-0501	2501	Black	Wrap-around type; to MS-16108 spec.	.36	.30	.27	.243
706-0502	2501	Red		.36	.30	.27	.243

INSULATED BANANA JACKS

Heavy duty, molded body. Supplied with fiber washer. 2 oz.

706-0208	*2205*	*Black*	Plastic head; nickel-plated brass body. For 5/16" hole, in panels to 3/8" thick.	.18	.15	.135	.122
706-0209	*2205*	*Red*		.18	.15	.135	.122
706-0509	*2509*	*Black*	Molded nylon jack. Locks into panel by means of double "D" body. For 5/16" hole, panel to 5/16".	.14	.12	.108	.097
706-0510	*2509*	*Red*		.14	.12	.108	.097

NON-INSULATED TIP AND BANANA JACKS

Nickel-plated brass bodies. Tip jack has phosphor-bronze spring. Mount in 1/4" hole in panels to 3/8" thick. With hex nut. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-299	300-499	500-Up
706-0107	2107	Nickel-plated	Tip jack for phone tip plugs.	.18	.15	.135	.122
706-0101	2101	Nickel-plated	Banana jack with tinned lug.	.18	.15	.135	.122

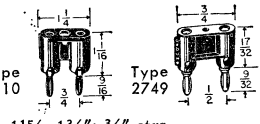
MOLDED RIGHT-ANGLE METER PLUGS

Right-angle plugs with plastic handles. Half shells assemble with one screw and nut. Lead wire solders to body. *Nickel-plated. 2 oz.

706-0255	*2255*	*Black*	4-leaved phosphor-bronze springs.*	.48	.40	.36	.32
706-0256	*2255*	*Red*		.48	.40	.36	.32
706-0235	2235	Black	Maxmium wire insulation, 9/64".	.36	.30	.27	.25
706-0236	2235	Red		.36	.30	.27	.25

MOLDED DOUBLE BANANA PLUGS

Molded as single unit for banana jacks. Can be stacked for multiple connections. Molded polystyrene body per Fed. Spec. L-P416, Type 1. Nickel-plated brass plug. Takes wire to #12. 15-amp rating. Wt. 3 oz.



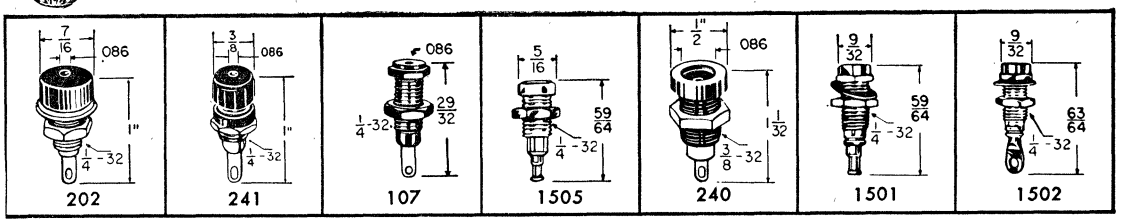
Type 2210. Standard plug. Overall, 1 15/16x1 3/4"; 3/4" ctrs.

706-0210. 1-24 ..... Ea. .86 25-49 ..... Ea. .72
50-99 ..... Ea. .65 100-Up ..... Ea. .58

Type 2799. Miniature. 1/2" centers. Overall, 1 7/32x 27/32x 1/2".

706-0749. 1-24 ..... Ea. .86 25-49 ..... Ea. .72
50-99 ..... Ea. .65 100-Up ..... Ea. .58

H. H. Smith Tip and Banana Jacks and Plugs



INSULATED TIP JACKS

Tip jacks in table below have molded plastic heads with brass nickel-plated bodies. Phosphor bronze contact. Mounts in 5/16" hole. With nut. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-299	300-499	500-Up
706-0202	*202*	*Red*	With phosphor-bronze spring. Supplied with extruded fiber washer for insulated mounting in panel to 3/8" thick.	.18	.15	.135	.122
920-0208	*202*	*Yellow*					
920-0206	202	Green					
920-0207	202	Blue					
706-0201	*202*	*Black*					
920-0292	241	Red	Supplied with molded nylon head, washer.	.36	.27	.24	.226
920-0293	241	Black					

NON-INSULATED TIP JACK

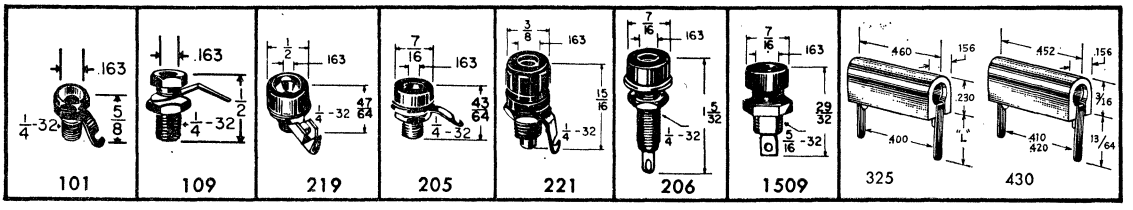
All metal. Brass nickel-plated body. Phosphor-bronze spring. With nut. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-299	300-499	500-Up
706-0107	107	Nickel-plated	Mounts in 1/4" hole; fits panels to 3/8" thick.	.18	.15	.135	.122

NYLON-INSULATED TIP JACKS

Each has self-insulating nylon-insulated body. Hex nuts are brass nickel plated. All accommodate standard phone tip plugs. Average shpg. wt. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-299	300-499	500-Up
706-0506	1505	Black	Wrap-around type. Hex head. Mount in 1/4" hole in panels to 1/4" thick.	.25	.21	.189	.17
920-1516	1505	Yellow					
920-1514	1505	Green					
920-1515	1505	Blue					
706-0505	1505	Red					
706-0240	240	Red	Phosphor-bronze spring. Mtg. nut. Mt. in 3/8" hole. Fit to 5/16" panels. Rated 5000 V.	.27	.20	.18	.162
706-0241	240	Black					
706-0501	1501	Red	Wrap around type made to **MS-16108** specifications.	.36	.30	.27	.243
706-0502	1501	Black					
920-1507	1501	Yellow					
920-1505	1501	Green					
920-1506	1501	Blue					
920-1502	1501	White					
920-1508	1502	Red	Spade type made to **MS-16108** specifications.	.50	.42	.378	.34
920-1509	1502	Black					



NON-INSULATED BANANA JACKS

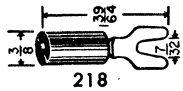
Bare brass, nickel-plated body. Supplied with hex nut. Fits 1/4" hole. 3/8" panel. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-299	300-499	500-Up
706-0101	101	Metal	Tinned lug; takes banana plug.	.18	.15	.135	.122
920-0109	109	Metal	With solder lug.				

INSULATED BANANA JACKS

Heavy-duty, molded body. Supplies with fiber washer. 2 oz.

920-0252	219	Red	Plastic head; nickel-plated brass body; solder lug and mtg. nut. For 5/16" hole, panel to 3/8".	.22	.18	.16	.144
920-0255	219	Blue					
920-0253	219	Black					
706-0208	*205*	*Red*	Plastic head; nickel-plated brass body. For 5/16" hole, panels up to 3/8" thick.	.18	.15	.135	.122
920-0220	205	Yellow					
920-0218	205	Green					
920-0219	205	Blue					
706-0209	*205*	*Black*					
920-0258	*221*	*Red*	Nylon head; fit 5/16" mtg. hole; for panels up to 1/4" thick.	.30	.25	.225	.203
920-0259	*221*	*Black*					
920-0262	221	Yellow					
920-0260	221	Green					
920-0221	*206*	*Red*	Plastic head; nickel-plated brass body; takes banana plug or tip plug; phos.-bronze spring. For 1/4" hole, up to 5/8" panel.	.27	.20	.18	.162
920-0225	206	Yellow					
920-0223	206	Green					
920-0224	206	Blue					
920-0222	*206*	*Black*					
706-0509	*1509*	*Red*	Molded nylon jack. Locks into panel by means of double "D" body. For 5/16" hole, panel to 5/16".	.14	.12	.108	.097
706-0510	*1509*	*Black*					
920-1525	*1509*	*Yellow*					
920-1523	*1509*	*Green*					
920-1524	*1509*	*Blue*					
920-1520	*1509*	*White*					



INSULATED SPADE LUG ADAPTER

Banana plug to spade lug adapter. Molded plastic handle. Wires may be soldered to plug or terminated in banana plug. Shpg. wt. 2 oz.

920-0250	*218*	*Red*	Fork fits binding posts and terminal screws to No. 10.	.17	.14	.136	.122
920-0251	*218*	*Black*		.17	.14	.136	.122

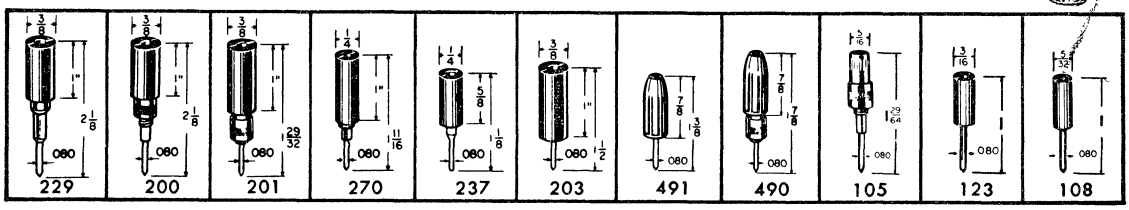
RIGHT ANGLE STD. AND MIL-TYPE TEST JACKS

For reliable test point connections on printed circuit boards in a minimum of space. Both types below accept standard .080" diameter probe tips at either end. Snap into .052" diameter holes on .400" centers. Type 430 is for use with PC boards up to 3/16" thick; Type 325 is for use with PC boards up to 1/16" thick. Type 430 is tested to MIL-P-20693A for nylon; MIL-STD-202B for mechanical tests. Type 325 is made to meet MIL-C-39024/II. Both units rated at 5 amps and 1.5 kV, 60 Hz Continuous. Type 430 has beryllium copper spring, silver underplate with gold overplate. Type 325 has beryllium copper spring, nickel underplate with gold overplate. Both units can be spaced side-by-side .160" on centers minimum. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Color	EACH 1-99	100-299	300-499	500-Up
920-0435	325	White	.13	.11	.099	.089
920-0430	325	Red	.13	.11	.099	.089
920-0429	325	Black	.13	.11	.099	.089
920-0432	325	Green	.13	.11	.099	.089
920-0433	325	Blue	.13	.11	.099	.089
920-0431	325	Yellow	.13	.11	.099	.089
920-0434	325	Gray	.13	.11	.099	.089
920-0539	*430*	*White*	.13	.11	.099	.089
930-0532	*430*	*Red*	.13	.11	.099	.089
920-0530	*430*	*Black*	.13	.11	.099	.089
920-0535	430	Green	.13	.11	.099	.089
920-0536	430	Blue	.13	.11	.099	.089
920-0534	430	Yellow	.13	.11	.099	.089
920-0538	430	Gray	.13	.11	.099	.089

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

H. H. Smith Tip, Banana Plugs and Test Jacks



INSULATED TIP PLUGS

Feature nickel-plated brass construction for heavier current applications. Handles are molded thermosetting plastic except Type 237, molded butyrate; Types 490 and 491, molded nylon; and Type 270, fibre. 12 amps AC. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-299	300-499	500-Up
706-0200 706-0201	229 229	Red Black	Std. tip; large dia. for soldering heavy-duty wire into nickel-plated brass body.	.20	.17	.15	.135
920-0200 920-0201	*200* *200*	*Red* *Black*	Solderless; wire tightens securely under knurled collar.	.20	.17	.15	.135
920-0202 920-0203	201 201	Red Black	"Jr." solderless phone tip; wire fastens under knurled collar.	.20	.17	.15	.135
920-0327 920-0328	270 270	Red Black	Submin.; std. tip, extra small dia.	.24	.20	.18	.162
706-0237 706-0238	*237* 237	*Red* Black	Hollow phone tip, solder-type	.14	.12	.108	.097
706-0204 706-0205	203 203	Red Black	Short tip plug for applications where minimum metal can be exposed	.16	.13	.118	.106

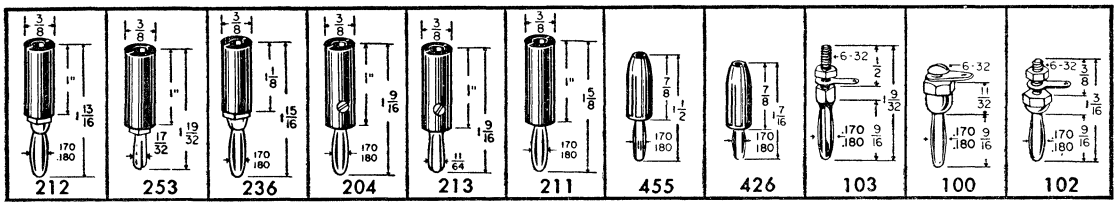
INSULATED TIP PLUGS (Cont'd)

Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-299	300-499	500-Up
920-0578 920-0577 920-0590 920-0580	491 491 491 491	Red Black Yellow Green	Short, tip plug (7/8" handle). Inserts flush, no metal exposed, Molded nylon handle.	.20	.165	.149	.134
920-0575 920-0576	490 490	Red Black	Solderless tip plug with molded nylon handle. Threaded type.	.24	.20	.18	.162

NON-INSULATED TIP PLUGS

Nickel-plated brass phone tip plugs. Fit standard phone tip jacks. Type 123 has .149" inside diameter for larger wire. All are rated 12 amps AC, for 10°C temperature rise, continuous duty. 2 oz.

706-0105	105	Nickel-plated	Solderless, all metal. Wire fastens under knurled collar	.18	.15	.135	.122
920-0123	123	Nickel-plated	Heavy-duty solder-type	.05	.04	.036	.032
706-0108	*108*	*Nickel-plated*	Std. solid phone tip. Solder type.	.04	.03	.027	.024



INSULATED BANANA PLUGS

Insulated banana plugs with unbreakable plastic handles. All are machined of the best materials, and inspected. Have sufficient spring tension to assure good holding power and minimum contact resistance. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-299	300-499	500-Up
706-0213 920-0241 920-0239 920-0240 706-0214	*212* *212* *212* *212* *212*	*Red* *Yellow* *Green* *Blue* *Black*	4-leaved phosphor-br. sprg. hex brass body. Sep. internal brass stud for solderless or solder connection.	.36	.30	.27	.243
920-0305 920-0306	253 253	Red Black	Split type with internal brass stud for solderless or soldered connection.	.28	.22	.198	.178
920-0284 920-0285	236 236	Red Black	4-leaved ni.-plated phosphor-br. spring. Threaded space for solderless connection.	.54	.45	.405	.365
706-0206 920-0215 920-0213 920-0214 706-0207	*204* *204* 204 204 *204*	*Red* *Yellow* Green Blue *Black*	4-leaved phosphor-br. nickel-plated sprg. Lead wire conn. with set screw thru handle.	.30	.25	.225	.203
920-0242 920-0243	*213* *213*	*Red* *Black*	Cross-slotted body. Lead wire connection with set screw	.25	.20	.18	.162
706-0211 706-0212 920-0236 920-0234 920-0235 920-0231	*211* *211* 211 *211* 211 211	*Red* *Black* Yellow *Green* Blue White	4-leaved phosphor-bronze nickel-plated spring. Wire solders to plug or stud; or stud locks wire for solderless connection.	.30	.25	.225	.203

INSULATED BANANA PLUGS (Cont'd)

Stock No.	Mfr's	Color	Description	EACH 1-99	100-299	300-499	500-Up
706-0455 706-0456	455 455	Red Black	4-leaf, phos. bronze. Nylon. Solderless	.30	.25	.255	.203
920-0526 920-0527	426 426	Red Black	4-leaf, phos. bronze spring Nylon. Midget.	.28	.23	.207	.186

NON-INSULATED BANANA PLUGS

Feature four-leaved, phosphor-bronze nickel plated springs. Each is supplied with terminal lug and hex nut. Shpg. wt., 2 oz.

920-0103	103	Nickel-plated	Threaded-shank type.	.30	.25	.255	.203
706-0100	*100*	*Nickel-plated*	Panel-mtg. type; 6-32 tapped body. Intern'l threads for panel use.	.30	.25	.255	.203
706-0102	*102*	*Nickel-plated*	Threaded-shank type; spring up	.30	.25	.255	.203

STANDARD AND MINIATURE DOUBLE PLUGS

Double plugs molded as a single unit for banana jacks. Can be stacked for multiple connections. Body is of molded polystyrene per Fed. Spec. L-P416, Type 1. Nickel-plated brass plug. Wire up to #12 is held with internal set screw. 15-amp rating. Polarity indicated on top and side. Av. wt., 3 oz.

Type 210. Standard plug, 1 15/16x1 3/4". 3/4" ctrs.
706-0210. 1-24 ..... Each .86 25-49 ..... Each .72
50-99 ..... Each .65 100-Up ..... Each .58

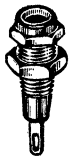
Type 1749. Miniature plug. As above, but has 1/2" centers. 15-amp rating. Overall size, 1 7/32x2 7/32x1/2".
706-0749. 1-24 ..... Each .86 25-49 ..... Each .72
50-99 ..... Each .65 100-Up ..... Each .58

E. F. Johnson Plugs, Jacks and Binding Posts

STANDARD TIP JACK

Tough, low-loss molded body. Capacity to 1/8" metal panel is only 2.0 pF; voltage breakdown test is 9,000 volts DC. Has formed cad.-plated phosphor bronze contact. Current rating: 10 amps. Supplied with 1/4"-32 nut for mounting in 17/64" dia. hole or double-flat keyed hole. 1 1/32x3/8" dia. 2 oz.

Stock No.	Mfr's Type	Color	EACH 1-9	10-49	50-99	100-499	500-999	1000-Up
828-0163	*105-0801-001*	*White*	.17	.16	.151	.138	.122	.096
828-0164	*105-0802-001*	*Red*	.17	.16	.151	.138	.122	.096
828-0165	*105-0803-001*	*Black*	.17	.16	.151	.138	.122	.096
828-0166	105-0804-001	Green	.17	.16	.151	.138	.122	.096
828-0167	105-0807-001	Yellow	.17	.16	.151	.138	.122	.096
828-0168	105-0810-001	Blue	.17	.16	.151	.138	.122	.096



STANDARD METAL-CLAD TIP JACK

Shock-proof polyamide and metal construction resists chipping or cracking. Highly resistant to extremes of heat, cold and moisture. Nickel-plated machined brass jacket protects nylon body. Has silver-plated phosphor bronze contact. Rated: 10 amps. Voltage breakdown is 7,000 VDC; capacity to 1/8" panel is 3.8 pF. With 1/4"-32 nut. Fit 17/64" hole. 1 1/16x9/32" dia. 2 oz.

828-0121	*105-0251-001*	*White*	.31	.23	.213	.194	.172	.134
828-0122	*105-0252-001*	*Red*	.31	.23	.213	.194	.172	.134
828-0123	*105-0253-001*	*Black*	.31	.23	.213	.194	.172	.134
828-0124	105-0254-001	Green	.31	.23	.213	.194	.172	.134
828-0125	105-0257-001	Yellow	.31	.23	.213	.194	.172	.134
828-0126	105-0260-001	Blue	.31	.23	.213	.194	.172	.134

MIL TYPE METAL-CLAD TIP JACK

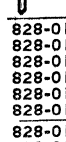
MS-16108, rev. F and M-C-39024/10 type jack. Body is protected by nickel-plated, machined brass jacket—resists chipping or cracking under hardest usage. Has gold-plated, beryllium copper contact, and brass terminal end closed entry feature. Current rating: 5 amps; voltage breakdown: 8000 VDC. Capacity to 1/8" metal panel is 3.8 pF. With nickel-plated bronze lock washer and 1/4"-32 nut for 17/64" hole. 31/32x29/32" dia. 2 oz.

828-0114	105-0201-200	White	.42	.36	.33	.30	.27	.215
828-0115	105-0202-200	Red	.42	.36	.33	.30	.27	.215
828-0116	105-0203-200	Black	.42	.36	.33	.30	.27	.215
828-0118	105-0207-200	Yellow	.42	.36	.33	.30	.27	.215

DELUXE TIP JACK

Capacity to 1/8 metal panel 2.0 pF. .081" tip. Silver-plated beryllium copper contacts. Body threaded 1/4"-32 for single nut mtg. With 1/4"-32 nut for mtg. in 17/64" dia. hole. 10 amps; DC breakdown, 11,000 V. 29/32"x3/8". 2 oz.

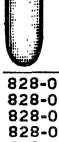
828-0139	*105-0601-001*	*White*	.30	.23	.215	.196	.174	.136
828-0140	*105-0602-001*	*Red*	.30	.23	.215	.196	.174	.136
828-0141	*105-0603-001*	*Black*	.30	.23	.215	.196	.174	.136
828-0142	105-0604-001	Green	.30	.23	.215	.196	.174	.136
828-0143	105-0607-001	Yellow	.30	.23	.215	.196	.174	.136
828-0144	105-0610-001	Blue	.30	.23	.215	.196	.174	.136



STANDARD AND SUBMINIATURE TIP PLUGS

Completely insulated. Recessed head. Metal parts are nickel-plated brass. **Standard:** for solderless connection of up to No. 16 stranded wire; 10-amp rating. Pin size, 9/16"x .080" dia. Body, 7/8"x3/8" dia. **Subminiature (*):** solder connection; 10-amp. 0080". Pin, .080x21/64" dia. Body, 7/8x3/16". 2 oz.

828-0127	*105-0301-001*	*White*	.27	.20	.183	.167	.148	.116
828-0128	*105-0302-001*	*Red*	.27	.20	.183	.167	.148	.116
828-0129	*105-0303-001*	*Black*	.27	.20	.183	.167	.148	.116
828-0130	105-0304-001	Green	.27	.20	.183	.167	.148	.116
828-0131	105-0307-001	Yellow	.27	.20	.183	.167	.148	.116
828-0132	105-0310-001	Blue	.27	.20	.183	.167	.148	.116
828-0145	105-0771-001*	White	.28	.22	.208	.19	.169	.132
828-0146	*105-0772-001**	*Red*	.28	.22	.208	.19	.169	.132
828-0147	*105-0773-001**	*Black*	.28	.22	.208	.19	.169	.132
828-0148	105-0774-001*	Green	.28	.22	.208	.19	.169	.132
828-0149	105-0777-001*	Yellow	.28	.22	.208	.19	.169	.132
828-0150	105-0780-001*	Blue	.28	.22	.208	.19	.169	.132



SLEEVE AND JACK ASSEMBLY

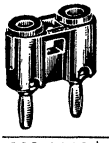
Includes tip jack, less mounting nut, in an inside threaded, insulating sleeve. Ideal for patch cords and panel mountings where an insulated rear connection of a tip jack is desired. Breakdown, 8,000 V. 1 1/16"x3/8" dia. 3 oz.

828-0157	105-0701-001	White	.39	.30	.276	.25	.223	.174
828-0158	*105-0702-001*	*Red*	.39	.30	.276	.25	.223	.174
828-0159	*105-0703-001*	*Black*	.39	.30	.276	.25	.223	.174
828-0160	105-0704-001	Green	.39	.30	.276	.25	.223	.174
828-0161	105-0707-001	Yellow	.39	.30	.276	.25	.223	.174

BANANA JACKS AND PLUGS

Low-loss body. Capacity to 1/16" metal panel, 2.4 pF. Breakdown test 10,000 VDC. Jack has cadmium-plated insert. Supplied with 5/16"-32 nut for mounting jack in 21/64" diameter hole. Solderless connection takes up to No. 16 stranded wire. Length: jack, 15/16"; plug, 1 3/8". Shpg. wt. 2 oz. *Jack. †Plug.

Stock No.	Mfr's Type	Color	EACH 1-9	10-49	50-99	100-499	500-999	1000-Up
828-0232	*108-0901-001**	*White*	.16	.13	.119	.112	.099	.078
828-0233	*108-0902-001**	*Red*	.16	.13	.119	.112	.099	.078
828-0234	*108-0903-001**	*Black*	.16	.13	.119	.112	.099	.078
828-0235	108-0904-001*	Green	.16	.13	.119	.112	.099	.078
828-0236	108-0907-001*	Yellow	.16	.13	.119	.112	.099	.078
828-0237	108-0910-001*	Blue	.16	.13	.119	.112	.099	.078
828-0212	*108-0301-001†*	*White*	.33	.25	.228	.214	.19	.148
828-0213	*108-0302-001†*	*Red*	.33	.25	.228	.214	.19	.148
828-0214	*108-0303-001†*	*Black*	.33	.25	.228	.214	.19	.148
828-0215	108-0304-001†	Green	.33	.25	.228	.214	.19	.148
828-0216	108-0307-001†	Yellow	.33	.25	.228	.214	.19	.148
828-0217	108-0310-001†	Blue	.33	.25	.228	.214	.19	.148

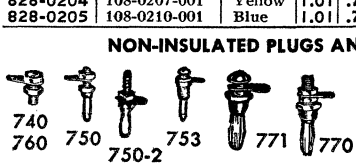


SOLDERLESS DUAL BANANA PLUG

Shock resistant insulating body—retains strength. Provide strain relief to wire leads. Plug springs are nickel-silver. Body is nickel-plated, machined brass. Brass studs extend full length of plug pins. 3/4" pin spacing. 15 amps; plug to plug capacity: 1.3 pF; breakdown: 10,000 VDC. 1 19/32" long. 2 oz.

828-0200	108-0201-001	White	1.01	.75	.686	.645	.573	.448
828-0201	*108-0202-001*	*Red*	1.01	.75	.686	.645	.573	.448
828-0202	*108-0203-001*	*Black*	1.01	.75	.686	.645	.573	.448
828-0203	108-0204-001	Green	1.01	.75	.686	.645	.573	.448
828-0204	108-0207-001	Yellow	1.01	.75	.686	.645	.573	.448
828-0205	108-0210-001	Blue	1.01	.75	.686	.645	.573	.448

NON-INSULATED PLUGS AND JACKS



740 nickel-plated brass jack, with solder terminal and nut. 760 for jumbo plugs, with solder terminal and nut. 740 requires 17/64" dia. mtg. hole; 760, 25/64". 750, 750-2, 753, 770 and 771 are banana plugs. Have brass studs. 770 and 771 are jumbo types; 770 plugs have long screw for mounting on ceramic or steatite plug-in coil forms. 2 oz.

Stock No.	Mfr's Type	Fits	Lgth.	EACH 1-9	10-49	50-99	100-499	500-Up
828-0218	108-740	750, 750-2, 753	5/8"	.23	.18	.164	.154	.137
828-0221	108-750	740	1 1/8"	.31	.23	.212	.199	.176
828-0222	108-750-2	740	1 1/2"	.32	.24	.22	.206	.186
828-0225	108-753	740	15/16"	.32	.24	.22	.207	.184
828-0227	108-760	770, 771	1"	.72	.56	.52	.488	.433
828-0228	108-770	760	1 25/32"	.63	.47	.43	.404	.358
828-0229	108-771	760	1 1/8"	.92	.70	.643	.603	.535

SUBMINIATURE VERTICAL JACKS

TYPE 105-85X. Rated at 5 amps. Operating voltage, 1500 volts. Contact resistance less than 2 milliohms. Body material, low-loss polyamide, meets MIL-M-20693A specs. Beryllium copper contacts for firm contact. Silver plated. 7/16" long, 3/16" dia. Mounts single .052" hole. 2 oz.

Stock No.	Mfr's Type	Color	EACH 1-9	10-49	50-99	100-499	500-Up
828-0169	*105-0851-001*	*White*	.19	.14	.128	.116	.103
828-0170	*105-0852-001*	*Red*	.19	.14	.128	.116	.103
828-0171	*105-0853-001*	*Black*	.19	.14	.128	.116	.103
828-0172	105-0854-001	Green	.19	.14	.128	.116	.103
828-0173	105-0857-001	Yellow	.19	.14	.128	.116	.103
828-0174	105-0860-001	Blue	.19	.14	.128	.116	.103

RIB-LOC PRESS-IN TIP JACK

Accepts .080" tip plug in closed-entry contact. Low-loss polyamide insulating body. Rating: 10 amps. Peak voltage, 5000 V. Mounts in .172 hole in panel up to 1/8" thick. Overall length, .700". Wt. 2 oz.

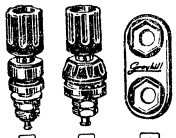
Stock No.	Mfr's Type	Color	EACH 1-9	10-49	50-99	100-499	500-999	1000-Up
828-0175	105-1041-001	White	.23	.18	.161	.151	.134	.105
828-0176	105-1042-001	Red	.23	.18	.161	.151	.134	.105
828-0177	105-1043-001	Black	.23	.18	.161	.151	.134	.105
828-0178	105-1044-001	Green	.23	.18	.161	.151	.134	.105
828-0180	105-1047-001	Yellow	.23	.18	.161	.151	.134	.105
828-0182	105-1050-001	Blue	.23	.18	.161	.151	.134	.105

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Binding Posts and Banana Plugs

GRAYHILL BINDING POSTS

BINDING POSTS AND DUAL MOUNTING BASES



A TYPE 29-1 BINDING POST. Screw binding post for 3/8" dia. mtg. hole—allows closer spacing of posts. Takes banana plugs, wires, spade lugs, prod tips, etc. Mounts on panel up to 3/16" thick—insulation resistance 120,000 megohms; voltage breakdown 3000 volts AC. 1" in front of panel, .69" behind. 1/2" diameter. Shpg. wt., 4 oz.

B TYPE 29-3 BINDING POST. Screw binding post for 1/2" dia. mounting hole. For use in existing equipment or where wider spacing is desirable. Takes banana plugs, wires, spade lugs, prod tips, etc. Mounts on panel up to 3/16" thick—insulation resistance 200,000 megohms; voltage breakdown 3000 volts AC. Post extends 1" in front of panel, .69" behind. .62" diameter. Shpg. wt., 4 oz.

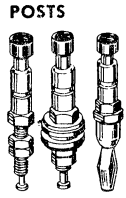
B TYPE 29-33 BINDING POST. Spring loaded binding post—head gives 24 oz. of contact force. For 1/2" mounting hole in panels to 3/16" thick. Insulation resistance 200,000 megohms; voltage breakdown between studs and mounting panel, 3000 volts AC. Extends .96" in front of panel, .69" behind. .62" diameter. Insulating washers, 5/8" dia. Shpg. wt. 4 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-49	50-99	100-999	1000-Up
801-0621	29-1	A	Red—Screw type	.70	.50	.38	.35
801-0620	29-1	A	Black—Screw type	.70	.50	.38	.35
801-0631	29-3	B	Red—Screw type	.70	.50	.38	.35
801-0630	29-3	B	Black—Screw type	.70	.50	.38	.35
801-0641	29-33	B	Red—Spring loaded	.70	.50	.38	.35
801-0640	29-33	B	Black—Spring loaded	.70	.50	.38	35

C TYPE 29B11 DUAL MOUNTING BASES. Use with Type 29-1 binding posts in table above. Makes assembled unit with two binding posts on 3/4" centers. Base is molded phenolic to Type CFG specifications. Shpg. wt. 8 oz.

801-0612. Type 29B11-2. Red Base. 1-24..Ea. .21 25-99..Ea. .15
100-999.....Ea. .12 1000-Up.....Ea. .105
801-0611. Type 29B11-1. Black Base. 1-24.Ea. .21 25-99 Ea. .15
100-999.....Ea. .12 1000-Up.....Ea. .105

"PUSH-POST" PLUNGER TYPE BINDING POSTS



Plunger type binding posts for positive, quick connections. Just depress button and place lead in .06" slot—spring pressure assures firm contact. With red or black buttons. Wt. 1/2 oz.

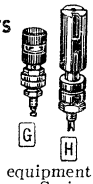
D TYPE 29-100. For 11/64" mounting hole less insulating washers—use as ground on panels up to 3/16" thick. Extends only 7/8" above panel; 1 1/2" overall length, 1/4" dia. Wt. 1/2 oz.

E TYPE 29-104. Same as Type 29-100 above but with insulating washers to prevent grounding to panel. For 3/8" mounting holes.

F TYPE 29-101. "Push-Post" with standard banana plug converts any banana jack to a plunger type binding post. Nickel-plated brass. Thermoplastic button. 1/2" diameter, 1.80" long. Shpg. wt. 1/2 oz.

Stock No.	Mfr's Type	Fig.	Color	EACH 1-24	25-49	100-999	1000-Up
801-0651	29-100R	D	Red	.66	.45	.338	.315
801-0650	29-100B	D	Black	.66	.45	.338	.315
801-0655	29-104R	E	Red	.90	.60	.45	.42
801-0656	29-104B	E	Black	.90	.60	.45	.42
801-0653	29-101R	F	Red	.90	.60	.45	.42
801-0652	29-101B	F	Black	.90	.60	.45	.42

EBY MIL-TYPE WATERTIGHT BINDING POSTS

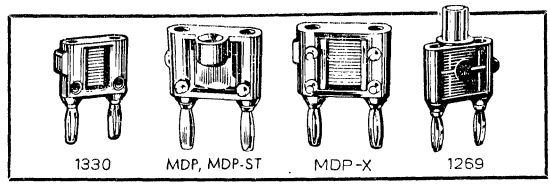


PB07FA01 Miniature. Fig. G. New watertight spring binding post for radio relay, multiplexer and telephone system applications. Built to MIL-P-55149/7. Maximum dia. of .400. Mounts on 1/2" centers. Accepts up to AWG #16 wire, which is gripped by a locking cam. Also accepts .080" test probes. Insulated from chassis. For 1/16" to 1/8" panels. 1.612" free length. Rated 1A, 100 VDC.

PB08NA01. (U-106/V, WB-8-CHA1). Fig. H. For sealed equipment requiring external connections. Developed for Signal Corps. Spring pressure. 1 59/64" when closed. *Red, †Black.

Stock No.	MC1 Type	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-Up
547-1813	PB07FA01	9766-176	2.26	1.89	1.57	1.34	1.17
547-1814	PB08NA01*	9766-203-6	2.20	1.83	1.52	1.30	1.13
547-1815	PB08NA02†	9766-203-9	2.20	1.83	1.52	1.30	1.13

POMONA DOUBLE BANANA PLUGS



MODEL 1330 DOUBLE BANANA PLUG

Recess for mounting small components. Set screws. 3/4" spacing. Stacking jacks at top. Shpg. wt. 5 oz.

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-49	50-99	100-Up
885-0311	*1330*	*Black*	1.12	.75	.68	.64	.53
885-0312	*1330*	*Red*	1.12	.75	.68	.64	.53

MDP MOLDED DOUBLE "STACK UP" PLUGS

Double plugs to permit multiple stacking. Fit standard banana jacks. 3/4" spacing. Made of tough thermo-plastic molded directly on the metal body of plug. Set screws secure cable leads. Ground connections marked. One-piece nickel-plated beryllium copper springs. 15 amps continuous, 30 amps initial. 5000 WVDC. 5 oz.

885-0080	*MDP*	*Black*	1.12	.75	.68	.64	.53
885-0081	*MDP*	*Red*	1.12	.75	.68	.64	.53
885-0082	MDP	Orange	1.12	.75	.68	.64	.53
885-0083	MDP	Yellow	1.12	.75	.68	.64	.53
885-0084	MDP	Green	1.12	.75	.68	.64	.53
885-0085	MDP	Blue	1.12	.75	.68	.64	.53
885-0086	MDP	Gray	1.12	.75	.68	.64	.53
885-0087	MDP	White	1.12	.75	.68	.64	.53

TYPE MDP-ST. Has solder turret terminals.

885-0114	*MDP-ST*	*Black*	1.42	.95	.86	.81	.67

TYPE MDP-X. Four-terminal isolation plug.

885-0115	MDP-X	Red	4.87	3.25	2.93	2.76	2.28

TYPES 1269 AND 1270. BNC receptacle and plug adapters, permit BNC connectors to be used with eqpt. having banana jacks. 1269 adapts jack to plug, 1270 adapts jack to receptacle. Wt., 4 oz.

885-0267	*1269*	*Black*	4.42	2.95	2.66	2.51	2.07
885-0268	1270	Black	5.92	3.95	3.56	3.36	2.77

POMONA STANDARD SINGLE BANANA PLUGS

MODEL 1325 SINGLE BANANA PLUGS

Solderless stack-up type with one-piece nickel-plated beryllium copper. Spring tip. Internal set screws eliminate soldering. Plugs fit standard .166" banana jacks. Rated 15 amps, continuous. 5000 WVDC. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-49	50-99	100-Up
885-0301	*1325*	*Black*	.75	.50	.45	.43	.35
885-0302	*1325*	*Red*	.75	.50	.45	.43	.35
885-0303	1325	Orange	.75	.50	.45	.43	.35
885-0304	1325	Yellow	.75	.50	.45	.43	.35
885-0305	1325	Green	.75	.50	.45	.43	.35
885-0306	1325	Blue	.75	.50	.45	.43	.35
885-0307	1325	White	.75	.50	.45	.43	.35

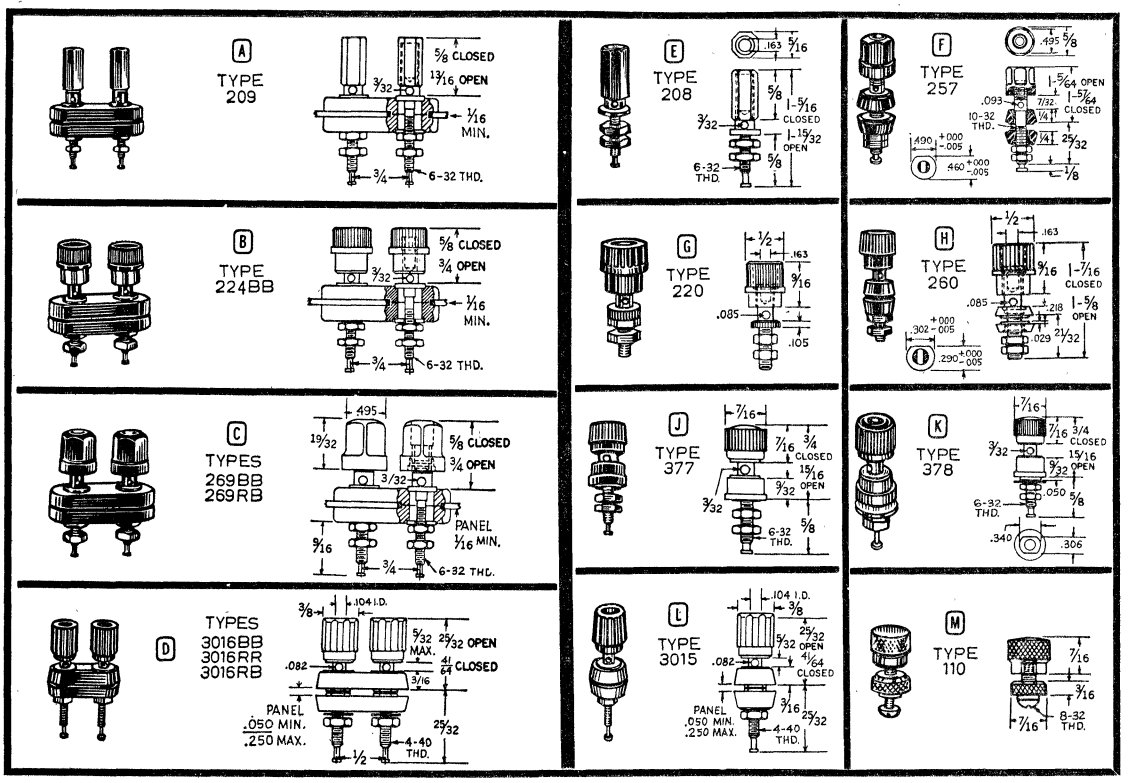
MODEL 1825 SAFETY-TYPE SOLDERLESS BANANA PLUG. Collar eliminates shock hazard, acts as strain relief. Internal set screw. Nickel-plated beryllium copper spring. .166" dia. jack, plug.

885-0460	*1825*	*Black*	.75	.50	.45	.43	.35
885-0462	*1825*	*Red*	.75	.50	.45	.43	.35
885-0463	*1825*	*Orange*	.75	.50	.45	.43	.35
885-0464	*1825*	*Yellow*	.75	.50	.45	.43	.35
885-0465	*1825*	*Green*	.75	.50	.45	.43	.35
885-0466	*1825*	*Blue*	.75	.50	.45	.43	.35
885-0468	*1825*	*Gray*	.75	.50	.45	.43	.45
885-0469	*1825*	*White*	.75	.50	.45	.43	.35

MODEL 1390 ISOLATION BANANA PLUG. Top stack-up receptacle is isolated from lower plug. .166" jack, plug. Gold-flashed turret terminals. Shpg. wt. 2 oz.

885-0345	1390	Black	1.87	1.25	1.13	1.06	.88
885-0346	1390	Red	1.87	1.25	1.13	1.06	.88

H. H. SMITH Binding Posts

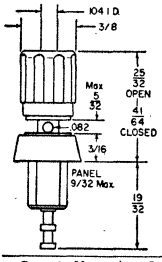


Dual Binding Posts

Have solder studs. Mount in two 1/2" holes in 1/16" to 1/4" panels. 3/4x1 1/2" base. **Type 209** has metal posts, rounded black base. **Types 224 and 269** are 5-way; include 4 hex nuts and 2 flat washers. **Type 224** has black, insulated, fluted heads. **Type 269BB** has black, hex-grip, insulated heads. **Type 269RB** is same as **Type 269BB**, but has one red and one black head.

MINIATURE BINDING POSTS. Mount in two 1/4" holes (on 1/2" centers) in up to 1/4" panels. ##Accept miniature banana plugs. 0.080 phone tips, #6 spade lugs, solder turret. **Type 3016RR** is same as above but has red heads. **Type 3016RB** as above but one red, one black. Wt. 4 oz.

Stock No.	Mfr's Type	Fig.	Mtg. Ctr.	Color	EACH 1-24	25-49	50-99	100-Up
920-0229	209	A	3/4"	Metal/black	1.02	.85	.77	.73
920-0267	224BB	B	3/4"	Black/black	.84	.70	.63	.60
920-0325	269BB	C	3/4"	Black/black	1.14	.95	.86	.81
920-0326	269RB	C	3/4"	Red/black	1.14	.95	.86	.81
920-2816	3016BB	D	1/2"	Black/black	.90	.75	.68	.64
920-2818	3016RR	D	1/2"	Red/red	.90	.75	.68	.64
920-2817	3016RB	D	1/2"	Red/black	.90	.75	.68	.64



MINIATURE TEFLON BINDING POSTS

Type 3017. Mounts in 1/4" "D" punched hole without hardware. "Memory" characteristic of Teflon locks unit in hole after insertion, and "D" Flat prevents rotation. For miniaturized equipment. Accepts 0.080" phone tip, #6 spade lug, miniature banana plug, alligator clip, or wire. Wrap-around solder turret. Captive head, molded nylon per MIL-P-20693A. Gold-plated brass insert and body. Virgin Teflon washer body, per MIL-P-19468. 5 amperes AC for 10°C rise, continuous duty. 1 kV, 60 Hz AC, continuous working voltage. 2.5 pF capacitance. Wt. 2 oz.

Stock No.	Color	1-9	100-299	300-499	500-Up
920-2820	Black	.75	.60	.57	.52
920-2822	Red	.75	.60	.57	.52
920-2824	Yellow	.75	.60	.57	.52
920-2825	Green	.75	.60	.57	.52
920-2826	Blue	.75	.60	.57	.52
920-2829	White	.75	.60	.57	.52

Single-Type Binding Posts

For a wide variety of uses. All are rated 2000 volts at 30 amperes. **Types 257, 220, and 260** have banana-plug jack in head—also accept phone-tip plug, spade lug, alligator clip, and wire strand. **Type 208** accepts banana plug. Metal parts are brass, insulated front panel, except **Types 220 and 337**, which are grounding type. **Types 257, 377, and 378** take direct solder connection to stud. **Type 208** has wrap-around solder stud and 6-32 thread. **Types 257 and 260** are both equipped with a locking edge. **Type 3015 MINIATURE** fluted binding post; captive nylon 3/8" head. Heavy-duty construction of all types for extra reliability in industrial applications. Av. wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Mtg. Hole	Lgth. (Closed)	Color	EACH 1-99	100-299	300-499	500-Up
920-0228	208	E	1/64"	15/16"	Metal	.42	.35	.30	.28
920-0211	257	F	1/2"	1 43/64"	Red	.60	.50	.45	.40
920-0212	257	F	1/2"	1 41/64"	Black	.60	.50	.45	.40
920-0256	220	G	11/64"	1 1/4"	Red	.29	.22	.20	.18
920-0257	220	G	11/64"	1 1/4"	Black	.29	.22	.20	.18
920-0215	260	H	5/16"	1 11/16"	Red	.54	.45	.41	.36
920-0216	260	H	5/16"	1 11/16"	Black	.54	.45	.41	.36
920-0477	377	J	11/64"	1 3/8"	Red	.42	.35	.32	.28
920-0478	377	J	11/64"	1 3/8"	Black	.42	.35	.32	.28
920-0479	378	K	23/64"	1 3/8"	Red	.42	.35	.32	.28
920-0480	378	K	23/64"	1 3/8"	Black	.42	.35	.32	.28
920-2814	3015	L	1/4"	1 5/16"	Red	.60	.50	.45	.40
920-2815	3015	L	1/4"	1 5/16"	Black	.60	.50	.45	.40

M **Type 110 Post.** Metal binding posts for heavy-duty use and low-resistance connections. Binding posts are rated at 15 amps, 60 Hz AC, for 10°C temperature rise under continuous duty. Nickel-plated brass 21/32" long, 3/16" mtg. hole. Supplied complete with screw and lock washer. Shpg. wt., 2 oz.

920-0110. 1-99.....Each .30
100-299.....Each .25 300-Up.....Each .23

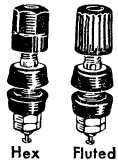
H. H. SMITH NYLON BINDING POST

TYPE 459. Fluted head post with head and washer per MIL-P-20693A. Rated 30 amps AC for 10° temperature rise, continuous duty. Working voltage, 2 kV at 60 Hz. Accepts phone tip plug, spade lug, banana plug, alligator clip, wire strand. Mounts in 1/2" hole.

920-0563. Red. 920-0561. Black. 1-99.....Ea. .60
100-249...Ea. .50 250-499...Ea. .45 500-Up...Ea. .40

Binding Posts and Adapters

SUPERIOR ELECTRIC BINDING POSTS



Take up to No. 12 wire through center hole or clamped and looped around shaft. Gold-plated. Hex-nut types have durable nylon plastic insulator. Meets MIL-P-20693 specs, except GP30NC which is nickel-plated grounding-type post. All are rated 30 amps at 1000 volts. Mount in 1/16-1/4" panels, 1/2" mounting hole. 23/64x1/2" dia. Wt., 2 oz.

HEX-NUT TYPES

Stock No.	Type	Color	Stock No.	Type	Color
930-0529	*DF30YC*	*Yellow*	930-0525	*DF30RC*	*Red*
930-0523	*DF30GNC*	*Green*	930-0521	*DF30BLC*	*Blue*
930-0527	*DF30WTC*	*White*	930-0549	GP30NC	Nickel
930-0519	*DF30BC*	*Black*	.....	.....	.....

1-24.....Each .69 25-99.....Each .50 100-Up.....Each .39

FLUTED-NUT TYPES

930-0531	DF31BC	Black	930-0537	*DF31RC*	*Red*
930-0533	DF31BLC	Blue	930-0539	DF31WTC	White
930-0535	DF31GNC	Green	930-0541	DF31YC	Yellow

1-24.....Each .69 25-99.....Each .50 100-Up.....Each .39

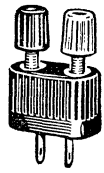
MINIATURE FLUTED-NUT TYPES

Rated 15 amps at 1000 V. Current-carrying parts are gold-plated brass. Plastic parts are of durable nylon. Meet MIL-P-20693, Type IV specs. For 1/16-1/4" panels. Mount in 3/8" hole. 121/32x7/16" dia. 2 oz.

930-0507	*DF21BC*	*Black*	930-0513	*DF21RC*	*Red*
930-0509	DF21BLC	Blue	930-0515	DF21WTC	White
930-0511	DF21GNC	Green	930-0517	DF21YC	Yellow

1-24.....Each .69 25-99.....Each .50 100-Up.....Each .39

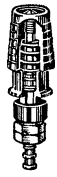
AC DUAL-ADAPTER BINDING POST



Top-quality binding post with AC plug connects up to 5 ways for extreme versatility. Ideal line voltage and frequency monitoring, etc. Utilizes Type DAP15BWC parallel-blade plug that fits standard 2-wire AC receptacle. Accepts spade lugs, banana plugs, clip leads, up to No. 12 wire through .098" diameter holes, or wire wrapped around shafts. Rated 15 amps at 125 volts. Has color-coded thumb-nuts, 1 white, 1 black. Shpg. wt., 3 oz.

930-0505. 1-9.....Each 2.76 10-Up.....Each 2.00

ADMIRAL CONTROLS "ADLOC" BINDING POST



Push down on top, insert wire (up to 12 gauge), release and positive contact is made instantly. Also for spade lugs, plugs, clamps and prods. Has a brass nickel-plated post, nylon plastic insulator. Rated 20 amps at 1000 V, rms. For .314" hole in panels 1/32" to 1/4". 23/32x5/8". Suffix "B," black; "R," red. Shpg. wt., 3 1/2 oz.

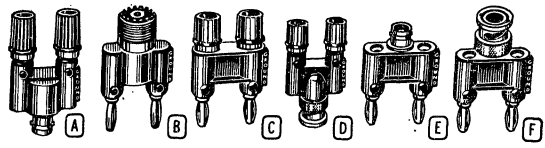
Stock No.	Mfr's Type	EACH 1-9	10-99	100-199	200-Up
729-0031	*AL2000B*	.90	.79	.73	.68
729-0032	*AL2000R*	.90	.79	.73	.68

E. F. JOHNSON SIX-WAY POSTS

Series 111-1, Std. 15A. Breakdown 8000 VDC. 5/16"-32 nut mtg. in 21/64" dia. round, "D," or double-flat hole. 115/16" long, 7/16" dia. Series 111-2. Min. 15A. Breakdown, 5000 VDC. 1/4"-32 nut mtg. in 17/64" dia. round, "D," or double-flat hole. 15/16" long, 3/8" dia. Series 111-3, Jumbo. 40A. Breakdown, 7000 VDC. 1/2"-20 nut mtg. in 1/2" dia. round, "D," or double-flat hole. 2" long, 5/8" dia. Series 111-4, Min. Same as Series 111-2, except accepts banana plug. 111-2 accepts pin plug, all others accept banana plug.

Stock No.	Mfr's Type	Color	EACH 1-9	10-49	50-99	100-499	500-999	1000-Up
828-0302	*111-0101-001*	White	.52	.39	.355	.334	.296	.231
828-0303	*111-0102-001*	Red	.52	.39	.355	.334	.296	.231
828-0304	*111-0103-001*	Black	.52	.39	.355	.334	.296	.231
828-0305	*111-0104-001*	Green	.52	.39	.355	.334	.296	.231
828-0306	*111-0107-001*	Yellow	.52	.39	.355	.334	.296	.231
828-0307	*111-0110-001*	Blue	.52	.39	.355	.334	.296	.231
828-0308	*111-0201-001*	White	.76	.57	.53	.496	.44	.344
828-0309	*111-0202-001*	Red	.76	.57	.53	.496	.44	.344
828-0310	*111-0203-001*	Black	.76	.57	.53	.496	.44	.344
828-0311	*111-0204-001*	Green	.76	.57	.53	.496	.44	.344
828-0312	*111-0207-001*	Yellow	.76	.57	.53	.496	.44	.344
828-0313	*111-0210-001*	Blue	.76	.57	.53	.496	.44	.344
828-0316	111-0301-001	White	.75	.56	.51	.48	.425	.333
828-0317	111-0302-001	Red	.75	.56	.51	.48	.425	.333
828-0318	111-0303-001	Black	.75	.56	.51	.48	.425	.333
828-0319	111-0304-001	Green	.75	.56	.51	.48	.425	.333
828-0320	111-0307-001	Yellow	.75	.56	.51	.48	.425	.333
828-0321	111-0310-001	Blue	.75	.56	.51	.48	.425	.333
828-0324	111-0401-001	White	.67	.50	.46	.432	.382	.299
828-0325	111-0402-001	Red	.67	.50	.46	.432	.382	.299
828-0326	111-0403-001	Black	.67	.50	.46	.432	.382	.299
828-0327	111-0404-001	Green	.67	.50	.46	.432	.382	.299
828-0328	111-0407-001	Yellow	.67	.50	.46	.432	.382	.299
828-0329	111-0410-001	Blue	.67	.50	.46	.432	.382	.299

H. H. SMITH DUAL INSTRUMENT ADAPTERS



Excellent quality male, female dual binding post adapters. Insulated 5-way binding posts for efficient, reliable service in an infinite amount of applications. Come with red and black heads on 3/4" centers except *1/2" centers. Banana jack holes are provided for side stacking. Packages of 1. Strong body to resist breakage or splitting that often occurs due to temperature variations. Current: 5A. Voltage 5kV. Average shipping weight, 1 oz.

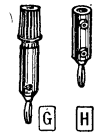
Stock No.	Mfr's Type	Fig.	Front Connection	EACH 1-9	10-24	25-49	50-99	100-Up
920-1782	1689	A	BNC/female	5.98	4.60	4.14	3.91	3.24
920-1876	1776	A	TNC male	9.00	7.00	6.30	5.95	4.94
920-1877	1777	A	TNC female	8.00	6.00	5.46	5.10	4.22
920-1880	1780	A	N male	9.00	7.00	6.30	5.95	4.94
920-1881	1781	A	N female	8.00	6.00	5.46	5.10	4.22
920-1795	1695	A	UHF male	6.50	5.00	4.50	4.25	3.51
920-1791	1691	A	UHF female	7.05	5.25	4.73	4.47	3.70
920-1782	1682	A	Dual bananas	3.03	2.25	2.03	1.91	1.58
920-1784	1684	A	2-cir. phone plug	5.98	4.60	4.14	3.91	3.24
920-1788	1688	B	BNC male	5.98	4.60	4.14	3.91	3.24
920-1798	1698	B	BNC male	13.40	10.00	9.00	8.50	7.05
920-1790	1690	B	UHF female to banana	5.98	4.60	4.14	3.91	3.24
920-1797	1697	B	BNC female to dual banana	12.00	9.00	8.10	7.65	6.35
920-1865	1755*	C	Binding post to dual banana	3.04	2.25	2.02	1.91	1.57
920-1866	1756*	D	Binding post to BNC male	6.15	4.60	4.14	3.91	3.24
920-1867	1757*	D	Binding post to BNC female	6.15	4.60	4.14	3.91	3.24
920-1868	1758*	E	BNC female to banana	4.04	3.00	2.70	2.55	2.10
920-1869	1959*	F	BNC male to banana	5.30	3.95	3.56	3.36	2.76

H. H. SMITH METAL SHORTING BAR TYPE

TYPE 1795. Metal shorting bar type. Rear: 3/32" thick brass busbar, 15 amps continuous duty handling capacity. Front: Dual miniature banana plugs on 1/2" centers. Unit sits flush to panel. Shpg. wt. 4 oz.

920-1895. 1-9.....89 10-Up.....66

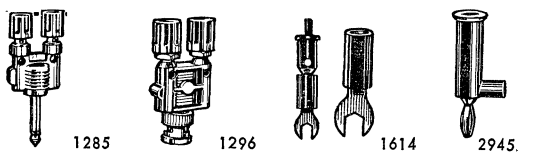
SINGLE TEST ADAPTERS



High-quality single instrument test adapters. All are standard adapters. Types 5025, 5032 have banana jack holes for side stacking in front connections. Types 5027, 5029 have centers with turret-terminal connections to isolated front and rear conductors for insertion in series input circuit.

Stock No.	Mfr. Type	Fig.	Front Connection	EACH 1-9	10-24	25-49	50-99	100-Up
920-5025	5025	G	Binding post to banana	1.45	1.10	.99	.94	.78
920-5027	5027	G	Binding post to isolated banana	1.45	1.10	.99	.94	.78
920-5029	5029	H	Banana to isolated banana plug	1.34	1.00	.90	.85	.71
920-5032	5032	H	BNC jack to banana plug	2.70	2.00	1.80	1.70	1.42

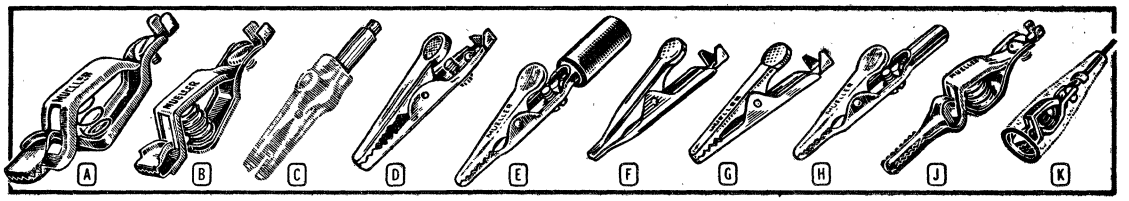
POMONA PHONE, BINDING-POST AND LUG ADAPTERS



MODEL 1285. Phone plug adapter. Adapts phone jack to 3/4" spaced binding posts. Thermoplastic body. Shpg. wt. 3 oz.
MODEL 1296. Binding-post adapter. Adapts BNC receptacle to 3/4" centers binding posts. Thermoplastic body. Shpg. wt. 3 oz.
MODEL 1614. Insulated spade lug adapter. Nickel-plated brass. 15 amps cont. 5000 VDC. −25° C to 85° C. Shpg. wt. 2 oz.
MODEL 2945. Miniature solderless banana plug with safety collar stack-up. This integral collar insulates exposed wire leads and acts as a strain relief by preventing the flexing of the lead at the set screw. No soldering. Shpg. wt. 2 oz.

Stock No.	Type No.	Color	EACH 1-9	10-24	25-49	50-99	100-Up
885-0283	1285	Black	6.34	4.85	4.37	4.13	3.40
885-0289	1296	Black	6.47	4.95	4.46	4.21	3.47
885-0398	1614	Black	.46	.35	.32	.30	.25
885-0399	1614	Red	.46	.35	.32	.30	.25
885-0685	2945	Black	.67	.50	.45	.43	.35
885-0686	2945	Red	.67	.50	.45	.43	.35

Mueller General-Purpose Test Clips



3-SIDED MESH-TEETH CLIPS

A §Cadmium-plated steel; *solid copper; †with insulation-piercing needle. #Wt. per 100 pieces.

Stock No.	Mfr's Type	Amps	Size	#Wt. Lbs.	EACH 1-9	10-99	100-499	500-Up
860-0036	§25	40	3"	6	.24	.17	.14	.13
860-0044	§27	20	2 7/16"	3¼	.18	.12	.10	.09
860-0046	*27C	40	2 7/16"	3½	.31	.22	.19	.18
860-0097	§48B	10	2"	2	.15	.10	.09	.08
860-0099	*48C	20	2"	2¼	.22	.15	.13	.12
860-0105	*†50C	20	2¼"	2½	.36	.25	.21	.20
860-0107	*51C	20	2½"	2½	.25	.18	.15	.14

"PEE-WEE" TEST CLIPS

B Mesh-teeth type for general purpose use. Type 45C of solid copper. Type 45 of cadmium-plated steel. #Wt. per 100 pcs.

Stock No.	Mfr's Type	Amps	Size	#Wt. Lbs.	EACH 1-9	10-99	100-499	500-Up
860-0085	45	5	1½"	1	.10	.07	.058	.055
860-0087	45C	10	1½"	1¼	.17	.12	.103	.098

HEAVY-DUTY SOLID COPPER CLIPS

B High-conductivity, solid copper clips. Handle current loads of up to 200 amps. Lbs. per 100 pcs.: *6¾, †18, §41.

Stock No.	Mfr's Type	Amps	Marking	Size	EACH 1-9	10-99	100-499	500-Up
860-0038	*25C	75	unmarked	3"	.51	.36	.30	.29
860-0025	†21C	100	plus sign	4½"	1.34	.94	.80	.76
860-0026	†21C	100	unmarked	4½"	1.34	.94	.80	.76
860-0007	§11C	200	plus sign	6"	2.65	1.85	1.59	1.51
860-0009	§11C	200	unmarked	6"	2.65	1.85	1.59	1.51

LEAD-PLATED BATTERY CLIPS

B For moderately heavy current loads, including battery charging, electroplating, and light welding. Lead-plated steel for complete protection and long life. Lbs. per 100 pcs.: *6¼, †15, §36.

860-0032	*24A	25	plus sign	2⅞"	.29	.20	.17	.16
860-0034	*24A	25	unmarked	2⅞"	.29	.20	.17	.16
860-0021	†21A	50	plus sign	4"	.52	.36	.31	.30
860-0023	†21A	50	unmarked	4"	.52	.36	.31	.30
860-0005	§11A	100	unmarked	6"	1.44	1.01	.86	.82

INSULATED ALLIGATOR CLIPS

C §Cadmium-plated steel; *solid copper. Insulated with vinyl to protect against shocks and shorts. Av. per 100 pcs., 1¾ lbs.

Stock No.	Mfr's Type	Amps	Marking	Size	EACH 1-9	10-99	100-499	500-Up
860-0139	§63	5	Red insul.	2⅛"	.23	.16	.14	.13
860-0137	§63	5	Black insul.	2⅛"	.23	.16	.14	.13
860-0143	*63C	10	Red insul.	2⅛"	.27	.19	.16	.15
860-0141	*63C	10	Black insul.	2⅛"	.27	.19	.16	.15

70 SERIES ALLIGATOR CLIPS

D Streamlined, simplified design. No. 70, cadmium-plated steel, solder connection; No. 70S, cadmium-plated steel, screw connections. No. 70CS, solid copper, screw connection. 1 lb. per 100.

Stock No.	Mfr's Type	Amps	Barrel Color	Size	EACH 1-9	10-99	100-499	500-Up
860-0150	70	5	.....	1 11/16"	.08	.06	.049	.046
860-0154	70S	5	.....	1 11/16"	.10	.07	.058	.055
860-0152	70CS	10	.....	1 11/16"	.16	.10	.094	.089

INSULATED-BARREL ALLIGATOR CLIPS

E Made of cadmium-plated steel, except Types 60CHS are solid copper. Jaws open 5/16". 1½ lbs. per 100 pcs.

860-0123	60HS	.....	Red	2 11/32"	.16	.12	.098	.093
860-0121	60HS	.....	Black	2 11/32"	.16	.12	.098	.093
860-0117	60CHS	.....	Red	2 11/32"	.22	.16	.134	.127
860-0115	60CHS	.....	Black	2 11/32"	.22	.16	.134	.127

"MICRO-GATOR" CLIPS

F Similar to "Mini-gators" but with tiny tip for clipping to small terminals, and as heat sink. §Cadmium-plated steel; *copper.

860-0062	§34	.....	1 3/32"	.07	.05	.04	.039
860-0064	*34C	.....	1 3/32"	.09	.06	.05	.05

"MINI-GATOR" CLIPS

G Ideal for testing all types of miniature and subminiature equipment. 3/16" jaw opening. 11/64" O.D. tip when used with insulator. Type 30, cadmium-plated steel; Type 30C, solid copper, for #20 or smaller wire. Shpg. wt., ¼ lb. per 100.

Stock No.	Mfr's Type	Amps	Size	EACH 1-9	10-99	100-499	500-Up
860-0052	30	5	1 1/16"	.09	.06	.053	.051
860-0054	30C	10	1 1/16"	.11	.08	.065	.061

60 SERIES ALLIGATOR CLIPS

H Steel, except 60CS, solid copper. *Insulation-piercing needle. Fit banana plugs. Jaws open 5/16". 2" long. 60PR2 has barrel crimped for friction fit on std. phone tip, banana plug, test prod tip. 1 lb. per 100.

Stock No.	Mfr's Type	Connection	EACH 1-9	10-99	100-499	500-Up
860-0113	60	Solder	.10	.07	.06	.058
860-0129	60S	Screw	.12	.08	.07	.066
860-0119	60CS	Screw	.18	.13	.108	.103
860-0126	*60NS	Screw	.23	.16	.136	.129
860-0127	60PR2	Crimp	.15	.10	.087	.083

CROCODILE CLIPS

J Cadmium-plated steel, except Type 85C is solid copper. Type 85T has phone tip on one jaw. Wt., 1½ lbs. per 100.

Stock No.	Mfr's Type	Size	Description	EACH 1-9	10-99	100-499	500-Up
860-0167	85	2⅛"	Screw Connection	.12	.08	.072	.069
860-0169	85C	2⅛"	Screw Connection	.24	.17	.142	.134
860-0171	85T	2⅝"	Tip-Clip	.31	.22	.184	.175

SLIP-ON INSULATORS FOR CLIPS

K Tough, flexible vinyl insulators for above clips. Offer high dielectric strength; resistant to oils and grease. Cover entire clip except for end of nose. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Color	Use With Series	EACH 1-9	10-99	100-499	500-Up
860-0015	13	Red	11	.86	.60	.52	.49
860-0013	13	Black	11	.86	.60	.52	.49
860-0030	23	Red	21	.47	.33	.28	.27
860-0028	23	Black	21	.47	.33	.28	.27
860-0042	26	Red	24, 25	.29	.20	.17	.16
860-0040	26	Black	24, 25	.29	.20	.17	.16
860-0050	29	Red	27	.19	.13	.12	.11
860-0048	29	Black	27	.19	.13	.12	.11
860-0058	32	Red	30	.05	.03	.03	.02
860-0056	32	Black	30	.05	.03	.03	.02
860-0070	36	Red	34	.05	.03	.03	.02
860-0068	36	Black	34	.05	.03	.03	.02
860-0095	47	Red	45	.08	.05	.05	.04
860-0093	47	Black	45	.08	.05	.05	.04
860-0103	49	Red	48, 50	.12	.09	.07	.06
860-0101	49	Black	48, 50	.12	.09	.07	.06
860-0135	62	Red	60, 70	.06	.04	.04	.03
860-0133	62	Black	60, 70	.06	.04	.04	.03
860-0160	72	Red	70	.06	.04	.04	.03
860-0158	72	Black	70	.06	.04	.04	.03
860-0177	87	Red	85	.08	.05	.05	.04
860-0175	87	Black	85	.08	.05	.05	.04

"HIPPO" AND "PIGMY HIPPO-CLIPS"

Strong full-channel-constructed plier clips with two vinyl insulating sleeves. Handles are full size to the end for greater strength and current capacity. Standard "Hippos" are 6" long, have 1 9/16" jaw opening. "Pigmy-Hippos" are 3" long, have 1⅛" jaw opening. Built-in solder strap and cable clinching ears. Bright copper-plated steel. Type 41A is standard size; Type 46A, "Pigmy." Wt. per 100: *41 lbs.; †5¾ lbs.

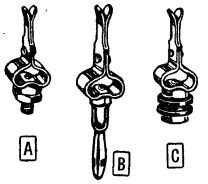
Stock No.	Mfr's Type	Amps	Sleeve Color	Marking	EACH
860-0077	41A*	100	Black	minus sign	.87
860-0079	41A*	100	Red	plus sign	.87
860-0089	46A†	50	Black	unmarked	.24
860-0091	46A†	50	Red	unmarked	.24

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Test Leads—Clips—Jacks and Holders

GRAYHILL

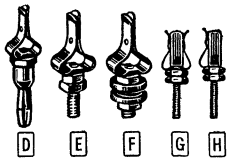
STANDARD TEST CLIPS



Test clips for panel mounting on test equipment. Permits rapid connection of wires or pigtail components. Type 2-0: for panels to ¼″ thick. Has 8-32 stud. Type 2-1: converts banana jack to test clip. Type 2-4: same as Type 2-0, but with insulated washers. Shpg. wt., per pkg., 6 oz.

Stock No.	Mfr's Type	Fig.	Description	Total Lgth.	EACH 1-9	EACH 10-Up
801-0001	2-0	A	Threaded Stud	1.56″	.37	.25
801-0002	2-1	B	Banana Plug	2.06″	.60	.40
801-0004	2-4	C	Threaded Stud w/washer	1.56″	.60	.40

MINIATURE TEST CLIPS



Miniature version of above—extend only ¾″ above mounting panel. Hex nut under clip permits tension adjustment. Nickel-plated brass or steel. Type 2-21: min. clip on std. banana plug. Type 2-20: for up to ¼″ panels. Has 6-32 stud. Type 2-24: as 2-20, but with ins. washers. Wt. ½ oz.

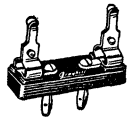
801-0021	2-21	D	Banana Plug	1.50″	.67	.45
801-0020	2-20	E	Threaded Stud	1.13″	.37	.25
801-0024	2-24	F	Threaded Stud w/washer	1.50″	.60	.40

G H ULTRAMINIATURE TEST CLIPS

Tiny test clips require panel area of only 3/16x⅛″ for single clip; ¼x⅛″ for double clip. ⅜″ long 2-56 mtg. stud. Av. wt., 3 oz.

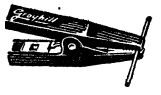
801-0042	2-42	G	Double Clip	.79″	.47	.30
801-0041	2-41	H	Single Clip	.79″	.37	.25

TEST CLIP ADAPTER



TYPE 2-2. For testing resistors, capacitors and other pigtail components. Plugs into std. banana jacks mounted on ¾″ centers; spring clips accept wire leads. Metal parts are nickel plated. Hex nut permits tension adjustment of individual clips which extend 1⅛″ above board. Board is molded phenolic to MIL-M-14. Shpg. wt., 2 oz.
801-0003. 1-9....Each 2.60 10-Up....Each 1.75

INSULATED TEST CLIPS



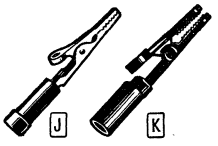
TYPE 16. Molded parts are phenolic to MIL-M-14. .008″ silver overlay at point of contact. Contact res., .0015 ohm. Silver-plated brass terminals. 500-V insulation test. 2″ long. 1 oz.
801-0351. Red. 801-0352. Black. 1-9..Each 2.00 10-Up..Each 1.40

RAYTHEON TEST JACKS

Top-quality test jacks for standard .080″ diameter test prods. Meet MIL-MS-16108 rev. F specifications. Use threaded nickel-plated brass sleeve for mounting; beryllium-copper spring pin contacts. Mount securely with nut and washer. All are nylon insulated. Shpg. wt. pkg. of 25, 1 lb.

Stock No.	Mfr's Type	Color Type	Mtg. Hole	EACH 1-24	EACH 25-99	EACH 100-499	EACH 500-Up
904-0995	TJ-103R	Red	¼″	.47	.29	.25	.23
904-0997	TJ-105BL	Black	¼″	.47	.29	.25	.23
904-0999	TJ-018W	White	¼″	.47	.29	.25	.23

H. H. SMITH INSULATED ALLIGATOR CLIPS

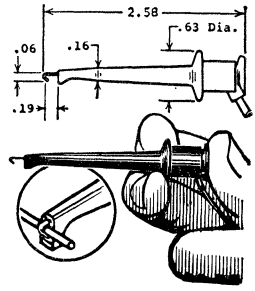


All have plastic insulated handles. Types 304, 305, and 310 are Figure J, others are Fig. K. Clips are cadmium plated steel. Rated at 5 amperes. 336 and 337 are all insulated to prevent shock or grounding. All accept standard tip plug except *tip and †banana plug. ‡Threaded insert to accept standard solderless tips. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-49	EACH 50-99	EACH 100-249	EACH 250-499	EACH 500-Up
920-0405	*304*	*Red*	*With tip jack adapter*	.56	.42	.36	.35	.34
920-0406	*304*	*Black*	*With tip jack adapter*	.56	.42	.36	.35	.34
920-0407	*305	Red	With tip & banana jack	.67	.50	.43	.42	.41
920-0408	*305	Black	With tip & banana jack	.67	.50	.43	.42	.41
920-0413	‡310	Silver	With tip jack adapter	.23	.18	.15	.14	.13
920-0436	336	Red	With tip jack adapter	.62	.46	.40	.39	.38
920-0437	336	Black	With tip jack adapter	.62	.46	.40	.39	.38
920-0438	†*337*	*Red*	*With banana plug adapt.*	.41	.31	.28	.26	.25
920-0439	†*337*	*Black*	*With banana plug adapt.*	.41	.31	.28	.26	.25

POMONA

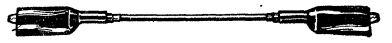
MINI-TEST CLIPS



Miniature test clips for making rapid and reliable tests. Plunger-type action. Conductor is gold-plated berylium copper. Nylon insulation molded directly onto clip and wire providing a strong, reliable integral unit. Clip is completely insulated to point of connection. Operating temp for all clips: −25°C to +105°C. Av. shpg. wt. 0 oz. Last Two Digits in Mfr's Type No. Indicates Length in Inches.

Stock No.	Mfr's Type	Color	Termination	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-Up
885-0900	3780-12	Black	One End Only	1.12	.75	.68	.64
885-0901	3780-12	Red	One End Only	1.12	.75	.68	.64
885-0902	3780-24	Black	One End Only	1.12	.75	.68	.64
885-0903	3780-24	Red	One End Only	1.12	.75	.68	.64
885-0904	3780-48	Black	One End Only	1.25	.80	.73	.69
885-0905	3780-48	Red	One End Only	1.25	.80	.73	.69
885-0910	3781-12	Black	Both Ends	2.25	1.50	1.35	1.28
885-0911	3781-12	Red	Both Ends	2.25	1.50	1.35	1.28
885-0912	3781-24	Black	Both Ends	2.25	1.50	1.35	1.28
885-0913	3781-24	Red	Both Ends	2.25	1.50	1.35	1.28
885-0914	3781-48	Black	Both Ends	2.38	1.55	1.40	1.33
885-0915	3781-48	Red	Both Ends	2.38	1.55	1.40	1.33
885-0920	3782-12	Black	To Stacking Banana Plug	1.88	1.25	1.13	1.06
885-0921	3782-12	Red	To Stacking Banana Plug	1.88	1.25	1.13	1.06
885-0922	3782-24	Black	To Stacking Banana Plug	1.88	1.25	1.13	1.06
885-0923	3782-24	Red	To Stacking Banana Plug	1.88	1.25	1.13	1.06
885-0924	3782-48	Black	To Stacking Banana Plug	2.00	1.30	1.18	1.11
885-0925	3782-48	Red	To Stacking Banana Plug	2.00	1.30	1.18	1.11
885-0930	3783-12	Black	To .025 Sq. Pin Receptacle	1.88	1.25	1.13	1.06
885-0931	3783-12	Red	To .025 Sq. Pin Receptacle	1.88	1.25	1.13	1.06
885-0932	3783-24	Black	To .025 Sq. Pin Receptacle	1.88	1.25	1.13	1.06
885-0933	3783-24	Red	To .025 Sq. Pin Receptacle	1.88	1.25	1.13	1.06
885-0934	3783-48	Black	To .025 Sq. Pin Receptacle	2.00	1.30	1.18	1.11
885-0936	3783-48	Red	To .025 Sq. Pin Receptacle	2.00	1.30	1.18	1.11

POMONA

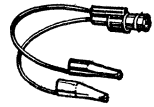


INSULATED ALLIGATOR CLIP LEADS

TYPE AL-B. Cadmium-plated steel alligator clips. #18 gauge wire; polyvinyl insulation. −25°C to +105°C. Shpg. wt. 3 oz.

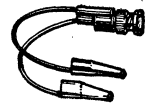
Stock No.	Mfr's Type	Insl. Color	Lgth. In.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-Up
885-0003	AL-B-24	Black	24	1.65	1.10	.99	.94
885-0004	AL-B-24	Red	36	1.65	1.10	.99	.94
885-0006	AL-B-36	Black	36	1.65	1.10	.99	.94
885-0007	AL-B-36	Red	36	1.65	1.10	.99	.94

MODEL 2886 BNC PLUG TO TEST CLIPS



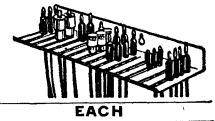
Molded "breakout" converts coax to test cable. Tough thermoplastic insulation molded to connector and wire. BNC plug connector; two minigator clips of cadmium-plated steel with black and red vinyl insulators. #20 wire, 7″ long, polyvinyl ins. 500 V peak. Wt. 2 oz.
885-0654. 1-9.. Each 6.75 10-24...Each 4.50
25-49.....Each 4.05 50-Up...Each 3.83

BNC RECEPTACLE TO TEST CLIPS



TYPE 2631. BNC receptacle UG1094/U with tough thermoplastic molded insulation. Two cadmium plated steel minigator test clips; black and red insulators. #20 wire. 500V peak. 3 oz.
885-0625. 1-9..Each 5.17 10-24...Each 3.45
25-49.....Each 3.10 50-Up..Each 2.93

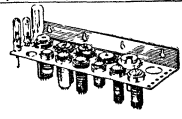
TEST-LEAD HOLDERS



File your test leads within easy reach. Cold-rolled steel, baked enamel finish. Mount easily. For cable sizes indicated below. 11x3½″ wide. Shpg. wt., 14 oz.

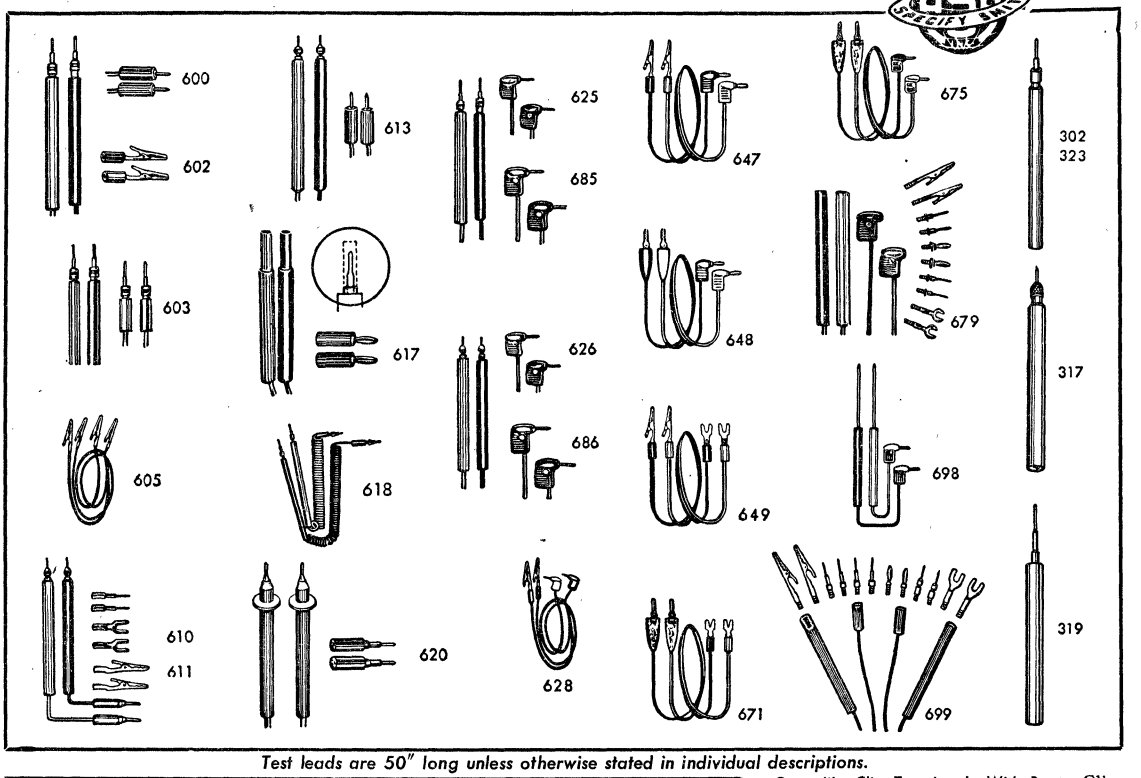
Stock No.	Mfr's Type	Cable Dia.	Color	EACH 1-4	EACH 5-24	EACH 25-49	EACH 50-Up
885-0382	1508	.210″	Orange	4.42	2.95	2.65	2.51
885-0631	2708	.450″	Blue	4.42	2.95	2.65	2.51

SOCKET-ADAPTER AND TOOL HOLDER



MODEL 2898. Holds seven ⅞″ and six 1 9/32″ socket adapters plus 12 service tools. Steel, baked green enamel. 3½x11″. Shpg. wt. 14 oz.
885-0660. 1-4..Ea. 3.75 5-Up..Ea. 2.50

H. H. Smith Test Leads



Test leads are 50″ long unless otherwise stated in individual descriptions.

No. 20 stranded, rubber-covered wire 50″ long (unless otherwise stated). 5000 V test. Handles, plugs: molded butyrate per MIL-L-P349A, Type 3, Class MS; fiber per MIL-F-1148A, Grade CH; molded thermosetting plastic per MIL-P-14CFG. Av., 5 oz.

Solderless Tip Test Leads. Prods are 4″ long with 3/8″ O.D. Have molded butyrate handle and nickel-plated brass tip. **Per Pair.**

Stock No.	Mfr's Type	Meter End	EACH 1-11	EACH 12-Up
920-0600	600	phone tips	1.05	.95
920-0602	602	alligator clips	1.10	.99

Type 603 All Solderless Test Leads. 4″ prod has 3/8″ O.D., butyrate handle. Thermosetting plug. Nickel/brass tip. **Per Pair.**
920-0603. 1-11..Ea. 1.35 12-Up..Ea. 1.22

Alligator Clip Test Leads. Cadmium-plated steel clips. *Have vinyl plastic boots. Types 716, 717, 718 have midget clips. **Per Pair.**

Stock No.	Mfr's Type	Wire Length	EACH 1-11	EACH 12-49
920-0605	605	24″	.85	.78
920-0629	629*	12″	.92	.83
920-0657	657*	24″	.96	.86
920-0716	716*	12″	.92	.83
920-0717	717*	18″	.94	.85
920-0718	718*	24″	.96	.86

Test Lead Kits. 4″ molded tenite handles have 3/8″ O.D. Prods have banana plugs at one end .610 has solderless phone tip; 611 has needle tip. Each kit contains these fittings for snapping onto banana plugs: 2 phone tips, 2 alligator clips, 2 spade lugs.

Stock No.	Mfr's Type	EACH 1-5	EACH 6-11	EACH 12-Up
920-0610	610	2.56	2.10	1.89
920-0611	611	2.56	2.10	1.89

Type 613 Phone Tips. Prods are 4″ long with 3/8″ O.D. Have molded butyrate handle, nickel-plated brass body and nickel-plated steel needle. **Per Pair.**
920-0613. 1-11..Ea. 1.05 12-49..Ea. .95

Type 617 Banana Plugs. Plugs insert flush to insulated molded butyrate handle; 3x7/16″ diameter prods have retractable cover. There are no exposed metal parts. Nickel-plated brass tip. **Per Pair.**
920-0617. 1-11..Ea. 2.00 12-Up..Ea. 1.80

Type 618 Retractile Solderless Test Leads. 12″ stretch coil extends to 6′. Solderless, nickel-plated brass phone tips both ends. Molded butyrate handles. Molded thermosetting plugs. 4000 V; nom. O.D. .165″. **Per Pair.**
920-0618. 1-11..Ea. 4.00 12-Up..Ea. 3.60

Type 620 Insulated Phone Tips. 5″ long prod has 1/2″ O.D., fiber handle, nickel/brass tip and finger guard. Fiber plug. **Per Pair.**
920-0620. 1-11..Ea. 2.30 12-Up..Ea. 2.07

Meter Test Leads With Solderless Prods. 4″ prod has butyrate handle with 3/8″ O.D. Nickel-plated brass tip and body. Molded thermosetting plastic elbow. Banana meter tip has 4-leaved phosphor-bronze nickel-plated spring. **Per Pair.**

Stock No.	Mfr's Type	Meter End	EACH 1-11	EACH 12-Up
920-0625	625	phone tip	2.02	1.50
920-0685	685	banana tip	2.10	1.70

Meter Test Leads With Needle Prods. Same as meter test leads above, but with nickel-plated steel needle prods. **Per Pair.**

920-0626	626	phone tip	2.02	1.50
920-0686	686	banana tip	2.10	1.70

Alligator Clip Test Leads. Cadmium-plated steel alligator clips have molded butyrate handles. Molded thermosetting plastic elbows* and meter plugs. **Per Pair.**

920-0628	628*	tip plugs	1.62	1.20
920-0647	647*	banana plugs	1.75	1.30
920-0649	649	spade lugs	1.62	1.20

Crocodile Clip Test Leads With Boots. Clips are cadmium/steel. *Butyrate handles. Vinyl boots. †Thermosetting elbows. **Per Pair.**

Stock No.	Mfr's Type	Meter End	EACH 1-11	EACH 12-Up
920-0648	648†	banana plugs	1.75	1.30
920-0671	671*	spade lugs	1.62	1.20
920-0675	675†	tip plugs	1.62	1.20

Universal Test Lead Kits. Completely interchangeable—50 leads in one! All parts adapt into handles supplied. Leads, 54 3/4″. Type 699 std. kit comes with 12 testing tips and connectors; Type 679 miniature kit, with 10 miniature accessories.
920-0679. 679.1-11 Ea. 4.05 12-Up Ea. 3.65
920-0699. 699.1-11 Ea. 4.05 12-Up Ea. 3.65

Type 698 "Slim Jim" Test Leads. 4″ butyrate prod is 3/8″ O.D.; has 3 1/2″ cadmium-plated steel tip, vinyl tubing. Thermosetting elbows have phone tips. **Per Pair.**
920-0698. 1-11..Ea. 1.82 12-Up..Ea. 1.35

302 Solderless Prod. Threaded, 4″ plastic handle, 3/8″ dia. Nickel-plated phone tip.
920-0402. *Red.* 920-0403. *Black.* 6 oz.
1-24.....Each .30 25-49...Each .29
50-99.....Each .27 100-Up.....Each .26

323 Solderless Prod. Bone fiber handle, molded to nickel-plated brass tip. .245 inside dia.—for heavy-duty wire. 5 7/32″ long.
920-0327. *Red.* 920-0328. *Black.* 8 oz.
1-24.....Each .35 25-49...Each .34
50-99.....Each .33 100-Up.....Each .32

317 Phono Needle Prod. Brass, nickel-plated body with replaceable steel phono-type needle. Plastic handle. 4 13/16″ long. 4 oz.
920-0420. *Red.* 920-0421. *Black.*
1-24.....Each .33 25-49...Each .32
50-99.....Each .30 100-Up.....Each .29

319 Heavy-Duty Prod. Threaded. Brass, nickel-plated tip. Plastic handle. 5 3/16″ long.
920-0424. *Red.* 920-0423. *Black.* 8 oz.
1-24.....Each .30 25-49...Each .29
50-99.....Each .27 100-Up.....Each .26

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

CINCH Barrier Blocks and Strips

SERIES 500 BARRIER BLOCKS

High, wide barriers permit high-voltage ratings. Material between the terminals at the base strengthens the entire strip and maintains same contact-to-contact and contact-to-ground creepage distance. Minimum warpage and shrinkage. Designations can be printed on base. Closed bottoms require no insulation. Knockouts in base can be removed for "Y" terminals.

Series 540. Have double 5-40x3/16" binder, head screw terminals. Creepage distance is 1/2". 1 1/8" wide by 39/64" high. Terminals are 3/8" center to center with .160" diameter holes. Av. wt. 14 oz. **Current 15 amps, 2300 volts.**

Stock No.	Mfr's Type	Terminals	EACH 1-24	25-49	50-99	100-249	250-Up
750-1356	*2-540*	*2*	.57	.44	.38	.30	.29
750-1405	*3-540*	*3*	.77	.62	.50	.41	.39
750-1450	*4-540*	*4*	.95	.75	.63	.49	.47
750-1495	5-540	5	.99	.78	.66	.51	.49
750-1540	*6-540*	*6*	1.11	.88	.75	.60	.58
750-1584	7-540	7	1.22	1.01	.83	.67	.64
750-1629	*8-540*	*8*	1.40	1.11	.95	.75	.71
750-1672	9-540	9	1.52	1.22	1.03	.81	.78
750-1712	*10-540*	*10*	1.68	1.34	1.11	.88	.84
750-1788	12-540	12	1.94	1.55	1.31	1.04	1.00
750-1867	14-540	14	2.23	1.79	1.49	1.19	1.13
750-1905	15-540	15	2.36	1.89	1.58	1.25	1.20
750-1936	16-540	16	2.51	2.01	1.68	1.34	1.27
750-1997	18-540	18	2.79	2.23	1.86	1.48	1.42
750-2046	*20-540*	*20*	3.06	2.46	2.06	1.64	1.55
750-2067	22-540	22	3.34	2.67	2.23	1.79	1.70
750-2075	24-540	24	3.62	2.90	2.43	1.92	1.84
750-2085	26-540	26	3.91	3.12	2.60	2.09	1.97
750-2094	30-540	30	4.45	3.57	2.97	2.37	2.26
750-2097	31-540	31	4.60	3.68	3.06	2.46	2.32

Series 541. Have double 6-32x1/4" binder head screw terminals. Creepage distance is 5/8". 1 3/8" wide by 11/16" high. Terminals are 7/16" center to center with .175-.180" diameter holes. Wt., 14 oz. **Rating 20 amps, 2800 volts, RMS.**

Stock No.	Mfr's Type	Terminals	1-24	25-49	50-99	100-249	250-Up
750-1357	*2-541*	*2*	.69	.57	.46	.37	.36
750-1406	3-541	3	.83	.67	.56	.44	.42
750-1451	4-541	4	.99	.78	.66	.51	.49
750-1496	5-541	5	1.11	.88	.75	.60	.58
750-1541	*6-541*	*6*	1.25	1.01	.83	.67	.64
750-1585	7-541	7	1.43	1.13	.96	.76	.72
750-1630	8-541	8	1.55	1.24	1.04	.82	.79
750-1713	*10-541*	*10*	1.84	1.47	1.22	.99	.95
750-1789	12-541	12	2.16	1.72	1.43	1.13	1.08
750-1868	14-541	14	2.43	1.92	1.61	1.29	1.22
750-1937	16-541	16	2.69	2.15	1.80	1.44	1.37
750-1998	18-541	18	2.98	2.38	2.00	1.59	1.51
750-2047	20-541	20	3.28	2.61	2.18	1.75	1.66
750-2068	22-541	22	3.58	2.86	2.38	1.90	1.82
750-2076	24-541	24	3.85	3.09	2.57	2.06	1.94
750-2086	26-541	26	4.13	3.31	2.76	2.21	2.10
750-2095	30-541	30	4.71	3.76	3.14	2.52	2.38

Series 542. Have double 8-32x5/16" binder head screw terminals. Creepage distance is 3/4". 1 5/8" wide by 7/8" high. Wt. 14 oz. **Rating 30 amps, 4000 volts RMS.**

Stock No.	Mfr's Type	Terminals	1-24	25-49	50-99	100-249	250-Up
750-1358	2-542	2	.75	.60	.49	.40	.38
750-1452	4-542	4	1.11	.88	.75	.60	.58
750-1542	6 542	6	1.48	1.18	1.00	.79	.75
750-1631	8-542	8	1.86	1.48	1.23	1.00	.95
750-1714	10-542	10	2.23	1.79	1.48	1.18	1.12
750-1790	12-542	12	2.59	2.08	1.73	1.39	1.32
750-1869	14-542	14	2.96	2.37	1.97	1.58	1.50
750-1938	16-542	16	3.34	2.67	2.23	1.79	1.70
750-1999	18-542	18	3.71	2.96	2.48	1.97	1.88
750-2048	20-542	20	4.08	3.27	2.73	2.18	2.08
750-2069	22-542	22	4.45	3.57	2.97	2.37	2.26
750-2087	26-542	26	5.20	4.16	3.47	2.77	2.63

SERIES 150 BAKELITE BARRIER BLOCKS

Barriers with nickel-plated brass screws. Fit 50-amp solder lugs—#6 stranded wire. 10-32x5/16" terminals on 1 1/16" ctrs. 3/4x1 13/16". Wt. 6 oz. **Ratings: 50 amps, 1700/2600 volts RMS.***

Stock No.	Mfr's Type	Terminals	1-24	25-49	50-99	100-249	250-Up
750-1309	2-150	2	.83	.67	.57	.44	.42
750-1374	3-150	3	1.17	.95	.78	.63	.60
750-1419	4-150	4	1.51	1.21	1.02	.80	.77
750-1464	5-150	5	1.86	1.48	1.23	1.00	.95
750-1509	6-150	6	2.19	1.76	1.47	1.17	1.11
750-1554	7-150	7	2.54	2.03	1.70	1.35	1.29
750-1599	8-150	8	2.89	2.30	1.92	1.53	1.46
750-1684	10-150	10	3.57	2.86	2.38	1.90	1.81

SERIES 140-Y, 141-Y, 142-Y BARRIER BLOCKS

Barriers between each terminal provide increased insulation; follow edge of strips and terminate at base. Molded bakelite base. All have brass solder terminals with hot-tin dipped finish. Size: Series 140-Y, 7/8" wide x 5/8" high; 141-Y, 1 1/8" wide x 1/2" high; 142-Y, 1 5/16" wide x 5/8" high.

Series 140-Y. Leakage path between terminals, 3/8". Designed for use with Series 160 fanning strips on page 338. Av. wt. 5 oz. **Ratings: 15 amps, 1100/1200 volts RMS*.**

Stock No.	Mfr's Type	Terminals	EACH 1-24	25-49	50-99	100-249	250-Up
750-1302	*2-140-Y*	*2*	.30	.24	.21	.17	.16
750-1367	3-140-Y	3	.37	.30	.25	.23	.21
750-1412	*4-140-Y*	*4*	.50	.41	.35	.27	.26
750-1457	*5-140-Y*	*5*	.63	.49	.42	.34	.33
750-1502	*6-140-Y*	*6*	.77	.62	.50	.41	.37
750-1547	7-140-Y	7	.84	.68	.58	.44	.42
750-1592	*8-140-Y*	*8*	.97	.77	.65	.50	.48
750-1637	9-140-Y	9	1.08	.85	.72	.59	.55
750-1677	*10-140-Y*	*10*	1.19	.97	.80	.64	.61
750-1722	11-140-Y	11	1.29	1.04	.86	.69	.66
750-1758	*12-140-Y*	*12*	1.42	1.12	.96	.76	.71
750-1802	13-140-Y	13	1.52	1.22	1.03	.81	.78
750-1837	14-140-Y	14	1.65	1.32	1.10	.87	.83
750-1877	15-140-Y	15	1.76	1.41	1.17	.95	.88
750-1910	16-140-Y	16	1.86	1.49	1.24	1.00	.96
750-1978	18-140-Y	18	2.10	1.68	1.40	1.11	1.06
750-2002	19-140-Y	19	2.19	1.76	1.47	1.17	1.11
750-2026	*20-140-Y*	*20*	2.30	1.85	1.53	1.22	1.17
750-2052	21-140-Y	21	2.44	1.94	1.63	1.29	1.23

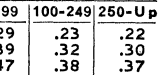
Series 141-Y. Leakage path, 7/16". For Series 161 fanning strips, listed on page 338. Av. shpg. wt. 5 oz. **20 amps, 1100/1600 volts rms.***

750-1305	2-141-Y	2	.37	.29	.24	.22	.21
750-1370	3-141-Y	3	.51	.41	.35	.27	.26
750-1415	4-141-Y	4	.68	.55	.45	.36	.35
750-1460	5-141-Y	5	.82	.66	.55	.43	.41
750-1505	6-141-Y	6	.96	.76	.64	.49	.47
750-1550	7-141-Y	7	1.11	.88	.75	.60	.58
750-1595	8-141-Y	8	1.24	1.00	.83	.67	.64
750-1640	9-141-Y	9	1.39	1.10	.92	.74	.70
750-1680	10-141-Y	10	1.53	1.22	1.03	.82	.78
750-1761	12-141-Y	12	1.83	1.46	1.21	.98	.92
750-1840	14-141-Y	14	2.13	1.71	1.43	1.13	1.08
750-1880	15-141-Y	15	2.27	1.82	1.51	1.21	1.14
750-1913	16-141-Y	16	2.44	1.94	1.63	1.29	1.23
750-1981	18-141-Y	18	2.73	2.18	1.83	1.46	1.39
750-2029	*20-141-Y*	*20*	3.03	2.44	2.03	1.63	1.53

Series 142-Y. Leakage path, 9/16". For Series 162 fanning strips, listed on page 338. **Rating 30 amps, 1600/2500 volts RMS.*** Av. shpg. wt. 5 oz.

750-1324	2-142-Y	2	.44	.36	.29	.25	.24
750-1418	4-142-Y	4	.82	.66	.55	.43	.41
750-1463	5-142-Y	5	1.00	.79	.67	.53	.49
750-1508	6-142-Y	6	1.19	.96	.79	.64	.61
750-1553	7-142-Y	7	1.38	1.09	.91	.74	.69
750-1558	8-142-Y	8	1.54	1.23	1.04	.81	.78
750-1683	10-142-Y	10	1.92	1.53	1.28	1.03	.98
750-1728	11-142-Y	11	2.10	1.69	1.41	1.11	1.06
750-1764	12-142-Y	12	2.28	1.83	1.52	1.21	1.16
750-1843	14-142-Y	14	2.65	2.12	1.77	1.42	1.35
750-1916	16-142-Y	16	3.02	2.44	2.03	1.61	1.53
750-1953	17-142-Y	17	3.21	2.56	2.14	1.72	1.63

SERIES 171, 172, 173 MINIATURE BARRIER STRIP



Series 171 single 2-56x3/16" binding head screw terminals on 1/4" ctrs.; 5/16x1 3/32". Series 172 double 2-56x3/16" screw terminals on 1/4" ctrs.; 5/8x5/16". Series 173 single 4-40x5/16" screw terms. on 3/8" ctrs.; 3/8x1/2" closed back. **1000 Volts rms, current depends on size wire used.** Av. shpg. wt. 5 oz.

Stock No.	Mfr's Type	Terminals	EACH 1-24	25-49	50-99	100-249	250-Up
750-1443	4-171	4	.43	.35	.29	.23	.22
750-1533	6-171	6	.60	.46	.39	.32	.30
750-1622	8-171	8	.71	.59	.47	.38	.37
750-1444	4-172	4	.80	.65	.53	.42	.41
750-1534	6-172	6	1.08	.85	.72	.59	.55
750-1623	8-172	8	1.37	1.08	.89	.72	.69
750-1706	10-172	10	1.64	1.32	1.09	.86	.83
750-1784	12-172	12	1.91	1.52	1.28	1.03	.98
750-1863	14-172	14	2.19	1.75	1.46	1.17	1.11
750-1354	2-173	2	.29	.23	.20	.16	.15
750-1448	4-173	4	.51	.42	.36	.28	.27
750-1538	6-173	6	.75	.60	.49	.40	.38
750-1627	8-173	8	.97	.76	.64	.50	.47
750-1710	10-173	10	1.17	.95	.78	.63	.60

*Second Voltage Ratings Listed are with Marker Strip

Terminal, Fanning, Marker Strips

SERIES 140, 141, 142 BARRIER-TYPE TERMINALS

Barriers interposed between terminal positions for more insulation. Follow edge of strips, terminate at base. Insure positive contact with strips at right. Series 140, 5-40x3/16" binder-head screws; 141, 6-32x1/4"; 142, 8-32x5/16".

Series 140. Leakage path between terminals is 3/8". Base is 7/8" wide x 5/8" high. Use with Series 160 fanning strips. Av. wt., 14 oz.

15 AMPS, 1100/1200 VOLTS RMS*

Stock No.	Mfr's Type	Terminals	EACH 1-24	25-49	50-99	100-249	250-Up
750-1300	1-140	1	.20	.16	.14	.12	.11
750-1316	*2-140*	*2*	.24	.20	.17	.14	.13
750-1365	*3-140*	*3*	.28	.23	.19	.16	.15
750-1410	*4-140*	*4*	.36	.28	.24	.20	.19
750-1455	*5-140*	*5*	.44	.35	.29	.25	.24
750-1500	*6-140*	*6*	.51	.41	.35	.28	.27
750-1545	*7-140*	*7*	.60	.47	.40	.32	.30
750-1590	*8-140*	*8*	.68	.55	.45	.36	.35
750-1635	9-140	9	.76	.61	.49	.40	.38
750-1675	*10-140*	*10*	.83	.67	.57	.44	.42
750-1720	11-140	11	.89	.72	.61	.47	.45
750-1756	*12-140*	*12*	1.00	.79	.66	.51	.49
750-1800	13-140	13	1.06	.84	.71	.58	.53
750-1835	14-140	14	1.14	.91	.77	.62	.59
750-1875	15-140	15	1.22	.99	.81	.65	.63
750-1908	*16-140*	*16*	1.29	1.04	.86	.69	.66
750-1945	17-140	17	1.38	1.09	.91	.74	.69
750-1976	18-140	18	1.45	1.16	.98	.77	.74
750-2000	19-140	19	1.52	1.21	1.02	.81	.77
750-2024	*20-140*	*20*	1.59	1.28	1.07	.84	.81
750-2050	*21-140*	*21*	1.69	1.35	1.12	.88	.84

Series 141. Leakage path between terminals is 7/16". Base is 1 1/8" wide x 1/2" high. Use with Series 161 fanning strips. Av. wt., 14 oz.

20 AMPS, 1100/1600 VOLT RMS*

750-1319	*2-141*	*2*	.26	.20	.17	.14	.13
750-1368	*3-141*	*3*	.34	.27	.23	.18	.17
750-1413	*4-141*	*4*	.45	.36	.31	.25	.24
750-1458	*5-141*	*5*	.57	.43	.37	.30	.28
750-1503	*6-141*	*6*	.63	.49	.42	.34	.32
750-1548	7-141	7	.74	.60	.49	.39	.37
750-1593	*8-141*	*8*	.82	.66	.56	.44	.42
750-1638	9-141	9	.92	.73	.62	.48	.46
750-1878	10-141	10	1.02	.81	.68	.55	.52
750-1911	11-141	11	1.10	.88	.74	.60	.57
750-1759	*12-141*	*12*	1.19	.96	.79	.64	.61
750-1803	13-141	13	1.30	1.03	.85	.69	.66
750-1838	14-141	14	1.39	1.10	.93	.74	.70
750-1878	*15-141*	*15*	1.47	1.17	.99	.78	.74
750-1911	*16-141*	*16*	1.57	1.26	1.05	.83	.79
750-1948	17-141	17	1.67	1.33	1.11	.90	.83
750-1979	18-141	18	1.76	1.41	1.17	.94	.90
750-2003	19-141	19	1.85	1.48	1.25	.99	.95
750-2027	*20-141*	*20*	1.96	1.56	1.31	1.04	.99

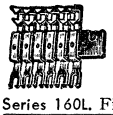
Series 142. Leakage path between terminals is 9/16". Base is 1 5/16" wide x 5/8" high. Use with Series 162 fanning strips. Av. wt., 14 oz.

30 AMPS, 1600/2500 VOLTS RMS*

750-1322	*2-142*	*2*	.32	.25	.21	.17	.16
750-1371	3-142	3	.43	.34	.28	.23	.22
750-1416	*4-142*	*4*	.58	.45	.38	.30	.29
750-1461	5-142	5	.69	.55	.45	.37	.35
750-1506	*6-142*	*6*	.81	.65	.55	.43	.41
750-1551	7-142	7	.95	.75	.63	.49	.47
750-1596	8-142	8	1.06	.84	.70	.57	.53
750-1641	9-142	9	1.17	.95	.78	.63	.60
750-1681	*10-142*	*10*	1.31	1.05	.86	.69	.66
750-1726	11-142	11	1.43	1.13	.96	.76	.72
750-1762	*12-142*	*12*	1.54	1.23	1.04	.81	.78
750-1806	13-142	13	1.68	1.34	1.11	.88	.84
750-1841	14-142	14	1.80	1.54	1.20	.97	.91
750-1881	15-142	15	1.92	1.53	1.28	1.03	.98
750-1914	*16-142*	*16*	2.06	1.64	1.38	1.09	1.04
750-1951	17-142	17	2.17	1.74	1.45	1.16	1.10

*Higher Rating Measured With Marker Strip

FANNING STRIPS



Laminated 3/32" bakelite strips; hole in either end for fastening the cable with a clamp or lacing twine assures positive connections. Left hand mtg. .032" cadmium-plated brass terminals. 2 thru 20 terminals are available in all series. Prefix in Type no. indicates no. of terminals.

Series 160L. Fit Series 140 barrier terminals on 3/8" ctrs. 1/2" wide.

Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-Up
750-1519	6-160L	.55	.44	.37	.28	.27
750-1563	7-160L	.63	.50	.41	.33	.32
750-1608	8-160L	.69	.55	.46	.38	.35
750-1652	9-160L	.79	.63	.54	.41	.40
750-1692	10-160L	.87	.70	.59	.46	.42
750-1771	*12-160L*	1.08	.86	.72	.58	.55

FANNING STRIPS (Cont'd)

Series 161L. Fit Series 141 barrier terminals on 7/16" ctrs. 5/8" wide.

Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-Up
750-1433	4-161L	.41	.33	.28	.23	.22
750-1478	5-161L	.50	.40	.35	.27	.26
750-1612	8-161L	.72	.58	.48	.39	.38
750-1696	10-161L	.89	.72	.60	.48	.45
750-1775	12-161L	1.11	.88	.75	.59	.57

Series 162L. Fit Series 142 barrier terminals on 9/16" ctrs. 5/8" wide.

750-1616	8-162L	.79	.63	.54	.41	.40
750-1700	10-162L	.95	.75	.63	.50	.48
750-1779	12-162L	1.17	.95	.79	.63	.60

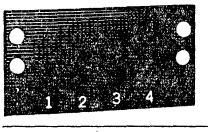
ADAPTER SOLDER TERMINALS FOR BARRIER BLOCKS

"Y" "3/4 W" "141J, 95B"

Permit topside or underside solder connections to barrier blocks. Types 3/4W and W for topside; Type Y for underside. Types 141-J and 95B are jumpers used for making permanent connections between adjacent barrier block terminals. Tinned brass. Wt., 1 oz.

Stock No.	Mfr's Type	For Series	EACH 1-24	25-49	50-99	100-249	250-Up
750-0809	*3/4W-140*	*140*	.12	.11	.10	.09	.08
750-0810	*3/4W-141*	*141*	.12	.11	.10	.09	.08
750-0811	3/4W-142	142	.14	.12	.11	.10	.09
750-0800	W-10	140	.12	.11	.10	.09	.08
750-0806	*Y-140*	*140*	.12	.11	.10	.09	.08
750-0807	*Y-141*	*141*	.12	.11	.10	.09	.08
750-0808	Y-142	142	.14	.12	.11	.10	.09
750-1249	*141-J*	*140 & 141*	.11	.094	.081	.067	.053
750-1240	*95B*	*142*	.21	.157	.133	.12	.109

MARKER STRIPS



Used for labeling terminal positions on barrier strips. Also act as insulators. 1/32" black fiber. Mounting holes match those in corresponding barrier strips. Middle figure in Type No. indicates number of contacts; last 3 figures indicate barrier series. Strips are numbered sequentially from 1 with white numerals. 1 oz.

Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-Up
750-0250	MS-2-140	.13	.10	.09	.08	.07
750-0260	MS-3-140	.13	.10	.09	.08	.07
750-0270	MS-4-140	.13	.10	.09	.08	.07
750-0280	MS-5-140	.13	.10	.09	.08	.07
750-0290	MS-6-140	.13	.10	.09	.08	.07
750-0300	MS-7-140	.15	.12	.10	.09	.08
750-0309	MS-8-140	.15	.12	.10	.09	.08
750-0318	*MS-9-140*	.15	.12	.10	.09	.08
750-0328	*MS-10-140*	.17	.13	.11	.10	.09
750-0334	MS-11-140	.17	.13	.11	.10	.09
750-0340	MS-12-140	.17	.13	.11	.10	.09
750-0351	MS-14-140	.19	.15	.13	.11	.10
750-0357	MS-15-140	.19	.15	.13	.11	.10
750-0363	MS-16-140	.21	.17	.14	.12	.11
750-0375	MS-18-140	.21	.17	.14	.12	.11
750-0379	MS-19-140	.23	.19	.16	.13	.12
750-0384	MS-20-140	.23	.19	.16	.13	.12
750-0388	MS-21-140	.23	.19	.16	.13	.12
750-0252	MS-2-141	.13	.10	.09	.08	.07
750-0262	MS-3-141	.13	.10	.09	.08	.07
750-0272	MS-4-141	.13	.10	.09	.08	.07
750-0282	MS-5-141	.15	.12	.10	.09	.08
750-0292	MS-6-141	.15	.12	.10	.09	.08
750-0302	MS-7-141	.15	.12	.10	.09	.08
750-0311	*MS-8-141*	.17	.13	.11	.10	.09
750-0328	MS-10-141	.17	.13	.11	.10	.09
750-0342	MS-12-141	.19	.15	.13	.11	.10
750-0353	MS-14-141	.21	.17	.14	.12	.11
750-0359	MS-15-141	.23	.19	.16	.13	.12
750-0365	MS-16-141	.23	.19	.16	.13	.12
750-0377	MS-18-141	.26	.20	.17	.14	.13
750-0386	MS-20-141	.27	.22	.18	.15	.14
750-0254	MS-2-142	13	10	.09	.08	.07
750-0264	MS-3-142	.13	.10	.09	.08	.07
750-0274	MS-4-142	.15	.12	.10	.09	.08
750-0284	MS-5-142	.15	.12	.10	.09	.08
750-0294	MS-6-142	.15	.12	.10	.09	.08
750-0313	MS-8-142	.17	.13	.11	.10	.09
750-0322	MS-9-142	.19	.15	.13	.11	.10
750-0344	MS-12-142	.23	.19	.16	.13	.12
750-0367	MS-16-142	.29	.23	.20	.16	.15
750-0373	MS-17-142	.32	.25	.21	.17	.16

*Second Volt rating is with marker strip

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Barrier and Feed-Thru Terminal Blocks

ALLIED PREMIUM-QUALITY BARRIER-TYPE TERMINAL BLOCKS AT LOWEST COST

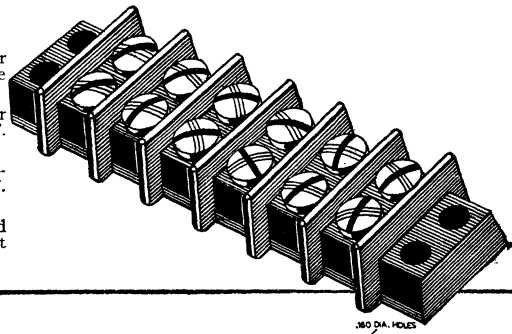
- **Barriers Between Terminals Provide High Voltage Ratings**
- **Offer Protection Against Shorts Due to Frayed Wires**

Series A700. Rated 15 amps, 1100/1200 volts rms. 5-40x3/16" binder head screw terminals. Leakage path between terminals is 3/8". Base is 7/8" wide x 5/8" high. Av. wt. 14 oz.

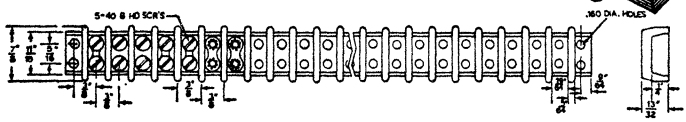
Series A701. Rated 20 amps, 1100/1600 volts rms. 6-32x1/4" binder head screw terminals. Leakage path between terminals is 7/16". Base is 1 1/8" wide x 1/2" high. Av. wt. 14 oz.

Series A702. Rated 30 amps, 1600/2500 volts rms. 8-32x5/16" binder-head screw terminals. Leakage path between terminals is 9/16". Base is 1 5/16" wide x 5/8" high. Av. wt. 14 oz.

Series 700, 701, 702 are the equivalent of Cinch 140, 141, 142 and Kulka 600, 601, 602, respectively. Write or contact our nearest branch office for Large Quantity Programs.



MAXIMUM 25 TERMINALS WITH STANDARD TYPE TERMINALS

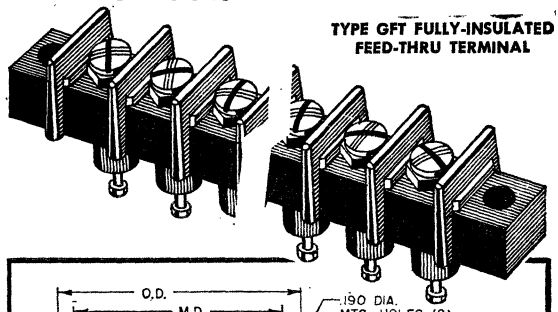


Stock No.	Mfr's Type	Terminals	EACH 1-24	25-49	50-99	100-249	250-499	500-999	1000-Up
706-7002	A700-2	2	.22	.18	.15	.126	.117	.108	.099
706-7004	A700-4	4	.32	.25	.22	.18	.171	.153	.138
706-7006	A700-6	6	.46	.37	.32	.252	.243	.225	.203
706-7008	A700-8	8	.61	.50	.41	.324	.315	.297	.267
706-7010	A700-10	10	.75	.60	.51	.396	.378	.36	.324
706-7012	A700-12	12	.90	.71	.59	.459	.441	.423	.38
706-7015	A700-15	15	1.10	.89	.73	.585	.567	.54	.486
706-7020	A700-20	20	1.43	1.15	.96	.756	.729	.693	.524
706-7032	A701-2	2	.24	.19	.16	.135	.126	.117	.105
706-7034	A701-4	4	.42	.34	.29	.234	.225	.216	.194

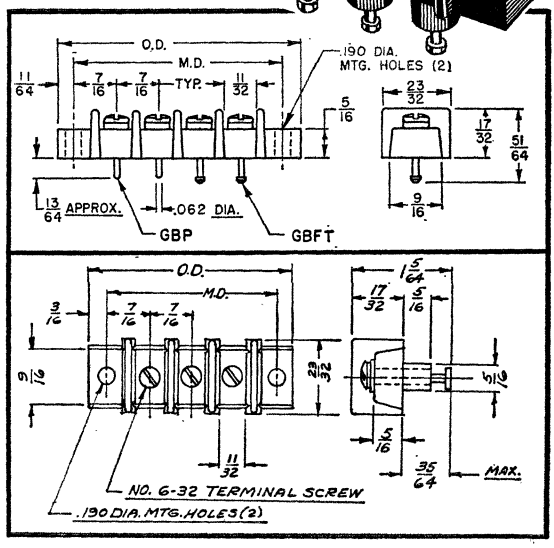
Stock No.	Mfr's Type	Terminals	EACH 1-24	25-49	50-99	100-249	250-499	500-999	1000-Up
706-7036	A701-6	6	.59	.46	.37	.324	.306	.288	.259
706-7038	A701-8	8	.77	.62	.53	.414	.396	.369	.332
706-7040	A701-10	10	.96	.77	.64	.522	.495	.45	.405
706-7042	A701-12	12	1.13	.91	.75	.603	.576	.549	.494
706-7050	A701-20	20	1.85	1.48	1.24	.981	.936	.891	.802
706-7054	A702-4	4	.52	.41	.34	.27	.261	.252	.227
706-7056	A702-6	6	.73	.59	.50	.387	.369	.351	.316
706-7058	A702-8	8	.95	.76	.63	.513	.477	.441	.397
706-7062	A702-12	12	1.39	1.11	.94	.729	.702	.675	.608

CURTIS FEED-THRU TERMINAL BLOCKS

Rated 20 amps, 300 volts. External terminals 6-32 screws. Available 1 thru 26 terminals. Black phenolic. Tin-plated terminals.
Types GBP, GBFT. Flat base, feed-thru blocks with turret-type solder terminal (GBFT) or .062" dia. printed circuit pins (GBP) for internal connection. Take up to one #12 AWG wire.
Type GFT. Fully-insulated feed-thru terminal block. Integral insulation of each terminal provides full 1/4" terminal-to-ground clearance even through 1/16" chassis. Internal solder connection.



TYPE GFT FULLY-INSULATED FEED-THRU TERMINAL



TYPE GFT FULLY INSULATED TERMINALS

Stock No.	Mfr's Type	Terminals	Length Inches	EACH 1-24	25-49	50-99	100-249	250-Up
764-0502	GFT-2	2	1 21/32	.39	.33	.32	.30	.29
764-0504	GFT-4	4	2 17/32	.75	.64	.60	.57	.56
764-0506	GFT-6	6	3 13/32	1.11	.95	.89	.85	.83
764-0508	GFT-8	8	4 1/4	1.47	1.25	1.18	1.12	1.09
764-0510	GFT-10	10	5 1/8	1.83	1.56	1.40	1.36	1.32
764-0512	GFT-12	12	6	2.19	1.76	1.67	1.63	1.58
764-0514	GFT-14	14	6 7/8	2.55	2.04	1.94	1.89	1.84
764-0516	GFT-16	16	7 3/4	2.91	2.33	2.22	2.16	2.10
764-0518	GFT-18	18	8 5/8	3.27	2.62	2.49	2.42	2.36
764-0520	GFT-20	20	9 1/2	3.63	2.91	2.76	2.69	2.62

TYPE GBP PRINTED CIRCUIT PINS

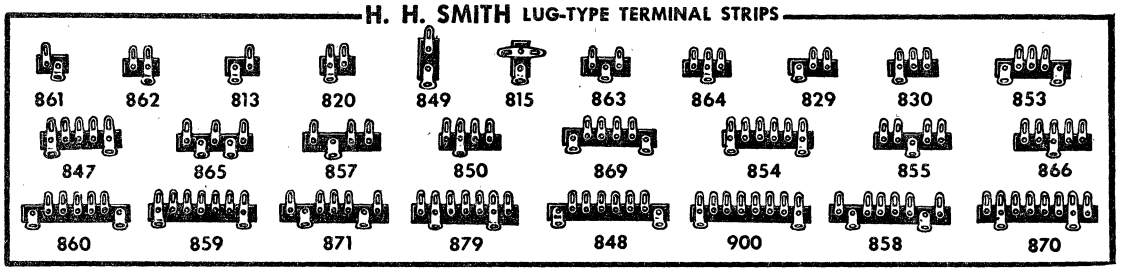
764-0402	GBP-2	2	1 21/32	.31	.28	.26	.24	.22
764-0404	GBP-4	4	2 17/32	.58	.56	.54	.52	.50
764-0406	GBP-6	6	3 13/32	.87	.84	.82	.80	.78
764-0408	GBP-8	8	4 1/4	1.15	1.12	1.10	1.08	1.06
764-0410	GBP-10	10	5 1/8	1.43	1.40	1.38	1.36	1.34
764-0412	GBP-12	12	6	1.71	1.68	1.66	1.64	1.62
764-0414	GBP-14	14	6 7/8	1.99	1.96	1.94	1.92	1.90
764-0416	GBP-16	16	7 3/4	2.27	2.24	2.22	2.20	2.18
764-0418	GBP-18	18	8 5/8	2.55	2.52	2.50	2.48	2.46
764-0420	GBP-20	10	9 1/2	2.83	2.80	2.78	2.76	2.74

TYPE GBFT FEED-THRU TURRET TERMINALS

764-0602	GBFT-2	2	1 21/32	.31	.28	.26	.24	.22
764-0604	GBFT-4	4	2 17/32	.59	.56	.54	.52	.50
764-0606	GBFT-6	6	3 13/32	.87	.84	.82	.80	.78
764-0608	GBFT-8	8	4 1/4	1.15	1.12	1.10	1.08	1.06
764-0610	GBFT-10	10	5 1/8	1.43	1.40	1.38	1.36	1.34
764-0612	GBFT-12	12	6	1.71	1.68	1.66	1.64	1.62
764-0614	GBFT-14	14	6 7/8	1.99	1.96	1.94	1.92	1.90
764-0616	GBFT-16	16	7 3/4	2.27	2.24	2.22	2.20	2.18
764-0618	GBFT-18	18	8 5/8	2.55	2.52	2.50	2.48	2.46
764-0620	GBFT-20	20	9 1/2	2.83	2.80	2.78	2.76	2.74

Terminal Strips and Solderless Blocks

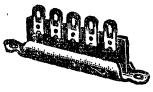
H. H. SMITH LUG-TYPE TERMINAL STRIPS



Dark brown bakelite strips, measuring 1/16″ thick x 3/8″ wide. For a wide variety of applications in electronics. Equipped with solder-coated steel lugs that have 3/8″ centers. 9/64″ diameter mounting holes. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	EACH 1-99	100-999	1000-2499	2500-Up	Stock No.	Mfr's Type	EACH 1-99	100-999	1000-2499	2500-Up	Stock No.	Mfr's Type	EACH 1-99	100-999	1000-2499	2500-Up
920-0861	*861*	.04	.030	.027	.025	920-0830	830	.04	.033	.030	.027	920-0866	*866*	.06	.046	.042	.037
920-0862	*862*	.04	.031	.028	.025	920-0853	853	.06	.050	.045	.041	920-0860	860	.08	.065	.059	.053
920-0813	813	.04	.030	.027	.025	920-0847	847	.07	.056	.051	.046	920-0859	859	.09	.068	.062	.055
920-0820	820	.04	.031	.028	.025	920-0865	865	.06	.050	.045	.041	920-0871	*871*	.08	.065	.059	.053
920-0849	849	.04	.030	.027	.025	920-0857	857	.05	.041	.037	.034	920-0879	*879*	.09	.068	.062	.055
920-0815	815	.06	.05	.045	.041	920-0850	850	.05	.042	.038	.034	920-0848	848	.09	.070	.063	.057
920-0863	*863*	.04	.032	.029	.026	920-0868	*869*	.07	.060	.054	.049	920-0900	*900*	.09	.075	.068	.062
920-0864	*864*	.04	.033	.030	.027	920-0854	854	.08	.062	.056	.051	920-0858	858	.09	.070	.063	.057
920-0829	829	.04	.032	.029	.026	920-0855	855	.06	.045	.041	.037	920-0870	*870*	.09	.075	.068	.062

H. H. SMITH SERIES 3000 TERMINAL STRIPS



Terminals are made of steel, with cadmium plating for easy soldering. Spaced on 5/16″ centers. Insulated strip is constructed of rugged molded bakelite. Sturdy, cadmium-plated steel mounting base. Mounting holes provided at each end of the base for No. 6 screws. Wt. 1 oz.

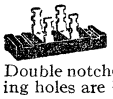
Stock No.	Mfr's Type	Terminals	Mtg. Ctrs.	EACH 1-99	100-999	1000-2499	2500-Up
920-2802	*3002*	*2*	*1″*	.10	.075	.068	.062
920-2803	*3003*	*3*	*1 5/16″*	.11	.085	.078	.070
920-2804	*3004*	*4*	*1 5/8″*	.12	.09	.082	.074
920-2805	*3005*	*5*	*1 15/16″*	.13	.105	.096	.086
920-2806	*3006*	*6*	*2 1/4″*	.14	.11	.10	.09
920-2807	3007	7	2 9/16″	.16	.125	.114	.102
920-2808	*3008*	*8*	*2 7/8″*	.18	.14	.126	.114
920-2809	3009	9	3 3/16″	.20	.15	.136	.122
920-2810	*3010*	*10*	*3 1/2″*	.21	.16	.144	.13
920-2812	*3012*	*12*	*4 1/8″*	.25	.19	.172	.154
920-2813	*3013*	*13*	*4 7/8″*	.29	.22	.198	.18

H. H. SMITH TERMINAL STRIPS

For a variety of connecting applications—antenna terminals, output terminals, etc. Made of black 3/32″ bakelite. Screw-type terminals are cadmium-plated with tinned lugs. Av. shpg. wt. 4 oz.

Stock No.	Mfr's Type	Term.	Mtg. Ctrs.	EACH 1-24	25-99	100-499	500-Up
920-0902	902	2	1 1/2″	.24	.20	.18	.16
920-0903	903	3	2″	.30	.25	.23	.21
920-0904	904	4	2 1/2″	.36	.36	.27	.25
920-0905	905	5	3″	.44	.36	.33	.29
920-0906	906	6	3 1/2″	.50	.41	.37	.32
920-0908	908	8	4 1/2″	.63	.52	.47	.42

CINCH JONES SERIES 170 TERMINAL STRIPS



Extra-heavy-duty solder terminals. Sturdy black molded bakelite base is 5/16″ wide, 1/4″ thick. Solder terminals are .032″ tinned brass; on 3/8″ centers. Double notched to insure good, easy mechanical connection. Mounting holes are 3/8″ from center of end terminals. Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Terminals	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
750-1348	2-170	2	.35	.29	.24	.21	.19	.18
750-1397	3-170	3	.45	.40	.30	.26	.22	.21
750-1442	4-170	4	.52	.46	.38	.29	.24	.23
750-1487	5-170	5	.60	.51	.42	.36	.27	.26
750-1532	6-170	6	.65	.59	.46	.40	.30	.28
750-1576	7-170	7	.72	.66	.51	.44	.36	.32
750-1621	8-170	8	.80	.71	.57	.48	.40	.38
750-1705	10-170	10	.97	.87	.68	.57	.46	.44

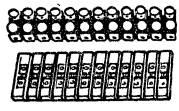
H. H. SMITH SCREW-TYPE TERMINAL STRIPS

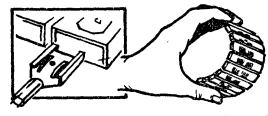
For multiple outputs. 1/16″ thick; *3/32″. Solder-coated brass terms. on 7/16″ centers. 9/64″ mounting holes. Bakelite. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Term.	Mtg. Ctrs.	EACH 1-49	50-249	250-499	500-Up
920-0872	*872*	*2*	*1 15/16″*	.11	.09	.08	.072
920-0873	873	3	1 3/4″	.15	.12	.108	.097
920-0874	874	4	2 3/16″	.19	.75	.135	.122
920-0875	875	5	2 5/8″	.23	.18	.162	.147
920-0876	876	6	3 1/16″	.26	.21	.189	.170
920-0877	877	7	3 15/16″	.31	.25	.225	.203
920-0928	928	8	3 15/16″	.35	.28	.252	.227
920-0929	929	9	4 3/8″	.39	.31	.279	.251
920-0930	930*	10	4 13/16″	.44	.35	.315	.284

NATIONAL TEL-TRONICS PRODUCTS

SOLDERLESS BLOCKS





Series 900. Black polyvinylchloride. Red pushbuttons lock wire. 27 amps max., 440 V. 70°C max. Beryllium copper contacts. Series 915 and 920 flexible blocks are for use with 1/4″ quick-disconnect terminals. Transparent polyvinylchloride can be cut. 20 amps max., 250 V. 80°C max. #12 wire, max. *No. of term. 4 oz.

Stock No.	Mfr's Type	Description	Length	EACH 1-9	10-24	25-49	50-Up
868-1010	900-12*	Pushbutton	2 7/16x3/4″	1.32	1.11	.99	.89
868-1014	900-24*	Pushbutton	4 7/8x3/4″	2.50	2.08	1.87	1.68
868-1027	915-12*	Flexible	2 13/16x1 1/8″	.73	.46	.42	.38
868-1031	915-24*	Flexible	5 5/8x1 1/8″	1.39	.92	.83	.75
868-1055	920-12*	Flexible	2 13/16x1 21/32″	.73	.46	.42	.38
868-1060	920-24*	Flexible	5 5/8x1 21/32″	1.39	.92	.83	.75

NATIONAL TEL-TRONICS PRODUCTS

SOLDERLESS BLOCKS

Series 905. A very versatile solderless block for many applications. Easily put into place; bends in any direction. If you need a smaller size, the series of terminals can easily be cut to fit your needs. Made of flexible polyester. 30 amps maximum. 380 volts at 60°C maximum. Each 1/2x5/8x3 3/4″ with 11/32″ spacing between terminal centers. #10 wire maximum. Shpg. wt., 4 oz.

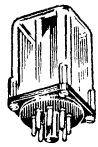
868-1020. 1-9.....Each 1.95 10-24.....Each 1.76
25-49.....Each 1.58 50-Up.....Each 1.30

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Housing, Terminal Boards, Tools and Terminals

KEYSTONE PLUG-IN HOUSINGS, TERMINAL BOARDS AND TOOLS

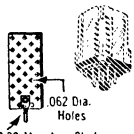
PLUG-IN MOLDED HOUSINGS



For packaging relays, logic packages, networks and miniature circuits. Lightweight, attractive. Withstand vibration and rough use. Good chemical resistance, low water absorption. G.P. phenolic octal headers fit std. sockets. Nickel plated brass pins. Guide hole tapped 8-32 for terminal board mtg. stud. Polystyrene housings for use up to 170°F. Butyrate to 210°F. Nylon to 300°F. Type 669 has electro tin plated steel housing, 1¼″ dia. x 1⅝″ high. Mini size: 1⅜″ sq. x 1⁹⁄₁₆″ high. Small: 1⅜″ sq. x 1¹⁵⁄₁₆″ high. Large: 1¹⁵⁄₁₆″ sq. x 2³¹⁄₃₂″ high. Extra large: 1¾x2⅜x2⁹⁄₁₆″ high. With octal header, screws. Wt.: Mini, small, 1 oz.; others, 2½ oz.

Stock No.	Mfr's Type	Size	Housing		EACH			
			Material	Color	1-9	10-19	20-99	100-Up
839-3360	660	Mini	Buty.	Clear	1.15	.95	.80	.75
839-3361	661	Mini	Nylon	White	1.05	.75	.70	.65
839-3362	662	Mini	Poly.	Clear	1.05	.75	.70	.65
839-3341	641	Mini	Poly.	Black	1.00	.65	.60	.55
839-3363	663	Small	Buty.	Clear	.97	.70	.67	.64
839-3364	664	Small	Nylon	White	1.15	.75	.70	.67
839-3365	665	Small	Poly.	Clear	.97	.70	.67	.64
839-3343	643	Small	Poly.	Black	1.00	.65	.60	.55
839-3350	650	Large	Buty.	Clear	1.80	1.35	1.20	1.10
839-3368	668	Large	Poly.	Clear	1.27	.80	.75	.70
839-3377	677	Large	Poly.	Black	1.32	.80	.75	.70
839-3339	639	X-Lge	Poly.	Clear	1.80	1.20	1.10	.93
839-3369	669	Small	Steel	Tin pl.	1.15	.75	.70	.67

TERMINAL BOARDS FOR PLUG-IN HOUSINGS



Glass epoxy terminal boards for use with plug-in housings described above. Holes are .062″ diameter, spaced in .100″ and .200″ alternates. An 8-32 threaded stud is firmly eyeletted to the board, for simplified assembly into the tapped hole of the plug-in headers. G-10 glass epoxy boards are ⅛″ thick; per GEE MIL-P-18177. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Board Size with stud	For Housing Size	EACH			
				1-9	10-19	20-99	100-Up
839-3396	696	1x1⁵⁄₁₆″	Mini	.27	.23	.18	.16
839-3397	697	1⅛x1¾″	Small	.27	.23	.18	.16
839-3398	698	1½x2¾″	Large	.32	.25	.21	.19
839-3399	699	1⅛x1⁷⁄₁₆″	Steel	.27	.23	.18	.16
839-3338	638	1⁵⁄₁₆x2⅜″	X-Lge	.37	.26	.24	.22

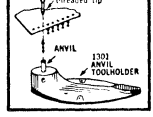
ALL-PURPOSE HAND PUNCH

MODEL 1330. With adjustable gauge, for use as a nibbler. Also shears eyelets, punches holes for sheet material or tubing. 1¼″ throat depth. Penetrates ⅛″ untempered metal, ³⁄₃₂″ phenolic, ¼″ masonite. Punches tubing as small as ¾″ dia.
839-3405. 1-3.....Ea. 16.00 4-Up.....Ea. 13.00

INTERCHANGEABLE DIE SETS FOR HAND PUNCH

Stock No.	Mfr's Type	For Hole	EACH	Stock No.	Mfr's Type	For Hole	EACH
839-3406	1331	⅛″	3.00	839-3410	1335	⁵⁄₃₂″	3.00
839-3407	1332	.072″	3.00	839-3411	1336	³⁄₁₆″	3.00
839-3408	1333	³⁄₃₂″	3.00	839-3412	1337	⁷⁄₃₂″	3.00
839-3409	1334	⅛″	3.00	839-3413	1338	¼″	3.00

"IMPACT" STAKING KIT

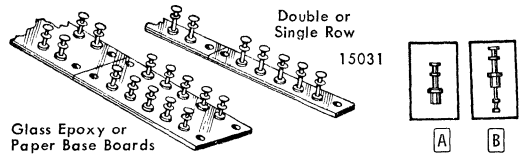


MODEL 1707. Produces light or heavy blow, adjustable by turning the spring tension cap. Uniform striking action is attained by pressing down handle. Interchangeable tools supplied permit assembly of terminal boards, printed circuits and small components. Simple construction, automatic single hand operation. Stakes all diameters up to ³⁄₃₂″ maximum. Kit includes: anvil holder; impact handle; plus 11 interchangeable tools. With complete instructions. Shpg. wt., 1 lb.
839-3433.....Ea. 28.00 2-Up.....Ea. 23.50

TERMINAL BOARD PROTOTYPE KIT

MODEL 1723. Complete assortment of basic materials and staking tools for construction of ⅛″ and ³⁄₃₂″ thick terminal boards. Consists of ⅛″ and ³⁄₃₂″ bakelite, blank and prepunched boards; assortment of hardware including eyelets, terminals, brackets, bushings and push-in terminals; complete terminal staking tool kit. Full instructions. Shpg. wt. 3 lbs.
839-3437...Ea. 22.00 2-Up...Ea. 17.00

SCORED TURRET TERMINAL BOARDS



Standardized terminal boards with turret terminals on one or both sides. Terminals are securely staked and hot tinned for easy soldering. Brass terminals per QQ-B626, comp. 22, ½ hard; hot dip solder finish per MIL-F-14072, Type 221. Boards are scored for easy separation into five sections, each 2⅝″ long, with .120″ dia. mounting holes in each section. Boards can be marked. PBE indicates paper base electrical board, MIL-P-3115C, for temperatures up to 250°F. GEE indicates G-10 Glass Epoxy boards per MIL-P-18177, for 300° F maximum. All are ³⁄₃₂″ thick with double row of terminals (50 total) on ⅜″ centers except Type 15031, with a single row of 25 terminals. All boards are 13⅛″ long. Av. shpg. wt. 3 oz.

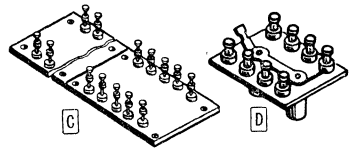
A DOUBLE TURRET TERMINALS ON ONE SIDE

Stock No.	Mfr's Type	Width	Spacing Between Rows	EACH			
				Material	1-9	10-19	20-99	100-Up
839-3450	15031	½″	...	PBE	1.57	1.03	.90	.79
839-3455	15036	1½″	1³⁄₁₆″	PBE	3.80	2.05	1.94	1.84
839-3468	15236	1½″	1³⁄₁₆″	GEE	5.30	2.78	2.63	2.52
839-3452	15033	2″	1½″	PBE	3.87	2.15	2.05	1.89
839-3465	15233	2″	1½″	GEE	6.10	3.26	3.05	2.94
839-3453	15034	2½″	2″	PBE	4.07	2.31	2.08	1.94
839-3466	15234	2½″	2″	PBE	6.52	3.47	3.31	3.15
839-3454	15035	3″	2½″	PBE	4.20	2.36	2.21	2.05

B FEED-THRU DOUBLE TURRET TERMINALS—BOTH SIDES

839-3462	15046	1½″	1³⁄₁₆″	PBE	7.57	4.10	3.78	3.68
839-3459	15043	2″	1½″	PBE	7.57	4.20	3.99	3.89
839-3460	15044	2½″	2″	PBE	8.00	4.36	4.15	3.98
839-3461	15045	3″	2½″	PBE	8.22	4.52	4.31	4.15

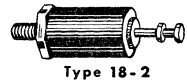
USECO TERMINAL BOARDS



For use where highest quality construction and wiring standards are observed. All boards with 50 terminals are scored .02″ deep after every group of 10 terminals so that five identical sections may be snapped off. Each section has four mtg. holes. Boards with 8 terminals have grounding strap in center and mount on ¼″ brass stand-offs with 3-48 tapped hole. Types 1180, 1181 and 1182 are designed to mount ½, 1, and 2-watt resistors, respectively, and are .062″ thick. Series 1100 is .094″ thick with .116″ mtg. holes. Series 2200 is .062″ thick with .062″ mtg. holes. Distance between rows of terminals: Type 1100B, C and D—1½, 2 and 2½″, respectively; Types 2200B and C—½ and ¾″; Types 1180, 1181 and 1182—½, ¾ and ⅞″. Series 1100 and 2200 are made of phenolic; Types 1180, 1181 and 1182 are glass melamine. All terminals are brass. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	No. of Term.	Size	EACH			
					1-5	6-24	25-49	50-Up
971-0292	*1100B*	C	*50*	*2x13.12″*	3.73	2.87	2.61	2.30
971-0293	1100C	C	50	2½x13.12″	3.90	3.01	2.73	2.41
971-0294	*1100D*	C	*50*	*3x13.12″*	4.10	3.17	2.88	2.55
971-0500	2200B	C	50	.75x7.81″	3.28	2.53	2.30	2.03
971-0501	2200C	C	50	1x7.81″	3.26	2.51	2.28	2.02
971-0301	1180	D	8	.719x.88″	.93	.66	.60	.53
971-0302	1181	D	8	1.03x1.22″	1.04	.73	.67	.59
971-0303	1182	D	8	1.16x1.5″	1.06	.74	.67	.60

GRAYHILL INSULATED STANDOFF TERMINALS

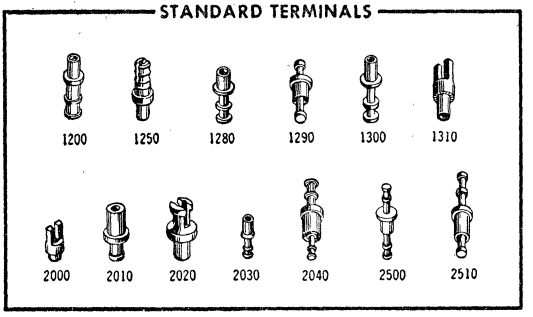

Type 18-2

Terminals are molded from natural, mica-filled phenolic. Feature exceptionally low loss at higher frequencies, extremely low moisture absorption, and very high dielectric strength. Terminals are silver-plated brass. Type 18-1 has a 4-40 threaded hole in the base for mounting. Type 18-2 has a 7/32″ mounting stud with a 4-40 thread. .59″ long x .31″ diameter. Wt., 3 oz.

Stock No.	Mfr's Type	Mounting	EACH		
			1-49	50-499	500-Up
801-0401	18-1	Female	.56	.45	.36
801-0402	18-2	Male	.63	.50	.40

Terminals and Swaging Tools

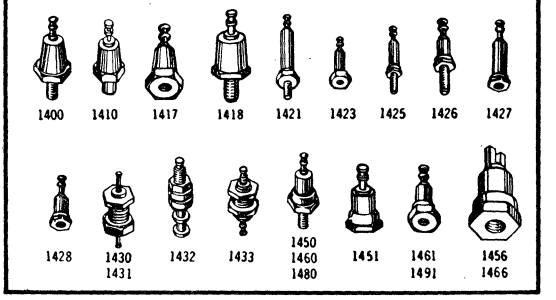
STANDARD TERMINALS



A large selection of standard terminals in miniature and subminiature sizes. Offer a wide choice of terminal configurations—includes hollow lug, bifurcated, turret and feed-through types. Satisfy requirements of all types of electronic assemblies. Simplify design and construction. All terminals are constructed of selected brass stock, in accordance with the requirements of MIL specification QQ-B-626, composition 22, ½ hard. All units are silver-plated according to the requirements of MIL specification QQ-S-365 Type III. In addition, terminals are treated with tarnish-resistant coatings of dichromate, water-dip lacquer and waxes. For further protection, terminals are packaged in vapor-resistant cellothene plastic to ensure user receives units in perfect condition. Av. shpg. wt. per Pkg./100, 2 oz.

Stock No.	Mfr's Type	Shank Dia.	Shank Lgth.	PRICE PER PKG./100 1-9	10-49	50-99	100-249	250-Up
971-0306	1200B	.114″	.105″	3.42	2.43	2.27	2.02	1.86
971-0307	1200C	.114″	.135″	3.42	2.43	2.27	2.02	1.86
971-0311	1250B	.114″	.105″	3.74	2.66	2.48	2.21	2.04
971-0312	1250C	114″	.135″	3.74	2.66	2.48	2.21	2.04
971-0315	1280A	.091″	.075″	1.98	1.40	1.31	1.17	1.08
971-0316	1280B	.091″	.105″	1.98	1.40	1.31	1.17	1.08
971-0317	1280C	.091″	.135″	1.98	1.40	1.31	1.17	1.08
971-0318	1280D	.091″	.165″	1.98	1.40	1.31	1.17	1.08
971-0328	1290B	.114″	.105″	4.26	3.02	2.82	2.52	2.32
971-0336	1300B	.114″	.105″	2.86	2.03	1.90	1.69	1.56
971-0337	1300C	.114″	.135″	2.86	2.03	1.90	1.69	1.56
971-0338	1300D	.114″	.165″	2.86	2.03	1.90	1.69	1.56
971-0356	1310B	.114″	105″	4.17	2.96	2.76	2.47	2.27
971-0357	1310C	.114″	.135″	4.17	2.96	2.76	2.47	2.27
971-0358	1310D	.114″	.165″	4.17	2.96	2.76	2.47	2.27
971-0488	2000B	.063″	.084″	3.01	2.14	2.00	1.78	1.64
971-0489	2000C	.063″	.115″	3.01	2.14	2.00	1.78	1.64
971-0491	2010B	.063″	.084″	2.27	1.61	1.51	1.35	1.24
971-0492	2010C	.063″	.115″	2.27	1.61	1.51	1.35	1.24
971-0494	2020B	.063″	.084″	3.28	2.33	2.18	1.94	1.79
971-0496	2030B	.062″	.084″	2.03	1.44	1.35	1.20	1.11
971-0498	2040B	.126″	.105″	4.95	3.51	3.28	2.93	2.69
971-0499	2040D	.126″	165″	4.95	3.51	3.28	2.93	2.69
971-0505	2500C	.091″	.115″	3.52	2.50	2.34	2.09	1.92
971-0506	2500D	.091″	.147″	3.52	2.50	2.34	2.09	1.92
971-0509	2510B	.073″	.084″	3.08	2.19	2.05	1.83	1.69
971-0510	2510D	.073″	.147″	3.08	2.19	2.05	1.83	1.69

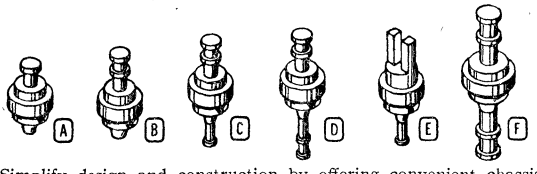
INSULATED TERMINALS



All are stand-off types, except Mfr's Types 1430 through 1433, which are feed-through types. Include standard, miniature and subminiature types, with turret and bifurcated terminal connections. Base connections are of stud, female, and swage types. Breakdown voltages from 1500 to 10,000 volts, AC. Made of brass, with .000015″ gold plate over .0003″ silver plate. Bases of cadmium-plated brass. Brass used meets MIL specification QQ-B-626, composition 22, ½ hard. "S" in table below is thread, or shank diameter; "X" is shank length, except * overall length. "Ins." indicates dielectric material: P, Phenolic (MIL-P-14020 CL 2); A, Alkyd (MIL-M-14E Ty, Mag.); T, Teflon (AMS-3651 B); H, Hi-Alumina (JAN I-10, L-5A), D; Diallyl Phthalate (MIL-M-19833, GD1-30). Av. shpg. wt. per package, 2 oz. **Sold in Packages of 25 only.**

Stock No.	Mfr's Type	S	X	Ins.	PRICE PER PKG./25 1-3	4-10	11-19	20-Up
971-0403	1400B	6-32	.250″	P	5.50	4.25	4.00	3.50
971-0406	1410D	.188″	.156″	P	5.50	4.25	4.00	3.50
971-0409	*1417*	*6-32*	....	*A*	6.50	4.75	4.25	3.75
971-0410	1418B	6-32	.250″	A	6.50	4.75	4.25	3.75
971-0411	1421	6-32	.250″	A	7.50	5.75	5.25	4.50
971-0413	1423	6-32	..	A	7.50	5.75	5.25	4.50
971-0414	1425	2-56	.218″	A	7.50	5.75	5.25	4.50
971-0415	1426B	.256″	.218″	A	7.25	5.50	4.75	4.25
971-0417	1427	2-56	....	A	7.50	5.75	5.25	4.50
971-0418	1428	.256″	....	A	7.25	5.50	4.75	4.25
971-0419	1430	10-32	.687″*	D	11.75	8.25	7.75	6.75
971-0420	1431	10-32	...	T	13.00	9.75	9.00	8.00
971-0421	1432	5-40	.796″*	T	9.75	7.75	7.00	6.25
971-0422	1433	¼-28	.875″*	D	13.00	9.75	9.00	8.00
971-0425	1450B	6-32	.250″	T	7.50	5.75	5.25	4.50
971-0426	1450H	4-40	.375″	T	7.50	5.75	5.25	4.50
971-0427	1451	6-32	....	T	7.50	5.75	5.25	4.50
971-0429	1456	6-32	....	T	8.25	6.00	5.25	4.75
971-0430	1456A	4-40	....	T	8.25	6.00	5.25	4.75
971-0431	1460B	6-32	.250″	H	7.50	5.75	5.25	4.50
971-0432	1460H	4-40	.375″	H	7.50	5.75	5.25	4.50
971-0433	1461	6-32	....	H	7.50	5.75	5.25	4.50
971-0434	1466	6-32	....	H	8.25	6.00	5.25	4.75
971-0438	1480B	.256″	.218″	H	8.50	6.25	5.50	5.25
971-0439	1480D	4-40	.218″	H	8.50	6.25	5.50	5.25
971-0446	1491A	2-56	....	T	9.00	6.50	5.75	5.25

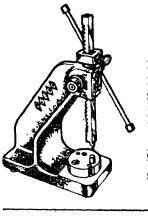
SERIES 4400 LOC-FIT TERMINALS



Simplify design and construction by offering convenient chassis mounting—simply push Teflon® grommet (supplied) into mounting hole and snap-fit terminal into grommet. Nominal chassis thickness 1/16″. Types 4441, 4442, 4444 and 4449 are feed-thru types. Types 4435 and 4449 are taper-pin receptacles. 4435 is insulated terminal. Mounting hole: Fig. A-E, 9/64″; F, 3/16″. Brass terminals and receptacles, ½ hard, composition 22 per QQ-B-626. Finished standard-9 (0.000015 gold over 0.0003 silver). Insulator material, Teflon per MIL-M-14077. Average shpg. wt. per Pkg./25, 4 oz.

Stock No.	Mfr's Type	Fig.	Lgth.	PRICE PER PKG./25 1-3	4-19	20-39	40-Up
971-0536	4435B	A	.372″	2.50	2.25	2.00	1.75
971-0537	4440B	B	.455″	3.00	2.50	2.25	2.00
971-0538	4441B	C	.580″	4.00	3.00	2.75	2.50
971-0539	4442B	D	.693″	4.00	3.00	2.75	2.50
971-0541	4444B	E	.580″	4.25	3.25	2.75	2.50
971-0546	4449B	F	.830″	5.25	4.00	3.75	3.25

SWAGING MACHINE



Model B. Hand-operated swaging machine of rugged rack and pinion construction. Precision machined to ensure smooth and rapid work. Designed for simplicity and ease of operation—means little or no man-hours devoted to training. Throat depth, 5⅛″; stroke depth, 6¾″. Adjustable platten may be rotated to accept ½″, 9/16″, and ¾″ diameter bottom tools. Adjustable stop controls depth of the stroke. Shpg. wt. 20 lbs.
971-0002. Ea. 99.00.....2-Up Ea. 85.00

SWAGING INSTALLATION TOOLS

Accurately machined from chromium steel alloy, flame-hardened, and highly polished. All tools are ½″ dia. and mount in the Model B swaging machine above, or A version. Tool numbers (Mfr's Type) are the same as the numbers of the corresponding terminals (tool 1200 fits terminal 1200B, for example). Av. shpg. wt. 7 oz.

Stock No.	Mfr's Type	For Use With Terminal Type	Stock No.	Mfr's Type	For Use With Terminal Type
971-0305	1200	1200B, C	971-0490	2010	2010B, C, D
971-0309	1250	1250B, C	971-0493	2020	2020B
971-0314	1280	1280A, B, C, D	971-0495	2030	2030B, C
971-0334	1300	1300B, C, D	971-0497	2040	2040B, C, D
971-0354	1310	1310B, C, D	971-0504	2500	2500C, D
971-0487	2000	2000B, C	971-0507	2510	2510B, C

Each 14.20.....2-Up Each 13.50

For Prices on Larger Quantities, Call Your Nearest Allied Electronics Facility

H. H. Smith Teflon® Terminals and Sockets

Body of virgin Teflon. Meets MIL-P-19468, Spec QQ-626. Terminals are precision machined of brass. Very easy to install—no restrictions as to chassis material. All standard plating finishes available. Terminals can be supplied in reverse on request. *After Fig. symbol indicates reverse positioning on insulator. †Indicates floating contact. **Packages of 100 only.**

SUBMINIATURE STANDOFFS

Stock No.	Mfr's Type	Fig.	Dimensions A	B	C	L	M	N	O	PRICE PER PKG./100 1-4	5-9	10-Up	Sealectro Equivalent Type
920-9800	92-1000	A	.148	.172	.040	.350	.210	.100	.040	5.95	5.25	4.66	ST-SM-1
920-9833	92-1034	A	.093	.125	.040	.350	.210	.100	.040	8.50	7.50	6.66	ST-SM-16
920-9837	92-1500	B	.148	.172	.040	.350	.210	.100	.040	9.35	8.25	7.33	ST-SM-1-TUR
920-9839	92-1501	B	.148	.172	.040	.375	.210	.125	.040	8.50	7.50	6.66	ST-SM-1-TUR-C2
920-9843	92-1504	B	.148	.172	.046	.334	.154	.140	.040	9.35	8.25	7.33	ST-SM-25-TUR
920-9846	92-1506	B	.148	.172	.040	.455	.250	.165	.040	9.35	8.25	7.33	ST-SM-24-TUR
920-9850	92-1512	B	.148	.172	.040	.540	.250	.250	.040	9.35	8.25	7.33	ST-SM-29-TUR-C2
920-9854	92-1528	B	.093	.125	.040	.350	.210	100	.040	9.35	8.25	7.33	ST-SM-16-TUR
920-9860	92-1542	B	.148	.172	.040	.359	.210	.109	.040	6.00	5.25	4.66	.....
920-9206	29-1500	B*	.148	.172	.040	.350	.210	.100	.040	6.80	6.00	5.33	RST-SM-1-TUR
920-9212	29-1513	B*	.171	.188	.040	.405	.210	.155	.040	9.35	8.25	7.33	RST-SM-38-TUR

SUBMINIATURE FEED THRU

Stock No.	Mfr's Type	Fig.	A	B	C	L	M	N	O	1-4	5-9	10-Up	Sealectro Equivalent Type
920-9600	82-1000	C	.148	.172	.040	.443	.210	.100	.040	6.80	6.00	5.33	FT-SM-IL2
920-9604	82-1003	C	.148	.172	.040	.515	.210	.100	.040	6.37	5.62	5.00	FT-SM-1
920-9616	82-1022	C	.093	.125	.040	.515	.210	.100	.040	8.50	7.50	6.66	FT-SM-16
920-9630	82-1500	D	.148	.172	.040	.500	.210	.100	.040	6.37	5.62	5.00	FT-SM-1-TUR
920-9640	82-1516	D	.093	.125	.040	.500	.210	.100	.040	8.50	7.50	6.66	FT-SM-16-TUR
920-9634	82-1504	D	.148	.172	.040	.531	.210	.100	.040	9.35	8.25	7.33	FT-SM-2-TUR
920-9624	82-1040	E	.093	.125	.040	.225	.125	.060	.040	10.20	9.00	8.00	FT-SM-59
920-9104	28-1003	C*	.148	.172	.040	.515	.210	.100	.040	6.80	6.00	5.33	RFT-SM-1
920-9115	28-1500	D*	.148	.172	.040	.500	.210	.100	.040	9.35	8.25	7.33	RFT-SM-1-TUR

MINIATURE STANDOFFS

Stock No.	Mfr's Type	Fig.	Dimensions A	B	C	L	M	N	O	PRICE PER PKG./100 1-4	5-9	10-Up	Sealectro Equivalent Type
920-9905	93-1500	F	.165	.187	.046	.431	.156	.150	.125	10.20	9.00	8.00	ST-250
920-9911	93-1503	F	.165	.187	.046	.556	.281	.150	.125	10.20	9.00	8.00	ST-260-L3
920-9920	93-1518	F	.148	.172	.040	.482	.250	.110	.125	10.20	9.00	8.00	ST-230L2
920-9926	93-1531	F	.171	.187	.046	.681	.281	.150	.250	11.90	10.50	9.33	ST-1500L3-C1
920-9936	93-2000	G	.171	.187	.148	.478	.203	.150	.125	10.20	9.00	8.00	ST-250SL
920-9938	93-2001	G	.171	.187	.148	.540	.203	.150	.187	11.00	9.75	8.66	.....
920-9907	93-1501	F	.165	.187	.046	.493	.156	.150	.187	11.00	9.75	8.66	ST-1000SL
920-9944	93-2004	G	.217	.250	.148	.890	.203	.187	.500	18.70	16.50	14.66	ST-2500SL

MINIATURE FEED THRU

Stock No.	Mfr's Type	Fig.	A	B	C	L	M	N	O	1-4	5-9	10-Up	Sealectro Equivalent Type
920-9708	83-1500	H	.264	.312	.040	.531	.210	.100	.040	11.90	10.50	9.33	FT-SM-26-TUR
920-9722	83-1510	H	.148	.171	.046	.836	.250	.230	.125	12.75	11.25	10.00	FT-995-DTUR
920-9724	83-1511	H	.171	.187	.040	.836	.250	.212	.187	12.75	11.25	10.00	FT-1000-DTUR
920-9716	83-1504	J	.171	.187	.050	.740	.125	.212	.187	11.90	10.50	9.33	FT-1000
920-9738	82-1581	J	.148	.171	.040	.520	.190	.100	.040	3.00	2.50	1.50	.....
920-9730	83-1525	K	.218	.250	.062	.187	.281	.375	.250	17.00	15.00	13.33	FT-1550-DTUR
920-9746	83-2000	L	.171	.187	.148	.821	.203	.212	.187	13.60	12.00	10.66	FT-1000SL
920-9712	83-1502	J	.171	.187	.046	.540	.133	.171	.063	9.35	8.25	7.33	FT-310
920-9748	83-2002	L	.171	.187	.148	.947	.203	.275	.250	16.15	14.25	12.66	FT-1500SL

PROBES AND PLUGS

Stock No.	Mfr's Type	Fig.	A	B	C	L	M	N	O	1-4	5-9	10-Up	Sealectro Equivalent Type
920-9520	73-3001	M	.218	—	.080	.645	.270	.375	—	10.20	9.00	8.00	PR-300

TEST JACKS

Stock No.	Mfr's Type	Fig.	A	B	C	L	M	N	O	1-4	5-9	10-Up	Sealectro Equivalent Type
920-9400	63-1000	N	.185	.218	.105	.687	.354	.287	.046	10.20	9.00	8.00	SKT-1
920-9404	63-1003	P	.185	.218	.054	.437	.120	.271	.046	15.30	13.50	12.00	SKT-2BC
920-9408	63-1005	P	.185	.218	.054	.640	.187	.400	.050	15.30	13.50	12.00	SKT-10
920-9410	63-1006	P	.204	.250	.054	.437	.120	.271	.046	17.00	15.00	13.33	SKT-3BC
920-9420	63-1500	P†	.148	.171	.040	.450	.110	.315	.060	15.00	13.50	12.00	.....
920-9414	63-1010	P	.148	.172	.040	.345	.120	.179	.046	15.30	13.50	12.00	SK-14
920-9434	63-3003	S	.187	.218	.050	.400	.140	.378	—	29.75	26.25	23.33	SK-103PC
920-9438	63-3005	S	.187	.218	.035	.400	.140	.378	—	30.60	27.00	24.00	SK-103PC-L1

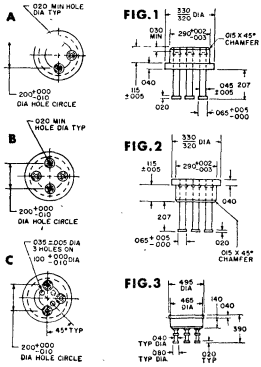
DOUBLE TURRET TERMINAL-THREAD STUD BASE

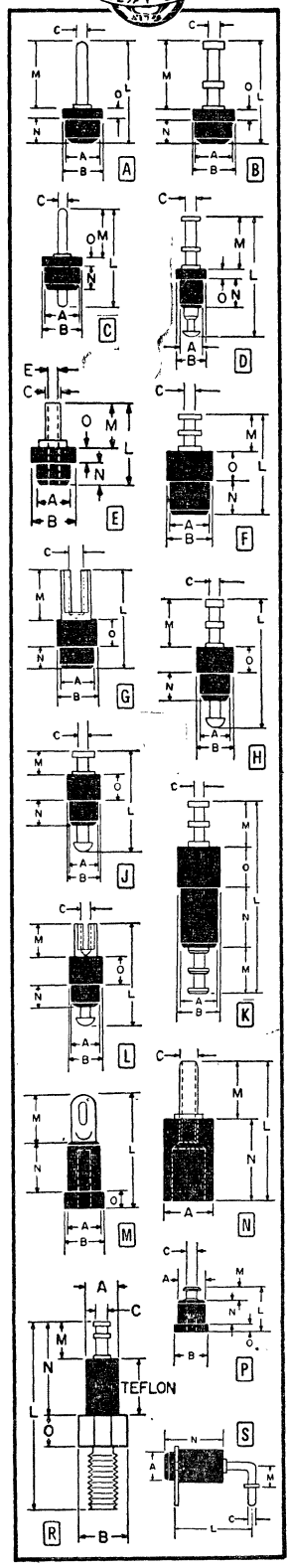
Stock No.	Mfr's Type	Fig.	A	B	C	L	M	N	O	1-4	5-9	10-Up	Sealectro Equivalent Type
920-9314	53-1500	R	.125	.156	.045	.750	.148	.372	.128	21.25	18.75	16.66	.....
920-9318	53-1506	R	.125	.156	.045	.750	.148	.372	.128	21.42	18.90	16.79	.....

TO-5, TO-18 TEFLON TRANSISTOR SOCKETS FOR FAST INSTALLATION

Smith Teflon transistor sockets cut installation time and afford increased reliability. Sockets shown here represent the basic configurations available for JEDEC Packages TO-5 (.200 diameter pitch circle) and TO-18 (.100″ diameter pitch circle). Wt. 1 oz.

Stock No.	Mfr's Type	Fig.	Sealectro Equiv. Type	EACH 1-99	100-499	500-999	1000-Up
920-9300	43-1000	1A	TC-300T	.30	.255	.225	.20
920-9270	34-1000	2A	.....	.31	.264	.233	.207
920-9303	43-1003	1C	TC-303T	.38	.323	.285	.253
920-9273	34-1003	2C	.....	.39	.332	.293	.26
920-9306	43-1100	1B	TC-400T	.35	.298	.263	.233
920-9280	34-1100	2B	.....	.36	.306	.27	.24
920-9310	43-1104	1D	TC-404T	.43	.366	.323	.287
920-9284	34-1104	2D	.....	.44	.374	.330	.293



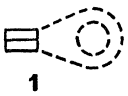


How to Select the Right Vaco Terminal

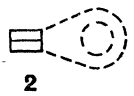
INSTRUCTIONS: Circle the number in each step that meets your design requirements, and enter that number in the appropriate space in the box to the right. Upon completion of steps 1 through 4, you have automatically specified the correct terminal to fill your needs.

STEP 1	STEP 2	STEP 3	STEP 4	

STEP ONE: Select Barrel Style

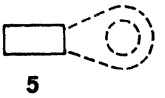


1
OPEN SEAM
Single-grip terminal is most economical style with temperature range from —67° to 350°F.

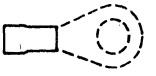


2
OPEN SEAM HIGH TEMPERATURE
Single-grip style with range up to 650°F.

3
BRAZED SEAM
Single-grip style for use with solid wire; crimp in any direction.



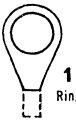
5
INSULATED SINGLE-GRIP
Has temperature range from —40° to 220°F with insulated sleeve of polyvinyl choride.



6
BELLMOUTH INSULATED
Flared end of polyvinyl chloride sleeve accepts large O.D. insulated wire. Temperature range from —40° to 220°F.

9
INSULATED DOUBLE-GRIP
Bronze sleeve and nylon insulation give highest degree of performance on solid wire or stranded wire. Crimp in any direction on wire and sleeve for complete support in areas of vibration. Temperature range —60° to 250°F.

STEP TWO: Select Tongue Style



1 Ring

3 Spade

4 Flanged Spade

5 Hook

6 Flag

7 Parallel Butt (also insert 02 in Step 4)

8 Quick Connect

9 Bullet

STEP THREE: Determine Wire Range

Connects _____ wire to _____ wire or component.

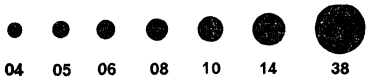
Wire Range: _____ × ____
(Conductor diameter in Mils)²

_____ = _____ Circular Mil Area.
(Number of wires)

Insert This Number in Step 3 Below	Wire Range	Circular Mil Area Min.	Circular Mil Area Max.	Insert This Number in Step 3 Below	Wire Range	Circular Mil Area Min.	Circular Mil Area Max.	Insert This Number in Step 3 Below	Wire Range	Circular Mil Area Min.	Circular Mil Area Max.
2	22-18	509	2,600	4	12-10	5,180	13,000	6	6	20,800	33,100
3	16-14	2,050	5,180	5	8	13,100	20,800	0	No Wire		

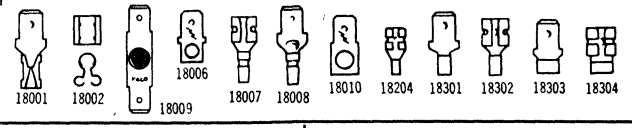
STEP FOUR: Determine Stud Size (at left) or Style of Quick Connect (at right).

For Ring, Spade, Hook, and Flag Terminals



04 05 06 08 10 14 38

For Special Quick Connects Illustrated Below Use 5 Digit Number As Shown



ALL VACO TERMINALS FEATURE MOD-PAK

The MOD-PAK is an exclusive Vaco packaging system that provides you with greater inventory flexibility, freedom from bin spillage, and convenience in handling. A Mod-Pak contains 100 . . . exactly 100 VACO Solderless Terminals in a factory-sealed plastic pak with zip top for easy opening. In addition each plastic pak is contained in an individual carton. Mod Paks are also available in "MB" (1000 Lot) cartons. Write for quantity lot quotations.

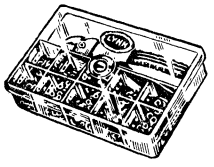
- 100 Vaco Solderless Terminals in a Plastic Zip-Top Pak
- Provides Convenient Handling and Storage of Terminals

TERMINAL KITS WITH CRIMPER/CUTTER

INSULATED TERMINAL KITS

MODEL 4900-63. Popular assortment contains 500 insulated single-grip solderless terminals, plus a rugged combination crimper-cutter tool for correct installation. Package includes: 20 different types and sizes of terminals; plus Model 1963 high-grade steel service tool. Case, 13¼" wide, 9¼" deep and 2" high. Shpg. wt. 10 lbs.
975-4063 . . . . . Each 45.50 2-Up . . . . . Each 34.00

ASST'D. TERMINALS SERVICING KIT

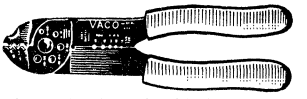


MODEL 2195. Handy kit contains approximately 140 solderless terminals in most popular sizes, in addition to a Type 1900 crimper/cutter tool described at right. The terminal assortment and tool are supplied in handy clear plastic case with slotted compartment dividers for index tabs. Case size, 8¾x6x1¾". Shpg. wt. 2 lbs.
975-3670 . . . Each 11.40 2-Up . . . Ea. 9.50

NON-INSULATED TERMINAL KIT

MODEL 5000. Contains 1000 single-grip non-insulated type solderless terminals, plus a combination crimping-cutter installing tool all housed in a compact steel storage box. Includes 50 each of twenty different types and sizes of solderless terminals to meet almost all applications and needs. Shpg. wt. 10 lbs.
975-4100 . . . Each 44.80 2-Up . . . Ea. 34.00

MODEL 1900 CRIMPING TOOL



For fast crimping of solderless terminals. Has 3 dies for use with non-insulated terminals on 18-22, 14-16, and 10-12 wires. Also strips insulation from No. 22 to 10 wire; cuts wire and bolts. Rugged steel; comfortable plastic handles. Wt. 1 lb.
975-3580. 1-3 . . . Ea. 4.80 4-Up . . . Ea. 4.50

MODEL 1963 ALL-PURPOSE CRIMPING AND CUTTING TOOL

Provides all the tools needed for electrical connections without soldering. Has crimping dies for insulated and non-insulated terminals. Cuts and strips wire; slices bolts. Wire cutter located at tip of tool for close work. Stripping notches for Nos. 10, 12, 14, 16, 18, 20 and 22 wire. Slices bolts 10-32, 6-32, 5-40, 10-24, 8-32 and 4-40. Plastic handles. Wt. 1 lb.
975-3590. 1-3 . . . Ea. 5.67 4-Up . . . Ea. 5.25

MODEL T-1710 CRIMPING TOOL

Crimps all terminals in wire range of 22 to 10 gauge. Built-in rachet, safety release and terminal locator. Compound lever action assures uniform crimps; meets or exceeds Mil-Spec pullout tests. Plastic handles. Shpg. wt. 1 lb.
975-2470 . . . . . 40.00

Allied Electronics Has the Best Record of Orders Filled in the Country

Solderless Terminals and Connectors

VACO®

Provide excellent electrical connections. Constructed of electrolytic copper and tin-plated for maximum conductivity and corrosion resistance. Sold only in packages of 100.

NON-INSULATED TERMINALS — SOLD IN PACKAGES OF 100 — INSULATED TERMINALS

Wire Size	Stud Size	L.	Type	Stock No.	Mfr's Type	Fig.	PRICE PER PKG. 1-9	10-49	50-99	100-Up	Stock No.	Mfr's Type	Fig.	PRICE PER PKG. 1-9	10-49	50-99	100-Up
22-18	4	19/32	Ring	975-5404	11204	1	3.02	2.72	2.45	1.89	975-6704	51204	14	5.26	4.73	4.26	3.29
22-18	5-6	19/32	Ring	975-5405	11205	1	3.02	2.72	2.45	1.89	975-6705	51205	14	5.26	4.73	4.26	3.29
22-18	5-6	21/32	Ring	975-5406	11206	1	3.02	2.72	2.45	1.89	975-6706	51206	14	5.26	4.73	4.26	3.29
22-18	8	43/64	Ring	975-5408	11208	1	3.02	2.72	2.45	1.89	975-6708	51208	14	5.26	4.73	4.26	3.29
22-18	10	43/64	Ring	975-5410	11210	1	3.02	2.72	2.45	1.89	975-6710	51210	14	5.26	4.73	4.26	3.29
16-14	5-6	9/16	Ring	975-5425	11305	1	3.02	2.72	2.45	1.89	975-6735	51305	14	5.26	4.73	4.26	3.29
16-14	5-6	43/64	Ring	975-5426	11306	1	3.02	2.72	2.45	1.89	975-6736	51306	14	5.26	4.73	4.26	3.29
16-14	8	23/32	Ring	975-5428	11308	1	3.02	2.72	2.45	1.89	975-6738	51308	14	5.26	4.73	4.26	3.29
16-14	10	23/32	Ring	975-5430	11310	1	3.02	2.72	2.45	1.89	975-6740	51310	14	5.26	4.73	4.26	3.29
12-10	10	23/32	Ring	975-5440	11410	1	3.73	3.36	3.02	2.35	.....	.....	....	.....	.....	.....	.....
12-10	12-1/4	63/64	Ring	975-5444	11414	1	5.00	4.50	4.05	3.13	.....	.....	....	.....	.....	.....	.....
22-18	4	17/32	Spade	975-5604	13204	2	2.68	2.41	2.17	1.69	975-7104	53204	15	5.26	4.73	4.26	3.29
22-18	5-6	5/8	Spade	975-5606	13206	2	2.68	2.41	2.17	1.69	975-7106	53206	15	5.26	4.73	4.26	3.29
22-18	8	23/32	Spade	975-5608	13208	2	3.02	2.72	2.45	1.89	975-7108	53208	15	5.26	4.73	4.26	3.29
22-18	10	23/32	Spade	975-5610	13210	2	3.02	2.72	2.45	1.89	975-7110	53210	15	5.26	4.73	4.26	3.29
16-14	4-6	5/8	Spade	975-5636	13306	2	3.02	2.72	2.45	1.89	975-7136	53306	15	5.26	4.73	4.26	3.29
16-14	8	23/32	Spade	975-5638	13308	2	3.02	2.72	2.45	1.89	975-7138	53308	15	5.26	4.73	4.26	3.29
16-14	10	23/32	Spade	975-5640	13310	2	3.02	2.72	2.45	1.89	975-7140	53310	15	5.26	4.73	4.26	3.29
22-18	4-6	11/16	Spade w/Fla.	975-5706	14206	3	2.68	2.41	2.17	1.69	975-7206	54206	16	5.26	4.73	4.26	3.29
22-18	4-6	43/64	Hook	.....	.....	....	.....	.....	.....	.....	975-7256	55206	17	5.26	4.73	4.26	3.29
22-18	8	43/64	Hook	975-5808	15208	4	3.02	2.72	2.45	1.89	975-7258	55208	17	5.26	4.73	4.26	3.29
22-18	10	7/8	Hook	.....	.....	....	.....	.....	.....	.....	975-7260	55210	17	5.26	4.73	4.26	3.29
16-14	4-6	19/32	Hook	975-5830	15306	4	3.02	2.72	2.45	1.89	975-7306	55306	17	5.26	4.73	4.26	3.29
16-14	8	21/32	Hook	975-5833	15308	4	3.02	2.72	2.45	1.89	975-7308	55308	17	5.26	4.73	4.26	3.29
16-14	10	15/16	Hook	.....	.....	....	.....	.....	.....	.....	975-7310	55310	17	5.26	4.73	4.26	3.29
16-14	8-10	5/8	Flag	975-5850	16310	5	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
22-18	.....	5/8	Butt	975-6002	17202	6	3.02	2.72	2.45	1.89	975-7502	57202	18	5.26	4.73	4.26	3.29
16-14	.....	5/8	Butt	975-6032	17302	6	3.02	2.72	2.45	1.89	975-7532	57302	18	5.26	4.73	4.26	3.29
12-10	.....	11/16	Butt	975-6042	17402	6	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
22-18	.....	9/16	Male	975-6101	18201	7	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
22-18	.....	21/32	Male	975-6102	18202	7	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
22-18	.....	3/4	Fem.	975-6103	18203	8	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
22-18	.....	17/32	Fem.	975-6104	18204	8	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
22-20	.....	5/8	Con.	975-6106	18206	9	3.40	3.06	2.75	2.14	.....	.....	....	.....	.....	.....	.....
18-14	.....	3/4	Male	975-6131	18301	7	3.02	2.72	2.45	1.89	975-7601	58301	19	5.26	4.73	4.26	3.29
18-14	.....	3/4	Fem.	975-6132	18302	8	3.02	2.72	2.45	1.89	975-7602	58302	20	6.15	5.54	4.98	3.85
18-14	.....	19/32	Angle	975-6133	18303	10	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
18-14	.....	1/2	Angle	975-6134	18304	11	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
16-14	.....	5/8	Snap	975-6201	19301	12	2.32	2.09	1.88	1.45	.....	.....	....	.....	.....	.....	.....
.....	.....	3/4	Snap	975-6202	19302	13	5.50	4.95	4.46	3.45	.....	.....	....	.....	.....	.....	.....

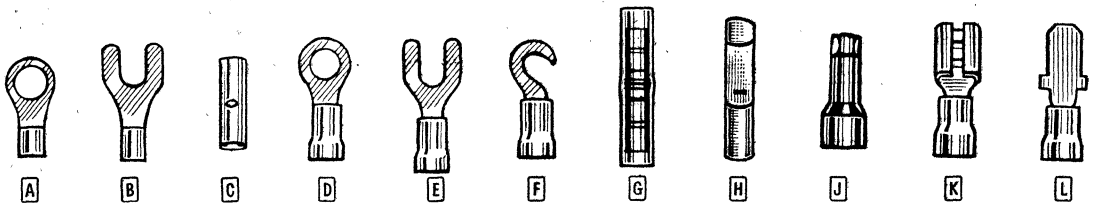
BELLMOUTH INSULATED — SOLD IN PACKAGES OF 100 — DOUBLE-GRIP INSULATED

22-18	4	51/64	Ring	975-7614	61204	21	6.15	5.54	4.98	3.85	.....	.....	....	.....	.....	.....	.....
22-18	5-6	51/64	Ring	975-7615	61205	21	6.15	5.54	4.98	3.85	975-8005	91205	25	9.20	8.28	7.45	5.07
22-18	5-6	55/64	Ring	975-7616	61206	21	6.15	5.54	4.98	3.85	975-8006	91206	25	9.20	8.28	7.45	5.07
22-18	8	7/8	Ring	975-7618	61208	21	6.15	5.54	4.98	3.85	975-8008	91208	25	9.20	8.28	7.45	5.07
22-18	10	7/8	Ring	975-7620	61210	21	6.15	5.54	4.98	3.85	975-8010	91210	25	9.20	8.28	7.45	5.07
16-14	5-6	51/64	Ring	.....	.....	....	.....	.....	.....	.....	975-8035	91305	25	9.20	8.28	7.45	5.07
16-14	5-6	29/32	Ring	975-7626	61306	21	6.15	5.54	4.98	3.85	975-8036	91306	25	9.20	8.28	7.45	5.07
16-14	8	61/64	Ring	975-7628	61308	21	6.15	5.54	4.98	3.85	975-8038	91308	25	9.20	8.28	7.45	5.07
16-14	10	61/64	Ring	975-7630	61310	21	6.15	5.54	4.98	3.85	975-8040	91310	25	9.20	8.28	7.45	5.07
22-18	4	47/64	Spade	975-7644	63204	22	6.15	5.54	4.98	3.85	975-8104	93204	26	9.20	8.28	7.45	5.07
22-18	5-6	53/64	Spade	975-7646	63206	22	6.15	5.54	4.98	3.85	.....	.....	....	.....	.....	.....	.....
22-18	8	59/64	Spade	975-7648	63208	22	6.15	5.54	4.98	3.85	975-8108	93208	26	9.20	8.28	7.45	5.07
22-18	10	59/64	Spade	975-7650	63210	22	6.15	5.54	4.98	3.85	975-8110	93210	26	9.20	8.28	7.45	5.07
16-14	4-6	55/64	Spade	975-7656	63306	22	6.15	5.54	4.98	3.85	.....	.....	....	.....	.....	.....	.....
16-14	8	61/64	Spade	975-7658	63308	22	6.15	5.54	4.98	3.85	975-8138	93308	26	9.20	8.28	7.45	5.07
16-14	10	61/64	Spade	975-7660	63310	22	6.15	5.54	4.98	3.85	975-8140	93310	26	9.20	8.28	7.45	5.07
22-18	4-6	57/64	Spade w/Fla.	975-7666	64206	23	6.15	5.54	4.98	3.85	975-8156	94206	....	9.20	8.28	7.45	5.07
22-18	4-6	7/8	Hook	975-7676	65206	24	6.15	5.54	4.98	3.85	975-8176	95206	27	9.20	8.28	7.45	5.07
22-18	8	7/8	Hook	975-7678	65208	24	6.15	5.54	4.98	3.85	975-8178	95208	27	9.20	8.28	7.45	5.07
22-18	10	7/8	Hook	.....	.....	....	.....	.....	.....	.....	975-8180	95210	27	9.20	8.28	7.45	5.07
16-14	4-6	53/64	Hook	975-7686	65306	24	6.15	5.54	4.98	3.85	975-8186	95306	27	9.20	8.28	7.45	5.07
16-14	8	57/64	Hook	975-7688	65308	24	6.15	5.54	4.98	3.85	975-8188	95308	27	9.20	8.28	7.45	5.07
16-14	10	15/16	Hook	975-7690	65310	24	6.15	5.54	4.98	3.85	975-8190	95310	27	9.20	8.28	7.45	5.07
16-14	.....	63/64	Male	.....	.....	....	.....	.....	.....	.....	975-8231	98301	28	9.20	8.28	7.45	5.07
16-14	.....	63/64	Fem.	.....	.....	....	.....	.....	.....	.....	975-8232	98302	29	9.20	8.28	7.45	5.07

HI-TEMPERATURE — SOLD IN PACKAGES OF 100 — BRAZED

22-18	4	19/32	Ring	.....	.....	....	.....	.....	.....	.....	975-6504	31204	34	3.93	3.54	3.18	2.46
22-18	4-6	19/32	Ring	975-6235	21205	30	3.02	2.72	2.45	1.89	975-6505	31205	34	3.93	3.54	3.18	2.46
22-18	5-6	21/32	Ring	.....	.....	....	.....	.....	.....	.....	975-6506	31206	34	3.93	3.54	3.18	2.46
22-18	8	43/64	Ring	975-6238	21208	30	3.02	2.72	2.45	1.89	975-6508	31208	34	3.93	3.54	3.18	2.46
22-18	10	43/64	Ring	975-6240	21210	30	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
16-14	4	9/16	Ring	.....	.....	....	.....	.....	.....	.....	975-6524	31304	34	3.93	3.54	3.18	2.46
16-14	4-6	9/16	Ring	975-6255	21305	30	3.02	2.72	2.45	1.89	975-6525	31305	34	3.93	3.54	3.18	2.46
16-14	5-6	43/64	Ring	.....	.....	....	.....	.....	.....	.....	975-6526	31306	34	3.93	3.54	3.18	2.46
16-14	8	23/32	Ring	975-6258	21308	30	3.02	2.72	2.45	1.89	975-6528	31308	34	3.93	3.54	3.18	2.46
16-14	10	23/32	Ring	975-6260	21310	30	3.02	2.72	2.45	1.89	975-6530	31310	34	3.93	3.54	3.18	2.46
8	10	17/64	Ring	.....	.....	....	.....	.....	.....	.....	975-6550	31510	34	16.29	14.66	13.20	10.21
8	1/4	17/64	Ring	.....	.....	....	.....	.....	.....	.....	975-6554	31514	34	16.29	14.66	13.20	10.21
8	3/8	17/64	Ring	.....	.....	....	.....	.....	.....	.....	975-6568	31538	34	16.29	14.66	13.20	10.21
8	5/16	17/64	Ring	.....	.....	....	.....	.....	.....	.....	975-6576	31556	34	16.29	14.66	13.20	10.21
22-18	.....	5/8	Butt	975-6352	27202	31	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
16-14	.....	5/8	Butt	975-6362	27302	31	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
.....	.....	3/4	Male	975-6381	28301	32	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....
.....	.....	3/4	Fem.	975-6382	28302	33	3.02	2.72	2.45	1.89	.....	.....	....	.....	.....	.....	.....

American Pamcor Solderless Terminals, Tools



Terminals for general wiring. Excellent for radio-TV, electronic assemblies, electrical repairs. Use them where power for a soldering iron is not available. Require crimping tools below—Type 47100-1 for insulated terminals, Type 49835-1 for noninsulated terminals. Insulated terminals have plastic sleeves. *U.L. Recog. Sold in Pkgs. of 100. Wt. per pkg., 8 oz.

NON-INSULATED BRAISED BARREL

Fig.	Type	Wire Size	Stud Size	Lgth. (In.)	Stock No.	Mfr's Type	PRICE PER PKG./100 1-9	10-49	50-Up
A	Ring	22-18	4	.531	729-1386	32989	4.79	3.38	2.53
A	Ring	22-18	4-6	.546	729-1446	34194	4.79	3.38	2.52
A	Ring	22-18	8-10	.703	729-1396	33214	5.47	3.92	2.94
A	Ring	16-14	4-6	.562	729-1448	34197	5.47	3.92	2.94
A	Ring	16-14	8-10	.734	729-1398	33217	4.79	3.38	2.53
B	Spade	22-18	6	.625	729-1382	32897	4.79	3.38	2.53
B	Spade	22-18	8-10	.625	729-1383	32899	4.79	3.38	2.53
B	Spade	16-14	6	.765	729-1400	33477	6.11	4.43	3.32
B	Spade	16-14	6	.530	729-1380	322996	4.80	3.39	2.54
B	Spade	16-14	8-10	.765	729-1399	33219	6.11	4.43	3.32
C	Splice	22-16		.568	729-1379	31818	5.71	4.10	3.08
C	Splice	16-14		.567	729-1378	31819	5.71	4.10	3.08

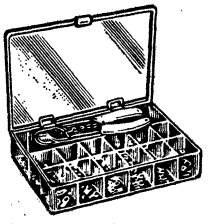
NON-INSULATED

A	Ring	22-18	5-6	.453	729-1332	31091	3.49	2.19	1.64
A	Ring	22-18	8-10	.5625	729-1342	31266	3.49	2.19	1.64
A	Ring	16-14	5-6	.484	729-1388	32186	3.49	2.19	1.64
A	Ring	16-14	8-10	.640	729-1327	30697	3.49	2.19	1.64
B	Spade	22-18	5-6	.547	729-1361	31655	3.49	2.19	1.64
B	Spade	22-18	8-10	.547	729-1357	31636	3.49	2.19	1.64
B	Spade	16-14	8-10	.672	729-1366	31706	3.49	2.19	1.64
A	Ring	12-10	8-10	.808	729-1375	31805	6.75	4.94	3.70
A	Ring	12-10	¼"	.996	729-1392	33458	7.34	5.41	4.06

INSULATED EXPANDED / NON-EXPANDED

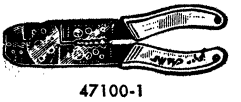
Fig.	Type	Wire Size	Stud Size	Lgth. (In.)	Stock No.	Mfr's Type	PRICE PER PKG/100 1-9	10-49	50-Up	Stock No.	Mfr's Type	PRICE PER PKG/100 1-9	10-49	50-Up
D	Ring	22-18	8-10	.829	729-1433	34149	8.10	5.71	4.28	729-1344	32952	7.09	4.94	3.70
D	Ring	22-18	4-6	.652	729-1430	34142	8.10	5.71	4.28	729-1343	32945	7.09	4.94	3.70
D	Ring	16-14	4-6	.683	729-1439	34158	8.10	5.71	4.28	729-1345	32957	7.09	4.94	3.70
D	Ring	16-14	8-10	.683	729-1441	34161	8.10	5.71	4.28	729-1346	32960	7.09	4.94	3.70
D	Ring	16-14	12	1.059	729-1442	34162	9.40	6.70	5.02	729-1347	32961	8.47	5.98	4.49
E	*Spade*	*22-18*	*4-6*	*.888*	729-1436	*34154*	8.10	5.71	4.28	729-1350	32980	7.09	5.98	4.49
E	*Spade*	*16-14*	*4-6*	*.888*	729-1443	*34165*	8.10	5.71	4.28	729-1348	32964	7.09	5.98	4.49
E	Spade	16-14	8-10	.888	729-1445	34167	8.10	5.71	4.28	729-1349	32966	7.09	5.98	4.49
F	Hook	22-18	8	.871	.....	.....	.....	.....	.....	729-1353	321699	8.10	5.71	4.28
F	Hook	16-14	10	.839	.....	.....	.....	.....	.....	729-1354	324134	11.42	8.24	6.18
G	Splice	22-18	.....	1.065	729-1420	34070	9.73	6.95	5.21	729-1355	324138	8.47	5.98	4.49
G	*Splice*	*16-14*	.....	*1.065*	729-1421	*34071*	9.73	6.95	5.21	729-1381	328427	8.47	5.98	4.49
H	Knife	22-18	.....	.6406	.....	.....	.....	.....	.....	729-1370	31762	13.73	9.99	7.50
H	Knife	16-14	.....	.6406	.....	.....	.....	.....	.....	729-1371	31763	13.73	9.99	7.50
J	Pigtail	22-14	.....	.....	729-1451	35115	4.84	3.25	2.40	729-1459	36964	4.23	2.80	2.10
J	Pigtail	18-10	.....	.....	729-1454	35653	7.83	5.53	4.15	729-1460	36965	7.02	4.92	3.70
K	Receptacle	22-18	Fits .250 Tab	.....	729-1462	42599-2	12.04	9.15	6.86	.....	.....	.....	.....	.....
K	Receptacle	16-14	Fits .250 Tab	.....	729-1474	42332-2	12.04	9.15	6.86	.....	.....	.....	.....	.....
L	PG Tab	22-16	.250 Tab	.....	729-1479	66034-1	9.37	6.81	5.11	.....	.....	.....	.....	.....
L	PG Tab	16-14	.250 Tab	.....	729-1480	66035-1	9.37	6.81	5.11	.....	.....	.....	.....	.....

29033 SOLDERLESS TERMINAL KIT



Kit contains a wide assortment of most popular types of insulated solderless terminals for a wide variety of general-purpose wiring applications. It's ideal for radio and TV servicemen and technicians, automobile mechanics and repairmen, hobbyists and experimenters. Permits a wide range of fast and easy component connections without using a soldering iron. Includes heavy-duty "Super-Champ" crimping and wiring tool (Type 47100-1) described at right. Insulated terminals including ring, spade, splice and pigtail types (see illustrations above). All items are housed in compact, transparent plastic case which has compartments for each type of terminals, plus section for "Super-Champ" crimping tool. Terminals are for use with wire sizes from 10 to 22. Case, 9¾x6½x2". Shpg. wt., 2 lbs.
729-1323.....26.32

"SUPER-CHAMP" CRIMPING TOOLS



47100-1

Type 47100-1. Crimps insulated solderless terminals; shears machine screws, measures stud sizes, cuts and strips wire. Constructed of tool steel. Has insulated plastic handles with a comfortable "feel," permits long use without tiring. 1 lb.
729-1464.....5.95

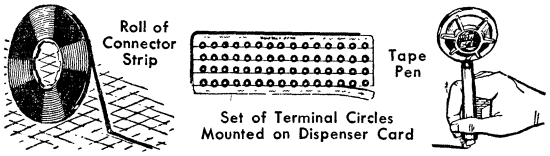
49835-1

Type 49835-1. For crimping non-insulated terminals. Otherwise same as above tool—shears machine screws, measures stud sizes, cuts and strips wire. 1 lb.
729-1470.....5.95

SEE PAGE 105 FOR INTEGRATED CIRCUIT SOCKETS, PAGE 299 FOR PC CONNECTORS—
CONTACT NEAREST ALLIED BRANCH OFFICE FOR A-MP ITEMS NOT LISTED ON THIS PAGE

Self-Sticking Numbers, Drafting Aids, Etch Kits

BRADY PRECISION-MADE PC DRAFTING AIDS



Black self-sticking circles and connector strips for use in printed circuit drafting. Save drafting time and costs. Precision cut to size, dimensionally stable. Photograph an opaque jet black without highlights. Meet Military Standard MS16912 (NORD).

TERMINAL CIRCLES (Av. shpg. wt., 1 oz.)

Stock No.	Type No.	O.D.	I.D.	Circles Per Card	MIL-S-MS 16912 (NORD)
739-5210	*TC125-031*	*.125"*	*.031"*	*112*	*1E*
739-5215	*TC187-062*	*.187"*	*.062"*	*112*	*2E*
739-5225	*TC250-062*	*.250"*	*.062"*	*96*	....
739-5231	*TC312-062*	*.312"*	*.062"*	*80*	....
739-5236	*TC375-062*	*.375"*	*.062"*	*54*	*8E*
739-5238	TC375-094	.375"	.094"	54	....
739-5240	TC400-095	.400"	.095"	48	....
739-5252	*TC500-062*	*.500"*	*.062"*	*42*	*12E*
739-5254	TC500-125	.500"	.125"	42	13E

1-24 Cards.....Each .46 25-99 Cards.....Each .30
100-499 Cards.....Each .27 500-999 Cards.....Each .24

CONNECTOR STRIPS IN ROLLS (18 Yds. Per Roll)

Stock No.	Type No.	Size	Rolls Pkg.	PER PKG. 1-9	10-24	25-99	100-499
739-3810	CSR015	.015"	5	5.30	3.75	3.37	3.00
739-3813	CSR031	.031"	5	5.30	3.75	3.37	3.00
739-3815	CSR040	.040"	5	5.30	3.75	3.37	3.00
739-3817	*CSR062*	*.062"*	*5*	5.60	4.00	3.60	3.20
739-3820	CSR080	.080"	5	5.60	4.00	3.60	3.20
739-3823	CSR093	.093"	5	5.60	4.00	3.60	3.20
739-3826	CSR100	.100"	5	5.60	4.00	3.60	3.20
739-3830	*CSR125*	*.125"*	*4*	4.48	3.20	2.88	2.59
739-3836	CSR156	.156"	3	3.71	2.70	2.43	2.19
739-3842	CSR187	.187"	3	3.71	2.70	2.43	2.19
739-3846	CSR200	.200"	3	3.71	2.70	2.43	2.19
739-3852	CSR250	.250"	2	2.54	1.80	1.62	1.44

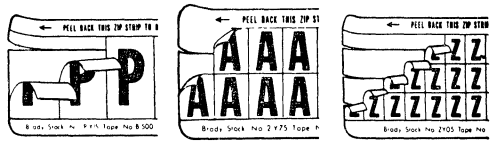
MODEL TP-4 TAPE PEN

Precision drafting instrument provides fast, accurate method of drawing with self-sticking tape. Applies straight, curved or irregular lines. Can be used freehand, with straight edge or French curve. Handles 18-yd. roll of tape; built-in blade cuts off tape at end of line. 7¼" long. Shpg. wt. 13 oz.
739-5290. 1-4.....14.90 5-Up.....9.95

DATAMARK PRINTED CIRCUIT ETCH KIT

Everything you need to begin turning out professional quality printed circuit boards. Especially useful are the many precision printed dry transfer circuit pad arrays for transistors, dual inline and flat pack patterns and TO-5 can microcircuits. Kit contains 4 XXXP 1/16" copper clad circuit boards, 8 sheets of etch resistant dry transfer patterns, lines and circles, 2-120" rolls of etch resistant PC tape, dry concentrated etchant, box and tray.
542-0801. Wt. 11 oz.....Ea. 4.95

BRADY SELF-STICKING NUMBERS AND LETTERS



(A) 7/8x1½" Markers (B) 9/16x¾" Markers (C) 3/8x½" Markers

Self-sticking markers come on handy dispenser card for easy application. Brady numbers and letters are bold and black, in three sizes, printed on durable, bright-yellow vinyl cloth. Just strip the marker from card and apply to any clean, dry surfaces. Markers stick without water or adhesives. *Identical Marker Cards carry multiples of same letter or number. †Comb. Cards carry a consecutive series of letters or numbers. Comb. Pacs have alphabet or numerical assortments. 3 cards of each number 1 thru 5, two of 6 thru 0. **How to Order:** Where last 2 digits of Stock Number have XX, you must complete with your selection. A through Z are designated 01 to 26. Ex.: 739-57XX Type Y15 Letter D—739-5704. Numbers 1-9 are designated 41 to 49. Ex.: 739-57XX Type Y15 Number 6—739-5746. For Zero order letter 0.

Stock No.	Mfr's Type	Fig.	Markers Per Card	Type	EACH CARD 1-24	25-99	100-499	500-999	1000-2499	2500-4999
739-57XX	*Y15**	*A*	*10*	*A-Z, 1-9*	.32	.24	.22	.196	.178	.166
739-58XX	*Y75**	*B*	*32*	*A-Z, 1-9*	.32	.24	.22	.196	.178	.166
739-56XX	*Y05**	*C*	*78*	*A-Z, 1-9*	.32	.24	.22	.196	.178	.166
739-5730	Y15†	A	10	A-J	.32	.24	.22	.196	.178	.166
739-5731	Y15†	A	10	K-T	.32	.24	.22	.196	.178	.166
739-5740	Y15†	A	10	0-9	.32	.24	.22	.196	.178	.166
739-5840	Y75†	B	32	0-9	.32	.24	.22	.196	.178	.166
739-5629	Y05†	C	78	A-Z	.32	.24	.22	.196	.178	.166
739-5640	*Y05†*	*C*	*78*	*0-9*	.32	.24	22	.196	.178	.166

COMBINATION PACS (Multi-Card Assortments)

Stock No.	Mfr's Type	Fig.	No. of Cards	Type	EACH MULTI-CARD PAC 1-3	4-19	20-39	40-99	100-199	200-399
739-5737	Y15-NC	A	25	Numer.*	6.80	5.46	4.90	4.45	4.16	3.86
739-5835	Y75-LC	B	26	A-Z	6.80	5.46	4.90	4.45	4.16	3.86
739-5635	Y05-LC	C	26	A-Z	6.80	5.46	4.90	4.45	4.16	3.86
739-5637	Y05-NC	C	25	Numer.*	6.80	5.46	4.90	4.45	4.16	3.86

HANDY, COMPLETE BRADY NUMBER AND LETTER KIT

Full set of self-sticking numbers and letters comes in one pocket-size booklet for on-the-spot use. Pop-up feature of each row of marker helps you speedily select and apply permanent identification. Black printing on a choice of bright background colors. Size (WxH): P-05, ½x⅜"; P-75, ½x¾". Wt. 4 oz.

Stock No.	Mfr's Type	Description	Color	EACH 1-4	5-9	10-49	50-99
739-5155	PW05-PK-1	375 letters and 330 numbers	White	3.44	3.00	2.76	2.48
739-5165	PY05-PK-1		Yellow	3.44	3.00	2.76	2.48
739-3857	PF-05-PK-1		Silver	3.44	3.00	2.76	2.48
739-5156	PW05-PK-2	700 numbers and 20 dashes	White	3.44	3.00	2.76	2.48
739-5166	PY05-PK-2		Yellow	3.44	3.00	2.76	2.48
739-5160	PW75-PK-1	192 lets., 159 nos., 9 dashes	White	3.44	3.00	2.76	2.48
739-5170	PY75-PK-1		Yellow	3.44	3.00	2.76	2.48

DATAK DRY STENCIL LETTERING AND SYMBOL SETS

Electronic Equipment Title Set. Complete set of pre-printed titles for 95% of electronic markings. Instant dry-transfer process; 24 easy-to-handle sheets, 3x5", in black or white letters. Shpg. wt., 4 oz.

Stock No.	Type	Description	Color	1-2	3-Up
542-0830	*9581*	*Title Set*	*Black*	7.45	5.95
542-0834	*9591*	*Title Set*	*White*	7.45	5.95
542-0838	*9601*	*Refill Alph.*	*Black*	3.75	3.00
542-0842	*9611*	*Refill Alph.*	*White*	3.75	3.00
542-0846	*9621*	*Refill Nos.*	*Black*	3.75	3.00
542-0850	*9631*	*Refill Nos.*	*White*	3.75	3.00

Terminal and Chassis Set. 24 sheets, letters and numerals, in black or white. 3 oz.

Stock No.	Type	Description	Color	1-2	3-Up
542-0811	*966*	*Set*	*Black*	7.45	5.95
542-0812	967	Set	White	7.45	5.95

968 Meter and Dial Marking Set. 12 sheets in black, white and red, with designs, letters, numerals for dials, panels. 4 oz.
542-0813. 1-2.....7.45 3-Up.....5.95

971 Logic Diagram Symbols Kit. Size same as full scale MIL-STD 806 B Spec and ASA STD Y 32 and 14. Line width, .020", blends with #2 Rapidograph pen or 2H pencil. Black. Eight 4¾x7¼" sheets. 3 oz.
542-0819. 1-2.....5.25 3-Up.....4.20

Protective Coatings. Colorless; protect Instant Lettering transfers. †Aerosol spray cans. *For metal and other non-porous surfaces.

Stock No.	Type	Description	Oz.	Each 1-2	3-up
542-0885	04088	Spray-matte†	16	3.70	2.95
542-0886	04089	Spray-gloss†	16	3.70	2.95
542-0888	*04177*	*Spray-gloss†**	*16*	3.70	2.95
542-0889	*04178*	*Spray-matte†**	*16*	3.70	2.95
542-0887	*04176*	*Brush-on***	*3*	1.25	1.00

970 Electronic Symbol Set. Dry-transfer symbols produce neater, clearer schematics. Just rub and it's transferred—permanent—looks like printing. All you draw are connecting leads. Opaque black, repro. quality.
542-0816. Contains 40 Sheets. 8 oz. 1-2 25.00
3-Up.....19.15

Printed Circuit, Layout and Nameplate Kits

KEPRO KITS

Kepro kits offer an introduction to the processing techniques of etched circuit board production. They provide the engineer and experimenter with materials and knowledge to produce accurate, professional circuit boards by tested and proven methods. No prior experience needed. Each kit includes comprehensive instructions that fully describe processing in a simple step-by-step form. All necessary materials and equipment are included. Progress quickly and logically from simple experimental PC boards to short-run production quantities with full assurance of professional results.

STANDARD ETCHED CIRCUIT KIT

S-101A. Etching kit produces basic circuit patterns quickly, accurately. Liquid or pressure-sensitive tape resists are applied directly to copper-clad boards in the desired pattern, then etched. Perforated copper-clad panel, supplied with kit, speeds component mounting. Includes materials for completely processing three single-clad panels. 3x6". Wt. 2 lbs.
835-0689. 1-9....Ea. 5.04 10-Up...Ea. 3.95

S-101A-G. Standard Etched Circuit Kit. As above, but with G-10 glass epoxy boards instead of XXXP paper-base phenolic boards.
835-0692. Shpg. wt. 2 lbs. 1-9....Ea. 6.71 10-Up.....Ea. 5.25

PROFESSIONAL ETCHED CIRCUIT KIT

P-101A Etched circuit kit utilizes photo engraving process to produce professional-quality etched circuits. Negative of layout can be produced photographically or mechanically with materials supplied. A sensitized sheet of XXXP phenolic copper-clad is exposed through your prepared negative, then developed and etched. Includes materials for completely processing three single-clad panels, one 3x3" and two 3x6".
835-0475. Shpg. wt. 3 lbs. 1-9.....Ea. 7.47 10-Up.....Ea. 5.85

P-101A-G. Professional Etched Circuit Kit. As above, but G-10 glass epoxy boards instead of XXXP paper-base phenolic boards.
835-0480. Shpg. wt. 3 lbs. 1-9.....Ea. 9.45 10-Up.....Ea. 7.40

ETCHED CIRCUIT KIT LAB

L-505A. Spans range from single experimental breadboards to high-quality, photo-processed, short-run production boards. Boards up to 70 sq. in. may be processed. Includes PL-2A Photo Layout Kit; 15 photo-sensitized copper-clad phenolic XXXP boards; 4 unsensitized boards; developing and etching trays; printing frame, mechanical negative; solutions; accessories. Shpg. wt. 20 lbs.
835U0201. 1-9 Ea. 44.41 10-Up Ea. 34.75

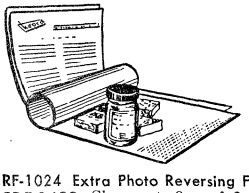
L-505A-G. Etched Circuit Kit Lab. Same as above, but with G-10 glass epoxy boards instead of XXXP paper-base phenolic boards. 21 lbs.
835U0205. 1-9.....Ea. 54.89 10-Up.....Ea. 42.95

PHOTO LAYOUT KIT

PL-2A. Eliminates necessity of inking and lettering through use of mechanical negative and pressure-sensitive characters. Layout time is reduced; errors easily corrected. May be used directly as negative when made to 1:1 scale or photographed and reduced to desired scale when produced at 2:1 or 4:1. Materials supplied will produce two sheets of artwork each 8x10".
835-0483. Shpg. wt. 14 oz. 1-9....Ea. 5.04 10-Up.....Ea. 3.95

PL-200A Master Layout Kit. (Not illus.) Includes materials to make 18x 24" artwork. Contents: 2 pcs.—18x24" matte surface "Mylar"; 2 pcs.—18x24" mechanical negative, "Mylar" base; 4 pcs.—17x21" graph paper; Mylar-Master layout grid sheet. 112/⅛", 224/3/16", 288/¼", 192/7/16", 252/½", 36/1" dots. 18 yds. ea. 1/16", 3/32", ⅛", 3/16", ¼" tape strips; letters; opaquing fluid; tools; data. Wt., 4 lbs.
835U0484. 1-9.....Ea. 49.45 10-Up.....Ea. 38.70

PHOTO REVERSING KIT



FK-701. Easy 2-step process for preparing line negatives and positives from taped or ink artwork or to reverse existing negatives and positives. No darkroom, tanks or trays required. Includes 2 pieces of reversing film 10x24", plus all necessary processing chemicals. 1½ lbs.
835-0154. 1-9 Ea. 9.20 10-Up. Ea. 7.20

RF-1024 Extra Photo Reversing Film. Size: 10x24".
835-0488. Shpg. wt. 8 oz. 1-9....Ea. 3.83 10-Up.....Ea. 3.00

RFD-1PT. Extra Photo Reversing Film Developer.
835-0492. Shpg. wt. 1 lb. 1-9....Ea. 2.87 10-Up.....Ea. 2.25

NAMEPLATE KITS

NP-303A. Enamel Nameplate and Panel Kit. Utilizes photographic process to produce high contrast nameplates on aluminum panels. Kit includes pressure sensitive opaque letters and numerals in 3 fonts. Characters are arranged on a clear acetate sheet and used as positive film to expose photosensitized blue aluminum plate. Plates require only development—no fixing. With two 8x10" aluminum plates, accessories and solutions.
835-0240. Shpg. wt. 1 lb. 1-9....Ea. 9.26 10-Up.....Ea. 7.25

NP-404. Anodized Aluminum Nameplate and Panel Kit. All materials needed to produce detailed aluminum lettering on a black anodized panel. Includes pressure-sensitive opaque letters and numerals; three 3x6" plates; accessories; etching solutions.
835-0241. Shpg. wt. 1½ lbs. 1-9....Ea. 8.37 10-Up.....Ea. 9.55

SILK SCREEN KIT

SC601A. Photo silk screen kit includes materials to produce one silk screen with print area up to 7x9" plus silk and film emulsion for two additional patterns. Produces lacquer resistant film type photo stencil. No dark room required. With squeegee, mounting hinges, black and white printing and etch resist inks. Designed for screen-printing production quantities of etched circuit boards, nameplates, instrument panels, decorative screen printing.
835U0715. Shpg. wt. 25 lbs. 1-9....Ea. 44.73 10-Up...Ea. 35.00

ETCHED CIRCUIT PROCESSING CHEMICALS

Stock No.	Type	Description	Size	1-4, Ea.
835-0497	*RMP-700*	*Resist Marking Pen*	.....	.95
835-0487	R-1PT	Paint Resist (for unsensitized sheet)	16 oz.	2.87
835-0730	T-1PT	Resist Thinner	16 oz.	2.50
835-0067	*D-1PT*	*Develop'g Sol'n (for sensitized sheet)*	*pint*	1.47
835-0060	*D-1G*	*Develop'g Sol'n (for sensitized sheet)*	*gal.*	6.39
835U0078	D-5G	Developing Solution. Wt. 75 lbs.	5 gal.	28.75
835-0108	*E-1PT*	*Etching Solution—Ferric chloride*	*pint*	1.08
835-0105	*E-1G*	*Etching Solution—Ferric chloride*	*gal.*	3.83
835U0116	E-5G	Etch'g Sol'n—Ferric chloride base	5 gal.	16.29
835-0128	EP-1G	Etch'g Powder—ammonium p'sulfate	1 gal.	4.15
835-0139	*EP-5G*	*Etch'g Powder—ammonium p'sulfate*	*5 gal.*	12.01
835-0486	PRS-1PT	Photo Resist Stripper	pint	2.55
835-0485	PRS-1G	Photo Resist Stripper	gal.	9.58

EXTRA PHOTO LAYOUT SUPPLIES

Stock No.	Type	Description	1-4, Ea.	5-Up, Ea.
835-0216	MN-1212	*12x12" Mechanical Negative. 4 oz.*	1.59	1.25
935-0238	MS-3	Stable Base Drafting Film. 8 oz.	2.49	1.96
835-0014	AT-810	Pres. Sens. Letters, Numerals on trans. base (3 sizes. 4 fnt.). 4 oz.	3.19	2.50
835-0184	GS1824	1/10" Lyt. Gr. Sh. (18x24"). 1 lb.	10.16	7.95

NP-303A MATERIALS

Stock No.	Type	Description	Size	5-Up, Ea.
835-0244	NP-EP1220	Sensitized Enamel Plate	12x20"	4.13
835-0246	NPD-1PT	Developer	16 oz.	2.50
835-0242	NP-AS1722	Pressure Sens. Adhesive Sheet	17x22"	2.75

NP-404 MATERIALS

Stock No.	Type	Description	Size	1-4, Ea.	5-Up, Ea.
835-0252	NP-SA1212	Anodized Alum. Plate	12x12"	6.26	4.90
835-0254	NP-SA1220	Anodized Alum. Plate	12x20"	9.90	7.75
835-0067	D-1PT	Developer	pint	1.47	1.15
835-0243	NP-E	Etching Powder	pkg.	1.21	.95

FLEXIBLE ETCHED CIRCUIT KIT

- Make Etched Circuit Patterns up to 3x6" in Size
- Prepared High Contrast Negative—No Darkroom Needed
- Can be Handled in Subdued Incandescent Room Light

FP-101A. All materials and equipment needed to produce three flexible etched circuit patterns up to 3x6" in size. The .004" thick Westinghouse type 5K02 material, clad on one side with photosensitized 2-oz. copper, is ideal for use where it is desirable to bend, twist or form wiring circuit in a tubular shape. Widely used to etch multi-conductor wiring harnesses. Lightweight, it offers excellent circuitry in RC model airplanes. Can be used to make experimental multi-layer boards. The three pieces of material are ready for exposure through a prepared high contrast negative. No darkroom needed. Material can be handled in subdued incandescent room light and exposed in sunlight or with a #2 photoflood lamp. Kit includes materials for producing artwork and "cut and peel" mechanical negatives, exposure frame components, developing solution, ferric chloride etchant, two trays and instructions.
835-0160. Shpg. wt. 2⅝ lbs. 1-9....Ea. 9.47 10-Up.....Ea. 5.95

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Printed Circuit Kits, Supplies and Lettering

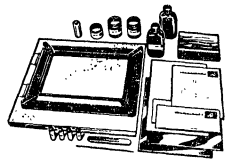
TECHNIQUES PRINTED CIRCUIT KITS AND SUPPLIES

5100 PRINTED CIRCUIT KIT

Laboratory-quality printed circuit kit lets you etch your own circuitry on copper-clad insulating boards. All materials provided. Efficient method incorporates ready-to-use presensitized copper-clad laminate. Cuts to a minimum the time required for making outstanding prototype printed circuits. Ideal for experimental uses.

Kit includes: twenty pieces of single and double-clad XXXP and epoxy fiberglass laminates in assorted sizes, presensitized and uncoated; 2 rolls of tape resist, 1/16" and 1/8" wide; 200 die-cut tape circles; 1 bottle of resist and brush; ball point resist pen; eyelets and terminals; No. 51 drill; layout paper; exposure clamp; developing and etching solution and trays. With complete easy-to-follow instructions. 9½ lbs.
967X1640.....Ea. 35.95 2-Up.....29.95

5006 SILK SCREEN PRINTING KIT



Accurate, rapid method for making larger sample quantities or short production runs of printed circuits. 8x 12" frame is hinge-mounted on formica covered plywood base with silk already stretched. With neoprene squeegee; photo stencil film; ink; blockout medium; tape masking; solvent; bottles; chemicals. 6 lbs.
967-1620.....Ea. 35.94 2-Up.....29.95

PRLT BALL POINT RESIST TUBES

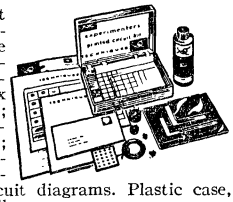
Make resist patterns directly on copper clad boards as easily as using a ball point pen. Deposits line 1/16" wide. Wt. 3 oz.

Stock No.	Color	Stock No.	Color	1-4	5-Up
967-1606	Black	967-1610	Yellow	1.50	1.25
967-1607	Brown	967-1611	Green	1.50	1.25
967-1608	Red	967-1612	Blue	1.50	1.25
967-1609	Orange	.....	.....	1.50	1.25

5002 EXPERIMENTERS KIT

Beginners etched circuitry kit with six copper-clad boards from 3x 2¼" to 4½x6"; etchant; tape resist; resist circles; eyeletassortment; drill. Convenient plastic case. 7⅛x 5x1⅛". 1 lb.
967-1615.....Ea. 5.70 2-Up.....4.74

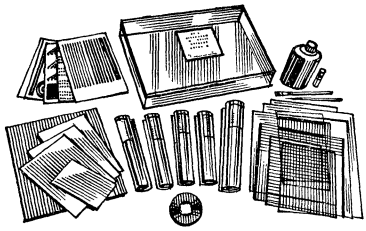
5003 TECHNICIANS KIT



Advanced kit for "pros." Contains 10 single and double-faced-copper-clad boards, 3x 2¼" to 4½x6"; etching solution; tape resist; liquid resist; resist circles; eyelets; drill; circuit diagrams. Plastic case, 7½x5x2". 1½ lbs.
967-1616.....Ea. 11.70 2-Up.....9.75

VECTOR

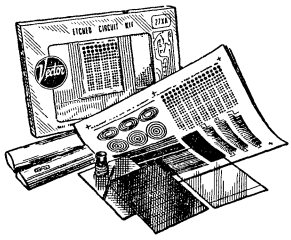
DIRECT POSITIVE ETCHED CIRCUIT KIT



- Top Definition Without Photography
- Uses Direct Positive—No Negative Needed
- Easy Repeatability
- Minimum Undercut

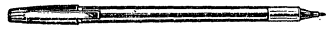
Type 32XA. Produces sharply detailed etched circuits in 1 hour with direct positive; no negatives to be made, no photography. Duplicate boards can be easily made from one master artwork. 1-oz. copper clad laminate is coated with photo-sensitive positive-action etch resist. Minimum undercutting with closable plastic box, plastic etching bags. Includes 2 artwork transparencies, transfer art, 5 boards, plastic box, etchant, developer, glass plate, mylar, mask cutting film, tape, brush, ink, burnishing tool, grid paper.
977-1178. Shpg. wt. 1 lb....**Ea. 29.94 2-Up.....24.95**
977-1177. 32X Sampler Kit. Similar, with two artwork transparencies, two copper clad boards. 12 oz.....**Ea. 10.74 2-Up....8.95**

VECTOR ETCHED CIRCUIT KIT



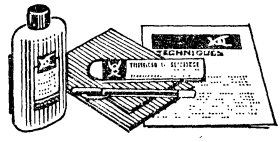
Type 27XA. "Vectoresist" rub-on transfer resist sheet with lines, dots and connector pattern. Replaces conventional tapes and liquid resists. Includes: two 4½x6½" 1-side copper-clad XXXP phenolic; 10x15" Vectoresist sheet; 2 bags of dry etchant; activator in etching bag; layout paper; instructions. 1¼ lbs.
977-1162. 1-9.....Each 9.75
10-49.....Each 6.50
50-199.....Each 5.85
200-499.....Each 4.55
500-Up.....Each 4.36
977-0772. Type R322 Vectoresist Sheet. Replacement 10x15" rub-on transfer resist sheet with assorted line width, dots, circles and 44 contact .156" spaced conn. pattern. 2 oz. 1-9....3.00 10-Up..2.12

TECHNIQUES FIBER TIP RESIST PEN



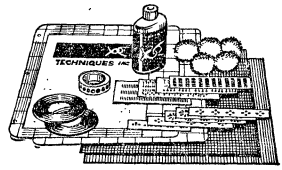
Type PRFP. Draws variable, fine to thick width circuit pattern directly on copper clad laminate, glass, metal, etc. Spare tip.
967-1601. Red. Wt. 3 oz. 1-9.....**Each 2.38 10-Up....Each 1.98**
967-1602. Blue. Wt. 3 oz. 1-9....**Each 2.38 10-Up....Each 1.98**

TECHNIQUES STUDENT PRINTED CIRCUIT KIT



Type 5000. Contains copper clad laminate, etchant, and new type resist pen capable of drawing variable width lines directly onto the laminate. All supplies and instructions needed for lay out and make basic PC boards. 1 lb.
967-1613. Ea. 5.40 2-Up 4.50

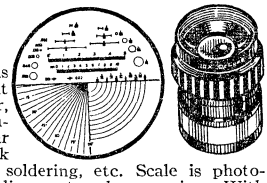
TECHNIQUES 1:1 NEGATIVE ART KIT



Type 5200. Photo reversing kit converts black line artwork to "clear" line art of identical size for exposing pre-sensitized panels. Contains pressure-sensitive patterns, supplies to make two 4½x6" negatives. 2 lbs.
967-1655.....Ea. 15.50
2-Up.....12.95

BISHOP GRAPHICS

10X OPTICAL COMPARATOR



Type 3500. Precision instrument has 10-power, 35mm coated lens. Use it to check pad and target register, conductor path widths, hole diameters, line thicknesses—all linear values at tolerance levels. Check delicate cuts, scratches, plating, soldering, etc. Scale is photo-printed on base glass for precise alignment and comparison. With protective lens cap, cleaning cloth, leather carrying case.
742-2235. Shpg. wt. ½ lb.....**Ea. 22.50 2-Up.....18.75**

RUSSELL INDUSTRIES DRY TRANSFER LETTERING

ELECTRONIC WORDS. Over 1000, in alphabetical order. 4 oz.
566-1080. EM-1 Black. Ea. 7.45 3-Up 5.95
566-1081. EM-1W White.....Each 7.45
3-Up.....5.95

DM-1 DIAL MARKING KIT. 14 pages of black markings, 13 pages of white. Has arcs, dots, lines, etc. 4 oz.
566-1060.....Ea. 7.45 3-Up.....5.95

- Each "Markit" has 27 3x6" looseleaf pages bound with plastic spiral ring
- Special wax-free adhesive assures permanence
- Letters or Numerals in Black or White —Four Sizes from 1/8" to ½".

ALPHABET

Stock No.	Type	Color	Size	EACH	3-Up
566-1010	AM-1	Black	1/8"	7.45	5.95
566-1011	AM-1W	White	1/8"	7.45	5.95
566-1015	AM-2	Black	1/4"	7.45	5.95
566-1016	AM-2W	White	1/4"	7.45	5.95
566-1020	AM-3	Black	3/8"	7.45	5.95
566-1021	AM-3W	White	3/8"	7.45	5.95
566-1025	AM-4	Black	1/2"	7.45	5.95
566-1026	AM-4W	White	1/2"	7.45	5.95

NUMERALS

Stock No.	Type	Color	Size	EACH	3-Up
566-1110	NM-1	Black	1/8"	7.45	5.95
566-1111	NW-1W	White	1/8"	7.45	5.95
566-1115	NM-2	Black	1/4"	7.45	5.95
566-1116	NM-2W	White	1/4"	7.45	5.95
566-1120	NM-3	Black	3/8"	7.45	5.95
566-1121	NM-3W	White	3/8"	7.45	5.95
566-1125	NM-4	Black	1/2"	7.45	5.95
566-1126	NM-4W	White	1/2"	7.45	5.95

Circuit Boards and Accessories

BISHOP GRAPHICS PRESSURE-SENSITIVE COMPONENT PATTERNS

PRE-ETCHED CIRCUIT ZAPS® FOR INSTANT PC BOARDS

A B C D E F

Component patterns, pads and conductor paths for prototype and test development in the lab, in minutes. Precision 1-oz. copper on 5 mil glass epoxy film, backed by pressure-sensitive adhesive. 1X scale conforms to MIL-STD-275 and IPC. *40 fingers. †in kit at right. Av. shpg. wt. ½ oz.

Stock No.	Mfr's Type	Description	Qty. Pkg.	Fig.	Centers	PER PKG. 1	PER PKG. 2-Up
742-2312	9012†	14-pin dual in-line	12	A	.....	7.00	5.85
742-2313	9013	16-pin dual in-line	12	A	.....	7.00	5.85
742-2314	9014	24-pin dual in-line	6	A	.....	7.00	5.85
742-2315	9015	36-pin dual in-line	4	A	.....	7.00	5.85
742-2321	9021	14-lead flat pack	8	B	.250″	7.00	5.85
742-2330	9030†	"TO-5" can 3-lead	16	C	.....	7.00	5.85
742-2331	9031	"TO" can 4-lead	16	C	.....	7.00	5.85
742-2332	9032	"TO" can 6-lead	16	C	.....	7.00	5.85
742-2333	9033	"TO" can 8-lead	16	D	.....	7.00	5.85
742-2334	9034†	"TO" can 10-lead	16	D	.....	7.00	5.85
742-2335	9035	"TO" can 12-lead	16	D	.....	7.00	5.85
742-2336	9036	"TO" can 16-lead	6	D	.....	7.00	5.85
742-2340	9040	Connector strip*	2	E	.100″	7.00	5.85
742-2341	9041	Connector strip*	2	E	.125″	7.00	5.85
742-2342	9042	Connector strip*	2	E	.150″	7.00	5.85
742-2343	9043†	Connector strip*	2	E	.156″	7.00	5.85
742-2345	9045	54-finger term. strip	5	....	.100″	7.00	5.85
742-2350	9050†	Resistor/diode pad	40	F	.500″	7.00	5.85
742-2351	9051†	Resistor/diode pad	32	F	.700″	7.00	5.85
742-2352	9052	Resistor/diode pad	24	F	1.000″	7.00	5.85
742-2360	9060†	Cond. (.031x5½″)	24	....	.078″	7.00	5.85
742-2370	9070†	Cond. "T" (.031″ w.)	64	....	.....	8.00	5.85
742-2380	9080†	4″ Zap cord jumper	10	....	Black	9.06	7.55
742-2381	9081†	4″ Zap cord jumper	10	....	Red	9.06	7.55
742-2382	9082†	4″ Zap cord jumper	10	....	Blue	9.06	7.55
742-2383	9083†	4″ Zap cord jumper	10	....	Green	9.06	7.55
742-2384	9084†	4″ Zap cord jumper	10	....	Orange	9.06	7.55
742-2385	9085†	6″ Zap cord jumper	10	....	Black	9.06	7.55
742-2386	9086†	6″ Zap cord jumper	10	....	Red	9.06	7.55
742-2387	9087†	6″ Zap cord jumper	10	....	Blue	9.06	7.55
742-2388	9088†	6″ Zap cord jumper	10	....	Green	9.06	7.55
742-2389	9089†	6″ Zap cord jumper	10	....	Orange	9.06	7.55
742-2301	9001†	Stake tool w/anvil	1	....	.....	9.06	7.55
742-2305	9005†	Terminals	100	....	.....	7.00	5.85

CIRCUIT ZAP SPEED KIT

Includes all patterns and tools marked † in table at left: four 14-lead dual in-line patterns; four TO-5 3-lead patterns; two 10-finger connector patterns; 19 resistor/diode patterns (0.5″ centers); four resistor/diode patterns (0.7″); 26 connector strips (.031x5½″); nine-conductor "T" pattern, 25 single hole pads, 15 double hole pads; ten 4″ and ten 6″ jumpers (asstd. colors); 100 terminals; staking tool with anvil; two 4x6″ unclad epoxy glass boards. 1 lb.
742-2300. Model 9000. Ea. 59.00 2-Up.....49.50

PRESSURE SENSITIVE DRAFTING AIDS

G H J K L

Component symbols for preparing artwork on printed wiring boards. Symbols represent entire component, eliminating individual do-nut pads. Guaranteed accurate within ±.002″; comform to MIL-STD-275 and IPC guidelines. Available in 1X or 2X scale (4X on special order). For 2X, multiply dimensions by two. Roll of 250. 1 oz.

"TO" CAN PATTERNS

Stock No.	Mfr's Type	Fig.	Scale	Leads	Actual Size O.D.	Actual Size I.D.	Clearance	PER ROLL 1	PER ROLL 2-Up
742-2270	6003	G	1X	3	.087″	.015″	.025″	8.22	6.85
742-2280	6048	G	2X	3	.087″	.015″	.025″	8.22	6.85
742-2273	6018	H	1X	4	.093″	.018″	.025″	8.22	6.85
742-2284	6146	H	2X	4	.093″	.018″	.025″	8.22	6.85
742-2275	6021	J	1X	8	.062″	.015″	.025″	8.22	6.85
742-2285	6197	J	2X	8	.062″	.015″	.025″	8.22	6.85
742-2276	6022	K	1X	10	.062″	.015″	.025″	8.22	6.85
742-2286	6198	K	2X	10	.062″	.015″	.025″	8.22	6.85
742-2277	6023	L	1X	12	.062″	.018″	.018″	8.22	6.85
742-2287	6203	L	2X	12	.062″	.018″	.018″	8.22	6.85

DUAL IN-LINE PATTERNS

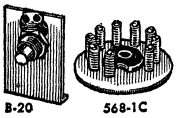
742-2272	6014	....	1X	14		.015″	.030″	9.06	7.55
742-2279	6038	....	2X	14	.070″	.015″	.030″	9.06	7.55
742-2271	6004	....	1X	16	wide	.015″	.030″	9.06	7.55
742-2282	6109	....	2X	16		.015″	.030″	9.06	7.55

PRECISION OPAQUE AND TRANSPARENT TAPE

T-201 is .005″ thick, T-205 and T-207 are .0025″ thick. Wt. 1 oz.

Stock No.	Type	Width	Color	Length	EA.	2-Up
742-2216	T-201	.031″	Black	20 yards	.90	.75
742-2219	T-205	.031″	Red	18 yards	.84	.70
742-2222	T-207	.031″	Blue	18 yards	.84	.70
742-2217	T-201	.080″	Black	20 yards	.90	.75
742-2220	T-205	.080″	Red	18 yards	.84	.70
742-2223	T-207	.080″	Blue	18 yards	.84	.70
742-2218	T-201	.125″	Black	20 yards	.90	.75
742-2221	T-205	.125″	Red	18 yards	1.08	.90
742-2224	T-207	.125″	Blue	18 yards	2.04	1.70

VECTOR BREADBOARD ACCESSORIES



B-20 568-1C

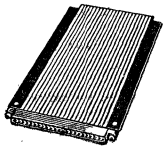
Solderless Sockets. Reliable solderless "Springclips" are soldered to socket contacts. Up to 6 leads connect to each "Springclip" for fast, reliable connection. Sockets mount on any "A" or "AA" pattern Vectorbord with furnished hardware. Wt. ¼ oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-49	50-199	200-Up
977-1289	567-1C	8-Pin Octal	2.25	1.50	1.35	1.05
977-1290	568-1C	9-Pin Noval	2.47	1.65	1.49	1.16
977-1291	569-1C	7-Pin Miniature	2.02	1.35	1.22	.95
977-1292	570B	4-Lead Transistor	3.72	2.49	2.24	1.74

Type B20F Pot and Switch Brackets. Handy brackets made of durable aluminum. Used for quick and easy mounting of pots and switches on any "A" or "AA" pattern Vectorbords. Wt. per pkg. 6 oz.
977-0120. Pkg. of 4. 1-4 .98 5-Up.....58

Bus Stripping. Precision punched fused-brass strip is tinned. .2″ wide with .093″ holes on .265″ centers. Mount with T9.4 zip terminals, solderless T30 springclips, or #4 self-tapping screws in an A" or "AA" pattern Vectorbord. Wt. per pkg. of 10, 5 oz.

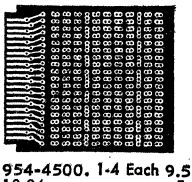
Stock No.	Mfr's Type	Size	Width	Mtg. Ctrs.	PKG./10 1-4	PKG./10 5-Up
977-0976	T-58	8″	.2″	.265″	2.07	1.10
977-0974	T-57	16″	.2″	.265″	3.35	1.79



VECTOR TYPE 3690 CARD EXTENDER

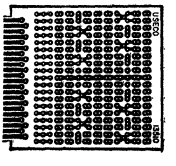
44 etched (total 2 sides) .156″ spaced nickel gold plated fingers. For 4.5x4 to 7½″ plugbords with 22 (or 21) .156″ spaced etched contacts on either or both sides. Overall, 4½x 7½x1/16″. Av. wt. 8 oz.
977-1409. 1-4. Ea. 16.95 5-19 Ea.....11.30
20-99....Each 10.17 100-Up.... Each 9.49

TRIAD TYPE 13500 UNIVERSAL CIRCUIT CARD



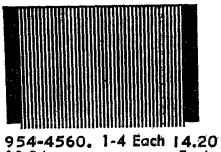
An invaluable aid in developing experimental or prototype circuits. Land pattern is compatible with standard. .1 grid design. Circuit card has 233 mounting pads of one or more holes each, front and back for a total of 444 holes per card; 22 fingers fit any standard plug-in, right-angle or swage-type connector with .156″ spacing. Hole size .052″. Bright immersion tin finish. 4x4½″. 1/16″ thick. 6 oz.
954-4500. 1-4 Each 9.50 5-9.....Each 7.10
10-24.....Each 6.39 25-Up.....Each 5.75

TRIAD TYPE 13510 UNIVERSAL CIRCUIT CARD



Has transistor locating holes, ground bus down center, location for pad rows. Takes Elco 6007 or Amphenol 143 connectors. 190 mtg. pads of one or more holes each, front and back. 22 fingers for connectors with .156″ spacing plus 22 pairs of pads. Hole size, .052″. Bright immersion tin plated. 4x4½″; 1/16″ paper-epoxy. 3 oz.
954-4510. 1-4 Each 9.50 5-9 Each 7.10
10-24....Each 6.39 25-Up....Each 5.75

TRIAD TYPE 13600 EXTENDER CARD



Used to extend the fingers of a circuit card to allow access to boards mounted in racks/panels. Frees both sides of electronic circuit for maintenance. Has 43 extension strips on each side of board; standard .156″ connector spacing. Bright immersion tin finish. 5x8″, 1/16″ thick paper/epoxy base. Wt. 6 oz.
954-4560. 1-4 Each 14.20 5-9.....Each 10.65
10-24.....Each 9.59 25-Up.....Each 8.63

Kepro Printed Circuit Boards and Shears

ETCHED CIRCUIT COPPER-CLAD MATERIALS

Laminated 1-oz. (.00135) and 2 oz. (.0127) copper-clad materials. Available in 1/16" XXXP paper base phenolic, glass mat polyester, and G-10 glass epoxy with foil on two sides, except types marked with *, clad one side only. Fully meet standard NEMA grade tolerances. Supplied unsensitized for screen processed parts and photo-sensitized for photo processed boards. Photosensitized materials are ready for exposure with no further sensitizing required.

XXXP PAPER BASE PHENOLIC TYPE (.00135)

Stock No.	Mfr's Type	Wt. per package	Size	PER PKG. OF 5 1-4	5-9	10-19	20-Up
UNSENSITIZED							
835-0306	*P1-365**	*1 lb.*	*3x6"*	2.64	1.98	1.65	1.50
835-0312	P1-465*	1 lb. 3 oz.	4x6"	2.87	2.15	1.85	1.70
835-0318	*P1-12125**	*3 lbs. 6 oz.*	*12x12"*	14.25	10.68	7.35	7.00
835-0310	P1-365PB*	1 lb.	3x6"	3.13	2.34	2.05	1.90
835-0335	P2-335	11 oz.	3x3"	2.10	1.57	1.30	1.20
835-0341	P2-365	1 lb.	3x6"	3.28	2.46	2.05	1.85
835-0351	P2-465	1 lb. 3 oz.	4x6"	3.57	2.67	2.25	2.05
835-0358	P2-12125	3 lbs. 6 oz.	12x12"	19.00	14.25	9.80	9.35
PHOTOSENSITIZED							
835-0502	S1-335*	9 oz.	3x3"	3.00	2.25	1.85	1.70
835-0509	S1-365*	11 oz.	3x6"	4.94	3.70	3.00	2.80
835-0517	S1-465*	1 lb. 6 oz.	4x6"	5.87	4.40	3.60	3.30
835-0525	S1-665*	1 lb. 2 oz.	6x6"	8.73	6.54	5.30	4.90
835-0533	S1-7105*	1 lb. 14 oz.	7x10"	16.06	12.04	9.80	9.05
835-0543	S1-12125*	3 lbs.	12x12"	32.65	24.48	16.85	16.10
835-0552	S2-335	9 oz.	3x3"	4.02	3.01	2.45	2.25
835-0558	S2-365	11 oz.	3x6"	6.98	5.23	4.25	3.95
835-0565	S2-465	14 oz.	4x6"	8.43	6.32	5.15	4.72
835-0573	S2-665	1 lb. 2 oz.	6x6"	12.95	9.71	7.90	7.30
835-0585	S2-7105	1 lb. 13 oz.	7x10"	23.34	17.50	14.25	13.15
835-0594	S2-12125	3 lbs. 5 oz.	12x12"	47.09	35.31	24.30	23.20

GLASS MAT POLYESTER (.00135)

Stock No.	Mfr's Type	Wt. per package	Size	PER PKG. OF 5 1-4	5-9	10-19	20-Up
UNSENSITIZED							
835-0356	P2-465M	1 lb. 1 oz.	4x6"	4.21	3.15	2.65	2.40
835-0324	P1-12125M *	1 lb. 6 oz.	12x12"	16.55	12.41	8.55	8.15
835-0364	P2-12125M	3 lbs. 6 oz.	12x12"	23.00	17.25	11.75	11.25
PHOTOSENSITIZED							
835-0548	S1-12125M*	3 lbs. 6 oz.	12x12"	34.95	26.21	18.05	17.20
835-0599	S2-12125M	3 lbs. 10 oz.	12x12"	52.20	39.15	29.95	25.75
835-0563	S2-365M	1 lb.	3x6"	7.37	5.52	4.50	4.15

G-10 GLASS EPOXY 1 OZ. (.00135)

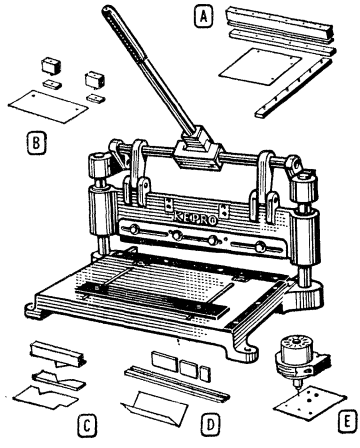
Stock No.	Mfr's Type	Wt. per package	Size	PER PKG. OF 5 1-4	5-9	10-19	20-Up
UNSENSITIZED							
835-0303	P1-335G*	11 oz.	3x3"	3.51	2.63	2.20	2.00
835-0309	*P1-365G**	*1 lb.*	*3x6"*	6.09	4.56	3.80	3.45
835-0315	*P1-465G**	*1 lb. 2 oz.*	*4x6"*	6.77	5.07	4.25	3.85
835-0321	*P1-12125G**	*3 lbs. 6 oz.*	*12x12"*	41.59	31.19	21.50	20.50
835-0338	P2-335G	11 oz.	3x3"	3.51	2.63	2.25	2.05
835-0344	P2-365G	1 lb.	3x6"	6.34	4.75	3.95	3.60
835-0354	P2-465G	1 lb. 3 oz.	4x6"	7.15	5.36	4.50	4.10
835-0361	P2-12125G	3 lbs. 10 oz.	12x12"	43.51	32.63	22.45	21.45
PHOTOSENSITIZED							
835-0505	*S1-335G**	*11 oz.*	*3x3"*	4.66	3.49	2.90	2.65
835-0513	*S1-365G**	*1 lb.*	*3x6"*	8.39	6.29	5.25	4.80
835-0520	*S1-465G**	*1 lb. 2 oz.*	*4x6"*	9.71	7.28	6.10	5.55
835-0528	*S1-665G**	*1 lb. 6 oz.*	*6x6"*	15.50	11.62	9.70	8.85
835-0537	*S1-7105G**	*2 lbs. 2 oz.*	*7x10"*	29.35	22.01	17.90	16.65
835-0546	S1-12125G*	3 lbs. 6 oz.	12x12"	60.00	45.00	31.00	29.55
835-0555	S2-335G	11 oz.	3x3"	6.55	4.91	3.45	3.15
835-0561	S2-365G	1 lb.	3x6"	10.05	7.53	5.75	5.50
835-0569	S2-465G	1 lb. 3 oz.	4x6"	12.01	9.00	7.50	6.85
835-0577	S2-665G	1 lb. 6 oz.	6x6"	19.21	14.40	12.00	10.95
835-0590	S2-7105G	2 lbs. 2 oz.	7x10"	36.38	27.28	22.20	20.50
835-0597	S2-12125G	3 lbs. 10 oz.	12x12"	73.29	54.96	37.85	36.10

G-10 GLASS EPOXY 2 OZ. (.0127)

Stock No.	Mfr's Type	Wt. per package	Size	PER PKG. OF 5 1-4	5-9	10-19	20-Up
UNSENSITIZED							
835-0385	P12-365G*	1 lb. 2 oz.	3x6"	6.22	4.66	3.90	3.55
835-0388	P12-465G*	1 lb. 6 oz.	4x6"	7.02	5.26	4.55	4.00
835-0391	P12-12125G*	3 lbs. 11 oz.	12x12"	43.26	32.44	22.35	21.30
835-0394	P22-335G	14 oz.	3x3"	3.77	2.82	2.35	2.15
835-0397	P22-365G	1 lb. 4 oz.	3x6"	6.73	5.04	4.05	3.70
835-0402	P22-465G	1 lb. 8 oz.	4x6"	7.28	5.46	4.55	4.15
835-0406	P22-12125G	3 lbs. 13 oz.	12x12"	45.43	34.07	23.45	22.40
PHOTOSENSITIZED							
835-0610	S12-335G*	14 oz.	3x3"	4.79	3.59	3.00	2.75
835-0613	S12-365G*	1 lb. 2 oz.	3x6"	8.52	6.39	5.35	4.85
835-0617	S12-465G*	1 lb. 8 oz.	4x6"	9.96	7.47	6.25	5.70
835-0620	S12-7105G*	1 lb. 9 oz.	7x10"	28.84	21.63	17.60	16.25
835-0623	S12-12125G*	3 lbs. 11 oz.	12x12"	61.77	46.32	31.85	30.40
835-0628	S22-465G	1 lb. 8 oz.	4x6"	12.14	9.10	7.60	6.95
835-0632	S22-665G	1 lb. 1 oz.	6x6"	14.56	10.92	9.15	8.35

MULTI-6 PRINTED CIRCUIT BOARD SHEAR

Type MS-6. A bench-top hand tool that will perform a variety of circuit board and sheet metal fabricating functions in the prototype lab or shop. The basic tool is a shear for cutting clad or unclad plastic materials such as G-10 glass epoxy, XXXP phenolic, FR-3 paper-base epoxy and mat polyesters up to 1/16" thick or sheet metals up to .040" thick. Only 15" wide and 13" deep but will shear panels up to 12" wide. With squaring gauge and adjustable back length gauge. 24 lbs.
835X0218...Ea. 148.50 2-Up...119.00



SHEAR ACCESSORIES

A Model PH-6. Pilot Hole Punch Set. Punch bar attachment provides six locations for .125" dia. perforating punches spaced 2" apart with 1st punch located 1" from right side. Punch centers are located accurately to ±.003" from 1st hole up to 10" maximum spacing. Can be used to punch pilot pin holes in copper-clad laminates up to 1/16" thick. Complete with six punches. 4 lbs.
835-0285....Ea. 165.00 2-Up...142.00

B Model PS-2. "Floating" 2-Hole Punch Set. Two .125" dia. punches fixtured to permit two randomly located holes along a single axis. Holes may be spaced from 1¾" to 10" apart. For laminates to 1/16". 2 lbs.
835-0290.....Ea. 52.00 2-Up....44.00

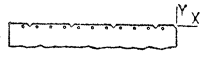
C Model NA-1 Notching Attachment. Mounts on pressure rail of shear for use in cutting corner notches of up to 1"x1" in laminate materials up to 1/16" thick. 3 lbs.
835-0239.....Ea. 56.00 2-Up....48.00

D Model DA-1. PC Board Drill Attachment. 115 VAC motor with Type O chuck attaches to shear to drill .020" to .125" holes in glass epoxy, phenolics, polyesters. 4 lbs.
835-0085.....Ea. 72.00 2-Up....62.00

E Model PB-1. Press Brake Attachment. Forms 90° bends in soft aluminum up to 18 gauge or sheet steel up to 22 gauge. Set includes one 12" brake die section and three brake rails for sections up to 6" long. 3 lbs.
835-0280.....Ea. 49.00 2-Up....42.00

PRE-PILOTED COPPER-CLAD PANELS

1 oz. copper-clad boards with .125" pilot holes at 1" intervals .125" from edge. *XXXP paper base phenolic. †G-10 glass epoxy. Photosensitized and clad on both sides except ‡clad 1 side only and §unsensitized.



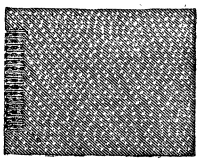
Stock No.	Mfr's Type	Size	Wt. Per Package	PKG. OF 5 1-4	5-9	10-19	20-Up
835-0317	P1-7105P*‡§	7x10"	2 lbs.	8.05	6.03	5.03	4.55
835-0323	P1-12125P*‡§	12x12"	3 lbs. 8 oz.	14.56	10.92	7.53	7.15
835-0357	P2-7105P*§	7x10"	2 lbs.	10.60	7.95	6.63	6.05
835-0363	P2-12125P*§	12x12"	3 lbs. 8 oz.	19.29	14.46	9.98	9.50
835-0535	S1-7105P*‡	7x10"	2 lbs.	16.35	12.26	9.98	9.20
835-0549	S1-12125P*‡	12x12"	3 lbs. 8 oz.	32.97	24.72	17.03	16.25
835-0592	S2-7105P*	7x10"	2 lbs.	23.64	17.73	14.43	13.20
835-0600	S2-12125P*	12x12"	3 lbs. 8 oz.	48.00	36.00	24.48	23.35

Stock No.	Mfr's Type	Size	Wt. Per Package	PKG. OF 5 1-4	5-9	10-19	20-Up
835-0316	P1-7105GP†‡§	7x10"	2 lbs. 6 oz.	21.34	16.00	13.33	12.15
835-0322	P1-12125GP†‡§	12x12"	3 lbs. 10 oz.	41.91	31.43	21.68	20.35
835-0355	P2-7105GP†§	7x10"	2 lbs. 6 oz.	22.36	16.77	13.98	12.75
835-0362	P2-12125GP†§	12x12"	3 lbs. 10 oz.	43.83	32.87	22.63	21.60
835-0534	S1-7105GP†‡	7x10"	2 lbs. 6 oz.	29.65	22.23	18.08	16.70
835-0547	S1-12125GP†‡	12x12"	3 lbs. 10 oz.	60.32	45.24	31.18	29.70
835-0591	S2-7105GP†	7x10"	2 lbs. 6 oz.	36.67	27.50	22.38	20.65
835-0598	S2-12125GP†	12x12"	3 lbs. 10 oz.	73.61	55.20	38.03	36.25

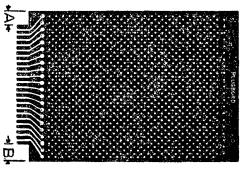
Vector Boards, Terminals and Accessories

"PLUGBORDS" AND RECEPTACLES

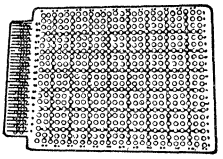
R616-1



812

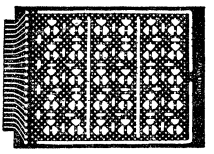


838A



2536WE

For Test Circuits, PC Prototypes, Short Runs



838PWE

"PLUGBORDS." 1/16" thick epoxy paper, EXXXP per MIL-P-22324 except *1/16" epoxy glass. Grade G-10 per MIL-P-18177. Grid of .062" holes on .1" ctrs. except 2536WE has .093" holes on .2" grid, front and back printed alpha-numeric grid layout. Contacts on .156" centers, .072" wide except †.090" wide. New "—1" etched contact boards have "A" and "B" dim. of .453". Other etched boards have "A" .408", "B" .508". GN Type have nickel-plated gold flashed contacts. Av. shpg. wt., 3 oz.

PLUGBOARDS WITH INSTALLED ELCO VARICON CONTACTS

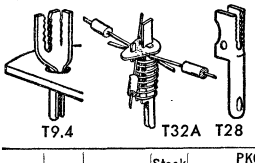
Stock No.	Mfr's Type	Size, Inches	Contacts	EACH 1-4	5-19	20-99	100-199	200-Up
977-1305	*812*	*4½x6½*	*16*	4.47	3.35	2.68	2.50	2.00
977-1306	**812WE*	*4½x6½*	*16*	5.30	3.97	3.18	2.97	2.37
977-1309	837	3x4½	12	3.50	2.62	2.10	1.96	1.56
977-1310	*837WE	3x4½	12	3.87	2.90	2.32	2.17	1.73
977-1328	*848WE	4½x6½	35	9.12	6.84	5.48	5.12	4.08

ETCHED CONTACT PLUGBOARDS 4½x6½"—.156" spaced contact

Stock No.	Mfr's Type	No. Contacts Front	Back	Dim. A	B	EACH 1-4	5-19	20-99	100-199	200-Up
977-1312	838	22	21	.408"	.508"	5.82	4.36	3.50	3.27	2.61
977-1324	838-1	22	21	.453"	.453"	5.82	4.36	3.50	3.27	2.61
977-1322	*838WE-IGN	22	21	.453"	.453"	8.72	6.54	5.23	4.88	3.89
977-1313	838A	22	—	.408"	.508"	4.22	3.16	2.53	2.36	1.88
977-1314	838A-1	22	—	.453"	.453"	4.22	3.16	2.53	2.36	1.88
977-1315	838AWE	22	—	.408"	.508"	4.75	3.51	2.85	2.66	2.12
977-1316	838AWE-1	22	—	.453"	.453"	4.75	3.56	2.85	2.66	2.12
977-1317	*838AWE-IGN	22	—	.408"	.508"	7.05	5.28	4.23	3.95	3.15
977-1320	*†838PWE	22	—	.408"	.508"	5.47	4.10	3.29	3.07	2.45
977-1321	838WE	22	21	.408"	.508"	5.80	4.35	3.47	3.24	2.59

RECEPTACLES. With solder and taper tab leads. Av. wt. 3 oz.

Stock No.	Mfr's Type	Contacts	For	EACH 1-24	25-49	50-249	250-Up
977-0777	R612-1	12	837, 837WE	2.90	2.17	1.62	1.39
977-0779	R616-1	16	812, 812WE	3.60	2.70	2.01	1.75
977-0781	R635	35	848WE, 2536WE	6.50	5.35	3.57	2.98
977-0783	R644	44	838, 838A, 838AWE, 838PWE, 838WE	3.25	2.48	1.58	1.50



T9.4 T32A T28

PUSH-IN TERMINALS

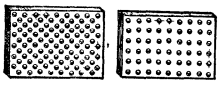
Solderless T32A springclip has less than .020 ohm resistance. Fits .093" "Vectorbord." T9.4 and T28 press-fit; teeth in slots hold lead till soldered. Shpg. wts.: Pkg./100, 2 oz.; Pkg./1000, 12 oz.

Mfr's Type	Fits Holes	Desc.	Stock No. 977-	PKG. 100 1-4	5-19	20-Up	Stock No. 977-	PKG. 1000 1	2-4	5-Up
T9.4	.093"	Tin-brass	0923	2.15	1.62	1.30	0924	14.58	10.18	8.55
T28	.062"	Tin-copper	0950	2.42	1.83	1.45	0951	16.47	11.44	10.30
T28S1	.062"	Sil-copper	0954	2.57	1.93	1.55	0955	17.37	13.51	12.17
T32A	.093"	Nic-brass	0965	19.30	14.50	10.80	0966	130.50	105.00	80.00
T32A1	.062"	Nic-brass	0967	19.30	14.50	10.80	0968	130.50	105.00	80.00

INSERTION TOOLS. Simplify insertion of terminals. Wt. 2 oz.

Stock No.	Mfr's Type	Used For	EACH 1-9	10-49	50-199	200-499	500-Up
977-0650	P-91	T28	.70	.59	.53	.41	.40
977-0678	P-136	T-32	1.77	1.59	1.49	1.49	1.49
977-0667	P-122B	T9.4	2.10	1.89	1.68	1.40	1.40

"VECTORBORD" PRE-PUNCHED TE RMINAL BOARDS



Pattern G Pattern A, AA, B, F, H

No suffix letters indicate boards are phenolic, XXXP per MIL-P-3115B; suffix EP indicates epoxy paper, EXXXP per MIL-P-22324; suffix WE indicates epoxy glass, G-10 per MIL-P-18177. Patterns A, B, F, G, H are 1/16" thick; AA is 3/32" thick. Patterns A and AA have .093" holes on .265" grid; B has .062" holes on .188" grid; F has .062" holes on .2" grid; G has .062" holes on staggered .1" grid; H has .062" holes on .1" grid. All 17" long except *8½", **35". Push-in T9.4 and TewA terminals, below left, fit pattern A and AA. T28, T28S1, T32A1 terminals fit B, F, G and H or standard terminals, and eyelets fit pre-punched holes. User can make own etched circuits. May be sawed, drilled or punched. Av. shpg. wt. 5 oz.

Stock No.	Mfr's Type	Width	Pattern	No. Holes	EACH 1-4	5-19	20-99	100-199	200-Up
977-1233	*85G24EP*	*4 13/16"*	*G*	*(85x23)x2*	3.42	2.56	2.05	1.92	1.53
977-1175	*32AA18**	*4 13/16"*	*AA*	*32x18*	1.30	.97	.78	.73	.58
977-1201	*64A18*	*4 13/16"*	*A*	*64x18*	1.95	1.46	1.17	1.09	.87
977-1206	*64AA18*	*4 13/16"*	*AA*	*64x18*	2.50	1.87	1.49	1.39	1.11
977-1174	32AA9*	2 7/16"	AA	32x9	.92	.69	.56	.52	.42
977-1204	64A18WE	4 13/16"	A	64x18	5.80	4.35	3.48	3.25	2.59
977-1234	*85G24WE*	*4 13/16"*	*G*	*(85x23)x2*	5.95	4.46	3.56	3.33	2.56
977-1228	*85F24EP*	*4 13/16"*	*F*	*85x23*	3.42	2.56	2.05	1.92	1.53
977-1207	64AA18EP	4 13/16"	AA	64x18	4.57	3.42	2.75	2.56	2.04
977-1188	42G24WE*	4 13/16"	G	(42x24)x2	2.95	2.21	1.77	1.65	1.32
977-1194	45B30*	5⅝"	B	45x30	1.30	.97	.78	.73	.58
977-1238	90B30	5⅝"	B	90x30	2.52	1.89	1.51	1.41	1.13
977-1208	*64AA32*	*8½"*	*AA*	*64x32*	4.30	3.22	2.57	2.40	1.92
977X1210	64AA132**	17"	AA	64x32	15.67	11.75	9.41	8.78	7.00
977X1236	*85G42EP*	*8½"*	*G*	*(85x41)x2*	5.92	4.44	3.56	3.32	2.65
977X1237	*85G42WE*	*8½"*	*G*	*(85x41)x2*	8.45	6.33	5.08	4.74	3.78
977X1271	*170H48WE*	*4 13/16"*	*H*	*47x169*	6.35	4.76	3.81	3.55	2.83

2-OUNCE COPPER CLAD TERMINAL BOARDS

Punched and unpunched boards for making printed circuits, shielding, or RF construction. Suffix 1XXXP and C1 are phenolic grade XXXP per MIL-P-3115, copper clad on one side; suffix C2 is the same but both sides clad; WEC1 epoxy glass Grade G-10 per MIL-P-13949B, 1 side; WEC2 same but both sides clad. Patterns F and G have .062" holes. .2" and .1" grid respectively. For Type T28 press-fit terminals, below left. 1/16" thick, 4½" wide. *Unpunched. Av. wt. 1 lb.

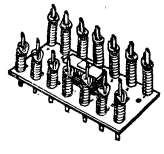
Stock No.	Mfr's Type	Lgth.	Width	Pattern	EACH 1-4	5-19	20-99	100-199	200-Up
977-1375	3070-1XXXP	6½"	4½"	F	1.30	.97	.78	.73	.58
977-1180	42F22C1	8½"	4½"	F	1.55	1.16	.94	.87	.70
977-1181	42F22C2	8½"	4½"	F	2.05	1.02	1.23	1.15	.92
977-1190	42G22WEC2	8½"	4½"	G	4.05	3.03	2.43	2.27	1.81
977-1230	85F42WEC1	17"	4½"	F	14.55	10.91	8.73	8.15	6.50
977-0271	CU65/45-WE1*	6½"	4½"	.....	2.07	1.55	1.25	1.17	.93

PAD CUTTER TOOLS

For isolating terminals from ground plane. Tools cut off ring of copper around hole to isolate it from the rest of the copper cladding. Small isolated pad is left for soldering if desired. Pad cutter permits use of inexpensive ZIP T28 terminals in place of expensive insulated standoffs. Mounts easily in any drill chuck for fast cutting. Shpg. wt., 2 oz.

977-0663. P116 1/4" dia. Circle Cutter.....Ea. 2.32 3-Up....1.85
977-0664. P116A 3/16" dia. Pad Cutter.....Ea. 2.48 3-Up....1.98

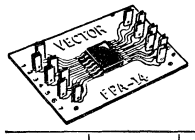
TYPE 570G SOLDERLESS IC BREADBOARD SOCKETS



Ideal for prototype work in the laboratory. Has 14 pin dual-in-line integrated circuit socket, mounted on 2.63x1.33" epoxy glass wafer. Tabs soldered to Springclips. Can be easily press fit mounted to 3/32" holes. Shpg. wt. 2 oz.

977-1295. 1-4..5.85 5-9..4.38 10-49..3.95
50-199.....Each 3.60 200-Up....Each 3.20

FLAT PACK IC SOCKETS



Quality constructed for mounting 12 and 14-lead integrated circuits on circuit boards. 1/16" epoxy paper wafer with copper etched pattern on .05" spacing. Leads fan out to alternate .1" spacing at ends of wafer with .125" diameter pads and .042" diameter holes. 14 Micro-Klip terminals. **Pkgs. of 4.** Shpg. wt. 3 oz.

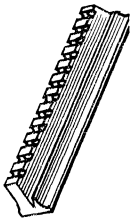
Stock No.	Mfr's Type	Description	PER PKG. 1-9	10-49	50-199	200-499	500-Up
977-0417	FPA-14-1	14-lead, 12 pads	4.95	3.71	3.02	2.35	2.25
977-0415	FPA-14	14-lead	3.12	2.34	1.89	1.47	1.41

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Circuit Board Accessories

E. F. JOHNSON TEST POINT STRIP HANDLE

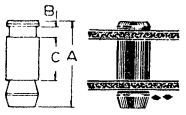
- For Fast PC Board Troubleshooting
- Low-Loss Polyamide Body
- Beryllium Copper Plated



TYPE 266-402. Permits fast troubleshooting of printed circuit boards. Low-loss polyamide body for insulation resistance greater than 200 megohms after MIL-T-5422B humidity test. 5 amp capacity. Operating voltage, 1500 volts. Contact resistance less than 2 milliohms. Beryllium copper plated. 1 oz.

828-1484. 1-9 . Each 2.03 10-49 . Each 1.80
50-99 . . . . . Each 1.64 100-499 . . . Each 1.49
500-Up . . . . . Each 1.36

E. F. JOHNSON POLYAMIDE SPACER BUSHINGS



Low-loss polyamide spacer bushings allow you to mount PC boards to panel or chassis without the use of nuts or bolts. Can be used for easy service. Mechanically secure and nonconductive combination. Machined from nylon. Snap in any predrilled .152 ±.002" diameter hole in a 1/16" thick chassis or panel. Dimensions: A, overall length; B, .065-.070 for all types; C, stand-off height. 4 oz. **Sold in packages of 50 only.**

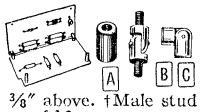
Stock No.	Mfr's Type	Dimensions A	Dimensions C	PER PKG. 1-2	PER PKG. 3-8	PER PKG. 9-Up
828-0342	115-260-1	.396	.125	7.00	6.00	5.50
828-0344	115-260-3	.521	.250	7.00	6.00	5.50
828-0346	115-260-5	.646	.375	7.00	6.00	5.50
828-0348	115-260-7	.771	.500	8.00	7.00	6.30
828-0350	115-260-9	.896	.625	8.00	7.00	6.30
828-0352	115-260-11	1.021	.750	8.00	7.00	6.30

RAYTHEON CIRCUIT-BOARD MOUNTING BRACKETS

Heavy-duty "L" brackets, to be used in pairs to mount one or two terminal or resistor boards rigidly. Cadmium-plated .090" cold-rolled carbon steel. Meet MIL-STD-202 and MIL-S-901 (Ships) specifications. *Distance between centers of holes in panel supports. Wt., 4 oz.

Stock No.	Mfr's Type	Overall Height	Support Centers*	EACH 1-9	EACH 10-49	EACH 50-99	EACH 100-199	EACH 200-499
904-0510	*MB-125*	2 1/16"	1"	.45	.34	.26	.22	.21
904-0511	*MB-126*	2 9/16"	1 1/2"	.48	.36	.27	.23	.22
904-0512	*MB-127*	3 1/16"	2"	.50	.38	.28	.24	.22
904-0513	*MB-128*	3 9/16"	2 1/2"	.53	.40	.30	.26	.24

KEYSTONE HINGED TERMINAL BOARD STANDOFFS



Interconnects circuits or service without danger of shorting. Wiring is exposed for easy testing. Brass per Mil Spec. QQ-B-626A, Comp. 22, 1/2 hard. Cadmium plated per QQ-P-416 Class 2, Type 2 and gold iridite. 90° swivel. *5/8" long below hinge, 3/8" above. †Male stud length. Av. shpg. wt. 2 1/2 oz. **Sold in packages of 10.**

A STANDOFFS FOR FRONT OF BOARDS

Stock No.	Mfr's Type	Use with Hinge No.	Lgth.	PER PKG. 1-2	PER PKG. 3-9	PER PKG. 10-Up
839-3421	1657A	351	3/4"	1.25	1.12	1.05
839-3422	1657B	352	1"	1.55	1.39	1.31
839-3415	1548E	353	3/4"	1.25	1.12	1.05
839-3416	1548F	354	1"	1.55	1.39	1.31
839-3426	1692D	355	3/4"	1.25	1.12	1.05
839-3427	1692E	356	1"	1.55	1.39	1.31
839-3420	1657	357	1/2"	.90	.81	.77
839-3414	1548C	358	1/2"	.90	.81	.77
839-3425	1692C	359	1/2"	.90	.81	.77

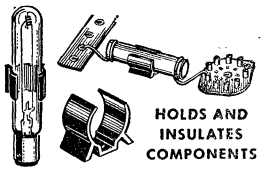
B MALE HINGED STANDOFFS

Stock No.	Mfr's Type	Thd.	Dia.	Lgth.	Thd. Depth	PER PKG. 1-2	PER PKG. 3-9	PER PKG. 10-Up
839-3321	357	4-40	.187"	1/2"	1/4"†	4.25	3.82	3.61
839-3322	358	6-32	.250"	1/2"	5/16"†	4.50	4.05	3.83
839-3323	359	8-32	.250"	1/2"	5/16"†	4.50	4.05	3.83

C FEMALE HINGED STANDOFFS

839-3315	351	4-40	.187"	3/4"	.172"	4.50	4.05	3.83
839-3316	352	4-40	.187"	1"*	.250"	5.00	4.50	4.25
839-3317	353	6-32	.250"	3/4"	.172"	4.75	4.27	4.03
839-3318	354	6-32	.250"	1"*	.250"	5.25	4.72	4.46
839-3319	355	8-32	.250"	3/4"	.172"	4.75	4.27	4.03
839-3320	356	8-32	.250"	1"*	250"	5.25	4.72	4.46

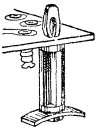
RICHCO PLASTIC COMPONENT CLIPS



High-dielectric, vinyl clips designed to hold and provide insulation for capacitors, resistors, batteries, fuses. Available in 12 sizes for parts with diameters from 1/4" to 1 3/8". V-1000 to V-1006 have one 3/32" mtg. hole; V-1008 has one 5/32" mounting hole; V-1010 and V-1011 have two 5/32" holes, 3/4" apart. All are 1/2" long, except V-1010 and V-1011 which are 1 1/8" long. *In table heading below, indicates diameter of part to be held. Av. shpg. wt. 3 oz. **Sold in packages of 10.**

Stock No.	Mfr's Type	Dia.*	PER PKG. 1-9	PER PKG. 10-49	PER PKG. 50-Up
911-5000	*V-1000*	1/4"	.45	.405	.383
911-5001	*V-1001*	5/16"	.45	.405	.383
911-5002	*V-1002*	3/8"	.48	.432	.408
911-5003	*V-1003*	7/16"	.48	.432	.408
911-5004	*V-1004*	1/2"	.50	.45	.425
911-5005	*V-1005*	9/16"	.60	.54	.51
911-5006	*V-1006*	5/8"	.53	.497	.456
911-5008	*V-1008*	3/4"	.83	.747	.706
911-5010	*V-1010*	1"	.70	.63	.595
911-5011	*V-1011*	1 3/8"	.93	.837	.791

RICHCO CIRCUIT BOARD SUPPORTS



Hold printed circuits in position with clearance above chassis for assembled components. Easily installed without tools. Boards are readily mounted, lock in place, remove easily. Tough nylon; positive spring locking action. Snap into .187" hole in chassis .030-.093" thick. 4 oz. **Sold in packages of 100.**

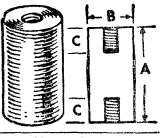
Stock No.	Mfr's Type	Height	PER PKG. 1-4	PER PKG. 5-99	PER PKG. 100-Up
911-0503	CBS-3N	3/16"	2.10	1.89	1.79
911-0504	CBS-4N	1/4"	2.25	2.02	1.91
911-0506	CBS-6N	3/8"	2.35	2.11	1.99
911-0508	CBS-8N	1/2"	2.50	2.25	2.12
911-0510	CBS-10N	5/8"	2.63	2.37	2.24
911-0512	CBS-12N	3/4"	2.80	2.52	2.38
911-0514	CBS-14N	7/8"	2.95	2.65	2.50

RICHCO HEX PVDC SPACER-STANDOFFS

Gray polyvinyl dichloride with high dielectric, excellent insulation and mechanical strength. Self-extinguishing; resistant to chemicals; easy to apply. For use with self-tapping screw (size 4, 6 or 8 as indicated). Shpg. wt. 5 oz. **Package of 100 only.**

Stock No.	Mfr's Type	Lgth.	Hex	Screw Size	PER PKG. 1-4	PER PKG. 5-99	PER PKG. 100-Up
911-0674	HS4-4	1/2"	.187"	#4	2.20	1.98	1.87
911-0675	HS4-5	5/8"	.187"	#4	2.30	2.07	1.96
911-0676	HS4-6	3/4"	.187"	#4	2.43	2.19	2.07
911-0678	HS4-8	1"	.187"	#4	2.65	2.38	2.25
911-0684	HS6-4	1/2"	.250"	#6	2.43	2.19	2.07
911-0685	HS6-5	5/8"	.250"	#6	2.60	2.34	2.21
911-0686	HS6-6	3/4"	.250"	#6	2.78	2.50	2.36
911-0688	HS6-8	1"	.250"	#6	3.10	2.79	2.64
911-0695	HS8-5	5/8"	.375"	#8	3.35	3.01	2.84
911-0696	HS8-6	3/4"	.375"	#8	3.68	3.31	3.13
911-0698	HS8-8	1"	.375"	#8	4.33	3.90	3.69

H. H. SMITH CERAMIC STAND-OFF INSULATORS

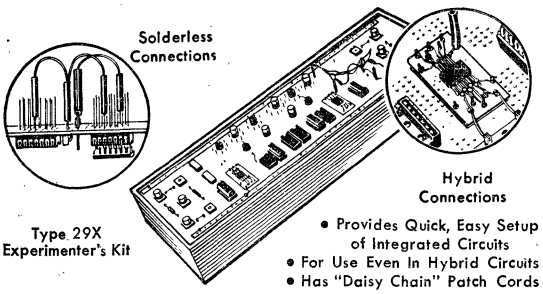


Commercial-grade threaded insulators to suit a wide variety of RF applications. Grade L-5 ceramic is employed with outside highly glazed to prevent absorption of moisture and avoid leakage losses. All except Type 2640 are threaded at both ends to accept 6-32 or 1/4-20 machine screws. Type 2640 is threaded throughout. Av., 3 oz.

Stock No.	Mfr's Type	Dimensions A	Dimensions B	Dimensions C	Thread	PKG. OF 10 1-4	PKG. OF 10 5-9	PKG. OF 10 10-Up
920-2540	2640	1/4"	1/4"	Thru	6-32	1.60	1.44	1.36
920-2541	*2641*	1/2"	1/4"	5/32"	6-32	1.64	1.47	1.40
920-2542	2642	3/8"	3/8"	5/32"	6-32	1.70	1.53	1.44
920-2543	2643	1/2"	3/8"	3/16"	6-32	2.03	1.83	1.73
920-2544	*2644*	1/2"	1/2"	9/64"	6-32	2.40	2.16	2.04
920-2545	*2645*	3/4"	1/2"	1/4"	6-32	2.70	2.43	2.30
920-2546	*2646*	1"	1/2"	3/8"	6-32	3.20	2.88	2.72
920-2547	*2647*	1 1/2"	1/2"	9/16"	6-32	3.10	2.79	2.64
920-2548	2648	2 1/2"	1/2"	1/2"	6-32	3.20	2.88	2.72
920-2549	2649	2 1/2"	3/4"	3/4"	1/4-20	4.50	4.05	3.93
920-2550	2650	4"	3/4"	3/4"	1/4-20	7.50	6.75	6.40

Vector Breadboard Kits, Accessories, and Cases

29X EXPERIMENTER'S IC BREADBOARD KIT



- Provides Quick, Easy Setup of Integrated Circuits
- For Use Even In Hybrid Circuits
- Has "Daisy Chain" Patch Cords

Deluxe integrated circuit breadboarding kit provides fast, convenient means of interconnecting most configurations of IC packages for experimental uses. Mounting surface is of pre-punched Micro-Vectorboard with .042" dia. holes on .100" grid spacing; supported by 2" high aluminum Frame-Loc rails. Kit includes 14 and 16-pin dual-in-line IC sockets, plus circular lead pattern TO-5 IC sockets with adapters for mounting to rectangular grid. Vector's T42-1 push-in Micro-Klips and K24C push-in pins for fast, easy connections. Wiring may be done with polyurethane coated wire, solderable thru insulation, or "Daisy Chain" solderless patch cords (both included). Flat bus strip supplied. 4½x14x2".

977-1165. Shpg. wt. 2 lbs.....Ea. 71.70 2-Up.....64.25

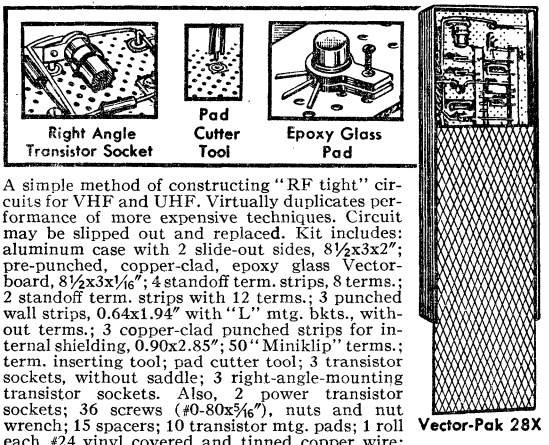
INTEGRATED CIRCUIT BREADBOARD KIT

Type 30X. Not illustrated. For fast, convenient means of interconnecting most configurations of IC packages for experimental uses. Board is 4½"x8½" and has .042" diameter holes spaced 0.1" x0.1". Mounted in slots of 2" high Frame-Loc aluminum rails. Includes double-faced pressure sensitive rubber tape so that integrated packages may be fastened to board with terminals either up or down. 100 T42-1 Micro-Klip terminals with special installation tool to assure fast set-up time. 50 "J" terminals with square pins for wire wrapping. 50' of bare tinned #26 copper wire; 20' of Belsol #32 solder through insulation wire. Hole pattern allows leads of D.I.P.'s or accessory D.I.P. socket leads for the same to pass directly through the matching holes. Connections may be soldered directly to the emergent tabs, or the supplied terminals may be used. Two bus strips (7" long) for supplying power to board. Layout paper, instructions, and corner brackets to assemble side rails. 2 lbs.

Type 31X. A bigger version of the 30X with 4½"x17" mounting surface. Includes all of the above, plus more hardware components. L-type brackets mount nearly all sizes of pots and switches. 50 tin-plated inboard pins. Three bus strips (14" long). 2¼ lbs.

Stock No.	Mfr's Type	EACH 1-9	10-49	50-199	200-499	500-Up
977-1167	30X	12.90	10.75	9.68	7.53	7.20
977X1169	31X	21.00	17.50	15.75	12.25	11.73

PAK 28X HIGH-FREQUENCY CIRCUIT BREADBOARDING KIT

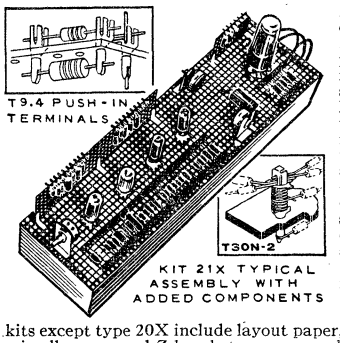


A simple method of constructing "RF tight" circuits for VHF and UHF. Virtually duplicates performance of more expensive techniques. Circuit may be slipped out and replaced. Kit includes: aluminum case with 2 slide-out sides, 8½x3x2"; pre-punched, copper-clad, epoxy glass Vectorboard, 8½x3x1/16"; 4 standoff term. strips, 8 terms.; 2 standoff term. strips with 12 terms.; 3 punched wall strips, 0.64x1.94" with "L" mtg. bkts., without terms.; 3 copper-clad punched strips for internal shielding, 0.90x2.85"; 50 "Miniklip" terms.; term. inserting tool; pad cutter tool; 3 transistor sockets, without saddle; 3 right-angle-mounting transistor sockets. Also, 2 power transistor sockets; 36 screws (#0-80x5/16"), nuts and nut wrench; 15 spacers; 10 transistor mtg. pads; 1 roll each #24 vinyl covered and tinned copper wire; 18 pieces plastic tubing 1/16" O.D.; 50 eyelets 1/16x7/32". Overall kit size, 8½x3x2". Shpg. wt., 2 lbs.

977-1164.....Ea. 36.86 2-Up.....30.70

Case Alone. Type HF20-86/31. With slide-out sides. Shpg. wt. 8 oz.
977-0525. 1-9..6.60 10-49..5.50 50-199..4.95 200-Up..3.85

EXPERIMENTERS' CHASSIS KITS



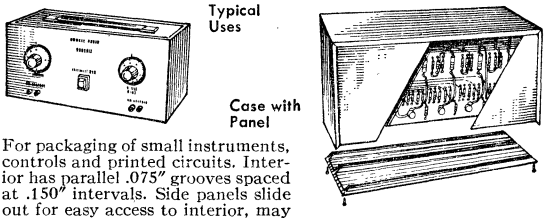
Designed for rapid setup of experimental circuits. Include push-in terminals, perforated XXXP phenolic decks, aluminum supports, T-30N-2 installation tool, spring pusher tool, hardware. Terminals: T-9.4 with insert tool (push-in type require soldering); T-30N-2 ("Springclip" holds up to 6 wires tightly without soldering); patchcords (supplied) slip in between spring coils of solderless terminals and speed wiring. Each pair of small decks* is: 1⅜x1²⁹⁄₃₂x³⁄₃₂" and 1²⁹⁄₃₂x8½x³⁄₃₂". All kits except type 20X include layout paper, pot, and switch brackets, miscellaneous and Z-brackets, screws and nuts.

Stock No.	Mfr's Type	Main Deck	*	Wt., Lbs.	EACH 1-9	10-49	50-199	200-499	500-Up
977-1150	20X	4¾x8½"	0	1	8.10	6.75	6.08	4.73	4.52
977-1152	21X	4¾x17"	2	2¾	22.44	18.70	15.08	11.73	11.22
977-1154	22X	4¾x8½"	2	1¼	15.42	12.85	10.35	8.05	7.71
977-1155	22XA	8½x17"	2	3½	37.52	31.30	25.20	19.60	18.76
977-1159	25X	8½x17"	2	3½	28.76	23.95	19.31	15.05	14.38

KITS ABOVE INCLUDE THE FOLLOWING:

Mfr's Type	Terminals T-9.4	T-30N-2	T-32A	Patch-cords	Tube Skt. 7P	8P	9P	Trans. Skt. 3, 4P	Power
20X	75	20	0	0	2	3	3	0	0
21X	100	50	0	8	2	3	3	4	2
22X	75	20	0	6	0	0	0	6	2
22XA	100	100	18	14	0	0	0	6	2
25X	100	90	10	13	3	2	2	4	2

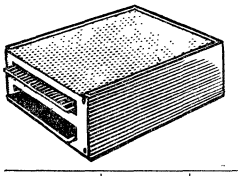
"MULTI-MOD" ALUMINUM CASES



For packaging of small instruments, controls and printed circuits. Interior has parallel .075" grooves spaced at .150" intervals. Side panels slide out for easy access to interior, may be drilled or perforated for ventilation. Exterior of each box has smooth sides, except for one surface. Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Size and Description	EACH 1-9	10-49	50-Up
977-1019	W20-46-31	2"Wx4.6"Lx3.1"H for 4½x3½" cards	3.37	2.81	2.53
977-1021	W20-66-46	2"Wx6.6"Lx4.6"H for 4½x8½" cards	4.47	3.73	3.36
977-1022	W30-66-46	3"Wx6.6"Lx4.6"H for 4½x6½" cards	5.46	4.55	4.10
977-1023	W30-86-46	3"Wx8.61"Lx4.61"H for 4½x8½" cards	6.01	5.01	4.51
977-1027	W30-100-80	3"Wx10.0"Lx8.0"H for 7.9x10" cards	7.72	6.44	5.20
977-1029	W45-86-46	4½"Wx8.6"Lx4.61"H for 4½x8½" cards	6.87	5.73	5.16
977-1030	W45-100-46	4.5"Wx10.0"Lx4.6"H for 4½x10" cards	7.52	6.27	5.64
977-0425	FT-1	Rubber feet for above. Pkg. of 8 for 1.63			

CASES FOR PRINTED CIRCUIT CARDS



2" wide extruded aluminum cases, brushed satin finish. 2 slide-out sides allow access to internal cards yet provide shielding with interlocking design. 9 inside 1/16" grooves spaced .150" apart to allow choice of positions. 2 cover grooves. Cases have plain .040" bases for cutting Plugboard slots or mount plugs. Dimensions: *2.0x3.12x 4.21", and †2.0x4.62x6.21". Wt., 10 oz.

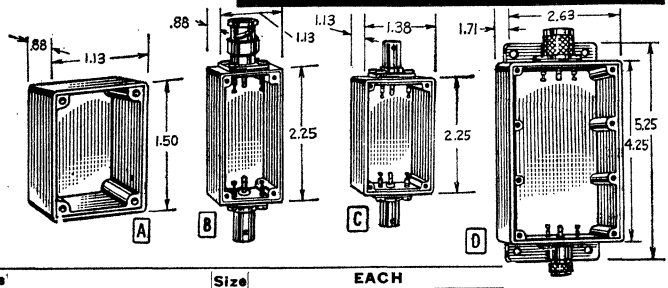
Stock No.	Type HF20-	Maximum Size Inside Board	EACH 1-9	10-49	50-199	200-Up
977-0515	31-42/1*	4.21 H x 3 W x 4" L	4.48	3.89	3.50	2.72
977-0518	46-62/1†	6.21 H x 4.5 W x 6" L	5.28	4.58	4.12	3.21

"Black Boxes"

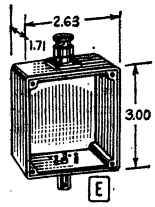
POMONA ELECTRONICS

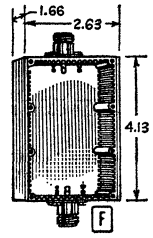
SHIELDED ALUMINUM "BLACK BOXES"

Ideal for compact packaging of voltage dividers, isolation networks, impedance machine networks and other varied uses. Die-cast aluminum housing with blue, baked enamel finish; plus anodized aluminum cover. With screws. Solder turret terminals for permanent, noise-free connection of components. Fully shielded for RF uses. Operating temperature, −55°C to +150°C. Working voltage, 500 volts peak. Noise rejection, greater than 70 dB. *Finish: unpainted. Dimensions shown with illustrations at right. Av. shpg. wt. 2 oz.



Stock No.	Mfr's Type	Connections: 1st End	Connections: Center	Connections: 2nd End	Size Fig.	EACH 1-9	10-24	25-49	50-99	100-Up
885-0891	3751	BNC Jack UG290A/U	None	BNC Jack UG290A/U	A	8.95	6.85	6.17	5.84	4.80
885-0892	3752	BNC Jack UG290A/U	None	BNC Plug UG1104A/U	A	10.26	7.85	7.05	6.67	5.48
885-0893	3753	None	None	None	A	1.96	1.50	1.35	1.28	1.05
885-0894	*3754	None	None	None	A	1.96	1.50	1.35	1.28	1.05
885-0762	3232	BNC Jack UG290A/U	BNC Jack UG290A/U	BNC Jack UG290A/U	C	12.43	9.50	8.55	8.07	6.65
885-0763	3233	BNC Jack UG290A/U	Banana jack binding posts with solder turret terminals	BNC Plug UG1104A/U	C	14.19	10.85	9.75	9.22	7.58
885-0597	2417	None	None	None	C	1.96	1.50	1.35	1.28	1.05
885-0602	*2428	None	None	None	C	1.96	1.50	1.35	1.28	1.05
885-0670	2901	None	None	None	D	7.65	5.85	5.27	4.97	4.10
885-0671	2902	BNC Jack UG290A/U	None	BNC Jack UG290A/U	D	12.88	9.85	8.88	8.38	6.90
885-0672	2903	BNC Jack UG290A/U	None	BNC Plug UG1104A/U	D	14.19	10.85	9.75	9.22	7.58
885-0675	*2906	None	None	None	D	7.65	5.85	5.27	4.97	4.10
885-0871	3601	None	None	None	E	5.03	3.85	3.47	3.27	2.70
885-0872	3602	BNC Jack UG290A/U	None	BNC Jack UG290A/U	E	11.57	8.85	7.97	7.52	6.20
885-0873	3603	BNC Jack UG290A/U	None	BNC Plug UG1104A/U	E	12.88	9.85	8.87	8.37	6.90
885-0876	*3606	None	None	None	E	5.03	3.88	3.47	3.27	2.70
885-0575	2390	BNC Jack UG290A/U	None	BNC Jack UG290A/U	B	8.95	6.85	6.17	5.84	4.80
885-0576	2391	BNC Jack UG290A/U	None	BNC Plug UG1104A/U	B	10.25	7.85	7.05	6.67	5.48
885-0577	2392	BNC Jack UG290A/U	BNC Jack UG290A/U	BNC Jack UG290A/U	B	12.43	9.50	8.55	8.07	6.65
885-0578	2393	BNC Jack UG290A/U	Banana jack binding posts with solder turret terminals	BNC Plug UG1104A/U	B	14.06	10.85	9.75	9.22	7.58
885-0582	2397	None	None	None	B	1.96	1.50	1.35	1.28	1.05
885-0585	*2400	None	None	None	B	1.96	1.50	1.35	1.28	1.05
885-0760	3230	BNC Jack UG290A/U	None	BNC Jack UG290A/U	C	8.95	6.85	6.17	5.84	4.80
885-0761	3231	BNC Jack UG290A/U	None	BNC Plug UG1104A/U	C	10.25	7.85	7.05	6.76	5.48

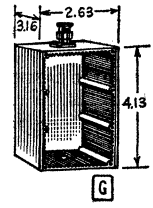




SHIELDED BLACK BOXES WITH CARD GUIDES

Aluminum boxes similar to those described above, but slotted to accept 1/16-in. circuit boards and shielding dividers, listed below. Useable inside space, 4x2x1½-in. Dimensions shown with illustrations at right. Wt. 2 oz.

Stock No.	Mfr's Type	Connections: 1st End	Connections: Center	Connections: 2nd End	Size Fig.	EACH 1-9	10-24	25-49	50-99	100-Up
885-0820	3301	None	None	None	F	8.95	6.85	6.17	5.84	4.80
885-0821	3302	BNC Jack UG290A/U	None	BNC Jack UG290A/U	F	14.19	10.85	9.75	9.22	7.58
885-0822	3303	BNC Jack UG290A/U	None	BNC Plug UG1104A/U	F	15.49	11.85	10.67	10.07	8.30
885-0825	*3306	None	None	None	F	8.95	6.85	6.17	5.84	4.80
885-0828	3311	None	None	None	G	11.58	8.85	7.97	7.52	6.20
885-0829	3312	BNC Jack UG290A/U	None	BNC Jack UG290A/U	G	16.81	12.85	11.57	10.92	9.00
885-0830	3313	BNC Jack UG290A/U	None	BNC Plug UG1104A/U	G	18.12	13.85	12.47	11.77	9.70
885-0845	*3316	None	None	None	G	11.58	8.85	7.97	7.52	6.20



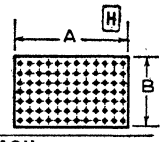
COVER PLATE

Larger cover plates provide flanges for mounting black boxes. Constructed of .080 aluminum #6061-T6—clear anodized per MIL-A-8625A. See illustrations at right for dimensions. Wt. 1 oz. **Write for prices on larger quantities.**

Stock No.	Mfr's Type	Figure	EACH 1-9	10-Up
885-0887	3729	A	.98	.75
885-0886	3728	B	.98	.75
885-0883	3719	C	1.11	.85
885-0842	3328	F, G	1.64	1.25

MOUNTING BOARD AND SHIELDED DIVIDERS

Punched blank circuit boards allow rapid assembly of components. Slide easily into box card guides. All boards are 1/16-in. thick. Shielding dividers are .063 aluminum. Types 3323, 3326, 3551, 3553 are glass-epoxy (GEE); 3327, 3558 have aluminum shielding divider. 1 oz.

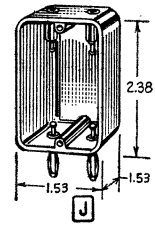


Stock No.	Mfr's Type	Fig.	Dimensions A	Dimensions B	No. of Holes	EACH 1-9	10-24	25-Up
885-0837	3323	H	2.39	1.50	12x7	.85	.65	.59
885-0840	3326	H	2.39	1.50	23x15	1.11	.85	.77
885-0841	3327		2.39	1.50		1.11	.85	.77
885-0861	3551	H	2.39	3.00	12x15	1.96	1.50	1.35
885-0863	3553	H	2.39	3.00	23x30	2.29	1.75	1.58
885-0868	3558		2.39	3.00		1.44	1.10	.99

NON-SHIELDED BLACK BOXES

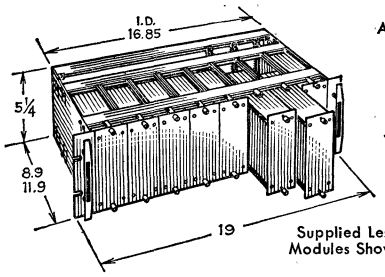
Molded of thermosetting electrical grade phenolic. Cover, punched XXP laminated paper base phenolic. Cover plate and 2 each #2-56 cover screws incl. Operating temp., −25°C to +125°C. Working voltage, 5000 VDC. Current, 15 amps cont., 30 int. Wt. 3 oz.

Stock No.	Mfr's Type	Dimensions LxWxD	Connections	EACH 1-9	10-24	25-49	50-99	100-Up
885-0526	2103	2.25x1.00x1.00	None	1.11	.85	.77	.72	.60
885-0527	2104	2.38x1.53x1.53		1.11	.85	.77	.72	.60
885-0528	2105	1.75x1.44x.69		1.11	.85	.77	.72	.60
885-0539	2224	2.38x1.53x1.53	Upper: Banana Jacks, .166" dia., solder terms. on ¾" ctrs. Brass nickel plated Polarity indicator on top. Lower: Banana plugs on ¾" centers. One-pc. beryllium copper spring, heat treated, nickel plated. Brass nickel plated plug body, solder terminals. For .166" dia. banana jacks.	4.51	3.45	3.10	2.93	2.42
885-0520	2098	1.75x1.44x.69	Same as above	4.51	3.45	3.10	2.93	2.42



Vector Module Cages and Hunter PC Board Holders

VECTOR STRUT MODULE CAGES

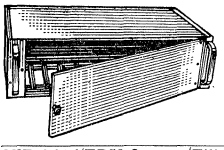


Vector Strut Module Cages provide adjustable aluminum frames for holding circuit card modules. Models listed accommodate eight 2″ wide by 6.6″ or 8.9″ long modules, or ten 1.6″ wide by 6.6″ or 8.9″ long modules. The cages may be rack-mounted in standard 19″ relay racks, or table-top mounted in the handsome all aluminum encasements also listed below.

The module cages have heavy 5¼″ high .080″ side walls which are 8.9″ or 11.9″ long. Cages are supplied completely assembled, or unassembled, and are complete with all necessary guides and hardware to assemble. Required connectors are user-furnished and are to be mounted on a pair of Triple Tee struts having captive nut grooves located at the back of the cage.

These struts may be adjusted up and down, or forward and backward to accommodate a wide variety of connectors. Aluminum parts are supplied with natural anodized finish. Less modules, handles, and filler panels—listed below. Shpg. wt. 4 lbs.

Stock No.	Mfr's Type	Description	EA., 1-9	10-Up, EA.
977-0235	CMA 3-20	Cage assembled 8.9″ deep with guides, accommodates 8 2″ wide EFP modules 6.6″ long.	49.24	44.31
977-0242	CA52HE89/ CMG-7	Above unassembled.	38.32	34.14
977-0238	CMA 4-20	Cage assembled 11.9″ deep with guides, accommodates 8 2″ wide EFP modules 9.6″ long.	50.36	45.32
977-0241	CA52HE119/ CMG-7	Above unassembled.	36.82	35.24
977-0233	CMA 3-16	Cage assembled 8.9″ deep with guides, accommodates 10 1.6″ wide EFP modules 6.6″ long.	53.54	48.06
977-0240	CA52HE89/ CMG-4	Above unassembled.	38.23	36.40



STRUT MODULE CAGE ACCESSORIES

Filler panel closes gap between outermost module and side wall. Handles include hardware. Cases are for table-top mounting, have anodized aluminum finish. Door has latch, striker plate, filler panels.

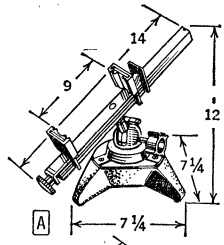
977-0406	FP52-2	Filler Panel, Pkg. of 2	1.50	.....
977-0502	HA-12	Pair of Handles	2.49	.....
977-0226	CE-55-95	Case for 8.9″ Deep Cages	18.50	.....
977-0229	CE-55-125	Case for 11.97″ Deep Cages	19.50	.....
977-0536	HP52-1	Door for Case	12.50	.....

EFP MODULES FOR VECTOR STRUT CAGES

Accommodate 4½x6½x1/16″ or 4½x9.7x1/16″ circuit cards completely inside which mount in .150″ spaced extruded grooves running lengthwise in the cases. 1.6″ wide modules have 6 circuit card grooves; 2″ wide modules have 9 grooves. Module front panels are .080″ thick and are furnished with two captive 10-32 thumb screws which engage nuts provided with cages above. Sides of the modules slide off toward the rear for easy access to circuit cards inside. Back panels of modules are solid and may be slotted for circuit card emergence, or may have BNC connector mounted. Modules provide about 80 dB of shielding. Natural anodized finish matches Vector Strut Cages above. Supplied unassembled. Shpg. wt. 1 lb.

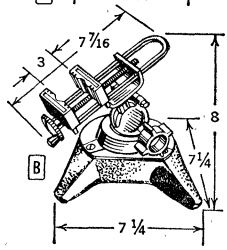
Stock No.	Mfr's Type	Description	EACH 1-49	EACH 50-Up
977-0331	EPF 164-6.6	Module 1.6″ wide x 4.6″ high x 6.6″ long.	5.90	5.31
977-0334	EFP 164-.97	Module 1.6″ wide x 4½″ high x 9x7″ long.	6.80	6.12
977-0343	EFP 204-6.6	Module 2.0″ wide x 4.6″ high x 6.6″ long.	6.07	5.46
977-0346	EFP 204-9.7	Module 2″ wide x 4½″ high x 9x7″ long.	6.96	6.26

HUNTER PC BOARD HOLDERS, VISES AND ATTACHMENTS



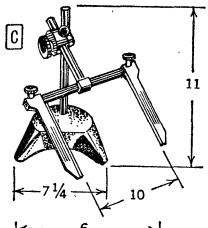
A **62E4 Quick-Adjust Vise.** Instantly adjusts from 9″ opening to smaller centered opening. Non-slip neoprene jaws. Consists of chrome-plated steel vise, spring-loaded positioner, 5-lb. cast iron base. Wt. 10 lbs.
809-4491.1-4 Ea.37.80 5-UpEa. 34.13

B **62E10 Vise.** 6½″ vise with Pana Positioner. Holds 15 lbs. with cast iron base, 50 lbs. when bolted to bench. Crank handle. Rubber feet. Neoprene jaws. Wt. 10 lbs.
809-4497.1-4 Ea.32.20 5-UpEa.29.10



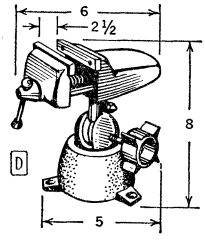
C **62L5 Circuit Board Holder.** Spring loading allows quick insertion and removal of boards up to 10″ wide. 360° rotation of circuit board for lead bend over. Adjustable tension for easy flipover or locking board in place. Shpg. wt. 7 lbs.
809X4499.1-4Ea.34.205-Up. Ea.30.78

D **62 Pana-Vise with Vertical Head.** The original and most popular unit. Opens to 2½″. Holds heavy pieces in any position. Consists of 62A and 62D (below). 8x6x5″. Wt. 3½ lbs.
809X4451.1-4Ea.19.205-Up. Ea.17.30



62A6 Pana-Vise on Vacuum Base. Flip of lever holds base firmly to any smooth, non-porous surface. Holds heavy pieces in any position. Consists of 62A4 and 62D. Wt. 4 lbs.
809-4464.1-4 Ea.25.40 5-Up Ea.22.89

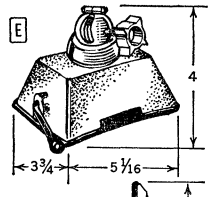
E **62A4 Vacuum Base with Pana Positioner.** Attaches and removes with flip of lever. Cast aluminum base, neoprene holding pad on bottom. Mounted positioner holds fixtures with ⅝″ shaft. Complete versatility in making work set-ups. Wt. 2½ lbs.
809-4461. 1-4 Ea. 23.30 5-Up Ea. 21.00



62A Pana Positioner. Pivots 360° on any tangent to half a sphere, achieves any compound angle. Single lock rigidly hold any ⅝″ fixture. 5″ wide x 4″ high. Wt. 2 lbs.
809-4457. 1-4 Ea. 11.70 5-Up Ea. 10.56

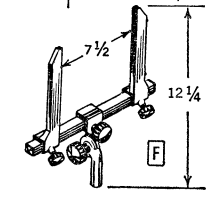
62D Vertical Vise Head. Opens to 2½″. Replaceable jaws. Shaft is ⅝″ for use with 62A, 62A4. Wt. 1 lb.
809-4476. 1-4 Ea. 10.55 5-Up Ea. 9.53

62E Horizontal Vise Head. ⅝″ shaft. Use with 62A, 62A4. Opens to 2½″. Replaceable jaws. Wt. 1 lb.
809-4486. 1-4 Ea. 10.55 5-Up Ea. 9.53

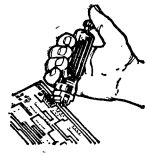


62C Nylon Jaws. Special jaws to hold small circuits. Ideal for 62D and 62E. Wt. ¼ lb.
809-4470. 1-4 Ea. 1.25 5-Up Ea. 1.13

F **62H Deluxe 7″ PC Board Holder.** Holds oval, square, oblong boards. Turns work surface 360°; horizontal, vertical, any desired position. Spring tension arm allows board to be removed, turned, inserted without adjustment. Use with 62A, 62A4. Wt. 1½ lbs.
809-4498.1-4 Ea.15.90 5-Up Ea.14.45



62X 7″ Circuit Holder. Spring loaded arm makes snugging up fast and simple. Change oval, square and oblong boards without touching knobs. Easy to set at desired height and angle. Fast flipping. Use with 62A and 62A4. 1 lb.
809-4505. 1-4 Ea. 12.00 5-Up Ea. 10.95



SPRING-LOADED HAND IC INSERTION TOOL

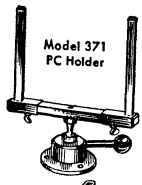
No. 52. Ideal for inserting D.I.P.'s into printed circuit board. Picks D.I.P.'s out of package, automatically squeezes them to fit the hole pattern, then ejects them when firmly placed on the board. Lightweight and comfortable to permit long hours of use without fatigue. ½ lb.
809-4425. 1-4...Each 7.40 5-Up...Each 6.68

Allied Electronics Offers Best Percentage of Order-Filling in the Country

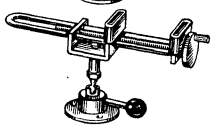
Printed Circuit Card Enclosures and Vises

WILTON PRINTED CIRCUIT BOARD HOLDERS

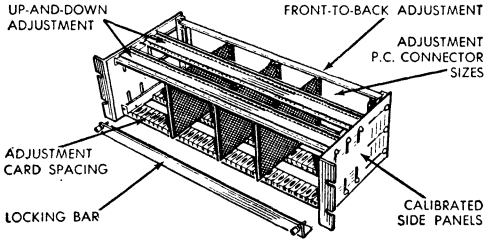
MODEL 371 PRINTED CIRCUIT BOARD HOLDER. Mounts on Midget "PowRarm" No. 345 (supplied). Specially designed for rapid, low-cost printed circuit production. Brackets adjust horizontally 3" to 6". V-grooved vertical posts (1/8" wide, 3/16" deep) permit insertion and removal of workpiece without adjustments. Shpg. wt. 2 lbs.
988-7371 ..... Each 12.55



MODEL 353 ELECTRONICS VISE. Mounts on Midget "PowRarm" No. 345 (supplied). For use with small subassemblies and PC boards. Holds work firmly but gently; jaws are rubber-wrapped to protect workpiece. Heavy-gauge steel with double slide bar—opening easily adjusts to 6½" with crank handle. Shpg. wt. 3 lbs.
988-7353 ..... Each 15.60


Model 353

H. H. SMITH 3050 UNIVERSAL CARD RACK

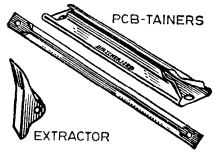


Fits 19" racks. Card guide and connector rails slide smoothly on nylon bushing for easy adjusting to keep cards centered. Front locking bar holds cards against rear connectors. Capacity, 39 cards; includes guides for 39. For card size: 1/16" thick; 2⅜-4¾" w.; 3½-7¼" long. Card spacing: .400 min. centers adj. in .400 increments. Aluminum. 19x5¼x8". Shpg. wt., 2½ lbs.
920-2850. 1-9 ..... Each 27.95
10-24 ..... Each 25.95 **25-Up** ..... Each 23.95
920-2851. Extra 3051 Card Guides. 100 Per Pkg 5.00

Stock No.	Mfr's Type	Description	Pkg. of	Wt.	EACH 1-9	10-24	25-Up
920-2850	3050	Universal Card Rack	1	2½ lbs.	27.95	25.95	23.95
920-2852	3050-1	Guide Rail	4	15 oz.	2.50	2.25	2.13
920-2853	3050-2	Guide Rail Brkt.	4	1 oz.	.50	.45	.42
920-2854	3050-3	Connector Rail Brkt.	2	1 oz.	1.25	1.13	1.07
920-2855	3050-4	Connector Rail	2	3 oz.	1.00	.90	.85
920-2857	3050-6	Locking Bar Brkt.	2	1 oz.	.50	.45	.42
920-2858	3050-7	Locking Bar	1	3 oz.	1.50	1.35	1.28
920-2851	3051	Extra Card Guides	100	7 oz.	5.00	4.50	4.27

BIRTCHER PCB-TAINERS

Miniature PC board retainers designed for improved retention, electrical contact and heat dissipation. For 1/16" boards. Beryllium copper, per QQ-C-533. Types 15- have .109" dia. mtg. holes; Types 17- have .098" dia. mtg. holes. Shpg. wt. 1 oz. Types 21- have .200" max. width. 6 oz.



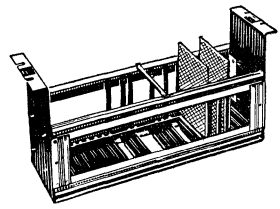
Stock No.	Mfr's Type	Length Inches	EACH 1-9	10-24	25-49	50-Up
741-1504	15B-4-3	2	.83	.67	.54	.43
741-1505	15B-5-3	2½	.89	.71	.57	.46
741-1506	15B-6-3	3	.96	.77	.62	.49
741-1507	15B-7-3	3½	1.01	.81	.65	.52
741-1508	15B-8-3	4	1.13	.90	.72	.58
741-1510	15B-10-3	5	1.36	1.09	.87	.70
741-1511	15B-11-3	5½	1.26	1.01	.81	.65
741-1515	17B-4-3	2	.83	.67	.54	.43
741-1516	17B-5-3	2½	.89	.71	.57	.46
741-1517	17B-6-3	3	.96	.77	.62	.49
741-1518	17B-7-3	3½	1.01	.81	.65	.52
741-1519	17B-8-3	4	1.13	.90	.72	.58
741-1521	17B-10-3	5	1.26	1.01	.81	.65
741-1522	17B-11-3	5½	1.36	1.09	.87	.70
741-1527	21B-2-4-3	2	.57	.46	.37	.30
741-1528	21B-2-6-3	3	.61	.50	.40	.32
741-1529	21B-2-8-3	4	.66	.52	.42	.34

PC CARD EXTRACTOR (For 1/16" PC boards.)

Stock No.	Mfr's Type	Material	EACH 1-9	10-24	25-49	50-99	100-Up
741-1557	61-1-2	A.B.S. Plastic	.47	.38	.30	.24	.195

ELCO VARIPAK II PC CARD ENCLOSURES

Aluminum racks hold boards and connectors in alignment for efficient stacking. Fits standard 19" rack or cabinet. Adjusts to hold PC boards to 8½" long, from 3½ to 4½" wide. Supplied with blank connector panel for your own cut-out design, except Type 03-9016-06-02-00 has strap in place of panel mount. Dimensions: 1) depth of guide plate; 2) depth of mtg. hanger. *Double tier. Av. wt., 2½ lbs. **Allied stocks the entire line of Elco Varipak components, and can fill your order immediately for any combination in the Varipak series. Contact Allied Electronics for complete information and pricing.**



Stock No.	Type 03-9016-	Dimensions 1	2	EACH 1-2	3-9	10-24	25-Up
778-1955	02-01-00	4"	5½"	26.24	21.65	19.25	16.84
778X1970	06-01-00	5½"	8½"	26.24	21.65	19.25	16.84
778X1971	06-02-00	5½"	8½"	26.38	21.76	19.34	16.93
778-1890	10-01-00	7"	8½"	27.56	22.73	20.21	17.68
778-2010	14-01-00	8"	11"	27.56	22.73	20.21	17.68
778X2030	21-01-00*	4"	5½"	45.12	40.95	36.40	31.85
778X2050	25-01-00*	5½"	8½"	45.12	40.95	36.40	31.85

COMPONENTS FOR VARIPAK II

Type 33-9016-2201-00-156 Front Panel. Provides mounting for gauges, etc. Clear aluminum. For 03-9916-06-01-00 only. 1 lb.
778-2620. Ea. 14.58 2-9 .. Ea. 12.85 10-24 ..... Ea. 11.42
25-99 ..... Ea. 10.00 100-Up ..... Ea. 8.57

Type 33-9016-2210-Front Panel. For Double-Tier Varipak only. 1½ lbs.
778-2622. Ea. 41.24 2-9 .. Ea. 28.31 10-24 ..... Ea. 25.17
25-99 ..... Ea. 22.02 100-Up ..... Ea. 18.88

Type 33-9016-1301-02 Extra Guide Plates. For 4½" w. Varipaks. 1 oz.
778-2617. Ea. 6.94 2-19 . Ea. 4.91 20-49 . Ea. 4.37 50-199 . Ea. 3.82

Type 63-9016-7504 Reinforcement Bar. For additional rigidity. 10 oz.
778-2746. 1-9 ..... Each 1.10 10-24 ..... Each .98
25-99 ..... Each .85 100-Up ..... Each .73

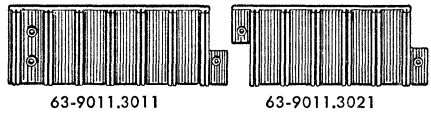
Type 63-9016-2402 Marker Strip. Flexible, white poly-vinyl chloride locator for guides, PC cards. 16⅜" long. Wt., 2 oz.
778-2734 .. Ea. .44 2-9 .. Ea. .43 10-24 .. Ea. .38 25-Up .. Ea. . 34

POLYCARBONATE GUIDES FOR VARIPAK II

Printed circuit boards slide into slots on guides. Guides snap into place in guide slots. Snap rivets sold separately. For 1/16", 3/32" or 1/8" PC boards. Styles: A, for 03-9016-02-01-00 Varipaks; B, for 03-9016-06-01-00 and 03-9016-06-02-00; C, for 03-9016-10-01-00; and D, for 03-9016-14-01-00. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Size	Style	EACH 1-9	10-99	100-249	250-999	1000-Up
778-2716	63-9016-1201-01	1/16"	A	.37	.23	.17	.15	.13
778-2717	63-9016-1201-02	3/32"	A	.27	.16	.12	.11	.09
778-2719	63-9016-1201-04	1/16"	B	.15	.18	.13	.12	.10
778-2720	63-9016-1201-05	3/32"	B	.20	.18	.13	.12	.10
778-2721	63-9016-1201-06	1/8"	B	.20	.18	.14	.13	.11
778-2722	63-9016-1201-07	1/16"	C	.22	.16	.14	.13	.11
778-2723	63-9016-1201-08	3/32"	C	.27	.18	.16	.14	.12
778-2724	63-9016-1201-09	1/8"	C	.18	.18	.16	.14	.12
778-2725	63-9016-1201-10	1/16"	D	.23	.22	.17	.15	.13
778-2726	63-9016-1201-11	3/32"	D	.23	.22	.18	.16	.14
778-2727	63-9016-1201-12	1/8"	D	.33	.31	.22	.20	.17
778-2767	90-2168-0043 Snap rivets			.03	.03	.02	.02	.015

GUIDE STRIPS



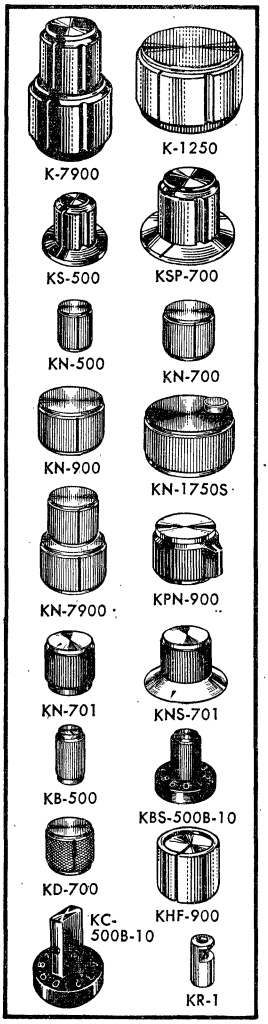
63-9011.3011 63-9011.3021

Accurately guides printed circuit cards—strips made for 1/16" cards at .750" spacing. Constructed of molded glass-filled diallyl phthalate. Guide strips are assembled as "building-blocks"—permit designer to include as many strips as required—in increments of 7 guide locations. 9012 has no extended mtg. plate. *Height. 10 oz.

Stock No.	Type 63-	Guide	*H	EACH 1-9	10-19	20-49	50-199	200-Up
778-2702	9011-3011	Right	2"	2.80	1.85	1.65	1.44	1.24
778-2703	9011-3021	Center	2"	2.80	1.85	1.65	1.44	1.24
778-2706	9012-3029	Right	3⅞"	6.50	4.57	4.06	3.56	3.05
778-2705	9012-3019	Left	3⅞"	6.15	4.32	3.84	3.36	2.88

Alco Knobs for Every Application

MACHINED ALUMINUM—STANDARD SERIES



K-Series machined aluminum matched family in four basic diameters machined from 1-piece aluminum and anodized in natural, black or gold. K-5700 and K-7900 matched knobs for concentric shaft controls consists of 2 separate knobs: an upper knob for inner control shaft (⅛″ dia.), and lower knob for outer control shaft (¼″ dia.).

SKIRTED ANODIZED KNOBS. Matches knob group above. Solid aluminum skirt (KS Series) or clear acrylic plastic skirt (KSP).

STRAIGHT KNURL SERIES. KN Series of straight knurl knobs with contrasting hairline indicators includes lustrous solid anodized color types and decorative 2-tone models. Straight knurl bodies have clean, precision serrations of the highest quality. Anodized 2-tone knob is available in 2 variations. KN-1750 series have 1¾″ dia. size with two 6/32 set screws spaced 120° apart.

Mating concentric sets, bottom knob ¼″ shaft, top ⅛″ shaft. With four 6/32 set screws. Knurl.

One-piece aluminum pointer and knurled knob body. Contrasting colored tops for 2-tone effect.

Black ARROWHEAD indicator engraved on top of straight knurl body in contrasting black.

Engraved ARROWHEAD on natural aluminum skirt. Knob body has straight knurl matching other KN knobs.

KB Series decorative knobs have standard hairline; skirted models with or without engraved numerals 0-9.

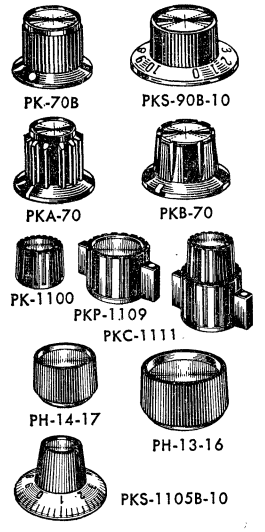
Conical top. Nonslip diamond knurl.

DELUXE SERIES. Unique, saw-cut indicator; single set screws. KHF-1250 with 2 set screws, has 120° spacing.

MINIATURE. KC-500-10 has numerals 0-9. KR-1 converts knob with ¼″ shaft hole to fit ⅛″ shaft.

Stock No.	Add Suffix for color	Mfr's Type	Knob Dia.	Shft Size	EACH 1-9	10-99	100-249	250-499	500-Up
700-310X	1,2,3	K-500-⅛	.500	⅛	.74	.50	.45	.43	.40
700-311X	*1,2,3*	*K-500*	*.500*	¼	.74	.50	.45	.43	.40
700-312X	1,2,3	K-700	.750	¼	.81	.55	.50	.47	.44
700-313X	1,2,3	K-900	.937	¼	.97	.65	.59	.56	.52
700-314X	1,2,3	K-1250	1.250	¼	1.06	.75	.68	.64	.60
700-335X	1,2	K-5700	.500	⅛					
			.750	¼	1.78	1.20	1.08	1.03	.96
700-336X	1,2	K-7900	.705	⅛					
			.937	¼	2.05	1.35	1.22	1.16	1.08
700-340X	1,2	KS-500-⅛	.500	⅛	.97	.65	.59	.56	.52
700-339X	1,2	KS-500	.500	¼	.97	.65	.59	.56	.52
700-341X	1,2	KS-700	.705	¼	1.05	.70	.63	.60	.56
700-342X	1,2	KS-900	.937	¼	1.38	.90	.81	.77	.72
700-344X	1,2	KSP-700	.750	¼	.97	.65	.59	.56	.52
700-345X	1,2	KSP-900	.937	¼	1.38	.90	.81	.77	.72
700-330X	1,2	KN-500-⅛	.500	⅛	.90	.60	.54	.51	.48
700-329X	1,2	KN-500	.500	¼	.90	.60	.54	.51	.48
700-331X	1,2	KN-700	.750	¼	.97	.65	.59	.56	.52
700-332X	1,2	KN-900	.937	¼	1.30	.80	.72	.68	.64
700-333X	1,2	KN-1250	1.250	¼	1.45	.95	.85	.82	.76
700-334X	1,2	KN-1750	1.750	¼	2.75	1.85	1.67	1.59	1.48
700-330X	4,5	KN-500-⅛	.500	⅛	1.06	.75	.68	.64	.60
700-329X	4,5	KN-500	.500	¼	1.06	.75	.68	.64	.60
700-331X	4,5	KN-700	.750	¼	1.35	.85	.77	.73	.68
700-332X	4,5	KN-900	.937	¼	1.50	1.00	.90	.86	.80
700-333X	4,5	KN-1250	1.250	¼	1.78	1.20	1.08	1.03	.96
700-334X	4,5	KN-1750	1.750	¼	2.52	2.15	1.94	1.85	1.72
700-335X	1,2	KN-5700	.500	⅛					
			.750	¼	2.10	1.40	1.26	1.20	1.12
700-336X	1,2	KN-7900	.750	⅛					
			.937	¼	2.50	1.60	1.44	1.38	1.28
700-337X	1,2	KPN-700	.750	¼	2.10	1.40	1.26	1.20	1.12
700-337X	4,5	KPN-700	.750	¼	2.40	1.60	1.44	1.38	1.28
700-338X	1,2	KPN-900	.937	¼	2.65	1.85	1.57	1.50	1.40
700-338X	4,5	KPN-900	.937	¼	2.95	1.95	1.75	1.67	1.56
700-3308	Black	KN-501-⅛	.500	⅛	1.30	.80	.72	.68	.64
700-3307	#5	KN-501	.500	¼	1.30	.80	.72	.68	.64
700-3309	only	KN-701	.750	¼	1.39	.85	.77	.73	.68
700-3318	Black	KNS-501-⅛	.500	⅛	1.50	1.00	.90	.86	.80
700-3317	#5	KNS-501	.750	¼	1.50	1.00	.90	.86	.80
700-3319	only	KNS-701	.750	¼	1.22	1.15	1.04	.99	.92
700-318X	1,2	KB-500-⅛	.500	⅛	.97	.65	.59	.56	.52
700-317X	1,2	KB-500	.500	¼	.97	.65	.59	.56	.52
700-319X	1,2	KBS-500-⅛	.500	⅛	1.30	.80	.72	.68	.64
700-320X	1,2	KBS-500-10-⅛	.500	⅛	1.06	.95	.85	.82	.76
700-323X	1,2,3	KD-500	.500	¼	.90	.60	.54	.51	.48
700-324X	1,2,3	KD-700	.750	¼	.97	.65	.59	.56	.52
700-325X	1,3	KHF-500	.500	¼	.74	.50	.45	.43	.40
700-326X	*1,3*	*KHF-700*	*.700*	¼	.81	.55	.50	.47	.44
700-327X	1,3	KHF-900	.937	¼	.97	.65	.59	.56	.52
700-328X	1,3	KHF-1250	1.250	¼	1.06	.75	.68	.64	.60
700-321X	1,2	KC-500	.500	⅛	.97	.65	.59	.56	.52
700-322X	1,2	KC-500-10	.500	⅛	1.30	.80	.72	.68	.64
700-3388	.....	*KR-1 Shaft Reducer*			1-24				.09
					25-99 Ea.				.06
					100-Up Ea.				.05
700-6607	Black	PK-50B-⅛	.500	⅛	.32	.25	.23	.22	.20
700-6606	#6	PK-50B	.500	¼	.32	.25	.23	.22	.20
700-6608	only	PK-70B	.750	¼	.41	.30	.27	.26	.24
700-6609		PK-90B	.937	¼	.49	.35	.32	.30	.28
700-6655	Black	PKS-90B	.937	¼	.74	.50	.45	.43	.40
700-6656	#6 only	PKS-90B-10	.937	¼	.81	.55	.50	.47	.44
700-6635		PKA-50B-⅛	.500	⅛	.49	.30	.27	.26	.24
700-6634	Black	PKA-50B	.500	¼	.49	.30	.27	.26	.24
700-6636	#6	PKA-70B	.750	¼	.58	.35	.32	.30	.28
700-6637	only	PKB-70B	.750	¼	.58	.35	.32	.30	.28
700-6638		PKB-90B	.937	¼	.65	.40	.36	.34	.32
700-662X	6,7	PK-1100-⅛	.750	⅛	.58	.35	.32	.30	.28
700-661X	6,7	PK-1100	.750	¼	.58	.35	.32	.30	.28
700-6651	6	PKP-1109B	.885	¼	.90	.60	.54	.51	.48
700-664X	6,7	PKC-1111	.750	⅛					
			.885	¼	1.45	.95	.85	.82	.76
700-6628	Black	PK-1108B	.937	¼	.74	.50	.45	.43	.40
700-6650	#6 only	PKP-194B	.937	¼	.97	.65	.59	.56	.52
700-6602	Black	PH-15-18	1.000	¼	.32	.25	.23	.22	.20
700-6601	#6	PH-14-17	1.200	¼	.49	.30	.27	.26	.24
700-6600	only	PH-13-16	1.400	¼	.58	.35	.32	.30	.28
700-6657	Black	PKS-1105B-10	.680	¼	.74	.50	.45	.43	.40
700-6658	#6 only	PKS-1106B	.680	¼	.65	.45	.41	.39	.36

PLASTIC KNOBS WITH ALUMINUM TOPS



Spun aluminum cap plate. Molded-in brass bushing, 6/32 set screw. White dot or hairline.

PKS dial skirt is anodized aluminum. Black arrow or 0-10 marking.

STANDARD SERIES. Slip-proof construction. Extended plastic skirt and spun aluminum inlay for similar appearance to others listed. Brass insert, 6/32 set screws.

PLASTIC CONTROL KNOBS. Matched family has two ½″ miniature knobs, bar pointer, concentric. Knobs have hex-head cup point, self-locking 6/32 set screws, aluminum inlay, brass insert, white dot indicator. PKP-194B bar pointer, PK-1108B unskirted.

TUNING CONTROL SERIES. Deep inlays, ring skirt, hex-head cup point, locking 6/32 set screws.

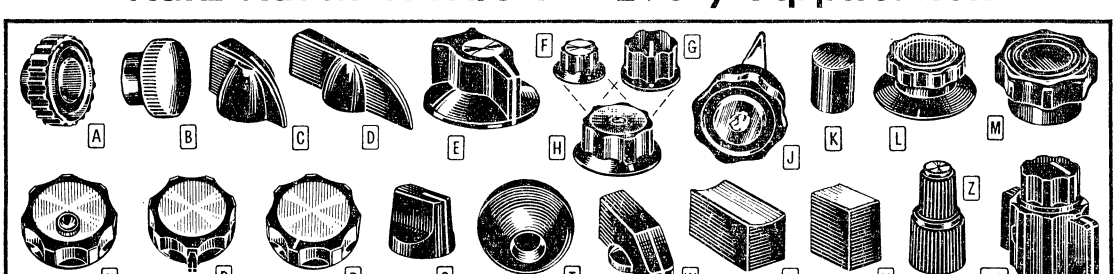
ALUMINUM DIAL SKIRTS. 0-9 graduations or black hairline only.

Complete Suffix Number of Allied Stock Number for Knob Color and Finish when Stock No. ends in X. **EXAMPLE:** to complete K 500 ⅛ Black, add 2 in place of X. No. is then 700-3102.

MACHINED ALUMINUM
1—Natural Anodized; Black Indicator
2—Black Anodized; White Indicator
3—Gold Anodized; Red Indicator
4—Natural Body With Black Top; Black Indicator
5—Black Body With Natural Top; White Indicator

PLASTIC
6—Black Plastic; White Indicator Spun Aluminum Inlay
7—Red Plastic, White Indicator, Spun Aluminum Inlay

Kurz-Kasch Knobs for Every Application



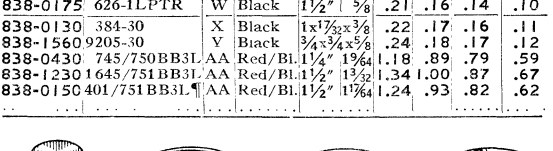
Quality plastic knobs for a wide variety of applications. **Key to suffixes**—1: Molded hole for standard ¼″ shaft.—2: Molded hole for standard 3/16″ shaft.—3: Flush-type brass insert for standard ¼″ shaft.—5: Flush-type brass insert for standard ⅛″ shaft.—21: Molded hole for standard ⅛″ shaft.—70: Heavy-duty brass insert for ¼″ shaft. All knobs have one slotted setscrew except—BB with two.—L: Indicator line filled. PTR: Pointer. 310 has 1¼″ pointer. *Pointer, bar knobs. †Gear ball. ‡Finger spinner knob. §Knobs with aluminum inlay. #Heavy-duty knob with inlay. **Flanged terminal nuts for 8-32 shaft. ††Black base, red top, for concentric shafts. ‡‡Available without line. §§Available with line. ¶Figure AA except top knob is Fig. S. Fig. Z is in "Snob" Knob listing.

Stock No.	Mfr's Type S-	Fig.	Color	Size O.D.	Ht. In.	EACH 1-99	100-499	500-999	1000-Up
838-0010	68-3	A	Black	1¾″	⅞	.44	.33	.29	.22
838-0022	78-3	A	Black	1″	⅝	.21	.16	.15	.10
838-0020	76-18**	B	Black	¾″	9/16	.18	.14	.13	.091
838-0023	82-1**	B	Black	⅝″	17/32	.17	.13	.12	.08
838-0024	82-3**	B	Black	⅝″	17/32	.17	.13	.12	.08
838-0028	246-1L PTR	C	Black	1½″	⅞	.22	.17	.16	.11
838-0031	*292-1L**	*C*	*Black*	*1¼″*	⅝	.12	.09	.085	.06
838-0032	292-1L*	C	Red	1¼″	⅝	.12	.09	.082	.059
838-0037	*292-3L**	*C*	*Black*	*2¼″*	⅝	.18	.13	.123	.088
838-0054	*293-1L**	*D*	*Black*	*2¼″*	⅝	.19	.15	.136	.097
838-0055	293-1L*	D	Red	2¼″	⅝	.31	.23	.218	.156
838-0061	*293-3L**	*D*	*Black*	*2¼″*	⅝	.30	.22	.208	.149
838-0200	645-1L	G	Black	¾″	7/16	.18	.14	.13	.095
838-0205	645-3L	G	Black	¾″	7/16	.25	.19	.18	.13
838-0207	645-5L	G	Black	¾″	7/16	.25	.19	.18	.13
838-0212	645-21L	G	Black	¾″	7/16	.19	.14	.13	.09
838-0225	647-1L	G	Black	13/16″	19/32	.18	.14	.127	.091
838-0227	647-3L	G	Black	1″	19/32	.25	.19	.18	.13
838-0275	648-1L	G	Black	1¼″	21/32	.19	.14	.132	.094
838-0278	648-3L	G	Black	1¼″	21/32	.26	.19	.18	.13
838-0280	649-1L	G	Black	2″	⅞	.49	.37	.32	.25
838-0282	649-3L	G	Black	2″	⅞	.60	.45	.39	.30
838-0300	653-1L	G	Black	1½″	¾	.21	.15	.14	.10
838-0310	653-3L	G	Black	1½″	¾	.29	.22	.20	.14
838-0320	657-1L	E	Black	1⅛″	⅝	.25	.18	.17	.12
838-0325	657-3L	E	Black	1⅛″	⅝	.31	.24	.22	.16
838-1221	1645/648††	GH	Red/Bl.	1¼″	13/32	.58	.44	.372	.291
838-0220	645/648††	GH	Red/Bl.	1¼″	13/32	.38	.28	.194	.189
838-1210	1645-1L§	G	Black	⅝″	7/16	.38	.28	.263	.188
838-1214	1645-3L§	G	Black	¾″	7/16	.45	.34	.30	.23
838-1218	1645-5L§	G	Black	¾″	7/16	.46	.34	.30	.23
838-1240	1647-1L§	G	Black	1″	19/32	.37	.28	.26	.18
838-1250	1647-3L§	G	Black	1″	19/32	.45	.34	.29	.23
838-1265	*1648-1L§*	*C*	*Black*	*1¼″*	¾	.40	.30	.263	.202
838-1275	1649-1L§	G	Black	2″	⅞	.73	.55	.47	.36
838-1285	1649-3L§	G	Black	2″	⅞	.86	.64	.56	.43
838-1286	1653-1L§	G	Black	1½″	¾	.41	.31	.27	.21
838-1287	1653-3L§	G	Black	1½″	¾	.51	.38	.33	.26
838-1368	1657-1L*§	E	Black	1⅛″	7/16	.48	.36	.314	.242

Stock No.	Mfr's Type S-	Fig.	Color	Size O.D.	Ht In.	EACH 1-99	100-499	500-999	1000-Up
838-1289	1657-3L*§	E	Black	1⅛″	⅝	.56	.42	.37	.28
838-0088	309 PTR	J	Black	1⅝″	¾	.52	.39	.338	.097
838-0093	310 PTR	J	Black	2⅜″	⅞	.71	.53	.463	.356
838-0099	330-30	K	Black	7/16″	15/32	.10	.074	.069	.05
838-0120	380-3L	L	Black	1⅛″	13/16	.68	.51	.445	.342
838-0125	381-70L	L	Black	1¾″	27/32	.83	.63	.54	.42
838-0135	385-3	M	Black	1⅜″	11/16	.40	.30	.28	.20
838-0096	311-3L	M	Black	1⅝″	⅞	.71	.57	.494	.38
838-0086	309-3	M	Black	1⅝″	¾	.34	.25	.237	.169
838-0091	310-3	M	Black	2⅜″	⅞	.52	.39	.336	.258
838-0080	308-3	M	Black	2⅜″	⅞	.25	.19	.178	.127
838-1010	1308-3#	M	Black	1⅛″	⅝	.48	.36	.309	.238
838-1020	1309-3	M	Black	1⅝	¾	.60	.45	.39	.30
838-1030	1310-3	M	Black	2⅜″	⅞	.82	.61	.53	.41
838-1040	1319-3	M	Black	1″	⅝	.47	.35	.30	.23
838-0400	745-1L	F	Black	⅝″	7/16	.25	.19	.17	.12
838-0410	745-3L	F	Black	⅝″	7/16	.33	.25	.23	.16
838-0425	745-21L	F	Black	⅝″	7/16	.26	.20	.18	.13
838-0600	747-1L§	F	Black	13/16″	19/32	.26	.19	.181	.130
838-0610	747-3L	F	Black	13/16″	19/32	.18	.14	.13	.09
838-0625	748-1L	F	Black	1″	21/32	.27	.20	.19	.14
838-0645	748-3L	F	Black	1″	21/32	.35	.26	.24	.17
838-1290	1747-1L§	F	Black	13/16″	19/32	.44	.34	.287	.223
838-1385	SFS-1773-70‡	N	Black	2½″	1	3.00	2.25	1.95	1.50
838-0650	772-1-BB-L	P	Black	2½″	15/16	.74	.56	.48	.37
838-1370	1772-1-BB-L	P	Black	2½″	15/16	.89	.67	.58	.44
838-0652	772-1-BB-M	R	Black	2½″	15/16	1.12	.84	.73	.56
838-1380	1772-1-BB-M	R	Black	2½″	15/16	1.26	.95	.82	.63
838-0140	400-1L	S	Black	15/16″	¾	.32	.24	.22	.16
838-0142	401-2L	S	Black	¾″	9/16	.25	.19	.18	.13
838-0145	401-21L	S	Black	¾″	9/16	.28	.21	.20	.14
838-0150	446-3†	T	Black	1¾″	1¾	.37	.28	.26	.19
838-0175	626-1LPTR	W	Black	1½″	⅝	.21	.16	.14	.10
838-0130	384-30	X	Black	1x1 7/32x⅜		.22	.17	.16	.11
838-1560	9205-30	Y	Black	¾x¾x⅝		.24	.18	.17	.12
838-0430	745/750BB3L	AA	Red/Bl.	1¼″	19/64	1.18	.89	.79	.59
838-1230	1645/751BB3L	AA	Red/Bl.	1½″	13/32	1.34	1.00	.87	.67
838-0150	401/751BB3L¶	AA	Red/Bl.	1½″	11/64	1.24	.93	.82	.62

"SNOB" KNOBS FOR SMART APPEARANCE

Specially-designed knobs add a professional appearance to all types of equipment. Molded hole fits standard ¼″ shaft (Type No.'s ending in —1L), or standard ⅛″ shaft (Type No.'s ending in —21L). 900 Series has plain top. 1900 Series, spun aluminum inlay on top. 2900 Series, spun aluminum cap on top. *Solid aluminum. All have slotted setscrew and filled-in indicator line. Also available without indicator line. **Specify.** Average shpg. wt. 1 oz.



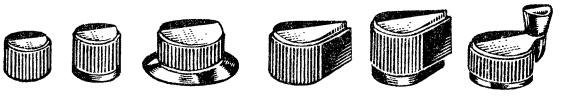
Stock No.	Mfr's Type S-	Fig.	Color	Size O.D.	Ht. In.	EACH 1-99	100-499	500-999	1000-Up
838-1395	1902/903	Z	Black	¾″	11 5/16	.80	.61	.54	.42
838-1530	2904/905	BB	Black	1⅛″	1 5/16	1.12	.99	.85	.66
838-0900	1000-21L*	DD	Plain	7/16″	⅝	.98	.74	.64	.49
838-0920	1001-1L*	DD	Plain	¾″	9/16	1.08	.81	.70	.54
838-0940	1002-1L*	DD	Plain	1″	11/16	1.26	.95	.82	.63
838-0960	1004-1L*	DD	Plain	1½″	13/16	1.84	1.38	1.20	.92
838-0806	902-1L	CC	Black	½″	⅝	.23	.18	.16	.12
838-0808	902-21L	CC	Black	½″	⅝	.27	.20	.19	.13
838-0810	903-1L	CC	Black	¾″	⅝	.23	.17	.162	.116
838-0815	904-1L	CC	Black	⅞″	⅝	.29	.22	.21	.15
838-0820	905-1L	CC	Black	1⅛″	11/16	.27	.21	.192	.137
838-1390	1902-1L	DD	Black	½″	⅝	.43	.32	.28	.22

Stock No.	Mfr's Type S-	Fig.	Color	Size O.D.	Ht. In.	EACH 1-99	100-499	500-999	1000-Up
838-1392	1902-21L	DD	Black	½″	⅝	.46	.35	.30	.23
838-1410	1903-1L	DD	Black	¾″	⅝	.38	.29	.267	.191
838-1420	1904-1L	DD	Black	⅞″	⅝	.49	.37	.32	.24
838-1430	1905-1L	DD	Black	1⅛″	11/16	.42	.32	.276	.212
838-1450	1906-1L	DD	Black	1⅜″	¾	.45	.34	.293	.225
838-1510	2902-1L	EE	Black	½″	⅝	.36	.27	.252	.180
838-1520	2902-21L	EE	Black	½″	⅝	.49	.37	.32	.25
838-1522	2903-1L	EE	Black	¾″	⅝	.39	.29	.274	.196
838-1525	2904-1L	EE	Black	⅞″	⅝	.52	.39	.34	.26
838-1540	2905-1L	EE	Black	1⅛″	11/16	.45	.34	.295	.227
838-1557	2906-1L	EE	Black	1⅜″	¾	.48	.36	.312	.240

RAYTHEON

Knobs, Knob and Shaft Locks

STANDARD CONTROL KNOBS



A variety of round and pointer knob types and sizes combining strength with modern styling. Knobs are molded from top-quality, long-lasting polycarbonate resin. Each knob with anodized aluminum insert molded in for maximum strength. Two Allen-head setscrews with cup-point hold round or flatted control shafts securely. Knobs with Suffix "G" in Type No. are built to MIL-K-3926A specs, and have uniform non-reflecting MIL-MS-91528C matte finish. Others are commercial types with high-gloss mirror finish. All for use with ¼" shafts except 50 Series, ⅛" shaft size only. Types: A, Round; B, Skirted Round; C, Round Dial; D, Pointer; E, Skirted Pointer; F, Crank. *Knob diameter, excluding skirt. †Length. Av. shpg. wt., 3 oz.

50 SERIES

Stock No.	Mfr's Type	MIL Type	Fig.	Knob. Dia.	EACH 1-24	25-99	100-199	200-499	500-Up
904-1000	*50-1-1*	.....	*A*	17/32"	.71	.55	.47	.44	.39
904-1002	50-1-1G	ON1B	A	17/32"	.79	.61	.52	.49	.43
904-1004	50-2-1	.....	B	17/32"	.83	.64	.54	.51	.45
904-1006	50-2-1G	OD1B	B	17/32"	.90	.70	.60	.56	.49
904-1008	50-3-1	.....	C	*17/32"	.93	.72	.71	.58	.50
904-1010	*50-3-1G*	*OF1B*	*C*	*17/32"	1.01	.78	.66	.62	.55
904-1012	50-4-1	.....	D	†1 11/16"	.74	.57	.48	.46	.40
904-1014	50-4-1G	OP1B	D	†1 11/16"	.79	.61	.52	.49	.43
904-1016	50-5-1	.....	E	†1 11/16"	.83	.64	.54	.51	.45
904-1018	50-5-1G	OK1B	E	†1 11/16"	.90	.70	.60	.56	.49

70 SERIES

Stock No.	Mfr's Type	MIL Type	Fig.	Knob. Dia.	EACH 1-24	25-99	100-199	200-499	500-Up
904-1024	*70-1-2*	.....	*A*	23/32"	.92	.70	.60	.56	.49
904-1026	70-1-2G	1N2B	A	23/32"	.97	.76	.65	.61	.53
904-1032	70-2-2	.....	B	23/32"	1.01	.79	.67	.63	.55
904-1034	*70-2-2G*	*1D2B*	*B*	23/32"	1.09	.85	.72	.68	.60
904-1036	*70-3-2*	.....	*C*	*23/32"	1.13	.88	.75	.70	.62
904-1038	*70-3-2G*	*1F2B*	*C*	*23/32"	1.21	.94	.80	.75	.66
904-1040	*70-4-2*	.....	*D*	†1 3/32"	.92	.70	.60	.56	.49
904-1042	70-4-2G	1P2B	D	†1 3/16"	.97	.76	.65	.61	.53
904-1044	70-5-2	.....	E	†1 3/16"	1.01	.79	.67	.63	.55
904-1046	70-5-2G	1K2B	E	†1 3/16"	1.09	.85	.72	.68	.60

90 SERIES

Stock No.	Mfr's Type	MIL Type	Fig.	Knob Dia.	EACH 1-24	25-99	100-199	200-499	500-Up
904-1048	90-1-2	.....	A	59/64"	.96	.74	.63	.59	.52
904-1050	90-1-2G	2N2B	A	59/64"	1.04	.80	.68	.64	.56
904-1054	90-2-2	.....	B	59/64"	1.08	.83	.71	.66	.58
904-1056	90-2-2G	2D2B	B	59/64"	1.15	.89	.76	.71	.62
904-1058	90-3-2	.....	C	*59/64"	1.19	.92	.78	.74	.64
904-1060	90-3-2G	2F2B	C	*59/64"	1.27	.98	.83	.78	.69
904-1062	90-4-2	.....	D	†1 3/8"	1.03	.79	.67	.63	.55
904-1064	*90-4-2G*	*2P2G*	*D*	†1 3/8"	1.09	.85	.72	.68	.60
904-1066	90-5-2	.....	E	†1 3/8"	1.14	.88	.75	.70	.62
904-1068	90-5-2G	2K2B	E	†1 3/8"	1.22	.94	.80	.75	.66

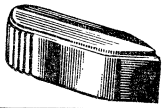
125 SERIES

Stock No.	Mfr's Type	MIL Type	Fig.	Knob Dia.	EACH 1-24	25-99	100-199	200-499	500-Up
904-1410	125-1-2G	3N2B	A	1 17/64"	1.09	.85	.72	.68	.60
904-1412	125-2-2	.....	B	1 17/64"	1.14	.88	.75	.70	.62
904-1414	125-2-2G	3D2B	B	1 17/64"	1.22	.94	.80	.75	.66
904-1425	125-3-2	.....	C	*1 17/64"	1.24	.96	.82	.77	.67
904-1427	125-3-2G	3F2B	C	*1 17/64"	1.32	1.02	.87	.82	.71
904-1465	125-6-2	.....	F	†2 1/64"	3.00	2.32	1.97	1.86	1.62
904-1467	125-6-2G	3S2B	F	†2 1/32"	3.36	2.35	2.00	1.88	1.65

175 SERIES

Stock No.	Mfr's Type	MIL Type	Fig.	Knob Dia.	EACH 1-24	25-99	100-199	200-499	500-Up
904-1605	175-1-2	.....	A	1 49/64"	1.46	1.12	.95	.90	.78
904-1615	175-3-2	.....	C	*1 49/64"	1.75	1.34	1.14	1.07	.94
904-1617	175-3-2G	4F2B	C	*1 49/64"	1.84	1.41	1.20	1.13	.99
904-1640	175-6-2	.....	F	†2 25/64"	3.27	2.51	2.13	2.01	1.76
904-1642	175-6-2G	4S2B	F	†2 25/64"	3.06	2.58	2.19	2.06	1.81

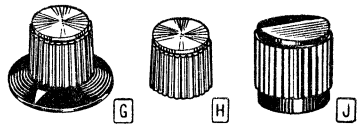
PLASTIC BAR KNOBS



Suffix "G" explained above. For heavy detent switches. Fitted with aluminum insert that accepts standard ¼" control shaft. Two set-screws hold shaft securely. 2½" long, ¾" wide, ⅞" deep. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	MIL Type	Finish	EACH 1-24	25-99	100-199	200-499	500-Up
904-1480	125-7-2G	3R2B	Matte	1.70	1.32	1.12	1.06	.92
904-1478	125-7-2	.....	Mirror	1.69	1.31	1.11	1.05	.92

DESIGNER SERIES KNOBS



Molded black plastic knobs with spun aluminum cap inserts. "BD" in Type No. indicates knob has black dot as indicator. Meet MIL specs. Wt., 3 oz.

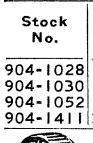
Stock No.	Mfr's Type	Fig.	Shaft Size	O. D.	EACH 1-24	25-99	100-199	200-499	500-Up
904-0110	*DS70-1-2*	*H*	*.252"*	*.708"*	1.10	.78	.72	.68	.59
904-0113	DS70-1-3	H	.190"	.708"	1.24	.88	.81	.77	.67
904-0108	DS70-1BD-2	H	.252"	.708"	1.24	.88	.81	.77	.67
904-0119	DS70-2BD-2	J	.252"	.708"	1.52	1.08	.99	.94	.82
904-0123	*DS70-3-2*	*G*	*.252"*	*.708"*	1.35	.96	.88	.84	.73
904-0150	DS90-3-2	G	.252"	.911"	1.48	1.05	.91	.91	.80
904-0170	*DS125-3-2*	*G*	*.252"*	*1.225"*	1.76	1.25	1.15	1.09	.95

KNOB-LOCK POINTER KNOBS

Especially designed for easy legibility—feature pointer that curves over knob towards panel to increase accuracy in reading. Match standard series knobs at left. Constructed of sturdy, durable polycarbonate resin. In mirror finish, or non-reflective "matte," conforming to military specs. (See left.) Order knob lock below. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Fits Lock Type	Finish	EACH 1-24	25-99	100-199	200-499	500-Up
904-1028	70-1LK-2	KL-701	Mirror	1.20	.93	.79	.74	.65
904-1030	*70-1LK-2G*	*KL-701G*	*Matte*	1.28	.99	.84	.79	.69
904-1052	90-1LK-2	KL-901	Mirror	1.33	1.03	.88	.82	.72
904-1411	125-1LK-2G	KL-1251G	Matte	1.60	1.24	1.05	.99	.87

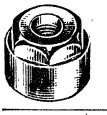
STANDARD KNOB LOCKS



Fit standard ⅜"-32 threaded shanks. Outer skirts are fabricated of tough, durable polycarbonate resin. For Series 70, 90 and 125, Fig. E and F knobs above left, and for pointer knobs listed above. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Fit Knob Series	Finish	EACH 1-24	25-99	100-199	200-499	500-Up
904-0410	*KL-701*	*70*	*Mirror*	1.14	.87	.74	.70	.67
904-0411	*KL-701G*	*70*	*Matte*	1.20	.93	.79	.74	.65
904-0416	KL-901	90	Mirror	1.32	1.02	.87	.82	.71
904-0417	KL-901G	90	Matte	1.40	1.07	.91	.86	.75
904-0427	*KL-1251G*	*125*	*Matte*	1.42	1.09	.93	.87	.76

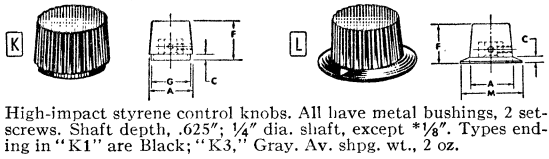
MOLDED-NYLON SHAFT LOCKS



Reliable means of maintaining control settings under conditions of shock and/or vibration. Mount on control bushing, in place of the usual nut and washer. Molded nylon with nickel-plated brass insert. Threaded for ¼" or ⅜" bushings. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Thread Size	For Shaft	Color	EACH 1-24	25-99	100-199	200-499	500-Up
904-0950	SL-100B	⅜-32	¼"	Black	.46	.33	.28	.26	.24
904-0951	SL-101R	⅜-32	¼"	Red	.49	.35	.30	.28	.26
904-0955	SL-105B	¼-32	⅛"	Black	.34	.25	.22	.20	.18
904-0959	SL-110B	⅜-32	¼"	Black	.30	.22	.19	.18	.16

400 SERIES KNOBS



High-impact styrene control knobs. All have metal bushings, 2 setscrews. Shaft depth, .625"; ¼" dia. shaft, except *⅛". Types ending in "K1" are Black; "K3," Gray. Av. shpg. wt., 2 oz.

(Figure K) ROUND DIAL—WITH SKIRT

Stock No	Mfr's Type	Dimensions in Inches A	C	F	G	EACH 1-24	25-99	100-199	200-499	500-Up
904-2020	*407R1K1	.720	.120	.813	.640	.54	.42	.36	.34	.29
904-2022	*407R1K3*	*.720*	*.120*	*.813*	*.640*	.54	.42	.36	.34	.29
904-2055	*407R2K1*	*.720*	*.120*	*.813*	*.640*	.50	.39	.33	.31	.27
904-2057	407R2K3	.720	.120	.813	.640	.50	.39	.33	.31	.27

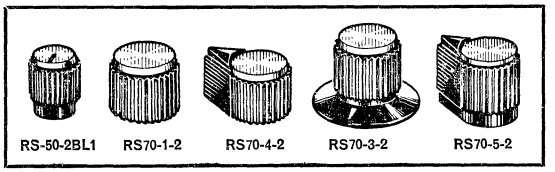
(Figure L) ROUND, DIAL SKIRTED (†Dimension M)

904-1910	*407D1K1	.720	.120	.813	†1.050	.66	.52	.44	.42	.37
904-1912	*407D1K3	.720	.120	.813	†1.050	.66	.52	.44	.42	.37
904-1930	*407D2K1*	*.720*	*.120*	*.813*	*†1.050*	.61	.48	.41	.38	.34
904-1932	470D2K3	.720	.120	.813	†1.050	.61	.48	.41	.38	.34
904-2110	409D2K1	.875	.120	.813	†1.270	.68	.51	.43	.41	.36

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Assorted Knobs and Dial Plates

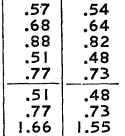
RAYTHEON PLASTIC KNOBS WITH ALUMINUM TOPS



Black polycarbonate. Aluminum cupped caps with epoxy coating. Zinc die-cast inserts have 2 setscrews. Conform to MIL-K-3926. Mirror finish. Matte on special order, add G to end of Type No. BL in Type No., ½″ black line; BD, black dot. ¼″ shaft except *⅛″. Style Code: 1, plain round; 2, skirted round; 3, dial skirted; 4, unskirted pointer; 5, skirted pointer; CU, concentric unskirted; CS, concentric skirted; CDS, concentric dial skirt. 1 oz.

Stock No.	Mfr's Type	Dia.	Style Code	EACH 1-49	50-99	100-199	200-Up
904-0800	RS 50-1-1*	½″	1	.72	.55	.47	.44
904-0801	RS 50-1-1 G*	½″	1	.76	.58	.49	.46
904-0802	RS 50-1BD-1*	½″	1	.74	.57	.48	.46
904-0804	RS 50-1BL-1*	½″	1	.74	.57	.48	.46
904-0806	RS 50-2-1*	½″	2	.78	.60	.51	.48
904-0808	RS 50-2BD-1*	½″	2	.80	.62	.53	.50
904-0810	RS 50-2BL-1*	½″	2	.80	.62	.53	.50
904-0832	RS 70-1-2	¾″	1	.74	.57	.48	.46
904-0834	RS 70-1BD-2	¾″	1	.77	.59	.50	.47
904-0836	RS 70-1BL-2	¾″	1	.77	.59	.50	.47
904-0838	RS 70-2-2	¾″	2	.80	.62	.53	.50
904-0840	RS 70-2BD-2	¾″	2	.82	.64	.54	.51
904-0842	RS 70-2BL-2	¾″	2	.82	.64	.54	.51
904-0868	RS 90-1-2	1″	1	.92	.70	.60	.56
904-0870	RS 90-1BD-2	1″	1	.93	.72	.61	.58
904-0872	RS 90-1BL-2	1″	1	.93	.72	.61	.58
904-0874	RS 90-2-2	1″	2	.98	.75	.64	.60
904-0876	RS 90-2BD-2	1″	2	1.00	.77	.65	.62
904-0886	RS 125-1-2	1¼″	1	1.12	.86	.73	.69
904-0887	RS 125-1-BD-2	1¼″	1	1.14	.88	.75	.70
904-0885	RS 125-1BL-2	1¼″	1	1.14	.88	.75	.70
904-0888	RS 125-2-2	1¼″	2	1.18	.91	.77	.73
904-0889	RS 125-2BD-2	1¼″	2	1.20	.93	.79	.74
904-0890	RS 125-2BL-2	1¼″	2	1.20	.93	.79	.74
904-0812	RS 50-3-1*	½″	3	.84	.65	.55	.52
904-0844	RS 70-3-2	¾″	3	.88	.67	.57	.54
904-0880	RS 90-3-2	1″	3	1.04	.80	.68	.64
904-0891	RS 125-3-2	1¼″	3	1.34	1.03	.88	.82
904-0846	RS 70-4-2	¾″	4	.78	.60	.51	.48
904-0882	RS 90-4-2	1″	4	1.18	.91	.77	.73
904-0848	RS 70-5-2	¾″	5	.78	.60	.51	.48
904-0884	RS 90-5-2	1″	5	1.18	.91	.77	.73
904-0814	RS 50/70-1-2	.700	CU	2.52	1.91	1.66	1.55
904-0816	RS 50BD/70-1-2	.700	CU	2.55	1.92	1.67	1.57
904-0818	RS 50BL/70-1-2	.700	CU	2.62	1.98	1.72	1.61
904-0820	RS 50/70-2-2	.700	CS	2.77	2.10	1.82	1.71
904-0822	RS 50BD/70-2-2	.700	CS	2.77	2.10	1.82	1.71
904-0824	RS 50BL/70-2-2	.700	CS	2.77	2.10	1.82	1.71
904-0826	RS 50/70-3-2	.700	CDS	2.80	2.12	1.83	1.72
904-0828	RS 50BD/70-3-2	.700	CDS	2.87	2.17	1.88	1.77
904-0830	RS 50BL/70-3-2	.700	CDS	2.87	2.17	1.88	1.77

WALDOM DIAL PLATES



Lithographed aluminum plates for amps, PA equipment. Black figures and letters dyed into the hard aluminum oxide surface. For 1¼″ bar knob. 2⅜x2⅝″. 1³⁄₃₂″ ctr. hole. Very attractive on all types of equipment. Shpg. wt. 2 oz.

Stock No.	Type	Description	EACH 1-49	50-99	100-Up
992-0114	426-A	Volume, 0-10	.62	.50	.35
992-0110	410-A	No title, 0-10	.62	.50	.35

ROUND DIAL PLATE

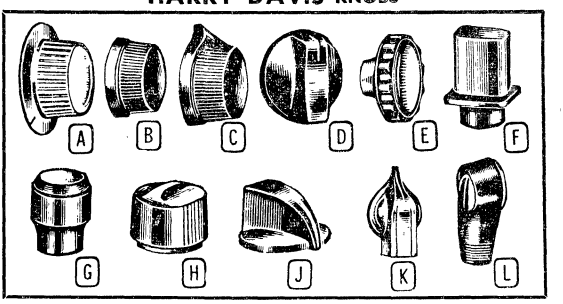
Attractive, easy-to-read etched aluminum scale with highly polished black background. Overall diameter, 1¾″. For 1¼″ bar knobs. 1³⁄₃₂″ center hole. Perfect for applications on amateur, public address, hi-fi and experimental equipment of all kinds. Shpg. wt. 2 oz.

992-0100	25	Volume (Arrow)	.46	.34	.25
992-0119	569	0-100 (180°)	.42	.34	.25
992-0125	905	0-100 (270°)	.46	.34	.25

"ON-OFF" SWITCH PLATE

Economy priced quality anodized aluminum toggle switch plate. Etched aluminum with black background. 1¹⁄₁₆x1¹¹⁄₁₆″. Wt. 2 oz.
992-0107. Type 278. 1-49.....Each .29
50-99.....Each .20 100-Up.....Each .15

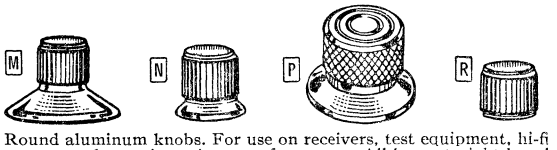
HARRY DAVIS KNOBS



For use as tone and volume control knobs for radios, television receivers, high-fidelity systems and other electronic equipment. Type 1770-F screws on 6-32 threaded shaft; all others have set screws for mounting round or flatted shafts. Type 5149-A has self-locating friction fit for flat wire shafts. *Indicates for use with knurled shafts. Wt., 3 oz.

Stock No.	Mfr's Type	Fig.	Dia.	Color	EACH 1-99	100-499	500-999	1000-Up
543-1600	*1600*	*A*	*1½″*	*Black*	.22	.16	.15	.11
543-1610	*1610*	*A*	*³⁹⁄₃₂″*	*Black*	.20	.15	.14	.10
543-1450	*1450*	*B*	*1¹¹⁄₁₆″*	*Black*	.12	.09	.08	.06
543-1451	*1450-D**	*B*	*1¹¹⁄₁₆″*	*Black*	.08	.06	.056	.04
543-1475	*1475*	*B*	*1″*	*Black*	.16	.12	.11	.08
543-1400	*1400*	*C*	*1¹¹⁄₁₆″*	*Black*	.12	.09	.08	.06
543-1470	*1470*	*C*	*1″*	*Black*	.22	.16	.15	.11
543-1500	*1500*	*D*	*1⅛″*	*Black*	.18	.14	.13	.09
543-1510	*1500*	*D*	*1⅛″*	*Red*	.20	.15	.14	.10
543-2185	2965	E	⅛″	*Black*	.20	.15	.14	.10
543-2190	*5149-A*	*F*	½″	*Black*	.10	.08	.07	.05
543-1770	*1770-F*	*G*	*³¹⁄₆₄″*	*Black*	.08	.06	.05	.04
543-1700	1700	*H*	¾″	*Black*	.20	.15	.14	.10
543-1550	*1550*	*J*	1³⁄₁₆″	*Black*	.18	.14	.13	.09
543-2150	2150	*K*	1¼″	*Black*	.18	.14	.12	.09
543-2110	*2110*	*L*	1⅝″	*Black*	.32	.24	.22	.16

USECO ALUMINUM KNOBS



Round aluminum knobs. For use on receivers, test equipment, hi-fi systems—electronic equipment of any type. All have straight knurl except Type 310-20 which has a diamond knurl. All fit ¼″ shaft. Have anodized aluminum finish. With 6-32 set screws, except Type 310-20 which has 8-32 set screw. Av. shpg. wt., 2 oz.

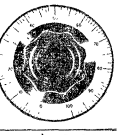
Stock No.	Mfr's Type	Fig.	Knob Dia.	Skirt Dia.	EACH 1-9	10-24	25-49	50-Up
971-0153	1000-20	M	⅝″	1″	1.70	1.12	1.01	.93
971-0101	500-20	N	½″	⅝″	1.48	.99	.90	.83
971-0100	310-20	P	⁵⁷⁄₆₄″	1¼″	1.75	1.20	1.09	.99
971-0104	625-20	R	⅝″	.....	1.43	1.01	.91	.84

H. H. SMITH CALIBRATED CONTROL PLATES

Impressive-looking control plates with black satin finish. For all types of electronic equipment. Made of brass. Easy-to-read numerals are etched in bright silver color. Calibrated clockwise from 0 to 100. Dimensions: 1³⁄₃₂″ inside diameter; .020″ thick. Choice of two outside diameters. Shpg. wt. 1 oz.

Stock No.	Mfr's Type	Degrees	O.D.	1-4, EA.	5-Up, EA.
920-2700	2900	180	2″	1.40	1.05
920-2702	2902	325	2″	1.40	1.05
920-2703	2903	180	3½″	2.00	1.50
920-2705	2905	325	3½″	2.00	1.50

CALIBRATED DIAL AND KNOB ASSEMBLY

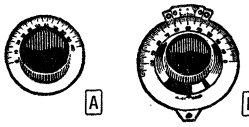


Built-to-last brass dial features a "chrome silver" finish. Thickness, .020″. Choice of two diameters. Easy-to-grip molded bakelite knob has ¼″ brass insert. Excellent for test and lab equipment and communications gear. Calibrated from 0-100, clockwise. Shpg. wt. 4 oz.

920-2784	2984	180	2¾″	4.05	3.00
920-2787	2987	360	2¾″	4.05	3.00
920-2788	2988	180	4″	4.65	3.45
920-2791	2991	360	4″	4.65	3.45

Knobs, Shafts and Accessories

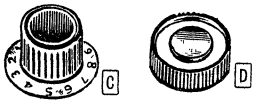
NATIONAL RADIO COMPONENTS



CALIBRATED PLANETARY DRIVE DIALS

Recommended for all types of equipment. Knobs are black bakelite, with dials of nickel-plated brass. Type N dial has a vernier scale. Type AM dials have dial pointer. Type N is 1⅜" deep; Type AM, 1 7/16" deep. For ¼" shafts. All 5:1 ratio. Av. shpg. wt. 1 lb.

Stock No.	Mfr's Type	Fig.	Scale	Dia.	EACH 1-4	5-9	10-49	50-99	100-499	500-Up
867-0003	AM-2	A	0-100; 180°	3"	8.60	6.70	6.00	5.60	5.35	5.00
867-0006	AM-5	A	200-0; 360°	3"	8.60	6.70	6.00	5.60	5.35	5.00
867-0007	AM-6	A	0-150; 270°	3"	8.60	6.70	6.00	5.60	5.35	5.00
867-0104	N-2	B	0-100; 180°	4"	26.00	18.00	17.30	16.58	15.56	15.00

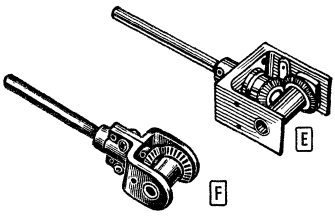


ALL-PURPOSE KNOBS FOR ¼" SHAFTS

Precision knobs for all types of communications equipment. Deeply knurled for sure grip. Made of Tenite. HRS Types have 7/16" chrome dial. Type HRT-M is miniature version of HRT, face-to-back size, 27/32". *Black, †gray. Av. shpg. wt. 1 oz.

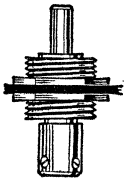
Stock No.	Mfr's Type	Fig.	Description	Knob Dia.	EACH 1-24	25-99	100-499	500-999	1000-Up
867-0082	HRS-3*	C	300° 0-10 scale	1 7/16"	1.30	1.00	.86	.80	.77
867-0083	HRS-3†	C	300° 0-10 scale	1 7/16"	1.30	1.00	.86	.80	.77
867-0084	HRS-4*	C	1-line scale	1 7/16"	1.30	1.00	.86	.80	.77
867-0085	HRS-4†	C	1-line scale	1 7/16"	1.30	1.00	.86	.80	.77
867-0086	HRS-5*	C	0-10 180° scale	1 7/16"	1.30	1.00	.86	.80	.77
867-0090	HRT*	D	Chrome insert	2⅛"	1.55	1.20	1.05	.96	.90
867-0092	HRT-M	D	Chrome circle	1½"	1.07	.83	.72	.67	.63

PRECISION RIGHT-ANGLE DRIVES



E Type RAD. Controls pots and capacitors at right angles to front panel. Light duty. Drives up to 2 units. Cast aluminum housing with die-cast zinc gears. 11 ratio. ¼" shaft. Shaft 2½" l. Overall 4½". 10 oz.
867-1104. 1-4....Ea. 6.80 5-Up...Ea. 4.80

F Type PRAD. Same as type RAD but with machined brass gears, stainless steel shaft, bronze bearings, die cast zinc housing, backlash under 1½%. Gears protected by removable metal cover. 1:1. Shaft ¼x2½". Overall 4½". 10 oz.
867-0117. 1-4...Ea. 36.00 5-Up...Ea. 24.00



PRECISION BALL REDUCTION DRIVES

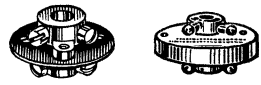
Front or rear mounting. Input 1 in-oz.; output 35-40 in-oz. ¼" shaft. 1° max. backlash. Mounting nuts. *Includes female coupling.

Stock No.	Mfr's Type	Reduction	L. In.	EACH 1-4	5-Up
867-0111	NBD-1-1	5:1	2	6.90	5.00
867-0112	NBD-1-2*	5:1	2	6.90	5.00
867-0113	NBD-2-1	10:1	2 7/32	6.90	5.00
867-0114	NBD-2-2*	10:1	2 7/32	6.90	5.00

AVD-250 RUGGED PLANETARY VERNIER DIAL DRIVE MECHANISM

Drive ratio is 5:1—five turns of the knob for each revolution of the drive. Output torque 1-3 in.-lbs. Drive shaft is ¼". Output coupling fits a ¼" shaft, which is secured by two set screws. Overall 2 9/32" dia.x1 15/32"; length from front of drive shaft to back of mounting plate, 1". Mounts on front of panel; 5/32" mtg. holes. 8 oz.
867-0021. 1-4...Ea. 4.00 5-Up...Ea. 2.75

SHAFT COUPLINGS

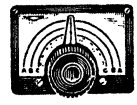


TX-8 TX-10

TX-8 Rigid steatite coupling for joining two shafts. Hubs of solid, nickel-plated brass. Fully insulated by ceramic disk. Two set-screws on each hub. 1⅝" dia. For ¼" shafts. 7 oz.
867-1123. 1-49.....Each 1.90
50-99.....Each 1.52 100-199..Each 1.20
200-499...Each 1.17 500-Up...Each 1.05

TX-10. Similar to above, but has bakelite insulating disc. 1 1/16" dia. 7 oz.
867-1124. 1-49.....Each 1.28
50-99.....Each .96 100-199...Each .92
200-499....Each .88 500-Up....Each .80

TYPE MCN VERNIER DIAL FOR INDIVIDUAL CALIBRATION



Provides three blank calibrating scales and 0-100, 180° logging scale. Uses "velvet-verner" drive for smooth, backlash-free tuning. Drive ratio is 5:1. 2¾x3⅞". Mounts on 3½" rack. With extra scales, hardware, hub for ¼" shaft. 2 oz.
867-0098. 1-4..Ea. 14.00 5-Up..Ea. 9.75

H. H. SMITH SHAFTS AND ACCESSORIES

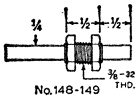
STURDY FLEXIBLE ⅛" SHAFTS

⅛" shafts with ¼" hubs ½" long. Phosphor bronze. For connecting out-of-line shafts. Up to 90° angular-control with no backlash, 2 oz.

Stock No.	Mfr's Type	Lgth.	EACH 1-24	25-49	50-99	100-Up
920-0151	151	3"	1.02	.75	.68	.61
920-0152	152	6"	1.17	.85	.87	.69

PANEL BEARING ASSEMBLY

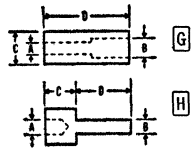
No.184



No.148-149

For panels to ⅜". Brass bearing ½" long, ⅜"-32 thd. ¼" drive shaft extends through both ends of coupling. Overall shaft length: 148—3", 149—6". Panel bearing only: 119 for ¼" shafts, 184 for ⅛" shafts. 2 oz.

Stock No.	Mfr's Type	EACH 1-99	100-499	500-Up
920-0148	*148*	.56	.40	.36
920-0149	*149*	.83	.60	.54
920-0119	*119*	.20	.15	.13
920-0184	184	.20	.15	.13



SHAFT FITTINGS

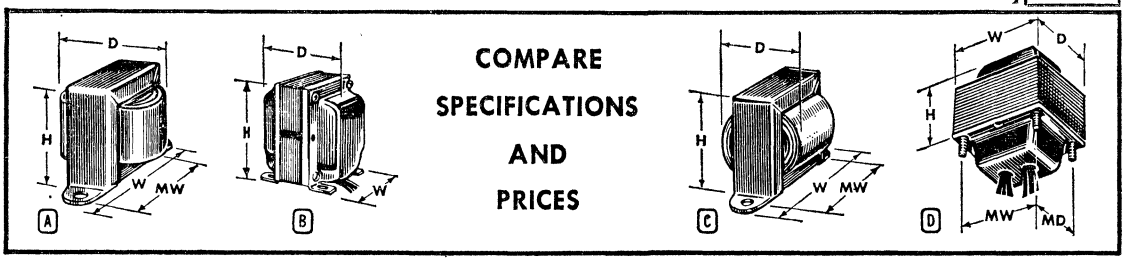
Couplings are designed for extending shafts of volume controls, switches, tone controls, etc., or for ganging units. Extenders are primarily for decreasing or increasing shaft diameter and length. *Indicates insulated fiber; †Brass, nickel-plated. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Dimensions A	B	C	D	EACH 1-9	10-49	50-99	100-Up
920-0180	*180†*	*G*	⅛"	⅛"	9/32"	⅜"	.54	.45	.40	.36
920-0120	*120†*	*G*	¼"	¼"	7/16"	¾"	.41	.34	.30	.27
920-0140	140*	G	¼"	¼"	7/16"	¾"	.41	.34	.30	.27
920-0131	131†	G	⅜"	¼"	½"	¾"	.41	.34	.30	.27
920-0141	141*	G	⅜"	¼"	½"	¾"	.41	.34	.30	.27
920-0189	189†	H	⅛"	⅛"	¼"	⅜"	.47	.40	.35	.32
920-0150	*150†*	*H*	¼"	¼"	½"	1¼"	.55	.45	.40	.36
920-0130	130*	H	¼"	¼"	½"	1¼"	.55	.45	.40	.36
920-0160	160†	H	¼"	¼"	½"	⅝"	.47	.40	.35	.32
920-0161	161*	H	¼"	¼"	½"	⅝"	.47	.40	.35	.32
920-0132	132†	H	⅜"	¼"	½"	1¼"	.55	.45	.40	.36
920-0162	162†	H	⅜"	¼"	½"	⅝"	.47	.40	.35	.32

Items in ITALICS Are Fast-Moving—Extra Quantities on Hand

Our Best Buy Transformers ALLIED

POWER SECTION



ALLIED'S OWN POWER TRANSFORMERS

Quality power transformers designed for use in new equipment or for replacement applications. All types listed are shielded except those indicated by #. Have 8″ flexible color-coded leads for easy installation. Plate windings are center-tapped except *half-wave type. 6.3-volt windings are center-tapped except †not center-tapped. ‡Electrostatic shield. **25.2 volts at 0.5 amp winding. All have primaries for operation from 110-120 volt, 50-60 Hz AC, except §for 60 Hz AC only.

Stock No.	Mfr's Type	Fig.	Plate VCT	Plate mA	Filaments 5 V (Amps)	Filaments 6.3V (Amps)	Case Size HxWxD	Mtg. Size MWxMD	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0168	6K143HF	A‡	115*	15	.....	0.6†	1 11/16x2 13/16x1 3/4″	2 3/8″	7.27	6.05	5.65	4.50	4.19
705-0034	*6K27VF*	C#§	125*	15	.....	0.6†	2x2 3/8x1 5/8″	2″	3.47	2.93	2.69	1.64	1.51
705-0035	*6K28HF*	A#	125*	50	.....	2.0†	2 5/16x3 11/16x2 1/4″	3 1/8″	5.60	4.85	4.42	2.65	2.44
705-0171	6K146HB	D‡§	135*	200	.....	5.5	2 1/8x3 3/8x2 13/16″	2 13/16x2 1/4″	12.67	10.70	9.84	7.82	7.30
705-0137	6K111VG	B‡	230	40	.....	1.5	2 3/4x2 9/32x2 1/2″	1 3/4x1 5/8″	9.50	7.55	7.10	4.48	4.14
705-0001	*6K1VF*	C#§	250	25	.....	1.0†	2 3/8x2 7/8x1 7/8″	2 3/8″	4.15	3.50	3.22	1.90	1.73
705-0106	6K82VF	C#	380*	20	.....	.....	2 3/8x2 7/8x2 1/16″	2 3/8″	5.35	4.82	4.29	2.45	2.26
705-0156	6K131VG	B**	440	50	.....	0.6†	3 1/8x2 5/8x2 11/16″	2x1 11/16″	10.25	8.10	7.63	4.84	4.47
705-0066	6K49HB	D	460	50	.....	2.5†	1 3/4x3x2 1/2″	2 1/2x2″	7.50	6.05	5.69	4.60	4.29
705-0067	6K49VG	B	460	50	.....	2.5†	3 3/16x2 5/8x2 11/16″	2x1 3/4″	7.50	6.26	5.90	3.62	3.34
705-0002	6K2HB	D	480	40	2	2.0	1 13/16x3x2 1/2″	2 1/2x2″	9.60	8.15	7.69	3.86	3.52
705-0003	6K2VG	B	480	40	2	2.0	3 3/16x2 5/8x2 3/4″	2x1 11/16″	9.15	8.23	7.30	4.96	4.64
705-0068	6K50HB	D	480	55	2	2.0	1 3/4x3x2 1/2″	2 1/2x2″	9.42	8.00	7.53	3.74	3.41
705-0069	6K50VG	B	480	55	2	2.0	3 3/16x2 5/8x2 11/16″	2x1 3/4″	9.13	7.60	7.29	4.27	3.94
705-0070	6K51HB	D	480	70	.....	3.0†	1 7/8x3x2 1/2″	2 1/2x2″	8.93	7.59	7.14	4.04	3.73
705-0071	6K51VG	B	480	70	.....	3.0†	3 3/16x2 5/8x2 15/16″	2x1 7/8″	8.66	7.36	6.93	4.04	3.73
705-0113	6K88VG	B	500	40	.....	2.0	2 3/4x2 1/4x2 3/4″	1 25/32x1 7/8″	8.25	6.95	6.38	5.09	4.75
705-0074	6K53HB	D	500	70	2	2.5	2 1/8x3x2 1/2″	2 1/2x2″	10.34	8.50	8.25	4.68	4.32
705-0075	6K53VG	B	500	70	2	2.5	3 3/16x2 5/8x3 1/8″	2x2 1/8″	10.00	8.48	8.00	4.68	4.32
705-0079	6K55VG	B	520	90	.....	4.0†	3 9/16x2 15/16x3 3/16″	2 1/4x2 1/16″	9.95	8.43	7.94	4.70	4.34
705-0036	6K29HB	D	520	90	2	3.0	2 3/8x3 3/8x2 13/16″	2 13/16x2 1/4″	11.07	9.25	8.86	4.84	4.47
705-0037	6K29VG	B	520	90	2	3.0	3 5/8x3x3 1/2″	2 1/4x2 1/4″	10.25	8.94	7.94	4.84	4.47
705-0081	6K56VG	B	540	120	3	3.5	3 15/16x3 1/4x3 1/2″	2 1/2x2 1/4″	14.40	10.37	9.84	6.79	6.27
705-0167	6K142VG	B‡§	600	60	.....	2.7	3 1/8x2 5/8x2 11/16″	2x1 11/16″	12.55	8.03	7.22	5.95	5.49
705-0054	6K42HB	D	600	70	2	3.0	2 1/4x3x2 1/2″	2 1/2x2″	12.30	10.40	9.55	5.79	5.35
705-0055	6K42VG	B	600	70	2	3.0	3 3/16x2 5/8x3 1/4″	2x2 3/16″	14.72	12.50	11.78	5.79	5.35
705-0058	6K44HB	D	600	120	3	5.0	2 5/8x3 3/4x3 1/8″	3 1/8x2 1/2″	15.07	12.75	11.73	7.15	6.60
705-0059	6K44VG	B	600	120	3	5.0	3 15/16x3 1/4x3 7/8″	2 1/2x2 9/16″	15.07	12.75	11.73	7.15	6.60
705-0005	6K3VG	B	650	40	2	2.0	3 3/16x2 5/8x2 11/16″	2x1 11/16″	9.30	7.90	7.43	3.97	3.67
705-0006	6K4HB	D	650	70	3	3.5	2 7/8x3x2 1/2″	2 1/2x2″	8.22	6.95	6.38	3.90	3.60
705-0007	6K4VG	B	650	70	3	3.5	3 13/16x2 5/8x3 3/4″	2x2 3/4″	8.22	6.95	6.38	3.90	3.94
705-0060	6K45HB	D	650	150	3	5.0	3x3 3/4x3 1/8″	3 1/8x2 1/2″	15.22	9.74	8.52	7.20	6.64
705-0061	6K45VG	B	650	150	3	5.0	3 15/16x3 1/4x4 1/4″	2 1/2x3″	15.22	9.74	8.52	9.71	8.96
705-0157	6K132VG	B	650	150	3	5.0	3 7/8x3 1/4x3 13/16″	2 1/2x2 9/16″	15.85	12.59	11.85	7.48	6.91
705-0077	6K54VG	B	680	70	2	2.5	3 9/16x2 15/16x3 5/16″	2 1/4x2 3/16″	11.62	7.44	6.51	5.51	5.08
705-0008	6K5HB	D	700	90	3	3.5	2 1/2x3 3/8x2 13/16″	2 13/16x2 1/4″	14.54	12.35	11.63	5.49	5.07
705-0010	6K6HB	D	700	120	3	4.7	2 3/4x3 3/4x3 1/8″	3 1/8x2 1/2″	15.23	12.95	12.18	6.44	5.95
705-0011	6K6VG	B	700	120	3	4.7	3 15/16x3 1/4x3 15/16″	2 1/2x2 11/16″	14.95	12.70	11.96	6.44	5.95
705-0063	6K46VG	B	700	200	3	6.0	4 5/8x3 7/8x4″	3x2 13/16″	20.52	17.40	15.47	9.71	8.96
705-0012	6K7HB	D	750	150	3	5.0	3 1/16x3 3/4x3 1/8″	3 1/8x2 1/2″	18.09	15.37	14.47	8.16	7.53
705-0013	6K7VG	B	750	150	3	5.0	3 15/16x3 1/4x4 3/8″	2 1/2x3 1/16″	17.27	14.30	13.48	8.16	7.53
705-0117	6K91VG	B	750	175	3	8.0	4 1/4x3 1/2x4 3/8″	2 3/4x3 5/16″	21.22	17.99	16.50	10.04	9.27
705-0169	6K144VG	B‡	800	30	2	1.2†, 1.2†	3 1/8x2 5/8x3 3/16″	2x2 3/16″	15.27	12.94	11.89	7.61	6.66
705-0014	6K8HB	D	800	200	3	5.0	2 7/8x4 1/2x3 3/4″	3 3/4x3″	19.41	16.50	15.54	8.68	8.01
705-0015	6K8VG	B	800	200	3	5.0	4 5/8x3 7/8x4 1/16″	3x2 13/16″	18.46	15.67	14.76	8.68	8.01
705-0039	6K30VG	B	800	250	4	5.0	4 5/8x3 7/8x4 3/8″	3x3 5/16″	22.84	19.33	18.24	10.24	9.45
705-0170	6K145VG	B‡§	900	250	4	2, 4†	4 5/8x3 7/8x4 11/16″	3x3 9/16″	27.27	23.10	21.10	12.93	11.94
705-0041	6K31VG	B	1200	200	3	3†, 3†	4 5/8x3 7/8x4 1/4″	3x3 1/16″	22.82	18.84	17.75	10.81	9.98
705-0040	6K31HB	D	1200	200	3	3†, 3†	2 15/16x4 1/2x3 3/4″	3 3/4x3″	23.27	18.84	17.75	10.81	9.98
705-0155	6K130VG	B§	1840	250 ind. 200 cap.			4 5/8x3 7/8x5 1/16″	3x3 15/16″	28.82	24.36	23.07	11.99	11.07

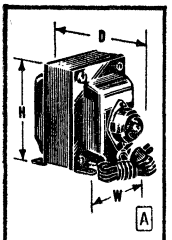
TUBE CHECKER TRANSFORMER

Multiple-secondary type for use in tube testers. Primary: 60 Hz. Secondary output volts: 1.1/1.4/1.5/2.0/2.5/3.0/3.3/4.0/5.0/6.3/7.0/7.5/12/20/25/30/35/50/70/85/110/117. Mounting centers 3 9/16″. With data sheet.

Stock No.	Mfr's Type	Fig.	Primary Input Volts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0140	6K114HF	A	125/115/105	2 5/8x4x3 1/16″	3 9/16″	17.76	15.06	14.21	7.47	6.79

Allied transformers are specially built to Allied Electronics' high standards for quality, stability and long-term performance. Quantities of 100 and up are shipped bulk-packed, F.O.B. Chicago, Illinois. Phone, wire or write Allied Electronics for pricing on quantities of 500 and more, or contact your nearest Allied Electronics facility. See Page 3 for addresses.

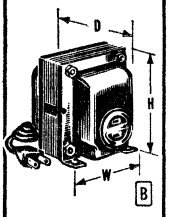
ALLIED General-Purpose Transformers



VARIABLE-VOLTAGE AND ISOLATION TRANSFORMERS

Isolate equipment from power line. Primaries operate from various 50-60 Hz input voltages (see table below); secondaries deliver 115 VAC output, except *105-115-125 VAC. With 6-ft. cord and plug.

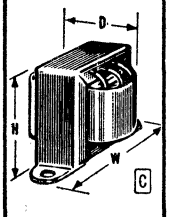
Stock No.	Mfr's Type	Fig.	Input Volts	VA Output	Size H x W x D	Mtg. Ctrs. W x D	Wt., Lbs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0023	6K16VCS	A	90-100-120-200-230-250	150	4⅝x3⅞x5½"	3x3⅛"	9¼	25.32	22.50	20.67	16.40	15.20
705-0083	6K58VCS	A	105-115-125	100	4⅝x3⅞x4¾"	3x2 9/16"	7½	19.97	17.68	16.25	12.60	11.77
705-0105	6K81VCP*	B	117	350	5½x4⅝x5¾"	3½x3⅞"	16	38.72	33.35	29.64	24.00	22.40



ISOLATION TRANSFORMERS

Reduce shock hazard, protect equipment. 6-ft. cord, plug and receptacle, except Fig. C type. 115 VAC output.

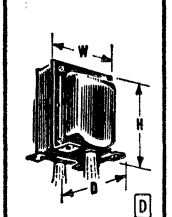
Stock No.	Mfr's Type	Fig.	Input Volts	VA Output	Size H x W x D	Mtg. Ctrs. W x D	Wt., Lbs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0138	*6K112HF*	C	115	35	2⅝x3 11/16x2¼"	3⅛"	1¾	7.27	6.15	5.65	4.50	4.19
705-0165	*6K140HF*	C	115/230	50	2 5/16x3 11/16x2⅛"	3⅛"	2	9.70	8.63	7.93	6.31	5.89
705-0048	6K38VCP	B	115	50	3⅝x3x3⅜"	2¼x1⅞"	3¾	10.20	10.14	9.01	7.11	6.64
705-0025	6K18VCP	B	115	100	4⅜x3⅝x4"	2¾x2¾"	6½	20.27	17.16	15.78	12.58	11.73
705-0164	6K139VCP	B	115	150	3⅞x3¼x4 7/16"	2½x2 15/16"	7¼	23.42	19.39	17.80	14.19	13.24
705-0026	6K19VCP	B	115	250	4⅝x3⅞x4⅝"	3x3⅜"	10	35.50	30.00	27.60	22.00	20.50



230-TO-115 VOLT STEP-DOWN AUTOTRANSFORMERS

Well-built units to reduce 220-250 volts, 50-60 Hz AC to 110-125 volts. Black enamel finish. With 8-ft. cord and plug, except Fig. C types. Female outlet on case, except Fig. C types.

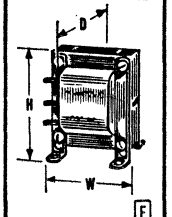
Stock No.	Mfr's Type	Fig.	Input Volts	VA Output	Size H x W x D	Mtg. Ctrs. W x D	Wt., Lbs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0092	*6K68HF*	C	230	20	2x3¼x2"	2 13/16"	1¼	4.82	4.06	3.73	2.98	2.77
705-0093	*6K69HF*	C	230	40	2 5/16x3⅝x2⅛"	3⅛"	1¾	6.25	5.28	4.85	3.87	3.61
705-0019	*6K12VCP*	B	230	80	3⅝x3x3¼"	2¼x1⅞"	3¼	11.55	9.96	8.86	7.14	6.66
705-00 9	*6K22PCV*	B	230	100	3½x2⅞x3⅜"	2¼x2"	4	15.08	13.58	12.07	8.40	7.84
705-0020	6K13VCP	B	230	150	4x3⅜x3⅝"	2½x2¼"	4¾	14.55	12.73	11.31	9.03	8.43
705-0021	*6K14VCP*	B	230	250	4⅝x3⅞x4¼"	3x2 13/16"	7¾	19.15	16.39	14.57	11.83	11.05
705-0022	*6K15VCP*	B	230	500	4⅝x3⅞x4¾"	3x3 5/16"	10	26.32	20.66	18.37	14.64	13.66
705-0030	6K24VCP	B	230	750	5½x4⅝x5"	3½x3¼"	13¾	33.12	28.00	25.79	20.50	19.26
705-0027	6K20VCP	B	230	1000	5½x4⅝x5¼"	3½x3½"	14¾	41.22	34.84	32.00	25.50	23.82
705-0031	6K25VCP	B	230	1500	6x4½x5⅝"	3 7/16x3 9/16"	19	48.62	41.04	37.73	30.04	28.07
705-0028	6K21VCP	B	230	2000	6x4½x6⅜"	3 7/16x4⅜"	25	52.50	46.60	42.84	33.98	31.70



115-TO-230 VOLT STEP-UP AUTOTRANSFORMERS

For operation of 230-V appliances from 110-125 V 50-60 Hz AC. With 8-ft. cord and AC outlet.

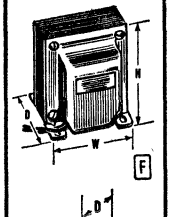
Stock No.	Mfr's Type	Fig.	Output Volts	VA Output	Size H x W x D	Mtg. Ctrs. W x D	Wt., Lbs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0124	6K97VCP	B	230	80	3⅝x3x3¼"	2¼x1⅞"	3¼	11.55	9.78	8.99	7.14	6.67
705-0084	6K60VCP	B	230	150	4x3⅜x3⅝"	2½x2¼"	4¾	14.55	12.32	11.30	9.02	8.41
705-0125	6K98VCP	B	230	500	4⅝x3⅞x4¾"	3x3 5/16"	10¼	26.30	22.22	20.24	16.27	15.20



CONTROL TRANSFORMERS

Automation types for high-speed automatic equipment. Adapted to relays, pilot lamps, solenoids, small motors, etc. Also use in high current, low voltage power supplies. Secondaries have two identical windings for series or parallel operation. Primaries operate from either 115 or 230 V, 50-60 Hz AC.

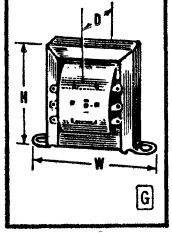
Stock No.	Mfr's Type	Fig.	Parallel Sec. Volts	Parallel Sec. Amps	Series Sec. Volts	Series Sec. Amps	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0101	*6K77VFL*	G	6	2	12	1	2⅜x2⅞x1¾"	2⅜"	5.40	4.85	4.32	2.66	2.48
705-0102	*6K78VFL*	G	6	4	12	2	2¾x3⅛x2"	2 13/16"	6.34	5.71	5.07	4.13	3.86
705-0103	*6K79VFL*	G	12	4	24	2	3⅛x3⅝x2¼"	3⅛"	7.53	6.77	6.03	4.02	3.76
705-0104	*6K80VBR*	E	12	8	24	4	3⅜x2⅞x3"	2¼x2⅜"	12.28	11.07	9.83	6.37	5.93
705-0144	*6K119VBR*	E	12	16	24	8	4⅛x3 7/16x3⅞"	2¾x3"	21.60	19.65	17.56	11.21	10.47



OSCILLOSCOPE POWER TRANSFORMERS

For use with 2X2A rectifiers in half-wave power supplies. All require primary input voltage of 117 volts, 60 Hz AC, except *117 volts, 50-60 Hz AC. Units are multi-output types; have 2, 3 or 4 secondaries; secondary outputs are shown in table below. Shpg. wts., lbs.: §5; ‡6.4.

Stock No.	Mfr's Type	Fig.	Plate Supply AC Volts	Plate Supply DC mA	Rect. Volts	Rect. Amps	Other Secondary Outputs	Size HxWxD	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0152	6K127VG	F§	1800*	2.0	2.5	1.8	2.5v @ 2.2A; 6.3v @ .6A	3⅞x3¼x3 9/16"	18.93	17.04	15.15	9.43	8.80
705-0151	6K126VG	F‡	2400	5.0	2.5	1.8	2.5v @ 2.0A	4¼x3 9/16x3 13/16"	19.77	16.74	14.88	12.25	11.33



FIXED-IMPEDANCE OUTPUT TRANSFORMERS

Push-pull plates to voice coil. Av. shpg. wt., 2 lbs.

Stock No.	Mfr's Type	Fig.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Audio Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pkd. 100-249	Bulk Pkd. 250-Up
705-0847	6W53HF	C	4000 CT	32, 16, 8	7½	2¼x3 11/16x2¼"	3⅛"	7.28	6.51	5.80	4.74	4.42
705-0843	6W49VG	D	6600 CT	500,250,16,8,4	35	3 15/16x3¼x3½"	2½x2¼"	13.90	10.78	9.57	8.58	8.00
705-0867	6W73HF	C	10,000 CT	8, 4, 2	5	1 11/16x2 13/16x1¾"	2⅜"	4.52	4.06	3.62	2.70	2.52
705-0864	6W70VG	D	10,000/7000 CT	500, 15, 8, 4	25	3⅛x2⅝x2⅝"	2x1 11/16"	10.30	8.94	7.94	6.38	5.95
705-0844	6W50HF	C	25,000 CT	4	5	1⅜x2⅜x1⅜"	2"	3.41	3.07	2.75	2.09	1.96

These transformers are specially built to Allied's high standards for quality, stability and performance. Quantities of 100 and up are shipped bulk-packed F.O.B. factory, Chicago.

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ALLIED

POWER SECTION

LOW-VOLTAGE RECTIFIER TRANSFORMERS. Primary, 115 V, except †110-120. *Tapped primary for lower voltages.

Stock No.	Mfr's Type	Fig.	Secondary Volts	Secondary Amps	Case Size HxWxD	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0126	*6K100HF*	B*	10/20CT/40CT	.035	1 7/16x2 3/8x1 3/8"	2"	5.47	4.71	4.18	3.19	2.89
705-0127	*6K101HF*	B*	10/20CT/40CT	.100	1 11/16x2 13/16x1 5/8"	2 3/8"	6.37	4.71	4.18	3.19	2.89
705-0128	*6K102HF*	B*	10/20CT/40CT	.300	2 5/16x3 11/16x2"	3 1/8"	7.42	4.71	4.18	3.19	2.89
705-0129	*6K103HF*	B*	10/20CT/40CT	.750	2 5/8x4x2 3/8"	3 9/16"	9.42	7.98	7.33	5.84	5.54
705-0130	6K104VG	C*	10/20CT/40CT	1.0	3 1/8x2 5/8x3 1/8"	2x2 1/4"	14.02	11.87	10.90	8.65	8.23
705-0131	6K105VBR	A	0/17/18	3.0	3 1/8x2 9/16x2 7/8"	2x2 3/8"	10.35	8.71	8.05	6.59	6.25
705-0132	6K106VBR	A	0/17/18	6.0	3 13/16x3 3/16x3 1/4"	2 1/2x2 5/8"	16.62	14.49	12.88	8.66	8.22
705-0133	6K107VBR	A	0/6.5/13/19.5/26	3.0	3 1/2x2 7/8x2 3/8"	2 1/4x2 1/8"	11.25	9.50	8.73	6.95	6.60
705-0134	6K108VBR	A	0/24/27/30/33/36	3.0	3 13/16x3 3/16x3 1/4"	2 1/2x2 5/8"	16.45	13.93	12.80	10.20	9.67
705-0135	6K109VBR	A†	0/24/27/30/33/36	8.0	4 5/8x3 13/16x3 7/8"	3x3 1/4"	25.52	25.52	19.85	15.82	15.00

HIGH-FIDELITY OUTPUT TRANSFORMERS. Feature screen taps for ultra-linear operation over entire frequency range, except those with †. Frequency response, 15-35,000 Hz, except *20-20,000 Hz. Rated watts are over full frequency range. All have 4, 8, and 16-ohm outputs, except ‡8 and 16 ohms only.

Stock No.	Mfr's Type	Fig.	Watts	P-P Imp.	mA	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0814	6W17PS	D	12	8000	60	3 3/4x3x3 1/4"	3 1/2	16.07	13.59	12.23	9.83	9.33
705-0816	6W20VG	C	12	8000	60	3 1/8x2 5/8x2 3/4"	2 1/2	13.70	11.58	10.63	8.46	8.03
705-0815	6W19HF	B	18*	8000†	65	2 5/8x4x2 1/2"	2 1/4	11.26	9.13	8.39	6.61	6.27
705-0818	6W22VG	C	24	6600	75	3 7/8x3 1/4x3 7/8"	6	23.02	19.50	17.92	14.29	13.56
705-0820	6W24VG	C	30*	6600	100	3 7/8x3 1/4x4"	6	24.02	20.37	18.70	14.87	14.10
705-0859	6W65VG	C‡	50*	5000†	150	4 1/4x3 1/2x4"	7	22.87	17.19	15.25	13.23	12.20
705-0860	6W66VG	C‡	50*	6600†	125	4 1/4x3 1/2x4"	7 1/4	22.87	21.50	19.13	14.18	13.45

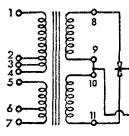
STANDARD AUDIO OUTPUT TRANSFORMERS. For coupling single output tube to speaker. Av. shpg. wt. 3/4 lb.

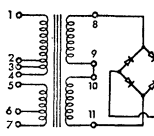
Stock No.	Mfr's Type	Fig.	Primary Impedance	Sec. Imp.	Audio Watts	Size HxWxD	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0807	6W10HF	B	5000 @ 40 mA	3.2	3	1 1/4x2 1/8x1 5/8"	2.98	2.68	2.38	1.24	1.13
705-0808	6W11HF	B	2500 @ 50 mA	3.2	3	1 1/4x2 1/8x1 3/8"	3.27	2.95	2.62	1.34	1.19
705-0810	6W13HF	B	2000 @ 50 mA	3.2	5	1 3/8x2 3/8x1 3/8"	2.30	2.06	1.84	.99	.90
705-0827	6W33HF	B	2000 @ 50 mA	3.2	3	1 1/4x2 1/8x1 1/4"	2.57	2.32	2.06	.94	.86
705-0828	6W34HF	B	2000 @ 60 mA	4	5	1 3/8x2 3/8x1 3/8"	3.28	2.95	2.62	1.31	1.19
705-0829	6W35HF	B	5000 @ 40 mA	4	5	1 3/8x2 3/8x1 5/8"	2.29	2.06	1.84	1.03	.93
705-0842	6W48VF	A	5000 @ 40 mA	6-8	10	2 3/8x2 7/8x1 7/8"	3.73	3.36	2.92	1.79	1.62
705-0845	6W51HF	B	7000 @ 30 mA	4	5	1 3/8x2 3/8x1 3/8"	2.47	2.23	1.97	1.19	1.09
705-0846	6W52HF	B	10000 @ 30 mA	4	5	1 3/8x2 3/8x1 3/8"	2.64	2.38	2.11	1.03	.93
705-0841	6W47HF	B	25000 @ 5 mA	4	5	1 3/8x2 3/8x1 3/8"	2.66	2.40	2.12	1.26	1.15

U.L. RECOGNIZED■ CONTROL TRANSFORMERS. For 120-V or 24-V line. 50/60 Hz. 240-480-V primaries must be series connected for 480-V; parallel connected for 240-V. 277-V primaries for use with 480-V, 3-phase, 4-wire source with 1 primary lead to source and other to neutral wire. *Mounts to standard conduit box.

Stock No.	Mfr's Type	Fig.	Pri. V	Sec. V	VA Rating	Size, H x W x D	Mtg. Ctr's. W x D	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0172	6K147	F	120	24	50	4 5/32x4 5/32x4	*	12.57	10.63	9.78	7.75	7.23
705-0173	6K148	E	120	24	100	3 1/2x3 3/4x4 1/4	3 1/4x1 13/16	16.90	14.29	13.12	10.45	9.75
705-0174	6K149	E	120	24	150	3 1/2x3 3/4x5	3 1/4x2 9/16	17.47	14.79	13.59	10.80	10.09
705-0175	6K150	G	120	24	250	4x4 1/2x4 7/8	3 3/4x3 3/16	26.12	22.11	20.34	16.19	15.10
705-0176	6K151	F	277	24	50	4 5/32x4 5/32x4	*	12.67	10.70	9.84	7.83	7.30
705-0177	6K152	E	277	24	100	3 1/2x3 3/4x4 1/4	3 1/4x1 13/16	17.05	14.42	13.25	10.55	9.84
705-0180	6K155	F	480/240	24	50	4 5/32x4 5/32x4	*	13.30	11.25	10.33	8.30	7.66
705-0181	6K156	E	480/240	24	100	3 1/2x3 3/4x4 1/4	3 1/4x1 13/16	17.92	15.15	13.93	11.08	10.33
705-0182	6K157	E	480/240	24	150	3 1/2x3 3/4x5	3 1/4x2 9/16	18.62	15.75	14.50	11.53	10.76
705-0183	6K158	G	480/240	24	250	4x4 1/2x4 7/8	3 3/4x3 3/16	27.87	23.60	20.65	17.25	16.10
705-0184	6K159	F	277	120	50	4 5/32x4 5/32x4	*	12.77	10.79	9.91	7.89	7.37
705-0185	6K160	E	277	120	100	3 1/2x3 3/4x4 1/4	4 1/4x1 13/16	17.17	14.55	13.36	10.62	9.93
705-0186	6K161	E	277	120	150	3 1/2x3 3/4x5	3 1/4x2 9/16	17.75	15.00	13.80	10.99	10.25
705-0187	6K162	G	277	120	250	4x4 1/2x4 7/8	3 3/4x3 3/16	26.70	23.10	20.76	16.55	15.45

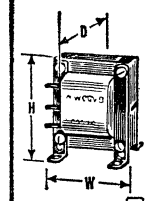
MULTI-TAP SELENIUM RECTIFIER TRANSFORMERS





A For full-wave center-tapped or bridge-type circuits with standard rectifiers. Allow a variety of combinations using taps on both windings, plus "aiding" or "bucking" action of extra winding. Permit numerous output voltages in addition to those below. Pri. 117V, 50-60 Hz. †Resistive or inductive load. *Capacitive load.

Stock No.	Mfr's Type	Rect. Ckt.	Range of AC Volts	Max. DC Output V†	Max. DC Output A*†	Max. DC Output V*	Size HxWxD	Mtg. Centers WxD	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0087	*6K36VBR*	CT	11.5-29.5	11	2	13.6	3x2 1/2						
		Bridge	11.0-28.5	23	1.25	30.0	x2 3/4"	2x2 1/8"	9.35	8.03	7.56	4.16	3.79
705-0088	*6K64VBR*	CT	12.0-29.6	11	4	14.5	3 3/8x						
		Bridge	12.0-29.6	24	2	33.0	2 7/8x3"	2 1/4x2 3/8"	11.93	10.13	9.50	4.73	4.31
705-0089	*6K65VBR*	CT	11.5-29.0	12	8	14.5	3 3/4x						
		Bridge	11.5-29.0	24	4	32.2	3 1/8x3 1/2"	2 1/2x2 7/8"	16.57	13.59	12.82	7.95	7.34
705-0090	6K66VBR	CT	12.0-29.5	11.5	12	14.2	4 1/8x3 1/2						
		Bridge	12.0-29.5	24	6	32.0	x3 7/8"	2 3/4x3 1/4"	21.79	17.70	16.68	9.47	8.47
705-0091	*6K67VBR*	CT	12.0-29.0	11	15	14.5	4 5/8x						
		Bridge	12.0-29.0	23	8	32.0	3 3/4x5"	3x3 3/4"	30.00	25.48	24.00	12.07	11.14



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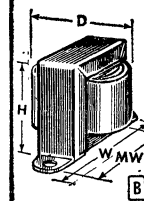

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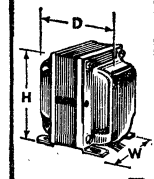

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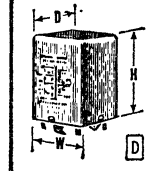

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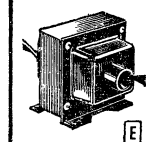
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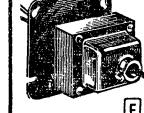
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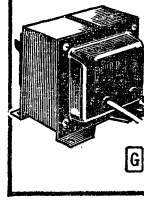
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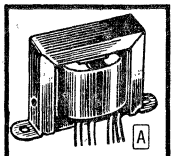
Transformers: Power 363-368—Filament 369-371—Filter Chokes, Audio 372-377—Transistor 378-381

ESSEX Stancor products

Power Transformers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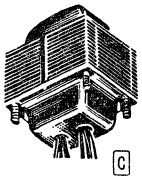
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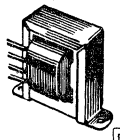
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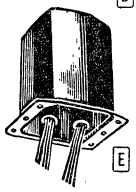
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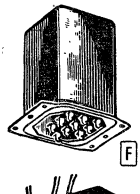
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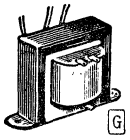
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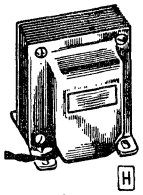
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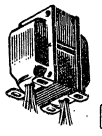
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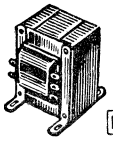

K

PLATE-FILAMENT POWER TRANSFORMERS

CT 6.3 volt filament windings except *for 6AX5, 6X4, 6X5 tubes or with selenium rectifiers.†½ wave. Primaries, 117 V 60 Hz. ‡For AC powered photoflash circuits, 105/115/125 V primary, no center tap.

Stock No.	Mfr's Type	Fig.	Plate VCT	Plate mA	Filaments V @ A	Filaments V @ A	Size H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-7215	*PS-8415	D	†125	15	.....	6.3 @ .6	2x2⅜x1⅜"	¾	4.90	3.28	3.09	2.91	1.73	1.57
928-5000	*PA-8421	A	†125	50	.....	6.3 @ 2	2¼x3¾x2⅛"	1½	7.67	5.12	4.84	4.55	2.54	2.31
928-7216	*PA-8416	D	250	25	.....	6.3 @ 1	2 5/16x2⅞x1¾"	1	6.27	4.19	3.96	3.73	2.00	1.82
928-3013	‡P-6425	D	360	20	.....	.....	2 5/16x2 15/16x2"	1½	7.45	4.97	4.69	4.52	2.54	2.31
928-5076	*PC-8418	B	460	50	.....	6.3 @ 2.5	3⅛x2½x2⅝"	2¼	10.27	6.85	6.47	6.09	3.31	3.01
928-5060	PC-8401	B	470	40	5 @ 2	6.3 @ 2	3⅛x2½x2⅝"	2¼	12.72	8.49	8.02	7.54	3.85	3.50
928-5061	PC-8402	B	480	55	5 @ 2	6.3 @ 2	3⅛x2½x2¾"	2½	12.70	8.47	8.00	7.53	4.13	3.76
928-5075	*PC-8417	B	440	50	6.3 @ 0.6	25.2 @ 0.5	3⅛x2½x2⅝"	2¼	13.27	8.84	8.35	7.86	4.56	4.15
928-5077	*PC-8419	B	480	70	.....	6.3 @ 3	3⅛x2½x2⅞"	2¾	12.07	8.05	7.60	7.15	3.88	3.53
928-5062	PC-8403	B	500	70	5 @ 2	6.3 @ 2.5	3⅛x2½x3⅛"	3¼	13.92	9.28	8.76	8.25	4.31	3.92
928-5063	PC-8404	B	520	90	5 @ 2	6.3 @ 3	3½x2 13/16x3⅛"	4	15.17	10.12	9.55	8.99	4.88	4.44
928-5064	PC-8405	B	540	120	5 @ 3	6.3 @ 3.5	3⅞x3⅛x3½"	5	16.82	11.21	10.59	9.97	6.06	5.52
928-4031	P-8381	C	580	290	5 @ 3	6.3 @ 5	5x3⅛x3 13/16"	7	29.68	19.78	18.68	17.58	....	....
928-2090	*P-6358	B	600	65	.....	6.3 @ 2.7	3⅛x2½x2½"	3	12.57	8.38	7.91	7.45	4.38	3.99
928-5066	PC-8407	B	650	55	5 @ 2	6.3 @ 2	3⅛x2½x3⅛"	3¼	13.00	8.66	8.18	7.70	4.13	3.76
928-5068	PC-8409	B	700	90	5 @ 2	6.3 @ 3	3½x2 13/16x3⅝"	4½	17.75	11.84	11.18	10.52	6.44	5.86
928-5069	PC-8410	B	720	120	5 @ 3	6.3 @ 3.5	3⅞x3⅛x3¾"	5½	20.80	13.87	13.10	12.33	6.13	5.58
928-5079	PC-8422	B	650	150	5 @ 3	6.3 @ 5	3⅞x3⅛x3⅞"	6	20.62	13.75	12.99	12.22	7.60	6.92
928-6223	PM-8423	C	650	90	5 @ 2	6.3 @ 3.5	3x2⅜x2 13/16"	4	15.40	10.27	9.70	9.13	5.31	4.83

E POWER TRANSFORMER FOR CHOKE INPUT FILTERS

Primary input, 117 volts, 50-60 Hz AC.

Stock No.	Mfr's Type	Plate VCT	Plate mA*	Size H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-5090	PCR-105	900	105	4 5/16x4 7/16x3 11/16"	6½	33.55	22.37	21.12	19.88	13.73	12.49

F POWER TRANSFORMER FOR CAPACITOR INPUT FILTERS

Stock No.	Mfr's Type	Plate VCT	Plate mA*	Size H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-5085	PCC-105	690	105	4 5/16x4 7/16x3 11/16"	6½	33.17	22.11	20.88	19.66	13.56	12.34

G TUBE CHECKER TRANSFORMER

Multiple-secondary type transformer for use in tube testers. Primary: 125/115/105 volts 60 Hz. Secondary output volts: 1.1/1.4/1.5/2.0/2.5/3.0/3.3/4.0/5.0/6.3/7.0/7.5/12/20/25/30/35/50/70/85/110/117. 3 9/16" mtg. ct.

Stock No.	Mfr's Type	Size	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-2000	P-1834-3	2⅝x4x2½"	2½	24.72	16.84	15.56	14.65	7.86	7.15

H OSCILLOSCOPE POWER TRANSFORMERS

For 2X2 rectifiers in conventional half-wave high-voltage supplies. Primary voltage 117 V 60 Hz, except (*) 50-60 Hz. P-8150 Secondaries (2): 1550 V AC at 1.5 mA; 2.5 V AC at 1.75 amps. P-8151 Secondaries (3): 2400 V AC at 5 mA; 2.5 V AC at 2 amps; 2.5 V AC at 2 amps. P-8178 Secondaries (4); 1800 V AC at 2 mA; 2.5 V AC at 1.8 amps; 2.5 V at 2.2 amps; 6.3 V at 0.6 amps. Type P-8150 not illustrated.

Stock No.	Mfr's Type	Size H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-3061	P-8150	3 1/16x3x2½"	2	17.95	11.97	11.31	10.64	5.95	5.41
928-3062	P-8151	4 5/16x3 9/16x3⅞"	6½	25.90	17.26	16.30	15.34	10.60	9.65
928-3077	*P-8178	3⅞x3¾x3¼"	5	26.35	17.57	16.59	15.62	10.78	9.81

J PLATE TRANSFORMERS FOR CAPACITOR-REACTOR INPUT FILTERS

Capacitor input rating is for intermittent duty: 200 mA; †160 mA. *For reactor input. Primary 117 V 60 Hz.

Stock No.	Mfr's Type	Plate VCT	Plate mA*	Size H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-5050	PC-8301†	830	200	3⅞x3⅛x3½"	4¾	19.90	13.28	12.54	11.80	8.14	7.41
928-5055	PC-8304	1500	265	4 11/16x3¾x4⅞"	11½	33.47	22.31	21.07	19.83	13.69	12.46
928-5056	PC-8305	1840	250	4 11/16x3¾x5"	12	40.12	26.75	25.26	23.78	16.41	14.93

K RECTIFIER TRANSFORMERS

Multi-tap transformers for low-voltage, high-current power supplies with full-wave center-tapped or bridge rectifier circuits. Have tapped primary and additional tapped winding, permitting a wide range of output voltages. Primaries operate from 117 volts, 50-60 Hz AC. With wiring charts.

Stock No.	Type RT-	Range of AC Volts	Max. DC Output Load Resistive	Max. DC Output Load Capacitive	Size (In.) H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-8001	201	11.7-29.4	11.2V @ 2.0A	13.8V @ 2.0A	3⅛x2½x2⅜	2½	13.15	8.77	8.28	7.79	4.38	3.99
		11.1-28.5	23.0V @ 1.25A	30.0V @ 1.25A								
928-8002	202	12.0-29.8	11.1V @ 4.0A	14.7V @ 4.0A	3 7/16x2 13/16x2¾	4	16.62	11.08	10.46	9.85	4.99	4.54
		12.0-29.8	24 3V @ 2.0A	33.0V @ 2.0A								
928-8003	204	11.7-29.2	12.0V @ 8.0A	14.5V @ 8.0A	3 13/16x3⅛x3½	6¼	22.30	14.86	14.03	13.21	6.45	5.87
		11.6-29.2	24.0V @ 4.0A	32.4V @ 4.0A								
928-8004	*206*	12.0-29.7	11.5V @ 12.0A	14.4V @ 12.0A	4 3/16x3 7/16x4	9¼	29.00	19.34	18.27	17.19	9.31	8.47
		12.0-29.7	24.0V @ 6.0A	32.0V @ 6.0A								
928-8005	208	12.1-29.2	11.4V @ 15.0A	14.8V @ 15.0A	4 9/16x3¾x5	12½	41.82	27.87	26.32	24.78	11.63	10.58
		12.1-29.2	23.7V @ 8.0A	32.5V @ 8.0A								
928-8012	2012	12.2-29.0	11.4V @ 22.5A	14.3V @ 22.5A	5 5/16x4⅜x5⅞	20½	61.95	41.30	39.01	36.71	20.25	18.43
		12.2-29.0	23.5V @ 12.0A	33.0V @ 12.0A								

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

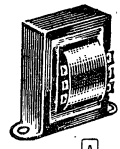
Power Transformers

ESSEX Stancor products

CONTROL TRANSFORMERS

Automation-type transformers provide trouble-free performance in high-speed automatic equipment. Typical applications include: relays, pilot lamps, solenoids, small motors, speed changers, pumps, electronic tubes, heating elements, elevators, door openers, automatic musical instruments, and many other mechanical and electric devices. For 115-230 volts, 50-60 Hz AC.

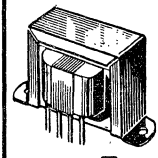
Stock No.	Mfr's Type	Fig.	Secondary Parallel	Secondary Series	Size HxWxD	Mtg. Ctrs.	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
928-3000	*P-6375*	A	6V @ 2A	12V @ 1A	2⅜x2⅞x1⅝"	2⅜"	1	7.52	5.01	4.73	4.46	2.19	1.99
928-3001	P-6376	A	6V @ 4A	12V @ 2A	2¾x3⅛x1⅞"	2 13/16"	1½	8.82	5.89	5.56	5.23	3.31	3.01
928-3002	*P-6377*	A	12V @ 4A	24V @ 2A	3⅛x3⅝x2¼"	3⅛"	2½	10.47	6.98	6.60	6.21	3.31	3.01
928-3003	*P-6378*	B	12V @ 8A	24V @ 4A	3 7/16x2 13/16x2⅞"	2¼x2¼"	4¼	17.12	11.41	10.78	10.14	5.44	4.95
928-3004	*P-6379*	B	12V @ 16A	24V @ 8A	4 3/16x3 7/16x3⅜"	3x2¾"	8	30.12	20.09	18.97	17.86	8.56	7.79


A

C MINIATURIZED CONTROL TRANSFORMERS

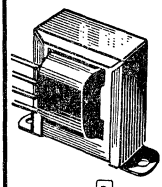
Primary 117 volts, 60 Hz AC; secondary, 12 volts. Lead wire terminations.

Stock No.	Mfr's Type	Secondary Amps rms	Secondary Amps Bridge	Secondary Amps Half-Wave	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
928-4046	P-8390	.150	.100 DC	.050 DC	1¼x2⅛x1¼"	¼	4.65	3.10	2.92	2.75	1.36	1.24
928-4047	*P-8391*	.350	.225 DC	.110 DC	1⅜x2⅜x1⅜"	⅓	4.82	3.21	3.03	2.86	1.31	1.19
928-4048	P-8392	.700	.450 DC	.225 DC	1⅝x2⅞x1⅝"	⅔	4.95	3.30	3.12	2.94	1.44	1.31
928-4049	P-8393	1.200	.750 DC	.375 DC	2x3¼x1⅝"	1	6.05	4.04	3.82	3.59	1.94	1.77


B

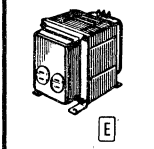
Primary, 117 volts, 60 Hz AC; secondary 24 volts, CT. Lead wire terminations.

Stock No.	Mfr's Type	Secondary Amps rms	Secondary Amps FW CT	Secondary Amps Bridge	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
928-4050	*P-8394*	.085	.135 DC	.065 DC	1¼x2⅛x1¼"	¼	5.12	3.42	3.23	3.04	1.31	1.19
928-4051	*P-8395*	.200	.275 DC	.135 DC	1⅜x2⅜x1⅜"	⅓	5.30	3.53	3.23	3.14	1.41	1.28
928-4052	*P-8396*	.400	.550 DC	.270 DC	1⅝x2⅞x1½"	⅔	5.62	3.75	3.54	3.34	1.69	1.54
928-4053	P-8397	.700	.925 DC	.450 DC	2x3¼x1⅝"	1	5.77	3.84	3.63	3.42	1.81	1.65


C

Primary 117 volts, 50-60 Hz AC; secondary 28 volts CT. Lead wire terminations.

Stock No.	Mfr's Type	Secondary Amps rms	Secondary Amps FW CT	Secondary Amps Bridge	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
928-4600	P-8600	.085	.110 DC	.065 DC	1¼x2⅛x1¼"	¼	4.57	3.04	2.87	2.70	1.76	1.60
928-4601	P-8601	.175	.225 DC	.125 DC	1⅜x2⅜x1⅜"	⅓	4.95	3.30	3.12	2.94	1.91	1.74
928-4602	P-8602	.300	.350 DC	.200 DC	1½x2⅞x1⅝"	⅔	5.40	3.60	3.40	3.20	2.09	1.90
928-4603	P-8603	.800	1.000 DC	.500 DC	1⅝x3¼x2"	1	6.15	4.10	3.87	3.64	2.38	2.17


D

Primary 117 volts, 50-60 Hz AC; secondary 36 volts CT. Lead wire terminations.

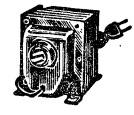
Stock No.	Mfr's Type	Secondary Amps rms	Secondary Amps FW CT	Secondary Amps Bridge	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
928-4610	P-8610	.065	.075 DC	.045 DC	1¼x2⅛x1¼"	¼	4.67	3.12	2.95	2.78	1.81	1.65
928-4611	P-8611	.135	.175 DC	.100 DC	1⅜x2⅜x1⅜"	⅓	4.45	2.97	2.81	2.64	1.73	1.57
928-4612	P-8612	.300	.350 DC	.200 DC	1½x2⅞x1⅝"	⅔	4.95	3.30	3.12	2.94	1.91	1.74
928-4613	P-8613	.550	.650 DC	.350 DC	1⅝x3¼x2"	1	6.20	4.13	3.90	3.67	2.39	2.18

E

D LOW-CURRENT CONTROL TRANSFORMERS

Versatile transformers with many applications. All have three isolated secondaries (one with center tap) to provide many combinations of output voltages and currents. May be series or parallel connected for a wide variety of designs. Applications include: pilot light, miniature relays, low-current, low-voltage power supplies. Lead wire terminations for fast, easy connections to circuit. Color-coded (Two black leads for primary; brown and silver leads for 1st secondary; blue and red leads for 2nd secondary; green and yellow leads for 3rd secondary, with green/yellow center tap lead). 117 V, 60 Hz primary, 12-V secs.

Stock No.	Mfr's Type	Amps Each Sec.	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
928-4020	*P-8361*	.10	1¾x2x1½"	⅓	6.95	4.64	4.38	4.12	2.11	1.92
928-4021	P-8362	.15	2x2⅜x1¾"	⅔	5.25	3.68	3.48	3.27	2.50	2.27
928-4022	P-8363	.25	2⅜x2⅞x1¾"	1	7.85	5.24	4.95	4.66	2.18	1.98
928-4023	P-8364	.50	2⅜x2⅞x2⅛"	1¼	9.15	6.09	5.75	5.42	2.85	2.60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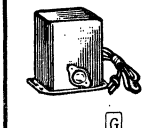
ISOLATION TRANSFORMERS

All have electrostatic shields grounded internally to core. Rms insulation test: 1500 V *Primary is tapped for 125, 115 and 105 V; 115-volt secondary, †Isolation testing transformer with 117 V primary; has tapped secondary with three standard receptacles for 105, 115 and 125 volts. ‡117 V primary and 117 V secondary. §Stepdown isolation transformers with primary tapped for 250, 230 and 210 V; 115-volt secondary.

Stock No.	Mfr's Type	Fig.	Size HxWxD	Watts	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
928X2060	P-6125*	E	7⅛x5⅜x7¾"	1000	35	169.82	113.19	106.90	100.62	.....	.....
928-2075	P-6160*	F	4 11/16x3¾x3¾"	100	7	37.40	24.94	23.55	22.17	10.63	9.67
928-2076	P-6161*	F	4 11/16x3¾x5½"	250	14¼	40.97	27.31	25.79	24.27	14.88	13.54
928X2079	P-6298*	F	7⅝x5⅝x7⅛"	500	28	125.12	83.41	78.78	74.14	.....	.....
928-2091	P-6371‡	G	5 5/16x4 9/16x5¼"	175	9	49.67	33.12	31.28	29.44	.....	.....
928-3006	P-6385§	F	4 11/16x3¾x5½"	250	14¼	48.20	32.12	30.34	28.55	.....	.....
928X3007	P-6387§	F	7¾x5⅝x7⅛"	500	29½	127.87	85.24	80.50	75.77	.....	.....
928-3010	P-6410‡	F	3½x2 13/16x3⅛"	50	4	15.67	10.45	9.87	9.29	5.25	4.78
928-3012	P-6415†	H	5⅞x4⅝x5 11/16"	350	17	55.07	34.38	32.47	30.56	.....	.....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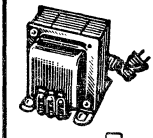
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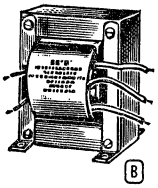
Transformers: Power 363-368—Filament 369-371—Filter Chokes, Audio 372-377—Transistor 378-381

Triad Power Transformers

RECTIFIER POWER TRANSFORMERS

A



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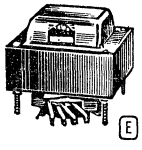


E

UNIVERSAL RECTIFIER POWER TRANSFORMER (115-Volt, 60-Hz Primary)

Type F-80U has two identical windings.

Stock No.	Mfr's Type	Fig.	Secondary Volts	Secondary Amps	Size HxWxD	Wt., Lbs.	EACH 1-4	5-9	10-24	25-49	50-99
954-0747	F-47U	B	17/18	3	3 1/8x2 9/16x3"	3 1/4	12.67	8.45	7.61	6.85	6.37
954-0748	F-48U	B	17/18	6	3 13/16x3 3/16x3 3/16"	5 1/2	18.20	12.14	10.93	9.84	9.15
954-0749	F-49U	B	36/36	3/3	4 5/8x3 13/16x3 3/4"	9 3/4	30.17	20.12	18.11	16.29	15.15
954-0760	F-60U	B	6.5/13/19.5/26	3	3 1/2x2 7/8x2 11/16"	3 1/2	12.47	8.32	7.49	6.74	6.27
954-0761	*F-61U*	*B*	*24/27/30/33/36*	*3*	*3 13/16x3 3/16x3 1/4"*	*6*	18.97	12.65	11.39	10.25	9.53
954-0765	F-65U	B	140/150/160	.75	3 13/16x3 3/16x3 3/8"	6	18.55	12.37	11.13	10.02	9.32
954-0767	F-67U	B	24/27/30/33/36	8	4 5/8x3 13/16x4 3/8"	10 3/4	37.70	25.15	22.64	20.38	18.95
954-0779	*F-79U*	*B*	*24/26/28/30*	*15*	*3 13/16x4 5/8x5 1/2"*	*18 1/2*	54.62	36.42	32.78	29.50	27.44
954X0780	F-80U	B	12/13.5/15/16.5/18	20	5 3/8x4 7/16x5 1/2"	26	92.27	61.52	55.37	49.83	46.34

LOW-VOLTAGE RECTIFIER TRANSFORMERS (Transistor Drive Voltage)

All types have 115 volt primaries, tapped to produce lower voltages.

954-0790	*F-90X*	*A*	*10/20CT/40CT*	*.1*	*1 5/8x2 13/16x1 5/8"*	3/4	6.12	4.08	3.67	3.30	3.07
954-0791	*F-91X*	*A*	*10/20CT/40CT*	*.3*	*2 9/32x3 11/16x2"*	*1 1/2*	7.57	5.05	4.55	4.09	3.80
954-0792	*F-92A*	*C*	*10/20CT/40CT*	*1*	*3 3/32x2 31/32x3"*	*3 3/4*	12.75	8.50	7.65	6.88	6.39
954-0793	*F-93X*	*A*	*10/20CT/40CT*	*.75*	*2 19/32x4x2 1/4"*	*2 1/2*	9.82	6.55	5.89	5.30	4.39
954-0794	F-94X	A	10/20CT/40CT	.035	1 3/8x2 3/8x1 3/8"	1/2	6.07	4.05	3.65	3.29	3.06

"N SERIES" STEP-DOWN AUTOFORMERS (50-60 Hz)

Stock No.	Mfr's Type	Fig.	Output VA	Primary Volts	Secondary V ±5%	Secondary A	Size HxWxD	Wt., Lbs.	EACH 1-4	5-9	10-24	25-49	50-99
954-2501	N-1X	A	50	230	115	0.435	2 9/32x3 11/16x2"	1 1/2	6.35	4.23	3.81	3.43	3.19
954-2534	N-34X	A	150	0-95-105-115-125-135	115	1.3	2 19/32x4x2 1/4"	2 1/2	9.55	6.37	5.73	5.16	4.79

ISOLATION TRANSFORMERS

Types N-68X and N-471A have split primaries; N-73A and N-74A, split secondaries. For 50-60 Hz AC operation.

Stock No.	Mfr's Type	Fig.	VA	Pri. Volts	Secondary V ±5%	Secondary A	Size HxWxD	Wt., Lbs.	EACH 1-4	5-9	10-24	25-49	50-99
954-2551	N-51X	A	35	115	115	.3	2 9/32x3 11/16x2 1/8"	1 3/4	7.77	5.18	4.66	4.19	3.89
954-2568	*N-68X*	*A*	*50*	*115/130*	*115*	*.435*	*2 9/32x3 11/16x2 1/8"*	*1 3/4*	8.55	5.70	5.13	4.62	4.29
954-2553	N-53M	C	85	115	115	.74	3 19/32x2 31/32x3 5/8"	4 1/2	18.95	12.64	11.38	10.24	9.52
954-2554	N-54M	C	150	115	115	1.3	3 7/8x3 9/32x4 1/4"	6 3/4	23.10	15.39	13.85	12.47	11.59
954X2559	N-59M	C	1000	115	115	8.7	5 5/16x4 1/2x8"	34	105.75	70.51	63.46	57.11	53.11
954-2573	N-73A	C	150	115	115/230	.65	3 7/8x3 9/32x4"	7	20.02	13.35	12.42	10.82	10.06
954-2574	*N-74A*	*C*	*150*	*115*	*57.5/115*	*1.3*	*3 7/8x3 9/32x4"*	*7*	19.92	13.29	11.96	10.76	10.01
954-2591	N-471A	C	300	220/440	115	2.6	4 5/8x3 15/16x4 1/2"	10 1/4	30.72	20.49	18.44	16.59	15.43

"R SERIES" COMBINED PLATE AND FILAMENT TRANSFORMERS

Fig. E except R-82B, Fig F. Primary, 115 V, 60 Hz. †Transistor type used in Delco 100-W amplifier. §Amps.

Stock No.	Mfr's Type	Plate (CT) Volts	Plate (CT) mA	Filaments (*CT) V	Filaments (*CT) A	Filaments (*CT) V	Filaments (*CT) A	Size	Wt. Lbs.	EACH 1-4	5-9	10-24	25-49	50-99
954-3006	R-6A	480	50	5	2	6.3*	2	3 1/8x2 5/8x2 5/8"	2.7	14.05	9.37	8.43	7.59	7.06
954-3008	R-8A	500	75	5	2	6.3*	2.5	3 1/8x2 5/8x3 1/8"	2.7	15.05	10.04	9.04	8.14	7.57
954-3010	R-10A	525	90	5	2	6.3*	5	3 1/2x3x3 5/8"	4.5	17.82	11.89	10.70	9.63	8.96
954-3004	R-4A	500	40	.....	.....	6.3*	2	2 3/4x2 3/8x2 3/4"	1.7	11.50	7.67	6.90	6.21	5.78
954-3012	R-12A	550	110	5	2	6.3*	5	3 7/8x3 1/4x3 3/8"	4.5	18.62	12.42	11.18	10.06	9.36
954-3007	R-7A	600	50	5	2	6.3*	2	3 3/16x2 5/8x2 5/8"	2.7	13.67	9.12	8.21	7.39	6.87
954-3005	R-5A	600	65	.....	.....	6.3*	2.7	3 1/8x2 5/8x2 5/8"	2.7	13.67	9.12	8.21	7.39	6.87
954-3009	R-9A	600	75	5	2	6.3*	3	3 9/16x3x3 1/4"	3.5	17.27	11.52	10.37	9.33	8.68
954-3011	R-11A	700	90	5	3	6.3*	3.5	3 9/16x3x3 7/8"	4.2	18.75	12.50	11.25	10.13	9.42
954-3020	R-20A	700	200	5	3	6.3*	8	4 1/4x3 5/8x4 3/8"	9.2	22.52	15.02	13.52	12.17	11.32
954-3072	R-72A	800	140	5	3	6.3*	4	4 1/4x3 19/32x3 5/8"	5.7	21.75	14.49	13.04	11.74	10.92
954-3024	R-24A	800	300	5	6	6.3*	6	4 5/8x3 15/16x4 1/2"	14.0	37.20	24.80	22.32	20.09	18.68
954X3025	R-25A	800	500	5	6	6.3/6.3*	3/7	5 5/16x4 1/2x5 5/8"	19.0	49.70	33.14	29.83	26.85	24.97
954-3071	R-71A	900	250	5	4	6.3*/6.3	2/4	4 5/8x4x5"	12.0	31.67	21.12	19.01	17.11	15.91
954-3082	R-82B†	70	3.5§	.....	.....	.....	.....	4 1/2x3 3/4x3 3/4"	8.3	25.82	17.22	15.49	13.94	12.96

"R SERIES" REGULATED POWER-SUPPLY TRANSFORMER

Primary, 115 volts, 60 Hz. For CRT's. Shpg. wt. 3 1/2 lbs.

Stock No.	Mfr's Type	Fig.	Plate Volts	Plate mA	Filaments V	Filaments A	Filaments V	Filaments A	Size	EACH 1-4	5-9	10-24	25-49	50-99
954-3043	R-43C	F	1600	3	2.5-5-6.3	1	2.5-5-6.3	3	2 3/8x3 1/16x2 9/16"	21.67	14.44	12.99	11.69	10.87

"R SERIES" TRANSFORMERS FOR PREAMPS, VTVM'S, ETC.

Primary, 115 V, 60 Hz. *CT. §Independent windings. Av. shpg. wt., 2 lbs.

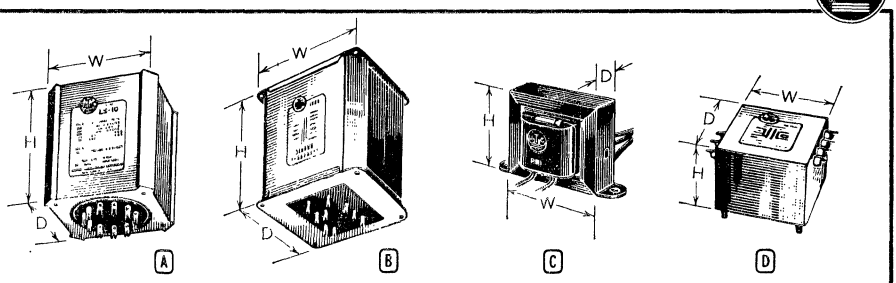
954-3068	R-68A	C	800*	30	5	2	6.3§/6.3§	1.2/1.2	3 3/32x2 21/32x3 1/8"	17.22	11.48	10.33	9.29	8.64
954-3002	R-2C	E	135	15	.....	.....	6.3	0.9	1 3/4x1 7/8x1 9/16"	9.95	6.63	5.97	5.37	4.99
954-3023	R-23B	E	250*	22	.....	.....	6.3/15.5/12.6	.81/.6/.6	1 7/8x2 5/8x2 3/16"	11.52	7.68	6.91	6.22	5.78
954-3003	R-3A	C	500*	20	.....	.....	6.3*	2	2 25/32x2 11/32x2 1/2"	11.52	7.68	6.91	6.22	5.78
954-3029	R-29A	C	230*	40	.....	.....	6.3*	1.5	2 25/32x2 11/32x2 3/8"	10.15	6.76	6.08	5.47	5.09
954-3030	R-30X	A	135	50	.....	.....	6.3	1.5	2 9/32x3 3/4x2 1/8"	9.57	6.40	5.76	5.18	4.82
954-3054	R-54X	A	115	15	.....	.....	6.3	0.6	2 13/16x1 5/8x1 5/8"	6.05	4.04	3.64	3.28	3.05
954-3056	R-56A	C	130	20	.....	.....	15/22.5/30	.6/.6/.6	2 25/32x2 11/32x2 3/4"	11.20	7.48	6.73	6.06	5.64
954-3073	R-73B	E	135	200	.....	.....	6.3*	5.5	2 1/8x3 3/8x2 13/16"	15.02	10.01	9.01	8.11	7.54

Transformers: Power 363-368—Filament 369-371—Filter Chokes, Audio 372-377—Transistor 378-380

UTC Transformers and Coils

FILAMENT, TRANSISTOR

ALLIED CAN FURNISH THE ENTIRE LINE OF UTC TRANSFORMERS AND CHOKES. WRITE FOR INFORMATION AND OEM PRICES ON ITEMS NOT LISTED



A LS-33 HIGH-LEVEL MATCHING TRANSFORMER

High-level matching transformer specially designed to keep hum pickup extremely low. Constructed with hipermalloy core, multiple section, and interleaved windings. Frequency response, ±1 dB at 10-40,000 Hz. Size, 4 3/16x3 1/2x4 7/16".

Stock No.	Mfr's Type	Max. Level	Primary Imp. (Ohms)	Secondary Imp. (Ohms)	Wt., Lbs.	EACH 1-2	3-4	5-9	10-24
964-4733	LS-33	20 W.	50, 125, 200, 250, 333, 500/600	1.2, 2.5, 5, 7.5, 10, 15, 30, 50, 125, 200, 250, 333, 500/600	7 1/2	59.12	46.98	40.86	37.15

A TYPE LS HYBRID AND REPEAT COILS

Repeat and hybrid units with many applications. LS units are designed to assure uniform frequency response, low wave form distortion and high efficiency. *Has high electrostatic shielding. Size, 3 1/8x2 5/8x3 1/4". Shpg. wt. 3 lbs.

Stock No.	Mfr's Type	Application	Primary Imp. (Ohms)	Secondary Imp. (Ohms)	EACH 1-2	3-4	5-9	10-24
964-4738	LS-68*	Mix, match lines and/or transistors	600/150 split	2 sec. each 600/150 split	51.87	41.21	35.85	32.60
964-4740	LS-140*	Isol. bal. and unbal. circuits	500/600 split	500/600 split	54.35	43.19	37.57	34.16
964-4741	LS-141	Hybrid Coil	3 bal. windings, each 500/600 CT		48.12	38.23	33.25	30.23

PLATE TRANSFORMERS (Primary 115 V, 50-60 Hz)

Stock No.	Mfr's Type	Fig.	Secondary	Size HxWxD	Wt., Lbs.	EACH 1-2	3-4	5-9	10-24
964X6244	S-44	B	575-525-0-525 575 @ 500 mA	5 7/8x5 3/8x6 3/4"	22 1/2	80.15	63.69	55.41	50.37
964-6245	S-45	B	900-750-0-750-900 @ 200 mA	4 5/8x5 1/8x5 3/8"	12	60.12	47.77	41.56	37.79
964X6246	S-46	B	1000-750-0-750-1000 @ 300 mA	5 7/8x5 3/8x6 3/4"	20 1/2	75.15	59.72	51.95	47.23
964X6247	S-47	B	1500-1250-1000-0-1000-1250-1500 @ 300 mA	5 7/8x6 1/8x6 5/8"	26 3/4	97.70	77.63	67.53	61.40
964X6248	S-48	B	1500-1250-1000-0-1000-1250-1500 @ 500 mA	5 7/8x6 19/32x7 3/8"	31	108.97	86.58	75.31	68.48
964X6249	S-49	B	2100-1800-1500-0-1500-1800-2100 @ 300 mA	5 7/8x6 19/32x7 3/8"	31	105.22	83.61	72.73	66.13
964Z6255	S-50	B	3000-2500-0-2500-3000 @ 300 mA	10 1/4x7 3/8x9 1/4"	52	202.92	161.24	140.26	127.52

SINGLE-SECONDARY FILAMENT TRANSFORMERS (Primary 105/115 V, 50-60 Hz)

Stock No.	Mfr's Type	Fig.	Secondary	Size HxWxD	Wt., Lbs.	EACH 1-2	3-4	5-9	10-24
964-6258	S-58	B	2.5V CT @ 20A	3 3/4x3 1/8x4 1/2"	4 1/2	33.82	26.88	23.39	21.26
964-6259	S-59	B	5V CT @ 13A	3 3/4x3 1/8x4 1/2"	4 1/2	31.57	25.09	21.82	19.84
964-6260	S-60	B	5V CT @ 22A	4 5/8x4 5/8x5 1/2"	8	44.35	35.23	30.65	27.86
964-6262	S-62	B	10V CT @ 10A	3 3/4x3 1/8x4 1/2"	4 1/2	31.57	25.09	21.82	19.84
964-6263	S-63	B	14, 12, 11V CT @ 10A single wdg, tapped	4 5/8x4 5/8x5 1/2"	8	45.85	36.43	31.69	28.81

POWER-LINE ISOLATION TRANSFORMERS

Ultra-shielded isolation transformers provide maximum isolation for critical circuits. Coupling less than 0.10 pF. MIL Type TF4RX01YY—meet MIL-T-27B specifications. Primary, 115 volts, 50-60 Hz; secondary, 115 volts. *Industrial rating.

Stock No.	Mfr's Type	Fig.	Watts *	Size HxWxD	Mtg. Ctrs.	Shpg. Wt., Lbs.	EACH 1-2	3-4	5-9
964-4001	HIT-1	D	60	3 1/32x4 1/32x4 1/32"	3 3/8x3 3/8"	5 1/2	87.45	69.47	60.44
964-4015	HIT-15	D	150	3 1/2x5 11/32x5"	4 5/8x4 5/16"	13	115.25	91.56	79.65
964-4002	HIT-2	D	200	4 17/32x5 17/32x5 17/32"	4 13/16x4 13/16"	15 1/2	120.25	95.54	83.10
964X4003	HIT-3	D	480	5 17/32x8x6 17/32"	7 1/16x5 5/8"	35	187.87	149.28	129.86

FILAMENT AND TRANSISTOR TRANSFORMERS (Primary 117 V, 60 Hz)

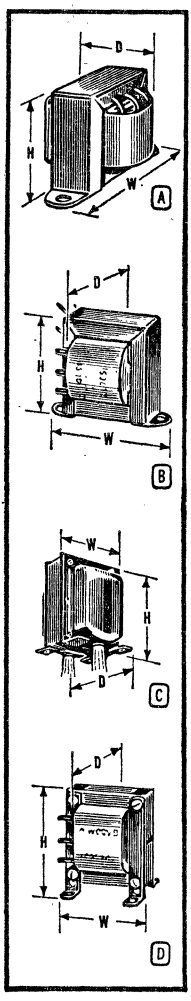
Industrial-type transformer with reliability in a wide variety of uses. Low-temperature rise design, vacuum-sealed. *Transistor types with taps on primary to modify secondary nominal voltage from −6%, to +6%, or +12%. Av. shpg. wt. 2 lbs.

Stock No.	Mfr's Type	Fig.	Secondary VCT @ Amps		Size H x W x D	EACH 1-2	3-4	5-9	10-24
964-2902	FT-2	C	6.3	1.2	1 11/16x2 7/8x1 5/8"	9.55	7.58	6.60	6.00
964-2904	FT-4	C	6.3	3	2x3 5/16x1 7/8"	10.52	8.36	7.27	6.61
964-2908	FT-8	C	6.3	8	2 5/8x4x2 1/2"	13.80	10.97	9.54	8.68
964-2910	FT-10	C	24/12	2/4	2 11/16x4x2 5/8"	15.77	12.54	10.91	9.92
964-2913	*FT-13	C	26	.04	1 1/4x2 1/8x1 3/8"	13.80	10.97	9.54	8.68
964-2914	*FT-14	C	26	.25	1 11/16x2 7/8x1 5/8"	13.02	10.35	9.00	8.18
964-2915	*FT-15	C	48	1	2 5/8x4x2 1/2"	17.55	13.94	12.13	11.01
964-2916	*FT-16	C	11/5.5	2.5/5	2 5/16x3 3/4x2 1/8"	17.55	13.94	12.13	11.01

Transformers: Power 363-368—Filament 369-371—Filter Chokes, Audio 372-377—Transistor 378-381

FILAMENT TRANSFORMERS

ALLIED Filament Transformers



Allied's own line of top-quality transformers. Compare prices and specs—you're money ahead with Allied transformers. Send us your specifications—let Allied handle your transformer needs.

Quality filament transformers provide reliable operation in a variety of applications. Wide selection of output voltages and currents and mounting styles. Primaries for 115-125 volts 50-60 Hz (except §6.3 V).

Type with ** has tapped primary to produce lower voltages. Types with * have primary tap for 107-volt operation. Types with ‡ have an electrostatic shield. † multiple secondary—one winding center-tapped.

Stock No.	Mfr's Type	Fig.	Volts	Amps	Insul., rms V	Size HxWxD	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-3712	*6K117HF*	A	2.5	1.5	2500	1 11/16x2 13/16x1 9/16"	2 3/8"	4.62	3.89	3.53	2.86	2.66
705-0110	*6K86HF*	A	2.5 CT	3.0	1500	1 11/16x2 13/16x1 7/8"	2 3/8"	4.30	3.59	3.30	2.66	2.48
705-0064	6K47VF	B	2.5 CT	5.0	5000	2 3/4x3 1/8x2 1/8"	2 13/16"	6.44	5.74	5.15	4.27	3.97
705-0146	6K121VF	B*	2.5 CT	10.0	7500	3 1/8x3 9/16x3"	3 1/8"	6.95	6.25	5.57	3.99	3.72
705-0043	6K33VG	C	2.5 CT	10.0	2500	3 3/16x2 5/8x2 11/16"	2x1 11/16"	7.87	6.85	6.08	4.87	4.55
705-0111	6K87HF	A	2.5 CT	10.0	3000	2 3/8x3 3/4x2 3/8"	3 1/8"	7.07	5.97	5.49	4.37	4.08
705-0108	6K84VBR	D	2.5 CT	10.0	10,000	3 3/8x2 7/8x2 1/2"	2 1/4x1 7/8"	10.82	8.70	7.74	6.70	6.25
705-0049	*6K39HF*	A	5.0 CT	3.0	2500	2x3 1/4x2"	2 13/16"	5.10	4.44	3.94	2.23	2.08
705-0018	6K11HF	A	5.0 CT	6.0	2500	2 3/8x3 5/8x2 1/4"	3 1/8"	7.55	6.80	6.03	4.92	4.50
705-0094	6K70VBR	D	5.0 CT	10.0	2500	3 1/8x2 1/2x3"	2x3 3/8"	8.45	7.29	6.43	5.28	4.92
705-0145	6K120VBR	D	5.0 CT	15.0	2500	3x2 1/2x3"	2x2 1/4"	11.62	8.87	7.96	6.40	5.99
705-0086	6K62VBR	D	5.0 CT	21.0	2500	3 3/4x3 1/8x3 1/4"	2 1/2x2 1/4"	15.53	14.32	12.55	8.50	7.93
705-0109	6K85VG	C	5.0 CT	30.0	2500	4 5/8x3 3/4x4"	3x2 7/8"	18.90	15.58	13.83	11.76	10.97
705-0042	*6K32HF*	A	6.3 CT	0.6	1500	1 3/8x2 3/8x1 5/8"	2"	3.71	3.38	2.97	2.41	2.26
705-0016	*6K9HF*	A	6.3 CT	1.0	1500	1 5/8x2 13/16x1 3/4"	2 3/8"	3.04	2.74	2.43	1.75	1.64
705-0045	*6K35HF*	A	6.3 CT	1.2	3000	1 5/8x2 13/16x1 7/8"	2 3/8"	3.04	2.74	2.43	1.75	1.66
705-0107	6K83HF	A	6.3	1.2	5000	2x3 1/4x1 7/8"	2 13/16"	4.67	4.15	3.68	3.00	2.89
705-0153	6K128HF	A§	6.3	1.2	5000	2x3 1/4x1 15/16"	2 13/16"	4.89	4.44	3.94	2.96	2.76
705-0161	6K136VG	C	(4) 6.3†	1.75	1500	3 1/8x2 5/8x3 1/16"	2x2 1/8"	11.75	9.95	9.14	7.20	6.77
705-0017	*6K10HF*	A	6.3 CT	3.0	2500	2x3 1/4x2 3/8"	2 13/16"	4.25	2.74	2.43	2.51	2.33
705-0095	6K71VBR	D‡	6.3 CT	3.0	2500	3 1/8x2 1/2x2 3/8"	2x1 3/4"	7.02	6.30	5.61	4.05	3.78
705-0149	6K124VF	B*	6.3	3.0	7000	3 1/8x3 9/16x2 3/4"	3 1/8"	8.75	6.67	5.93	4.83	4.50
705-0082	6K57VG	C‡*	6.3 CT	4.0	2500	3 3/16x2 5/8x2 11/16"	2x1 11/16"	8.30	7.57	6.63	5.50	5.03
705-0115	6K90VG	C	6.3 CT	6.0	1500	3 1/8x2 5/8x2 3/4"	2x1 3/4"	21.22	8.40	7.55	6.21	5.80
705-0032	6K26VF	B	6.3 CT	6.0	2000	3 1/8x3 9/16x2 1/2"	3 1/8"	7.10	6.38	5.67	3.35	3.13
705-0033	6K26VBR	D	6.3 CT	6.0	2500	3x2 1/2x2 1/4"	2x2"	8.33	7.49	6.67	5.22	5.06
705-0044	*6K34VBR*	D*	6.3 CT	10.0	2500	3 3/8x2 13/16x2 7/8"	2 1/4x2 1/8"	11.69	10.51	9.34	6.88	6.42
705-0120	6K93VG	C	6.3 CT	20.0	2000	3 7/8x3 5/16x4 1/8"	2 1/2x3"	18.62	12.05	10.70	8.73	8.14
705-0096	6K72VBR	D‡*	6.3 CT	20.0	2500	4 5/8x3 3/4x2 7/8"	3x2 3/8"	15.60	12.05	10.70	8.73	8.14
705-0097	6K73VBR	D‡	7.5 CT	4.0	2500	3 1/8x2 1/2x2 11/16"	2x2 1/8"	9.48	8.54	7.59	4.66	4.34
705-0098	6K74VBR	D‡	7.5 CT	8.0	2500	3 3/4x3 1/8x2 7/8"	2 1/2x2 1/4"	12.07	9.83	8.74	7.10	6.63
705-0099	6K75VBR	D‡	10.0 CT	4.0	2500	3 3/8x2 13/16x2 3/4"	2 1/4x2 1/8"	9.65	8.70	7.73	5.19	4.85
705-0147	6K122VBR	D‡*	10.0 CT	5.0	2000	3x2 1/2x4 3/4"	2x2 1/8"	8.89	7.98	7.10	4.46	4.14
705-0100	6K76VBR	D‡	10.0 CT	8.0	2500	3 3/4x3 1/8x3"	2 1/2x2 3/8"	12.07	9.38	8.35	6.79	6.34
705-0148	6K123VG	C	10.0 CT	10.0	2000	3 7/8x3 1/4x3 3/4"	2 1/2x2 1/2"	14.25	12.19	10.81	8.23	7.67
705-0141	6K115VG	C‡*	11.0 CT	10.0	2500	4 5/8x3 7/8x3 11/16"	3x2 7/16"	16.17	12.19	10.81	8.83	8.24
705-0159	6K134VBR	D**	12-11-10 CT	11.0	3000	4 1/8x3 7/16x3 1/8"	2 3/4x2 1/2"	20.80	17.60	16.18	12.89	12.00
705-0121	6K94HF	A	12.6 CT	1.5	1500	2x3 1/4x2"	2 13/16"	5.60	4.23	3.84	3.05	2.85
705-0046	6K36HF	A	12.6 CT	2.0	1500	2x3 1/4x2 1/4"	2 13/16"	5.05	4.23	3.84	3.05	2.85
705-0122	6K95HF	A	12.6 CT	2.5	1500	2 1/4x3 5/8x2 1/4"	3 1/8"	7.95	4.64	4.13	3.35	3.13
705-0136	*6K110HF*	A	12.6 CT	3.0	1500	2 5/16x3 11/16x2 3/8"	3 1/8"	6.97	4.64	4.13	3.35	3.13
705-0139	*6K113HF*	A	24.0 CT	1.0	1500	2x3 1/4x2"	2 13/16"	6.17	5.22	4.79	3.80	3.54
705-0047	6K37HF	A	25.2	1.0	1500	2x3 1/4x2 1/8"	2 13/16"	4.87	3.72	3.31	2.70	2.52
705-0123	6K96HF	A	25.2 CT	2.0	1500	2 5/8x4x2 3/8"	3 9/16"	8.62	5.72	5.08	4.04	3.82
705-0065	*6K48HF*	A	26.5 CT	0.6	3000	2x3 1/4x2"	2 13/16"	4.57	3.86	3.55	2.82	2.63
705-0114	*6K89HF*	A	26.8 CT	1.0	1500	2x3 1/4x2 1/8"	2 13/16"	8.07	5.16	4.52	3.42	3.20

FILAMENT TRANSFORMER CROSS-REFERENCE

This cross-reference is not intended as a direct substitution chart but rather to indicate which units may be used as substitutes in most instances. See above for exact specifications on Allied units.

STANCOR TO ALLIED CROSS-REFERENCE

Stancor Type No.	Allied Type No.	Stancor Type No.	Allied Type No.	Stancor Type No.	Allied Type No.	Stancor Type No.	Allied Type No.
P3020	6K115VG	P5016	6K75VBR	P6433	6K120VBR	P6467	6K39HF
P3060	6K84VBR	P6133	6K47VF	P6454	6K121VF	P6469	6K37HF
P3062	6K11HF	P6134	6K35HF	P6456	6K26VF	P6492	6K85VG
P3064	6K26VBR	P6135	6K70VBR	P6458	6K122VBR	P8130	6K36HF
P4019	6K37VG	P6138	6K74VBR	P6461	6K123VG	P8190	6K83HF
P4026	6K117HF	P6139	6K76VBR	P6462	6K124VF	P8191	6K128HF
P4089	6K90VG	P6308	6K34VBR	P6465	6K32HF	P8357	6K96HF
P5014	6K71VBR	P6309	6K72VBR	P6466	6K10HF	P8358	6K110HF
P5015	6K73VBR	P6432	6K62VBR				

TRIAD TO ALLIED CROSS-REFERENCE

Triad Type No.	Allied Type No.	Triad Type No.	Allied Type No.	Triad Type No.	Allied Type No.	Triad Type No.	Allied Type No.
F1X	6K86HF	F14X	6K35HF	F25X	6K94HF	F41X	6K96HF
F3X	6K87HF	F16X	6K10HF	F26X	6K95HF	F44X	6K36HF
F5U	6K84VBR	F18X	6K90VG	F29C	6K134VBR	F45X	6K18HF
F7X	6K39HF	F22A	6K93VG	F34A	6K136VG	F52X	6K83HF
F8X	6K11HF	F23U	6K75VBR	F40X	6K89HF	F72Z	6K47VF
F13X	6K32HF						

Items In ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Filament Transformers

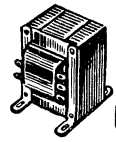
ESSEX Stancor products

FILAMENT TRANSFORMERS

SINGLE-SECONDARY FILAMENT TRANSFORMERS

Filament transformers that provide voltages and currents for heating a wide variety of receiving and transmitting tubes. All are center-tapped, except Types P4026, P6469, P8190 and P6462, not tapped. All operate from 117 V, 50-60 Hz AC. *Indicates units with 107-V primary tap for low line voltage conditions.

Stock No.	Mfr's Type	Fig.	Volts	Amps	Size H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-2012	P4026	B	2.5	1.5	1⅝x2⅞x1⅝"	1	6.10	4.07	3.84	3.62	1.88	1.71
928-2065	P6133	D	2.5	5.0	2¾x3⅛x2¼"	1½	8.97	5.98	5.64	5.31	2.66	2.42
928-3019	P6454*	D	2.5	10.0	3⅛x3⅝x2½"	2½	9.67	6.45	6.09	5.74	2.80	2.55
928-2006	P3060	A	2.5	10.0	3 7/16x2 13/16x2⅜"	2½	12.62	8.42	7.96	7.49	4.16	3.79
928-3029	P6467	B	5.0	3.0	2x3¼x2⅛"	1½	6.87	4.58	4.33	4.07	2.15	1.96
928-3020	P6455*	D	5.0	6.0	2¾x3⅛x2⅛"	2	8.52	5.69	5.37	5.06	3.09	2.81
928-2067	P6135	A	5.0	10.0	3⅛x2½x2¾"	2	11.27	7.52	7.11	6.69	3.75	3.41
928-3018	P6433	A	5.0	15.0	3⅛x2½x2¾"	3	13.72	9.14	8.64	8.13	5.19	4.72
928-3030	P6468*	C	5.0	30.0	4¼x3 7/16x3⅞"	6.3	26.22	17.48	16.51	15.54	9.63	8.76
928-3041	P6492	C	5.0	30.0	4 11/16x3¾x4"	7½	24.10	16.07	15.17	14.28	10.85	9.87
928-4035	P8385	B	6.3	.3	1¼x2⅛x1⅜"	⅓	4.47	2.99	2.82	2.66	.....	.....
928-3027	*P6465*	B	6.3	.6	1⅜x2⅜x1½"	½	4.20	2.79	2.64	2.48	1.39	1.26
928-2066	*P6134*	B	6.3	1.2	1⅝x2⅞x1⅞"	1	4.22	2.83	2.67	2.51	1.49	1.36
928-3080	P8190	B	6.3	1.2	2x3¼x1⅞"	1	6.42	4.28	4.04	3.80	2.19	1.99
928-3028	*P6466*	B	6.3	3.0	2x3¼x2⅛"	1½	6.30	4.20	3.97	3.74	2.18	1.98
928-2020	P5014	A	6.3	3.0	3⅛x2½x2"	2	9.75	6.50	6.14	5.78	3.16	2.88
928-3025	P6462*	D	6.3	3.0	3⅛x3⅝x2⅜"	2	10.32	6.88	6.49	6.11	3.93	3.58
928-3021	*P6456**	B	6.3	6.0	2⅜x3¾x2⅜"	2	9.87	6.58	6.21	5.85	2.68	2.44
928-2010	P3064	A	6.3	6.0	3⅛x2½x2⅜"	2½	11.60	7.73	7.30	6.87	3.04	2.77
928-2080	P6308*	A	6.3	10.0	3 7/16x2 13/16x2⅝"	3½	16.25	10.84	10.23	9.63	4.63	4.21
928-2081	P6309*	A	6.3	20.0	4 9/16x3¾x3⅜"	6¾	18.67	12.45	11.76	11.06	6.88	6.26
928-2021	P5015	A	7.5	4.0	3⅛x2½x2¼"	3	13.22	8.81	8.32	7.83	3.25	2.96
928-2022	P5016	A	10.0	4.0	3 7/16x2 13/16x2½"	3¼	13.47	8.97	8.47	7.98	4.21	3.83
928-3022	P6458*	A	10.0	5.0	3 1/16x2½x2½"	3	12.37	8.24	7.79	7.33	3.23	2.94
928-2070	P6139	A	10.0	8.0	3 13/16x3⅛x3"	5	14.52	9.68	9.15	8.61	5.19	4.72
928-3024	P6461	C	10.0	10.0	3⅞x3¼x3 9/16"	5	18.87	12.58	11.88	11.18	7.09	6.45
928-2003	P3020*	C	11.0	10.0	4 11/16x3¾x3⅝"	7¾	18.87	12.58	11.88	11.18	7.29	6.63
928-4034	P8384	B	12.6	1.0	2x3¼x1¾"	1	5.67	3.79	3.58	3.37	.....	.....
928-3060	*P8130*	B	12.6	2.0	2x3¼x2⅛"	1½	6.52	4.36	4.11	3.87	2.38	2.17
928-4017	*P8358*	B	12.6	3.0	2⅜x3¾x2¼"	1¾	7.17	4.79	4.52	4.26	2.83	2.58
928-3031	*P6469*	B	25.2	1.0	2x3¼x2⅛"	1½	5.77	3.84	3.63	3.42	2.18	1.98
928-4016	*P8357*	B	25.2	2.0	2⅝x4x2¼"	2¼	8.55	5.90	5.58	5.25	3.64	3.31
928-3078	P8180	B	25.2	1.0	2x3¼x2⅛"	1½	5.62	3.75	3.54	3.34	2.28	2.07
928-4038	P8388	B	25.2	2.8	2⅝x4x2¼"	2¼	10.82	7.22	6.82	6.42	3.59	3.27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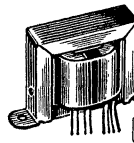
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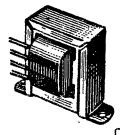

D

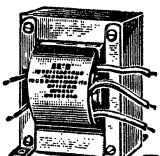
Triad Transformers

SINGLE-SECONDARY FILAMENT TRANSFORMERS

Filament transformers provide a wide choice of voltages and currents for applications in many types ofequipment. All 115 volt, 50-60 Hz AC primary except *60 Hz operation only.

Stock No.	Mfr's Type	Fig.	Secondary Volts	Secondary Amps	Insul. rms V	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	EACH 100-Up
954-0701	F-1X*	E	2.5CT	3	1500	1 11/16x2 13/16x1⅞"	¾	5.17	3.11	2.79	2.59	2.43
954-0703	F-3X*	E	2.5CT	10	3000	2¼x3 13/16x2¼"	1¾	8.50	5.09	4.58	4.26	4.00
954-0707	F-7X	E	5CT	3	1500	1 15/16x3¼x2"	1¼	6.12	3.66	3.29	3.06	2.88
954-0711	F-11U	F	5.2CT	24	1500	3 13/16x3 9/16x3⅞"	6¾	19.60	11.76	10.58	9.84	9.25
954-0713	*F-13X*	E	6.3	.6	1500	1⅜x2⅜x1⅜"	½	4.62	2.78	2.50	2.33	2.19
954-0714	*F-14X**	E	6.3CT	1.2	2500	1 11/16x2 13/16x1⅝"	¾	5.05	3.02	2.72	2.53	2.38
954-0716	*F-16X*	E	6.3CT	3	2500	1 15/16x3¼x2"	1¼	6.65	3.39	3.59	3.34	3.14
954-0718	F-18A	G	6.3CT	6	1500	3 3/16x2⅝x2⅝"	2½	11.67	7.01	6.31	5.87	5.52
954-0719	F-18X	E	6.3CT	6	1500	2 19/32x4x2¼"	2¼	9.90	5.93	5.34	4.97	4.67
954-0721	F-21A	G	6.3CT	10	1500	3 9/16x3x3¼"	3½	16.05	9.63	8.67	8.06	7.58
954-0722	F-22A	G	6.3CT	20	2000	4x3¼x4 3/16"	7	22.00	13.20	11.88	11.05	10.39
954-0723	F-23U	F	10CT	7	1500	3½x2⅞x2 15/16"	4	14.35	8.62	7.76	7.22	6.79
954-0728	F-28U	F	7.5CT-6.3CT	25	3000	4⅝x3 13/16x3⅝"	7½	33.27	19.97	19.97	16.71	15.71
954-0729	F-29U	F	12CT-11CT-10CT	11	3000	4⅜x3½x3⅜"	6½	22.70	13.63	12.27	11.41	10.73
954-0725	*F-25X*	E	12.6CT	1.5	1500	1 15/16x3¼x2"	1¼	6.20	3.71	3.34	3.11	2.92
954-0726	*F-26X**	E	12.6CT	2.5	1500	2 9/32x3 11/16x2⅜"	2¼	6.95	4.18	3.76	3.49	3.28
954-0740	*F-40X**	E	26.8CT	1	1500	1 15/16x3¼x2"	1¼	6.20	3.71	3.34	3.11	2.92
954-0741	*F-41X**	E	25.2CT	2	1500	2⅝x4 1/16x2½"	2¼	8.32	4.99	4.49	4.18	3.93
954-0745	*F-45X**	E	24CT	1	1500	1 15/16x3¼x2"	1¼	6.25	3.75	3.38	3.14	2.95

E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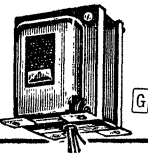
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MULTIPLE-SECONDARY FILAMENT TRANSFORMERS

Windings may be connected in series to obtain their combined voltage—when properly phased, current will be equal to current of lowest winding—or connected in parallel to obtain combined current. Primary 115 V, 50-60 Hz. *Tapped primary, 105-115-125 V, 60 Hz.

Stock No.	Mfr's Type	Fig.	Secondaries Volts	Secondaries Amperes	Insul. rms V	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	EACH 100-Up
954-0734	F-34A	G	6.3CT/6.3/6.3/6.3	1.75/1.75/1.75/1.75	1500	3 3/16x2 21/32x3"	3¼	14.10	8.46	7.61	7.08	6.66
954-0736	F-36A	G	6.3CT/6.3/6.3/6.3	3.5/3.5/3.5/3.5	1500	3⅞x3 9/32x3½"	5	20.75	12.46	11.21	10.43	9.80
954-0742	F-42A	G	12.6CT/12.6	2.5/2.5	1500	3 19/32x2 21/32x3⅛"	3¾	12.85	7.71	6.94	6.45	6.06
954-0783	F-83A*	G	12.6CT/12.6	5/5	2500	3⅞x3 9/32x3¾"	6	22.12	13.28	11.95	11.11	10.44

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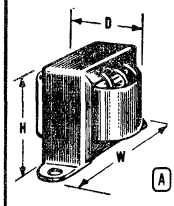
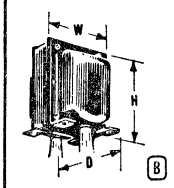
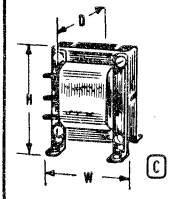
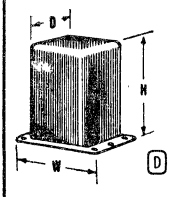
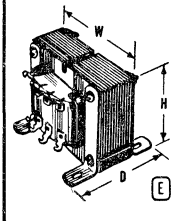
ALLIED Filter Chokes and Transformers

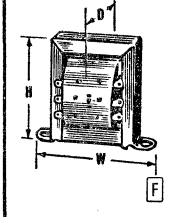


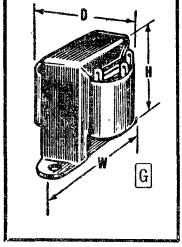












FILTER CHOKES

Rated at 10V, 60 Hz with max. DC in winding. All V, *3000 V. ‡Amperes. §Tapped for 8 H @ 150 mA —15%, +50% tol. 1500-V rms insulation, except †2000 or 4 H @ 200 mA.

Stock No.	Mfr's Type	Fig.	Henries	mA	Ohms	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-1143	6X42HBR	E	.005	22.5‡	.03	3¾x4½x4 13/16"	3¾x3½"	21.47	19.20	17.09	10.87	9.85
705-1142	6X41HBR	E	.01	8.0‡	.15	3⅛x3¾x3⅛"	3⅛x2¼"	12.72	9.67	8.60	6.00	5.54
705-1131	*6X31HBR*	E	.01	12.5‡	.11	3½x4⅛x3"	3⅜x2⅜"	14.77	11.39	10.13	6.98	6.44
705-1130	6X30HBR	E	.025	4‡	.425	2⅞x3⅜x2¾"	2¾x2⅛"	9.74	8.76	7.78	4.84	4.40
705-1129	6X29HBR	E	.035	2‡	.75	2⅜x2⅝x2½"	2⅛x2"	5.66	5.09	4.53	2.61	2.41
705-1132	6X32HBR	C	.08/.02	2.5/5.0‡	.61/.155	3 13/16x3⅜x3 11/16"	2½x3 1/16"	16.72	12.64	11.21	7.91	7.30
705-1133	6X33VBR	C	.3/.075	1.0/2.0‡	3/.75	3½x2⅞x3 3/16"	2¼x2 11/16"	12.05	9.08	8.05	5.69	5.25
705-1134	6X34HF	A	.32	600	10	2x3¼x2¼"	2 13/16"	4.57	3.49	3.10	2.15	1.92
705-1135	6X35HF	A	.70	290	30	1 11/16x2 13/16x1½"	2⅜"	3.05	2.75	2.42	1.15	1.06
705-1111	6X11HF	A	1.0†	300	40	2¼x3 11/16x2"	3⅛"	4.60	3.97	3.52	2.15	1.99
705-1122	6X22HF	A	1.5*	10	95	1 3/16x2⅛x1¼"	1¾"	2.42	2.18	1.94	1.05	.96
705-1109	6X9HF	A	1.5	200	60	1⅝x2 13/16x1⅝"	2⅜"	3.12	2.81	2.50	1.24	1.15
705-1145	6X44HF	A	2.0	15	70	1¼x2 3/16x1¼"	1¾"	2.55	2.30	2.04	1.17	1.06
705-1119	6X19HF	A	2.0	200	65	2¼x3 11/16x2"	3⅛"	4.62	3.47	3.08	2.21	2.04
705-1117	6X17HF	A	2.3	150	60	2x3¼x1¾"	2 13/16"	4.29	3.86	3.43	2.62	2.46
705-1124	6X24HF	A	2.5†	130	100	2x3¼x1¾"	2 13/16"	3.94	3.55	3.16	2.24	2.05
705-1118	6X18HF	A	3†	150	97	2¼x3 11/16x2"	3⅛"	4.20	3.36	2.98	1.98	1.83
705-1107	6X7HF	A	3.5	50	200	1⅝x2 13/16x1½"	2⅜"	2.88	2.59	2.30	1.84	1.70
705-1128	6X28HF	D	5.0	100	300	2⅝x2¼x2¾"	1½x2⅜"	6.70	6.03	5.35	3.38	3.15
705-1146	6X45HF	A	5.0	65	330	1⅝x2 13/16x1 7/16"	2⅜"	3.65	3.10	2.84	2.25	2.10
705-1105	6X5HF	A	5.5	50	330	1⅜x2⅜x1¼"	2"	2.34	2.11	1.99	1.48	1.38
705-1136	6X36HF	A	6.0	200	150	2⅝x4x2¼"	3 9/16"	6.02	5.08	4.66	3.71	3.46
705-1106	6X6HF	A	7.0	50	550	1⅜x2⅜x1⅜"	2"	3.20	2.88	2.56	1.31	1.22
705-1115	6X15HF	A	8.0	85	260	2x3¼x2"	2 13/16"	3.77	2.99	2.66	2.32	2.16
705-1103	6X3HF	A	8.5	50	400	1⅝x2 13/16x1⅜"	2⅜"	3.27	2.94	2.62	1.23	1.15
705-1144	6X43HF	A	9.0	125	250	2 5/16x3 11/16x1 15/16"	3⅛"	5.00	4.36	3.88	3.09	2.88
705-1138	6X37VG	B	10.0†	200	150	3½x2 15/16x3½"	2¼x2⅜"	11.87	8.94	7.95	4.89	4.46
705-1139	6X38HF	A	10.0	90	270	2x3¼x2"	2 13/16"	4.27	3.59	3.31	2.63	2.45
705-1104	6X4HF	A	10.5	110	220	2⅝x4x2⅛"	3 9/16"	4.89	4.39	3.90	2.47	2.25
705-1121	6X21VG	B	12.0*§	100	145	3x2⅝x2 11/16"	2x1¾"	7.55	6.80	6.03	4.50	4.20
705-1101	6X1HF	A	16.0	50	550	2x3¼x1⅝"	2 13/16"	3.86	3.47	3.08	1.49	1.38
705-1113	6X13HF	A	20.0	15	900	1⅝x2 13/16x1½"	2⅜"	3.56	3.20	2.85	1.56	1.44
705-1125	6X25HF	A	35.0	15	1600	1⅜x2⅜x1¼"	2"	2.67	2.18	1.94	1.26	1.16
705-1120	6X20HF	A	350.0*	5	5500	2x3¼x1¾"	2 13/16"	5.52	4.26	3.79	3.18	2.94

MINIATURE INTERCOM AND TRANSCEIVER TRANSFORMERS

*Transceiver input, mike or plate to grid; 5 watts. †Intercom input voice coil to grid. §Matches low-impedance line to voice coil; 3 watts. All are standard single plate to voice coil outputs. Av. shpg. wt. ½ lb.

Stock No.	Mfr's Type	Fig.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0848	6W54HF	C	*200/5000	60,000	1⅝x2⅞x1⅝"	2⅜"	5.44	4.91	4.36	2.63	2.36
705-0849	6W55HF	C	†4	25,000	1⅜x2⅜x1½"	2"	3.59	3.13	2.87	2.04	1.91
705-0850	6W56HL	E	§45/50	3-4, 6-8	1⅜x2⅜x1⅜"	2"	2.92	2.50	2.23	1.81	1.67

1-WATT AUDIO INPUT TRANSFORMER FOR LINE OR MIKE TO GRID

Response, ±3 dB, 200-10,000 Hz. Shpg. wt. ½ lb.

705-0870	6W77HF	A	400 CT	195K	1¼x2 1/16x1¼"	.....	4.72	4.00	3.67	2.93	2.74

INTERSTAGE AUDIO TRANSFORMERS

Maximum DC permissible in primary is 10 mA except ‡30 mA. Single plate to P-P grid except Type marked with *, single plate to single grid, †single or push-pull plate to push-pull grids. Turns ratio: 6W8, 6W62—1:3; 6W61—1:2; 6W68—1:1; 6W69—3:1 to half-secondary.

705-0805	6W8HF	A	*7000-20K	.....	1⅜x2⅜x1⅜"	2"	3.61	3.26	2.90	2.31	2.16
705-0855	6W61HF	A	10,000	40,000 CT	1⅜x2⅜x1½"	2"	4.14	3.72	3.31	2.65	2.47
705-0856	6W62HF	A	†10,000 CT	90,000 CT	1⅝x2⅞x1½"	2⅜"	4.53	4.07	3.63	2.95	2.70
705-0862	6W68HF	A	‡10,000	10,000 CT	1⅝x2⅞x1⅝"	2⅜"	3.89	3.50	3.12	2.18	2.04
705-0863	6W69HF	A	‡10,000	.....	1⅝x2⅞x1⅝"	2⅜"	3.65	3.28	2.92	2.34	2.18

UNIVERSAL AUDIO OUTPUT TRANSFORMERS

Six secondary taps. Center-tapped primary for push-pull, except *for single-ended output. ¾ lb.

Stock No.	Mfr's Type	Fig.	Primary Ohms	Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0811	6W14HFL	G	2000-14,000	4	1⅜x2⅜x1½"	2"	5.38	3.96	3.51	2.81	2.62
705-0812	6W15HFL	G	2000-14,000	8	1⅝x2⅞x1⅝"	2⅜"	4.84	4.36	3.88	2.48	2.32
705-0813	6W16VFL	F	2000-14,000	18	2⅜x2⅞x2"	2⅜"	6.90	6.22	5.53	3.55	3.32
705-0854	6W60HFL	G	6000-10,000	8	2x3¼x2 3/16"	2 13/16"	4.95	4.46	3.97	3.18	2.96
705-0830	6W36HFL	G	*7000-10,000	4	1⅜x2⅜x1⅜"	2"	3.39	3.05	2.71	1.52	1.42

CONSTANT-VOLTAGE 70.7-VOLT LINE-TO-VOICE-COIL TRANSFORMERS

Stock No.	Mfr's Type	Fig.	Watt Taps	Sec. Ohms	Max. W.	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0801	6W2HFL	G	5, 2.5, 1.25, .62, .31	4, 8	5	1⅜x2⅜x1½"	2"	4.50	3.82	3.60	1.83	1.69
705-0822	6W28VFL	F	8, 4, 2, 1, 0.5	4, 8, 16	8	2x2⅜x1⅝"	2"	5.10	3.97	3.53	2.40	2.22
705-0802	6W4HFL	G	10, 5, 2.5, 1.25, .62	4, 8, 16	10	1⅝x2 13/16x1⅝"	2⅜"	4.87	4.10	3.77	2.30	2.12
705-0803	6W5VFL	F	18, 9, 4.5, 2.25, 1.12, .56	4, 8, 16	18	2⅜x2⅞x1⅞"	2⅜"	6.00	5.05	4.64	2.83	2.61
705-0804	6W6HFL	G	24, 12, 6, 3, 1.5, .75	4, 8, 16	24	2¼x3 11/16x2¼"	3⅛"	7.27	6.14	5.65	3.41	3.15
705-0835	6W41HFL	G	2, 1, .5	4, 8	2	1 3/16x2 1/16x1¼"	1¾"	4.06	3.38	3.24	3.28	2.98
705-0840	6W46VFL	F	16, 8, 4, 2, 1, 0.5	4, 8, 16	16	2¾x3⅛x2¼"	2 13/16"	7.67	5.92	5.58	3.62	3.34

CONSTANT-VOLTAGE HIGH-FIDELITY 70.7-VOLT LINE-TO-VOICE-COIL TRANSFORMER

705-0836	6W42HFL	G	5, 2.5, 1.25, .625, .31	4, 8, 16	5	1⅝x2 13/16x1⅝"	2⅜"	4.89	4.40	3.91	2.30	2.09

CONSTANT-VOLTAGE 25-VOLT LINE-TO-VOICE-COIL TRANSFORMERS

705-0831	6W37HFL	G	2, 1, 0.5	4, 8	2	1 3/16x2 1/16x1¼"	1¾"	3.75	3.19	3.01	1.58	1.43
705-0832	6W38HFL	G	5, 2.5, 1.25, 0.625, 0.31	4, 8	5	1⅝x2 13/16x1⅝"	2⅜"	4.45	3.62	3.41	1.93	1.76
705-0833	6W39HFL	G	10, 5, 2.5, 1.25, 0.625	4, 8, 16	10	2¼x3 11/16x2"	3⅛"	6.35	4.38	3.92	2.99	2.76
705-0834	6W40HFL	G	18, 9, 4.5, 2.25, 1.12	4, 8, 16	18	2⅝x4x2¼"	3 9/16"	7.57	6.39	5.88	3.50	3.31

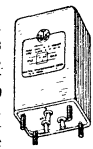
UTC Filter Chokes, Audio Transformers

FILTER CHOKES, AUDIO TYPES

INTERSTAGE AND LINE FILTERS

Stock No.	Mfr's Type	Imp. (Ohms)	Size (Inches)	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-0130	BMI-60	10k	1⅝x1 11/16x1 3/16	54.10	42.98	37.39	34.00	31.16	28.89	27.18	25.15
964-0133	BMI-400	10k	1⅝x1 11/16x1 3/16	54.10	42.98	37.39	34.00	31.16	28.89	27.18	25.15
964-0150	BMI-1000	10k	1⅝x1 11/16x1 3/16	54.10	42.98	37.39	34.00	31.16	28.89	27.18	25.15
964-4400	LMI-100	10k	1⅝x1 11/16x1 3/16	56.62	44.99	39.13	35.59	32.61	30.25	28.45	26.32
964-4430	LMI-3000	10k	1⅝x1 11/16x1 3/16	56.62	44.99	39.13	35.59	32.61	30.25	28.45	26.32
964-4440	LMI-10000	10k	1⅝x1 11/16x1 3/16	56.62	44.99	39.1	35.59	32.61	30.25	28.45	26.32
964-4120	HMI-200	10k	2½x1 11/16x1 3/16	56.60	44.97	39.12	35.56	32.60	30.23	28.44	26.31
964-4530	LML-3000	500/600	2½x1 11/16x1 3/16	56.62	44.99	39.13	35.59	32.61	30.25	28.45	26.32

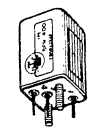
Precision midrange frequency filters. Suffix in Mfr's Type indicates cut-off frequency. BMI units are sharply peaked, 2 dB down ±3% from center frequency, and down 40 dB per octave. HMI filters are high-pass interstage units; 10k source and load. Cases sealed to meet MIL-F-18372B specifications. Av. shpg. wt. 9 oz.



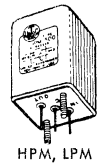
INTERSTAGE MINIFILTERS

Stock No.	Mfr's Type	Size (Inches)	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-0150	BPM-1000	1⅛x¾x¾	50.10	39.82	34.63	31.49	28.87	26.77	25.18	23.29
964-0190	BPM-8000	1⅛x¾x¾	50.10	39.82	34.63	31.49	28.87	26.77	25.18	23.29
964-4160	HPM-500	1⅜x1x1	52.60	41.80	36.36	33.06	30.31	28.11	26.44	24.45
964-4170	HPM-1000	1⅜x1x1	52.60	41.80	36.36	33.06	30.31	28.11	26.44	24.45
964-4670	LPM-200	1⅜x1x1	52.60	41.80	36.36	33.06	30.31	28.11	26.44	24.45
964-4675	LPM-500	1⅜x1x1	52.60	41.80	36.36	33.06	30.31	28.11	26.44	24.45
964-4680	LPM-1000	1⅜x1x1	52.60	41.80	36.36	30.06	30.31	28.11	26.44	24.45
964-4683	LPM-3000	1⅜x1x1	52.60	41.80	36.36	33.06	30.31	28.11	26.44	24.45
964-4690	LPM-10000	1⅛x¾x¾	52.60	41.80	36.36	33.06	30.31	28.11	26.44	24.45

Compact, hermetically-sealed. Cases meet MIL-F-18327B specifications. Cutoff frequency indicated by digits in Mfr's Type number. All input and output impedances are 10k. Attenuation is approx. 2 dB ±3% from center frequency, down 35 dB per octave. For transistor use units may be reversed so continuity is on input side. Av. shpg. wt. 6 oz.



BPM

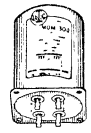


HPM, LPM

MQL AND MQM LOW-FREQUENCY HIGH-Q COILS

Stock No.	Mfr's Type	Series Ind. Hys.	Parallel Ind. Henrys	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-5503	MQL-3	200	50	65.15	51.76	45.03	40.94	37.53	34.80	32.73	30.28
964-5616	MQM-16	16	4	34.55	27.46	23.89	21.72	19.91	18.46	17.37	16.06
964-5640	MQM-40	40	10	34.55	27.46	23.89	21.72	19.91	18.46	17.37	16.06
964-5630	MQM-300	300	75	36.57	29.06	25.28	22.99	21.06	19.53	18.38	17.00

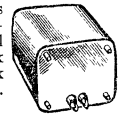
Hermetically sealed to MIL-T-27B. 2% tol. at 1 V, 60 Hz. Hipermalloy shielding reduces hum. 2 like windings and 4 terminals for series, parallel, CT or trans. connection. MQL, 1 13/16x2½", 16 oz. MQM, 1 5/16x1⅝", 5 oz.



MIL-T-27B SEALED FILTER INDUCTORS

Stock No.	Mfr's Type	Ind. Hys.	DC mA	DC Ohms	EACH 1-2	3-4	5-9	10-24	25 49	50-99	100-249	250-499
964-3070	H-70	10.0	35	925	18.55	14.73	12.81	11.65	10.68	9.90	9.31	8.62
964-3170	H-170	*140, 35	250, 500	.6, .15	27.05	21.49	18.70	17.00	15.58	14.45	13.59	12.57

Rated 1000 V. H-170 has two windings; for transistor use. Stainless steel mtg. studs. H-70, 1¾x 1 5/16x1 5/16"; H-170, 2 13/16x 2¾x2⅜". Shpg. wt. 2½ lbs. *Millihenries.



TYPE PIP SUBMINIATURE PULSE TRANSFORMERS

Stock No.	Mfr's Type	Width (μs)	Rise Time (μs)	Volts Out	Imp. In, Out (Ohms)	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-6101	PIP-1	.05	.02	9	50	10.02	7.96	6.92	6.30	5.77	5.35	5.03	4.66
964-6104	PIP-4	.5	.05	7	100	10.02	7.96	6.92	6.30	5.77	5.35	5.03	4.66
964-6105	PIP-5	1	.08	6.8	100	10.02	7.96	6.92	6.30	5.77	5.35	5.03	4.66
964-6107	PIP-7	3	.20	6.8	100	10.02	7.96	6.9	6.30	5.77	5.35	5.03	4.66
964-6108	PIP-8	5	.30	7.9	200	10.02	7.96	6.92	6.30	5.77	5.35	5.03	4.66
964-6109	PIP-9	10	.35	6.5	200	10.02	7.96	6.92	6.30	5.77	5.35	5.03	4.66
964-6111	PIP-11	1	.02	6.6	280/100	10.02	7.96	6.92	6.30	5.77	5.35	5.03	4.66
964-6199	PIPSH	Hipermalloy Shield and Cover				1.50	1.20	1.04	.94	.87	.81	.75	.70

Same physical design and reliability as UTC DO-T and DI-T transformers. Metal-cased and hermetically sealed to MIL-T-21038B specifications. Types 1 through 9 are MIL type TP6-RX-4410CZ and have 4:4.1 ratio. Type 11 is MIL type TP6-RK-5310CZ with 5:3.1 ratio. Size, 5/16" dia. x 3/16" high. Actual wt. 1/20 oz. Av. shpg. wt. 2 oz.

MINIATURE PULSE TRANSFORMERS—VACUUM TUBE TYPE

Stock No.	Mfr's Type	Width (μs)*	Rise Time (μs)	Volts Out	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-3047	H-47	.20	.01	18	13.27	10.56	9.19	8.34	7.66	7.10	6.68	6.17
964-3048	H-48	.50	.01	20	13.27	10.56	9.19	8.34	7.6	7.10	6.68	6.17
964-3049	H-49	1.0	.02	24	13.27	10.56	9.19	8.34	7.66	7.10	6.68	6.17
964-3050	H-50	2	.05	27	13.80	10.97	9.54	8.68	7.95	7.37	6.94	6.41
964-3051	H-51	3	.07	26	14.30	11.23	9.88	8.98	8.23	7.63	7.19	6.65
964-3052	H-52	5	.15	23	14.77	11.74	10.22	9.29	8.51	7.89	7.43	6.87
964-3054	H-54	10	.25	24	15.77	12.54	10.91	9.92	9.09	8.43	7.93	7.33
964-3055	H-55	16	.40	23	17.02	13.53	11.77	10.70	9.81	9.10	8.56	7.91
964-3057	H-57	25	1.50	24	13.52	10.76	9.35	8.51	7.80	7.23	6.80	6.29

For wide use in all types of vacuum tube circuits. Meet specifications of MIL-T-21038B, −70°C to +130°C. Width given at 50% amplitude. Rise time, 10% to 90% of max. amplitude. *Blocking oscillator and coupling characteristics. Sizes: 45, ⅜x ⅜"; 47-52, 9/16x9/16"; 54-57, ⅝x⅝". Av. shpg. wt. 2 oz.

LOW-FREQUENCY LOW PASS FILTERS

Have a loss of less than 3 dB at nominal frequency, with attenuation of more than 40 dB at twice nominal frequency. Housed in a hermetically sealed metal case to meet MIL-T-18327B specifications. Shpg. wt. 1½ lbs.

Stock No.	Mfr's Type	Nominal Frequency	Source and Load Impedance (Ohms)	Size (HxWxD)	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-4310	LLP-10	10 Hz	100k	3⅛x2 5/16x2 1/16"	112.75	89.58	77. 3	70.85	64.94	60.22	56.65	52.41
964-4315	LLP-15	15 Hz	100k	3⅛x2 5/16x2 1/16"	92.27	76.86	66.80	60.74	52.60	48.78	45.88	42.95

FILTER, SWINGING AND AUDIO CHOKES

Stock No.	Mfr's Type	Henrys (*mH)	mA (†A)	Ohms	Size (HxWxD)	Wt., Lbs.	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-6237	S-37	8	550	60	4⅝x5⅜x5⅜"	12	43.57	34.63	30.13	27.39	25.11	23.28	21.90	20.25
964-6238	S-38	4/20	550	60	4⅝x5⅜x5⅜"	12	43.57	34.63	30.13	27.39	25.11	23.28	21.90	20.25
964-6281	S-81	100/8*	2.5†	0.6	2 windings—									
		25/2*	5†	0.15	2½x3¾x2 5/32"	2	17.30	13.74	11.95	10.87	9.96	9.24	8.69	8.04

UTC Inductors and Transformers

HERMETICALLY SEALED MIL-T-27B TYPES HVC AND TVC VARIABLE INDUCTORS

- Offer Extreme Compactness
- Wide Range of Adjustment
- High Q Factor

Hermetically sealed variable inductors designed to meet MIL-T-27B specifications. They provide a wide range of inductance with a high Q factor in an extremely compact unit. Give excellent performance in tuned circuits. Adjustable, −70% to +200% of mean inductance by 900° rotation. Usable over a wide frequency range. Highly stable with temperature and voltage change. The TVC series has taps at 30% and 50% of total turns. All units have two 4-40 mounting studs. Size, 1⅛x 25/32x1 9/32". Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Mean H	Max. mA	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-4201	HVC-1	.006	100	16.55	13.14	11.43	10.40	9.53	8.83	8.31	7.69
964-4202	HVC-2	.015	60	16.55	13.14	11.43	10.40	9.53	8.83	8.31	7.69
964-4203	HVC-3	.040	40	16.55	13.14	11.43	10.40	9.53	8.83	8.31	7.69
964-4204	HVC-4	.1	30	16.55	13.14	11.43	10.40	9.53	8.83	8.31	7.69
964-4205	HVC-5	.25	20	16.55	13.14	11.43	10.40	9.53	8.83	8.31	7.69
964-4206	HVC-6	.6	15	16.55	13.14	11.43	10.40	9.53	8.83	8.31	7.69
964-4207	HVC-7	1.5	10	17.55	13.94	12.13	11.02	10.10	9.37	8.82	8.16
964-4208	HVC-8	4.0	7	17.55	13.94	12.13	11.02	10.10	9.37	8.82	8.16
964-4209	HVC-9	10	5	17.55	13.94	12.13	11.02	10.00	9.37	8.82	8.16
964-4210	HVC-10	25	3.5	18.05	14.34	12.48	11.34	10.40	9.64	9.07	8.39
964-4211	HVC-11	60	2	19.55	15.54	13.52	12.29	11.27	10.44	9.83	9.09
964-4212	HVC-12	150	1.5	21.55	17.12	14.89	13.53	12.41	11.51	10.82	10.02
964-6502	TVC-2	.015	60	20.02	15.92	13.84	12.59	11.54	10.70	10.07	9.31
964-6504	TVC-4	.1	30	20.02	15.92	13.84	12.59	11.54	10.70	10.07	9.31
964-6505	TVC-5	.25	20	20.02	15.92	13.84	12.59	11.54	10.70	10.07	9.31
964-6506	TVC-6	.6	15	20.02	15.92	13.84	12.58	11.54	10.70	10.07	9.38
964-6508	TVC-8	4	7	21.05	16.73	14.55	13.23	12.12	11.24	10.58	9.78
964-6509	TVC-9	10	5	21.05	16.73	14.55	13.23	12.12	11.24	10.58	9.78
964-6510	TVC-10	25	3.5	52.87	42.30	42.30	42.30	.....	.....	.....	.....
964-6512	TVC-12	150	1.5	61.87	49.50	49.50	49.50	.....	.....	.....	.....

TYPE VIC VARIABLE INDUCTORS FOR TUNED AUDIO CIRCUITS

- Wide Adjustment Range
- Positive Value Settings

Type VIC variable inductors offer a convenient approach to the problem of tuned audio circuits. By adjusting a set screw in the side of the case, any inductance value of −45% to +85% from the mean value is obtained. Range is covered in 600° rotation with positive setting for precise values. Mounting centers on terminal board side are 13/16x 29/32", and tapped for 4-40 screws. 1 11/32x 1¼x1 7/16". 5½ oz.

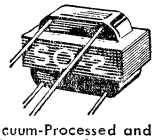
Stock No.	Mfr's Type	Mean H	Max. mA	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-6547	VIC-7	.13	25	13.02	10.35	9.00	8.18	7.50	6.95	6.54	6.05
964-6548	VIC-8	.21	21	13.52	10.74	9.34	8.50	7.79	7.22	6.80	6.29
964-6549	VIC-10	.54	15	13.52	10.74	9.34	8.50	7.79	7.22	6.80	6.29
964-6550	VIC-11	.85	12	13.52	10.74	9.34	8.50	7.79	7.22	6.80	6.29
964-6552	VIC-12	1.3	10	14.02	11.14	9.70	8.81	8.08	7.49	7.04	6.52
964-6553	VIC-13	2.2	8	14.02	11.14	9.70	8.81	8.08	7.49	7.04	6.52
964-6554	VIC-14	3.4	7	14.02	11.14	9.70	8.81	8.08	7.49	7.04	6.52
964-6555	VIC-15	5.4	6	14.55	11.56	10.05	9.14	8.37	7.77	7.30	6.76
964-6556	VIC-16	8.5	5	14.55	11.56	10.05	9.14	8.37	7.77	7.30	6.76
964-6557	VIC-17	13	4	14.55	11.56	10.05	9.14	8.37	7.77	7.30	6.76
964-6558	VIC-18	21	3.5	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98

HERMETICALLY SEALED MIL-TF4RX20YY TYPE M PERMALLOY DUST TOROIDS

Offer high voltage stability, maximum Q in their class. Virtually no change in inductance due to frequency, temperature or vibration. Meet MIL-T-278. 1% tolerance. The DC currents shown will cause only a slight drop in coil inductance. Extremely low hum pickup. Case offers shielding, permits close spacing. Sizes: MQA, 1 9/32x 1 21/32x1 11/16"; MQB, 2 9/16x2 13/16x1 3/16"; MQE, 1 11/16x1 7/32x½". Shpg. wts.: MQA, 4 oz.; MQB, 14 oz.; MQE, 1½ oz.

Stock No.	Mfr's Type	Inductance	Max. mA	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-5212	MQA-12	1 H	20	20.02	15.92	13.84	12.59	11.54	10.70	10.07	9.31
964-5304	MQB-4	120 mH	120	30.05	23.88	20.76	18.89	17.31	16.05	15.10	13.97
964-5305	MQB-5	.5 H	60	30.05	23.88	20.76	18.89	17.31	16.05	15.10	13.97
964-5306	MQB-6	.1 H	40	32.57	25.89	22.52	20.48	18.77	17.40	16.37	15.14
964-5409	MQE-9	.25 H	22	16.05	12.75	11.10	10.09	9.24	8.57	8.07	7.46
964-5410	MQE-10	.4 H	17	16.55	13.14	11.43	10.40	9.53	8.83	8.31	7.69
964-5412	MQE-12	.9 H	12	17.02	13.53	11.77	10.70	9.81	9.10	8.56	7.91
964-5416	MQE-16	4 H	5	55.12	44.10	44.10	44.10	.....	.....	.....	.....

SUBOUNCER AND SUB-SUBOUNCER TRANSFORMERS



- Vacuum-Processed and Waterproofed
- Weigh Less than ½ oz.

Subouncers (SO) weigh less than ½ ounce; sub-subouncers (SSO), less than ⅓ ounce. Mount with securely anchored 4" color-coded leads or with channels, listed below. Vacuum-processed and double-sealed (waterproof). Primary windings of SO-11 through SO-16 are center-tapped; secondary windings are split. *Both windings are center-tapped; †both windings are split. SO-1 has maximum dBm level of +10; SO-2, +20; SO-3 through SO-8, +23; SO-10 through SO-16, +24; SO-1 and SSO-21, +7; SSO-2, +15; all others, +20. Size of Type SO, 1 9/32x2 3/32x7/8"; Type SSO, 7/16x¾x33/64". 2 oz.

SUBOUNCER UNITS

Stock No.	Mfr's Type	Use (T.=Transistor)	Primary Imped. Ohms	Sec. Imped. Ohms	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-6301	SO-1	Input	200, 50	250K, 62.5K	10.02	7.17	6.23	5.67	5.20	4.82	4.54	4.19
964-6303	SO-2	Interstage	10K	90K	9.87	6.97	6.07	5.51	5.06	4.69	4.41	4.08
964-6305	SO-3	Pl. to line	10K, 25K	200, 500	9.55	6.36	5.03	4.61	4.28	4.02	3.72	3.36
964-6315	SO-8	Transistor to PP sec.	10K	2000 CT	8.27	6.37	5.54	5.04	4.62	4.28	4.03	3.73
964-6319	SO-10	Transistor to VC	2000 CT 4000 CT	8 16	7.52	5.39	4.69	4.27	3.92	3.62	3.41	3.16
964-6321	SO-11	T. Interstage	400, 500	400, 500	6.80	6.18	5.38	4.89	4.48	4.15	3.90	3.61
964-6323	SO-12	T. Interstage	400, 500	120, 150	6.80	6.18	5.38	4.89	4.48	4.15	3.90	3.61
964-6329	SO-15	T. Output	600	600	6.80	6.18	5.38	4.89	4.48	4.15	3.90	3.61
964-6331	SO-16	T. Interstage	2500	2500	8.27	6.57	5.72	5.20	4.76	4.42	4.15	3.85
964-6300	SO-CH	Mtg. channel for SO units			.50	.40	.34	.31	.29	.27	.25	.23

SUB-SUBOUNCER UNITS

Stock No.	Mfr's Type	Use (T.=Transistor)	Primary Imped. Ohms	Sec. Imped. Ohms	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-6401	SSO-1	Input	200, 50	250K, 62.5K	10.02	7.96	6.92	6.30	5.77	5.35	5.03	4.66
964-6403	SSO-2	Interstage	10K	90K	10.02	7.96	6.92	6.30	5.77	5.35	5.03	4.66
964-6415	SSO-8	T. to PP sec.	10K	2000 CT	8.27	6.58	5.72	5.21	4.77	4.42	4.16	3.85
964-6421	SSO-11	T. Output	500, 600	50, 60	6.80	5.39	4.69	4.27	3.92	3.62	3.41	3.16
964-6427	SSO-14	T. Interstage	10K CT 25K CT	200 CT 500 CT	7.50	6.76	5.88	5.34	4.90	4.54	4.38	3.95
964-6437	SSO-19	Out. Matching	500 CT	600 CT	7.27	5.78	5.03	4.58	4.20	3.89	3.66	3.38
964-6439	SSO-20	Output	1500 CT	600 CT	7.27	5.78	5.03	4.58	4.20	3.89	3.66	3.38
964-6441	SSO-21	Crystal/Chop.	200K CT	1000 CT	10.27	8.17	7.11	6.47	5.93	5.49	5.16	4.78
964-6445	SSO-23	Inductor: 8 H @ 2 mA; 4 H @ 5 mA; 650 ohms			5.77	4.58	3.99	3.62	3.33	3.08	2.90	2.68
964-6451	SSO-26	T. Interstage	40K, 50K*	400, 500†	9.77	7.76	6.75	6.13	5.62	5.22	4.90	4.54
964-6400	SSO-CH	Mtg. Channel for SSO units			.50	.40	.34	.31	.29	.27	.25	.23

Allied can furnish the entire line of UTC inductors and transformers. Write your Allied office.

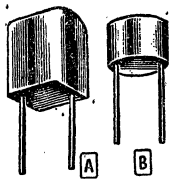
Transformers: Power 363-368—Filament 369-371—Filter Chokes, Audio 372-377—Transistor 378-381

Miniature Inductors and Transformers

INDUCTORS, AUDIO TYPES

HERMETICALLY SEALED MINIDUCTORS PROVIDE HIGH Q WITH SMALL CASE SIZE

Stock No.	Mfr's Type	Inductance (0 DC)	DC mA Max.	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-4801	MH-1	.6 mH	90.0	14.02	11.14	9.70	8.81	8.08	7.49	7.04	6.52
964-4802	MH-2	1.5 mH	57.0	14.02	11.14	9.70	8.81	8.08	7.49	7.04	6.52
964-4803	MH-3	2.5 mH	44.0	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-4804	MH-4	6 mH	28	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-4805	MH-5	10.0 mH	22.0	15.52	12.33	10.73	9.75	8.94	8.29	7.80	7.22
964-4806	MH-6	15 mH	18	15.52	12.33	10.73	9.75	8.94	8.29	7.80	7.22
964-4807	MH-7	25 mH	14	16.05	12.75	11.10	10.09	9.24	8.57	8.07	7.46
964-4809	MH-8	40.0 mH	11.0	16.05	12.75	11.10	10.09	9.24	8.57	8.07	7.46
964-5001	MM-1	3 mH	50	13.02	10.35	9.00	8.18	7.50	6.95	6.54	6.05
964-5002	MM-2	5.0 mH	40.0	13.02	10.35	9.00	8.18	7.50	6.95	6.54	6.05
964-5003	MM-3	8.0 mH	30.0	13.52	10.76	9.35	8.51	7.80	7.23	6.80	6.29
964-5005	MM-5	20.0 mH	20.0	14.02	11.14	9.70	8.81	8.08	7.49	7.04	6.52
964-5006	MM-6	30.0 mH	16.0	14.02	11.14	9.70	8.81	8.08	7.49	7.04	6.52
964-5007	MM-7	60.0 mH	11.0	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-5008	MM-8	120.0 mH	8.0	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-5710	MW-.10	.10 H	18	13.02	10.35	9.00	8.18	7.50	6.95	6.54	6.05
964-5725	MW-.25	.25 H	11	13.02	10.35	9.00	8.18	7.50	6.95	6.54	6.05
964-5750	MW-.5	.5 H	8	13.52	10.76	9.35	8.51	7.80	7.23	6.80	6.29
964-5701	MW-1	1.0 H	6	15.52	12.33	10.73	9.75	8.94	8.29	7.80	7.22
964-5702	MW-2	2 H	4	19.05	15.13	13.17	11.97	10.97	10.17	9.57	8.85
964-5703	MW-3	3 H	3.5	20.52	16.32	14.20	12.91	11.83	10.97	10.31	9.54
964-5705	MW-5	5 H	3	25.55	20.30	17.66	16.05	14.72	13.65	12.84	11.88
964-4900	ML-0	.15 H	12	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-4901	ML-1	.25 H	9.0	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-4902	ML-2	.4 H	7.0	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-4903	ML-3	.7 H	5.0	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-4904	ML-4	1.4 H	3.0	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-4905	ML-5	2.5 H	1.0	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-4906	ML-6	4.0 H	.7	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-4907	ML-7	6.0 H	.6	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-4908	ML-8	10.0 H	.5	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-4909	ML-9	25.0 H	.3	15.52	12.33	10.73	9.75	8.94	8.29	7.80	7.22
964-4910	ML-10	60.0 H	.2	17.55	13.94	12.13	11.01	10.10	9.37	8.82	8.16
964-5155	MO-.5	.5 H	23	17.02	13.53	11.77	10.70	9.81	9.10	8.56	7.91
964-5101	MO-1	1 H	16	17.02	13.53	11.77	10.70	9.81	9.10	8.56	7.91
964-5102	MO-2	2 H	8	17.55	13.94	12.13	11.02	10.10	9.37	8.82	8.16
964-5105	MO-5	5 H	5	17.55	13.94	12.13	11.02	10.10	9.37	8.82	8.16
964-5120	MO-20	20 H	2.7	17.55	13.94	12.13	11.02	10.10	9.37	8.82	8.16
964-5100	MO-100	100 H	1.1	18.55	14.73	12.81	11.65	10.68	9.90	9.31	8.62



A ML Series Sealed in Hipermalloy Case

B MM, MH, MW Series Symmetrical Toroids

C MO Series Has Low Inductance Variation

For transistor and printed circuit, as well as vacuum tube designs. Provide high Q in miniature form. Low hum pickup. Stable over a temperature range of from −55° C to +100°C. The ML-5 thru 10 and the MO-2 thru 100 are for lower frequencies. The MM and the MW series are for medium frequencies. The MH series are for high frequencies. Miniductors meet specs of MIL-T-27B. MH, MM cases are 23/32" dia. x 1/4" high; actual wt., .07 oz. MW cases are 23/32" dia. x 1/4" h., actual wt., .25 oz. ML cases are 7/16x31/64x9/16" h.; actual wt., 2 oz. MO cases are 3/4x1 1/16x 13/16" h.; 1 oz.

OUNCER AUDIO TRANSFORMERS FOR APPLICATIONS REQUIRING SMALL SIZE

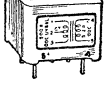
Stock No.	Mfr's Type	Primary Impedance Ohms	Secondary Imped. Ohms	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-5801	*0-1**	*50, 200-250, 500-600*	*50K*	14.30	11.36	9.88	8.98	8.23	7.63	7.19	6.65
964-5802	0-2*	50, 200-250, 500-600	50K CT	14.77	11.74	10.22	9.29	8.51	7.89	7.43	6.87
964-5803	0-3*	7.5-30	50K	13.80	10.97	9.54	8.68	7.95	7.37	6.94	6.41
964-5804	0-4†	15K	60K	12.30	9.77	8.50	7.72	7.08	6.56	6.17	5.72
964-5806	0-6‡	15K	95K CT	13.80	10.97	9.54	8.68	7.95	7.37	6.94	6.41
964-5807	0-7‡	15K; 4 mA	95K CT	13.80	10.97	9.54	8.68	7.95	7.37	6.94	6.41
964-5808	0-8††	15K	50, 200-250, 500-600	14.30	11.36	9.88	8.98	8.23	7.63	7.19	6.65
964-5809	0-9††	15K; 4 mA		14.30	11.36	9.88	8.98	8.23	7.63	7.19	6.65
964-5810	0-10††	30K CT		15.30	12.15	10.58	9.61	8.81	8.17	7.69	7.11
964-5812	0-12†	50, 200-250		14.30	11.36	9.88	8.98	8.23	7.63	7.19	6.65
964-5813	0-13§§	50 H @ 3 mA DC	6000	11.80	9.37	8.15	7.41	6.80	6.30	5.93	5.48
964-5814	0-14*	200	500K	13.80	10.97	9.54	8.68	7.95	7.37	6.94	6.41
964-5816	0-16*	250 CT	50K	18.55	14.75	12.81	11.65	10.68	9.90	9.31	8.62
964-5818	0-18**	10K-2.5K S; 4 mA	2K-5000	14.30	11.36	9.88	8.98	8.23	7.63	7.19	6.65
964-5819	0-19**	10K-2.5K S; 4 mA	4K-1KS	14.30	11.36	9.88	8.98	8.23	7.63	7.19	6.65
964-5822	0-22‡‡	400 CT/500 CT; 20 mA	3.2/4	10.02	7.96	6.92	6.30	5.77	5.35	5.03	4.66
964-5825	0-25§	600-500 S	2000-500 S	14.30	11.36	9.88	8.98	8.23	7.63	7.19	6.65
964-5826	0-26**	10K CT; 4 mA	100-20K	14.30	11.36	9.88	8.98	8.23	7.63	7.19	6.65
964-5827	0-27**	10K CT; 4 mA	500-125 S	14.77	11.74	10.22	9.29	8.51	7.89	7.43	6.87
964-5830	0-30**	500-125 S; 20 mA	500-125 S	14.55	11.56	10.05	9.14	8.37	7.77	7.30	6.76
964-5837	0-37‡‡	4K/1K S; 4 mA	600/150 S	14.55	11.56	10.05	9.14	8.37	7.77	7.30	6.76
964-5817	*0-17*	*Mumetal Shield; for any Ouncer unit*		2.75	2.19	1.90	1.73	1.59	1.47	1.39	1.28
964-5800	0-BR	Ouncer Chassis Mounting Bracket		.77	.61	.53	.48	.45	.41	.39	.36

Sealed Units Weigh Just One Ounce

Sealed in a drawn aluminum housing. Mounting opposite terminal board. Ideal for portable broadcast, aircraft, concealed service. High fidelity characteristics. Max. levels: 0-1 thru 0-16, 6.3 mW 8 dBm; 0-18 thru 0-21 and 0-26 thru 0-29, 100 mW, 20 dBm; 0-25, 30 mW, 15 dBm; 0-30 and 0-37, 1 W at 200 Hz. Applications: *low-impedance to grid; †mixing, matching; §transistor input; ‡interstage plate to grid; **transistor interstage; ††plate to line output. ‡‡transistor to VC. §§inductor. "S" indicates split winding. Current where given is unbal. mADC. 1 3/16" h. x 7/8" dia. 1 1/16" mtg. ctrs., 2 oz.

MOLDED CASE SUBOUNCERS AND SUB-SUBOUNCERS FOR MINIATURE AUDIO CIRCUITS

Stock No.	Mfr's Type	Use	Primary Imped. Ohms	Sec. Imped. Ohms	EACH 1-2	3-4	5-9	10-24	25-49	50-99	100-249	250-499
964-6330	SO-15P	T. Output	600CT	600S	13.80	11.74	10.22	9.29	8.51	7.89	7.43	6.87
964-6416	SSO-8P	T. to PP Sec.	10K	2000CT	14.55	11.56	10.05	9.14	8.37	7.77	7.30	6.76
964-6428	SSO-14P	T. Interstage	10K, 25K CT	200, 500CT	14.77	11.74	10.22	9.29	8.51	7.89	7.43	6.87
964-6340	SSO-15P	T. Interstage	20K, 30K CT	800, 1200CT	14.77	11.74	10.22	9.29	8.51	7.89	7.43	6.87
964-6440	SSO-20P	Output	1500CT	600CT	13.80	10.96	9.53	8.67	7.94	7.36	6.93	6.41
964-6450	SSO-25P	T. Interstage	10K CT	10K/2500S	15.02	11.94	10.39	9.44	8.66	8.03	7.55	6.98
964-6454	SSO-27P	Tr. Out or Dr	4K CT	600S	15.52	12.33	10.73	9.75	8.94	8.29	7.80	7.22

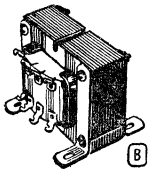


Epoxy-encased, vacuum molded and hermetically sealed. Meet specifications of MIL-T-27B Grade 5. For use in a wide variety of miniature audio circuits. Response, 300 Hz-20 kHz. Plug-in pin terminals are 1/4" x .04" diameter. "S" in table below indicates split windings. Mfr's type SO-15P has maximum dBm level of +24; all others, +20. SO-P Series, 3/4x1x23/32" high. SSO-P Series, 3/4x7/8x9/16" hi. Av. shpg. wt. 1/2 oz.

ESSEX Stancor products — STANCOR

Filter Chokes, Audio Transformers

A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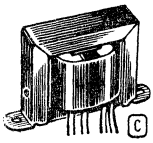
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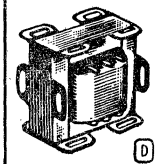
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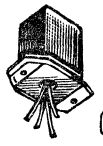
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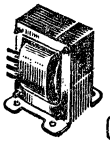
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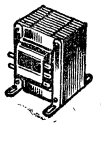
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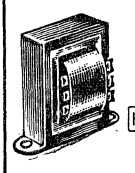
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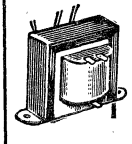
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FILTER CHOKES

All ratings are with maximum DC in winding. Rated at 1500 volts rms, except *2000, ‡2500, †3000. Filter chokes listed in table below are designed for both input and smoothing use. C2690, C2691 and C2692 have dual windings; first rating is series operation and second rating parallel. §PC mounting.

Stock No.	Mfr's Type	Fig.	H	mA	DC Res. Ohms	Size H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-0046	C1001†	C	10.5	225	225	2⅝x4x2⅛"	2¼	6.80	4.54	4.28	4.03	2.60	2.37
928-0047	C1002	C	15.0	75	400	2⅜x3¾x2¼"	1¼	5.30	3.53	3.33	3.14	2.00	1.82
928-0048	C1003	C	16.0	50	580	2x3¼x1⅝"	1	5.37	3.58	3.38	3.18	1.54	1.40
928-0090	C1277	C	7.0	50	300	1⅝x2⅞x1⅜"	¾	5.02	3.35	3.16	2.98	1.48	1.35
928-0049	C1355	D	8.0	75	290	2x2⅜x1⅝"	1	5.65	3.77	3.56	3.35	1.75	1.59
928-0051	C1411†	A	4.5	200	80	3½x2 13/16x4½"	3½	12.82	8.54	8.07	7.59	4.50	4.10
928-0052	C1412†	A	4.0	250	60	3½x2 13/16x3⅝"	4½	15.17	10.72	9.55	8.99	4.75	4.32
928-0053	C1515	C	20.0	15	900	1⅝x2⅞x1⅜"	1	4.95	3.30	3.12	2.94	1.55	1.41
928-0054	C1706	C	4.5	50	300	1⅜x2⅜x1¼"	¾	3.27	2.18	2.06	1.94	1.04	.95
928-0055	C1707	C	7.0	50	550	1⅜x2⅜x1¼"	¾	4.45	2.97	2.81	2.64	1.09	.99
928-0056	C1708	C	13.0	65	500	2x3¼x1¼"	1	4.85	3.23	3.05	2.87	1.61	1.47
928-0057	C1709	C	8.0	85	250	2x3¼x1⅞"	1¾	4.62	3.08	2.91	2.74	1.69	1.54
928-0058	C1710	C	7.0	150	200	2⅝x4x2"	2¼	7.62	5.09	4.80	4.52	2.69	2.45
928-0059	C1721†	F	8.5	200	120	3 7/16x2 13/16x3⅛"	4½	17.55	11.70	11.05	10.40	6.35	5.77
928-0060	C1722†	F	8.0	00	80	4 9/16x3¾x3⅛"	7½	19.57	13.50	12.33	11.60	7.19	6.54
928-0061	C2303*	C	2.5	130	100	2x3¼x1⅝"	1	5.50	3.66	3.46	3.26	1.54	1.40
928-0062	C2304	C	2.3	150	60	2x3¼x1¾"	1	6.00	3.99	3.77	3.54	1.55	1.41
928-0063	C2305	E	5.0	100	300	2 11/16x2 11/16x2¼"	1½	9.32	6.22	5.87	5.53	3.81	3.47
928-0064	C2318	C	12.0	30	400	1⅜x2⅜x1⅜"	½	3.60	2.40	2.27	2.14	1.28	1.16
928-0065	C2325	C	2.0	200	60	2⅜x3¾x1⅞"	2	5.27	3.58	3.38	3.18	1.84	1.67
928-0066	C2326	C	1.0	300	43	2⅜x3¾x2"	2¾	6.15	4.10	3.87	3.64	2.04	1.86
928-0067	C2327	C	1.5	200	85	1⅝x2⅞x1½"	¾	4.35	2.90	2.74	2.58	1.31	1.19
928-0068	C2328	C	.8	375	25	2⅜x3¾x1⅞"	1½	7.42	4.95	4.68	4.40	2.41	2.19
928-0069	C2334	C	2.8	300	60	2⅝x4x2⅛"	2½	10.10	6.72	6.35	5.98	2.56	2.33
928-0091	C2343	C	.75	300	32	1⅝x2⅞x1⅜"	¾	4.25	2.84	2.68	2.52	.....	.....
928-0092	C2344	C	1.5	10	85	1¼x2⅛x1⅛"	½	3.37	2.25	2.13	2.00	.....	.....
928-0070	C2685	B	.035	2A	.75	2⅝x2⅛x2⅝"	2	7.87	5.26	4.96	4.67	2.55	2.32
928-0071	C2686	B	.025	4A	.425	2⅞x2⅝x3⅜"	3½	13.55	9.04	8.53	8.03	5.10	4.64
928-0072	C2687	B	.010	8A	.15	3 3/16x3x3¾"	5½	14.97	9.98	9.43	8.87	6.15	5.60
928-0073	C2688	B	.010	12½A	.11	3½x4⅛x2⅞"	6	17.62	11.75	11.10	10.45	6.40	5.82
928-0074	C2689	B	.005	22½A	.03	3 13/16x4½x4⅜"	12	29.75	19.83	18.73	17.62	11.41	10.38
928-0075	C2690	F	.3/.075	3/.75	3/.75	3 7/16x2 13/16x3"	5	14.05	9.37	8.85	8.33	5.25	4.78
928-0076	C2691	F	.08/.02	2.5/5A	.6/.15	3 13/16x3⅛x3½"	7	19.55	13.03	12.31	11.58	8.00	7.28
928-0093	C2692	G	.024/.006	20A/40A	.12/.03	5¼x4 7/16x5¼"	21¼	68.12	45.41	42.89	40.37	.....	.....
928-0077	C2704	C	9.0	125	250	2⅜x3¾x1⅞"	1¾	6.75	4.50	4.25	4.00	2.51	2.28
928-0078	C2705‡	A	10.0	200	150	3½x2 13/16x3 9/16"	4½	13.85	9.23	8.72	8.21	6.16	4.70
928-0079	C2707	C	2.0	15	70	1¼x2⅛x1⅛"	¼	3.55	2.37	2.24	2.10	1.23	1.12
928-0080	C2708	C	.032	600	10	2x3¼x1⅝"	1¼	5.40	3.60	3.40	3.20	2.14	1.95
928-7600	RC-12150	E	12.0	150	150	3⅞x4x3¼"	5½	22.50	14.99	14.16	13.33	8.69	7.91
928-7620	RS-1555	E	15.0	55	380	2 11/16x2 11/16x2¼"	2	16.10	10.74	10.14	9.54	5.33	4.85
928-8155	TC-2§	C	.011	1A	0.75	1 3/16x1 3/16x1⅛"	⅔	3.12	2.09	1.97	1.86	1.00	.91

FIXED-IMPEDANCE OUTPUT TRANSFORMERS

Types A3311 and A3800 are Fig. A; A3327 and A3329, Fig. F; others are Fig. C. The single-ended transformers are matched to voice coil, while the push-pull transformers are matched to voice coil and/or line. Made from high-quality materials to provide excellent power handling capabilities and frequency response. See table below for complete specifications. *Push-pull transformers, while the others are singled-ended.

Stock No.	Mfr's Type	Primary Imp. (Ohms)	Secondary Impedance (Ohms)	Watts	Size (In.) H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-0002	A3309	5000	3-4	3	1¼x2⅛x1⅜	½	4.15	2.76	2.61	2.46	1.31	1.19
928-0003	A3311*	10k CT	500/15/8/4	25	3½x2 13/16x3¼	3½	13.92	9.28	8.76	8.25	4.40	4.00
928-0327	A3327	25,000	4	5	1⅜x2⅜x1⅜	½	3.70	2.47	2.33	2.19	1.33	1.21
928-0004	A3328	4000	3.5	3	1¼x2⅛x1⅛	½	3.02	2.02	1.90	1.79	1.14	1.04
928-0329	A3329	8000	3.5	3	1¼x2⅛x1⅛	½	3.02	2.02	1.90	1.79	1.15	1.05
928-0005	A3332	2000	3.2	3	1¼x2⅛x1¼	½	3.57	2.39	2.25	2.12	.99	.90
928-0006	A3800*	5000 CT	500/250/15/8/4	30	3½x2 13/16x3¼	4	13.97	9.31	8.79	8.27	4.81	4.38
928-0017	A3877	5000	4	5	1⅜x2⅜x1⅜	½	3.20	2.13	2.01	1.90	1.08	.98
928-0018	A3879	10,000	4	5	1⅜x2⅜x1⅜	½	3.67	2.45	2.31	2.18	1.08	.98

LINE-TO-VOICE-COIL TRANSFORMERS

*Type A3837 is an autotransformer for one or more speakers in parallel across 500-ohm line. †Constant-voltage PA, EIA 70.7-volt types. §25-volt types. Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	Primary Impedance	Sec. Imp.	Watts	Mtg. Ctrs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
928-0012	A3837*	H	500	.06 to 48	15	2⅜"	9.15	6.09	5.75	5.42	2.59	2.36
928-0383	A3883	H	500	4/6/8/15	25	2⅜"	6.32	4.22	3.99	3.75	.....	.....
928-0493	A4793	H	78/156/312/625/1250	8	8	2"	7.32	4.88	4.61	4.34	.....	.....
928-0028	A7947	J	2000/1500/1000/500	6-8/3.2	8	2⅜"	6.20	4.13	3.90	3.67	1.71	1.56
928-0033	A8101	J	500	3.2/6-8	5	2"	3.92	2.61	2.47	2.32	1.08	.98
928-0034	A8102†	H	625/1250/2500/5000/10000	4/8/16	8	2"	6.15	4.10	5.87	3.64	1.85	1.68
928-0035	A8103†	H	312/625/1250/ 2500/5000/10000	4/8/16	16	2 13/16"	9.70	6.47	6.11	5.75	2.71	2.47
928-0036	A8104	H	3000/2000/ 1500/1000/500	16/8/4	10	2⅜"	7.80	5.19	4.90	4.62	2.08	1.89
928-0037	A8105†	J	1000/2000/4000/ 8000/16000	4/8	5	2"	6.25	4.18	3.94	3.72	1.66	1.51
928-0031	A8080†	J	1000/1250/1667/2500/5000	8/16	5	2"	6.22	4.14	3.91	3.68	1.68	1.53
928-0032	A8082†	H	333/357/384/417/455	8/16	15	2⅜"	7.67	5.12	4.84	4.55	2.10	1.91
928-0688	A8088	J	156/312/625/1250/2500/ 5000	8	4	2⅜"	5.22	3.48	3.29	3.10	.....	.....
928-0695	A8095	J	125/250/500/1000/2000	4/8	5	2"	5.95	3.96	3.74	3.52	.....	.....
928-0019	A8096§	H	78/156/132/625/1250	4/8/16	8	2"	8.22	5.48	5.18	4.87	1.81	1.65
928-0020	A8097§	H	39/78/156/312/625/1250	4/8/16	16	2 13/16"	8.97	5.98	5.64	5.31	2.84	2.58
928-0708	A8108	J	4000/8000/6000/32000	4/8	5	2"	9.72	6.49	6.13	5.77	.....	.....

Transformers: Power 363-368—Filame t 369-371—Filter Chokes, Audio 372-377—Transistor 378-381

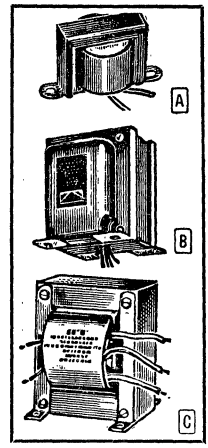
Triad Filter Chokes, Audio Transformers

FILTER CHOKES, AUDIO TYPES

C SERIES SMOOTHING FILTER REACTORS

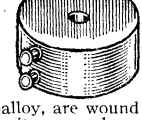
Smoothing filters with inductance tolerance of −20%, +50%. Transformer types C-47U and C-48U have split windings. High performance, longevity, and superior precision design techniques.

Stock No.	Mfr's Type	Fig.	DC mA	Ind. H	Res. (Ohms)	Test Volts	Size H x W x D	Wt., Lbs.	EACH 1-4	5-9	10-24	25-49	50-99
954-0102	C-2X	A	15	2	70	1500	1 3/16x2 1/16x1 1/4"	.21	3.22	2.14	1.93	1.74	1.62
954-0101	C-1X	A	20	15	1000	1000	1 3/16x2 1/16x1 1/4"	.21	3.62	2.41	2.17	1.95	1.81
954-0103	C-3X	A	50	10	500	1500	1 5/8x2 13/16x1 1/2"	.6	4.27	2.84	2.56	2.30	2.14
954-0106	C-6X	A	65	5	330	1500	1 5/8x2 13/16x1 1/2"	.6	4.12	2.74	2.47	2.22	2.06
954-0105	C-5X	A	75	12	390	1000	1 15/16x3 5/16x1 3/4"	1	5.22	3.47	3.12	2.81	2.61
954-0107	C-7X	A	90	10	270	1000	1 15/16x3 5/16x2"	1.3	5.65	3.76	3.38	3.04	2.83
954-0111	C-11X	A	110	6	160	1500	2 9/32x3 11/16x2"	1.5	6.90	4.59	4.13	3.72	3.46
954-0110	C-10X	A	125	9	250	1000	2 9/32x3 11/16x2"	1.6	6.82	4.54	4.09	3.68	3.42
954-0112	C-12A	B	160	6	165	1500	2 25/32x2 11/32x2 1/2"	2	9.99	6.67	6.00	5.40	5.02
954-0114	C-14A	B	200	6	150	1500	3 3/16x2 21/32x2 5/8"	2.5	11.17	7.45	6.71	6.04	5.62
954-0121	C-21X	A	225	1.5	65	1500	1 15/16x3 5/16x1 3/4"	1.1	4.85	3.22	2.89	2.60	2.42
954-0124	C-24X	A	240	1	50	1500	1 5/8x2 13/16x1 1/2"	.75	4.07	2.71	2.44	2.19	2.04
954-0115	C-15A	B	250	4	100	1500	3 3/16x2 21/32x2 5/8"	2.65	10.77	7.19	6.47	5.82	5.41
954-0123	C-23X	A	260	1.2	45	1500	1 15/16x3 5/16x2"	1.35	5.85	3.89	3.50	3.15	2.93
954-0127	C-27X	A	290	0.7	30	1500	1 5/8x2 13/16x1 1/2"	.75	3.70	2.46	2.21	1.99	1.85
954-0117	C-17X	A	300	1.5	40	1500	2 9/32x3 11/16x2"	1.6	5.97	3.97	3.57	3.21	2.99
954-0119	C-19A	B	300	10	105	3000	4 1/4x3 19/32x4 1/8"	7.75	22.55	15.04	13.54	12.19	11.34
954-0129	C-29X	A	375	1.5	50	1500	2 9/32x3 11/16x2"	1.6	6.12	4.07	3.66	3.29	3.06
954-0120	C-20A	B	400	6	60	3000	4 5/8x3 15/16x4 1/2"	10.5	26.10	17.40	15.66	14.09	13.10
954-0140	C-40X	A	600	0.32	10	1500	1 15/16x3 5/16x2"	1.3	5.07	3.37	3.03	2.73	2.54
954-0147	C-47U	C	1A/2A	.3/.075	3/.75	1500	3 1/2x2 7/8x3 3/16"	4.6	14.02	9.35	8.42	7.58	7.05
954-0148	C-48U	C	2.5A/5A	.08/.02	.61/.155	1500	3 13/16x3 3/16x3 9/16"	6.75	18.02	12.00	10.80	9.72	9.04



EC SERIES EPOXY-MOLDED TOROIDAL INDUCTORS

Stock No.	Mfr's Type	L (mH)	Approx. Ohms	DC mA for 5% L Drop	EACH 1-4	5-9	10-24	25-49	50-99
954-0420	EC-020A	20	1.85	116	9.40	6.27	5.64	5.08	4.72
954-0430	EC-030A	30	2.85	95	8.87	5.92	5.33	4.80	4.46
954-0450	EC-050A	50	5.50	74	9.57	6.38	5.74	5.17	4.81
954-0460	EC-100A	100	13.00	52	10.37	6.92	6.23	5.61	5.22
954-0465	EC-200A	200	23.00	37	10.07	6.72	6.05	5.45	5.07
954-0467	EC-300A	300	35.00	30	10.42	6.95	6.26	5.63	5.24
954-0468	EC-500A	500	72.00	23	10.40	6.93	6.24	5.62	5.23
954-0470	EC-1000A	1000	134.00	16.5	10.87	7.25	6.53	5.88	5.47



Encapsulated per MIL-T-27B Gold-plated fixed terminals. Highly resistant to shock and vibration. High Q and high measure of stability with level and temperature variations. The cores, of powdered nickel-alloy, are wound with low distributed capacitance and resistance—each coil providing inductance tolerance of ±2%. Size, 23/32" high; 1 5/16" diameter. Av. wt., 2 oz.

AUDIO INPUT TRANSFORMERS (Line or Mike to Grid) Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Application	Primary Impedance	Response Hz ±3dB	Mtg. Ctrs.	EACH 1-4	5-9	10-24	25-49	50-99
954-0003	A-3X	D	Mike or line to grid	400 CT	200-10,000	1 3/4"	5.20	3.46	3.11	2.76	2.57
954-0004	A-4X	D	Line to single grid	500CT/333/200CT /125/67.5CT/50	100-20,000	1 3/4"	6.65	4.42	3.98	3.58	3.13

INTERSTAGE TRANSFORMERS (Plate to Grid) Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	Watts Out.	Application	Imp. (Ohms) Pri.	Sec.	Mtg. Ctrs.	EACH 1-4	5-9	10-24	25-49	50-99
954-0031	A-31X	D	3	Plate to sgl. or P-P grids	10k	90kCT	2"	6.42	4.27	3.84	3.46	3.22
954-0033	A-33X	D	6	Plate to sgl. or P-P grids	10k	90kCT	2 13/16"	6.27	4.17	3.75	3.38	3.14

LOW-POWER AUDIO TRANSFORMERS *40-15,000 Hz. †Static shields. ‡Split primary and secondary. 5 oz.

Stock No.	Mfr's Type	Fig.	mW Output	Application	Impedance (Ohms) Pri.	Sec.	EACH 1-4	5-9	10-24	25-49	50-99
954-0009	A-9J†	E	1	Line or mike to grid	600/250/50	85k	17.62	11.75	10.58	9.52	8.85
954-0010	A-10J†	E	1	Balanced line, mike to grid	600CT/150	60k	17.67	11.79	10.61	9.55	8.88
954.0012	A-12J†	E	10	Balanced line, mike to grid	600CT/150	60k	19.40	12.94	11.65	10.49	9.76
954-0066	A-66J*	E	100	Plate to line	15k	600/250/50	16.70	11.14	10.03	9.03	8.39
954-0067	A-67J‡†	E	50	Balanced line to balanced line	600CT/150	600CT/150	17.17	11.45	10.31	9.28	8.63

DRIVER TRANSFORMERS

*Transistor type, used in Delco 50- and 100-watt solid-state amplifiers; min. pri. inductance, 3.5 H. Av. wt., 2 lbs

Stock No.	Mfr's Type	Fig.	mW Output	Application	Impedance (Ohms) Pri.	Sec.	EACH 1-4	5-9	10-24	25-49	50-99
954-0089	A-89A	F	15	Univ. P-P plates to AB or B grids	4k/8k	4.4k/8.8k	14.62	9.72	8.75	7.88	7.33
954-4160	TY160X*	D	3-5	Class AB, P-P. Turns ratio, 6:1:1	45(DC Pri)	3.6, ea. (DC sec.)	8.47	5.65	5.09	4.58	4.26

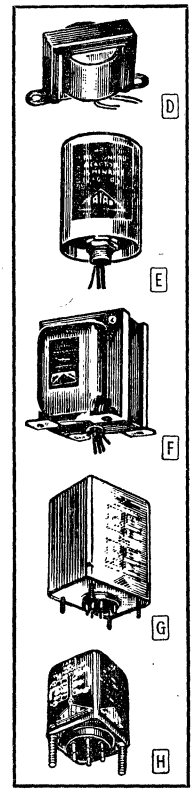
HERMETICALLY SEALED LOW-LEVEL AUDIO OUTPUT (Mixing, Matching, Bridging) Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	mW Out.	Application	Impedance (Ohms) Primary	Secondary	EACH 1-4	5-9	10-24	25-49	50-99
954-0952	HS-52	G	400	P-P plates to line	20kCT/5k	600/250/150/62.5	39.40	26.27	23.64	21.28	19.79

HERMETICALLY SEALED MINIATURE AUDIO TRANSFORMER

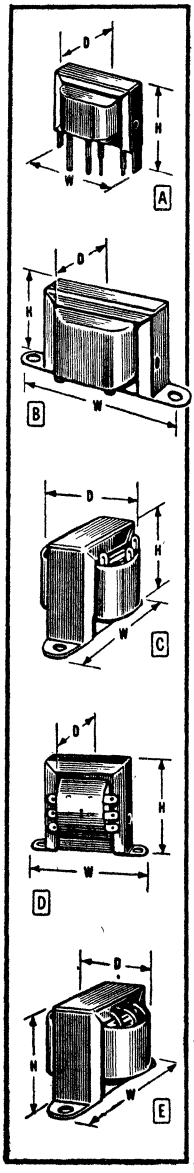
Feature layer-wound coils of microscopically fine wire Static shield. Shpg wt., 2 oz.

954-2002	JAF-2	H	1	Line or mike to grid	600/250/50	250k	23.00	15.33	13.80	12.42	11.55



Transformers: Power 363-368-Filament 369-371-Filter Chokes, Audio 372-277-Transistor 378-381

ALLIED Transistor and Line Transformers



TRANSISTOR TRANSFORMERS

INPUT TRANSFORMERS

Stock No.	Mfr's Type	Fig.	Impedance, Ohms Pri.	Impedance, Ohms Sec.	Res., Ohms Pri.	Res., Ohms Sec.	Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0541	6T42HF	B	600 CT	10	42	.8	.050	13/16x15/8x3/4"	1 3/8"	3.70	3.15	2.96	1.80	1.64
705-0542	6T44PC	A	30 CT	50K	14.7	4060	.150	21/32x13/16x9/16"	25/32"	5.55	4.15	3.91	2.61	2.41
705-0543	6T45HF	B	1K CT	200K CT	123	1815	.300	13/16x15/8x3/4"	1 3/8"	5.68	4.73	4.54	2.61	2.41
705-0546	6T49HF	B	500K	200 CT	7000	8.5	.300	13/16x15/8x3/4"	1 3/8"	6.80	5.78	5.44	3.02	2.79

OUTPUT TRANSFORMERS

Stock No.	Mfr's Type	Fig.	Impedance, Ohms Pri.	Impedance, Ohms Sec.	Res., Ohms Pri.	Res., Ohms Sec.	Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0526	6T27PC	A	350 CT	4, 12	38	1.45	.150	21/32x13/16x9/16"	25/32"	6.21	5.29	4.98	2.53	2.34
705-0527	6T28PC	A	500 CT	4, 8, 16	75.3	3.55	.150	21/32x13/16x9/16"	25/32"	5.50	4.61	4.34	2.61	2.41
705-0528	6T29PC	A	600 CT	4, 8, 16	73.2	3.2	.150	21/32x13/16x9/16"	25/32"	5.50	4.57	4.29	2.61	2.41
705-0529	6T30PC	A	825 CT	4, 8, 16	75	2.7	.150	21/32x13/16x9/16"	25/32"	5.68	4.83	4.54	2.61	2.41
705-0530	6T31PC	A	1250	4, 12	132.5	1.4	.150	21/32x13/16x9/16"	25/32"	5.68	4.83	4.54	5.52	2.32
705-0532	6T33PC	A	10K CT	4, 8, 16	1174	2.6	.150	21/32x13/16x9/16"	25/32"	5.72	4.87	4.58	2.69	2.48
705-0521	6T22HF	B	1000	4, 8, 16	180	3.5	.200	13/16x15/8x3/4"	1 3/8"	7.92	5.88	5.53	3.74	3.45
705-0522	6T23HF	B	2000 CT	4, 8, 16	250	4	.200	13/16x15/8x3/4"	1 3/8"	8.45	5.99	5.64	4.00	3.69
705-0534	6T35HF	B	100 CT	4, 8, 16	10.9	1.45	.300	13/16x15/8x3/4"	1 3/8"	5.72	4.16	3.92	2.70	2.49
705-0535	6T36HF	B	160	4, 8, 16	18.7	1.4	.300	13/16x15/8x3/4"	1 3/8"	5.68	4.83	4.54	2.61	2.41
705-0536	6T37HF	B	400 CT	4, 8, 16	34	1.5	.300	13/16x15/8x3/4"	1 3/8"	5.47	3.99	3.75	2.58	2.38
705-0537	6T38HF	B	500 CT	4, 8, 16	47	.85	.300	13/16x15/8x3/4"	1 3/8"	5.55	4.49	4.20	2.61	2.41
705-0539	6T40HF	B	2500	4, 8, 16	172	1.15	.300	13/16x15/8x3/4"	1 3/8"	5.68	4.83	4.54	2.58	2.38
705-0540	6T41HF	B	3000	4, 8, 16	192	1.2	.300	13/16x15/8x3/4"	1 3/8"	5.48	4.66	4.38	2.58	2.38
705-0523	6T24HF	B	48 CT	8, 16	5	1.5	5	2x3 5/16x1 3/4"	2 13/16"	6.02	4.73	4.48	2.84	2.62
705-0524	6T25HF	B	20 CT	8	.55	.35	10	1 7/16x2 3/8x1 3/4"	2"	3.44	2.96	2.78	1.48	1.36
705-0548	6T51VF	B	48 CT	3.2, 8, 16	3.6	1.4	10	2 5/16x2 7/8x2"	2 3/8"	5.10	4.31	4.06	2.40	2.22
705-0549	6T52VF	B	100 CT	3.2, 8, 16	6.6	1.5	10	2 5/16x2 7/8x2"	2 3/8"	5.07	4.20	3.94	2.39	2.20

INTERSTAGE TRANSFORMERS

Stock No.	Mfr's Type	Fig.	Impedance, Ohms Pri.	Impedance, Ohms Sec.	Res., Ohms Pri.	Res., Ohms Sec.	Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0508	6T8HF	B	500 CT	5K CT	37	250	1.0	1 7/16x2 3/8x1 3/8"	2"	4.49	4.81	3.61	2.42	2.20
705-0510	6T10PC	A	500 CT	50	59.7	7.9	.150	21/32x13/16x9/16"	25/32"	5.43	4.62	4.34	2.18	1.99
705-0511	6T11PC	A	500 CT	50K	76.8	5135	.150	21/32x13/16x9/16"	25/32"	5.47	4.39	4.13	2.58	2.38
705-0544	6T46PC	A	1500	500 CT	104	46.5	.150	21/32x13/16x9/16"	25/32"	5.68	4.83	4.55	2.40	2.22
705-0513	6T13PC	A	5K CT	7500 CT	650	790	.150	21/32x13/16x9/16"	25/32"	5.55	4.62	4.34	2.61	2.41
705-0514	6T14PC	A	5K CT	10K CT	635	1100	.150	21/32x13/16x9/16"	25/32"	5.68	4.83	4.55	2.53	2.34
705-0515	6T15PC	A	5K CT	80K CT	573	5740	.150	21/32x13/16x9/16"	25/32"	5.92	5.03	4.73	2.66	2.46
705-0517	6T17PC	A	10K	2K CT	1200	257	.150	21/32x13/16x9/16"	25/32"	5.30	3.99	3.75	2.52	2.32
705-0518	6T18PC	A	10K	3K CT	1200	385	.150	21/32x13/16x9/16"	25/32"	5.30	4.38	4.13	2.52	2.32
705-0519	6T19PC	A	500 CT	150 CT	62	21.2	.150	21/32x13/16x9/16"	25/32"	5.37	4.05	3.82	2.53	2.34
705-0552	6T55PC	A	20K	800 CT	1350	95	.150	21/32x13/16x5/8"	25/32"	4.58	3.89	3.76	2.14	1.98
705-0506	6T6HF	B	100 CT	10 CT	4.3	.8	.250	1 1/4x2 1/16x1 3/8"	1 3/4"	3.48	2.96	2.78	1.49	1.38
705-0507	6T7HF	B	100	1K CT	5.8	45	.250	1 7/16x2 3/8x1 3/8"	2"	2.89	2.46	2.31	1.53	1.40
705-0520	6T20HF	B	100K	1500 CT	3250	143	.300	13/16x15/8x3/4"	1 3/8"	5.68	4.83	4.54	2.65	2.64
705-0545	*6T48HF*	B	500 CT	500 CT	40	55	.300	13/16x15/8x3/4"	1 3/8"	5.56	4.73	4.44	2.40	2.22

DRIVER TRANSFORMERS

Stock No.	Mfr's Type	Fig.	Impedance, Ohms Pri.	Impedance, Ohms Sec.	Res., Ohms Pri.	Res., Ohms Sec.	Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0554	6T58HF	E	2000 CT	200 CT	748	120	.100	5/8x1 1/4x1/2"	1 1/16"	8.75	6.66	6.80	4.16	3.84
705-0550	6T53HF	B	100	200 CT	6.5	15.5	.500	1 1/4x2 1/16x1 1/4"	1 3/4"	3.86	3.28	3.08	1.70	1.57
705-0551	6T54HF	B	500 CT	200 CT	36.5	15.5	.500	1 1/4x2 1/16x1 1/4"	1 3/4"	3.97	3.39	3.18	1.62	1.50
705-0503	6T3HF	B	100	100 CT	9	10.8	.500	1 11/16x2 13/16x1 3/8"	2 3/8"	3.70	3.15	2.96	1.57	1.43
705-0505	6T5HF	B	20	36 CT	2	4	1.0	1 1/4x2 1/16x1 1/4"	1 3/4"	3.27	2.77	2.62	1.55	1.41

STANDARD LINE-TO-VOICE-COIL TRANSFORMERS

‡Autoformer for connecting one or more speakers across 500-ohm line. *Pri/sec. imp. 500/.06 to 8, 1000/.12 to 16, 1500/.18 to 24, 2000/.24 to 32, 2500/.30 to 40, 3000/.36 to 48. Av. shpg. wt., 1¼ lbs.

Stock No.	Mfr's Type	Fig.	Primary Impedance	Sec. Imp.	Audio Watts	Size HxWxD	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0823	6W29HFL	C	500	4, 8	5	1 3/8x2 3/8x1 1/2"	2.81	2.40	2.24	1.23	1.14
705-0824	6W30VHL	D	500	4, 6, 8, 15	25	2 3/8x2 7/8x1 7/8"	5.02	3.87	3.64	2.37	2.19
705-0821	6W27HFL	C	2000/1500/1000/500	4, 8	8	1 5/8x2 13/16x1 5/8"	4.44	3.78	3.56	2.01	1.86
705-0837	6W43HFL	C	2000/1500/1000/500	4, 8	4	1 3/8x2 3/8x1 1/2"	3.45	2.91	2.67	2.13	1.99
705-0838	6W44HFL	C	2000/1500/1000/500	4, 8	12	2x3 1/4x1 7/8"	5.24	4.46	4.20	2.22	2.05
705-0839	6W45VFL	D	3000/2000/1500/1000/500	4, 8, 16	10	2 3/8x2 7/8x1 7/8"	5.60	4.75	4.48	2.66	2.46
705-0868	6W74VFL	D‡	*See impedance ranges above.		15	2 3/8x2 7/8x2"	6.57	5.57	5.25	3.10	2.86

POWER TRANSFORMERS

Primaries for 117 V, 60 Hz AC. *For bridge rectifier—identical dual plate supplies.

Stock No.	Mfr's Type	Fig.	Plate Supply AC V	Plate Supply DC mA	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
705-0158	6K133VG	.....	13 or 18*	900	3 1/8x2 5/8x2 15/16"	2x1 15/16"	8.23	7.04	6.61	3.71	3.43
705-0154	6K129VG	.....	80 CT	1200	3 1/2x2 15/16x3 9/16"	2 1/4x2 3/8"	11.07	9.40	8.86	5.56	5.05

STANCOR AND TRIAD TO ALLIED CROSS REFERENCE—TRANSISTOR TRANSFORMERS

Stancor No.	Allied No.	Stancor No.	Allied No.	Stancor No.	Allied No.	Stancor No.	Allied No.	Triad No.	Allied No.
A3883	6W30VFL	TA10	6T23HF	TA30	6T13PC	TA45	6T41HF	TY33X	6T37HF
A7947	6W27HFL	TA11	6T24HF	TA31	6T14PC	TA46	6T20HF	TY43X	6T55PC
A7949	6W44HFL	TA12	6T25HF	TA32	6T15PC	TA47	6T45HF	TY44X	6T22HF
A8101	6W29HFL	TA16	6T5HF	TA33	6T33PC	TA52	6T48HF	TY45X	6T38HF
A8104	6W45VFL	TA18	6T44PC	TA35	6T17PC	TA54	6T55PC	TY46X	6T7HF
P8196	6K129VG	TA20	6T27PC	TA36	6T18PC	TA55	6T49HF	TY47X	6T23HF
TA1	6T42HF	TA21	6T28PC	TA38	6T19PC	TA56	6T51VF	TY48X	6T35HF
TA2	6T6HF	TA22	6T10PC	TA39	6T35HF	TA57	6T52VF	TY51X	6T58HF
TA3	6T7HF	TA23	6T29PC	TA40	6T36HF	TA58	6T53HF	TY61X	6T3HF
TA4	6T8HF	TA24	6T11PC	TA41	6T37HF	TA59	6T54HF	TY63X	6T24HF
TA7	6T3HF	TA26	6T31PC	TA42	6T38HF	TP1	6K133VG	.....	.....
TA9	6T22HF	TA28	6T46PC	TA44	6T40HF	.....	.....	.....	.....

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

UTC Transistor Transformers

DO-T TRANSISTOR TRANSFORMERS AND INDUCTORS

Subminiature, 5/16" diameter x 13/32" high. Units are rugged, fully hermetically sealed. Exceed MIL-T-27 B, Grade 4. Turns are circular to eliminate turn corner stress and provide uniform wire lay. Bobbins of units completely rigid. 1½" leads, plastic, insulated copper. Actual wt. 1/10 oz. Shpg. wt. 1 oz.

Stock No.	Mfr's Type DO-	Application	Primary Ohms	Secondary Ohms	EACH 1-2	3-4	5-9
964-2000	T1	Interstage	20K-30K	800-1200	10.02	7.96	6.92
964-2002	T2	Output	500-600	50-60	9.02	7.17	6.23
964-2003	T3	Output	1K-1.2K	50-60	9.02	7.17	6.23
964-2004	T4	Output	600	3.2	9.02	7.17	6.23
964-2006	T6	Output	10K	3.2	10.02	7.96	6.92
964-2007	T7	Input	200K	1K	15.52	12.33	10.73
964-2008	T8	Inductor 3.5 H @ 2 ma DC			8.02	6.37	5.54
964-2009	T9	Out. or Driver	10K-1K2	500-600 CT	11.02	8.77	7.63
964-2010	T10	Driver	10K-12.5K	1.2K-1.5K CT	11.02	8.77	7.63
964-2012	T12	S/PP Output	150-200 CT	12-16	9.55	7.58	6.60
964-2013	T13	S/PP Output	300-400 CT	12-16	9.55	7.58	6.60
964-2014	T14	S/PP Output	600-800	12-16	10.02	7.96	6.92
964-2015	T15	S/PP Output	800-1070 CT	12-16	10.02	7.96	6.92
964-2016	T16	S/PP Output	1K-1.33K CT	12-16	10.02	7.96	6.92
964-2017	T17	S/PP Output	1.5K-2K CT	12-16	10.02	7.96	6.92
964-2020	T20	Out. or Match to line	500 CT	600	10.02	7.96	6.92
964-2021	T21	Output to line	900 CT	600	10.02	7.96	6.92
964-2022	T22	Output to line	1.5K CT	600	10.02	7.96	6.92
964-2023	T23	Interstage	20K-30K CT	800-1.2K CT	11.52	9.16	7.97
964-2024	T24	Input	200K CT	1K CT	16.55	13.14	11.43
964-2025	T25	Interstage	10K-12K CT	1.5K-1.8K CT	12.02	9.56	8.31
964-2026	T26	Inductor 6 H @ 2 mA DC			9.55	7.58	6.64
964-2027	T27	Inductor 1.25 H @ 2 mA DC			8.02	6.37	5.54
964-2028	T28	Inductor .3 H @ 4 mA DC			8.02	6.37	5.54
964-2030	T30	Single/PP Output	320-400 CT	3.2-4	9.55	7.58	6.60
964-2031	T31	Single/PP Output	640-800 CT	3.2-4	10.02	7.96	6.92
964-2034	T34	Single/PP Output	1.6K-2K CT	3.2-4	10.02	7.96	6.92
964-2036	T36	Isol. or Interstage	10K-12K CT	10K-12K CT	12.55	9.97	8.67
964-2037	T37	Interstage	2K-2.5K split	8K-10K split	13.02	10.35	9.00
964-2038	T38	Interstage	10K-12K CT	K-2.4K split	13.02	10.35	9.00
964-2040	T40	Interstage	40K-50K CT	400-500 split	14.02	11.14	9.70
964-2041	T41	Output	400-500 CT	400-500 split	12.55	9.97	8.67
964-2044	T44	Interstage	80-100 CT	32-40 split	12.55	9.97	8.67
964-2047	T47	Isol. or Interstage	9K-10K CT	9K-10K CT	13.52	10.76	9.35
964-2051	T51	Interstage	2K-2.5K CT	2K-2.5K CT	13.02	10.35	9.00
964-2053	T53	Input	400-500 CT	4K-5K CT	13.02	10.35	9.00
964-2054	T54	Interstage	40K-50K CT	4K-5K CT	15.52	11.56	10.00
964-2420	T420	Isol.—pri. and sec., 28 V, 380-1000 Hz., 10 mA			13.02	10.35	9.00
964-2099	TSH	Hipermalloy shield and cover for any DO-T units			1.52	1.21	1.06

Allied Electronics Can Furnish the Entire Line of UTC Transformers and Chokes. For information on Types Not Listed and Larger Quantity Prices, Contact Your Nearest Allied Facility

DI-T TRANSISTOR TRANSFORMERS AND INDUCTORS

Subminiature. Hermetically sealed and metal cased, exceeding MIL-T-27B, Grade 4 specifications. Bobbins of units is completely rigid to eliminate stress and wire movement. 1½" solder-melting-plastic insulated copper leads. Actual wt. 1/15 oz. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type DI-	Application	Primary Ohms	Secondary Ohms	EACH 1-2	3-4	5-9
964-1008	T8	Inductor 2.5 H @ 2 mA DC			8.02	6.37	5.54
964-1009	T9	Output or Driver	10K-12K	500-600 CT	11.02	8.77	7.63
964-1011	T11	Driver	10K-12.5K	2K-2.5K CT	11.02	8.77	7.63
964-1025	T25	Interstage	10K-12K CT	1.5K-1.8K CT	12.02	9.56	8.31
964-1026	T26	Inductor 4:5 H @ 2 mA DC			9.55	7.58	6.60
964-1027	T27	Inductor .9 H @ 2 mA DC			8.02	6.37	5.54
964-1036	T36	Isol. or Interstage	10K-12K CT	10K-12K CT	12.55	9.97	8.67
964-1052	T52	Interstage	4K-5K CT	8K-10K CT	13.02	10.35	9.00
964-1053	T53	Input	400-500 CT	4K-5K CT	13.02	10.35	9.00
964-1099	TSH	Hipermalloy shield and cover for DI-T units			1.50	1.20	1.04

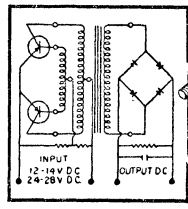
DI-T200 TRANSISTOR TRANSFORMERS

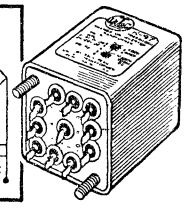
Similar in construction to DI-T series (left), but with leads of uninsulated, gold-plated .017D Dumet wire. Leads are spaced on 1/10" radius circle. Hermetically sealed, metal cased to meet MIL-T-27B Grade 4 Class R (105° max.). 5/16" x 3/8". Actual wt., 1/15 oz. Av. shpg. wt., 2 oz.

964-1245	T245	Output	500-600 CT	50-60 CT	11.52	9.16	7.97
964-1250	T250	Output	500 CT	600 CT	12.02	9.56	8.31
964-1255	T255	Output	1K-1.2K CT	50-60 CT	11.52	9.16	7.92
964-1260	T260	Output to Line	1.5K CT	600 CT	12.02	9.56	8.31
964-1265	T265	Isol. or Interstage	2K-2.5K CT	8K-10K split	14.55	11.56	10.05
964-1270	T270	Output or Driver	10K-12K CT	500-600 CT	13.02	10.35	9.00
964-1273	T273	Output	10K-12.5K CT	1.2K-1.5K CT	13.02	10.35	9.00
964-1276	T276	Interstage	10K-12K CT	2K-2.4K CT	13.02	10.35	9.00
964-1283	T283	Isol. or Interstage	10K-12K CT	10K-12K CT	14.02	11.14	9.70
964-1200	T200 SH	Hipermalloy shield and cover for DI-T200			1.25	1.00	.87

TRANSISTOR INVERTER TRANSFORMERS

Hermetically sealed to MIL-T-27B. New winding/coupling method greatly reduces transitory peaks—protects driving transistors. DC output shown for 12/14 or 24/48 V battery. Current ratings same with 6/7 V battery but output V is halved. Optimum results at 1000 Hz. Av. wt., 1½ oz.



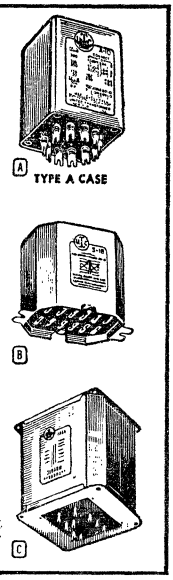


Stock No.	Mfr's Type	DC Output V	DC Output mA	Size (Inches)	EACH 1-2	3-4	5-9
964-3097	H-97	250	60	1 5/16x1 5/16x1 3/4	30.82	24.50	21.31
964-3098	H-98	375	100	1 5/8x1 5/8x2 3/8	33.07	26.28	22.86
964-3100	H-100	550	200	2 3/4x2 3/8x2 13/16	47.60	37.82	32.90

[A] ULTRACOMPACT TRANSISTOR AND TUBE-TYPE AUDIO HI-FI TRANSFORMERS

Meet broadcast standards. Response (Hz): ‡20-20,000; †40-20,000; A-27 and A-44, 30-20,000; A-20, 10-50,000; A-21, 30-30,000; A-26, 20-40,000; A-43, 20-30,000. All ±2 dB. *Multiple-alloy shield for extremely low hum pickup. §High electrostatic shielding. A-33 (hipermalloy shield) fits entire "A" series. Wt., ½ lb.

Stock No.	Mfr's Type	Application	Primary Imp. (ohms)	Secondary Imp. (ohms)	EACH 1-2	3-4	5-9	10-24
964-0010	A-10‡	Low imp. to grid	50, 125-150, 200-250, 333, 500-600	50k	33.07	26.28	22.86	20.79
964-0011	A-11*‡	Low imp. to 1, 2 grids	50, 200, 500	50k, P.P	24.80	19.71	17.15	15.59
964-0012	A-12‡	Low imp. to PP grids	Same as A-10	80k 2 sect	32.57	25.87	22.51	20.45
964-0015	A-15†	Transistor interstage	10k-2.5k	500-2k	20.02	15.92	13.84	12.59
964-0018	A-18†	1 or PP pl. to PP gr.	15k (Split)	80k P.P. 2.3:1	29.05	23.09	20.09	18.26
964-0019	A-19†	Plate to PP grids	15k—8 mA DC	80k P.P. 2.3:1	24.30	19.31	16.80	15.28
964-0020	A-20§	Mixing, matching	Same as A-10	Same as Pri.	32.57	25.87	22.51	20.46
964-0021	*A-21*§*	*Mixing, matching*	*50, 200-250, 50-600*	*Same as Pri.*	22.05	17.52	15.23	13.85
964-0022	A-22†	T. interstage or out.	500	125-250 (Split)	18.27	14.53	12.64	11.49
964-0023	A-23†	T. interstage or out.	500	4-16 (Split)	18.27	14.53	12.64	11.49
964-0026	A-26	1 or PP pl. to line	30k P. to P.	As A-10 pri.	32.32	25.69	22.34	20.32
964-0027	A-27	Xtal/hi. imp. to line	100k (Split)	As A-10 pri.	30.57	24.29	21.12	19.21
964-0028	A-28†	Transistor to V.C.	48 CT	16 (Split)/8/4	19.52	15.52	13.50	12.28
964-0035	A-35	Transistor interstage	10k-2.5k (Split)	500-125 (Split)	21.05	16.73	14.55	13.23
964-0039	A-39*‡	Line to transistor	600-150 (Split)	2000-500 (Split)	23.05	18.32	15.93	14.49
964-0043	A-43§	Mixing/matching line	600-150 (Split)	Two 600-125 (Split)	31.57	25.09	21.82	19.84
964-0044	A-44	T. interstage or out.	4k-1k (Split)	600-150 (Split)	22.05	17.52	15.23	13.85
964-0048	A-48	Hybrid circuit use	500-600	Two 500-600	30.05	23.88	20.76	18.89
964-0033	A-33	Mu-metal shield; for any of above. Size, 1 19/32x1 19/32x2 1/32"			7.02	5.57	4.84	4.41



TRANSISTOR/FILAMENT SUPPLY TRANSFORMERS (Primary, 115 V, 50-60 Hz)

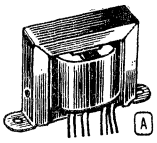
Stock No.	Mfr's Type	Fig.	Secondary	Size HxWxD	Wt., Lbs.	EACH 1-2	3-4	5-9	10-24
964-6275	S-75	B	Two-6.3V @ .6A each	1 7/8x2 13/16x1 3/4"	1	17.30	13.74	11.95	10.87
964-6276	S-76	B	Two-12.6V @ 2.0A each	2 15/16x4 1/8x2 9/16"	3	23.30	18.51	16.11	14.64
964-6277	S-77	C	Two-17/21.5V @ 1.5A each } Tapped	3 3/4x3 1/8x4 1/2"	4½	31.57	25.09	21.82	19.84
964X6278	S-78	C	Two-34/43V @ 4.5A each } Primary	5 7/8x5 3/8x6 3/4"	21	168.75	135.00	135.00	135.00

Transformers: Power 363-368—Filament 369-371—Filter Chokes, Audio 372-377—Transistor 378-381

ESSEX Stancor products | STANCOR

Transistor Transformers

When Ordering, Be Sure to Specify Manufacturer's Name and Type Number . . . As New Types Are Released by Manufacturers, Allied Electronics Will Stock Them.



A

B

C

TRANSISTOR TRANSFORMERS

Designed for transistor applications, but also excellent wherever low-power transformers are needed. †Maximum primary DC. *Watts. Shpg. wt., 3 oz., except TA-11, 2¾ lbs.; TA-58, ½ lb.

A INPUT TRANSFORMERS

Stock No.	Mfr's Type	Pri. Imp.	Sec. Imp.	† mA	Pri. Res.	Sec. Res.	*W	Size H x W x D	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-8147	TA-47	1K CT	200K CT	....	123	1815	.300	13/16x1 5/8x3/4"	7.90	5.27	4.98	4.69	2.24	1.94
928-8155	TA-55	500K	200 CT	....	7000	8.5	.300	13/16x1 5/8x3/4"	9.45	6.31	5.96	5.61	.....	.....

OUTPUT TRANSFORMERS

All types are Fig. A except TA-21, which is Fig. B.

928-8111	TA-11	48 CT	8/16	275	5	1.5	.5	2x3 1/4x1 7/8"	7.80	5.19	4.90	4.62	2.78	2.53
928-8112	TA-12	20 CT	8	500	.55	.35	10	1 3/8x2 3/8x1 5/8"	4.85	3.23	3.05	2.87	1.69	1.54
928-8121	TA-21	500 CT	4/8/16	....	75.3	3.55	.150	21/32x1 3/16x5/8"	7.57	5.04	4.76	4.48	2.44	2.22
928-8139	TA-39	100 CT	4/8/16	....	10.9	1.45	.300	1 3/16x1 5/8x3/4"	6.82	4.55	4.29	4.04	2.48	2.26
928-8142	TA-42	500 CT	4/8/16	..	47	.85	.300	1 3/16x1 5/8x3/4"	7.37	4.91	4.63	4.36	2.31	2.10
928-8143	TA-43	700 CT	4/8/16	...	77	1.15	.300	1 3/16x1 5/8x3/4"	8.25	5.49	5.19	4.88	2.51	2.28
928-8109	TA-9	1000	4/8/16	10	180	3.5	.200	1 3/16x1 5/8x7/8"	9.65	6.43	6.07	5.71	3.00	2.73
928-8141	TA-41	40 CT	4/8/16	...	34	1.5	.300	1 3/16x1 5/8x3/4"	6.52	4.36	4.11	3.87	2.24	2.04

A DRIVER TRANSFORMERS

928-8107	TA-7	100	100 CT	100	12	12	.5	1 5/8x2 7/8x1 5/8"	5.15	3.44	3.25	3.06	1.65	1.50
928-8158	TA-58	100	200 CT	200	6.5	15.5	.5	1 1/4x2 1/8x1 1/4"	5.37	3.58	3.38	3.18	1.54	1.40
928-8159	TA-59	500 CT	200 CT	50	36.5	15.5	.5	1 1/4x2 1/8x1 3/8"	5.52	3.69	3.49	3.28	1.66	1.51
928-8105	TA-5	1000	200 CT	10	400	115	.050	11/16x1 5/16x5/8"	8.90	5.93	5.60	5.27	2.91	2.65
928-8106	TA-6	2000	200 CT	5	720	115	.050	11/16x1 5/16x5/8"	9.52	6.35	6.00	5.65	3.13	2.85

B INTERSTAGE TRANSFORMERS

928-8131	TA-31	5K CT	10K CT	....	635	825	.150	21/32x1 3/16x5/8"	7.90	5.27	4.98	4.69	2.33	2.12
928-8134	TA-34	10K	200 CT	....	1200	33.4	.150	21/32x1 3/16x5/8"	7.62	5.09	4.80	4.52	2.63	2.39
928-8135	TA-35	10K	2K CT	....	1200	257	.150	21/32x1 3/16x5/8"	6.52	4.36	4.11	3.87	2.34	2.13
928-8138	TA-38	500 CT	150 CT	....	62	21.2	.150	21/32x1 3/16x5/8"	6.65	4.43	4.18	3.94	2.38	2.17
928-8128	TA-28	1500	500 CT	....	104	46.5	.150	21/32x1 3/16x5/8"	7.90	5.27	4.98	4.69	2.33	2.12
928-8152	TA-52	500 CT	500 CT	....	40	55	.300	1 3/16x1 5/8x3/4"	7.75	5.17	4.88	4.59	2.10	1.91
928-8130	TA-30	5K CT	7.5K CT	....	650	790	.150	21/32x1 3/16x5/8"	7.57	5.04	4.76	4.48	2.34	2.12

C POWER TRANSFORMERS

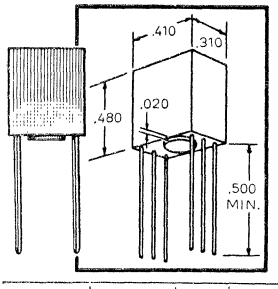
Small, efficient transformers for 117 volt, 60 Hz AC. All types are Fig. C except TP-2 and TP-3, which are Fig. A. Type TP-1 is for a bridge rectifier. All have identical dual-plate supplies. *Tapped primary.

Stock No.	Mfr's Type	Plate Supply AC V	Plate Supply DC mA	Wt., Lbs.	Size H x W x D	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-8201	TP-1	13 or 18	900	2¾	3 1/8x2 1/2x3"	11.52	7.69	7.26	6.83	3.29	2.99
928-8202	TP-2	10/10 CT/40 CT	100	¾	1 5/8x2 7/8x1 7/8"	7.42	4.95	4.68	4.40	3.29	2.99
928-8203	TP-3	10/20 CT/40 CT	300	1½	2 3/8x3 3/4x2 1/8"	9.92	6.62	6.26	5.89	3.29	2.99
928-8204	*TP-4	10/20 CT/40 CT	1000	3¼	3 1/8x2 1/2x3 1/8"	16.67	11.11	10.49	9.87	3.29	2.99

INTERSTAGE TRANSFORMERS

For circuits requiring dependable performance and stable operation. Single plate to single grid. Maximum primary DC rating of 10 mA. Turns ratio, 1:3 for primary to secondary. For 7000 to 20,000 ohm plate impedance. Core size, ½x½". 2-inch mounting centers. Overall size, 1 3/8x2 3/4x1 1/2".

Stock No.	Mfr's Type	Pri. Imp.	Wt. Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACKED 100-249	BULK PACKED 250-Up
928-0001	A-53	7-20	½	5.05	3.37	3.18	2.99	1.46	1.33



POLYCHROMATRAN TRANSFORMERS AND CHOKES

- Color-Coded According to Application
- Fatigue-Resistant Gold-Plated Leads
- Extended Low-Frequency Response
- Reduced Distortion Levels
- Minimum Size and Weight
- Test Rating of 500 Volts rms

Wide selection of miniature audio polychromatran transformers specially designed and engineered for use with printed circuit boards. All units have gold-plated leads of fatigue-resistant nickel-iron alloy, .020" diameter, 9/16" long. Leads are spaced in multiples of 0.1" grid spacing for convenient installation on PC boards. Incorporating the latest advances in transformer design, these units offer reductions in audio distortion up to 50%, plus substantially improved lower end frequency response. Each unit is clearly color-coded according to application, greatly reducing chances of error in handling and selection during production. Extremely lightweight and compact, average size is only .460x.405x.305". Rectangular shape allows utmost utilization of space and stacking in limited area. Protective stand-off prevents solder flowback and allows maximum lead exit protection. All have rms test voltage rating of 500 volts. Actual wt. per unit, approx., ¾ oz.

Stock No.	Mfr's Type	Cap., mW	Application	Impedance Primary	Impedance Secondary	Unbal. DC mA in Pri.	DC Resistance Ohms		EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk-Packed 100-249	Bulk-Packed 250-Up
928-5615	PCT-15	35	Input	50,000	1000 CT	0	4600	90	14.87	9.91	9.36	8.81	6.70	6.10
928-5631	PCT-31	75	Driver	10,000 CT	2000 CT	1	1250	400	13.12	8.94	8.25	7.77	5.91	5.38
928-5676	PCT-76	75	Output or Isolation	10,000 CT	10,000 CT	1	1100	1400	12.70	8.46	7.99	7.52	5.71	5.20
928-5677	PCT-77	75	Output or Isolation	600 CT	600 CT	3	85	110	11.25	7.50	7.08	6.66	5.06	4.61
928-5716	PCT-116	.....	Choke	6 H	.....	2	1800	.....	10.57	7.05	6.66	6.26	4.76	4.33
928-5717	PCT-118	....	Choke	3.5H	.....	2	1200	.....	9.30	6.19	5.85	5.50	4.19	3.81

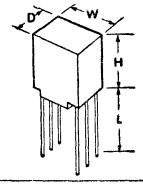
Transformers: Power 363-368—Filament 369-371—Filter Chokes, Audio 372-377—Transistor 378-381

Transistor, Pulse and Control Transformers

TRIAD "RED SPEC" SP SERIES MIL-T-27B MINIATURE TRANSISTOR TRANSFORMERS

Engineered to MIL-T-27B. Specially designed for use in all transistorized and printed circuit applications. Each unit weighs only 1/10th of an ounce! All have solid epoxy-molded cases. Provide top performance from 100 Hz to 100 kHz. 105-volt DC operating voltage. High-strength nickel-alloy leads (.020" diameter) eliminate need for stripping or tinning. Spaced on standard 1/10" grid centers to fit printed circuit boards. Decals permanently affixed giving type, usage, lead numbers and connection data. When mounted on printed circuit board, separator plate leaves viewing area under transformer for lead inspection. *Dry hydrogen annealed Trialloy deep-drawn .020" case for 20-45 db magnetic shielding. Av. wt., .2 oz.

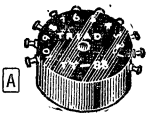
SP SPECS
H = .485
W = .410
D = .310
L = .75



Stock No.	Mfr's Type	MIL-T-27B Designation	Primary Impedance	Secondary Impedance	mW	Application	EACH 1-9	10-24	25-49	50-99	100-Up
954-3204	SP-4	TF5SX16ZZ	200,000 CT	1000 CT	10	Input	15.75	9.45	8.51	7.91	7.44
954-3213	SP-13	TF5SX13ZZ	25,000/20,000	1000/800CT	40	Interstage	13.60	8.16	7.34	6.83	6.42
954-3220	SP-20	TF5SX13ZZ	10,000 CT	1200 CT	50	Driver	13.07	7.85	7.07	6.58	6.19
954-3221	SP-21	TF5SX13ZZ	10,000 CT	2000 CT	50	Driver	13.15	7.89	7.10	6.60	6.20
954-3229	SP-29	TF5SX13ZZ	10,000 CT	500 CT	50	Driver	12.72	7.64	6.88	6.40	6.02
954-3250	SP-50	TF5SX17ZZ	500 CT	600	50	Output	11.42	6.86	6.17	5.74	5.40
954-3252	SP-52	TF5SX13ZZ	1500 CT	600	50	Output	11.97	7.18	6.46	6.01	5.65
954-3265	SP-65	TF5SX13ZZ	8000 CT	3.2	50	Output	11.25	6.75	6.08	5.65	5.31
954-3266	SP-66	TF5SX13ZZ	10,000 CT	10,000 CT	50	Output Isolation	12.72	7.63	6.87	6.39	6.00
954-3267	SP-67	TF5SX17ZZ	600 CT	600 CT	50	Output Isolation	11.32	6.80	6.12	5.69	5.35
954-3210	SP-310	.....	*Magnetic shielding case			.....	1.40	.80	.76	.70	.67

TRIAD EPOXY-MOLDED TOROIDAL TRANSISTOR DC TO DC SUPPLY TRANSFORMERS

DC to DC transformers (Fig. A), hermetically sealed, small in size, mount with a single bolt. Usable in common emitter or common collector circuits. Exceed MIL-T-27B, Grade 5, Class R. All transformers, incl. DC to AC (Figs. B, C, see second table below), permit current conversion in small volume at high efficiency.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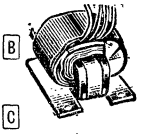
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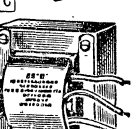
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Stock No.	Mfr's Type	DC Input Volts	DC Output Volts	DC mA	Size (Dia. x Ht.)	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	100-Up
954-4078	TY-78	12.6	250/125	100	1¾x1 11/16"	.35	21.90	13.25	11.93	11.09	10.42
954-4079	TY-79	12.6	300/150	200	1¾x1"	.35	23.25	13.25	11.93	11.09	10.42
954-4080	TY-80	12.6	325/162.5	150	1¾x1"	.35	22.52	14.35	12.92	12.02	11.30
954-4081	TY-81	12.6	375/187.5	200	2x1"	.50	22.45	13.67	12.30	11.44	10.75
954-4082	TY-82	12.6	450/225	150	2x1"	.50	22.90	13.25	11.93	11.09	10.42
954-4083	TY-83	12.6	500/250	250	2¾x1⅜"	.85	33.17	19.05	17.15	15.95	14.99
954-4084	TY-84	12.6	600/300	200	2¾x1⅜"	1.0	34.90	19.41	17.47	16.25	15.28
954-4088	TY-88	28.0	250/125	80	1 5/16x9/16"	.25	20.80	11.72	10.55	9.81	9.22
954-4089	TY-89	28.0	300/150	100	1¾x1 11/16"	.35	20.80	11.54	10.39	9.66	9.08
954-4099	TY-99	6.0	300/150	100	1¾x1"	.35	21.75	13.59	12.23	11.37	10.69

TRANSISTOR DC TO AC POWER SUPPLY TRANSFORMERS (See Description Above)

Stock No.	Mfr's Type	Fig.	DC Input Volts	AC Output Volts	Hz	Watts	Size H x W x D	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	100-Up
954-4068	TY-468	B	28	110/115/125	400	60	1⅞x2¼x2"	.5	19.05	12.02	10.82	10.06	9.46
954-4062	TY-462	B	12	110/115/125	400	60	1⅞x2¼x2"	.5	26.15	14.98	13.48	12.54	11.79
954-4075	TY-75A	C	12	110/115/125	60	115	3⅞x3 9/32x3½"	5.0	28.15	14.89	13.40	12.46	11.71
954-4076	TY-76A	C	12	110/115/125	60	60	3 3/32x2 31/32x2⅝"	3.0	17.55	9.60	8.64	8.04	7.56

MILWAUKEE CONTROL TRANSFORMERS

3200 SERIES-TYPE CW1. Reliable industrial control transformers for applications where accurate voltage control is required. Interleaved windings are specially designed for minimum regulation even under conditions of high inrush. 60 Hz AC input. Dual primaries. 240/480 volt, parallel or series. Operable at 220 or 230 volt combinations. Secondaries, 120 or 120/240 volts. Screwtype terminals; open-frame core and coil construction for top performance and long life. All have four oblong mounting holes, see mounting centers in table.

PRIMARY, 240/480 V—SECONDARY, 120 V

Stock No.	Mfr's Type	kVA	Mtg. Ctrs.	Size HxWxD	Wt., Lbs.	EA.
864-5910	C1-13361	.050	2½x2¼"	2 9/16x3x3½"	3	10.95
864-5911	C1-13362	.075	2½x2⅞"	2 9/16x3x4⅛"	4¼	12.00
864-5912	C1-13363	.100	2 13/16x2¾"	2⅞x3⅜x4⅜"	5½	12.70
864-5913	C1-23166	.150	3⅛x3⅜"	3 3/16x3¾x5¼"	8½	13.80
864-5931	C1-23167	.200	3¾x2⅞"	3 13/16x4½x4⅞"	9½	17.40
864-5922	C1-23091	.250	4½x3⅝"	4½x5¼x5⅞"	12	19.10
864-5942	C1-33188	.300	3¾x3 13/16"	3 13/16x4½x5 15/16"	13½	22.71
864X5943	C1-33189	.350	4⅜x4"	4⅝x5¼x5⅞"	21	23.29
864X5940	C1-33112	.500	4½x5"	4½x5¼x7½"	26	29.64
864X5970	C1-43192	.750	4½x5¾"	4½x5¼x8¼"	32	36.65
864U5968	C1-43137	1.0	5¼x5¼"	5¾x6⅛x7½"	40	41.58
864Z5974	C1-53091	1.5	5⅞x6½"	6½x7 1/16x8¾"	59	56.86
864Z5975	C1-53129	2.0	5⅞x8"	6½x7 1/16x10¼"	72	71.81

PRIMARY, 240/480 V—SECONDARY, 120/240 V

Stock No.	Mfr's Type	kVA	Mtg. Ctrs.	Size HxWxD	Wt., Lbs.	EA.
864-5915	C1-13381	.050	2½x2¼"	2 9/16x3x3½"	3	11.30
864-5917	C1-13383	.100	2 13/16x2¾"	2⅞x3⅜x4⅜"	5½	13.00
864-5935	C1-23174	.150	3⅛x3⅜"	3 3/16x3¾x5¼"	8½	14.15
864-5936	C1-23175	.200	3¾x2⅞"	3 13/16x4½x4⅞"	9½	17.86
864-5920	C1-23089	.250	4½x3⅝"	4½x5¼x5⅞"	12	19.62
864-5947	C1-33196	.300	3¾x3 13/16"	3 13/16x4½x5 15/16"	13½	23.97
864X5938	C1-33110	.500	4½x5"	4½x5¼x7½"	28	28.55
864X5965	C1-43044	.750	4½x5¾"	4½x5¼x8¼"	35	37.49
864U5967	C1-43135	1.0	5¼x5¼"	5¾x6½x7½"	40	44.33
864Z5972	C1-53089	1.5	5⅞x6½"	6½x7 1/16x8¾"	53½	57.44
864Z5978	C1-53132	2.0	5⅞x8"	6½x7 1/16x10¼"	78	73.56

TRIGATE PULSE TRANSFORMERS FOR SCR APPLICATIONS

SPRAGUE
THE MARK OF RELIABILITY

D

E

D RIGID LEAD TYPES

Stock No.	Mfr's Type	Turns Ratio	Min. L_P µH	Max. L_L µH	Max. C_C pF	EACH 1-14	15-49	50-99	100-249	250-499	500-Up
926-9020	11Z-2000	1:1	200	3	800	3.68	2.89	1.89	1.37	1.26	1.16
926-9021	11Z-2001	1:1	1000	12	2000	3.85	3.03	1.98	1.43	1.32	1.21
926-9023	11Z-2003	2:1	1000	10	1300	4.73	3.71	2.43	1.76	1.62	1.49
926-9024	11Z-2004	5:1	5000	1500	400	4.20	3.30	2.16	1.56	1.44	1.32
926-9030	11Z-2100	1:1:1	200	3	800	4.38	3.44	2.25	1.63	1.50	1.38
926-9031	11Z-2101	1:1:1	1000	12	1400	4.55	3.58	2.34	1.69	1.56	1.43
926-9033	11Z-2103	2:1:1	1000	15	1300	5.43	4.26	2.79	2.02	1.86	1.71

E FLEXIBLE LEAD TYPES

926-9012	11Z-12	1:1	200	3	800	2.10	1.65	1.08	.78	.72	.66
926-9013	11Z-13	1:1:1	200	3	800	2.45	1.93	1.26	.91	.84	.77
926-9014	11Z-14	2:1	1000	10	1300	2.98	2.39	1.53	1.11	1.02	.94
926-9015	11Z-15	2:1:1	1000	15	1300	3.33	2.61	1.71	1.24	1.14	1.05
926-9016	11Z-16	5:1	5000	1500	400	3.15	2.48	1.62	1.17	1.08	.99

Feature balanced pulse characteristics, efficient energy transfer between windings, fast pulse rise-time and increased current capabilities to prevent SCR di/dt failure. Minimum saturation allows increased pulse widths. Temperature range: −40° to +105°C. Maximum line voltage: 1600 Vrms, 60 Hz AC. Available in rigid lead types for self-supporting mounting on P.C. boards, or flexible lead types mounted by a plastic snap-on or bracket. 1 oz.

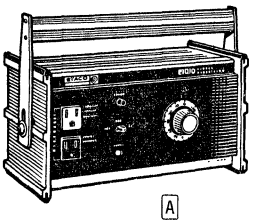
Transformers: Power 363-368—Filament 369-371—Filter Chokes, Audio 372-377—Transistor 378-381

DELUXE VARIABLE TRANSFORMERS AND POWER SUPPLIES

AC VOLTAGE CONTROL FOR INDUSTRY CLASSROOM, LAB

Portable Variable Transformers utilize the latest techniques of circuit design, with rugged construction to meet U.L. and CSA safety standards. Feature continuous voltage control over a full ourput voltage range; negligible waveform distortion; moderate voltage drop under load; laminated silicon steel cores to insure low core loss and low excitation current; up to 98% efficiency; better than 5% regulation. Design permits simple switch selection of "line voltage" or "over-voltage" output (0-120 or 140 volts output with standard 120 volts input).

Convenience outlet energized when line cord is plugged in. Neon pilot light; permanent etched legends; tamper-proof, mar-resistant ventilated case; standard 6-ft. cord and receptacle; thermal circuit breaker protection. All meters provided with zero adjustment for easy calibration. Metered units have isolated AC and DC outputs rated for 10% of the unit's total output rating; available at banana jacks on front panel. Anodized collapsible handle of extruded aluminum. **Optional: Voltmeter, Ammeter and Wattmeter; Contact your local Allied Center for full information.**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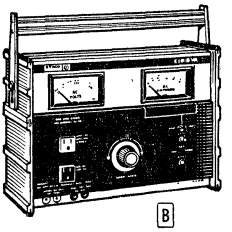
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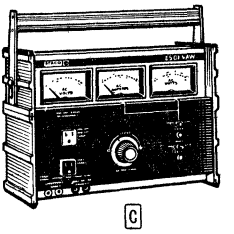
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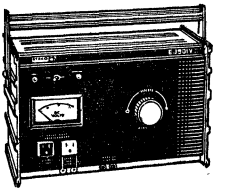
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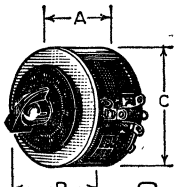
Stock No.	Mfr's Type	Fig.	Input Volts	Output		Isolated AC/DC Output mA	Size, Inches	Wt., Lbs.	EACH	
				Volts	Amps				1-2	3-Up
927X0371	E371	A	120	0-120/140	3.75	....	6 3/16x11 1/4x5	15	35.07	30.00
927X0501	E501V	D	120	0-120/140	5.0	500	6 5/16x17 5/8x5 5/8	20	75.98	65.00
927X0502	E501VA	B	120	0-120/140	5.0	500	10x15 1/16x5 7/8	25	122.74	105.00
927X0505	E1010	A	120	0-120/140	10.0	....	6 1/8x11 15/16x5 7/8	20	81.41	65.00
927X1000	E1010V	D	120	0-120/140	10.0	1000	6 3/16x17 5/8x5 7/8	27	99.36	85.00
927X1010	E1010VA	B	120	0-120/140	10.0	1000	10x15 1/16x5 7/8	33	146.12	125.00
927X1011	E1010VAW	C	120	0-120/140	10.0	1000	10x15 1/16x5 7/8	35	233.80	200.00
927X1710	E1710	A	120	0-140	16.0	....	10x15 1/16x6 1/4	35	116.90	100.00
927X1720	E1720	A	240	0-280	8.0	....	10x15 1/16x6 1/4	35	116.90	100.00

ISOLATED VARIABLE TRANSFORMERS

Exclusively by Staco, for use in industrial, medical or educational applications where the safety of isolation is required. Ideal for transformerless receiver testing and general experimentation. Output voltage is completely isolated from the power line (input voltage). DC output is rated equal to the isolated AC output on all models. Either side of output can be grounded independently of supply line. All units are U.L. Listed and CSA approved. Ventilated case; 0-150 V voltmeter; circuit breaker; pilot light; banana jacks; on/off switch; 6-ft. cord with NEMA standard 3-prong plug and receptacle.

Stock No.	Mfr's Type	Fig.	Input Volts	Output			Size, Inches	Wt., Lbs.	EACH	
				Volts	AC Amps	DC Amps			1-2	3-Up
927X2001	EJ201V	D	120	0-140	2.0	2.0	6 3/16x17 5/8x5 7/8	20	99.36	85.00
927X2002	EJ401V	D	120	0-140	4.0	4.0	10x15 1/16x5 7/8	30	128.59	110.00
927X2003	EJ901V	D	120	0-140	9.0	9.0	10x16 3/16x7 1/2	43	181.19	155.00



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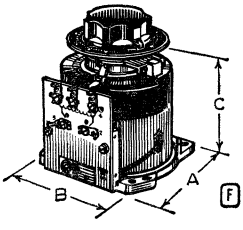

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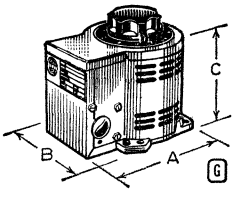

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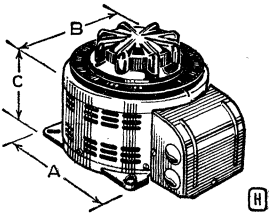


H

MILLION CYCLE TEST PROVES RELIABILITY

Staco Variable Transformers have undergone over 1,000,000 cycles of testing under full load conditions without failure of electrical or mechanical components, proving that these Staco transformers provide the reliability demanded by today's users. The design of all Staco variable transformers insures longer life with a minimum of maintenance. Staco's new proprietary process bonds the winding to core assembly for a secure, stable commutator surface, free of distortion even under severe overload. This process transfers heat away from the critical brush contact area. Staco has a Variable Transformer for your every requirement.

STACO Variable Autotransformers

SINGLE PHASE MODELS (PANEL OR BENCH MOUNTING)

Rugged and reliable units offer precise voltage control with minimum maintenance and long life. Input frequency on all models is 50/60 Hz except *60 Hz only with over-voltage output.

Type numbers without suffix are open types for panel or bench mounting. Types with suffix (CT) have coil and terminals housed in a metal enclosure, for bench or conduit mounting.

SINGLE PHASE MODELS—120 VOLTS INPUT

Stock No.	Mfr's Type	Fig.	Input Volts	Output			Size, Inches (AxBxC)	Wt., Lbs.	EACH	
				Volts	Amps	kVA			1-2	3-Up
927-3171	*171**	E	120	0-120/132	1.75	0.23	2 13/16x2 13/16x2 1/16	3	14.02	12.00
927-3201	201	E	120	0-120/132	2.0	0.26	2 13/16x2 13/16x2 1/16	3	14.02	12.00
927-3251	*251**	E	120	0-120/132	2.5	0.33	2 13/16x2 13/16x2 7/16	3 1/2	15.19	13.00
927-3291	291	E	120	0-120/132	3.0	0.39	2 13/16x2 13/16x2 7/16	3 1/2	15.19	13.00
927-3375	*371**	J	120	0-120/140	3.75	0.53	3 3/4x3 3/4x3 1/4	5	21.04	18.00
927-5501	501	J	120	0-120/140	5.0	0.70	3 3/4x3 3/4x3 5/16	6	22.21	19.00
927-6010	1010	J	120	0-120/140	10.0	1.4	5 1/16x5x4 3/16	12	29.22	25.00
927-6011	1010CT	K	120	0-120/140	10.0	1.4	6 7/8x5x4 7/16	12	38.57	33.00
927-6210	1210	J	120	0-120	12.0	1.4	5 1/16x5x4 3/16	12	31.56	27.00
927X7501	1510	J	120	0-120/140	15.0	2.1	6 5/8x6 1/8x4 3/8	20	56.11	48.00
927X7502	1510CT	L	120	0-120/140	15.0	2.1	9x6 3/8x4 7/8	21	63.12	54.00
927X8001	2510	J	120	0-120/140	25.0	3.5	8 3/16x7 5/8x4 1/8	23	75.98	65.00
927X8006	2510CT	L	120	0-120/140	25.0	3.5	9 5/8x7 5/8x4 1/8	24	91.18	78.00
927F9000	5010	M	120	0-140	50.0	7.0	12 1/2x12 1/2x6 1/2	60	189.37	162.00

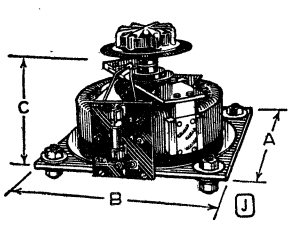
SINGLE PHASE MODELS—240 VOLTS INPUT

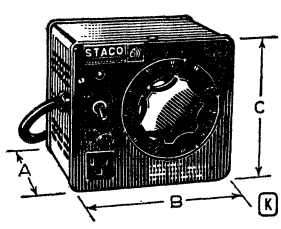
Stock No.	Mfr's Type	Fig.	Input Volts	Output			Size, Inches (AxBxC)	Wt., Lbs.	EACH	
				Volts	Amps	kVA			1-2	3-Up
927-6120	1020	J	240	0-240/280	3.5	0.98	5 1/16x5x4 3/16	12	35.07	30.00
927-6125	1020CT	K	240	0-240/280	3.5	0.98	6 7/8x5x4 7/16	12	43.25	37.00
927-7000	1220*	J	*240	0-240	5.0	1.2	5 1/16x5x4 3/16	12	37.40	32.00
927X7507	1520	J	240	0-240/280	9.5	2.7	6 5/8x6 1/8x4 3/8	20	56.11	48.00
927X8500	2520	J	240	0-240/280	10.0	2.8	8 3/16x7 5/8x4 1/8	23	75.98	65.00
927X8510	2520CT	L	240	0-240/280	10.0	2.8	9 5/8x7 5/8x4 1/8	24	91.18	78.00
927F9100	5020	M	240	0-240/280	28.0	7.8	12 1/2x12 1/2x6 1/2	60	189.37	162.00

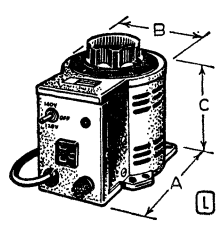
PORTABLE MODELS

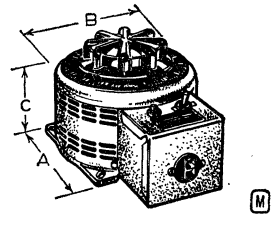
Prefix "2PF" indicates 2-wire cord, plug and receptacle; prefix "3PN" indicates 3-wire cord, plug and receptacle.

All portable models are housed in a rugged metal enclosure with switch, fuse and pilot light.









CORD AND PLUG TYPE—120 VOLTS INPUT

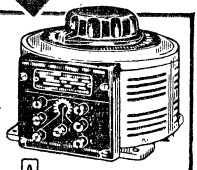
Stock No.	Mfr's Type	Fig.	Input Volts	Output			Size, Inches (AxBxC)	Wt., Lbs.	EACH	
				Volts	Amps	kVA			1-2	3-Up
927-2171	2PF171*	F	120	0-132	1.75	0.23	3 7/8x3 7/8x3 1/2	3 1/2	26.88	23.00
927-2172	2PF371	F	120	0-120/140	3.75	0.53	4 1/2x6x5 3/8	7	30.39	26.00
927-2170	2PF501	F	120	0-120/140	5.0	0.70	4 1/2x6x5 3/8	9	32.73	28.00
927-2302	3PN501	F	120	0-120/140	5.0	0.70	4 1/2x6x5 3/8	9	35.07	30.00
927-2175	2PF1010	G	120	0-120/140	10.0	1.4	6 7/8x5x4 7/16	13	39.74	34.00
927-2303	*3PN1010*	G	120	0-120/140	10.0	1.4	6 7/8x5x4 7/16	13	46.76	40.00
927-2305	3PN1210*	G	120	0-120	12.0	1.4	6 7/8x5x4 7/16	13	51.43	44.00
927X2309	3PN2210	H	120	0-140	22.0	3.1	9 5/8x7 5/8x4 1/8	25	109.88	94.00

CORD AND PLUG TYPE—240 VOLTS INPUT

Stock No.	Mfr's Type	Fig.	Input Volts	Output			Size, Inches (AxBxC)	Wt., Lbs.	EACH	
				Volts	Amps	kVA			1-2	3-Up
927-2176	2PF1020	G	240	0-240/280	3.5	0.98	6 7/8x5x4 7/16	13	45.59	39.00
927-2304	3PN1020	G	240	0-240/280	3.5	0.98	6 7/8x5x4 7/16	13	53.77	46.00
927-2306	3PN1220*	G	240	0-240	5.0	1.2	6 7/8x5x4 7/16	13	54.94	47.00
927X2330	3PN2520	H	240	0-280	10.0	2.8	9 5/8x7 5/8x4 1/8	25	109.88	94.00

NOTE: Figures E, F, G and H are shown on preceding page.

Superior Electric Variable Transformers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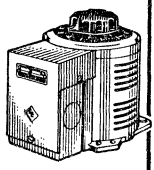
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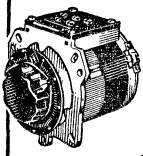
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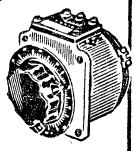
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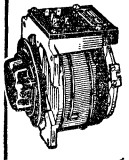
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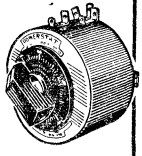
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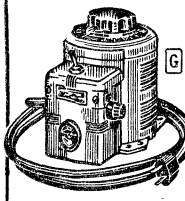
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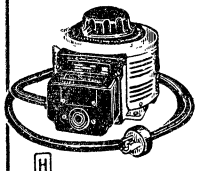
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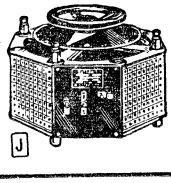

J

POWERSTAT® VARIABLE TRANSFORMERS WITH POWERKOTE™ COILS

Deliver continuously adjustable output voltage from AC line. Zero waveform distortion, good regulation, conservative ratings. All are for 50-60 Hz. (§60 Hz only.) Enclosed for plane-surface mtg. except 10B, 10B-40, 21, 22, and other types with suffix "U" are open types for panel mounting. Mfr's Types 21, 22, 126, 136B, 226, 236B, 1156D and 1256D are for both panel and surface mounting. Suffix "T" indicates terminals enclosed in metal box. †Indicates when mounted on metal panel, for non-metallic panel, or bracket mounting, derate to 1.75 amps with corresponding reduction in maximum kVA.

SINGLE-PHASE TYPES

Portable Types 116B and 216B have 2-wire parallel blade input cord-plug sets and output receptacles. *In table indicates unit is equipped with 3-wire plug and receptacle. Type LW136B is a double-wound assembly with an isolated secondary winding. Type 22 incorporates a unique coil-winding technique designed to provide higher voltage ratings without increase in size or weight of transformer. ††Rating when mounted on metal panel. Derated to 0.5 amp when mounted for non-metallic panel or bracket.

Stock No.	Mfr's Type	Fig.	Input Volts	Output Volts	Output Amps	Output kVA	Max. Size (DWH)	Wt., Lbs.	EACH 1-2	EACH 3-5	EACH 6-Up
931X2410	LW136B	A	120-240	0-30	25.0	0.75	9x7¾x6⅝"	23	131.51	105.00	94.50
931-5600	§117BT	B	120	0-120	12.0	1.4	7⅛x5⅛x6½"	12	43.83	35.00	31.50
931-5610	§*117BU*	C	120	0-120	12.0	1.4	5x5⅛x5¾"	11	33.81	27.00	24.30
931-2730	§*Q117U*	C	120	0-120	12.0	1.4	4⅞x4¼x5 11/16"	11	33.81	27.00	24.30
931-5290	*21*	D	120	0-140	4.5	0.63	3⅜x3¾x4½"	6	23.79	19.00	17.10
931-5420	*116BU*	C	120	0-140	10.0	1.4	5x5⅛x5¾"	11	31.31	25.00	22.50
931-2700	*Q116U*	C	120	0-140	9.0	1.3	4⅞x4¼x5 11/16"	11	31.31	25.00	22.50
931-5700	126	A	120	0-140	15.0	2.1	6¾x6¼x5⅜"	17	63.87	51.00	45.90
931-5730	126U	E	120	0-140	15.0	2.1	4¼x6x6¾"	16	57.61	46.80	41.40
931X5800	136B	A	120	0-140	22.0	3.1	8⅞x7¾x6⅛"	24½	91.43	73.00	65.70
931X5820	136BU	E	120	0-140	22.0	3.1	4 5/16x7¾x8 11/16"	24	83.91	67.00	60.30
931X5900	146	A	120	0-140	30.0	4.2	11x10x6⅜"	38	145.29	116.00	104.00
931-6020	216BU	C	240	0-280	3.5	0.98	5x5⅛x5¾"	11	37.57	30.00	27.00
931-2760	*Q216U*	C	240	0-280	3.5	0.98	4⅞x4¼x5 11/16"	11	37.57	30.00	27.00
931-6100	§217BT	B	240	0-240	5.0	1.2	7⅛x5⅛x6½"	12	50.10	40.00	36.00
931-6110	§217BU	C	240	0-240	5.0	1.2	5x5⅛x5¾"	11	40.08	32.00	28.80
931-2790	§Q217U	C	240	0-240	5.0	1.2	4⅞x4¼x5 11/16"	11	40.08	32.00	28.80
931-5350	*22*	D	240	0-280	2.25	0.63	4 9/16x3¾x4 13/16"	6	35.07	28.00	25.20
931-6200	*226*	A	240	0-280	7.5	2.1	6¾x6¼x5⅜"	17	63.87	51.00	45.90
931-6230	226U	E	240	0-280	7.5	2.1	4¼x6x6¾"	16	57.61	46.00	41.40
931X6320	236B	A	120-240	0-280	10.0	2.8	8⅞x7¾x6⅛"	23¾	91.43	73.00	65.70
931X6340	236BU	E	120-240	0-280	10.0	2.8	4 5/16x7¾x8 11/16"	23¼	83.91	67.00	60.30
931X6400	246	A	120-240	0-280	15.0	4.2	11x10x6⅜"	38	145.29	116.00	104.40

Stock No.	Mfr's Type	Fig.	Input Volts	Output Volts	Output Amps	Output kVA	Max. Size (DWH)	Wt., Lbs.	EACH 1-3	EACH 4-11	EACH 12-Up
931-5230	§10B-40	F	40	0-40	7.0	0.28	2¼x2⅞x3⅛"	3.3	20.04	16.00	13.60
931-5070	*3PN117B	G	120	0-120	12.0	1.4	7¼x5⅛x6½"	12	55.11	44.00	37.40
931-5200	§*10B*	F	120	0-132	†2.25	0.3	2⅛x2⅞x3⅛"	2.4	16.28	13.00	11.05
931-5400	*116B*	G	120	0-140	10.0	1.4	7⅛x5⅛x6½"	12	42.58	34.00	28.90
931-5065	*3PN116B*	G	120	0-140	10.0	1.4	7⅛x5⅛x6½"	12	50.10	40.00	34.00
931-5080	*3PN126	H	120	0-140	15.0	2.1	8⅜x6¼x5⅜"	18.5	81.41	65.00	55.25
931X5090	*3PN136B	H	120	0-140	22.0	3.1	10¼x7¾x6⅛"	26½	117.73	94.00	79.90
931-5260	12	F	240	0-240	††0.7	0.17	2⅛x2⅞x3⅛"	2.5	25.05	20.00	17.00
931-6000	*216B*	G	240	0-280	3.5	0.98	7⅛x5⅛x6½"	12	48.84	39.00	33.15
931-5110	§3PN217B	G	240	0-240	5.0	1.2	7⅛x5⅛x6½"	12	58.86	47.00	39.95
931-5120	*3PN226	H	240	0-280	7.5	2.1	8⅜x6¼x5⅜"	18.5	81.43	65.00	51.00
931X5130	*3PN236B	H	240	0-280	10.0	2.8	10¼x7¾x6⅛"	25¾	117.73	94.00	79.90

Types 1256D-2P and 1256D-3P are single units (Fig. J) ganged and parallel connected. Type 1256D-2P has two units connected in parallel; Type 1256D-3P, three units connected in parallel.

Stock No.	Mfr's Type	Fig.	Input Volts	Output Volts	Output Amps	Output kVA	Max. Size (DWH)	Wt., Lbs.	EACH 1	EACH 2-Up
931X6700	1156D	J	120	0-140	50.0	7.0	15⅝x13⅞x9⅜"	79	216.68	147.05
931X7300	1256D	J	240	0-280	28.0	7.8	15⅞x13⅞x9⅜"	79	216.68	147.05
931F6730	1256D-2P	....	240	0-280	56.0	15.7	15⅝x15⅝x16"	158	479.70	325.55
931F6780	1256D-3P	....	240	0-280	84.0	23.5	15⅝x15⅝x22⅝"	274	829.15	562.70

THREE-PHASE TYPES (Not Illus.)

Consist of single units ganged together. Types with suffix "-2" are open delta connected; Type Nos. which have suffixes "-3" and "-3Y" are wye connected All are for 50-60 Hz. (§60 Hz only.) †See note above

Stock No.	Mfr's Type	Input Volts	Output Volts	Output Amps	Output kVA	Max. Size (DWH)	Wt., Lbs.	EACH 1	EACH 2-Up
931X5630	§117BU-2	120	0-120	12.0	2.5	11⅛x5⅛x5¾"	22	88.92	60.35
931F5830	136B-2	120	0-140	22.0	5.3	9⅛x8¾x12½"	52	211.67	143.65
931-5210	§10B-3	240	0-240	†2.2	0.94	8⅛x3⅞x3⅞"	8½	73.89	50.15
931-5110	§21-3	240	0-280	4.5	2.18	10⅞x4⅝x5"	17	106.46	70.55
931X5450	§116BT-3	240	0-280	10	4.8	7⅛x5⅛x18⅜"	36	145.29	98.60
931Z5780	§126-3	240	0-280	15.0	7.27	7⅛x7¼x15⅛"	49	226.70	153.85
931Z5810	126U-3	240	0-280	15.0	7.27	7⅛x7¼x15⅛"	49	205.41	139.40
931X5860	§136B-3	240	0-280	22.0	10.66	9⅛x8¾x17¾"	76	311.87	211.65
931F6790	§1156D-3Y	240	0-280	50.0	24.2	15½x13⅞x22⅝"	225	790.32	536.35
931X6390	§236B-3	480	0-560	10.0	9.7	9⅛x8¾x17¾"	76	311.87	211.65
931F7000	§1256D-3Y	480	0-560	28.0	27.2	15⅛x13⅞x22⅝"	225	790.32	536.35

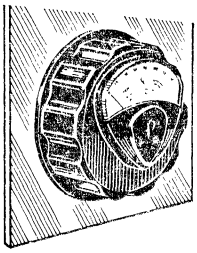
ATTENTION INDUSTRIAL BUYERS

Make Allied your one complete source for all your electronics needs. Allied has the highest percentage of filled-orders in the country. Simply contact the Allied facility nearest you.

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Superior Electric Variable Transformers

POWERSTAT METERED KNOBS FOR VARIABLE TRANSFORMERS

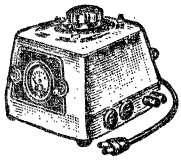


Accurate Voltmeter Remains Stationary Inside Knob Rim, Does Not Turn with Knob

Metered knob assemblies for back-of-panel mounted variable transformers. Feature stationary, direct-reading voltmeter for accurate monitoring of voltage. For standard Powerstat variable transformers: 21-22, 116B-216B, 117B-217B, 126-226, 136B-236B and 146-246. Meter features ±3% accuracy. Type VS 150 for 120 V types; VS300 for 240 V types. Av. shpg. wt. 2 lbs.

931-2956. VS150 (0-150V)..**57.61**
931-2990. VS300 (0-300V)..**57.61**

TYPE UC1MB VOLTBOX® VARIABLE TRANSFORMER



- Direct-Reading Voltmeter
- Three-Output Receptacles
- 10-Ampere Rating

Rugged, versatile variable transformer. Offers continuously variable 0-140-volt output from 120 volts, 50-60 Hz, single-phase AC source. Rated at 10 amperes. Has direct reading voltmeter; line switch; line/load meter switch; two five-way binding posts; three-output receptacles. Has complete fuse protection for extra safety. All units come supplied with six-foot 2-wire line cord and plug. Overall measurement, 7⅜x7⅞x8½". Shpg. wt. 17¾ lbs.

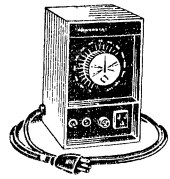
931 X2895.....**122.57**

- Complete Fuse Protection
- Line/Load Meter Switch

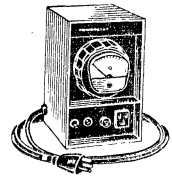
POWERSTAT ENCLOSED LABORATORY TRANSFORMERS

- Integral Handle for Easy Portability
- Functional Design with Recessed Controls
- Front Panel Pilot Light, Output and Fuse

Portable AC voltage source for laboratory applications. With Powerstat variable transformers for zero waveform distortion, smooth control and linear output voltage. All except N10B have Powerkote coils for greater overload resistance and higher current ratings. Integral hand c. provision for wall-mounting. Grounded NEMA cord-plug assembly, recessed front-panel controls. *constant impedance load. †metered knob. For single-phase 120 V AC input.



N10B, N21
N116B(L)

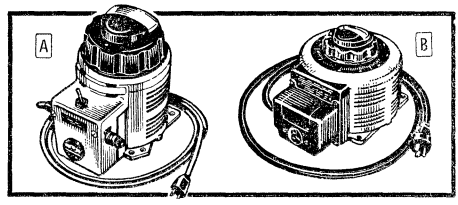


N1116BK
N116BLK

Stock No.	Mfr's Type	Hz	OUTPUT Constant Cur. Load V	Max. A	Max. kVA	Size (HxWxD)	Wt., Lbs.	EACH 1-3	4-11	12-Up
931-2550	N10B	60	0-132	2.25	0.30	6 1/16x4¼x3 29/32"	5	35.07	30.00	25.50
931-2555	N21	50/60	0-140	4.5	0.63	8 7/16x5x5 9/16"	10	49.09	42.00	35.70
931-2560	N116B	50/60	0-140	10	1.4	9 9/16x5⅜x6⅜"	15	57.28	49.00	41.65
931-2570	N116BK†	50/60	0-140	10	1.4	9 9/16x5⅜x7 13/32"	15	105.21	90.00	76.50
931-2565	N116BL	50/60	0-120	10, *13	1.2, *1.6	9 9/16x5⅜x6⅜"	15	57.28	49.00	41.65
931-2575	N116BLK†	50/60	0-120	10, *13	1.2, *1.6	9 9/16x5⅜x7 13/32"	15	105.21	90.00	76.50

METERED-KNOB POWERSTAT VARIABLE TRANSFORMERS

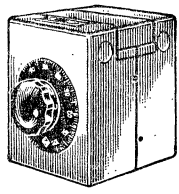
- Voltmeter Reads 0 to 150 Volts
- Remains Stationary Inside Knob
- Full Scale Accuracy of ±3%



Each Powerstat incorporates a large, easy-to-read voltmeter stationary inside its control knob. Powerstats are especially suited for applications where close voltage control is necessary. Voltmeters have full scale accuracy of ±3%; are insensitive to stray magnetic fields; read from 0 to 150 volts AC. Units listed operate from 120 volt, 50-60 Hz AC input; provide continuously variable AC output of 0 to 140 volts. Have input cord, output receptacle and fuse except *Type VS136B is less cord and receptacle; but has terminals for screw, push-on, or solder connections. Type VS116B has On-Off switch. All have provision for limiting output voltage to line voltage values.

Stock No.	Mfr's Type	Fig.	Max. Constant Amps	kVA	Dimensions	Wt., Lbs.	EACH 1-3	4-11	12-Up
931-2500	VS116B	A	10.0	1.4	6 13/16x5 1/8x7 1/8"	12	92.68	74.00	62.90
931X2930	*VS136B	B	22.0	3.1	6 3/16x7¾x8 13/16"	24¼	140.28	112.00	95.20
931X2875	VS3PN136B	B	22.0	3.1	10 7/32x7¾x6 3/16"	26	167.83	134.00	113.90

LIGHTWEIGHT ALUMINUM ENCLOSED POWERSTAT



- Permits Easy Wiring
- Completely Enclosed
- Completely Protected

Single-phase variable transformers can be mounted on wall or front of panel, on bench, floor, back of panel, etc. Completely enclosed in dust-tight housing fabricated of case aluminum and aluminum sheet. *50-60 Hz AC. †60 Hz AC only. Amperage and kVA ratings in table below are given for constant current load. Overall size, 6 13/16x5¾x6". Average shpg. wt. 15 lbs.

NOTE: POWERSTAT Variable Transformers feature POWERKOTE coils for longer life, increased ratings, greater overload capacities, and are designed for heavy duty, trouble-free operation. Rigid inspection at every stage of manufacture gives you assurance of a quality-built product.

Stock No.	Mfr's Type	Input Volts	Output Volt	Amp	kVA	EACH 1-2	3-5	6-Up
931-1010	EN116B	120*	0-140	8	1.1	61.37	49.00	44.10
931-1040	EN117B	120†	0-120	10.0	1.2	63.87	51.00	45.90
931-1070	EN216B	240*	0-280	3.0	0.84	68.88	55.00	49.50
931-1090	EN217B	240†	0-240	4.4	1.1	71.39	57.00	51.30

POWERSTAT SUPER-QUALITY REPLACEMENT BRUSHES

Replacement brushes for use with Powerstat Variable Transformers. Shipping weight, 2 oz.

Stock No.	Mfr's Type	For Series	EACH
931-2805	RB10B	10B	1.88
931-2806	RB12	12	1.88
931-2807	RB21	21	2.50
931-2808	RB22	22	2.50
931-2809	RB116B	116B	2.50
931-2810	RB216B	216B	2.50

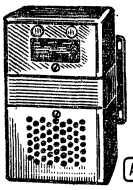
Stock No.	Mfr's Type	For Series	EACH
931-2811	RB117B	117B	2.50
931-2812	RB217B	217B	2.50
931-2813	RB126	126	3.12
931-2814	RB226	226	3.12
931-2815	RB136	136B	3.12

Stock No.	Mfr's Type	For Series	EACH
931-2816	RB236	236B	3.12
931-2817	RB146	146	4.39
931-2818	RB246	246	4.39
931-2819	RB1156B	1156D	5.64
931-2820	RB1256B	1256D	5.64

SOLA ELECTRIC SB

Constant-Voltage Transformers

AUTOMATIC INSTANTANEOUS REGULATORS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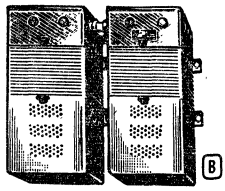
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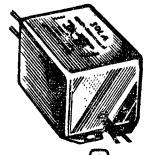
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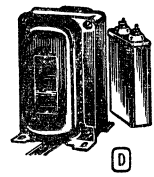

D

CV TRANSFORMERS TO SOLVE ANY VOLTAGE PROBLEM

- Ultra-Fast Regulating Action
- Response Time 1½ Hz or Less
- Fully Automatic, Continuous Regulation
- No Manual Adjustments Required
- Self-Protecting Against Short Circuits
- Negligible External Field

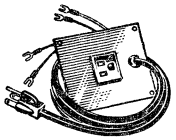
Static-magnetic voltage regulators accept input variations up to ±15% and regulate to within ±1%. Completely automatic, no moving parts, no maintenance, no manual adjustment. Fast regulating action response time is usually 1½ Hz (25 milliseconds) or less. Short-circuit and overload protection inherent in design. **CVS:** Less than 3% harmonic distortion at full load, the newer CVS delivers a sine wave output and is recommended for all AC applications. **CVN:** Recommended as transformer for DC power supplies, delivers a square wave and average 20% rms harmonic content. **CVE:** Electronic power type for plate-filament service. Regulates to ±3% of nominal input. **CVF:** Electronic power type for filament service. 50-Hz models of CVE and CVF available. **Figure codes:** A—exposed core, end housings, screw-type terminals in outlet box; B—same as A but duplex; C—drawn case, integral capacitor; D—exposed core, end bells, separate capacitor. *Suffix F in Stock No.—Shipped FOB warehouse Elk Grove, Ill.*

TYPE CVS SINUSOIDAL TRANSFORMERS—60 Hz DUTY

Stock No.	Mfr's Type	Output Volts	Input Volts	VA	Nominal Dimensions (In.) Outline	Nominal Dimensions (In.) Mounting	Fig.	Use Adapter	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-Up
921-3150	23-13-030-2	118	95-130	30	6⅛x4x5 3/16	3x3½	A	d	8	40.60	34.10	30.00
921-3200	23-13-060-2	118	95-130	60	6 15/16x4x5 3/16	3x3½	A	d	10	48.20	38.50	33.90
921-3600	23-23-060-2	118	190-260/380-520	60	6 15/16x4x5 3/16	3x3½	A	d	10	51.50	42.10	37.05
921-3300	23-22-112-2	118	95-130/190-260	120	8x4x5 3/16	3x3½	A	d	14	61.50	49.30	43.40
921-3650	23-23-112-2	118	190-260/380-520	120	8x4x5 3/16	3x3½	A	d	14	66.00	52.90	46.55
921X3350	23-22-125	118	95-130/190-260	250	9⅝x5⅜x7 7/16	4⅛x4¾	A	b	28	84.00	72.50	63.80
921U3700	23-23-125	118	190-260/380-520	250	10x5⅜x7 7/16	4⅛x4¾	A	b	49	90.00	74.30	65.40
921U3400	23-22-150	118	95-130/190-260	500	12 7/16x9x6 7/16	5⅝x8⅛	A	c	45	131.00	104.60	92.05
921U4250	23-26-150	118/236	190-260/380-520	500	12 7/16x9x6 7/16	5⅝x8⅛	A	c	46	140.00	111.80	98.40
921F3800	23-25-175	118/236	95-130/175-235 190-260	750	16 13/16x9x6 7/16	5⅝x8⅛	A	c	54	180.00	157.50	133.30
921F3850	23-25-210	118/236	95-130/175-235 190-260	1000	17 15/16x9x6 7/16	5⅝x8⅛	A	c	72	222.00	175.50	154.45
921F4300	23-26-210	118/236	190-260/380-520	1000	17 15/16x9x6 7/16	5⅝x8⅛	A	c	72	222.00	175.50	154.45
921F3900	23-25-215	118/236	95-130/175-235 190-260	1500	19 5/16x10 11/16x9½	3 15/16x11¾	A	.....	128	294.00	246.00	216.50
921F3950	23-25-220	118/236	95-130/175-235 190-260	2000	19 15/16x12¾x10 11/16	4½x11¾	A	.....	140	382.00	307.75	270.80
921F4350	23-26-220	118/236	190-260/380-520	2000	19 15/16x12¾x10 11/16	4½x11¾	A	.....	148	382.00	307.75	270.80
921F4000	23-25-230-3	118/236	95-130/175-235 190-260	3000	21⅞x12¾x10 11/16	6 7/16x11¾	A	.....	194	535.00	427.95	376.60
921F4400	23-26-230	118/236	190-260/380-520	3000	21⅞x12¾x10 11/16	6 7/16x11¾	A	.....	196	535.00	427.95	376.60
921F4050	23-25-250	118/236	95-130/175-235 190-260	5000	20 9/16x25 13/16x10 11/16	5 7/16x24 13/16	B	.....	335	830.50	668.35	588.15
921F4450	23-26-250	118/236	190-260/280-520	5000	20⅞x25 13/16x10 11/16	5 7/16x24 13/16	B	.....	342	830.50	668.35	588.15
921X3450	23-22-612	118	95-130/190-260	120	8¾x5⅜x7 7/16	4⅛x4¾	A	b	21	70.50	60.00	52.80
921X3500	23-22-625	118	95-130/190-260	250	11 5/16x9x6 7/16	5⅝x8⅛	A	c	35	96.00	80.60	70.95

TYPE CVN NORMAL HARMONIC TRANSFORMER—60 Hz DUTY

Stock No.	Mfr's Type	Voltage Rating Output	Voltage Rating Input	VA	Nominal Size (Inches) Outline	Nominal Size (Inches) Mounting	Fig.	Use Adapter Kit	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-Up
921-1000	20-10-015	118	95-130	15	5 5/16x2⅝x3½	5 1/16x1⅛	C	.....	4	24.00	22.35	19.65
921-1800	20-14-015	118	95-130	15	4 5/16x2⅜x2 7/16	1¾x1⅞	D	.....	3	25.00	23.30	20.50
921-1850	20-14-030	118	95-130	30	4 5/16x2⅝x3 5/16	1⅞x2⅜	D	.....	5	25.60	22.10	19.45
921-1150	20-13-030-2	118	95-130	30	6x4x5 3/16	3x3½	A	d	7	33.00	28.50	25.10
921-1200	20-13-060-2	118	95-130	60	6 13/16x4x5 3/16	3x3½	A	d	10	40.60	34.00	29.90
921-1900	20-14-060	118	95-130	60	4 13/16x3⅛x3⅞	2½x3⅞	D	.....	8	34.60	28.80	25.35
921-1950	20-14-112	118	95-130	120	4 13/16x3⅛x4 15/16	2½x3⅞	D	.....	11	47.00	43.35	38.15
921-1250	20-13-112-2	118	95-130	120	7⅜x4x5 3/16	3x3½	A	d	12	54.00	43.35	38.15
921-2200	20-21-112-2	236	190-260	120	7⅞x4x5 3/16	3x3½	A	d	13	54.00	43.35	38.15
921X1300	20-13-115	118	95-130	150	8⅞x5⅜x7 7/16	4⅛x4¾	A	b	22	64.50	54.75	48.20
921X2250	20-22-125	118	95-130/190-260	250	11 1/16x6 15/16x6 7/16	4 9/16x6 15/16	A	c	25	79.50	63.70	56.05
921X2300	20-22-150	118	95-130/190-260	500	12 5/16x6 15/16x6 7/16	4 9/16x6⅛	A	c	36	125.00	99.75	87.80
921Z2350	20-22-210	118	95-130/190-260	1000	15⅛x6 15/16x6 7/16	4 9/16x6⅛	A	.....	48	212.00	165.90	146.00
921F2800	20-25-220	118/236	95-130/175-235/ 190-260	2000	20x10½x10 11/16	4 9/16x9½	A	.....	128	340.00	272.55	239.85
921F2850	20-25-230	118/236	95-130/175-235/ 190-260	3000	22x10½x10 11/16	6 9/16x9½	A	.....	170	510.00	408.70	359.65
921F3100	20-27-250	118/236	190-260/380-520	5000	21x14½x14⅜	7x13	A	.....	290	790.00	635.90	559.60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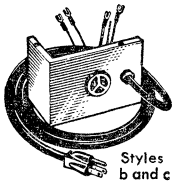

Styles b and c

CORD/RECEPTACLE ADAPTER KITS FOR "A" STRUCTURES

Stock No.	Mfr's Type	Style Code	Input Cord	Output Recept	EA.
921-6200	999-104	d	2-wire	2-wire	7.25
921-6100	999-019	b	3-wire	3-wire	4.50
921-6000	999-009	c	2-wire	2-wire	5.10
921-6150	999-020	c	3-wire	3-wire	4.50

Provides the convenience of an input plug and output receptacle on CV transformers in "A" type housings. Easily wired to standard terminal arrangement located under top plate of housing. Determine correct part number by noting "Adapter Kit" in tabular lists for CVS and CVN types.

Many Of The Above Units Also Available In 50 Hz Rating

Provide ± 1% Voltage Regulation

SOLA ELECTRIC

TYPE CVE—FOR PLATE-FILAMENT SERVICE—50 TO 250 mA—60 Hz

100-130 V input. *Additional 6.3 V, 8 amp unregulated filament winding.

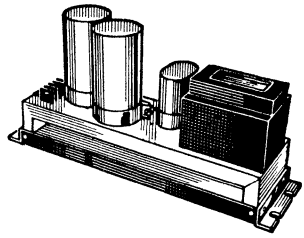
Stock No.	Mfr's Type	Typical Rectifier Tube	Av. DCV to Filter	Fil. Windings 6.3 V	Fil. Windings 5.0 V	Nominal Dimensions (In.) Outline	Nominal Dimensions (In.) Mounting	Fig.	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-Up
921-6300	7104	5Y3	275 @ 50 mA	2.5A; CT	2 A	4 13/16 x 3 1/8 x 3 3/16"	2 1/2 x 2 1/8"	D	6	20.00	18.90	16.65
921-6350	7106	5Y3	385 @ 110 mA	3A; CT	2 A	4 13/16 x 3 1/8 x 3 15/16"	2 1/2 x 2 7/8"	D	8	24.40	21.80	19.20

TYPE CVF—FOR FILAMENT SERVICE—2.5 TO 25 AMPS—60 Hz

Stock No.	Mfr's Type	Output Volts	Input Volts	Amps	Nominal Dimensions (In.) Outline	Nominal Dimensions (In.) Mounting	Fig.	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-Up
921-0050	20-01-015	6.0	95-130	2.50	5 9/16 x 2 5/8 x 3 1/2"	5 1/16 x 1 1/8"	C	4	28.00	25.00	22.00
921-0150	20-02-015	6.3	95-130	2.38	5 9/16 x 2 5/8 x 3 1/2"	5 1/16 x 1 1/8"	C	4	28.00	25.00	22.00
921-0350	20-04-065	6.3	95-130/190-260	10.0	4 13/16 x 3 1/8 x 3 3/4"	2 1/2 x 2 1/16"	D	8	33.00	28.30	24.90

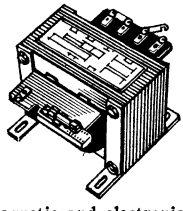
CVDC FIXED-OUTPUT DC POWER SUPPLIES

Designed for intermittent, variable or pulse loads. Excellent for controlling line-voltage fluctuations, particularly effective when employed with fixed loads. Large filter capacitances also provide good dynamic response for rapidly changing loads (speed of voltage correction). CVDC "brute force" supplies offer DC voltage regulation to ±1% for ±15% input voltage variation. Requires no adjustments or maintenance for easy simplified operation. Constant voltage transformer (CVT) provides automatic current limiting in event of load faults; short-circuit protection prohibits overloads from damaging power supply or equipment. Utilizes full rating of rectifiers . . . wave shape minimizes necessary filtering. Normal ripple, 1% (rms) except *½%. Negative or positive DC polarity. Typical efficiency, 75%. Electrical circuits insulated from ground for operation at either polarity. With panel for std. 19" rack mtg. For 100-130 V, 60 Hz AC.



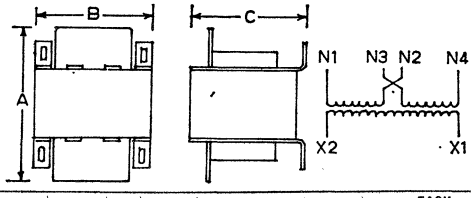
Stock No.	Mfr's Type	Output Ratings V	Output Ratings A	Output Ratings W	Wt., Lbs.	EACH 1-2	EACH 3-4	EACH 5-Up
921X7500	281513-2	6	10	60	27½	145.00	124.00	111.50
921X7550	281514-2	12	5	60	21½	145.00	119.00	107.00
921X7750	282124-1	12	10	120	31	145.00	124.00	111.50
921X7600	281515-2	18	5	90	26	141.00	127.00	114.50
921Z7401	282125-1	18	10	180	45	185.00	136.00	111.50
921X7200	281024-1	24	6	144	30	145.00	128.00	115.00
921Z7850	282126-1	24	10	240	48	154.00	139.00	125.00
921U8000	28626- 2	28	8	224	41¼	160.00	133.00	119.50
921F7875	2821281	28	15	420	55	167.00	154.00	138.50
921X7250	281048	48	4	192	31½	141.00	132.00	119.00
921U7650	281561-1	48	10	480	44½	199.00	185.00	166.00
921F7950	282129-1	48	20	960	95	320.00	220.00	198.00
921U7300	281125-1	125	2	250	41¾	154.00	131 00	118.00
921U7400	281200	200	1	200	39	141.00	123.00	110.50
921F7450	281250*	250	1	250	54	148.00	123.00	110.50

CONTROL TRANSFORMERS FOR VARIED APPLICATIONS



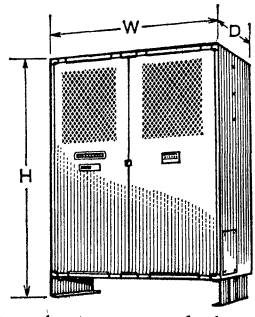
- Transformers Meet or Exceed NEMA, ANSI and NMBTA Standards
- New, Exclusive SWING-KLIP Series Parallel Connecting Links
- Single Phase, Triple Voltage Dual Frequency, 55°C Temp. Rise

For control circuits incorporating electromagnetic and electronic devices—solenoids, valves, contractors, relays, rectifiers and solid state components—in applications such as motor control, processing equipment and machine tools. Low resistance types, these transformers are designed to meet or exceed requirements of NEMA, ANSI, and NMBTA. Have metallic nameplate with complete data, wiring diagram permanently attached to frame. Slotted feet for simplified installation. High quality core steel selected for optimum performance of each KVA rating. Control transformers of the highest quality.



Stock No.	Mfr's Type	KVA	NAED EDP No. 5888	Dimensions A	Dimensions B	Dimensions C	Approx. Wgt. Lbs.	EACH 1-2	EACH 3-4	EACH 5-Up
921-4802	35-10-25	.025	28401	3 5/16"	3"	2"	2	9.15	6.22	5.37
921-4805	35-10-50	.050	28402	3 5/16"	3"	2½"	2½	11.70	7.95	6.59
921-4807	35-10-75	.075	28403	3 19/32"	3¾"	3½"	3½	14.60	9.92	8.16
921-4810	35-10-100	.100	28404	3 25/32"	3⅜"	3⅔"	3⅔	15.60	10.60	8.84
921-4815	35-10-150	.150	28405	4 7/16"	4½"	6½"	6½	18.00	12.20	10.25
921-4820	35-10-200	.200	28406	4 11/16"	4½"	7½"	7½	20.70	14.05	13.30
921-4825	35-10-250	.250	28407	51/6"	4½"	9"	9	26.50	18.00	15.35
921-4830	35-10-300	.300	28408	4 15/16"	5¼"	11¼"	11¼	28.60	19.40	15.90
921-4835	35-10-350	.350	28409	5 5/16"	5¼"	13"	13	31.00	21.05	17.85
921X4850	35-10-500	.500	28410	6"	5¼"	16¼"	16¼	35.00	23.80	21.90
921X4875	35-10-750	.750	28411	6 11/32"	6⅜"	24"	24	44.50	30.25	28.70
921X4821	35-10-210	1.0	28412	7 3/16"	6⅜"	30½"	30½	54.50	37.05	35.50

SOLATRON® LINE VOLTAGE REGULATORS FOR COMPUTERS



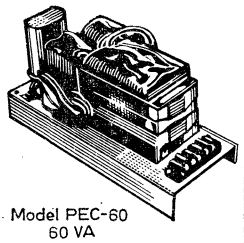
- Line Voltage Regulation of ±¼%
- No Moving Parts—No Maintenance
- Ultra-Fast Response
- Clipping of Line Voltage Spikes
- Effective Filtering of Line Noise
- Available in Eight Sizes
- 57 to 63 Hz Frequency

With the problems of low line voltage due to power cutbacks or line loss; the increase of power line transients from lightning or the switching of power or equipment; and, the increased speed and sensitivity of new E. D. P. equipment—the need for a method of achieving consistent, reliable, clean power is becoming more critical. The new, improved Solatron LVR for computers is designed specifically to meet the stringent requirements of E. D. P. equipment. Features line voltage regulation of ±¼%; wide input range of +10% to −20%; effective filtering of line noise; clipping of line voltage spikes; remote sensing with adjustable output; fast response. Regulators will more than pay for themselves in the reduction of down time and errors due to power variations. Specifications: Input Voltage, nominal: 208 volts 3ϕ range, +10/−20%; Output Voltage, nominal; regulation: ±1% for any combination of line load, thermal drift, warm up and frequency. Capable of remote sensing. Frequency, 57 to 63 Hz; Output Voltage Adjustability, ±5% from nominal. In 8 sizes from 10 KVA to 225 KVA. Dimensions, *50x27x20". †65x36x27".

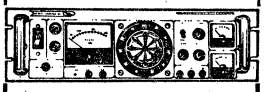
Stock No.	Type 39-59-	NAED EDP No. 5888	Approx. Shps. Wt. (lbs.)	Fig.	EACH Complete Unit 1	EACH Complete Unit 2-Up
921F5010	310	27001	540	A*	2,923.00	2,657.00
921F5015	315	27002	700	A*	3,273.00	2,975.00
921F5025	325	27003	1,080	B†	3,650.00	3,277.00
921F5050	350	27004	1,510	B†	5,755.00	5,232.00
921F5075	375	27005	1,785	B†	9,634.00	7,849.00
Regulators below have 3 cabinets. Specs. below apply to each cabinet.						
921F5110	410	27006	1,200	B†	10,962.00	9,965.00
921F5115	415	27007	1,385	B†	15,765.00	14,332.00
921F5122	422	27008	1,585	B†	21,780.00	19,800.00

WANLASS Paraformer™ and Regulators

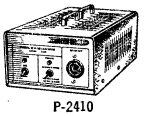
AC & DC VOLTAGE REGULATORS



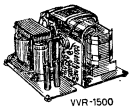
Model PEC-60
60 VA



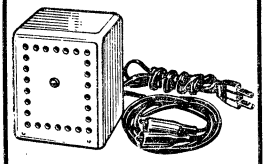
P-5505 PARAX
POWER SUPPLY



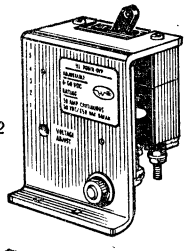
P-2410



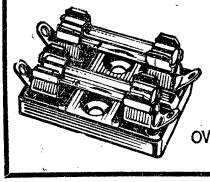
VVR-1500



BE-12 ELIMINATOR



OVP-2



OVP-1

PEC PARAFORMER . . LATEST CONCEPT IN AC POWER CONDITIONING

AC power transformer operates on new concept of parametric coupling—eliminates mutual inductance and flux coupling for greatly increased energy transfer. Provides voltage regulation and noise rejection of over 50 dB, over a frequency range of 0 to 1 MHz. Removes SCR-type switching transients, noise and other interference. Completely isolates line noise from the load and load noise from line. Entire unit consists only of primary winding, secondary winding, magnetic core and AC capacitor—no other components are used. Primary winding modulates inductance of the secondary transferring electrical power to sustain secondary oscillations and deliver power to the load. This results in far more efficient energy transfer than ferroresonant transformers. Also provides line voltage regulation of ±½%; overload protection and low-line voltage protection; over 50 dB attenuation for line and load noise. For 115 VAC, single-phase 60 or 400 Hz input, 60 or 400 Hz output. Numbers in Mfrs. Type indicate output capacity in Volt-Amperes. **Contact Allied for larger quantity prices.**

60 Hz UNITS

Stock No.	Mfr's Type PEC-	Size (HxWxD)	Wt., Lbs.	EACH 1-3	4-9	10-Up
983-4060	60	4¼x4x9"	10	118.98	95.00	90.25
983U4150	150	6x4x12"	21	175.35	150.00	142.50
983F4200	500	7½x5x17"	50	263.02	225.00	213.75
983F4260	1000	7½x10x17"	85	496.82	425.00	403.75

400 Hz UNIT

Stock No.	Mfr's Type PEC-	Size (HxWxD)	Wt., Lbs.	EACH 1-3	4-9	10-Up
983-4075	75	4¼x5x6"	7	122.74	105.00	99.75

P-5505 VARIABLE AC/DC PARAX POWER CONDITIONER

Perhaps the most versatile piece of test gear offered by Wanlass, this fine instrument provides regulated and filtered variable AC (0-140 V) and DC (0-8 V) power with complete transient suppression. "Parax" operation guarantees high reliability.

The unit is composed of a variable AC regulated power conditioner combined with a highly regulated, variable DC power supply. Has extensive capabilities and uses in testing high line and low line limits, as well as providing a DC range of voltage for testing integrated circuits.

Variable AC supply is a standard "Parax" circuit, while variable DC supply is a highly precise transistor-series-regulator with "Parax" filtering advantages. Indicative of the instrument's potential wide-use features is the fact that it is completley metered: AC volts in, AC volts out; DC volts out, and DC amps out.

Input voltages (*range dependent on load current): fixed AC power, 105-125 VAC, 1 phase nominal (*50-150 VAC); variable AC power, (*50-150 VAC); DC power, (*50-150 VAC). Output voltages: fixed AC, 118 VAC; variable AC, 0-140 VAC; DC, 0-8 VDC. Output capacity: AC, 500 VA; DC, 0-15 amps. Line regulation: AC, ±.25%, DC, ±100μV. Load regulation.

(10%-FL): fixed AC, ±1.5%; variable AC, ±2% (typical); DC, ±5 mV. DC ripple: 2 mV (rms). Protection for fixed AC power: inherent overload and short circuit. DC response time: 10 μsec. Noise attenuation: AC, 50 dB (to 1 MHz). Size: 5¼x19x19". Shpg. wt. 80 lbs.

983F4000.....875.00

P-2410 PHASAC® 1-PHASE TO 3-PHASE CONVERTER

Static single-phase to three-phase AC converters rated 1 kVA, with all passive components utilizing inherent phase shift phenomenon of Paraformer®. AC Input: 105-125 VAC, single-phase. AC Output: 120 VAC line-to-neutral, 208 VAC line-to-line, 240 VAC at 1 kVA (333 VA per phase); three-phase. Output Connector: 4-wire wye or 3-wire delta. Size 8⅝"w. x 17⅛" d. x 6⅝" h. Weight is 60 lbs.

983F3700. 1-9..Ea. 475.00 10-Up..Ea. 455.00

VVR-1500 VARAX® VARIABLE INDUCTOR STATIC AC VOLTAGE REGULATORS

Static, frequency insensitive AC voltage regulators offer high reliability, ideal for remote and unattended locations. Provide line and load regulation. True rms regulation by rms sensor and all silicon semiconductor closed-loop control circuit, with low power level. No silicon controlled rectifiers or other solid state components are used in power circuits. AC Input: 105-130 VAC, 47-63 Hz, single-phase. AC Output: 120 V rms: 1500 or 2000 VA. Load Regulation: ±1% for 400 to 1500 watt load change (±1%, zero to full-load with optional BI-1500 ballast inductor). Line Regulation: ±1%. Operating Temperature: 0° to 55° C: up to 85° C with 200 cfm forced-air cooling. Efficiency: Over 90% at full load. Size: 10" w. x 10" d. x 4.5" h. Produces no spikes or conducted RF interference. Short circuit protection. Wt. 32 lbs.

Stock No.	Model No.	Power Rating	Inductive Load Required	Motor Load HP	Each 1-3	4-9	10-24	25-Up
983U4500	VVR-1500	1500VA	1.8 to 3.6 amps	1/12 to 1/6	216.04	172.50	164.00	155.25
983U4501	VVR-1501	1500VA	3.6 to 5.4 amps	1/6 to 1/4	216.04	172.50	164.00	155.25
983U4502	VVR-1502	2000VA	5.3 to 8.0 amps	1/4 to 1/2	216.04	172.50	164.00	155.25
983-1050	BI-1500	Ballast Inductor for VVR-1500			31.31	25.00	23.75	22.50

BE12 ELIMINATOR 12V DC POWER SUPPLY

Low priced, solid-state power supply for a wide variety of servicing applications. Eliminates need for 12-14 volt batteries to power DC devices. May be used for servicing all-transistor 12-14 volt equipment and hybrid or all-vacuum tube equipment. Useful for operating auto radios, stereo tape cartridge and cassette players. Specially designed for protection against inadvertent overloads and dead short circuits. Operates from 105-125 volts, single phase, 60 Hz AC. Precision regulated and filtered. DC output: 12-14 volts at 1.5 amps. All-silicon transistors for maximum dependability and ultra-long life. Comes in special corrosion resistant case. Includes sturdy, Underwriter's Laboratory listed two-wire cord and plug for AC input, output leads complete with alligator clips to DC load. Overall dimensions measure 4" high x 3½" wide x 3" deep. Wt. 1 lb.

983-1000. 1-3...Each 24.98 4-9...Each 19.95
10-24.....Each 18.95 25-49.Each 17.95

OVP OVERVOLTAGE PROTECTION DEVICES

TYPE OVP-1. Adjusts 6 to 60 VDC and currents up to 50 amps DC for power supply protection from overvoltage. 10 msec circuit breaker action. Suited for Wanlass Brutes I, II, III. ½ lb.

Stock No.	Type OVP-	VDC	EACH 1-3	4-9	10-24	25-Up
983-3531	1	6-60	65.13	52.00	49.00	47.00
983-3532	2-53	3.6	11.27	9.00	8.50	8.00
983-3533	2-5	5	11.27	9.00	8.50	8.00
983-3534	2-6	6	11.27	9.00	8.50	8.00
983-3535	2-10	10	11.27	9.00	8.50	8.00

TYPE OVP-2. Protects voltage-sensitive loads such as ICs or MOSFETs. For Wanlass DPS or OEM DC power supplies or any 10 amp or less protection. (See below for voltage capacities.) Wt. 2 oz.

Stock No.	Type OVP-	VDC	EACH 1-3	4-9	10-24	25-Up
983-3536	2-12	12	11.27	9.00	8.50	8.00
983-3537	2-15	15	11.27	9.00	8.50	8.00
983-3538	2-18	18	11.27	9.00	8.50	8.00
983-3539	2-24	24	11.27	9.00	8.50	8.00
983-3540	2-28	28	11.27	9.00	8.50	8.00

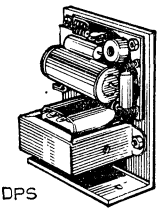
Regulated DC Power Supplies

WANLASS

REGULATED 20 WATT DC POWER SUPPLIES

Regulated DC power supplies for use in a wide variety of applications. Operate from 115 volts ±10% AC single phase, 60 Hz. Four different models for 5-6 V, 12-15 V, 24 V or 180-220 V. All silicon, solid-state construction for superior dependability and long-life reliability. Regulated ±1% for line and load, filtered to 1% rms ripple and protected by automatic recovery, current overload limiting. Automatic short-circuit protection. 4½x4x3". Av. shpg. wt. 2 lbs.

Stock No.	Mfr's Type	DC Output Volts	DC Output Amp	EACH 1-3	4-9	10-24	25-Up
983-3201	*DPS-1*	5-6	3.0	31.24	24.95	23.70	22.50
983-3202	*DPS-2*	12-15	1.5	31.24	24.95	23.70	22.50
983-3203	*DPS-3*	24	1.0	31.24	24.95	23.70	22.50
983-3204	DPS-4	180-220	0.1	45.09	36.00	34.20	32.40
983-3205	*DPS-5*	5-6	1.5	24.98	19.95	18.95	17.95
983-3206	*DPS-6*	12-15	0.75	24.98	19.95	18.95	17.95
983-3207	DPS-7	24	0.40	24.98	19.95	18.95	17.95

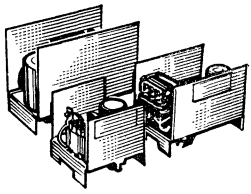


DPS

ECONOMY REGULATED DC POWER SUPPLIES

Regulated DC power supplies for a wide variety of uses. Voltage adjustment potentiometer facilitates selection of any output voltage from 3.6 to 60 VDC (voltage ranges in table at right). Line regulation: ±1% change in output for ±10% change in line voltage. Load regulation: ±1%, no load to full rated load. Low ripple output of 0.1%, 10 mV rms. Automatic short circuit protection. Floating output permits positive or negative grounding. Transformer taps. Open chassis construction for use in Manufacturer's Original Equipment Systems. Type 30-OEM: 30-watt power rating. 5x5x5". Shpg. wt., 5 lbs. Type 60-OEM. 60-watt power rating. 7x5x7". Shpg. wt., 7 lbs. Type 120-OEM: 120 watt power rating. Shpg. wt., 12 lbs.

Stock No.	Mfr's Type	Volt. Range V	EACH 1-3	4-9	10-24	25-Up
983-5500	*30-OEM-1*	3.6-9	57.61	46.00	43.75	41.50
983-5501	30-OEM-2	9-17	57.61	46.00	43.75	41.50
983-5502	30-OEM-3	17-30	57.61	46.00	43.75	41.50
983-5503	30-OEM-4	30-60	57.61	46.00	43.75	41.50
983-6000	60-OEM-1	3.6-9	72.01	57.50	54.50	51.75
983-6001	60-OEM-2	9-17	72.01	57.50	54.50	51.75
983-6002	*60-OEM-3*	17-30	72.01	57.50	54.50	51.75
983-6003	60-OEM-4	30-60	72.01	57.50	54.50	51.75
983-7000	120-OEM-1	3.6-9	108.01	86.25	82.00	77.75
983-7001	120-OEM-2	9-17	108.01	86.25	82.00	77.75
983-7002	120-OEM-3	17-30	108.01	86.25	82.00	77.75
983-7003	120-OEM-4	30-60	108.01	86.25	82.00	77.75

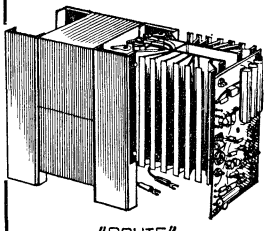


30, 60 and 120 OEM Power Supplies

BRUTE REGULATED DC POWER SUPPLIES

SCR regulated high power wide-range supplies employ phase control principle with ±0.1% or 50 mV line and load regulation. Automatic crossover to constant current mode, special circuit virtually eliminates RFI. Output continuously adjustable 5-50 V or 2-25 V (reconnectable). 1% rms or 500 mV ripple. Input 115-230 V, 1-phase, 47-63 Hz. Provide reliable regulation with very low ripple output. Includes remote sense capability. Brute I: 300 watts, measures 7¾x7x11"; weight, 25 lbs. Brute II: 600 watts, measures 7¾x7x12"; weight 30 lbs. Brute III: 1200 watts, measures 11¼x10x 4"; weight 65 lbs.

Stock No.	Mfr's Type	Output Amps	EACH 1-3	4-9	10-24	25-Up
983-1101	Brute I	6/12	185.37	148.00	141.00	133.00
983-1102	Brute II	12/24	244.23	195.00	185.00	176.00
983-1103	Brute III	25/50	394.53	315.00	299.00	284.00



"BRUTE"

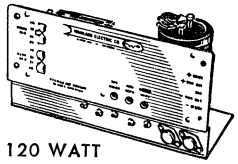
OPTIONAL OVERVOLTAGE AND RIPPLE REDUCTION

983-3251. Type K-2 Ripple Reduction Kit. For ½% rms ripple. For Brute I and II. Shpg. wt. 4 lbs. 31.31
983-3300. K3 Overvoltage Protector.... Ea. 31.31

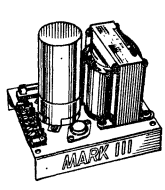
LOW VOLTAGE DC POWER SUPPLIES

Ideal DC source for IC, OP-AMP and MOS/FETS or other voltage sensitive loads. Has built-in overvoltage and overload protection. Operates from 115/230V, 47-63 Hz 1-phase source and provides DC output voltages in the 5-28 volt range at 60 watts and 5-24 volt range at 120 watts (See table, right). Regulated ±0.1% for line and load with ripple less than 1 mv. Has application in items requiring low voltage DC from a single, small and dependable source. Size 5½x5x6". Wt. 7 lbs.

Stock No.	Model No. MARK-	DC Output	Watts	EACH 1-3	4-9	10-24	25-Up
983-3480	III-OEM 5-5	5V, 5A	60	112.09	89.50	85.00	80.50
983-3490	III-OEM 12-5	12V, 5A	60	112.09	89.50	85.00	80.50
983-3500	III-OEM 15-4	15V, 4A	60	112.09	89.50	85.00	80.50
983-3505	III-OEM 18-3	18V, 3A	60	112.09	89.50	85.00	80.50
983-3510	III-OEM 24-2.5	24V, 2.5A	60	112.09	89.50	85.00	80.50
983-3520	III-OEM 28-2	28V, 2A	60	112.09	89.50	85.00	80.50
983-3485	III-OEM 5-10	5V, 10A	120	171.04	137.50	130.60	123.75
983-3495	III-OEM 12-10	12V, 10A	120	171.04	137.50	130.60	123.75
983-3515	III-OEM 24-5	24V, 5A	120	171.04	137.50	130.60	123.75



120 WATT



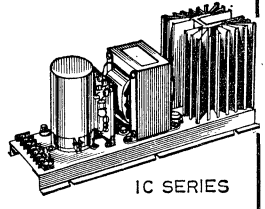
60 WATT

ALL SILICON IC SERIES DC POWER SUPPLIES

D.C. power for I.C.'s and MOS/FET applications. Provides over 100 dB noise attenuation for all voltage sensitive loads. Can be employed in the same manner as any other power, isolation or rectifier transformer, combining it with a series regulated DC power supply, providing positive protection for voltage sensitive loads. Adjustable output voltage, ±5% minimum, from nominal output. AC input: 105-125 VAC, 47-63 Hz single phase. Ripple: 5 mV rms maximum. Recovery time: 50-100 μsec. Line load regulation: ±0.25%. Type 60-IC. 11.5x5.2x6". Wt. 11 lbs. Type 120-IC. 15.5x5.2x6.3". Wt. 16 lbs. Type 200-IC. 17x6.2x8". Wt. 27 lbs.

Stock No.	Mfr's Type	Output V	Output W/A	EACH 1-3	4-9	10-24	25-Up
983-5101	60-IC-1	3.6-6.3	7.5A	156.56	125.00	118.75	112.50
983-5102	60-IC-2	12-15-18	60W	156.56	125.00	118.87	112.50
983-5103	60-IC-3	24-28-36	60W	156.56	125.00	118 75	112.50
983-5104	60-IC-4	48-60	60W	156.56	125.00	118.75	112.50
983-5151	120-IC-1	3.6-6.3	15A	212.92	170.00	161.50	153.00
983-5152	120-IC-2	12-15-18	120W	212.92	170.00	161.50	153.00

Stock No.	Mfr's Type	Output V	Output W/A	EACH 1-3	4-9	10-24	25-Up
983-5153	120-IC-3	24-28-36	120W	212.92	170.00	161.50	153.00
983-5154	120-IC-4	48-60	120W	212.92	170.00	161.50	153.00
983U5171	200-IC-1	3.6-6.3	25A	281.81	225.00	213.50	202.50
983U5172	200-IC-2	12-15-18	200W	281.81	225.00	213.50	202.50
983U5173	200-IC-3	24-28-36	200W	281.81	225.00	213.50	202.50
983U5174	200-IC-4	48-60	200W	281.81	225.00	213.50	202.50

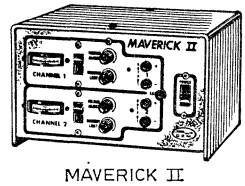


IC SERIES

"MAVERICK" REGULATED DC POWER SUPPLIES

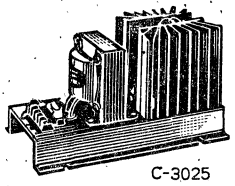
Economy regulated variable bench and dual rack mount DC power supplies. Available in two models, one providing 0-7 volts at 5 amps and the other a dual output of 0-18 volts at 1.25 amps each. Maverick I can be seriesed or paralleled with a like unit to provide higher voltage and/or current. Maverick II can have its dual output seriesed or paralleled to provide higher voltage and/or current. Regulation: ±0.1% or 5 mV for line and ±0.1% or 5 mV for load. Ripple: 0.01% or 1 mV rms maximum. AC input: 105-125 volts, 1 phase, 47-63 Hz. Automatic current limiting, adjustable from 0-110%. Remote sensing with Auto-Revert to local in case of a disconnected or broken sense lead. Impedance: 10 milliohms maximum from DC-1 kHz. Reset-circuit breaker for AC. Floating output. Natural convection cooling for 0-45°C operating temperature. Other features include: On-off and meter selector switches on front panel. Floating output—either positive or negative may be grounded. Dual rack mount—½ of rack mounting hardware is furnished with each unit. Combination voltmeter/ammeter. Front panel voltage adjust; front panel current limit adjust. 5¼x8½x8". Shpg. wt. 9 lbs.

Stock No.	Mfr's Type	DC Output Volts	DC Output Amps	EACH 1-3	4-9	10-24	25 Up
983-3401	Maverick I	0-7	0 5	111.47	89.00	84.50	80.00
983-3402	Maverick II	(two) 0-18	1.25	156.56	125.00	118.75	112.50

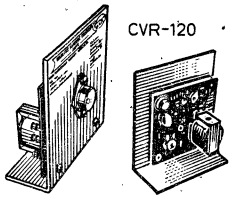


MAVERICK II

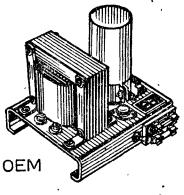
WANLASS Voltage and Clipping Regulators



C-3025



CVR-120



C214-OEM

C-3000 SERIES SOLID-STATE RMS CLIPPING REGULATORS

True rms clipping regulators hold output voltage constant under varying conditions of line, load, frequency and power factor. Peak clipping regulation technique. Line regulation of ±½% rms for ±10% line change; load regulation of ±½% rms for load changes from 10% to full rated load. AC input: 100-130 V, 47-420 Hz single-phase. AC output: 115 V nominal (see VA ratings in Table). Response time, less than 50 μsec. Line transient suppression; excellent surge loading characteristics. Silicon transistor circuit. Temp. range, —20° C to +50° C. Efficiency, 75% minimum at nominal input voltage and full rated load. Type C-3003. 3x4x2.8". Shpg. wt., 1½ lbs. Type C-3006. 3x4.12x3.75". Shpg. wt., 2½ lbs. Type 3012. 3x4.15x4.5". Shpg. wt., 3.2 lbs. Type 3025. 5.5x6.12x9.5". Shpg. wt., 6½ lbs. Type 3050. 7.25x10.88x6.12". Shpg. wt., 10¼ lbs. Type C-3100. 7.25x6.12x16". Shpg. wt., 17½ lbs. **Contact Allied for larger quantity prices.**

Stock No.	Mfr's Type	Output VA	EACH 1-3	4-9	10-Up
983-3003	C-3003	30	48.84	39.00	37.00
983-3006	C-3006	60	57.61	46.00	43.75
983-3012	C-3012	120	63.87	51.00	48.50
983-3025	C-3025	250	112.09	89.50	85.00
983-3050	C-3050	500	156.89	125.00	118.75
983-3100	C-3100	1000	263.02	210.00	199.50

CVR-120 AC VOLTAGE REGULATOR

Useful addition to any service bench. Solid-state completely static voltage regulator priced considerably lower than ferroresonant-type constant voltage transformers. Small size and light weight (approximately 10% of comparably rated units). Frequency and power factor insensitive. Peak regulated—ideal for DC power supply pre-regulator applications. AC input, 100 to 130 volts, 47 to 420 Hz, single-phase. AC output: peak, 135 volts; rms, 105 volts typical at 130 volts input and full load. Peak regulation: line, ±1% for ±10% line voltage fluctuation; load, ±1% for no load to full rated load. Operating temperature: up to 40° C ambient at full load, higher with derating. Overall size, 4x4½x2½". Shpg. wt., 10 oz. **Contact Allied for larger quantity prices.**

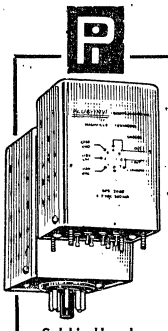
Stock No.	Mfr's Type	Output VA	EACH 1-3	4-9	10-Up
983-3200	CVR-120	120	33.18	26.50	25.00

C214 DC REGULATOR

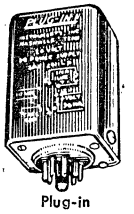
Specially designed for driving relays, solenoids, motors and other surge-type loads. Provides DC output of 28 volts at 2.5 amperes. AC input 115/230 Volts AC (±10%), single-phase, 50/60 Hz. Line and Load regulation is ±2%. Ripple is only 0.1% rms ±10 mV. Operating temperature is from 0° to 40° centigrade. Can be used up to 70° C with derating. Size is 6" w. x 5" d. x 5.5" h. Weight is only 7 lbs. Heavy-duty construction to provide long dependable service.

- DC Output of 28 VDC
- Regulation better than ±2%
- Ripple less than 0.1%

Stock No.	Model No.	Output Volts	Net Each, Lots of 1-3	4-9	10-24	25-Up
983-1300	C214-OEM	28VDC	57.61	46.00	43.50	41.50



Solder-Header



Plug-in

DC POWER SUPPLIES BY ROSEMOUNT PLUG-IN

Miniature transistorized power supplies feature silicon transistors and rectifiers. Plug-in or solder header construction. Pot adjusts output. Line regulation: 2 mV DC or less. Lead regulation: 5 mV DC or less. Ripple: 1 mV p-p or less. DC isolation to case exceeds 100 megs @ 200 VDC; Output imped. (DC to 1 kHz): 0-1 ohm. Transient response (full load change): less than 200 mV p-p within 50 μ-sec. Stability better than ±0.1% for 500 hours. Ambient air temperature: 30° to 130° F. Temp coef.: 0.0008% degrees F. 3⅛x2⅛x2⅝". Solder type have 1½x1½" spacing. Plug-in type includes socket. 105-130 V, 50-400 Hz AC. Av. shpg. wt. 3 lbs. **Contact Allied for larger quantity prices.**

Stock No.	Mfr's Type	Style	Volts Range	Output mA	EACH 1-4	5-9	10-24
906-1952	SPS-2052-P	Plug-In	9-13	0-200	85.33	77.00	73.92
906-1953	SPS-2052-S	Solder Header	9-13	0-200	86.50	78.00	74.88
906-1954	SPS-2053-P	Plug-In	13-17	0-175	85.33	77.00	73.92
906-1955	SPS-2053-S	Solder Header	13-17	0-175	86.50	78.00	74.88
906-1956	SPS-2054-P	Plug-In	17-21	0-150	85.33	77.00	73.92
906-1957	SPS-2054-S	Solder Header	17-21	0-150	86.50	78.00	74.88
906-1958	SPS-2055-P	Plug-In	1-6.5	0-300	79.49	72.00	69.12
906-1959	SPS-2055-S	Solder Header	1.6-5	0-300	81.83	74.00	71.04
906-1960	SPS-2056-P	Plug-In	5-9	0-250	79.49	72.00	69.12
906-1961	SPS-2056-S	Solder Header	5-9	0-250	81.83	74.00	71.04
906-1972	SPS-2062-S	Solder Header	1-6.5	0-800	86.50	76.00	72.96
906-1974	SPS-2063-S	Solder Header	5-9	0-600	91.18	78.00	74.80

DUAL MINIATURE POWER SUPPLIES WITH SILICON TRANSISTORS

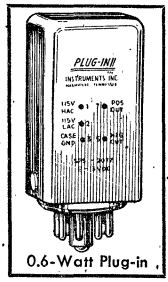
Similar to above, but with separate positive and negative outputs, each adjustable ±5% by potentiometer. Line regulation, 3 mV; load regulation, 6 mV. Ripple, 1 mV rms. Temp. coeff., .015%/°F. Size, 2⅝x2⅜x3⅛". Wt., 2 lbs. **Contact Allied for prices on quantities larger than those shown.**

Stock No.	Type SPS-	Style	Volts (±)	mA	EACH 1-4	5-9	10-24
906-7984	2073D-P	Plug-In	12	0-75	97.02	88.00	84.48
906-7985	2073D-S	Solder Header	12	0-75	98.19	89.00	85.44
906-7986	2074D-P	Plug-In	15	0-65	97.02	88.00	84.48
906 7987	2074D-S	Solder Header	15	0-65	98.19	89.00	85.44

REGULATED DC POWER SUPPLIES

Solid-state DC power supplies for small electronic and instrumentation equipment. Output isolated from input, for either positive or negative output. Output impedance, 0.1 ohm. Operating range, 30°F to 120°F. Ripple, 1 mV rms. Slip-on case. Size, less plug, 2x2x3". Plug-in power supply includes octal receptacle. 105-125 V, 60 Hz AC. Av. shpg. wt., 2 lbs. **Contact Allied for prices on quantities larger than those shown.**

Stock No.	Type SPS-	Output VDC	Output mA	Regulation Line%	Load%	EACH 1-4	5-9	10-24
906-1924	2017-P	9	0-175	±0.05	±0.1	59.61	54.00	51.84
906-1910	2010-P	12	0-175	±0.05	±0.1	59.61	54.00	51.84
906-1926	2018-P	15	0-125	±0.04	±0.08	59.61	54.00	51.84
906-1927	2019-P	18	0-100	±0.04	±0.08	59.61	54.00	51.84
906-1929	2020-P	22.5	0.90	±0.02	±0.05	59.61	54.00	51.84
906-1912	2011-P	24	0.90	±0.02	±0.05	59.61	54.00	51.84
906-1931	2021-P	28	0.75	±0.02	±0.05	59.61	54.00	51.84



0.6-Watt Plug-in

0.6-WATT PLUG-IN MINIATURE DC POWER SUPPLIES

Rated 0.6-watt; pot output adjustment. Momentary 5-minute automatic electronic short protection. Shielded transformer. AC isolation, 20 pF typ. DC isolation to case, over 100 megs @ 200 VDC. Amb. temp., 20 to 125° F. With octal receptacle. 1⅜x1⅜x2⅜". Av. wt: 1 lb. **Contact Allied for larger quantity prices.**

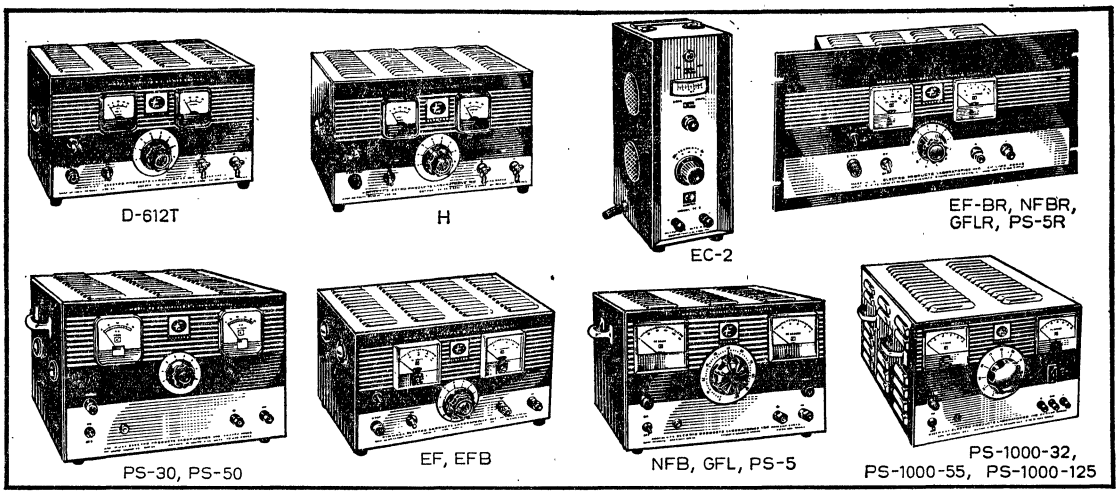
Stock No.	Mfr's Type	Volts Range	Output mA	Regulation Line	Load	Ripple mV	Temp. Coeff. (%/°F)	EACH 1-4	5-9	10-24
906-7994	SPS-2077-P	9-13	0-50	3 mV	6 mV	1.5	0.015	56.11	51.00	48.96
906-7996	SPS-2078-P	13-17	0-40	3 mV	6 mV	1.5	0.015	56.11	51.00	48.96

Ask Your Nearest Allied Electronics Facility for Prices on Larger Quantities

Industrial Power Supplies

ELECTRO

Provide reliable source of filtered DC voltage for commercial, industrial, research, educational and service applications. Smooth action controls and DC meters permit adjustment to exacting requirements. Silicon and selenium rectifiers, Patented conduction cooling to provide greater output. Special filters improve regulation and hold AC ripple to a minimum. All output ratings, as listed, are extremely conservative. Rugged, space-saving design. All units equipped with on-off switch, primary fuse, 6-ft. rubber-covered power cord and plug.



GENERAL-PURPOSE POWER SUPPLIES

Model D-612T. For CB transceivers, battery charging, solenoids, etc., requiring up to 16 VDC. Low ripple. Maximum output for the price. Voltage and current output meters. Input 117 V, 60 Hz.

Model H. Heavy-duty, dual range. Replaces storage batteries in labs, thermoelectric power source and other high current, low voltage uses. Voltage and current output meters. Input 117 V, 50-60 Hz.

Model EC-2. Low cost unit for auto, tape, disk and transistor radio servicing, research and development. Continuously variable output. Low ripple. Combined voltmeter/ammeter. 117 V, 60 Hz.

Model PS-50. Delivers 50 amps continuously. Heavy-duty, adjustable 12-V unit services autos, aircraft, marine radios. Industrial and educational uses. Eight-position tap switch voltage output selection. Input 117 V, 50-60 Hz.

Model PS-30. As above, but 30 amps continuous output.

*Continuously variable unless otherwise noted. †Voltage change for each amp of output change. §No-load to full-load unless otherwise noted.

Stock No.	Mfr's Type	Output Volts*	Output Amps	Regulation§ V/A†	Max. Ripple	Meters	DC Imped., Ohms§	Size, Inches WxDxH	Wt., Lbs.	EACH 1-2	EACH 3-Up
780X1000	D-612T	0-16	0-10	0.44 (3-10 A)	0.5% at 5A,	0-20 V; 0-10 A	0.44 (3-10 A)	12x8½x7	22	124.63	99.50
		0-8	0-10	0.3 (3-10 A)	2% at 10 A		0.3 (3-10 A)				
780X4000	H	12 adj.	0-10	0.23 (3-10 A)	5%	0-20 V; 0-30 A	0.23 (3-10 A)	12x8½x7	30	162.82	130.00
		6 adj.	0-20	0.15 (3-20 A)	5%		0.15 (3-20 A)				
780-2100	EC-2	0-16	0-5	1.8	0.5%	0-20 V/10A	1.8	4⅜x6½x10¾	11	93.32	74.50
780Z6200	PS-30	12 adj.	0-30	0.12 (6-30 A)	1%	0-20 V; 0-50 A	0.27	14¼x14¼x9¼	68	288.07	230.00
780Z6250	PS-50	12 adj.	0-50	0.17	0.5%	0-20 V; 0-50 A	0.17	14¼x19¼x9¼	87	463.42	370.00

INDUSTRIAL POWER SUPPLIES

DC voltage output continuously variable. Avalanche characteristics on rectifiers. Meters ±2% accurate.

Model EF. Variable 0-28 or 0-14 V at 5 amps continuous; 10 amps intermittent. Selenium rectifiers. Input 117 V, 60 Hz.

Model EFB. Very low ripple version for transistor work; has chokes and capacitors in ripple filter. Federal stock number 6130-957-1450. Inputs 117 V, 50-60 Hz.

Model EFBR. Same as EFB, but in standard EIA rack panel.

Model NFB. Heavy-duty, 0-32 V. Low ripple. Variable autoformer for smooth control. Silicon rectifiers. Input 117 V, 50-60 Hz.

Model NFBR. Same, but with standard EIA rack panel. Federal stock number 6130-853-3127.

Model GFL. Low cost, semi-regulated, low ripple, 0-125 V. For design and testing DC appliances, phone circuits, relays, etc. Silicon rectifiers; overload protection. Input 117 V, 50-60 Hz.

Model GFLR. Same, but with standard EIA rack panel.

Model PS-5. For 48-volt applications, delivers 550 watts of well-filtered DC; variable 0-55 V. Input 117 V, 60-50 Hz.

Model PS-5R. Same, but with standard EIA rack panel.

Model PS-1000-32. Heavy-duty type for continuous power, low ripple. Output 0-32 VDC at 30 amps. Variable autoformer for smooth control. Filter circuit has chokes, capacitors. Input 117 V, 50-60 Hz.

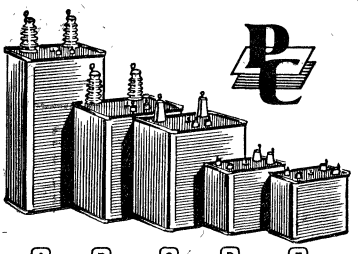
Model PS-1000-55. Same, but 0-55 VDC at 20 amps. Improved ripple.

Model PS-1000-125. Same, but 0-125 VDC at 8 amps.

†Voltage change for each amp of output change % applies for either line or load. §No-load to full load unless otherwise specified.

Stock No.	Mfr's Type	Output Volts*	Output Amps	Regulation§ V/A†	Max. Ripple	Meters	DC Imped., Ohms§	Size Inches WxDxH.	Wt., Lbs.	EACH 1-2	EACH 3-Up
780X2200	EF	0-28	0-6	1.9 (1-5 A)	1.0%	0-50 V; 0-6 A	0.9 (1-5 A)	12x8½x7	25	172.22	137.50
		0-14	0-6	0.6 (1-5 A)	1.0%		0.6 (1-5 A)				
780U2300	EFB	0-32	0-4	1.25	0.1%	0-40/20 V;	1.25	12x8½x7	36	241.11	192.50
		0-16	0-8	1.0	0.1%	0-10 A	1.0				
780Z2400	EFBR	0-32	0-4	1.25	0.1%	0-40/20 V,	1.25	19x8½x8¾	47	281.81	225.00
		0-16	0-8	1.0	0.1%	0-10 A	1.0				
780Z3000	GFL	0-125	0-5	1.5	0.5%	0-150 V; 0-5 A	1.5	14¼x14¼x9¾	88	438.37	350.00
780Z3100	GFLR	0-125	0-5	1.5	0.5%	0-150 V; 0-5 A	1.5	19x14¼x10½	100	482.21	385.00
780Z5000	NFB	0-32	0-15	0.4	0.75%	0-50 V; 0-25 A	0.4	14¼x14¼x9¾	84	388.27	310.00
780Z5050	NFBR	0-32	0-15	0.4	0.75%	0-50 V; 0-25 A	0.4	19x14¼x10½	97	432.11	345.00
780Z6050	PS-5	0-55	0-10	0.8	0.5%	0-75 V; 0-15 A	0.8	14¼x14¼x9¾	70	444.63	355.00
780Z6100	PS-5R	0-55	0-10	0.8	0.5%	0-75 V; 0-15 A	0.8	19x14¼x10½	89	482.21	385.00
780Z6400	PS-1000-32	0-32	0-30	0.2	0.75%	0-50 V; 0-30 A	0.2	14¼x19¼x9¼	103	576.15	460.00
780X6500	PS-1000-55	0-55	0-20	0.5	0.5%	0-75 V; 0-30 A	0.5	14¼x19¼x9¾	113	582.41	465.00
780Z6950	PS-1000-125	0-125	0-8	1.0	Less than 1%	0-150 V; 0-10 A	1.0	14¼x19¼x9¾	120	582.41	465.00

High-Voltage Packs, Transformers, Power Supplies



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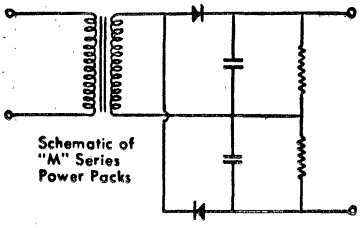


Schematic of "M" Series Power Packs

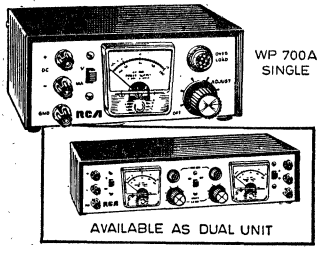
- DC Outputs from 2 to 75 Kilovolts
- Pass 50-Hour MIL-Q-151 Salt Spray Test
- Film-Type Long-Life Filter Capacitors
- Grain-Oriented Iron-Core Transformers
- Long Life-Design Selenium Rectifiers

PLASTIC CAPACITORS "M" SERIES HIGH-VOLTAGE PACKS

Compact, hermetically sealed units. Use latest techniques and advanced materials to achieve long operating life and small package size. Selenium rectifiers avoid failure—design life is 40,000 hours at +35°C, 25,000 hours at +65°C. Require no warm-up time, may be mounted in any position. Can be used with a primary voltage input control to adjust output voltage from zero to full rated voltage. Input, 0-118 V AC, 50-500 Hz. Output, 0-1.5, 0-5 or 0-10 mA DC to rated voltage. Ripple, 1% rms or 2.7% peak to peak. Ambient rating, −55°C to +85°C (output at +85°C limited to 4 mA) except. *0 to +85°C. Maximum altitude. 10,000 feet operating, 50,000; feet non-operating. Vibration, 10-55 cycles with 0.06" excursion for 2 hours in each plane except ‡ for applications not subject to excessive shock. Oil-filled containers are primed and lacquered per MIL-L-7178. Terminals are steatite, solder-seal type with solder lugs, except types rated at 30 kilovolts DC and above have corona spheres with 11/64" dia. holes to accept banana plug. §Have single high-voltage terminal and are furnished to deliver positive output potential relative to ground. Footed mounting brackets.

Stock No.	Mfr's Type	Fig.	DC Output kV	DC Output mA	Case Size H x W x D	Wt., Lbs.	EACH 1	EACH 2-Up
884-0203	HV20-502M	E	2	5	3⅜x2¼x3¾"	2½	82.02	65.75
884-0206	HV25-103M	D	2.5	10	3¾x2¼x3¾"	3¼	102.40	83.40
884-2012	HV50-502M	D	5	5	3¾x2¼x3¾"	3¼	121.20	82.50
884X0209	HV50-103M	C	5	10	5⅞x3¾x4 9/16"	11	157.40	127.00
884-0222	HV100-152M	C	1.5	10	4½x3¾x3 13/16"	4¾	120.00	94.20
884X0224	HV100-502M	C	10	5	5⅞x3¾x4 9/16"	8⅛	157.40	127.00
884X0221	HV100-103M	A	10	10	8x3¾x4 9/16"	12⅛	231.00	183.65
884-0220	HV150-152M	C	15	1.5	5½x3¾x3 13/16"	5¾	159.00	127.00
884X0223	HV150-502M	B	15	5	6⅛x3¾x4 9/16"	12	200.00	160.00
884U0227	HV150-103M‡	E	15	10	8½x4 11/16x6"	23	309.00	234.00
884X0239	HV200-152M	C	20	1.5	5⅞x3¾x4 9/16"	8⅛	167.80	133.40
884X0242	HV200-502M	A	20	20	8x3¾x4 9/16"	12⅛	231.00	183.60
884U0245	HV250-130M‡*	D	25	10	12 3/16x5⅝x7 11/32"	27	502.00	399.20
884X0257	HV300-152M	A	30	1.5	7½x3¾x4 9/16"	10½	296.00	234.60
884U0260	HV300-502M‡	E	30	5	8½x4 11/16x6"	23	309.00	246.00
884U0275	HV500-152M‡	E	50	1.5	8½x4 11/16x6"	19	360.00	286.50
884F0278	HV500-502M‡*	D	50	5	12 3/16x5⅝x7 11/32"	45	500.00	399.00
884F0281	HV750-152M‡*§	.....	75	1.5	12 3/16x5⅝x7 11/32"	45	569.00	452.50

RCA SOLID-STATE DC POWER SUPPLIES



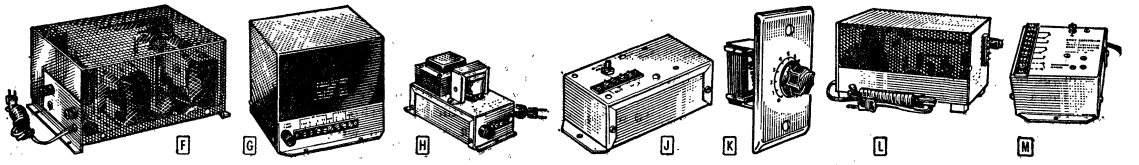
Model WP-700A. Constant-voltage DC power supply, ideally suited for circuit design, servicing, industrial and educational uses. Delivers continuously adjustable 0-20 volts at 0 to 200 mA. Negative feedback regulator for low ripple output of less than 500 μV rms. Line regulation: less than 30 mV change in output voltage for line variation of 105-135 VAC. Load regulation: less than 50 mV change for 200 mA load change. Overload indicator. Compact case. 4x6½x3". For 105-135 V, 50-60 Hz AC. 3 lbs.
901-5700. 1-4.....Each 48.00
5-Up.....Each 40.00

Model WP-702A. As above, but dual unit supply with each section isolated. Separate-controls, output terminals, meters. 6x12x3". 5 lbs.
901-5702. 1-4.....Each 87.00
5-Up.....Each 73.00

Model WP703A. As WP-700A, but output of 0-20 volts at 500 mA. 5¼x8¼x3¼". 6 lbs.
901-5703. 1-4.....Each 58.50
5-Up.....Each 49.00

Model WP-704A. As WP-700A, but output of 0-40 volts at 250 mA. 5¼x8¼x3¼". 6 lbs.
901-5704. 1-4.....Each 58.50
5-Up.....Each 49.00

SOUNDOLIER POWER SUPPLIES, TONE GENERATOR, AND AUTOTRANSFORMERS



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Ⓕ REGULATED DC POWER SUPPLIES

For a wide variety of extended uses in many service applications. Output: *22-32 VDC, 4 amps; †22-32 VDC, 2 amps; ‡22-26 VDC, 1 amp. Output voltage variation: less than 350 mV no load to full load. Ripple: less than 1.2 mV rms at full load. Ambient temperature range: 0 to +50° C. *5⅝x12x8 9/16"; †5⅝x12x8 9/16"; ‡5⅝x6¾x8 9/16". With 6' cord. 105-125 V, 60 Hz AC.

Stock No.	Mfr's Type	Wt., Lbs.	EACH
923-2140	RPS24-40*	14	109.25
923-2120	RPS24-20†	11	96.19
923-2110	RPS24-10‡	8	69.97

Ⓖ AC-DC POWER SUPPLIES

Supply 24, 12, 6 VDC at 2 amps and 24, 12, 6 VAC at 2 amps simultaneously. Regulation: 27 VDC, no load; 23 VDC, full load. Ripple: less than .125%. All outputs are clearly labeled. Separate commons for AC, DC and 2 ground terminals. *Uncovered, 6x7¼x6⅞"; †protective cover, 6 9/16x7⅜x6⅞". 6' power cord, 117 V. 60 Hz AC.

923-0320	FPS24-20*	13½	45.17
923-0301	CFPS24-20†	14	49.85

Ⓗ DC POWER SUPPLY

Model PS24-20. For all-purpose use. Supplies 24, 12, 6 VDC at 2 amps. Ripple: less than 2½% at full load. Positive and negative terminals isolated from chassis. 4x6¾x3⅜". With 6' power cord. 117 V, 60 Hz AC.
923-0820. Wt., 5¾ lbs.....**Each 24.80**

Ⓙ SOLID-STATE TONE GENERATOR

Model GPS610. Steady tone adjustable 600-1000 Hz. Adjustable output level. Up to 1 volt into 5000 ohm load. Provisions for external switching with SPST switch. 2¼x6¾x3⅝". With 6' cord. 117 V, 60 Hz AC.
923-0350. Wt., 2½ lbs.....**Each 39.66**

Ⓚ AUTOTRANSFORMER

For attenuating loudspeakers. Positive attenuation thru 10 steps. Total attenuation, 36 dB. For 70 V or 25 V lines. Mounts to standard outlet box. With mtg. hardware. *Power rating (watts). †Mtg. plate (Gang).

Stock No.	Mfr's Type	*	†	Wt., Lbs.	EACH
923-0110	AT-10	10	1	1¼	10.30
923-0135	AT-35	35	2	1¾	10.62
923-0175	AT-75	75	2	2¼	22.63

Ⓛ HEAVY-DUTY DC POWER SUPPLIES

Delivers 24 VDC for solid-state equipment, relays or laboratory use. All have silicon rectifiers. Ripple: less than 2½%, full load. Positive and negative terminals are isolated. 29 VDC at no load; 23 VDC at full load. Wall or rack mounted. Model PS24-32 suitable for Class II wiring—output uses defeat proof fuse which cannot exceed 3.2 amps. *6½x13x9"; †5¼x9¾x7"; ‡5¼x9¾x7". 6' power cord. 117 V, 60 Hz AC.

Stock No.	Mfr's Type	Amps	Wt., Lbs.	EACH
923-0890	PS24-100*	10	26	83.33
923-0850	PS24-50†	5	19	71.22
923-0832	PS24-32‡	3.2	16	57.94

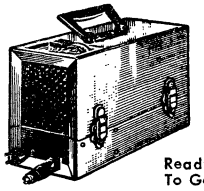
Ⓜ DC POWER SUPPLY/RELAY MODULE

Model PSRM-1. Quick, efficient way to use an internally powered DPDT relay. 24 VDC power supply and DPDT relay complete in one chassis. Screw terminals for external switch. Terminals to relay and external switch clearly labeled. Has pressure sensitive tape for instant mounting. 2¼x4x4⅜". With 6' power cord. 117 V, 60 Hz AC.
923-0550. Shpg. wt., 2¼ lbs.....**18.53**

Power Inverters, Transformers, Controls

TERADO INVERTER/CHARGERS

SOLID-STATE POWER/INVERTERS



Ready To Go

"TRAV-ELECTRIC" INVERTER

MODEL 50-160. Has built-in battery and charger. Battery can be recharged from any AC outlet or auto cigarette lighter. Has storage battery, inverter, charger, battery meter, case. 125 watts, AC continuous, 175 watts intermittent. 12x5½x8".
574U5160. 30 lbs.....87.60

Operate 117-VAC electrical appliances from a 12-volt storage battery. Ideal for cars, trailers, boats, buses, mobile homes. *Automatic frequency control keeps output within ½ Hz (±¼ Hz) for operating tape-recorders and phonographs. Other models are for equipment not sensitive to frequency change. †Includes remote control. With cables, copper-clad steel cases.

Stock No.	Mfr's Type	Cap., Cont	W. Intr.	Size HxWxD	Wt., Lbs.	EACH
574-5205	50-205	140	175	6x10¾x6"	10½	57.64
574-5170	50-170	125	150	6x10¾x6"	10½	50.60
574U5129	50-129	275	500	6x12½x6"	20	87.00
574U5128	50-128	450	500	6x12½x6"	20	104.55
574U5153	†50-153	175	200	6x10¾x6"	25	99.86
574U5201	*50-201	150	175	6x10¾x6"	20	110.47
574U5200	*50-200	175	200	6x10¾x6"	21	130.14
574U5191	*50-191	275	300	6x10¾x6"	30	176.35
574U5202	†*50-202	550	600	6x10¾x13"	60	364.87
574Z5110	#50-110	1000	1100	15x12x12"	120	680.35

MARK I SOLID-STATE INVERTER CHARGER

MODEL 50-131. Delivers 450 watts continuously, 500 watts intermittently at 117 VAC from your 12-volt storage battery. Operates TV, tools, lights, and many other appliances. Also charges 12-volt batteries from 117 VAC line. Charges at 20 or 10-amp rate, or at a low trickle charge. Built-in meter shows charging rate. AC receptacle on front panel. Fuse protected, handle, case. 6x12½x6".
574U5131. Shpg. wt. 21 lbs.....120.65
574U5132. Mark II, 50-132. Above, but 275W cont., 300W int. 21 lbs.....98.88

OHMITE VARIABLE AND POWER TRANSFORMERS

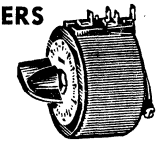
OMITRAN® SMALL VARIABLE TRANSFORMERS

UNCASED STYLE (Mount with ⅜"-32 bushing)

Stock No.	Mfr's Type	Max. Amps	Max. V Input	Output Volts	Dia. x L	Wt., Lbs.	EACH 1-4	5-9	10-24	25-Up
876-4160	VT1	1.3	120	0-120/132	2⅞x1 13/16"	1½	14.61	12.50	11.25	10.31
876-4170	VT1N	1.5	120	0-120	2⅞x1 13/16"	1½	14.61	12.50	11.25	10.31
876-4100	VT02	2.0	120	0-120/132	2⅞x2 5/16"	2¼	14.02	12.00	10.80	9.90
876-4155	VT02N	2.5	120	0-120	2⅞x2 5/16"	2¼	14.02	12.00	10.80	9.90
876-4185	VT2LN	5.0	40	0-40	2⅞x2 5/16"	2¼	16.36	14.00	12.60	11.55
876-4190	VT3	3.0	120	0-120/132	2⅞x2 13/16"	3	15.19	13.00	11.70	10.73
876-4195	VT3N	3.0	120	0-120	2⅞x2 13/16"	3	15.19	13.00	11.70	10.73
876-6507	6507	Brush Contact Assembly				1 oz.	1.24	1.10	.99	.91

CASED STYLE (*Fixed, †Portable)

876-4150	VT02E*	1.4	120	0-132	3⅜x2½x4¼"	2½	21.62	18.50	16.65	15.26
876-4151	VT02F†	1.75	120	0-132	3⅜x2½x4¼"	3¼	24.54	21.00	18.90	17.33



UNCASED

CASED

Low-power variable transformers offering a choice of six current ratings from 1 to 3 amperes. Deliver full rated current at any brush setting. Snap-in brush contact assembly for easy replacement. Adjustable shaft (except VT2LN) may extend from brush or opposite side for greater mounting versatility. Three-way terminals for ¼" push-on connectors or soldering. 60 Hz AC.

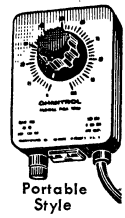
OHMITROL® SOLID-STATE MOTOR CONTROLS

COMPONENT STYLE (LxWxD, 1¾x1¾x1") Shpg. wt. 3 oz.

Stock No.	Mfr's Type	Input	Output	Trimmer Range	EACH 1-4	5-9	10-Up
876-3000	PCA-1000	120 V,	0-120 VAC		22.87	20.75	18.68
876-3011	PCD-1000	60 Hz AC	Pulsating 0-120 VDC and Full 120 VDC	0-50 V	42.43	38.50	34.65
876-3005	PCA-1020	240 V,	0-240 VAC		26.18	23.75	21.38
876-3017	PCD-1020	60 Hz AC	Pulsating 0-240 VDC and Full 240 VDC	0-100 V	46.29	42.00	37.80

PORTABLE STYLE (LxWxD, 4¼x3¼x1 13/16") Shpg. wt. 2 lbs.

876-3001	PCA-1001	120 V,	0-120 VAC		34.71	31.50	28.35
876-3012	PCD-1001	60 Hz AC	Pulsating 0-120 VDC and Full 120 VDC	0-50 V	54.56	49.50	44.55
876-3006	PCA-1021	240 V,	0-240 VAC		38.02	34.50	31.05
876-3018	PCD-1021	60 Hz AC	Pulsating 0-240 VDC and Full 240 VDC	0-100 V	58.42	53.00	47.70



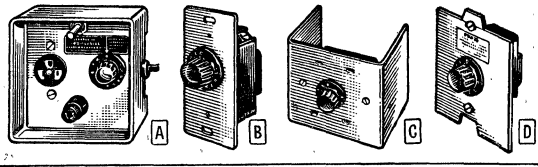
Portable Style

Typical Component

Built-in trimmer sets starting point of control voltage anywhere between 0 and 50 volts (for 1 kW models). Two-way terminals accept quick connectors or soldering. RFI filtered output. Available in component style for mounting in equipment; ⅜"-32 bushing mounting on aluminum panel for heat sink. Also available as self-contained portable model with grounded line cord and grounded AC receptacle. Load ratings: Model PCA, 120 VAC, 1 kW, 8.3 A; 240 VAC, 2 kW, 8.3 A. Model PCD, 6.0 A DC-resistive; 3.5 A DC-motor load.

LUTRON POWERDIAL SCR POWER CONTROLS

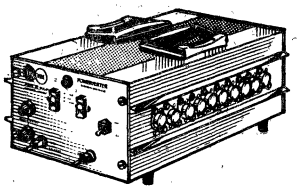
Positive control of voltage, current, heat, motor speed and more. Precision SCR power controls features solid-state circuit—weigh just 1/10 as much and occupy only ½ the space of typical variable autotransformer controls. Have continuously adjustable output on either AC or DC. No brush burnout or wear. PD series has selector switch for AC, DC or off; fuse, 3-wire cord and receptacle. PDU series is suitable for panel mounting; may be wired for either AC or DC output with 2-wire connection. All units are for 60-Hz AC. All are bench models, except * panel mount.



A B C D

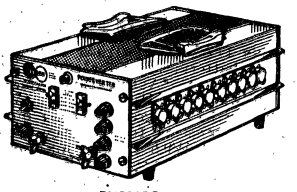
Stock No.	Mfr's Type	Fig.	rms Amps AC	rms Amps DC	AC Volts Input	AC Volts Output	rms Output Volts DC	Size HxWxD	Wt., Lbs.	EACH 1-4	5-9	10-Up
847-9204	PD-50	A	0-5	0-5	120	0-120	0-85	4½x4½x2½"	2	26.72	24.00	21.60
847-9206	PD-75	A	0-7.5	0-7.5	120	0-120	0-85	4½x4½x2½"	2	30.06	27.00	24.30
847-9208	PD-100	A	0-10	0-7.5	120	0-120	0-85	4½x6x2½"	2½	33.40	30.00	27.00
847-9210	PD-150	A	0-15	0-10	120	0-120	0-85	6x6x2½"	3	66.80	60.00	54.00
847-9220	*PDU-50	B	0-5	0-5	120	0-120	0-85	4x2x1⅝"	½	17.53	15.75	14.18
847-9222	*PDU-75	D	0-7.5	0-7.5	120	0-120	0-85	4x4x1⅝"	½	20.87	18.75	16.88
847-9224	*PDU-100	D	0-10	0-7.5	120	0-120	0-85	4x4x1⅝"	¾	33.40	30.00	27.00
847-9226	*PDU-150	D	0-15	0-10	120	0-120	0-85	4½x4½x3¾"	1	66.80	60.00	54.00
847-9240	*2PDU-50	C	0-5	0-5	240	0-240	0-170	4x2x1⅝"	½	36.74	30.00	27.00
847-9242	*2PDU-75	D	0-7.5	0-7.5	240	0-240	0-170	4x4x1⅝"	½	40.08	33.00	29.70
847-9244	*2PDU-100	D	0-15	0-7.5	240	0-240	0-170	4x4x1⅝"	¾	43.42	39.00	35.00

Tripp-Lite, Eico and Lectrotech Power Supplies

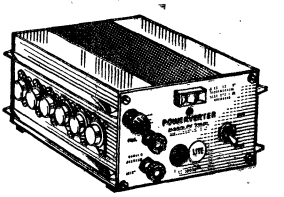


PV-1000FC

TRIPP-LITE SOLID-STATE DC-TO-AC INVERTERS



PV500FC



PV250FC

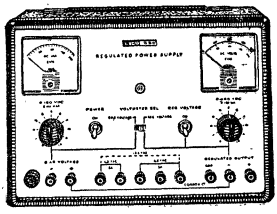
TRIPP-LITE 12- AND 24-VOLT DC 117 VOLT AC INVERTERS

Stock No.	Mfr's Type	DC Input (volts)	Input Amps Max.	Max. Watts Cont.	Max. Output Watts (5 mns)	Number of Transistors	Frequency Control	Polarity Protection	Overload Pilot Light	Size (Inches)	Weight	EACH
575-1000	PV250FC	12	25	250	275	11	Yes	No	No	3½x6¼x9	9 lbs.	120.00
575-1010	PV500FC	12	50	500	550	15	Yes	Yes	Yes	5x9¼x9	15 lbs.	220.00
575-1040	PV1000FC	12	100	1000	1100	27	Yes	Yes	Yes	5x9¼x17	35 lbs.	320.00
575-1030	PV1000	12	100	1000	1100	20	No	Yes	Yes	5x9¼x17	35 lbs.	320.00
575-1050	PV1000-24FC	24	50	1000	1100	12	Yes	Yes	Yes	5x9¼x17	35 lbs.	420.00
575-1060	PV1000-24	24	50	1000	1100	12	No	Yes	Yes	5x9¼x17	35 lbs.	320.00

NOTE: Tripp-Lite square wave inverters are recommended for lighting, small power tools, electric razors, tape recorders, radios, TV, phonographs, test equipment, etc. DO NOT USE with refrigerators, air conditioners, toasters, coffee pots, frying pans and other heavy current devices.

EICO AC AND DC POWER SUPPLIES, BATTERY ELIMINATORS

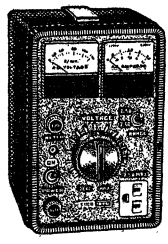
DUAL POWER SUPPLY



MODEL 1030-W. Dual independent, variable regulated DC outputs, plus dual unregulated filament voltages. Reg. B+: 0-400 VDC. Reg. Bias: 0 to −150 VDC. Filament V, 6.3 and 12.6 VAC at 3 A. 13x8½x7". 110-120 V, 50-60 Hz. AC 21 lbs.
775X1031. Factory Assembled.....128.54

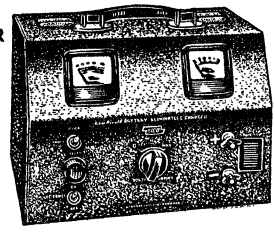
DELUXE CHARGER/ ELIMINATOR

Front Panel Meters Show DC Volts, Current



MODEL 1064-W. Delivers low-ripple DC; charges 6/12 V batteries. Heavy-duty silicon rectifiers, L-C filter with iron core choke. Output: 0-8 V at 10 A continuous, 20 A intermittent; 0-16 V at 6 A continuous, 10 A interm. 8½x5¾x7½". 115VAC. 16 lbs.
775X1065. Factory Assembled.....93.47

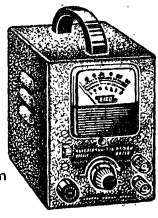
CHARGER/ ELIMINATOR



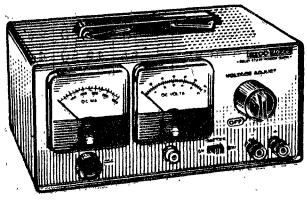
MODEL 1060-W. Electrolytically filtered, low-ripple DC for 6/12 V radios. Output: 0-8 V at 10 A cont., 20 A intermittent; 0-16 V at 6 A cont., 10 A interm. Front voltmeter, ammeter, Rugged steel case, 8¾x 10½x7¾". 105-125 V, Hz AC. 19 lbs.
775X1061. Factory Assembled.....87.62

SOLID-STATE 0-30 VDC POWER SUPPLY

- Ideal for Transistor Equipment
- Full Load Ripple, 0.005% Maximum

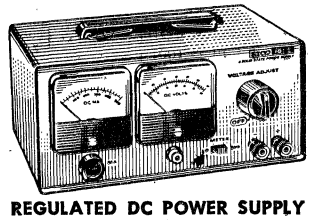


MODEL 1020-W. Features dual-range 0.6 V and 0-30 front panel voltmeter with positive and negative binding posts. Output: 0-12 V at 150 mA; 12-24 V at 200 mA; 24-30 V at 300 mA. Front panel fuse holder; power transformer for line isolation. Steel case, 5x4x5½". 117 V, 60 Hz AC. Shpg. wt. 5 lbs.
775-1020. Factory Assembled.....40.86



CHARGER/ELIMINATOR

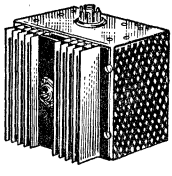
MODEL 1025-W. Solid-state 0-30 VDC power supply. Output current: 150 mA (0-12 V); 200 mA (12-14 V); 300 mA (24-30); all with 0.005% max. ripple. Front panel voltmeter, ammeter and pilot lamp. Fused. 3¾x8x 4¾". For 110-130 V, 60 Hz AC. Wt. 5 lbs.
775-1026. Factory Assembled.....58.73



REGULATED DC POWER SUPPLY

MODEL 1032-W. Solid-state supply, regulated against line and load variations. Output: 0-30 V at 0-500 mA. Regulation: 0.2 V change, 0 to max. load. Ripple: less than 2.5 mV p-p. Voltmeter, ammeter. Fused. Size, 4⅞x3¾x8⅛". 105-135 V, 50/60 Hz AC. 5 lbs.
775-1033. Factory Assembled.....64.07

LECTROTECH MODULE-TYPE SOLID-STATE DC REGULATED POWER SUPPLIES



- Electrostatically Shielded Transformer
- Load and Line Voltage Regulation, .005 Volt Maximum
- Ripple and Noise, Less Than 500 Microvolts

Space-saving unit for test equipment, reference sources, bias supplies. Recovery, 50 μsec max. Op. ambient, 50°C max. Storage, −20° to +85°C. 100% overload protection. Isolated input; adjustable output. Overall, 5x5x5¼"; 3¾x2⅛" mounting centers. For 105/125/210/250 V, 48-440 Hz AC. Av. shpg. wt. 5½ lbs.

Stock No.	Mfr's Type	Output VDC	Output Amps	EACH 1-2	EACH 3-5	EACH 6-Up
841-4015	1015	10-15	1	99.95	95.00	89.00
841-4020	1520	15-20	1	99.95	95.00	89.00
841-4025	2025	20-25	1	99.95	95.00	89.00
841-4030	2530	25-30	1	99.95	95.00	89.00

Power Supply Section: Pages 387-394

Extra-Value Batteries by RADIO SHACK®

BATTERY SECTION

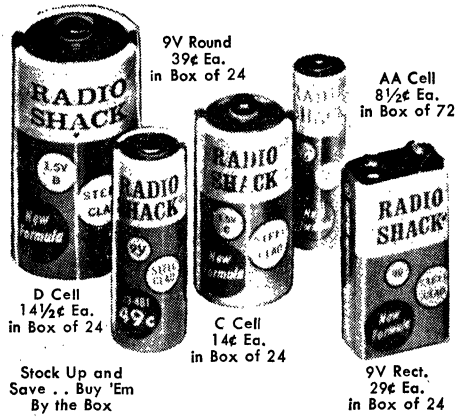
OFFER EXTRA PERFORMANCE, LONG LIFE AND LOW PRICE

OUR OWN SUPER-POWERED "NEW FORMULA" BATTERIES

- We Subject Our Batteries to the Most Rigid Controls
- Factory-Fresh • "Buy in the Box" for Bigger Savings
- A Size to Fit Every Flashlight and Most Appliances

Why pay more for zinc-carbon batteries when you can buy Radio Shack's own premium-quality "New Formula" power cells at substantial savings? Unlike many ordinary mass-produced batteries on today's market, Radio Shack batteries have surpassed the most rigid quality control tests—your guarantee of freshness, extra long life and unsurpassable value. Factory sealed to provide protection in handling against corrosive leakage that can damage not only batteries, but also to the units being powered. Available in a size to fit all popular flashlights and other battery-powered appliances. Type 23B467 "C" is for baby flashlights; 23B468 "AA" is for standard penlights; 23-481 (9V round) and 23B464 (9V rectangular) are for appliances with portable or transistorized circuitry. You save even more when you "buy 'em by the box."

Stock No.	Type No.	Size	Replaces Ever-eady	Replaces Bur-gess	Replaces RCA	EA.	PER BOX
910-5126	23B466	1.5V "D"	950	2	V5036	.19	24/3.48
910-5129	23B468	1.5V "AA"	915	Z	VS034A	.10	72/5.79
910-5128	23B467	1.5V "C"	935	1	VS035A	.17	24/3.36
910-5126	23B464	9V Rect.	216	2U6	VS323	.35	24/6.96
910-5130	23-481	9V Round	206	L6	VS320	.49	24/9.38



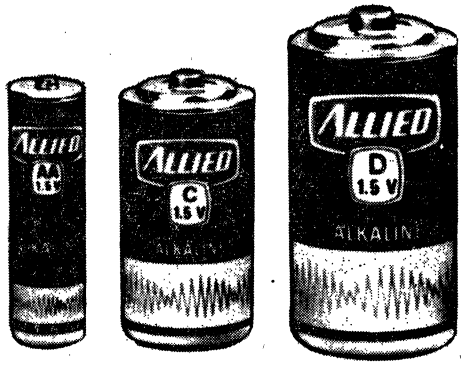
ALLIED® SUPER-VALUE LONG-LIFE ALKALINE BATTERIES

CHOOSE FROM THREE POPULAR 1½-VOLT SIZES

- For High-Drain Use • Provide Instantaneous Service
- Last Up to 10 Times Longer Than Standard Batteries

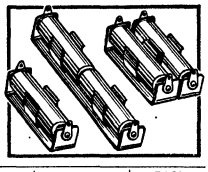
You'll be amazed at the extra hours of service you get from our long-life alkaline batteries. Designed for high drain service applications, these alkaline cells outperform, outlast standard operating zinc-carbon flashlight batteries by up to 1000%. Alkaline cells cost less, too. Compare by dividing the initial cost by the many extra hours of service provided. Long-life, high-power alkaline batteries mean instant service for flashguns, portable phonographs, appliances, intercoms, electric toys and games—virtually anything that operates on batteries. Available in 1½-volt "D," "C," "AA." Wt. 10 oz. per pk.

Stock No.	Type No.	Size	Volts	PER PKG. OF 2 (*Pkg. 4) 1-3	4-Up
910-5171	23B5001	"D"	1½	1.59	1.49
910-5172	23B5002	"C"	1½	1.39	1.29
910-5173	23B5003	"AA"	1½	1.89*	1.79*



KEYSTONE BATTERY HOLDERS

Low cost, lightweight and sturdily constructed. Good electrical contact, low leakage current and snap-fit clips. 2024T3 spring temper aluminum, nickel plated brass contacts. Batteries within chart rules are in same size group. *Fit side by side. #Fit end to end. Average shpg. wt. 3 oz.

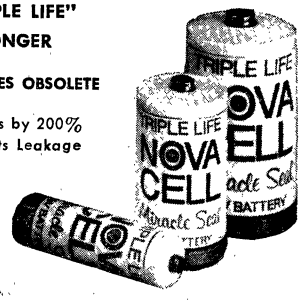


Stock No.	Mfr's Type	Holds	Burgess	Mallory	Eveready	EACH 1-9	10-Up
839-3204	104	1	Hg-4R	RM4R	E4	.70	.42
839-3239	139	1	Z, HG9	RM12R, ZM9	E9, E12	.35	.25
839-3240	140*	2	CD6, 9R	TR133, M-15F	E91, E133	.50	.40
839-3271	171*	3	HG12R, 920	M-15R	E502, N46	.82	.55
839-3282	182*	4	H133, 930		515, 915	1.05	.70
839-3289	189#	2	HG502R		1015, BA58	.65	.50
839-3273	173	1	1,P6, 120	TR233, M14R	E93, 226	.50	.33
839-3274	174*	2	130, H233	M-14F	E233, BA42	.57	.40
839-3285	185#	2	302599	302599	635, 935	.65	.50
839-3232	132	1	H163, H115R	TR132R, TR115	E132. E115	.50	.33
839-3275	175	1	2, 2R, CD7	RM42	E42, N56, 95	.50	.33
839-3276	176*	2	210	Mn-1300	D99, A100, 950	.57	.40
839-3286	186#	2	230	M-13R	1050, BA30	.65	.51
839-3266	166	1	U10	RM411	411	.50	.33
839-3277	177	1	U15	RM142R	412	.50	.33
839-3283	183	1	U20	RM413	413	.50	.33
839-3305	225	1	Y20	.....	504	.32	.21
839-3303	203P	1	2U6	216	1604	.65	.48

NOVA CELL "TRIPLE LIFE" BATTERIES LAST LONGER

MAKES "REGULAR" BATTERIES OBSOLETE

- Outlast Ordinary Batteries by 200%
- Polyethylene Seal Prevents Leakage
- Full Three-Year Shelf Life



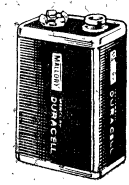
A single Allied Radio Shack Nova Cell battery lasts as long as three regular zinc-carbon batteries. Makes other batts. obsolete. Made with a miracle polyethylene seal that prevents leakage so "battery mess" will no longer damage equipment. You get triple the life of ordinary batteries because the electrolyte is specially processed. It is the greatest new idea in batteries in a decade. Offer outstanding performance over a wide range of temperature environments. Provide dependable service in heavy-duty applications where ordinary zinc-carbon batteries give only marginal service or fail completely. Don't delay any longer—put Triple Life Nova Cell batteries in all your electric and electronic equipment today and get better performance, longer life, greater economy and more convenience. Available in three popular sizes, in packages of two or four batteries as shown below. Ultra-dependable "Triple Life" Nova Cells—you'll never use "regular" batteries again.

Stock No.	Type No.	Size	Volts	Pack of 2	Pack of 4
910-5105	23-451	"D" Cell	1½	.79	.....
910-5106	23-452	"C" Cell	1½	.75	.....
910-5107	23-453	"AA" Cell	1½	.....	.98

MALLORY BATTERY SECTION

Mallory Duracell Batteries

For use in test equipment, walkie-talkies, portable radios, and other applications. Assure peak performance. "T" suffix indicates ½" tab on negative terminals; "T2" indicates tabs on both ends. *Indicates capacity in milliampere-hours. †With snap terminals. Batteries designed for long-term dependability.


TR146X

TR133

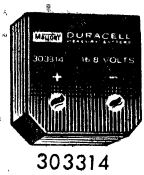
ZM 9

RM 42

RM625

RM640

RM 177


303314

MERCURY BATTERIES (Only Sold in Standard Pk. or Case Lots Shown)

Stock No.	Mallory Type	Volts	Cap'y mAH*	Dia. x Ht. or H.W.D.	Price Each In Standard Pk. Std. Pack	Price Each In Standard Pk. Price Each	Price Each In Case Lots Case Quan	Price Each In Case Lots Price Each	Replaces Eveready	Replaces Burgess
853-0001	*RM1*	1.40	1000	5/8x21/32	4	1.00	40	.61	E1	HG1
853-0002	*RM1R*	1.35	1000	5/8x21/32	4	1.25	40	.815	E1N	HG1R
853-0003	RM1RT2	1.35	1000	5/8x21/32	4	1.35	40	.915	E1N2	HG1RT2
853-0004	*RM3R*	1.35	2200	1x21/32	4	1.95	20	1.27	E3	HG3R
853-0005	*RM4R*	1.35	3400	1 1/5x21/32	4	2.50	20	1.62	E4	HG4R
853-0006	RM4RT	1.35	3400	1 1/5x21/32	4	2.55	10	1.67	E4T1	HG4RT
853-0007	*RM12*	1.40	3600	5/8x161/64	2	1.75	10	1.14	E12	HG12
853-0008	*RM12R*	1.35	3600	5/8x2	2	1.95	10	1.27	E12N	HG12R
853-0009	RM12RT	1.35	3600	5/8x2	2	2.00	10	1.32	E12NT1	HG12RT
853-0010	RM12RT2	1.35	3600	5/8x161/64	2	2.05	10	1.37	E12NT2	HG12RT2
853-0011	*RM42*	1.40	14000	1 1/5x23/8	1	5.00	10	3.25	E42	HG42
853-0012	*RM42R*	1.35	14000	1 1/5x23/8	1	5.50	10	3.56	E42N	HG42R
853-0013	*RM42RT2*	1.35	14000	1 1/5x23/8	1	5.60	10	3.66	E42NT2	HG42RT2
853-0014	RM312	1.40	36	5/8x9/64	6	.35	60	.24	E312	HG312
853-0015	RM400	1.40	75	29/64x9/64	6	.75	60	.50	E400	HG400
853-0017	*RM401*	1.40	800	29/64x1 1/8	3	1.00	24	.67	E401	HG401
853-0117	RM412	12.40	160	1x19/32x13/32	2	4.00	12	2.60	.....	.....
853-0200	RM413	28	160	1x19/32x21/2	2	5.00	12	3.25	.....	.....
853-0019	RM450R	1.35	350	29/64x9/16	4	1.25	40	.815	E450	HG450R
853-0020	*RM502R*	1.35	2400	1/4" dia. x 131/32	2	1.75	10	1.14	E502	HG502H
853-0021	RM520	1.40	130	1/2x9/32	6	.25	60	.17	E520	HG520
853-0022	RM575	1.40	100	.455x.129	6	.35	60	.24	.....	HG575
853-0023	RM601R	1.35	1800	5/8x15/32	2	1.75	10	1.14	E601	HG601R
853-0024	*RM625*	1.40	350	5/8x1/4	4	.60	40	.42	E625	HG625
853-0025	*RM625R*	1.35	250	5/8x1/4	4	1.10	40	.73	E625N	HG625R
853-0026	RM625RT2	1.35	250	5/8x1/4	4	1.20	40	.83	E625NT2	HG625RT2
853-0027	*RM640*	1.40	500	5/8x7/16	2	.95	20	.63	E640	HG640
853-0029	RM640RT2	1.35	500	5/8x7/16	4	1.20	20	.83	E640NT2	HG640RT2
853-0030	RM675	1.40	160	29/64x13/64	6	.75	60	.50	E675	HG675
853-0201	TR112R	2.8	350	21/32x19/64	2	2.50	10	1.67	.....	.....
853-0031	TR113R	4.05	250	21/32x53/64	2	2.95	10	1.92	E113	H113R
853-0032	TR114RT2	5.40	250	21/32x11/16	2	3.35	10	2.22	E114T2	H114RT2
853-0033	TR115	7.00	350	21/32x13/16	2	3.50	10	2.34	E115	H115
853-0034	*TR115R*	6.75	250	21/32x15/16	2	3.75	10	2.44	E115N	H115R
853-0035	*TR126*	8.40	600	3/4x2	6	2.50	24	1.67	E126	H126
853-0036	TR132	2.80	1000	21/32x15/16	2	1.95	10	1.14	E132	H132
853-0037	*TR132R*	2.70	1000	21/32x15/16	2	2.20	10	1.47	E132N	H132N
853-0038	*TR133*	4.20	1000	21/32x2	6	2.50	24	1.67	E133	H133
853-0039	*TR133R*	4.05	1000	21/32x2	2	2.80	10	1.87	E133N	H133R
853-0040	*TR134R*	5.40	1000	21/32x29/64	2	3.40	10	2.27	E134N	H134R
853-0041	*TR135R*	6.75	1000	21/32x31/4	2	4.00	10	2.68	E135N	H135R
853-0043	*TR136R*	8.10	1000	21/32x329/32	2	4.50	10	3.00	E136N	H136R
853-0044	*TR137R*	9.45	1000	21/32x49/16	2	5.00	10	3.35	E137R	H137R
853-0045	*TR146X†*	8.40	900	129/32x11/32x21/32	6	1.95	24	1.27	E146X	H146X
853-0047	TR163	4.20	500	21/32x15/16	2	2.75	10	1.84	E163	H163
853-0048	TR164	5.60	500	21/32x13/4	6	2.50	24	1.67	E164	H164
853-0049	*TR164R*	5.40	500	21/32x13/4	2	3.40	10	2.27	E164N	H164R
853-0050	*TR165*	7.00	500	21/32x23/4	2	3.25	10	2.17	E165	H165
853-0051	TR169	12.6	500	21/32x37/8	1	5.50	10	3.67	E169	H169
853-0052	*TR175*	7.00	350	31/64x11/32	1	2.25	10	1.50	E175	H175
853-0053	*TR177†*	9.80	160	35/64x129/32	6	2.50	24	1.67	E177	H177
853-0054	*TR233R*	4.05	2200	11/64x131/32	1	5.00	10	3.35	E233N	.....
853-0055	*TR286†*	8.40	750	115/16x113/16	6	2.50	12	1.67	226	P6
853-0056	*TR289†*	12.6	750	1x225/64	6	5.00	6	3.35	228	PM8
853-0202	TR431	10.7	1000	1x27/8	1	5.00	6	3.35	.....	.....
853-0057	*ZM9*	1.40	2400	9/16x131/32	24	1.00	48	.65	E9	HG9
853-0061	302905	6.75	3400	19/32x317/32	1	12.50	6	8.50	E302905	HG302905
853-0063	*303314*	16.8	2400	17/32x61/64	1	16.00	6	10.70	E303314	HG303314

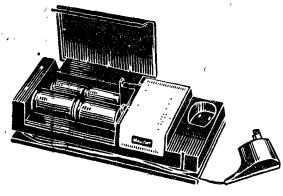
ALKALINE BATTERIES

853-0300	MN1300	1.5	10000	D	2	1.00	12	.65	E95	AL2
853-0301	MN1400	1.5	5000	C	2	.80	12	.52	E93	AL1
853-0302	MN1500	1.5	1800	AA	2	.60	24	.39	E91	AL9
853-0303	MN2400	1.5	750	AAA	2	.60	24	.39	E92	AL7
853-0304	MN9100	1.5	560	N	2	.60	12	.39	E90	ALN
853-0305	MN1604	9.0	550	124/32x11/32x21/32	1	1.50	12	.98	.....	.....

RECHARGEABLE ALKALINE BATTERIES AND CHARGER

MODEL SA13D, SA14C, SA15AA BATTERIES. Directly interchangeable with carbon-zinc and alkaline primary AA, C and D cells. Excellent charge retention of up to fifty cycles use. Excels in heavy duty applications where so many other batteries fail.

Stock No.	Mfr's Type	V	Amp. Hrs.	Size	Wt. Oz.	PER PKG/2
853-3703	SA15AA	1½	.3	AA	1	2.00
853-3702	SA14C	1½	1	C	2½	3.00
853-3701	SA13D	1½	2	D	5	3.50



MODEL BC-16 CHARGER. Recharges any AA, C, or D alkaline rechargeable batteries such as Mallory Type SA13D, SA14C, and SA15AA, illustrated at left. Designed to completely recharge batteries in 14 to 18 hour period. Positive action terminals hold batteries securely in place for sure connections. Pays for itself in battery costs saved. 9¾x 4¾x2¾". AC.
853-3700. Shpg. wt. 1 lb.....8.95

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Burgess Batteries, Lanterns and Flashlights

INDUSTRIAL BATTERIES

Quality batteries are designed for industry's maximum service demands—long-life service on heavy-duty drain and long periods of use. Labeled "Not Designed for Retail Sales." Excellent for emergency use because of extreme reliability. Minimum quantity 1 case.

Stock No.	Mfr's Type	Volts	Quantity	Per Case 1	Per Case 2-Up
737-0960	1200	1½	200	39.20	27.00
737-0940	800	1½	200	34.40	24.00
737-0930	700	1½	192	32.99	23.04
737-0920	600	6	25	26.50	15.75
737-0900	500	1½	192	25.34	17.67

GENERAL AND INDUSTRIAL FLASHLIGHTS

IND. 2-CELL. NO. 363. Industrial flashlight with steel reinforced reflector. Uses two No. 2 (Size "D") battery cells and PR2 lamp. Replaceable switch. Less batteries. Has flexible vinyl head.
737-0860. Shpg. wt. 8 oz. **1.89**

IND. MAGNET. NO. 263. High-impact industrial model. Powerful "Alnico" magnet with 15 lb. grip. Comes with lamp No. PR2. Uses 2 "D" batteries (not included). Deeply recessed lens for extra power.
737-0850. Shpg. wt. 8 oz. **2.19**

IND. WITH BULB. NO. 368. Features specially designed bullet end cap which contains spare bulb. Also has handy ring hanger, deeply recessed lens. Uses lamp PR2. Takes 2 "D" cells (not included).
737-0870. Shpg. wt. 8 oz. **1.99**

INDUSTRIAL BATTERIES

Stock No.	Mfr's Type	V	Wt., Lbs.	Price Each in Std. Pack: Std. Pkg.	Price Each in Std. Pack: Price Each
737-0807	4D	1½	1	12	2.99
737-0812	4FH	1½	1¼	12	1.59
737-0814	4F5H	7½	7	4	7.90
737-0815	4F6H	9	8	4	8.95
737-0821	6 Ign	1½	2	12	1.69
737-0822	6 Tel.	1½	2	12	1.69
737-0823	6 Ind	1½	2	12	1.69
737-0975	5156PI	22½	1½	1	7.95
737-0995	5360	4½	¼	6	2.70
737-0998	5540	7½	½	5	3.75

ZINC-CARBON "A" BATTERIES FOR ELECTRONIC USE

Stock No.	Mfr's Type	Price Each In Std. Pack: Std. Pack	Price Each In Std. Pack: Price Each	Price Each In Case Lots: Quantity Per Case	Price Each In Case Lots: Price Each	V	Size	Wt., Lbs.	Replaces: Eveready	Replaces: NEDA
737-0760	*2F*	1	2.27	6	1.95	1½	2 19/32x1 3/8x4 1/4"	¾	W353	11
737-0770	*2FH(2FBP)*	1	1.97	5	1.59	1½	2 5/8x1 11/32x4 1/8"	½	W711	700
737-0810	*4F*	1	2.12	12	1.65	1½	2 5/8x2 5/8x4 3/32"	1½	742	4
737-0910	532	1	3.05	10	2.35	4½	2 15/32x1 3/16x2 23/32"	¼	703	706
737-0030	C5	1	2.47	6	1.90	7½	2 7/32x1 15/16x3 1/32"	¾	717	9
737-0400	F2BP	1	3.22	6	2.75	3	2 21/32x1 3/8x4 1/32"	1	W353	701
737-0410	*F4BP*	1	2.10	12	1.69	6	2 5/8x2 5/8x4"	1½	510S	915
737-0420	*F4PI*	1	2.12	12	1.65	6	2 21/32x2 21/32x4 1/8"	1½	744	6
737-0720	*Z4*	1	4.95	6	3.80	6	1 3/16x1 3/16x2 7/32"	¼	724	2

ZINC-CARBON "B" BATTERIES FOR ELECTRONIC USE

Stock No.	Mfr's Type	Price Each In Std. Pack: Std. Pack	Price Each In Std. Pack: Price Each	Price Each In Case Lots: Quantity Per Case	Price Each In Case Lots: Price Each	V	Size	Wt., Lbs.	Replaces: Eveready	Replaces: NEDA
737-0970	*4156*	1	2.35	5	1.61	22½	3 17/32x2 1/8x2 29/32"	1	763	710
737-0980	5156SC	1	6.95	5	4.63	22½	4 7/64x2 3/8x2 55/64"	1¾	768	721
737-0990	*5308*	1	4.35	5	3.05	45	4 1/16x2 9/16x5 1/8"	2½	762S	709
737-0020	B30	2	7.75	6	5.40	45	4 1/16x2 17/32x5 5/16"	2¼	484	207
737-0430	*K10*	1	2.50	6	1.67	15	1 1/4x7/8x1 17/32"	⅛	417	224
737-0440	*K15*	1	2.75	6	1.83	22½	1 1/4x7/8x2 9/32"	⅛	420	225
737-0490	*M30*	1	4.55	6	3.27	45	3 9/16x1 3/4x5 1/2"	2	482	202
737-0580	*U10*	1	1.50	6	1.00	15	1x3 9/64x1 7/16"	1 oz.	411	208
737-0590	*U15*	1	1.75	12	1.17	22½	1x3 9/64x1 31/32"	1 oz.	412	215
737-0600	*U20*	1	1.95	12	1.30	30	1x3 9/64x2 17/32"	⅛	413	210
737-0610	*U30*	1	2.50	6	1.75	45	1 3/32x1 9/32x3 17/32"	⅛	415	213
737-0620	*UX45*	1	3.75	6	2.50	67½	1 7/32x3 1/32x3 31/32"	¼	416	217
737-0630	V45	6	3.95	12	2.77	67½	2 3/4x1 11/32x3 43/64"	1	468	200C
737-0640	*V60*	1	4.50	6	3.15	90	3 23/32x1 9/32x3 11/16"	1	490	204
737-0660	*XX15*	1	3.50	6	2.33	22½	1 11/32x1 5/16x3 7/8"	¼	425P	.....
737-0670	*XX45*	1	3.85	12	2.70	67½	2 3/4x1 11/32x3 43/64"	¾	467	200
737-0690	*Y10*	1	1.50	12	1.00	15	1 9/32x1 9/32x1 23/64"	1 oz.	504	220
737-0700	*Y15*	1	1.75	12	1.17	22½	1 9/32x1 9/32x1 31/32"	1 oz.	505	221
737-0740	*Z30NX*	1	3.85	5	2.69	45	3 1/32x1 7/8x4 19/32"	1½	W350	711

ZINC-CARBON BATTERIES FOR TRANSISTOR CIRCUITS

Long-life zinc carbon batteries, most popular for portable power, in most standard sizes. Specially sealed to prevent leakage. Sturdy construction. Designed for dependable use in industrial, transistor, electronic and many other applications.

Stock No.	Mfr's Type	Price Each In Std. Pack: Std. Pack	Price Each In Std. Pack: Price Each	Price Each In Case Lots: Quantity Per Case	Price Each In Case Lots: Price Each	V	Size	Wt., Lbs.	Replaces: Eveready	Replaces: NEDA
737-0780	*2MN6*	1	.98	24	.65	9	1x3 9/64x1 7/8" dia.	⅛	222	1604D
737-0790	*2N6*	1	2.25	6	1.50	9	1 3/8x1 3/4x2 3/4"	¼	246	1602
737-0800	*2U6*	12	.69	36	.49	9	1x3 9/64x1 7/8"	¼	216	1604
737-0820	*7*	24	.20	72	.13	1½	1 3/4x1 3/32" dia.	¼	912	24F
737-0830	*130*	12	.35	72	.23	1½	1 15/16x5 5/64" dia.	½	1035	14
737-0840	*230*	12	.35	72	.23	1½	2 25/64x1 21/64" dia.	½	1050	13
737-0950	930	24	.25	144	.155	1½	1 31/32x3 5/64" dia.	½	1015	15
737-0750	*2*	50	.25	200	.163	1½	2 3/8x1 21/64" dia.	5/8	950	13F
737-0040	*C6X*	1	2.95	6	1.97	9	2 5/16x1 11/32x6 1/16"	¾	2356N	1612
737-0470	L6	6	.89	12	.62	9	1 31/32x4 7/64" dia.	⅛	206	1611
737-0480	*M6*	1	1.95	12	1.36	9	1 13/16x1 13/16x2 7/16"	½	266	1605
737-0500	*NE*	6	.15	48	.095	1½	1 11/64x7/16" dia.	⅛	904	910
737-0510	*P6*	6	.98	24	.68	9	1 15/16x1" dia.	¼	226	1600
737-0680	Y6	1	1.20	12	.83	9	3/5x3/5x1 9/10"	⅛	.....	1606

RECHARGEABLE NICKEL-CADMIUM BATTERIES (*10-Hour Discharge Rate in mA)

BUTTON CELLS

Stock No.	Mfr's Type	Volts	Size (Inches)	Weight (Oz.)	*	Replaces Size	Price Each In Standard Pack: Std. Pack	Price Each In Standard Pack: Price Each	Price Each In Case Lots: Quantity Per Case	Price Each In Case Lots: Price Each
737-0050	CD1	1.25	29/64Dx7/32	2	2	N22	1	2.00	10	1.40
737-0060	CD2	1.25	39/64Dx15/64	2	5	N24	1	1.50	10	1.06
737-0170	CD8	1.25	63/64Dx15/64	2	10	N26	1	1.65	10	1.16
737-0180	CD8L	1.25	63/64Dx1/4	2	10	N26T	1	1.90	10	1.31
737-0070	CD3	1.25	63/64Dx9/32	2	15	N28	1	1.70	10	1.18
737-0080	CD3L	1.25	63/64Dx19/64	2	15	N28T	1	1.95	10	1.38
737-0090	CD4	1.25	63/64Dx11/32	2	22	N32	1	1.75	10	1.21
737-0100	CD4L	1.25	63/64Dx3/8	2	22	N32T	1	2.00	10	1.41
737-0110	CD5	1.25	1 45/64Dx19/64	2	45	N36	1	2.60	10	1.83
737-0120	CD5L	1.25	1 7/10Dx21/64	2	45	N36T	1	2.85	10	1.99

CYLINDRICAL CELLS

Stock No.	Mfr's Type	Volts	Size (Inches)	Weight (Oz.)	*	Replaces Size	Price Each In Standard Pack: Std. Pack	Price Each In Standard Pack: Price Each	Price Each In Case Lots: Quantity Per Case	Price Each In Case Lots: Price Each
737-0130	*CD6 (AA)*	1.25	9/16Dx1 1/64	2	45	N	1	3.05	10	2.14
737-0140	CD6L (AA)	1.25	9/16Dx2 9/32"	2	45	N	1	3.25	10	2.27
737-0190	CD9	1.25	35/64Dx3 11/16	3	90	N	1	6.25	10	4.36
737-0150	CD7 (D)	1.25	1 19/64Dx2 27/64	7	230	N	1	6.40	10	4.47
737-0160	CD7L (D)	1.25	1 19/64Dx2 25/32	7	230	N	1	6.60	10	4.61
737-0200	*CD10 (D)*	1.25	1 19/64Dx2 27/64	2	400	N	1	10.20	10	7.13
737-0210	CD10L (D)	1.25	1 19/64Dx2 49/64	2	400	N	1	10.40	10	7.26
737-0220	CD11 (D)	1.25	1 19/64Dx2 27/64	2	300	N	1	7.15	10	4.98
737-0230	CD12 (short C)	1.25	7/8Dx1 33/64	2	120	N	1	4.25	10	2.96
737-0240	CD13 (short C)	1.25	1 19/64Dx1 29/64	3	230	N	1	9.75	10	6.83
737-0250	CD14 (C)	1.25	1 1/64Dx1 61/64	4	190	.....	1	5.60	10	3.90

NICKEL CADMIUM BATTERIES

Stock No.	Mfr's Type	Volts	Size (Inches)	Weight (Oz.)	*	Replaces Size	Price Each In Standard Pack: Std. Pack	Price Each In Standard Pack: Price Each	Price Each In Case Lots: Quantity Per Case	Price Each In Case Lots: Price Each
737-0260	CD21	6.1	1 1/16Dx1 17/32	12	15	Y5521	1	12.00	10	8.40
737-0270	*CD22*	6.1	1 1/16Dx1 31/32	12	22	Y5201	1	12.60	10	8.80
737-0272	CD23	6.1	1 51/64Dx1 55/64	12	45	.....	1	19.05	10	13.32
737-0280	CD24	9.7	1 1/16Dx2 2/32	12	15	Y5488	1	18.10	10	12.67
737-0290	CD25	9.7	1 1/16Dx3 7/32	12	22	.....	1	18.25	10	12.80
737-0330	CD28	12.2	1 1/16Dx3 19/32	12	22	Y5386	1	23.25	10	16.25
737-0340	CD29	12.2	1 51/64Dx3 7/64	20	45	Y5511	1	36.15	10	25.20

Battery Section: Pages 395-397

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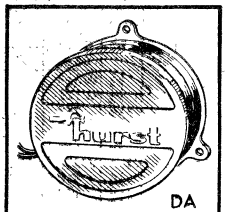
SYNCHRONOUS MOTORS

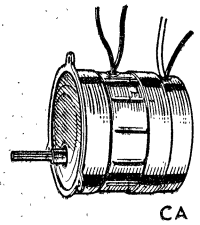
Synchronous Motors

HEAVY-DUTY MOTORS WITH 40 TO 600 INCH-OUNCES OF TORQUE

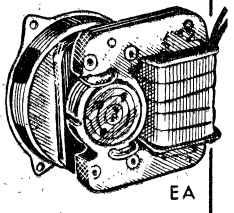
See Table at Left, Below, for Ordering Information



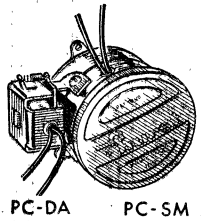
DA
SM



CA



EA



PC-DA PC-SM
AR-DA AR-SM

Rugged synchronous motors for continuous-duty use in educational training devices, lab and process controls, medical equipment, time switches, etc. Will not overheat in continuous duty or in stalled position. Operating Temp.: —40° C to +105° C;

SM Series 40 Inch-Ounce Unidirectional. Rugged shaded pole motor with clockwise rotation. Instant start at full torque. Case: 1¾x2½" dia. Wt. 1 lb. *Specify ½, 1, 2, 3, 4, 5, 6, 10, 15, 30, or 60 rpm

Stock No.	*rpm	EACH 1-9	10-24	25-49	50-99	100-Up
811-1100	½	16.10	13.38	12.71	12.08	11.47
811-11XX	1-60	16.10	13.38	12.71	12.08	11.47

CA Series 100 Inch-Ounce Reversible. SPDT switching. Case: 2½x2⅛" dia. Includes capacitor. Shpg. wt. 1¼ lbs. Specify ⅓, ½, 1, 1½, 2, 2½, 3, 4, 5, 6, 8, 10, 12, 15, 16, 20, 24, 25, 30, 32, 33⅓, 40, 48, 50, 60, 64, 80, 100, 120, 150, 160, 200, 240, 400, 600, 800 or 1,000 rpm.

811-0297	⅓	16.43	13.63	12.95	12.31	11.70
811-0298	½	16.34	13.63	12.95	12.31	11.70
811-0299	1	16.43	13.63	12.95	12.31	11.70
811-0300	1½	16.34	13.63	12.95	12.31	11.70
811-0301	2	16.43	13.63	12.95	12.31	11.70
811-0302	2½	16.43	13.63	12.95	12.31	11.70
811-03XX	3-32	16.43	13.63	12.95	12.31	11.70
811-0333	33⅓	16.43	13.63	12.95	12.31	11.70
811-03XX	40-80	16.43	13.63	12.95	12.31	11.70
811-0390	100	16.43	13.63	12.95	12.31	11.70
811-0391	120	16.43	13.63	12.95	12.31	11.70
811-0392	150	16.43	13.63	12.95	12.31	11.70
811-0393	160	16.43	13.63	12.95	12.31	11.70
811-0394	200	16.43	13.63	12.95	12.31	11.70
811-0395	240	16.43	13.63	12.95	12.31	11.70
811-0396	400	16.43	13.63	12.95	12.31	11.70
811-0397	600	16.43	13.63	12.95	12.31	11.70
811-0398	800	16.43	13.63	12.95	12.31	11.70
811-0399	1000	16.43	13.63	12.95	12.31	11.70

EA Series 150 Inch-Ounce Unidirectional. Open frame, shaded pole. Accurate timing motor, clockwise rotation. Case: 1⅝x2⅝x3⁵⁄₁₆". 3⁄₁₆x1" output shaft except 3600, 3⁄₃₂x¾". Wt. 1¼ lbs. Specify 1, 2, 4, 6, 8, 10, 12, 20, 30, 60, 120, or 3600 rpm.

811-05XX	1-60	12.91	10.18	9.67	9.19	8.72
811-0590	120	12.91	10.18	9.67	9.19	8.72
811-0599	3600	12.91	10.18	9.67	9.19	8.72

DA Series 150 Inch-Ounce Reversible. Instantly reversible (SPDT switch), highly accurate both clockwise and counter-clockwise. Effective magnetic shielding. Case: 1¾x2½". dia. Wt. 1¼ lbs. Specify 1, 2, 4, 6, 8, 10, 12, 20, 30, 60, or 120 rpm.

811-04XX	1-60	19.18	15.90	15.10	14.36	13.64
811-0480	120	19.18	15.90	15.10	14.34	13.64

power required, 5 watts, 95-130V, 60 Hz AC. Stainless steel flatted shaft, 3⁄₁₆" dia. x 1" long. Bronze bearings; brass gearing. Nickel plated cases. Mounting, three #6 holes spaced 120°. Torque equals 1 rpm rating, divided by speed.

PC-SM Series 40 Inch-Ounce Unidirectional with Positive Clutch and Brake. Basic SM motor as described at left with positive clutch and instantaneous brake. Shock and vibration resistant. Starts in 20 milli-seconds or less—stops 60 rpm shaft in 12°; 1 rpm in 1/5°. Shpg. wt. 1¼ lbs. *Specify ½, 1, 2, 3, 4, 5, 6, 10, 15, 30, or 60 rpm when ordering.

Stock No.	*rpm	EACH 1-9	10-24	25-49	50-99	100-Up
811-1000	½	23.64	19.45	18.48	17.55	16.68
811-10XX	1-60	23.64	19.45	18.48	17.55	16.68

AR-DA Series 100 Inch-Ounce Reversible with Positive Clutch Action. Features high accuracy both clockwise and counter-clockwise. Operates as an automatic reset motor when a return spring is attached to the output shaft. When clutch is de-energized, the shaft is free for manual or automatic reset. Clutch mechanism is fully lubricated and completely enclosed. Designed for heavy-duty use and will easily handle full 100 in.-oz. rating. Size and appearance same as PC series. Accurate within 1/5 second at 1 rpm, more accurate at higher speeds. Maximum error in seconds 1.5625 divided by the rpm. Case: 2½x2¹⁄₁₆" dia. Clutch actuator, ⅞" height x 1³⁄₁₆" width. Shpg. wt. 1½ lbs. *Specify 1, 4, 6, 10, 30, or 60 rpm when ordering.

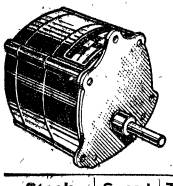
Stock No.	*rpm	EACH 1-9	10-24	25-49	50-99	100-Up
811-02XX	1-60	31.26	26.02	24.63	23.39	22.22

PC-DA Series 120 Inch-Ounce Reversible with Positive Brake and Clutch. Basic reversible DA motor as described above, with positive clutch and instantaneous brake. Highly accurate, vibration and shock resistant. Starts in 20 milliseconds—stops 60 rpm shaft in 1/5°. Shpg. wt. 1½ lbs *Specify 1, 2, 4, 6, 8, 10, 12, 20, 30, 60 or 120 rpm when ordering.

Stock No.	*rpm	EACH 1-9	10-24	25-49	50-99	100-Up
811-09XX	1-60	26.50	21.98	20.88	19.83	18.84
811-0990	120	16.50	21.88	20.88	19.83	18.84

To order motors with XX in Stock No., see Ordering Information at left, below.

MODEL GA 600-INCH-OUNCE REVERSIBLE H/S MOTORS



Capacitor phased hystersis-synchronous. Lifetime lubrication. Glass-reinforced Lexan housing. Stainless steel shaft, ¼x1" (flatted) except 3600 rpm, ⅛" dia. 1.0 μF capacitor (±5%) included. Case: 2¾x2¾x3". Adapter plate (below) permits output shaft and stud locations to match many motors, 115 V, 60 Hz AC. 2¾ lbs. *Specify speed: 1, 2, 3, 4, 5, 6, 10, 18, 30 rpm.

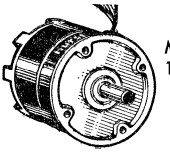
Stock No.	Speed rpm	Torque (Oz.-in.)	EACH 1-9	10-24	25-49	50-74	75-99	100-Up
811-0699	3600	.6	26.79	32.45	22.22	20.98	19.75	17.28
811-0690	300	2.0	34.75	30.40	28.81	27.21	25.62	22.41
811-0686	225	2.7	34.75	30.40	28.81	27.21	25.62	22.41
811-0685	180	3.3	34.75	30.40	28.81	27.21	25.62	22.41
811-0684	150	4.0	34.75	30.40	28.81	27.21	25.62	22.41
811-0682	120	5.0	34.75	30.40	28.81	27.21	25.62	22.41
811-0681	100	6.0	34.75	30.40	28.81	27.21	25.62	22.41
811-06XX	1-10*	.....	40.06	35.07	33.23	31.38	29.55	25.86
811-06XX	18-30*	.....	37.64	32.93	31.21	29.48	27.74	24.29
811-0660	60	10	34.75	30.40	28.81	27.21	25.62	22.41

811-0075. Adapter Plate. Shpg. wt. 4 oz. ..... Each .83

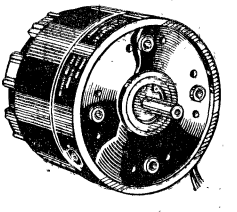
HOW TO COMPLETE STOCK NUMBERS

Where Stock No. has XX in last four digits, insert speed (in rpm) of motor desired to replace the XX. **Example:** For Type DA motor with output speed of 10 rpm (Stock No. 811-04XX) specify Stock No. 811-0410 when ordering. Where rpm is single digit, insert zero in front. Ex.: 811-11XX SM at 1 rpm=811-1101.

MODEL HB AND MB MOTORS



Mini-Bee
Model MB
1/100 hp



Honey-Bee
Model HB
1/50 hp

Precision 1800 rpm hysteresis-synchronous motors for accurate speed. Inverted rotor design for greatly reduced flutter characteristics. Sealed ball bearings, lifetime lubrication. Temperature rise of only 40° C even under full load conditions. Fully reversible—capacitor included. Starting torque: Model MB, 6 inch-ounces; Model HB, 12 inch-ounces. Sync torque: Model MB, 5¼ inch-ounces; Model HB, 11 inch-ounces. Dimensions: Model MB, 2¹³⁄₃₂" diameter x 2⅜" length; Model HB, 3¾" diameter x 3⅝" length. Mountings: Model MB, (4) #8-32 UNC 2B tapped mounting holes, equally spaced on 2.000" diameter B.C. 5⁄₁₆" max. thread engagement; Model HB, (4) #10-32-2B UNF tapped mounting holes equally spaced on 2.625" diameter B.C. 5⁄₁₆" max. thread engagement. Both models have 5⁄₁₆x1" stainless steel shaft. For 120 volts, 60Hz AC. Shpg. wts. MB: 2 lbs. HB: 4 lbs.

Stock No.	Mfr's Type	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
811-0710	MB	54.28	48.00	47.50	42.89	39.45	37.37
811-0810	MB	70.56	62.00	57.50	48.84	45.39	43.24

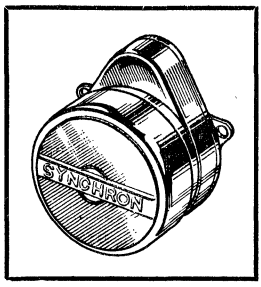
Specify Complete Stock No. and Output Speed When Ordering

Hansen and R.M.S. Motors

SYNCHRONOUS MOTORS

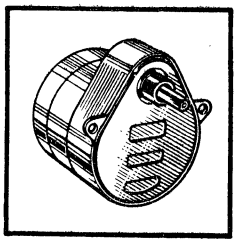
HANSEN "SYNCHRON" AND "900" SERIES SYNCHRONOUS MOTORS

"SYNCHRON." Hysteresis timing motors. Sealed gear case, brass gears and one-piece steel pinions. Two-piece field structure, shaded poles. Mount in any position. At 1 rpm or more, motor can be stalled without damage. Double bearing on rotor shaft, reduction train and output shaft. K12RC, 4 watt "K" coil, 20-oz.-in. torque at 1 rpm. I12 RC. 3 watt "I" coil, 30 oz.-in. torque at speeds shown. All have Type 12 flatted shaft, 1/8" dia. x 3/8" long. Clockwise. Two .142" dia. mtg. holes spaced 1.875". −40° to +140° F. 110 V, 60 Hz AC. **Specify speed: Type K12RC, 1, 2, 3, 4, 6, 10, 30, 50, 60 rpm; Type I12 RC, 1, 2, 4, 10, or 12 revolutions per hour.** 12 oz.



Stock No.	Mfr's Type	Speed (Specify)	EACH 1-9	10-24	25-49	50-99	100-Up
804-00XX	K12RC	1-60 rpm	5.60	4.35	3.20	2.70	2.10
804-01XX	I12RC	1-12 rph	5.67	4.42	3.27	2.77	2.17

900 SERIES. Self-starting hysteresis-synchronous with positive direction of rotation. Features instrument-type gear train, thicker gears to match increased torque. Extra heavy phenolic first gear for low noise level. Patented, hardened steel Synchron rotor ring; improved Class A coil construction. Silicone lifetime lubrication. Mounts in any position, may be stalled continuously without electrical or mechanical damage. Torque rating at 1 rpm, 98 oz.-in. at 8 watts. Flatted shaft, 3/16" diameter x 1/2" long. 3/8" diameter x 5/16" long bearing. Porous bronze bearing insert. Ultra-precision rotor shaft rotates on double bearings for improved reliability. Clockwise rotation. For operation from 110 volts, 60 Hz AC. **When ordering, specify choice of output speed: 1, 2, 4, 6, 10, 20, 30, or 60 rpm.** †Type 9GA393RP. 12 oz.



Stock No.	Mfr's Type	Speed (Specify)	EACH 1-9	10-24	25-49	50-99	100-Up
804-090X	900†	1-2 rpm	14.70	12.73	12.23	11.23	10.21
804-909X	900†	4-60 rpm	9.50	9.75	8.25	7.25	6.23

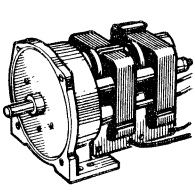
HOW TO ORDER HANSEN MOTORS

Insert desired rpm (For K12RC and 900) or rph (For I12RC) in place of XX in Stock No. EXAMPLE: K12RC motor at 1 rpm is 804-0001.

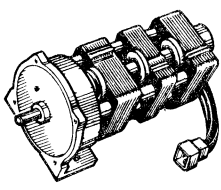
R.M.S. LOW-PRICED SHADED-POLE AC MOTORS

CONSTANT AND VARIABLE-SPEED TYPES

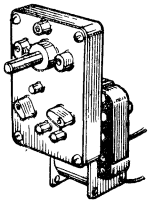
These reliable multipurpose motors can be used as vending, photocopy, advertising display or cycle controllers. Also ideal for business machines, data processing equipment, remote control devices, motorized valves and many other applications. Can be mounted in any position with no lubricant loss. No fan required. Permanently lubricated; sintered-bronze bearings, no commutators or brushes; impedance protected. 155° insulation; gear case lubrication is good from −65° to 300° F. Variable speed motors provide constant torque over 10 to 1 speed variation. HG Series have compact space-saver size for use where minimum mounting space and maximum durability are required. Variable types require Speed Control Box below to vary speed. All motors 115 volts, 50-60 Hz. AC. Av. motor shpg. wt. 3 lbs.



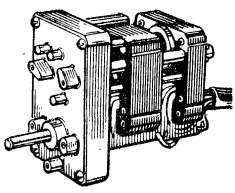
BG Unidirectional



BG Variable Speed



HG Unidirectional



HGF Tandem Reversible

CONSTANT-SPEED GEAR MOTORS

SEE TABLE BELOW FOR PRICES

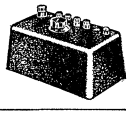
rpm	Torque In.-Oz.	Stock No. 915-	Mfr's Type Clockwise	Stock No. 915-	Mfr's Type Counter Clockwise	Stock No. 915-	Mfr's Type Reversible	Stock No. 915-	Mfr's Type Clockwise	Stock No. 915-	Mfr's Type Counter Clockwise	Stock No. 915-	Mfr's Type (Space-Savers) Tandem Reversible	Stock No. 915-	Mfr's Type Clockwise
1	800	0135	BG5R1K	0110	BG5L1K	0125	BG5P1K	0271	HG5R1K	0251	HG5L1K	0201	HGFP1K	0231	HGF5R1K
2	800	0136	BG5R2K	....	.....	0126	BG5P2K	0272	HG5R2K	0252	HG5L2K	0202	HGFP2K	0232	HGF5R2K
3	750	....	.....	....	.....	0127	BG5P3K	0273	HG5R3K	0253	HG5L3K	0203	HGFP3K	0233	HGF5R3K
4	560	0138	BG5R4K	....	.....	....	.....	0274	HG5R4K	0254	HG5L4K	0204	HGFP4K	0234	HGF5R4K
5	450	0139	BG5R5K	....	.....	0129	BG5P5K	0275	HG5R5K	0255	HG5L5K	0205	HGFP5K	0235	HGF5R5K
6	375	....	.....	0115	BG5L6K	0130	BG5P6K	0276	HG5R6K	0256	HG5L6K	0206	HGFP6K	0236	HGF5R6K
8	280	0141	BG5R8K	....	.....	....	.....	0277	HG5R8K	0258	HG5L8K	0208	HGFP8K	0238	HGF5R8K
10	225	0142	BG5R10K	0117	BG5L10K	0132	BG5P10K	0279	HG5R10K	0259	HG5L10K	0210	HGFP10K	0239	HGF5R10K
15	450	0185	BG8R15K	....	.....	0170	BG8P15K	0280	HG5R15K	0260	HG5L15K	0215	HGFP15K	0240	HGF5R15K
20	300	0186	BG8R20K	....	.....	0171	BG8P20K	0281	HG5R20K	0261	HG5L20K	0216	HGFP20K	0241	HGF5R20K
30	200	0187	BG8R30K	....	.....	0172	BG8P30K	0282	HG5R30K	0262	HG5L30K	0217	HGFP30K	0242	HGF5R30K
60	100	0188	BG8R60K	....	.....	0173	BG8P60K	0283	HG5R60K	0263	HG5L60K	0218	HGFP60K	0243	HGF5R60K
100	60	0190	BG8R100K	0160	BG8L100K	0180	BG8P100K	0284	HG5R100K	0264	HG5L100K	0219	HGFP100K	0244	HGF5R100K
200	30	0191	BG8R200K	....	.....	0181	BG8P200K	0285	HG5R200K	0265	HG5L200K	0220	HGFP200K	0245	HGF5R200K
300	20	0192	BG8R300K	....	.....	0182	BG8P300K	0286	HG5R300K	0266	HG5L300K	0221	HGFP300K	0246	HGF5R300K

PRICES OF GEAR MOTORS

SPECIFY STOCK NO., TYPE AND RPM FROM ABOVE

Rotation	EACH 1-9	10-24	25-49	50-99	100-Up
Clockwise	15.83	14.25	13.45	12.65	11.85
CCW	15.83	14.25	13.45	12.65	11.85
Reversible	22.45	20.20	19.05	17.95	16.80

SOLID-STATE SPEED CONTROL BOX FOR USE WITH ABOVE MOTORS



Type SCTPBK. Controls speed of both the reversible and unidirectional motors listed above. 7¼x4¼x4". Shpg. wt. 2 lbs.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-Up
915-0390	SCTPBK	41.70	40.45	39.20	37.53	35.45

VARIABLE-SPEED GEAR MOTORS

CLOCKWISE UNIDIRECTIONAL (PRICES BELOW)

Stock No.	Mfr's Type	Torque In.-Oz.	Speed in rpm
915-0193	BG8R400C5BK	10	400-40
915-0189	BG8R100C5BK	40	100-10
915-0184	BG8R10C5BK	400	10-1
915-0134	BG5R1C4BK	800	1-0.1

REVERSIBLE (PRICES BELOW)

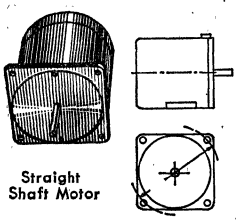
915-0183	BG8P400C5BK	10	400-40
915-0175	BG8P100C5BK	40	100-10
915-0165	BG8P10C5BK	400	10-1
915-0120	BG5P1C4BK	800	1-0.1

PRICES (EACH) OF GEAR MOTORS

Rotation	1-9	10-24	25-49	50-99	100-Up
Unidirectional	25.52	22.35	21.15	20.00	18.80
Reversible	30.39	26.60	25.20	23.80	22.40

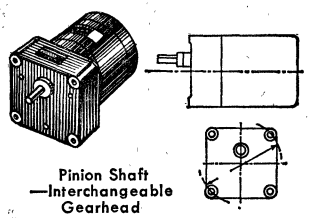
Motors, Speed Controllers, Drives, and Accessories on Pages 398-404

Hitachi "M" Modular Motors and Gearheads



Straight Shaft Motor

High precision, industrial duty motors with complete design flexibility. Modular design reduces prototyping, replacement and inventory costs. Over 500 speed and torque combinations available from stock. Available in three frame sizes—6, 8 and 10. Power outputs from 1/750 to 1/18 H.P. Torque from 0.7 to 1500 oz.-in.; single, dual or variable speed; straight shaft, or pinion shaft for use with interchangeable gearhead. Permanently lubricated, electronically selected ball bearings. Rabbeted joints and bushed lead-wire openings form a totally enclosed, protected motor housing. All insulating materials rated Class "A" or better. Instantly reversible; designed for continuous duty operation (brake motors for 30-minute duty cycle) at 120 V, 60 Hz AC, single phase. Av. shpg. wt. 3 lbs.



Pinion Shaft —Interchangeable Gearhead

Straight Shaft Motor Stock No.	Straight Shaft Motor Type	Pinion Shaft Motor Stock No.	Pinion Shaft Motor Type	H.P.	Description	Speed (rpm)	Torque (oz.-in.)	EACH
SIZE 6 MOTORS (2.4" Dia. x 2.6" Long with 3/16" Shaft)								
808-0006	HM6S1	808-0005	HM6P1	1/750	Hysteresis Synchronous	1800	0.75	30.40
808-0010	HM6S2D1	808-0007	HM6P2D1	1/375	Hysteresis Sync. Dual Speed	3600/1800	0.75	38.40
808-0111	SM6S2	808-0110	SM6P2	1/375	Reluctance Synchronous	1800	1.5	30.40
808-0061	RM6S2	808-0060	RM6P2	1/375	Induction with Brake	1450	2.8	3.040
808-0176	IM6S3	808-0174	IM6P3	1/250	Induction	1500	3.5	30.40
808-0177	IM6S3D1	808-0175	IM6P3D1	1/250	Induction Dual Speed	3000/1500	2.0	38.40
808-0066	RM6S4	808-0065	RM6P4	1/200	Induction with Brake	1450	4.0	30.40
808-0176	IMT6S3	808-0174	IMT6P3	1/250	Variable Speed with Control	150-1500	3.5	83.20
SIZE 8 MOTORS (3.15" Dia. x 2.95" Long with 1/4" Shaft)								
808-0013	HM8S5	808-0012	HM8P5	1/150	Hysteresis Synchronous	1800	3.7	34.80
808-0015	HM8S5D2	808-0014	HM8P5D2	1/150	Hysteresis Sync. Dual Speed	3600/1800	1.8	42.80
808-0120	SM8S5	808-0119	SM8P5	1/150	Reluctance Synchronous	1800	3.7	34.80
808-0185	IM8S7	808-0183	IM8P7	1/100	Inductance	1600	7.0	34.80
808-0075	RM8S7	808-0074	RM8P7	1/90	Induction with Brake	1550	8.9	34.80
808-0129	SM8S10	808-0128	SM8P10	1/75	Reluctance Synchronous	1800	7.5	34.80
808-0188	IM8S12D6	808-0187	IM8P12D6	1/60	Induction Dual Speed	3200/1600	5.0	42.80
808-0193	IM8S15	808-0191	IM8P15	1/50	Induction	1600	13.5	34.80
808-0084	RM8S20	808-0083	RM8P20	1/35	Induction with Brake	1550	20.4	34.80
808-0181	IMT8S15	808-0180	IMT8P15	1/50	Variable Speed with Control	160-1600	13.5	87.60
SIZE 10 MOTORS (4" Dia. x 4" Long with 5/16" Shaft)								
808-0019	HM10S15	808-0018	HM10P15	1/50	Hysteresis Synchronous	1800	11.2	60.60
808-0024	HM10S15D7	808-0023	HM10P15D7	1/50	Hysteresis Sync. Dual Speed	3600/1800	5.6	77.80
808-0140	SM10S15	808-0139	SM10P15	1/50	Reluctance Synchronous	1800	11.2	60.60
808-0156	SM10S20	808-0155	SM10P20	1/40	Reluctance Synchronous	1800	15.3	60.60
808-0210	IM10S30	808-0209	IM10P30	1/25	Induction	1600	27.8	60.60
808-0212	IM10S30D15	808-0211	IM10P30D15	1/25	Induction Dual Speed	3200/1600	13.6	77.80
808-0091	RM10S40	808-0090	RM10P40	1/18	Induction with Brake	1550	39.6	60.60
808-0216	IMT10S30	808-0215	IMT10P30	1/25	Variable Speed with Control	160-1600	27.8	112.40

NON-SYNCHRONOUS GEARMOTORS

Gearhead Model Ratio: 1)	Output Speed (rpm)	Use 6G Series Gearheads Torque (oz.-in.) IM6P3D1	RM6P2	IM6P3	RM6P4	Use 8G Series Gearheads Torque (oz.-in.) IM8P12D6	IM8P7	RM8P7	IM8P15	RM8P20	Use 10G Series Gearheads Torque (oz.-in.) IM10P30D15	IM10P30	RM10P40
1800	0.86	140	140	140	140	600	600	600	600	600	.....	.....	.....
900	1.7	140	140	140	140	600	600	600	600	600	.....	.....	.....
600	2.6	140	140	140	140	600	600	600	600	600	.....	.....	.....
450	3.4	140	140	140	140	600	600	600	600	600	.....	.....	.....
360	4.3	140	140	140	140	600	600	600	600	600	.....	.....	.....
300	5.2	140	140	140	140	600	600	600	600	600	.....	.....	.....
225	6.9	140	140	140	140	600	600	600	600	600	.....	.....	.....
180	8.6	140	140	140	140	600	600	600	600	600	1500	1500	1500
120	13	140	140	140	140	418	585	600	600	600	1312	1500	1500
90	17.2	134	140	140	140	362	507	600	600	600	985	1500	1500
60	26	90	126	140	140	241	337	429	600	600	656	1340	1500
36	43	54	75	94	108	145	202	257	390	590	423	750	750
30	52	45	63	78	90	121	169	214	325	492	354	723	750
18	86	31	44	55	62	73	102	129	196	296	212	434	618
6	258	10	15	18	21	24	34	43	65	98	71	145	206

SYNCHRONOUS GEARMOTORS

Gearhead Model (Ratio: 1)	Output Speed (rpm)	Use 6G Gearheads Torque (oz.-in.) HM6P1, HM6P2D1	SM6P2	Use 8G Gearheads Torque (oz.-in.) HM8P5D2	HM8P5, SM8P5	SM8P10	Use 10G Series Gearheads Torque (oz.-in.) HM10P15D7	SM10P15, HM10P15	SM10P20
1800	1	140	140	600	600	600	.....	.....	.....
900	2	140	140	600	600	600	.....	.....	.....
600	3	140	140	600	600	600	.....	.....	.....
450	4	140	140	563	600	600	.....	.....	.....
360	5	140	140	452	600	600	.....	.....	.....
300	6	140	140	376	600	600	.....	.....	.....
225	8	118	140	283	581	600	.....	.....	.....
180	10	94	140	225	463	600	812	1500	1500
120	15	67	135	150	309	600	540	1081	1476
90	20	51	100	130	268	543	405	811	1108
60	30	34	67	87	178	362	270	540	737
36	50	20	40	52	107	217	174	348	476
36	60	17	34	43	89	181	146	291	398
18	100	12	23	26	54	109	87	175	239
6	300	3.9	7.8	9	18	36	29	58	80

HOW TO ORDER GEARMOTORS

1. Select desired output speed from appropriate chart, above. **2.** Reading from left to right, find torque value equal to or greater than required. **3.** Specify motor model at top of torque column in which proper torque value was found; Stock No. and price are shown above. **4.** Order matching gearhead (size 6, 8 or 10) from tables at right. **Note:** Only pinion shaft motors can be used with gearhead. Gearheads used with dual speed motors operate at twice indicated speed.

Stock No.	Mfr's Type	Ratio to 1	EACH
SIZE 6 GEARHEADS (2.4" Square)			
808-0304	6G1800	1800	11.40
808-0303	6G600	600	10.20
808-0301	6G450	450	10.20
808-0300	6G360	360	10.20
808-0299	6G300	300	10.20
808-0298	6G225	225	9.20
808-0297	6G180	180	9.20
808-0295	6G120	120	9.20
808-0293	6G90	90	9.20
808-0285	6G60	60	9.20
808-0276	6G36	36	8.00
808-0273	6G30	30	8.00
808-0265	6G18	18	8.00
808-0256	6G6	6	8.00
SIZE 8 GEARHEADS (3.15" Square)			
808-0465	8G1800	1800	15.40
808-0448	8G900	900	15.40
808-0430	8G600	600	14.00
808-0410	8G450	450	14.00
808-0387	8G360	360	14.00
808-0380	8G300	300	14.00
808-0374	8G225	225	12.60
808-0367	8G180	180	12.60
808-0358	8G120	120	12.60
808-0348	8G90	90	12.60
808-0338	8G60	60	12.60
808-0328	8G36	36	11.20
808-0326	8G30	30	11.20
808-0317	8G18	18	11.20
808-0309	8G6	6	11.20
SIZE 10 GEARHEADS (4" Square)			
808-0048	10G180	180	42.20
808-0047	10G120	120	42.20
808-0045	10G90	90	42.20
808-0043	10G60	60	42.20
808-0041	10G36	36	35.40
808-0040	10G30	30	35.40
808-0037	10G18	18	35.40
808-0031	10G6	6	35.40

MOTOR APPLICATIONS

Type IM Induction Motors. Low starting current. May be started, stopped and reversed continuously with low-inertia loads. May be stalled at full voltage for short periods without damage. Continuous duty rated. Smooth, quiet and relatively efficient. Speed will change with change in torque load.

Type RM Induction Motor with Built-In Braking Device. Same as IM but will stop and reverse more rapidly without "coasting." For duty cycles of 30 minutes or less requiring precise positioning or rapid direction reversal.

Type SM Reluctance Synchronous Motors. Discrete "lock-in" points; may be polarized to external source; maintains constant speed. Relatively inefficient with inherent vibration.

Type HM Hysteresis Synchronous Motors. Infinite number of "lock-in" points; may not be polarized. Smoother and quieter than SM; accelerates higher inertial loads to constant synchronous speed.

All motors are individually boxed; come complete with metal encased oil filled matching capacitor and mounting brackets. Gearheads are individually boxed; complete with mounting hardware and container of lubricant. Variable speed motors include tachometer generator and constant torque solid-state speed control.

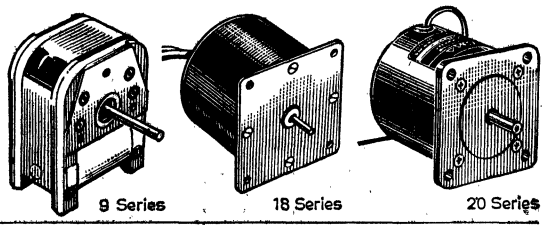
Contact Allied for Motors with Special Speed/Torque Characteristics

Motors and Motor Controllers

SIGMA SERIES 9, 18 AND 20 MOTORS

Series 9. Converts digital pulse input to analog shaft output. Operates from any drive input with successive DC pulses of alternating polarity. Angular accuracy, 15 minutes. Bi-polar construction with PM stator, dual windings. Use 9F02 Drive Package-two needed for bi-directional operation. Damper over 50 step/second. Rated continuous duty at 24 VDC nominal. **Series 18.** Two phase inductor stepping motors. Bi-directional operation with A202 drive. 28 VDC. †Value of external resistor. Drive Packages on PC board. 1 lb.

917-0292. 9F02. For Series 9. 8-20-V; 6 μsec (min).....**78.00**
917-0015. A202. For Series 18. 4-10-V; 1 μsec (min).....**75.00**
917-0095. AT-214-1 Damper. For Series 9. Wt. 6 oz.....**45.00**



9 Series 18 Series 20 Series

Stock No.	Mfr's Type	Step Angle	Max. Steps/ Second	Torque, Gm./cm Max. Step	Min. Hold	Min. Detent	Ohms/ Winding	Amps/ Winding	External Resistor† Ohms	W	Size, Inches H.xW.xD.	Shpg. wt. Oz.	EACH 1-24	25-49	50-Up
917-0280	9AG4J2-.18	18°	425	360	750	375	.18	6.2	3.7	150	2 7/16x1 13/16x1 5/32	12	89.00	80.10	76.65
917-0283	9AH4D2-.18	18°	300	345	720	360	.18	6.2	3.7	150	2 7/16x1 13/16x2 5/16	23	118.00	106.20	100.30
917-0286	9AK4J2-.18	15°	475	420	950	475	.18	6.2	3.7	150	2 7/16x1 13/16x1 5/32	12	89.00	80.10	76.65
917-0289	9AL4D2-.18	15°	400	395	880	440	.18	6.2	3.7	150	2 7/16x1 13/16x2 5/16	23	118.00	106.20	100.30
917-0365	18-1408D40-195	9°	800	35	100	8	195	.055	145	5	1.418dia.x.787	3	19.50	17.55	15.58
917-0369	18-2013D32-75	11.25°	300	210	500	18	75	.155	51.6	10	1.969dia.x1.26	8	28.00	25.20	23.80
917-0373	18-2520D16-35	22.5°	700	190	75	75	35	.320	25	20	2.52x2.52x1.969	16	43.00	38.60	36.55

SERIES 20 1.8° STEPPING MOTORS

2 or 4 phase, converts digital pulse input to analog shaft output of 1.8 steps. ±3%. Size, 1st 4 digits of Mfr's Type; e.g., 2223-2.2"x 2.3" (Diameter of motor housing x length of motor less shaft protrusion.) Listed torques rated with Bipolar Chopper Driver.†

917-0458RL Driver 29-2D30R7-B. Input ±30VDC. Pulse Trigger Each.....**127.00**
917-0020. Uni-polar Driver. A 203-15 amp. 24VDC. 5VDC trigger Each.....**113.00**
917-0459. 29-2565C10.† Bi-polar Chopper Driver. 65VDC @ ⅔ of IO. Each.....**420.00**

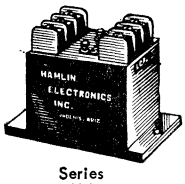
Stock No.	Mfr's Type 20-	Torque @ 50 step/sec.	Current Amps	Wt., Oz.	EACH 1-9
917-0377	2223D200-F6	53	1.3	24	90.00
917-0378	3424D200-F1.8	110	2.4	50	84.00
917-0381	3437D200-F.75	265	5.7	90	106.00
917-0383	4256TD200-F.44	550	7.1	128	116.00
917-0385	4275D200-F1.2	1000	4.8	225	175.00
917-0386	4275TD200-F0.6	1500	7.5	225	375.00

SERIES 20 SYNCHRONOUS AC MOTORS

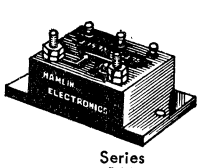
Bidirectional, heavy-duty motors have extremely efficient magnetic circuit for increased torque without adding to motor weight or bulk. They outperform other motors of same frame size. Typical applications include industrial, medical and scientific instruments; process control and automated machinery; central or peripheral computer equipment. Accelerate to rated speed within one cycle. Static detent torque present when unenergized. Speed, 72 rpm at 120 VAC. 60 Hz. Size of unit is indicated by 1st 4 digits of Mfr's Type; e.g., 2223=2.2x 2.3" (DxL).

Stock No.	Mfr's Type 20-	Torque (oz./in.)	Phase Shift R.	C.M.F.	Current Amps	EACH 1-9
917-0378	2223S72-A120	44	100	1	.105	55.00
917-0380	3424S72-A120	90	250	2	.165	48.00
917-0382	3437S72-A120	210	200	4	.35	80.00
917-0384	4256TS72-A120	350	0	4	.35	80.00
917-0387	4275-A120	575	50	6.5	.6	125.00

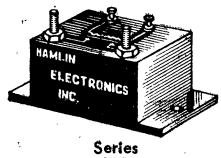
HAMLIN SELF-CONTAINED AC CONTROLLERS



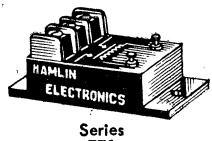
Series 612



Series 733



Series 723



Series 773

SERIES 612 2½-A/PHASE SOLID-STATE CONTROLLER

Small dependable 3-phase controller for light motor control. Overloads up to 80 A/phase (1 cycle). Quiet operation reduces R.F.I. and E.M.I. For use with low level logic. Contacts: 3PST—normally open. 208/240 V, 50-60 Hz AC. 2.61x1.5x1.82". 4¾ oz.

Stock No.	Mfr's Type	Coil Volts	Coil mA	EACH 1-9	10-24	25-49	50-99
807-0040	612-11-100	5 VDC	50	37.70	33.90	32.00	30.90
807-0041	612-11-300	24 VDC	13	37.70	33.90	32.00	30.90
807-0042	612-11-500	24 VAC	13	37.70	33.90	32.00	30.90
807-0043	612-11-600	Line V	7	37.70	33.90	32.00	30.90

SERIES 723 ZERO-VOLTAGE 6-A SWITCHING CONTROLLER

Solid-state controller uses AC voltage through zero to cut R.F.I. and E.M.I. Operate time: 1 ms. Release time: ½ cycle. Contacts: SPST—normally open. 723-21: 120 V, 50-60 Hz AC. 723-22: 240 V, 50-60 Hz AC. *External contact. 2.61x1.5x1.463". 3½ oz.

807-0044	723-21-000	*	*	20.50	18.50	17.40	16.40
807-0045	723-21-100	5 VDC	28	23.00	20.70	19.60	18.40
807-0046	723-21-300	24 VDC	8	23.00	20.70	19.60	18.40
807-0047	723-22-000	*	*	23.00	20.70	19.60	18.40
807-0048	723-22-100	5 VDC	28	25.50	23.00	21.75	20.40
807-0049	723-22-300	24 VDC	8	25.50	23.00	21.75	20.40

SERIES 773 STANDARD 6-A SOLID-STATE CONTROLLER

Controls resistive, capacitive, inductive or incandescent loads. Zero current point turn off cuts R.F.I. and E.M.I. Contacts: SPST—normally open. 773-11: 120 V, 50-60 Hz AC. 773-12: 240 V, 50-60 Hz AC. *External contact. 2.5x1.25x1.11" 2¼ oz.

Stock No.	Mfr's Type	Coil Volts	Coil mA	EACH 1-9	10-24	25-49	50-99
807-0054	773-11-030	*	*	8.95	8.00	7.50	7.25
807-0055	773-11-130	5 VDC	28	10.75	9.75	9.25	8.80
807-0056	773-11-330	24 VDC	8	10.75	9.75	9.25	8.80
807-0057	773-12-030	*	*	10.05	9.50	8.55	8.25
807-0058	773-12-130	5 VDC	28	13.80	12.45	11.75	11.35
807-0059	773-12-330	24 VDC	8	13.80	12.45	11.75	11.35

SERIES 733 LATCHING 6-A SOLID-STATE CONTROLLER

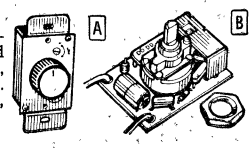
Controls AC load by pulses. DC pulses at rated voltage for 1 millisecond will set or reset controller. Contacts: SPST—normally open. 733-31-100/300: 120 V, 50-60 Hz AC. 733-32-100/300: 240 V, 50-60 Hz AC. 2.61x1.5x1.15". Wt., 2½ oz.

807-0050	733-31-100	5 VDC	33	10.60	9.55	9.00	8.70
807-0053	733-31-300	24 VDC	110	10.60	9.55	9.00	8.70
807-0051	733-32-100	5 VDC	33	15.05	13.55	12.80	12.35
807-0052	733-32-300	24 VDC	110	15.05	13.55	12.80	12.35

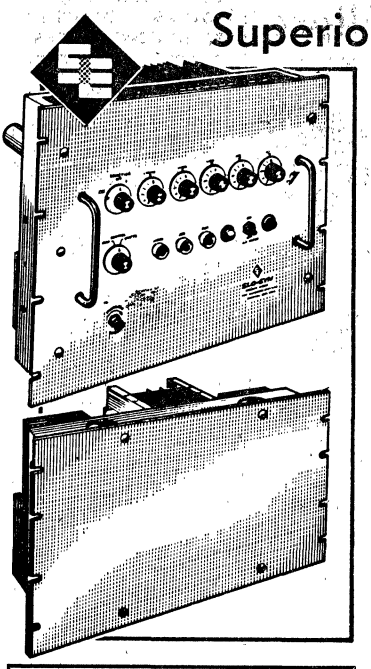
MSC SERIES SOLID-STATE MOTOR SPEED CONTROLLERS

Stock No.	Type	Fig.	VAC	A	EACH
779-8211	MSC-11	B	120	1.6	4.83
779-8231	MSC-31	B	120	3	5.15
779-8232	MSC-31K*	B	120	3	6.62
779-8851	UFSC-51	A	120	5	8.77
779-8852	UFSC-51K*	A	120	5	10.24

Full-wave solid-state circuit for infinite speed variations for most shaded pole, PSC or universal motors. Push-on, push-off. Third wire for accessories. UFSC is for fans. *With faceplate, knob, hdwre. 2x1.55x1 13/16".



Superior-Electric Stepper Motors, Drives



MODEL HPR400R-4 *SLO-SYN* PRESET INDEXER

- Controls Indexing to 9999 Steps
- Provision for Computer Input
- Functions Can Be Controlled by Voltage Level
- Available With or Without Stepping Motor

High-speed, rack-mounted unit for driving Slo-Syn stepping motors in indexing and other positioning operations. Decade counter controls on front panel select step increments. Will automatically drive motor the pre-selected number of steps, then actuate a relay control for external equipment. Speed range, 50 to 2000 steps/second. Has 24-pin connector for remote control from computer, external decade switches or relays, remote sensing devices, or other isolated control elements. Momentary contact closure of 150 microseconds minimum required for start, stop and reset; functions can also be controlled by voltage levels. Operating temperature range, 0° to 40°C. Overall size: 19x13x13 31/32". For 105-125 volt, 60 Hz AC operation. Requires Type HS25, HS50, or HS50L bifilar DC stepping motor, listed in table below. Wt., 66 lbs.
930X1005. 1-5.....Each 1320.00
HPR400SR-4. Preset Indexer with HS400B-1003 stepping motor. Shpg. wt., 76 lbs.
930X1015. 1-5.....Each 1530.00

MODEL HTR400 *SLO-SYN* TRANSLATOR

- Drives Motor Up to 2000 Steps/Second
- With or Without Stepping Motor
- Triggering Pulse Can Be Supplied By Tape Reader, Oscillator, Etc.

High-speed, pulse-to-step converter drives appropriate Superior Slo-Syn motor one step for each pulse received. Designed especially for use in programming, positioning, indexing, digital counters, remote meter indication, and many other digital applications. Features internal oscillator that supplies adjustable frequency, from 50 to 2000 steps per revolution, with fast and automatic motor acceleration and deceleration. Requires 10-15 volt negative change of voltage for triggering, with minimum pulse-width of 50 microseconds. Acceleration and deceleration times: 65 milliseconds. Operating temperature: 0° to 40°C. Rack mount, 19x10¼x10 15/32". Requires Type HS25, HS50, or HS50L bifilar DC motor (listed in table below). Shpg. wt., 61 lbs.
930X1076. 1-5.....Each 785.00
Model HTR400S. Translator with Superior HS400B stepping motor. Wt., 71 lbs.
930X1080. 1-5.....Each 995.00

MODEL HPI 153R SLO-SYN PRESET INDEXER

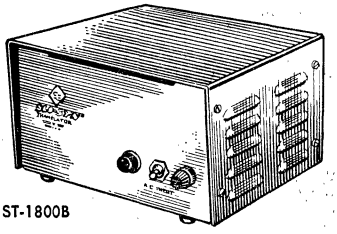
- Controls Indexing to 99,999 Steps
- Has Computer Input Provision
- Complete with Type HS450 Stepping Motor
- Speed Range of 100-3000 Steps/Second

Rack-mounted unit drives Type HS450 stepping motor (incl.) in indexing and other positioning applications. Decade counter controls on the front panel allow the operator to select the desired positioning movement. Will automatically drive motor the pre-selected number of steps, then actuate a relay control for external equipment. Speed range, 100-3000 steps/second. Receptacle for remote control from computer, external decade switches or relays. Momentary contact closure of 150 micro-seconds minimum for start, stop and reset. Operating temp., 0 to 40°C. For Rack Mounting. 105-125 v, 60 Hz AC. Wt. 61 lbs.
930X1003. 1-5.....Each 1830.00

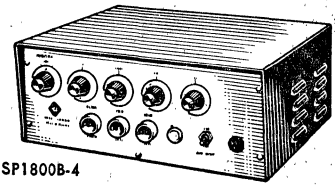
MODEL HTR103R SLO-SYN TRANSLATOR

- Drives Motor Up to 3000 Steps/Second
- Complete with Type HS450 Stepping Motor
- Provision for Triggering Pulse by Tape Recorder, Oscillator, Etc.

Solid-state, pulse-to-step converter drives Type HS450 Slo-Syn motor (incl.) one step for each pulse received. Specially designed for use in high speed positioning applications. Can be rack or bench mounted. Has internal oscillator that supplies adjustable frequency from 100 to 3000 steps per second with automatic motor acceleration and deceleration. Adjustable acceleration and deceleration to match the characteristics of the load being driven. Required triggering signal of 10-12 volt negative change of voltage with a minimum pulse width of 30 microseconds. Triggering pulses can be supplied by tape readers, computers. oscillators, pulse generators and other signal producing equipment. Operating temperature range, 0 to 40°C.; storage temp., −55 to 85°C. For Rack Mounting. For 105-125 volt, 60 Hz AC operation. Shpg. wt. 71 lbs.
930X1068. 1-5.....Each 1215.00



ST-1800B



SP1800B-4

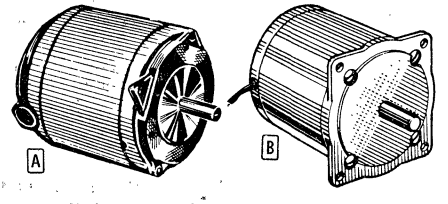
SLO-SYN TRANSLATOR

ST-1800B. Pulse-to-step converter for use with appropriate bifilar-type synchronous stepping motors (shown at right). Used in programmed positioning, indexing, digital counters, many other applications. Converts low-level signal impulses or square waves into correct switching sequences to drive motor at 200 discrete steps per revolution. 1-amp input at 120 VAC. Shpg. wt. 12 lbs.
930X1250. 1-5.....Each 395.00

SLO-SYN PRESET INDEXERS

SP1800B-4. Excellent for control of indexing operations in applications using synchronous stepping motors for positioning. Any indexing movement can be set on control panel. Automatically provides correct switching sequence required to drive motor needed number of 1.8° steps. Can be made to cycle automatically. Controls indexing up to 9999 steps. 1.25-amp input at 120 VAC. Shpg. wt. 15 lbs.
930X1150. 1-5.....Each 875.00

SLO-SYN BIFILAR DC MOTORS



- High torque with instant stop-start-reverse
- Stepping provided in 1.8° increments
- Require Only SPDT Switch for Full Control

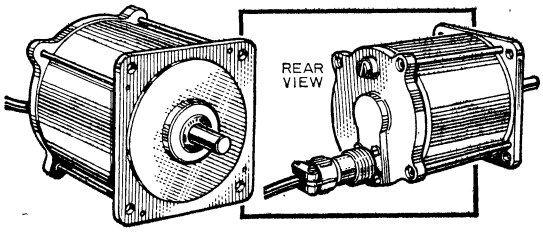
Synchronous motors for DC stepping applications where the use of push-pull circuitry and a center tapped power supply is not possible, or where an increase in torque at high stepping speeds is required. Only a single-ended power source and SPDT switching is necessary. Translator modules, shown at left, provide stepping in 1.8° increments. Translator and preset indexer, shown above, provide stepping and indexing for variety of programmed systems in a wide variety of industrial applications. Suffix "E" denotes double-ended shaft.

Stock No.	Mfr's Type	Fig.	DC Volts	Amps Per Winding	Size (in.)	Wt., Lbs.	EACH Each	2-5	6-24	25-Up
930-1158	SS25-1001	B	11.8	0.22	3 11/16x3 3/8	1¼	105.98	87.00	78.30	73.95
930-1177	SS50-1009	A	5.5	1.3	2½x3 3/8	3½	100.00	80.00	72.00	68.00
930-1195	SS150-1010	A	10.0	1.25	4 7/8x4¼	8	108.95	90.00	81.00	76.50
930-1214	SS250-1002	A	9.0	1.55	4 7/8x4¼	8	128.21	111.00	99.00	94.35
930-1216	SS250-1027	B	4.6	3.1	4 7/8x4¼	8	128.21	111.00	99.90	94.95
930X1225	SS400-1021	B	5.3	3.4	6¾x4¾	15	191.75	153.00	137.70	130.05
930-1050	HS25	A	5.4	1.5	2 7/32x3¼	2	145.00	116.00	104.40	98.60
930-1054	HS50	A	3.0	4.0	3 11/16x3 3/8	5	129.00	103.00	92.70	87.55
930-1057	HS50E	B	3.0	4.0	3 11/16x3 3/8	8	144.00	115.00	103.50	97.75
930-1060	HS50L	A	4.5	3.5	5 5/16x3 7/8	7	177.00	141.00	126.90	119.85
930-1063	HS50LE	B	4.5	3.5	5 5/16x3 7/8	8	191.75	153.00	137.78	130.05

Motors, Speed Controllers, Drives, and Accessories on Pages 398-404

Motors and Translators by Superior-Electric

SLO-SYN VISCOUS DAMPED MOTOR

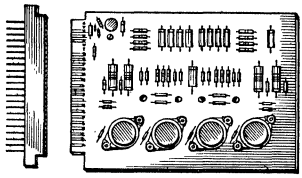


- Precision DC Stepping Motor
- .06° Maximum Error
- Internally Viscous Damped To Minimize Shaft Oscillation

TYPE HS50D. For DC stepping applications in a variety of uses. Features a unique fluid system that results in a step function approaching critical damping. The properties of the internally contained silicone viscous damping fluid have no effect on the overall speed of response or running characteristics of the motor. With damping, typical time for motor shaft settling to within 0.1° is approximately 17 milliseconds. Can be operated over an ambient temperature range of +10°C to +35°C, and can be mounted either horizontally or vertically with the shaft facing down. Special vent on motor housing must be opened before operating.

Using proper drive circuitry, the HS50D can achieve speeds of 1000 steps per second or higher. Steps per revolution: 200, 1.8 per step. Maximum error: (non-cumulative). 06°. Amperes per winding, 4. DC volts, 3. Input volts, 120. Frequency, 60 Hz. Maximum moment of inertia (rigidly attached load), 0.5.-in.^{2} Resistor, 800 ohms, ±25%, 25 watts. Capacitor, 1, 5 μF, 6%, 330. VAC. (Ratings and specs for AC). 3⅜x3⅜x5⅛". Shpg. wt. 5 lbs.
930-1056 ..... **147.00**

SUPERIOR SLO-SYN TRANSLATOR MODULES



TYPE STM1800. Plug-in PC board with logic circuit for stepping Slo-Syn Bifilar motors in increments of 1.8°. Bidirection operation. Requires a 30-volt center-tapped DC power supply with maximum ripple of 5%. Draws 1 to 8 amps, depending on motor used. Voltage may have to be varied to maintain rated motor voltage. Triggered by 10-15V neg. voltage change with min. pulse width of 50 microseconds. Input imp., 500 ohms. Increment, 1.8° except 5° when used with TS50 motor. Requires dropping resistor. With connector. 14 oz.
930-1253 ..... **Each 79.50** 2-5 ..... **Each 68.00**
6-24 ..... **Each 61.20** 25-Up ..... **Each 57.80**

TYPE STM1800V. Similar to STM1800 above, but includes built-in oscillator that can be adjusted to drive motor at speeds from 4 steps per second up to maximum at which motor will drive load. Includes 500k potentiometer for speed adjust. Shpg. wt. 1 lb.
930-1256 ..... **Each 92.25** 2-5 ..... **Each 78.00**
6-24 ..... **Each 70.20** 25-Up ..... **Each 66.30**

TYPE STM1800C. For stepping Types HS50L or HS50 motors in increments of 1.8° up to 2000 steps per sec. Capable of bidirectional operation of motor. Requires Type T6382 power supply (below). Draws 8 amps from HS50; 7 amps from HS50L. Requires an 8-10V neg. voltage change with min. pulse width of 30 μsec. Input impedance, 3000 ohms. Requires dropping resistor. With connector. Wt. 2 lbs.
930-1251 ..... **Ea. 108.50** 2-5 ..... **Each 87.00**
6-24 ..... **Each 78.25** 25-Up ..... **Each 74.45**

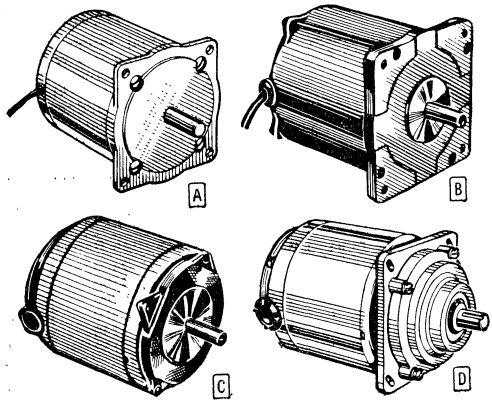
TYPE STM1800CV. Similar to STM1800C, but with built-in oscillator. Uses Type T6382 power supply (below). With 500k pot. Shpg. wt. 2 lbs.
930-1252 ..... **Ea. 122.50** 2-5 ..... **Each 98.00**
6-24 ..... **Each 88.25** 25-Up ..... **Each 83.90**

TYPE T6382 POWER SUPPLY. For STM1800C, STM1800CV. 5 lbs.
930-1263 ..... **Each 32.00**

SUPERIOR ELECTRIC *SLO-SYN* INSTANT REVERSING SYNCHRONOUS AC MOTORS

For continuous control heavy-duty applications requiring rapid starting, stopping, and reversing characteristics. Basic speed, 72 rpm at 120 volts, 60 Hz, AC except †200 rpm. Number in manufacturer's type number below indicates torque in oz.-in.; for example, SS25 has torque of 25 oz.-in. Motors with E suffix have shaft extensions to permit attaching drive at either end. *Square design, explosion-proof, 60 Hz AC only.

Stock No.	Mfr's Type	Fig.	Max. Amps	Size L x Dia.	Wt. Lbs.	EACH Ea.	2-5	6-24	25-Up
930-1155	SS25	A	0.1	2¼x2 7/32"	1½	68.40	55.00	49.50	46.75
930-1161	SS50	A	0.3	2½x3⅜"	3½	60.00	48.00	43.20	40.80
930-1162	SS50E	A	0.3	2½x3⅜"	3½	75.00	61.25	54.00	51.00
930-1185	SS150	B	0.4	4⅞x4¼"	8	72.00	58.00	52.20	49.30
930-1186	SS150E	B	0.4	4⅞x4¼"	8	87.50	70.00	63.00	59.50
930-1210	SS250	B	0.6	4⅞x4¼"	8	95.87	79.00	71.10	67.15
930-1211	SS250E	B	0.6	4⅞x4¼"	8	105.11	91.00	81.90	77.35
930U1220	SS400	B	0.6	6¾x4¼"	15	139.76	121.00	108.90	102.85
930U1221	SS400E	B	0.6	6¾x4¼"	15	153.62	123.25	119.70	113.05
930X1268	X1500*	A	3.0	6½x6½"	38	303.77	263.00	236.70	223.55
930-1265	TS50†	A	0.3	3 11/16x3⅜"	5	84.32	73.00	65.70	62.05



SLO-SYN PLANETARY GEAR AND RC MOTORS

As above except types with suffix P have speed-reducing planetary gear assemblies; types with suffix RC have built-in resistor capacitor networks; P-RC types have both. Approximate speed for motor with P1 assembly, 16.6 rpm (ratio 4⅓); P2, 3.3 (ratio 21⅔); P3, 0.665 (ratio 108⅓). Exact speed may be calculated from basic motor speed (72 rpm) and ratio. To determine shipping weights, use weight indicated for motor in table above and add 1 lb. for RC type, 2 lbs. for P type, and 3 lbs. for P-RC type.

Stock No.	Mfr's Type	Fig.	(Oz.-In.)	Size L x Dia.	EACH Each	2-5	6-24	25-Up
930-1163	SS50-P1	C	120	2⅞x3⅜"	91.50	73.00	65.70	62.05
930-1167	SS50-P2	C	600	2⅞x3⅜"	91.50	73.00	65.70	62.05
930-1171	SS50-P3	C	2000	3 3/16x3⅜"	104.00	83.00	74.70	70.55
930-1175	SS50-RC	....	50	5 5/32x3⅜"	87.50	74.75	63.00	59.50
930-1165	SS50-P1RC	....	120	5 19/32x3⅜"	118.00	101.00	85.50	80.75
930-1167	SS50-P2RC	....	600	5 19/32x3⅜"	118.00	101.00	85.50	80.75
930-1173	SS50-P3RC	....	2000	5 29/32"x3⅜	131.00	112.00	94.50	89.25

Stock No.	Mfr's Type	Fig.	(Oz.-In.)	Size Lx Dia.	EACH Each	2-5	6-24	25-Up
930X1187	SS150-P1	D	400	6¼x4¼"	104.00	83.00	74.70	70.55
930X1189	SS150-P2	D	2000	6¼x4¼"	104.00	83.00	74.70	70.55
930X1193	SS150-RC	....	150	7½x4¼"	92.40	80.00	72.00	68.00
930X1191	SS150-P2RC	....	400	8⅞x4¼"	131.00	105.00	94.50	89.25
930X1212	SS250-P1	....	650	6¼x4¼"	120.12	104.00	93.60	88.40
930X1222	SS400-P1	....	1000	6¼x4¼"	173.25	150.00	135.00	127.50
.....	.....	....	....	.....	.....	.....	.....	.....

RESISTORS FOR ABOVE

Fixed, wirewound resistors for use with capacitors (right) in phase shifting networks for motors listed in tables above (except RC types which have network built in). *U.L. Recog. Tol., ±5%. 2 oz.

Stock No.	Mfr's Type	Use With Motor	Ohms	Watts	EACH Ea.	2-5	6-24	25-Up
930-1104	R-SS25	SS25	500	5	2.19	1.75	1.58	1.49
930-1105	R-SS50	SS50	400	25	2.19	1.75	1.58	1.49
930-1108	SS150	SS150	250	25	2.19	1.75	1.58	1.49
930-1111	R-SS250/SS400	SS250/SS400	150	50	4.08	3.25	2.93	2.76
930-1116	R-X1500*	X1500	55	375	10.53	8.50	7.65	7.23
930-1120	R-TS50	TS50	300	25	2.19	1.75	1.58	1.49

CAPACITORS FOR ABOVE

Can-type electrolytics for use in phase shifting networks for motors listed above (except RC types which have network built in). Rated at 330 volts, AC. C-X1500 is Recognized Under the Component Program of U.L. Laboratories, Inc. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Use With Motor	μF	EACH Ea.	2-5	6-24	25-99
930-0400	C-SS25	SS25	.75	5.10	4.25	3.83	3.61
930-0402	C-SS50	SS50	2.25	7.20	6.00	5.40	5.10
930-0408	C-SS150/-TS50	SS150/-TS50	3.75	5.68	4.75	4.28	4.04
930-0412	C-SS250/SS400	SS250/SS400	6.5	7.20	6.00	5.40	5.10
930-0418	C-X1500	X1500	55.0	28.02	24.00	21.60	20.40

G. K. Heller Variable Speed Motors, Controllers

Infinitely variable speed, reversible, ball bearing motors, either plain or with heavy duty gearheads easily rotatable to different shaft positions. Motors furnished with 5′ cable and plug to connect to solid state controller; longer cable available. Controllers supply filtered d-c to motors for maximum smoothness and cool operation. Reversing switch, speed adjustment knob, pilot light and on-off switch on front panel. Transient and overload protection, line voltage and load correction circuits furnish reliable operation with full rated torque at all speeds. For applications requiring moderate accuracy use EMF feedback types. In scientific apparatus, semiconductor manufacturing, or other applications requiring the ultimate in speed range, stability, and repeatability use precision drives. All models available in open chassis construction for OEM use. All controllers can be arranged to respond to external command signals.

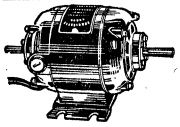
1/40 HP EMF FEEDBACK TYPE

MODEL S10. SCR full-wave filtered d-c output, dual range controller. Keyholes in rear panel for wall mounting. Operates motors over approximately 20/1 speed ranges in each of two ranges. Automatic dynamic braking. Size: 5½x4⅜x3⅛″. Shpg. wt. 4 lbs.

810-0090 ..... 68.50

MOTORS FOR USE WITH S10 CONTROLLER

Stock No.	Mfr's Type	Gear Ratio	Max. Speed RPM Low Range	High Range	Torque In-lbs.	EACH
810-0301	2T60-1	(Plain)	2000	3000	.63	52.25
810-0302	2T60-6	6/1	333	500	3.2	68.50
810-0303	2T60-10	10/1	200	300	4.2	68.50
810-0304	2T60-18	18/1	111	166	6.0	68.50
810-0305	2T60-30	30/1	66	100	3.5	68.50
810-0306	2T60-36	36/1	55	83	7.1	72.25
810-0307	2T60-60	60/1	33	50	8.0	72.25
810-0308	2T60-100	100/1	20	30	6.0	72.25
810-0309	2T60-300	300/1	6.6	10	7.0	72.25
810-0310	2T60-540	540/1	3.6	5.6	5.0	72.25
810-0311	2T60-900	900/1	2.3	3.3	3.7	72.25
810-0312	2T60-1110	1110/1	1.8	2.7	2.2	72.25



PLAIN MOTOR

Precision die cast totally enclosed motor featuring 5/16″ shaft at each end. Dimensions: for 2T60-1, 6½x3 7/16x3 21/32″; for T2-1, 6⅞x3 7/16x3 21/32″. Shpg. wt. 6 lbs.

⅛ HP EMF FEEDBACK TYPE

MODEL S20. Dual range, reversing SCR controller supplying full wave filtered d-c armature voltage. Magnetic circuit breaker; push-pull speed control knob gives 50% increase in speed at reduced running torque; patented automatic field weakening circuit provides full starting torque. 7x5x4″. Shpg. wt. 6 lbs.

810-0095 ..... 83.75

MOTORS FOR USE WITH S20 CONTROLLER

Stock No.	Mfr's Type	Gear Ratio	Max Speed RPM Low Range	High Range	Torque In-lb	EACH
810-0018	MSB-1815	(Plain)	17.25	2400	2.3	68.50
810-0028	MSD-188	(Plain)	1725	2400	4.4	76.25
810-0538	54RL-2½	2½/1	690	960	8.0	189.00
810-0539	54RL-5	5/1	345	480	16.0	164.50
810-0540	54RL-10	10/1	173	240	32.0	123.75
810-0541	54RL-20	20/1	86	120	54.0	123.75
810-0542	54RL-30	30/1	57	80	66.0	123.75
810-0543	54RL-40	40/1	43	60	73.0	123.75
810-0507	12R-57	57.7/1	30	42	50.0	102.90
810-0509	12R-157	157.2/1	11	15	120.0	102.90
810-0511	12R-437	437.3/1	4	5.5	200.0	102.90
810-0513	12R-524	523.9/1	3.3	4.6	200.0	102.90

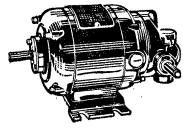
1/40 HP PRECISION TYPE

MODEL T2. Transistor (not SCR) controller using linear integrated circuits for 0.5% accuracy against line, load, or temperature changes. Adjustable 2000/1 speed range. Automatic current limiting and thermal protection. 5x6x12″. Shpg. wt. 14 lbs.

810-0400 ..... 152.00

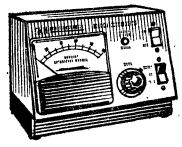
MOTORS FOR USE WITH T2 CONTROLLER

Stock No.	Mfr's Type	Gear Ratio	Max. Speed RPM	Torque In-lb	EACH
810-0401	T2-1M	(Plain)	1800	.63	120.50
810-0406	T2-6M	6/1	300	3.2	129.50
810-0410	T2-10M	10/1	180	4.2	129.50
810-0418	T2-18M	18/1	100	6.0	129.50
810-0430	T2-30M	30/1	60	3.5	129.50
810-0436	T2-36M	36/1	50	7.1	133.25
810-0460	T2-60M	60/1	30	8.0	133.25
810-0470	T2-100M	100/1	18	6.0	133.25
810-0480	T2-300M	300/1	6	7.0	133.25
810-0485	T2-540M	540/1	3.3	5.0	133.25
810-0490	T2-900M	900/1	2	3.7	133.25
810-0496	T2-1110M	1110/1	1.6	2.2	133.25



RIGHT ANGLE GEAR MOTOR

Same as plain motor, but with bronze output gears, 5/16″ extended hi-speed and gear output shafts. Dimensions: 2T60, 7 1/16x3 7/16x3 21/32″; T2, 7 7/16x3 7/16x3 21/32″. See prices above. Shpg. wt. 6 lbs.



⅛ HP PRECISION TYPE

MODEL S18T. Precision drive for demanding applications; handsome sloping front cabinet with rocker-type magnetic circuit breaker and forward-stop-reverse switching. Ten-turn potentiometer gives easy adjustment of motor speed over a 120/1 range with 0.5% accuracy. Meter for speed or load readout. A-C cable stores in base when not in use. 6½x9x6½″. Shpg. wt. 15 lbs.

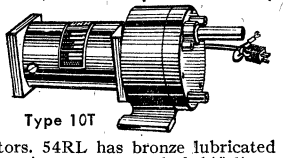
810-0093 ..... 248.00

MOTORS FOR USE WITH S18T CONTROLLER

Stock No.	Mfr's Type	Gear Ratio	Max. Speed RPM	Torque In-lbs	EACH
810-0351	10T-1	(Plain)	2900	2.7	90.00
810-0352	10T-10	9.75/1	298	20	107.75
810-0353	10T-15	14.5/1	200	32	107.75
810-0354	10T-20	20.5/1	141	45	107.75
810-0355	10T-36	36/1	80	50	107.75
810-0356	10T-57	57.7/1	50	50	122.25
810-0357	10T-157	157.2/1	18.5	120	122.25
810-0358	10T-437	437.3/1	6.5	200	122.25
810-0359	10T-524	523.9/1	5.5	200	122.25

RIGHT ANGLE GEARMOTORS—(Ratios 40/1 and less)

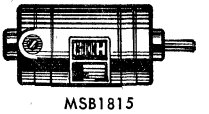
Type 54RL



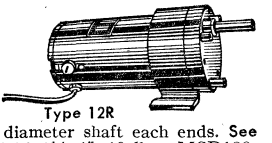
Type 10T

Single reduction worm gear motors. 54RL has bronze lubricated gear with ⅝″ shaft. 10T has ball bearing output gearshaft ½″ diameter internal tachogenerator. Dimensions: Type 54RL, 9 13/32x5 1/64x5 19/32″; Type 10T, 12¾x4¾x4¾″. All prices can be found above for these types. Shpg. wts.: For 54RL, 25 lbs; for 10T, 15 lbs.

PLAIN AND IN-LINE GEARMOTORS (Ratios 40/1 and up)



MSB1815



Type 12R

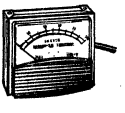
PLAIN. Ball bearing. Enclosed. ⅜ diameter shaft each ends. See prices above. Type MSB1815: 8-11.16x4¼x4″, 10 lbs.; MSD188: 9 9/16x4¼x4″, 13 lbs.; 10T-1: 8½x4x3⅛″, 10 lbs., shpg. wt. 10 lbs.

IN-LINE. Multiple reduction spur gear motors. ⅝″ output shaft. 12R: shunt wound field. 10T: permanent magnet. See prices above. Type 12R: 12¾x4¾x4¾″, 15 lbs. 10T: 12¾x4¾x4¾″, 15 lbs., shpg. wt. 16 lbs.

ACCESSORIES AND MODIFICATIONS

METERS. For monitoring T2 or S18T systems. Speed meter plugs into socket on controller; torque meter plugs into speed meter box or controller. Shpg. wt. 1 lb. each.

810-0010. Speed.... 57.75
810-0011. Torque.... 51.80

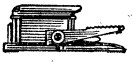


FOOT SWITCH. Made to rigid specifications. For stopping and starting systems at preset speed and direction.

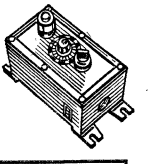
810-0013. 2 lbs..... 22.80

FOOT CONTROL. Speed pot for systems listed above.

810-0014. 1 lb..... 83.75



Accessories and modifications such as automatic traversing relays, explosion-proof control stations, multiple motor systems are available. Consult your local Allied Electronics Sales Office for price and delivery information.



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C. P. CLARE MIL. TYPE RELAYS

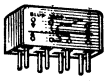
Wide selection of full and half-size military-type relays of unusual versatility, capable of exceptionally reliable long-life operation under adverse environments. These relays are ideal for use in a multitude of industrial situations as well as in many airborne and aerospace applications. Relays employ a rigid frame to maintain permanent alignment of all elements. Contact arrangement is 2 form C. These relays are specially manufactured to meet MIL-R-5757/10 and 5757/19 specifications.

SERIES "F" RELAYS

Type FW1111G00 has standard ear brackets for mounting, solder-header type terminals. FW1105G00, also with solder-header terminals, has stud mounting on the side of the enclosure. FW1201G00 comes in plain case with 3" leads. FW1207G00 features 3/16" plug-in terminals in plain case. All contacts have DPDT arrangement, rated at 2 amps. Av. wt., 5 oz.

Stock No.	Mfr's Type	DC Volts	Coil Ohms	EACH 1-9	10-24	25-99	100-249	250-Up
752-1960	FW1111G00	26.5	675	10.92	9.50	8.55	6.18	5.23
752-1950	FW1105G00	26.5	675	10.92	9.50	8.55	6.18	5.23
752-1980	FW1201G00	26.5	675	10.92	9.50	8.55	6.18	5.23
752-1987	FW1207G00	26.5	675	10.92	9.50	8.55	6.18	5.23

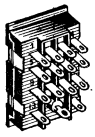
TYPE HF



Types HFW1201D00 and HFW1201K01 both have plain cases and 3/16" plug-in terminals. HFW1205-K00 has the same 3/16" plug-in-type terminals, but standard ear brackets for mounting. Contacts are rated at 2 amps in DPDT arrangement. DC voltage is 26.5 for all models. Av. shpg. wt. 5 oz.

Stock No.	Mfr's Type	DC Volts	Coil Ohms	EACH 1-9	10-24	25-99	100-249	250-Up
752-2580	HFW1201D00	26.5	1250	12.37	10.75	9.67	8.06	6.98
752-2582	HFW1201K01	26.5	700	12.37	10.75	9.67	8.06	6.98
752-2584	HFW1205K00	26.5	700	12.37	10.75	9.67	8.06	6.98

AMPHENOL 59 SERIES SOCKETS



59-133 Socket

Current rating: 5 amps. Voltage rating: 250 volts. Contacts: Cadmium-plated brass. Dielectric: Black phenolic. Type 59-133 has solder eyelet contact termination and comes with spring steel mounting clip. Type 59-134 has printed circuit contact termination. These sockets are designed for use with the popular 4 PDT miniature relays in a wide variety of applications. Shpg. wt. 2 oz.

713-1901. Type 59-133 1-24....62 25-49....54 50-Up....48
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AMPHENOL RELAY SOCKETS

TYPE 146-817. 11-contact melamine socket for fast and easy mounting of most 11-pin relays. Has replaceable contacts on 3/4" terminals, screw-type terminals. Contacts rated 10 amps at 600 V rms. Has two .156" mounting holes on 3 7/8" centers. 4 tie points. Shpg. wt. 1 lb.

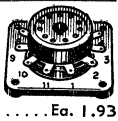
713-5017. 1-24.....Each 3.90 25-49.....Each 3.53
50-99.....Each 2.65 250-Up.....Each 2.05

AMPHENOL BARRIER-TYPE OCTAL RELAY SOCKETS

Maximum EIA working voltage of sockets is 2000 DC. All have bronze cloverleaf contacts. Each contact rated 8 amps. Inter-electrode capacitance is 2.6 pF. 8 screw terminals. Top mounting, except *bottom mounting. †Includes 4 molded-in threaded inserts for use as tie points. Size, 3/64x1 15/16x2 5/8". Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-999	1000-Up
713-5003	*146-103*	2.05	1.64	1.45	1.27	.94	.86
713-5004	*146-104*†	2.05	2.04	1.71	1.53	1.18	1.06
713-5011	146-203*	2.05	1.64	1.45	1.27	.94	.86
713-5012	*146-204*†*	2.05	2.04	1.71	1.53	1.18	1.06

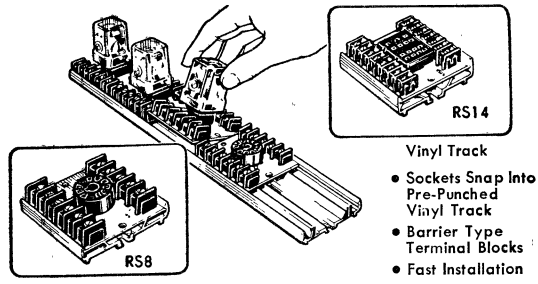
POMONA 11-CONTACT RELAY SOCKET



TYPE 2811. Above-chassis mount. Diallyl phthalate base and socket. Beryllium copper contacts rated 600V rms at 10 amps. 2x2x.85". 5 oz.

885-0605. 1-9.....Ea. 3.43 10-24.....Ea. 2.75
25-49 Ea.....2.48 50-99.....Ea. 2.34 100-Up.....Ea. 1.93

CURTIS TRACK-MOUNTED RELAY SOCKET ASSEMBLIES



Vinyl Track

- Sockets Snap Into Pre-Punched Vinyl Track
- Barrier Type Terminal Blocks
- Fast Installation

PC track-mounted socket assemblies (up to 24) snap vertically in or out of 48" pre-punched vinyl track (below). Design gives spring retention of each assembly. Sockets can be spaced out in track, leaving spaces for marking strips; have recessed slotted center post so relays can be rocked out without danger of fracturing posts. Glass epoxy G-10 board, wave soldered and coated for moisture protection and insulation. Barrier type terminal blocks with screws are permanently marked. RS14,-15 for miniature 4PDT relays (P&B KHP, Sigma 67, Guardian 1300 etc.) with 2 coil leads and ground have 2-56 wire clamp for wire sizes to #16, Others have 6-32 screws for wire to #12. RS12 for 3PDT (P&B KUP14, Sigma 68R3 etc.); RS16 for 2PDT (P&B KUP11, Sigma 68R2 etc.). Av. wt. 4 oz.

RELAY SOCKET ASSEMBLIES

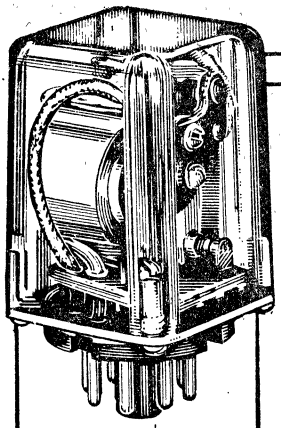
Stock No.	Mfr's Type	Contacts	A	V	Size, Inches WxDxH	EACH
759-8410	*RS8*	Octal	10	250	2 7/8x2x1 3/32	1.95
759-8413	*RS11*	11	10	250	2 7/8x2 7/8x1 3/32"	2.85
759-8414	RS12	12	10	250	3 3/8x2 7/8x1 1/16	3.50
759-8416	*RS14*	14	5	125	2 7/8x2x2 29/32	4.65
759-8417	RS15	15	5	125	2 5/16x2 1/4x2 29/32	4.65
759-8418	RS16	16	10	250	3 3/8x2 1/4x1 1/16	2.75

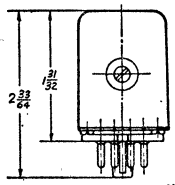
PRE-PUNCHED VINYL TRACK

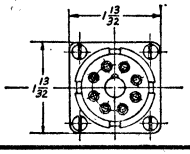
Pre-punched with 2" center-to-center mounting slot dimension. Mount with only 2 or 3 holes per track. Cut to any length. Wt. 6 oz.

Stock No.	Type	WxL	For Sockets	EACH
759-8430	TR1	2 3/16x48"	RS15 only	2.00
759-8431	*TR2*	2 3/4x48"	RS8-11-12-14-16	2.40

Allied's Own General-Purpose Relays







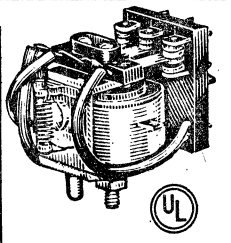
ALLIED'S OWN RELAYS AT LOW PRICES

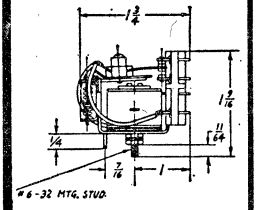
- **Color-Coding for Voltage and AC, DC, or Plate Circuit Helps on Production Line and Shows Inventory at a Glance**
- **Open Types U.L. Component Program Recognized**
- **Special Price Quotations on Larger-Quantity Requirements**

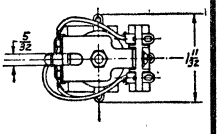
Volume purchasing permits Allied to offer these dependable, long-life relays at low cost. Compare specifications and prices. These relays provide highest performance in light-duty power control circuits. They are equally at home in the control box of an elevator or in the heart of a modern computer. All have nylon bobbins, shock-resistant armature mounting and corrosion-resistant coil. Open types are ■U.L. Recog. The stationary and movable terminal blocks are molded phenolic with ample separation between opposite potentials. Plug-in types are for applications where an enclosed unit is needed to protect the relay from dust, oil and other foreign substances or where speedy connection and fool-proof replacement are desirable. *All units are color-coded for voltage and AC, DC or plate circuit by means of colored coil tape. Shpg. wt., open types, 2 oz.; enclosed types, 3 oz. **NOTE: All relays ordered in multiples of 50 will generally be shipped bulk in handy production-line packaging.** *Open type now available with Quick-Connect terminals. Order as SO-703, Type No., adding QC to end of number.*

SPECIFICATIONS

CONTACT RATINGS: 10 amperes at 115 VAC or 32 VDC, noninductive.
CONTACT MATERIAL: Silver alloy, gold-flashed.
COILS: AC or DC. Nylon bobbins, sealed with a fused wrap.
INSULATION: 1500 V rms between circuits and frame.
LIFE EXPECTANCY: Exceeds 5,000,000 operations.
MOUNTING: Open types—Single hole, tapped 6-32. Enclosed types—SPDT and DPDT, standard octal; 3PDT, 11-pin plug.
COLOR CODING: AC—12 V, red; 24 V, green; 115 V, white. DC—12 V, blue; 24 V, yellow; 110 V, black. PLATE CIRCUIT—Brown.







GENERAL-PURPOSE OPEN TYPE RELAYS

Stock No.	Allied Type No.	Coil Voltage /Imp.	Contact Action	Coil mA	Coil Ohms	Color Code*	EACH 1-24	25-49	50-99	100-249	250-499	500-999	1000-1499	1500-2499	2500-Up
703-1000	KN100-1C- 12A	12 AC	SPDT	170	20	Red	3.38	2.92	2.60	2.28	2.11	1.95	1.87	1.79	1.71
703-1001	KN100-1C- 24A	24 AC	SPDT	85	75	Green	3.38	2.92	2.60	2.28	2.11	1.95	1.87	1.79	1.71
703-1002	*KN100-1C-115A*	120 AC	SPDT	35	1500	White	3.38	2.92	2.60	2.28	2.11	1.95	1.87	1.79	1.71
703-1014	KN105-1C- 12D	12 DC	SPDT	80	150	Blue	3.22	2.79	2.48	2.17	2.02	1.86	1.78	1.71	1.63
703-1015	KN105-1C- 24D	24 DC	SPDT	40	600	Yellow	3.22	2.79	2.48	2.17	2.02	1.86	1.78	1.71	1.63
703-1005	KN100-2C- 12A	12 AC	DPDT	170	20	Red	3.95	3.42	3.04	2.66	2.47	2.28	2.18	2.09	2.00
703-1006	KN100-2C- 24A	24 AC	DPDT	85	75	Green	3.95	3.42	3.04	2.66	2.47	2.28	2.18	2.09	2.00
703-1007	*KN100-2C-115A*	120 AC	DPDT	35	1500	White	3.95	3.42	3.04	2.66	2.47	2.28	2.18	2.09	2.00
703-1018	*KN105-2C- 12D*	12 DC	DPDT	80	150	Blue	3.58	3.10	2.76	2.42	2.24	2.07	1.98	1.90	1.81
703-1019	*KN105-2C- 24D*	24 DC	DPDT	40	600	Yellow	3.58	3.10	2.76	2.42	2.24	2.07	1.98	1.90	1.81
703-1020	*KN105-2C-110D*	110 DC	DPDT	11	10000	Black	4.21	3.64	3.24	2.84	2.63	2.43	2.33	2.23	2.13
703-1011	*KN100-3C-115A*	120 AC	3PDT	35	1500	White	4.47	3.87	3.44	3.01	2.80	2.58	2.47	2.37	2.26
703-1023	*KN105-3C- 24D*	24 DC	3PDT	40	600	Yellow	4.10	3.56	3.16	2.76	2.57	2.37	2.27	2.17	2.07

GENERAL-PURPOSE ENCLOSED TYPE RELAYS

703-1026	KN110-1C- 12A	12 AC	SPDT	170	20	Red	5.77	5.00	4.44	3.88	3.61	3.33	3.19	3.05	2.91
703-1027	KN110-1C- 24A	24 AC	SPDT	85	75	Green	5.77	5.00	4.44	3.88	3.61	3.33	3.19	3.05	2.91
703-1028	KN110-1C-115A	120 AC	SPDT	35	1500	White	5.77	5.00	4.44	3.88	3.61	3.33	3.19	3.05	2.91
703-1039	KN115-1C- 12D	12 DC	SPDT	80	150	Blue	5.72	4.95	4.40	3.85	3.58	3.30	3.16	3.03	2.89
703-1040	KN115-1C- 24D	24 DC	SPDT	40	600	Yellow	5.72	4.95	4.40	3.85	3.58	3.30	3.16	3.03	2.89
703-1031	KN110-2C- 12A	12 AC	DPDT	170	20	Red	6.39	5.54	4.92	4.31	4.00	3.69	3.54	3.38	3.23
703-1032	*KN110-2C- 24A*	24 AC	DPDT	85	75	Green	6.39	5.54	4.92	4.31	4.00	3.69	3.54	3.38	3.23
703-1033	*KN110-2C-115A*	120 AC	DPDT	35	1500	White	6.39	5.54	4.92	4.31	4.00	3.69	3.54	3.38	3.23
703-1043	*KN115-2C- 12D*	12 DC	DPDT	80	150	Blue	6.44	5.58	4.96	4.34	4.03	3.72	3.56	3.41	3.26
703-1044	*KN115-2C- 24D*	24 DC	DPDT	40	600	Yellow	6.44	5.58	4.96	4.34	4.03	3.72	3.56	3.41	3.26
703-1045	KN115-2C-110D	110 DC	DPDT	11	10000	Black	7.07	6 12	5.44	4.76	4.42	4.08	3.91	3.74	3.57
703-1048	KN115-2C-2.5K	2500 Ohms	DPDT	10	2500	Brown	6.34	5.49	4.88	4.27	3.96	3.66	3.51	3.36	3.20
703-1049	KN115-2C- 5K	5000 Ohms	DPDT	7	5000	Brown	6.44	5.58	4.96	4.34	4.03	3.72	3.56	3.41	3.26
703-1050	KN115-2C- 10K	10000 Ohms	DPDT	5	10000	Brown	6.86	5.94	5.28	4.62	4.29	3.96	3.80	3.63	3.46
703-1035	*KN110-3C-115A*	120 AC	3PDT	35	1500	White	7.90	6.84	6.08	5.32	4.94	4.56	4.37	4.18	3.99
703-1053	*KN115-3C- 24D*	24 DC	3PDT	40	600	Yellow	7.85	6.80	6.04	5.29	4.91	4.53	4.34	4.15	3.96

CROSS REFERENCE AND INTERCHANGEABILITY GUIDE

GENERAL-PURPOSE OPEN TYPE RELAYS

Allied	P & B	Guardian	Magnecraft	Phillips Advance	Comar	Line	Milwaukee	Omega	Ohmite
KN100	KA/KAG	IR-1200	W88AX	GHA, GHB	M	MK/MKO	100	200/250	GR
KN105	KA/KAG	IR-1205	W88X	GHA, GHB	M	MK/MKO	100	200/250	GR

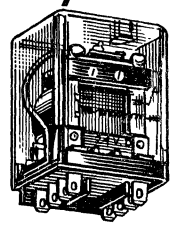
GENERAL-PURPOSE ENCLOSED TYPE RELAYS

KN110	KRP/KRP-G	IR-1210	W88ACPX	GHP, GHH	M	MKH, MKP	105	200-PC	GRTP
KN115	KRP/KRP-G/KCP	IR-1215	W88CPX	GHP, GHH	M	MKH, MKP	105	200-PC	GRTP

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

ALLIED Plug-in, Stud or Bracket Mount Relays

TYPE ASD FRAME RELAYS



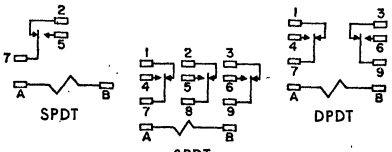
Type ASD. These general-purpose industrial relays are designed for high reliability, excellent packaging density, and excellent cost-to-quality relationships. Rugged, 10 amp contacts allow these relays to be used in delicate instruments and logic circuits or controlling heating elements, solenoid valves, small motors, and even machine tools, elevator controls, office machines, and copy and vending machines.

One, two or three pole contact combinations are available in many standard open and enclosed styles. Clear polycarbonate covers are used on enclosed types.

All ASD frame relays have 0.187″ flat male terminals of the quick-connect type. Terminals are properly spaced for standard plug-in mounting, and are pierced to accommodate solder wiring.

U.L. Recognized. Life Expectancy: 10 million mechanical operations minimum, (without load). 100,000 operations, minimum at rated load. Operating Speed: 15 milliseconds and 10 milliseconds release. Continuous-duty. Av. shpg. wt. 3 ounces.

CONTACT DIAGRAMS

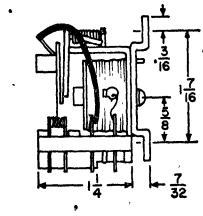


DC COILS			(AC COILS) 1 and 2 Pole			(AC COILS) 3 Pole		
Voltage (Nominal)	Current in Ma	Resis. Ohms	Voltage (Nominal)	Current in Ma	Resis. Ohms	Voltage (Nominal)	Current in Ma	Resis. Ohms
6	188	32.1	6	335.0	6	6	460.0	4.2
12	100	120.0	12	168.0	21	12	230.0	18.0
24	51	472.0	24	84.0	75	24	115.0	72.0
48	26.6	1800.0	120	17.5	2250	120	24.0	1700.0
110	11.5	10000.0	240	8.75	9110	240	12.0	7200.0

HOW TO ORDER

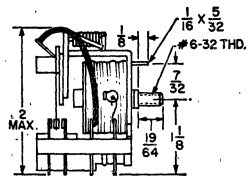
To Order, Substitute Last Number of Allied Type For Voltage. 1 = 6VAC, 2 = 12VAC, 3 = 24VAC, 4 = 120VAC, 5 = 240VAC, 6 = 6VDC, 7 = 12 VDC, 8 = 24VDC, 9 = 110VDC. Ex: Allied Type No. ASD 412 is Stock No. 703-041X and Voltage 12VAC; Stock No. is then 703-0412.

OPEN CONSTRUCTION TAPPED 6-32 HOLES



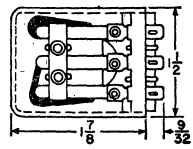
Stock No.	Allied Type No. ASD-	Construction	Voltage	Contact Action	EACH 1-24	25-49	50-99	100-249	250-499	500-999	1000-Up
703-040X	401 to	Open Tapped 6-32 Hole	6, 12, 24, 120VAC	SPDT	3.50	3.32	3.15	2.45	2.28	2.10	1.93
	405		240VAC	SPDT	3.95	3.75	3.35	2.76	2.56	2.37	2.17
703-040X	406 to		6, 12, 24VDC	SPDT	3.35	3.18	2.84	2.34	2.17	2.01	1.84
	409		110VDC	SPDT	4.00	3.80	3.40	2.80	2.60	2.40	2.20
703-041X	411 to		6, 12, 24, 120VAC	DPDT	4.40	4.18	3.74	3.08	2.86	2.64	2.42
	415		240VAC	DPDT	4.85	4.60	4.12	3.39	3.15	2.91	2.66
703-041X	416 to		6, 13, 24VDC	DPDT	3.90	3.70	3.31	2.73	2.53	2.34	2.14
	419		110VDC	DPDT	4.60	4.37	3.91	3.22	2.99	2.76	2.53
703-042X	421 to		6, 12, 24, 120VAC	3PDT	5.00	4.75	4.25	3.50	3.25	3.00	2.75
	425		240VAC	3PDT	5.45	5.17	4.63	3.81	3.54	3.27	2.99
703-042X	426 to		6, 12, 24 VDC	3PDT	4.55	4.32	3.86	3.18	2.95	2.73	2.50
	429		110VDC	3PDT	5.00	4.75	4.25	3.50	3.25	3.00	2.75

OPEN CONSTRUCTION 6-32 STUD MOUNTING



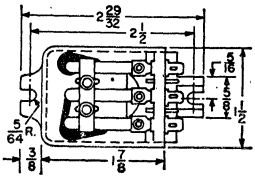
Stock No.	Allied Type No. ASD-	Construction	Voltage	Contact Action	1-24	25-49	50-99	100-249	250-499	500-999	1000-Up
703-043X	431 to	Open 6-32 Mounting Stud	6, 12, 24, 120VAC	SPDT	3.60	3.42	3.06	2.52	2.34	2.16	1.98
	435		240VAC	SPDT	4.05	3.84	3.44	2.83	2.63	2.43	2.22
703-043X	436 to		6, 12, 24VDC	SPDT	3.45	3.27	2.93	2.41	2.24	2.07	1.89
	439		110VDC	SPDT	4.10	3.89	3.48	2.87	2.66	2.46	2.25
703-044X	441 to		6, 12, 24, 120VAC	DPDT	4.50	4.27	3.82	3.15	2.92	2.70	2.47
	445		240VAC	DPDT	4.95	4.70	4.20	3.46	3.21	2.97	2.72
703-044X	446 to		6, 12, 24VDC	DPDT	4.00	3.80	3.40	2.80	2.60	2.40	2.20
	449		110VDC	DPDT	4.70	4.46	3.99	3.29	3.05	2.82	2.58
703-045X	451 to		6, 12, 24, 120VAC	3PDT	5.10	4.84	4.33	3.57	3.31	3.06	2.80
	455		240VAC	3PDT	5.55	5.27	4.71	3.88	3.60	3.33	3.05
703-045X	456 to		6, 12, 24VDC	3PDT	4.65	4.41	3.95	3.25	3.02	2.79	2.55
	459		110VDC	3PDT	5.10	4.84	4.33	3.57	3.31	3.06	2.80

ENCLOSED CONSTRUCTION PLUG-IN



Stock No.	Allied Type No. ASD-	Construction	Voltage	Contact Action	1-24	25-49	50-99	100-249	250-499	500-999	1000-Up
703-046X	461 to	Enclosed Plug-In	6, 12, 24, 120VAC	SPDT	3.80	3.50	3.20	2.79	2.27	2.09	1.93
	465		240VAC	SPDT	4.25	3.85	3.46	3.07	2.48	2.30	2.12
703-046X	466 to		6, 12, 24VDC	SPDT	3.65	3.40	3.08	2.71	2.20	2.03	1.87
	469		110VDC	SPDT	4.30	3.85	3.50	3.07	2.49	2.30	2.12
703-047X	471 to		6, 12, 24, 120VAC	DPDT	4.70	4.30	3.90	3.43	2.79	2.57	2.37
	475		240VAC	DPDT	5.15	4.75	4.30	3.79	3.08	2.84	2.61
703-047X	476 to		6, 12, 24VDC	DPDT	4.20	3.85	3.50	3.07	2.49	2.30	2.12
	479		110VDC	DPDT	4.90	4.40	4.00	3.51	2.85	2.63	2.42
703-048X	481 to		6, 12, 24, 120VAC	3PDT	5.30	4.85	4.40	3.87	3.14	2.90	2.67
	485		240VAC	3PDT	5.75	5.30	4.82	4.23	3.44	3.17	2.92
703-048X	486 to		6, 12, 24VDC	3PDT	4.85	4.40	4.00	3.51	2.85	2.63	2.42
	489		110VDC	3DPT	5.25	4.85	4.40	3.87	3.14	2.90	2.67

ENCLOSED CONSTRUCTION BRACKET MOUNTED



Stock No.	Allied Type No. ASD-	Construction	Voltage	Contact Action	1-24	25-49	50-99	100-249	250-499	500-999	1000-Up
703-049X	491 to	Enclosed Bracket Mounted Slotted	6, 12, 24, 120VAC	SPST	3.80	3.61	3.23	2.66	2.47	2.28	2.09
	495		240VAC	SPDT	4.25	4.03	3.61	2.97	2.76	2.55	2.33
703-049X	496 to		6, 12, 24VDC	SPDT	3.65	3.46	3.10	2.55	2.37	2.19	2.00
	499		110VDC	SPDT	4.30	4.08	3.65	3.01	2.79	2.58	2.36
703-050X	501 to		6, 12, 24, 120VAC	DPDT	4.70	4.46	3.99	3.29	3.05	2.82	2.58
	505		240VAC	DPDT	5.15	4.89	4.37	3.60	3.34	3.09	2.83
703-050X	506 to		6, 12, 24VDC	DPDT	4.20	3.99	3.57	2.94	2.73	2.52	2.31
	509		110VDC	DPDT	4.90	4.65	4.16	3.43	3.18	2.94	2.69
703-051X	511 to		6, 12, 24, 120VAC	3PDT	5.30	5.03	4.50	3.71	3.44	3.18	2.91
	515		240VAC	3PDT	5.75	5.46	4.88	4.02	3.73	3.45	3.16
703-051X	516 to		6, 12, 24 DC	3PDT	4.85	4.60	4.12	3.39	3.15	2.91	2.66
	519		110VDC	3PDT	5.30	5.03	4.50	3.71	3.44	3.18	2.91

SOCKETS FOR ABOVE RELAYS

Stock No.	Termination	Ea.	Stock No.	Termination	Ea.
703-0901	Printed Circuit	.75	703-0904	8-Pin Front Connected	3.30
703-0902	.187″ Quick-Disconnect	.75	703-0905	11-Pin Front Connected	4.20
703-0903	Pierced Solder Terminals	.75			

CROSS REFERENCE AC TYPES ENCLOSED

Allied Type	P & B	Sigma	Struthers Dunn
ASD461-65	KUP5A15	68R1	283XAXC
	KUP11A15	68R2	
	KUP14A15	68R3	

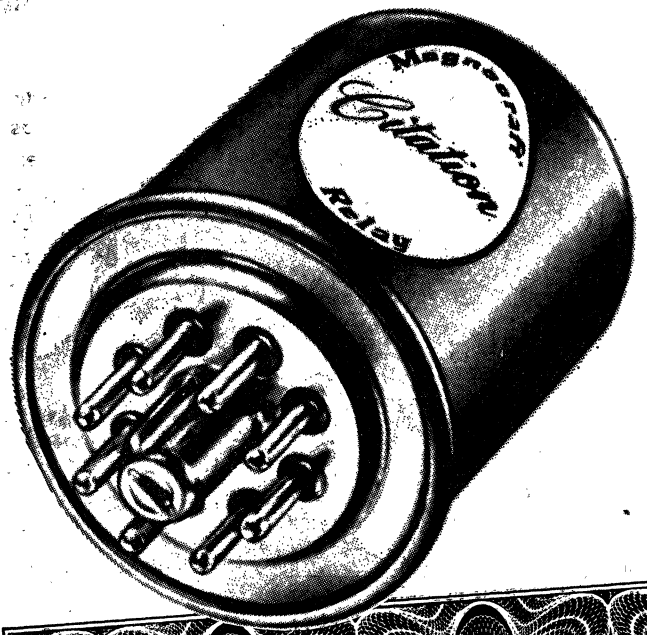
ENCLOSED BRACKET MOUNTED

Allied	P & B	S-D	Sigma	Allied	P & B	Sigma	S-D
ASD491	14A55	283XCXC1	68R34	ASD461-69	5A15	68R1	283XA
to	14A55	283XBXC1	68R34	ASD471-79	11A15	68R2	283XB
ASD519	14A55	283XAXC1	68R34	ASD481-89	14D15	68R3	283XC

Magnecraft® Citation Series

- Pre-Cycled To Stabilize Operating Characteristics
- Unprecedented Level Of Quality Control
- Hinge-pin Armature Bearings—Oversized Bearing Surfaces
- Molded Nylon Bobbins With Coil Terminal Inserts
- Glass Melamine Insulation For High Dielectric Strength
- High Contact Pressure For Built-in Wipe Action
- Riveted Contacts For Better Reliability—Longer Life

A GENERAL-PURPOSE RELAY SO OUTSTANDING IT IS BACKED BY AN UNCONDITIONAL WARRANTY



Warranty

This Citation Series Relay will be replaced with an identical model at no charge, if for any reason it fails to perform satisfactorily for 12 Months* from date of purchase.

* Must be accompanied with receipt and returned to point of purchase. Liability limited to replacement only.

Magnecraft

Relays: Solid State, 101, 432—Gen. Purpose, 406-419—Power, 419-421, 425—Latching, 422-4, 445

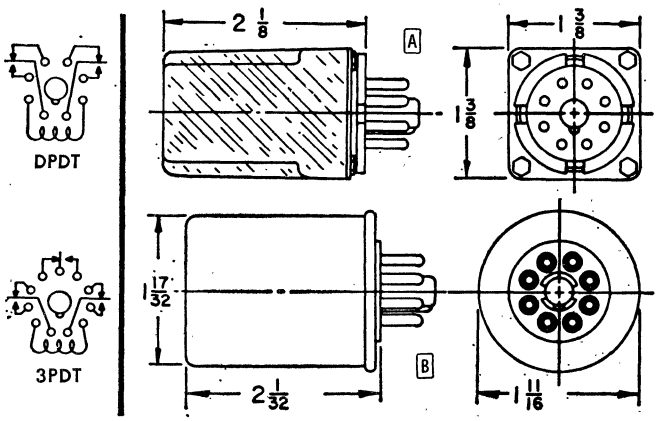
Class 88 General-Purpose Relays

CITATION SERIES

For the Most Exacting Requirements

The Citation Series has evolved from an ever increasing demand for premium features by ultra-discriminating customers. The demand has grown to where Magnecraft is now proudly offering this entire series for immediate off-the-shelf delivery through the Allied Electronics national distribution network.

The Citation Series was designed to incorporate those features which would provide the ultimate in reliability for the most exacting requirements. Moreover, to illustrate Magnecrafts' pride and confidence in this relay, Magnecraft is offering it with the unconditional warranty shown on the opposite page. Highlighting and substantiating Magnecrafts' claim that, as always, when the demand is for the best, Magnecraft has it.



SPECIFICATIONS

NOMINAL COIL VOLTAGE: See Table on this page for standard voltages.

CONTACT COMBINATIONS: DPDT, 3PDT Standard.

CONTACTS: Code 120, Silver alloy gold flash, .187″ std. rated 10 amperes at 115 VAC or 32 VDC resistive load.

DC COIL DISSIPATION CAPACITY: 3.0 watts maximum continuous. See Table on this page for nominal operating power values.

DIELECTRIC WITHSTANDING VOLTAGE: 750 VAC RMS, between mutually insulated conductive elements.

MOUNTING: Standard 8 or 11 pin octal plug.

A WITH DUST COVER

Stock No.	Type No.	Contacts 10 Amp	Coil Volts	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
850-0003	CW88CPX-115	DPDT	115VAC	10.99	10.28	9.77	9.25	8.74	7.20
850-0004	CW88CPX-120	3PDT	115VAC	13.69	12.79	12.15	11.51	10.87	8.95
850-0007	CW88CPX-187	DPDT	12VDC	10.45	9.74	9.25	8.77	8.28	6.82
850-0008	CW88CPX-188	DPDT	24VDC	10.45	9.74	9.25	8.77	8.28	6.82
850-0010	CW88CPX-191	3PDT	12VDC	12.95	12.09	11.49	10.88	10.28	8.46
850-0011	CW88CPX-192	3PDT	24VDC	12.95	12.09	11.49	10.88	10.28	8.46

B HERMETICALLY SEALED

Stock No.	Type No.	Contacts 10 Amp	Coil Volts	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
850-0015	CW88HPX-74	DPDT	24VDC	17.99	16.78	15.94	15.10	14.26	11.75
850-0018	CW88HPX-78	3PDT	24VDC	21.50	20.08	19.08	18.07	17.07	14.06
850-0005	CW88AHPX-60	DPDT	115VAC	19.19	17.91	17.01	16.12	15.22	12.54
850-0006	CW88AHPX-65	3PDT	115VAC	22.40	20.92	19.87	18.83	17.78	14.64

Magnecraft Citation

PRE-CYCLING

Each relay in the Citation Series is precycled prior to final inspection in order to stabilize operation characteristics and achieve an unprecedented level of quality control.

Magnecraft Citation

HINGE-PIN DESIGN

Each relay has rugged, precision-built, hinge-pin armature bearings with oversized bearing surfaces. This is the same construction used in the finest telephone type relays for minimum friction and maximum contact effectiveness. The result is stabilzed adjustment over long life.

Magnecraft Citation

SUPERIOR CONTACT DESIGN

High contact pressure and built-in wipe action. Riveted contacts further enhance reliability through longer life.

Magnecraft Citation

GLASS MELAMINE INSULATION

Insulating members are made of glass melamine for high dielectric strength, essentially unaffected by changes in temperature and humidity.

Magnecraft Citation

INTEGRATED BOBBIN CONSTRUCTION

Molded nylon bobbins with ruggedized coil terminal inserts to eliminate all possibility of shorts.

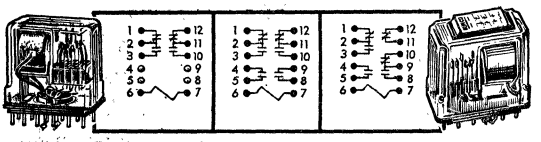
Relays: Impulse, 422-3—Stepping, 422-4—Mercury Plunger, 425—Mercury-Wetted, 438, 441

Struthers-Dunn, Inc. Plug-In Relays

RELAYS FOR INDUSTRIAL CONTROL

Developed to provide long, reliable contact life on relaying loads, these relays have met with outstanding success not only on laboratory-type "tail-chasing" circuits, but on actual machine installations when handling industrial loads. Contact reliability is constantly maintained through millions of control cycles. Now available with heavy duty 12-pin plugs and sockets (see below).

GENERAL PURPOSE RELAYS



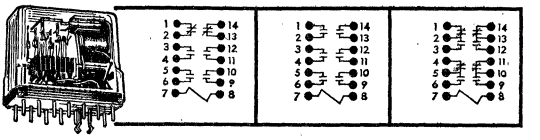
FRAME 219. Twelve pin. Four types: Basic Type; Manual Actuator (M); Lamp (L); Lamp and Actuator (LM); Bifurcated contacts*. Specify coil voltage—See how to order information on page 411.

Stock No.	Mfr's Type (219-)	Contacts	VOLTS	EA. 1-9
929-226X	XBXP	DPDT	Available in AC 6, 12, 24, 115, 230V	19.38
929-227X	XBXPM	DPDT		21.25
929-228X	XBXP33*	DPDT		25.63
929-217X	BBXP	DPDT & 2 NO		23.13
929-218X	BBXPM	DPDT & 2 NO		25.00
929-219X	BBXP33*	DPDT & 2 NO	Available in DC 6, 12, 24, 115-125V	29.38
929-214X	ABAP	DPDT, 1 NO & 1 NC		25.13
929-215X	ABAPM	DPDT, 1 NO & 1 NC		25.00
929-216X	ABAP33*	DPDT, 1 NO & 1 NC		29.38

For quantity prices, follow 1-9 prices (below) to desired quantity.

EACH 1-9	10-24	25-49	50-Up
19.38	15.50	14.73	13.95
21.25	17.00	16.15	15.30
25.63	20.50	19.48	17.53
25.13	18.50	17.58	16.65
25.00	20.00	19.00	18.00
29.38	23.50	22.33	21.15
23.13	18.50	17.58	16.65
25.00	20.00	19.00	18.00
29.38	23.25	22.33	21.15

4PDT & SIX POLE RELAYS

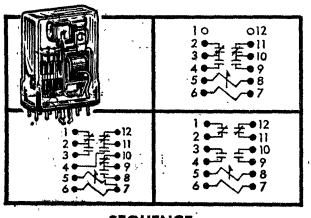


FRAME 219. 14-pin socket. Same options as model left. Coils: 60 Hz AC, 6, 12, 24, 115, 230V; DC, 6, 12, 24, 115-125V. Contact rating: 10A, 115VAC resistive. Specify coil voltage—See how to order information on page 411.

Stock No.	Mfr's Type (219-)	Contacts	Volts	EA. 1-9
929-220X	DXBP	49 NO + 2P NC	Available in AC 6, 12, 24, 115, 230V	26.25
929-221X	DXBPM	4P NO + 2P NC		28.13
929-222X	DXBP33*	4P NO + 2P NC		32.50
929-223X	FXXP	6 P NO		26.25
929-224X	FXXPM	6 P NO		28.13
929-225X	FXXP33*	6 P NO	Available in DC 6, 12, 24, 115-125V	32.50
929-229X	XDXP	4PDT		26.25
929-230X	XDXPM	4PDT		28.13
929-231X	XDXP33*	4PDT		32.50

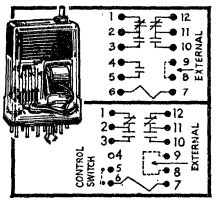
For quantity prices, follow 1-9 prices (below) to desired quantity.

EACH 1-9	10-24	25-49	50-Up
26.25	21.00	19.95	18.90
28.13	22.50	21.38	20.25
32.50	26.00	24.70	23.40
26.25	21.00	19.95	18.90
28.13	22.50	21.38	20.25
32.50	26.00	24.70	23.40
26.25	21.00	19.95	18.90
28.13	22.50	21.38	20.25
32.50	26.00	24.70	23.40



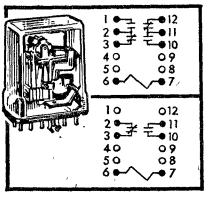
SEQUENCE

FRAME 211. 8-tooth ratchet, 2-contact cams. R suffix transfer on release of coil power. 5A, 115 VAC res.



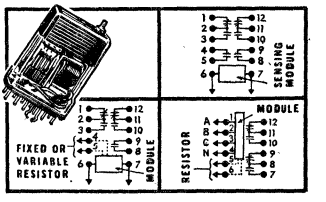
LATCH

FRAME 255. Relays mechanically latched, electrically-reset versions of 219 relay. 10A, 115 VAC.



TIME DELAY

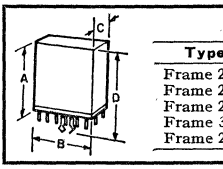
FRAME 236. "On Delay" network energizes relay. Preset.



OVER & UNDER-VOLTAGE

FRAME 349. Adjustable solid-state sensing module. Pot shaft extends through cover. 5 amps, 115 VAC.

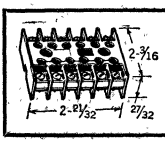
Stock No.	Mfr's Type	Contacts (*3 Phase)	VOLTS	EACH 1-9	10-24	25-49	50-74	75-Up
929-251X	255XBXP	DPDT	Available in AC 6, 12, 24, 115, 230V	38.13	30.50	28.97	27.45	24.40
929-252X	255XCXP	3PDT		41.25	33.00	31.35	29.70	26.40
929-250X	255BXBP	2 NO & 2 NC		41.25	33.00	31.35	29.70	26.40
929-241X	236ABXP	DPDT+1 NO		89.38	71.50	67.93	64.35	57.20
929-212X	211XBXP	DPDT		39.38	31.50	29.93	28.35	25.20
929-213X	211XPXPR	DPDT	Available in DC 6, 12, 24, 115V	39.38	31.50	29.93	28.35	25.20
929-210X	211AXAP	1 NO+1 NC		35.63	28.50	27.08	25.65	22.80
929-211X	211AXAPR	1 NO+1 NC		35.63	28.50	27.08	25.65	22.80
929-2811	349BBXP	DPDT+2 NO	115 VAC	119.38	95.50	90.73	85.95	76.40
929-2801	349ABXP	DPDT+1 NO	115 VAC	119.38	95.50	90.73	85.95	76.40
929-2821	349XBXP	DPDT*	115 3 Phase	135.00	108.00	102.60	97.20	86.40



BASIC DIMENSIONS

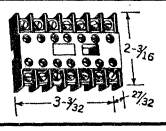
Type	A	B	C	D
Frame 255	3 3/4"	2 5/8"	1 15/32"	4 9/16"
Frame 236	4 9/16"	2 5/8"	1 15/32"	3 3/4"
Frame 211	4 9/16"	2 5/8"	1 15/32"	3 3/4"
Frame 349	4 9/16"	2 5/8"	1 15/32"	3 3/4"
Frame 219	3 13/32"	2 5/8"	1 15/32"	2 19/32"

IMPORTANT! FOR ORDERING INFORMATION, SEE PAGE 411



12-PIN PLUG-IN RELAY SOCKET

TYPE 27390. Twelve terminal socket accepts types 211, 219, 235, 236, 237, 255, 349, and RSX alarm relays. 2 21/32 x 2 3/16 x 37/32".
929-2030 ..... Each 2.50



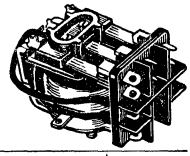
14-PIN SOCKET FOR 4PDT AND 6-POLE

TYPE 33377. Accepts all frame 219 4PDT and 6-pole models. 1/2" longer than 27390.
929-2050 ..... Each 2.80

Relays: Mil, 405—Sensitive, 430-1—TO-5 Size, 445—Solenoids, 442-4—Coaxial, 446

Struthers-Dunn General-Purpose Relays

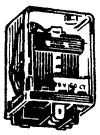
INDUSTRIAL 10 AMP OPEN TYPE



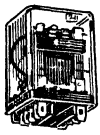
Frame 314 OPEN TYPE. U.L. Recognized Gold-plated, silver cadmium oxide contacts. Solder lug terminals are aligned in a molded support with integral insulating barriers. 6-32 threaded stud mount and tab. 10 amps, 120 V; 5 A, 240 V. Wt. 4 oz.

Stock No.	Mfr's Type	Contacts	Coil Voltage VAC	EACH 1-9
929-2709	314XAX	SPDT	115	4.46
929-2739	314XBX	DPDT	115	5.30
929-2769	314XCX	3PDT	115	5.66

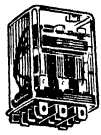
283 FRAME ENCLOSED



283XAXC



283XBXC



283XCXC

283 Type C. Construction is plug-in mounting. The 283 frame relays are SPDT, DPDT, and 3PDT general purpose relays. Contacts are rugged 10 amp, gold flashed silver cadmium-oxide. Terminals are dual purpose solder type, .187 quick connect or plug-in. Standard coil voltages are available, AC or DC. Have high reliability and packaging density for excellent cost-to-quality relationship. Typical applications include machine tools, elevator controls, office machines, and copy and vending machines. All 283 frame relays are protected by clear polycarbonate flame resistant covers, which come in two styles—plug-in or bracket mount. Continuous duty coils with power capability of 2 VA for 1 and 2 pole AC relays. 2.7 VA for three pole relays. All DC relays are 1.2 watts. Operating speed is 15 milliseconds pull in and 10 milliseconds release. Life expectancy is 10 million operations mechanically with no load. With rated load, life is 100,000 operations minimum. Ambient temperature range: 1 and 2 pole AC relays, −45°C to +55°C, 3 pole AC relays, −45°C to +45°C, and DC relays are −45°C to +70°C. **See Below For How To Order.**

Stock No.	Type	Contact	AC	DC	EACH 1-9
929-253X	283XAXC	SPDT	6, 12, 24, 110	.....	4.94
929-2535	283XAXC	SPDT	240	.....	5.47
929-254X	283XAXC	SPDT	.....	6, 12, 24	4.76
929-2549	283XAXC	SPDT	.....	110	5.54
929-257X	283XBXC	DPDT	6, 12, 24, 110	.....	6.02
929-2575	283XBXC	DPDT	240	.....	6.56
929-258X	283XBXC	DPDT	.....	6, 12, 24	5.43
929-2589	283XBXC	DPDT	.....	110	6.26
929-261X	283XCXC	3PDT	6, 12, 24, 110	.....	6.74
929-2615	283XCXC	3PDT	240	.....	7.29
929-262X	283XCXC	3PDT	.....	6, 12, 24	6.20
929-2629	283XCXC	3PDT	.....	110	6.74

283 Type C1. Same as above except for bracket mounting. Optional features: Indicating lamp for across coil, Manual actuator, Lamp and actuator are available through special order. Contact your local Allied Office. **See Below For How to Order.**

929-255X	283XAXC1	SPDT	6, 12, 24, 110	.....	4.94
929-2555	283XAXC1	SPDT	240	.....	5.47
929-256X	283XAXC1	SPDT	.....	6, 12, 24	4.76
929-2569	283XAXC1	SPDT	.....	110	5.54
929-259X	283XBXC1	DPDT	6, 12, 24, 110	.....	6.02
929-2595	283XBXC1	DPDT	240	.....	6.56
929-260X	283XBXC1	DPDT	.....	6, 12, 24	5.43
929-2609	283XBXC1	DPDT	.....	110	6.26
929-263X	283XCXC1	3PDT	6, 12, 24, 110	.....	6.74
929-2635	283XCXC1	3PDT	240	.....	7.29
929-264X	283XCXC1	3PDT	.....	6, 12, 24	6.20
929-2649	283XCXC1	3PDT	.....	110	6.74

Matching nylon chassis mount sockets. High durability for long-life and wear in industrial applications.

Stock No.	Type No.	Description	EACH
929-2079	36579	Printed circuit terminals	1.05
929-2080	36580	.187" disconnect terminals	1.50
929-2081	36581	Solder terminals	.96

HOW TO ORDER

To Order Replace X in Stock Number with Number Designating Coil Voltage. (1)-6VAC, (2)-12VAC, (3)-24VAC, (4)-115VAC, (5)-240VDC, (6)-6VDC, (7)-12VDC, (8)-24VDC, (9)-110VDC. Example: Stock No. is 929-000X, a Voltage of 24VDC is Desired, Complete Stock No. is 929-0008.

INDUSTRIAL 10 AMP—ENCLOSED

Frame 314 PLUG-IN. U.L. Recognized as general-purpose industrial type with mechanical life of 10 million operations. Gold plated silver cadmium oxide contacts. Dust tight polycarbonate clear covers. Contact ratings: 120 VAC, 10 amps, 1/6 hp; 240 VAC, 5 amps, 1/3 hp. 60 Hz 115 VAC coils have integral neon lamps to signal coil operation.

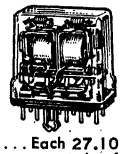
STANDARD DC TYPES WITHOUT NEON INDICATOR

Stock No.	Mfr's Type	Contacts	Terminals	Coil Voltage	EACH 1-9
929-2719	314XAX48P	SPDT	octal	115 DC	7.35
929-2749	314XBX49P	DPDT	octal	115 DC	7.83
929-2779	314XCX48P	3PDT	11	115 DC	9.87

AC TYPES WITH NEON OPERATION INDICATOR

929-2729	314XAX48PL	SPDT	octal	120 AC	7.95
929-2759	314XBX48PL	DPDT	octal	120 AC	8.45
929-2789	314XCX48PL	3PDT	11	120 AC	10.60

ALARM RELAYS



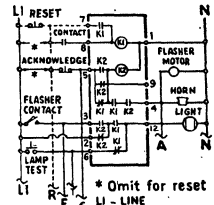
Functions as two interwired relays. Alarms operate from NO sustained or momentary contacts. Operates both alarm and light. External pushbutton silences alarm. Manual shut-off or automatic when initiating condition clears. Coils are 115 VAC. Use socket 27390.

Type RSX1440. Initiated by sustained closure of NO contacts. 919-1340. 1-9 ..... Each 27.10

RSX1440Z. Initiated by momentary, intermittent, or sustained closure of NO contacts. 929-1341. 1-9 ..... Each 28.90

RSX1440Z Allows Signal Light Test

Condition	K1	K2	Flasher	Horn	Light
Normal	off	on	off	off	off
Alarm	on	on	on	on	flash
Acknowledge	on	off	off	off	on
Trouble Contact Reopens without reset	off	on	off	off	off
with reset	on	off	off	off	on
Reset	off	on	off	off	off
Lamp Test	off	on	off	off	on



RSX1Z40Z Circuit to Right

QUANTITY PRICING TABLE

Type No.	Variations	EACH 10-24	25-49	50-Up
283XAXC	6, 12, 24, 110 AC	4.10	3.90	3.70
283XAXC	240 AC	4.55	4.32	4.15
283XAXC	6, 12, 24 DC	3.95	3.76	3.56
283XAXC	110 DC	4.60	4.37	4.15
283XBXC	6, 12, 24, 110 AC	5.00	4.75	4.50
283XBXC	240 AC	5.45	5.18	4.90
283XBXC	6, 12, 24 DC	4.50	4.28	4.05
283XBXC	110 DC	5.20	4.94	4.68
283XCXC	6, 12, 24, 110 AC	5.60	5.32	5.04
283XCXC	240 AC	6.05	5.75	5.44
283XCXC	6, 12, 24 DC	5.15	4.90	4.63
283XCXC	110 DC	5.60	5.32	5.04
283XAXC-1	6, 12, 24, 110 AC	4.10	3.90	3.70
283XAXC-1	240 AC	4.55	4.32	4.15
283XAXC-1	6, 12, 24 DC	3.95	3.76	3.56
283XAXC-1	110 DC	4.60	4.37	4.15
283XBXC-1	6, 12, 24, 110 AC	5.00	4.75	4.50
283XBXC-1	240 AC	5.45	5.18	4.90
283XBXC-1	6, 12, 24 DC	4.50	4.28	4.05
283XBXC-1	110 DC	5.20	4.94	4.68
283XCXC-1	6, 12, 24, 110 AC	5.60	5.32	5.04
283XCXC-1	240 AC	6.05	5.75	5.44
283XCXC-1	6, 12, 24 DC	5.15	4.90	4.63
283XCXC-1	110 DC	5.60	5.32	5.04
314XAX	SPDT	3.70	3.52	3.33
314XBX	DPDT	4.40	4.19	3.94
314XCX	3PDT	4.70	4.47	4.23
314XAX48P	SPDT	6.10	5.80	5.49
314XBX48P	DPDT	6.50	6.18	5.85
314XCX48P	3PDT	8.20	7.80	7.38
314XAX48PL	SPDT	6.60	6.28	5.94
314XBX48PL	DPDT	7.00	6.65	6.30
314XCX48PL	3PDT	8.80	8.36	7.92
36579	.....	.95	.90	.85
36580	.....	1.25	1.19	1.12
36581	.....	.80	.76	.72
RSX1440	.....	22.50	21.38	20.25
RSX1440Z	.....	24.00	22.80	21.60

BASIC DIMENSIONS

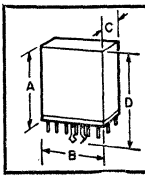
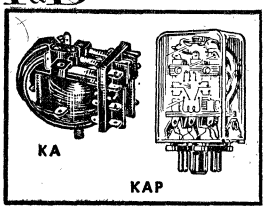


Fig.	Type: Open 314	283	Enclosed 314	RSX 1440
A	1 7/8"	1 7/8"	2 1/4"	2 19/32"
B	1 3/8"	1 3/8"	1 3/8"	2 5/8"
C	1 11/16"	1 1/2"	1 3/8"	1 15/32"
D	.....	2 5/32"	.....	3 13/32"

For Quantity Prices See Table Lower Right of Page

P&B Potter & Brumfield General-Purpose Relays



SERIES KA AND KAP

KA (open) and KAP (with plastic dust cover) relays for small motors, solenoids, other relays. Contacts: movable, gold-flashed silver; stationary, silver overlay. 10-amp relays have silver-cadmium-oxide movables. Type KA are ■ U.L. Recog., AC models C.S.A. Listed; KAP models with "Y" suffix are ■U.L. Recog. and C.S.A. Listed. KA mtg., 6-32 threaded stud and locating tab. Socket information, next page. KAP, SPDT and DPDT types have 8-pin plugs; 3PDT, 11-pin. **Ask for prices in quantities of 750-Up. *In bulk packages of 50.**

COIL DATA FOR KA, KAP AND KRP

DC COILS			AC COILS		
Volts	Res., Ohms	mA	Volts	Res., Ohms	mA
6	32	188	6	6	335
12	120	100	12	21	168
24	472	51	24	75*	84
110	10k	11.5	120	2250	17.5
.....	.....	.....	240	9110	8.75

TYPE KA OPEN RELAYS (Av. shpg. wt., 4 oz.)

5 AMPERES

Stock No.	Mfr's Type	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-Up*
886-0380	KA5AY	6 AC	SPDT	4.63	3.70	3.52	3.33	2.59	2.41
886-0381	KA5AY	12 AC	SPDT	4.63	3.70	3.52	3.33	2.59	2.41
886-0382	KA5AY	24 AC	SPDT	4.63	3.70	3.52	3.33	2.59	2.41
886-0383	KA5AY	120 AC	SPDT	4.63	3.70	3.52	3.33	2.59	2.41
886-0384	KA5AY	240 AC	SPDT	5.25	4.20	3.99	3.78	2.94	2.73
886-0389	KA5DY	6 DC	SPDT	4.44	3.55	3.37	3.20	2.49	2.31
886-0390	KA5DY	12 DC	SPDT	4.44	3.55	3.37	3.20	2.49	2.31
886-0391	KA5DY	24 DC	SPDT	4.44	3.55	3.37	3.20	2.49	2.31
886-0392	KA5DY	110 DC	SPDT	5.31	4.25	4.04	3.83	2.98	2.76
886-0398	KA11AY	6 AC	DPDT	5.63	4.50	4.28	4.05	3.15	2.93
886-0399	KA11AY	12 AC	DPDT	5.63	4.50	4.28	4.05	3.15	2.93
886-0400	KA11AY	24 AC	DPDT	5.63	4.50	4.28	4.05	3.15	2.93
886-0401	*KA11AY*	*120 AC*	*DPDT*	5.63	4.50	4.28	4.05	3.15	2.93
886-0402	KA11AY	240 AC	DPDT	6.13	4.90	4.66	4.41	3.43	3.19
886-0407	KA11DY	6 DC	DPDT	4.94	3.95	3.75	3.56	2.77	2.57
886-0408	KA11DY	12 DC	DPDT	4.94	3.95	3.75	3.56	2.77	2.57
886-0409	KA11DY	24 DC	DPDT	4.94	3.95	3.75	3.56	2.77	2.57
886-0410	KA11DY	110 DC	DPDT	5.81	4.65	4.42	4.19	3.26	3.02
886-0416	KA14AY	6 AC	3PDT	6.13	4.90	4.66	4.41	3.43	3.19
886-0417	KA14AY	12 AC	3PDT	6.13	4.90	4.66	4.41	3.43	3.19
886-0418	KA14AY	24 AC	3PDT	6.13	4.90	4.66	4.41	3.43	3.19
886-0419	KA14AY	120 AC	3PDT	6.13	4.90	4.66	4.41	3.43	3.19
886-0420	KA14AY	240 AC	3PDT	6.75	5.40	5.13	4.86	3.78	3.51
886-0425	KA14DY	6 DC	3PDT	5.63	4.50	4.28	4.05	3.15	2.93
886-0426	KA14DY	12 DC	3PDT	5.63	4.50	4.28	4.05	3.15	2.93
886-0427	KA14DY	24 DC	3PDT	5.63	4.50	4.28	4.05	3.15	2.93
886-0428	KA14DY	110 DC	3PDT	6.44	5.15	4.89	4.64	3.61	3.35

10 AMPERES

Stock No.	Mfr's Type	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-Up*
886-0375	KA5AG	6 AC	SPDT	4.69	3.75	3.56	3.38	2.63	2.44
886-0376	KA5AG	12 AC	SPDT	4.69	3.75	3.56	3.38	2.63	2.44
886-0377	KA5AG	24 AC	SPDT	4.69	3.75	3.56	3.38	2.63	2.44
886-0378	KA5AG	120 AC	SPDT	4.69	3.75	3.56	3.38	2.63	2.44
886-0379	KA5AG	240 AC	SPDT	5.31	4.25	4.04	3.83	2.98	2.76
886-0385	KA5DG	6 DC	SPDT	4.50	3.60	3.42	3.24	2.52	2.34
886-0386	KA5DG	12 DC	SPDT	4.50	3.60	3.42	3.24	2.52	2.34
886-0387	KA5DG	24 DC	SPDT	4.50	3.60	3.42	3.24	2.52	2.34
886-0388	KA5DG	110 DC	SPDT	5.38	4.30	4.09	3.87	3.01	2.80
886-0393	KA11AG	6 AC	DPDT	5.75	4.60	4.37	4.14	3.22	2.99
886-0394	KA11AG	12 AC	DPDT	5.75	4.60	4.37	4.14	3.22	2.99
886-0395	KA11AG	24 AC	DPDT	5.75	4.60	4.37	4.14	3.22	2.99
886-0396	*KA11AG*	*120 AC*	*DPDT*	5.75	4.60	4.37	4.14	3.22	2.99
886-0397	KA11AG	240 AC	DPDT	6.25	5.00	4.75	4.50	3.50	3.25
886-0403	KA11DG	6 DC	DPDT	5.13	4.10	3.90	3.69	2.87	2.67
886-0404	KA11DG	12 DC	DPDT	5.13	4.10	3.90	3.69	2.87	2.67
886-0405	KA11DG	24 DC	DPDT	5.13	4.10	3.90	3.69	2.87	2.67
886-0406	KA11DG	110 DC	DPDT	6.00	4.80	4.56	4.32	3.36	3.12
886-0411	KA14AG	6 AC	3PDT	6.38	5.10	4.85	4.59	3.57	3.32
886-0412	KA14AG	12 AC	3PDT	6.38	5.10	4.85	4.59	3.57	3.32
886-0413	KA14AG	24 AC	3PDT	6.38	5.10	4.85	4.59	3.57	3.32
886-0414	*KA14AG*	*120 AC*	*3PDT*	6.38	5.10	4.85	4.59	3.57	3.32
886-0415	KA14AG	240 AC	3PDT	7.00	5.60	5.32	5.04	3.92	3.64
886-0421	KA14DG	6 DC	3PDT	5.81	4.65	4.42	4.19	3.26	3.02
886-0422	KA14DG	12 DC	3PDT	5.81	4.65	4.42	4.19	3.26	3.02
886-0423	KA14DG	24 DC	3PDT	5.81	4.65	4.42	4.19	3.26	3.02
886-0424	KA14DG	110 DC	3PDT	6.69	5.35	5.08	4.82	3.75	3.48

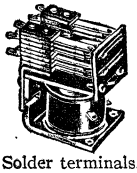
TYPE KAP ENCLOSED RELAYS (Av. shpg. wt., 5 oz.)

5 AMPERES

886-0444	KAP11AY	24 AC	DPDT	8.81	7.05	6.70	6.35	4.94	4.58
886-0445	*KAP11AY*	*120 AC*	*DPDT*	8.81	7.05	6.70	6.35	4.94	4.58
886-0446	KAP11AY	240 AC	DPDT	9.31	7.45	7.08	6.71	5.22	4.84
886-0454	KAP11DY	12 DC	DPDT	8.75	7.00	6.65	6.30	4.97	4.62
886-0455	KAP11DY	24 DC	DPDT	8.75	7.00	6.65	6.30	4.97	4.62
886-0456	KAP11DY	110 DC	DPDT	9.63	7.70	7.32	6.93	5.39	5.01
886-0465	KAP14AY	120 AC	3PDT	10.88	8.70	8.27	7.83	6.09	5.66
886-0466	KAP14AY	240 AC	3PDT	11.38	9.10	8.65	8.19	6.37	5.92
886-0475	KAP14DY	12 DC	3PDT	10.75	8.60	8.17	7.74	6.02	5.59
886-0476	KAP14DY	24 DC	3PDT	10.75	8.60	8.17	7.74	6.02	5.59
886-0477	KAP14DY	110 DC	3PDT	11.63	9.30	8.84	8.37	6.51	6.05
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

10 AMPERES

886-0431	KAP5AG	24 AC	SPDT	8.00	6.40	6.08	5.76	4.48	4.16
886-0432	KAP5AG	120 AC	SPDT	8.00	6.40	6.08	5.76	4.48	4.16
886-0436	KAP5DG	24 DC	SPDT	7.88	6.30	5.99	5.67	4.41	4.10
886-0437	KAP5DG	110 DC	SPDT	8.75	7.00	6.65	6.30	4.97	4.62
886-0440	KAP11AG	6 AC	DPDT	8.94	7.15	6.79	6.44	5.01	4.65
886-0441	KAP11AG	24 AC	DPDT	8.94	7.15	6.79	6.44	5.01	4.65
886-0442	*KAP11AG*	*120 AC*	*DPDT*	8.94	7.15	6.79	6.44	5.01	4.65
886-0450	KAP11DG	24 DC	DPDT	8.88	7.10	6.75	6.39	4.97	4.62
886-0451	KAP11DG	110 DC	DPDT	9.75	7.80	7.41	7.02	5.46	5.07
886-0460	KAP14AG	24 AC	3PDT	11.06	8.85	8.41	7.97	6.20	5.75
886-0461	KAP14AG	120 AC	3PDT	11.06	8.85	8.41	7.97	6.20	5.75
886-0470	KAP14DG	24 DC	3PDT	11.00	8.80	8.36	7.92	6.15	5.72
886-0471	KAP14DG	110 DC	3PDT	11.88	9.50	9.03	8.55	6.65	6.18



SERIES GA MULTIPLE-CONTACT RELAYS

For remote power switching, general circuit and power control uses. Withstand mobile shock and vibration. Moisture resistant coil prevents damage from high humidity. 5A contacts. AC coils for 50/60 Hz. Power at 25°C: DC—2W nominal, 6 W max.; AC—6 VA. Temp. range: —45°C; AC to ±45°C; DC to ±75°C. Pull-in: AC—85% or less of nominal voltage; DC—75% or less. Solder terminals. Mounts with 8-32 screw. $1\frac{1}{16}$x$1\frac{23}{32}$x$1\frac{25}{32}$". 4 oz.

Stock No.	Mfr's Type	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-Up
886-0180	GA11A	24 AC	DPDT	4.81	3.85	3.66	3.47	2.70
886-0181	GA11A	120 AC	DPDT	4.81	3.85	3.66	3.47	2.70
886-0182	GA11D	6 DC	DPDT	4.81	3.85	3.66	3.47	2.70
886-0183	GA11D	12 DC	DPDT	4.81	3.85	3.66	3.47	2.70
886-0184	GA11D	24 DC	DPDT	4.81	3.85	3.66	3.47	2.70
886-0185	GA11D	110 DC	DPDT	5.44	4.35	4.13	3.92	3.05
886-0187	GA14A	120 AC	3PDT	5.75	4.60	4.37	4.14	3.22
886-0189	GA17A	6 AC	4PDT	6.94	5.55	5.27	5.00	3.89
886-0190	GA17A	12 AC	4PDT	6.94	5.55	5.27	5.00	3.89
886-0191	GA17A	24 AC	4PDT	6.94	5.55	5.27	5.00	3.89
886-0192	GA17A	120 AC	4PDT	6.94	5.55	5.27	5.00	3.89
886-0193	GA17A	240 AC	4PDT	7.44	5.95	5.65	5.36	4.17
886-0194	GA17D	6 DC	4PDT	6.94	5.55	5.27	5.00	3.89
886-0195	GA17D	12 DC	4PDT	6.94	5.55	5.27	5.00	3.89
886-0196	GA17D	24 DC	4PDT	6.94	5.55	5.27	5.00	3.89
886-0197	GA17D	110 DC	4PDT	7.56	6.05	5.75	5.45	4.24

COIL DATA FOR SERIES GA AND GP RELAYS

DC COILS			AC COILS		
Volts	Resistance In Ohms	Av. Current Milliamps	Volts	Resistance In Ohms	Av. Current Milliamps
6	18	333	6	1.7	1000
12	72	167	12	6.8	500
24	288	83	24	24.0	260
110	6050	18	120	690	50
.....	.....	.....	240	2950	25

SERIES GP "PIC & BUILD" RELAYS

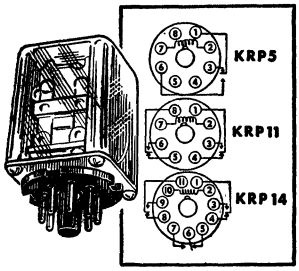
Order GPA or GPD coils and a switch, either GP11 or GP17. Combine to produce over 20 different relays that convert to alternative sensitivities or switching. Same size, specs as GA at left. 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-49	50-99	100-Up
886-0237	GPA	6 AC	2.44	1.95	1.85	1.76	1.37
886-0238	GPA	12 AC	2.44	1.95	1.85	1.76	1.37
886-0239	GPA	24 AC	2.44	1.95	1.85	1.76	1.37
886-0240	GPA	120 AC	2.44	1.95	1.85	1.76	1.37
886-0246	GPD	2500 Ohms	2.25	1.80	1.71	1.62	1.26
886-0248	GPD	10,000 Ohms	3.00	2.40	2.28	2.16	1.68
886-0243	GPD	6 DC	3.00	2.40	2.28	2.16	1.68
886-0244	GPD	12 DC	3.00	2.40	2.28	2.16	1.68
886-0245	GPD	24 DC	2.88	2.30	2.19	2.07	1.61
886-0235	GP11	DPDT Switch	2.50	2.60	1.90	1.80	1.40
886-0236	GP17	4PDT Switch	4.25	3.40	3.23	3.06	2.38

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Potter & Brumfield General-Purpose Relays

SERIES KRP AND KRP-N ENCLOSED RELAYS



General-purpose relays are enclosed in high-impact transparent, cellulose acetate case. Dust and weather proofed. Coil power at 25°C: DC—100 mW minimum, 4 watts maximum; AC—2 volt-amperes. Temperature range: −45°C minimum; AC to +70°C maximum; DC to +85°C maximum. Operate (approx.) 15 msec., release 10 msec. 10 million cycle life. 1000 megohm minimum insulation resistance. Breakdown, 500 V rms, 60 Hz. Shock, 30gs. *KRP-N Series includes a lamp to indicate current or voltage availability in power circuits. Lamp lights when coil is energized. KRP5 and KRP11 plug into standard octal socket. KRP14 plugs into 11-pin socket. Hold-down springs and socket information, next column. Coil Data Chart on preceding page. Both series, 1 13/32x1 13/32x2". Av. shpg. wt., 5 oz.

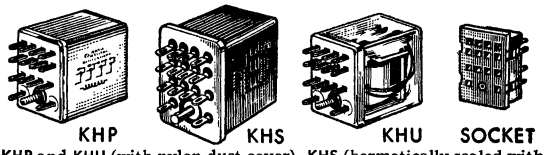
5 AMPERES

Stock No.	Mfr's Type KRP-	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
886-0670	5A	6 AC	SPDT	7.88	6.30	5.99	5.67	4.41	4.10	3.62
886-0672	5A	24 AC	SPDT	7.88	6.30	5.99	5.67	4.41	4.10	3.62
886-0673	5A	120 AC	SPDT	7.88	6.30	5.99	5.67	4.41	4.10	3.62
886-0679	5D	6 DC	SPDT	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0680	5D	12 DC	SPDT	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0681	5D	24 DC	SPDT	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0682	5D	110 DC	SPDT	8.69	6.95	6.60	6.26	4.87	4.52	4.00
886-0690	11A	6 AC	DPDT	8.75	7.00	6.65	6.30	4.90	4.55	4.03
886-0691	11A	12 AC	DPDT	8.75	7.00	6.65	6.30	4.90	4.55	4.03
886-0692	*11A*	*24 AC*	*DPDT*	8.75	7.00	6.65	6.30	4.90	4.55	4.03
886-0693	*11A*	*120 AC*	*DPDT*	8.75	7.00	6.65	6.30	4.90	4.55	4.03
886-0694	11A	240 AC	DPDT	9.31	7.45	7.08	6.71	5.22	4.84	4.28
886-0705	11D	6 DC	DPDT	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0706	*11D*	*12 DC*	*DPDT*	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0707	*11D*	*24 DC*	*DPDT*	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0708	11D	110 DC	DPDT	9.56	7.65	7.27	6.89	5.36	4.97	4.40
886-0716	14A	6 AC	3PDT	10.88	8.70	8.27	7.83	6.09	5.66	5.00
886-0717	14A	12 AC	3PDT	10.88	8.70	8.27	7.83	6.09	5.66	5.00
886-0718	14A	24 AC	3PDT	10.88	8.70	8.27	7.83	6.09	5.66	5.00
886-0719	*14A*	*120 AC*	*3PDT*	10.88	8.70	8.27	7.83	6.09	5.66	5.00
886-0720	14A	240 AC	3PDT	11.44	9.15	8.69	8.24	6.41	5.95	5.26
886-0728	14D	6 DC	3PDT	10.75	8.60	8.17	7.74	6.02	5.59	4.95
886-0729	14D	12 DC	3PDT	10.75	8.60	8.17	7.74	6.02	5.59	4.95
886-0730	14D	24 DC	3PDT	10.75	8.60	8.17	7.74	6.02	5.59	4.95
886-0731	14D	110 DC	3PDT	11.63	9.30	8.84	8.37	6.51	6.05	5.35

10 AMPERES

886-0675	5AG	6 AC	SPDT	8.06	6.45	6.13	5.81	4.52	4.19	3.71
886-0676	5AG	24 AC	SPDT	8.06	6.45	6.13	5.81	4.52	4.19	3.71
886-0677	*5AG*	*24 AC*	*SPDT*	8.06	6.45	6.13	5.81	4.52	4.19	3.71
886-0685	5DG	6 DC	SPDT	8.00	6.40	6.08	5.76	4.48	4.16	3.68
886-0686	5DG	12 DC	SPDT	8.00	6.40	6.08	5.76	4.48	4.16	3.68
886-0687	5DG	24 DC	SPDT	8.00	6.40	6.08	5.76	4.48	4.16	3.68
886-0688	5DG	110 DC	SPDT	8.88	7.10	6.75	6.39	4.97	4.62	4.08
886-0695	*11AG*	*6 AC*	*DPDT*	9.06	7.25	6.89	6.53	5.08	4.71	4.17
886-0700	*11AN	6 AC	DPDT	10.38	8.30	7.89	7.47	5.81	5.40	4.77
886-0696	11AG	12 AC	DPDT	9.06	7.25	6.89	6.53	5.08	4.71	4.17
886-0701	*11AN	12 AC	DPDT	10.38	8.30	7.89	7.47	5.81	5.40	4.77
886-0697	*11AG*	*24 AC*	*DPDT*	9.06	7.25	6.89	6.53	5.08	4.71	4.17
886-0702	*11AN	24 AC	DPDT	10.38	8.30	7.89	7.47	5.81	5.40	4.77
886-0698	*11AG*	*120 AC*	*DPDT*	9.06	7.25	6.89	6.53	5.08	4.71	4.17
886-0703	**11AN*	*120 AC*	*DPDT*	10.38	8.30	7.89	7.47	5.81	5.40	4.77
886-0699	*11AG*	*240 AC*	*DPDT*	9.63	7.70	7.32	6.93	5.39	5.01	4.43
886-0704	*11AN	240 AC	DPDT	10.94	8.75	8.31	7.88	6.12	5.69	5.03
886-0709	11DG	6 DC	DPDT	9.00	7.20	6.84	6.48	5.04	4.68	4.14
886-0710	*11DG*	*12 DC*	*DPDT*	9.00	7.20	6.84	6.48	5.04	4.68	4.14
886-0713	*11DN	12 DC	DPDT	10.25	8.20	7.79	7.38	5.74	5.33	4.72
886-0711	*11DG*	*24 DC*	*DPDT*	9.00	7.20	6.84	7.88	6.12	5.69	4.14
886-0714	*11DN	24 DC	DPDT	10.25	8.20	7.79	7.38	5.74	5.33	4.72
886-0712	*11DG*	*110 DC*	*DPDT*	9.86	7.90	7.51	7.11	5.53	5.14	4.54
886-0715	*11DN	110 DC	DPDT	11.19	8.95	8.50	8.06	6.27	5.82	5.15
886-0721	14AG	6 AC	3PDT	11.31	9.05	8.60	8.15	6.34	5.88	5.20
886-0722	14AG	12 AC	3PDT	11.31	9.05	8.60	8.15	6.34	5.88	5.20
886-0723	14AG	24 AC	3PDT	11.31	9.05	8.60	8.15	6.34	5.88	5.20
886-0724	*14AG*	*120 AC*	*3PDT*	11.31	9.05	8.60	8.15	6.34	5.88	5.20
886-0726	**14AN*	*120 AC*	*3PDT*	12.63	10.10	9.60	9.09	7.07	6.57	5.81
886-0725	14AG	240 AC	3PDT	11.88	9.50	9.03	8.55	6.65	6.18	5.46
886-0727	*14AN	240 AC	3PDT	13.19	10.55	10.02	9.50	7.39	6.86	6.07
886-0735	14DG	6 DC	3PDT	11.19	8.95	8.50	8.06	6.27	5.82	5.15
886-0736	14DG	12 DC	3PDT	11.19	8.95	8.50	8.06	6.27	5.82	5.15
886-0737	*14DG*	*24 DC*	*3PDT*	11.19	8.95	8.50	8.06	6.27	5.82	5.15
886-0738	14DG	110 DC	3PDT	12.06	9.65	9.17	8.69	6.76	6.27	5.55

SERIES KH MINIATURE 4PDT RELAYS



KHP and KHU (with nylon dust cover), KHS (hermetically sealed with metal cover) relays for data processing, computer control, etc. KHU, ■ U.L. Recog. Gold-flashed silver contacts, rated 3 amps at 30 VDC or 120 VAC resistive, except KHP and KHU types with suffix "12", silver-cadmium-oxide contacts. Coil power: DC, 0.5-2 watts; AC, 1.20 VA. Solder terminals. KHP has 3-48 mtg. stud. Fit sockets (below). Sizes: KHP and KHU, 1 17/64x1 7/64x5/64". KHS, 29/32x15/32x29/32". Av. shpg. wt., 2 oz. Contact Allied for prices in quantities of 750-Up. Bulk packed in quantities over 250.

COIL DATA FOR SERIES KH RELAYS

DC COILS Volts	Resistance In Ohms ±10% @25°C	Inductance In H (approx.)	AC COILS Volts	Resistance In Ohms ±10% @25°C	Average Current Milliamps
6	40	.08	6	10.5	200
12	160	.28	12	43	100
24	650	1.0	24	160	52
48	2600	4.5	120	3900	10.5
90	9000	13.5	...	.....	.....
110	11k	17.0	...	.....	.....

Stock No.	Mfr's Type	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0545	KHP17A11	6 AC	6.94	5.55	5.27	5.00	3.89	3.61
886-0546	KHP17A11	12 AC	6.94	5.55	5.27	5.00	3.89	3.61
886-0547	KHP17A11	24 AC	6.94	5.55	5.27	5.00	3.89	3.61
886-0548	*KHP17A11*	*120 AC*	7.56	6.05	5.75	5.45	4.24	3.93
886-0550	*KHP17D11*	*6 DC*	6.31	5.05	4.80	4.55	3.54	3.28
886-0551	*KHP17D11*	*12 DC*	6.31	5.05	4.80	4.55	3.54	3.28
886-0552	*KHP17D11*	*24 DC*	6.31	5.05	4.80	4.55	3.54	3.28
886-0553	KHP17D11	48 DC	6.56	5.25	4.99	4.73	3.68	3.41
886-0554	KHP17D11	90 DC	7.38	5.90	5.61	5.31	4.13	3.84
886-0555	KHP17D11	110 DC	7.38	5.90	5.61	5.31	4.13	3.84
886-0557	KHP17D12	24 DC	6.50	5.20	4.94	4.68	3.64	3.38
886-0558	KHP17D12	110 DC	7.56	6.05	5.75	5.45	4.24	3.93
886-0561	KHS17A11	6 AC	11.94	9.55	9.07	8.60	6.69	6.21
886-0563	KHS17A11	24 AC	11.94	9.55	9.07	8.60	6.69	6.21
886-0564	*KHS17A11*	*120 AC*	12.38	9.90	9.41	8.91	6.93	6.44
886-0566	KHS17D11	6 DC	10.69	8.55	8.12	7.70	5.99	5.56
886-0567	KHS17D11	12 DC	10.69	8.55	8.12	7.70	5.99	5.56
886-0568	KHS17D11	24 DC	10.69	8.55	8.12	7.70	5.99	5.56
886-0569	KHS17D11	110 DC	11.75	9.40	8.93	8.46	6.58	6.11
886-0575	KHU17A11	6 AC	6.94	5.55	5.27	5.00	3.89	3.61
886-0576	KHU17A11	12 AC	6.94	5.55	5.27	5.00	3.89	3.61
886-0577	KHU17A11	24 AC	6.94	5.55	5.27	5.00	3.89	3.61
886-0578	KHU17A11	120 AC	7.56	6.05	5.75	5.45	4.24	3.93
886-0580	KHU17D11	6 DC	6.31	5.05	4.80	4.55	3.54	3.28
886-0581	*KHU17D11*	*12 DC*	6.31	5.05	4.80	4.55	3.54	3.28
886-0582	*KHU17D11*	*24 DC*	6.31	5.05	4.80	4.55	3.54	3.28
886-0588	KHU17D12	24 DC	6.50	5.20	4.94	4.68	3.64	3.38
886-0583	KHU17D11	48 DC	6.56	5.25	4.99	4.73	3.68	3.41
886-0584	KHU17D11	90 DC	7.38	5.90	5.61	5.31	4.13	3.84
886-0585	KHU17D11	110 DC	7.38	5.90	5.61	5.31	4.13	3.84
886-0589	KHU17D12	110 DC	7.56	6.05	5.75	5.45	4.24	3.93

SOCKETS

886-1410	*9KH1*	*Solder term.*	.88	.70	.67	.63	.49
886-1411	*9KH2*	*PC terminal*	.88	.70	.67	.63	.49

886-1412. *KHP Hold-Down Spring. Wt. 3 oz.*.....Box of 50 for 7.32

RELAY ACCESSORIES AND SOCKETS

8-Pin "P" Case. Type 35D070. Clear plastic case for mounting rectifiers, capacitors, resistors. Octal base. With four screws. 2x1 13/32x1 13/32". Av. wt., 1 oz.
886-1460 1-24....Each .72 25-49.....Each .62
50-99..Ea. .59 100-249..Ea. .46 250-Up.....Ea. .42

11-Pin "P" Case. Type 35D072. As above, 11-pin base.
886-1462 1-24.....Each 1.02 25-49..Each .76
50-99....Each .72 100-249.....Each .56 250-Up.....Each .52

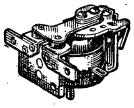
KCP-KRP Hold-Down Spring. Type 9KR15. Two 5/32" holes. 3 oz.
886-1416.....Box of 50 for 7.73

SOCKETS FOR KCP, KRP, KRP-N, KAP, PW, SM RELAYS

Amphenol Barrier Type Sockets. For KAP, KCP, KRP, and KRP-N relays. For SP and DP types, order octal 713-5003, p. 405. For 3-pole, order 11-pin 713-5017, p. 405.

Amphenol Standard Sockets. For KAP, KCP, KRP, KRP-N. For SP and DP relays, order octal 713-2810. For 3-pole relays, order 11-pin 713-2815, p. 138. For PW and SM relays, order 7-pin Type.

P&B General-Purpose and Sensitive Relays



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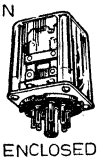


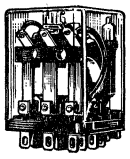
ENCLOSED

KR3 SERIES AND KRP3-H SERIES DOUBLE-BREAK HEAVY-DUTY RELAYS

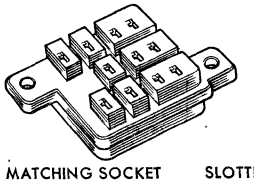
Both series have copper alloy contact arms plus silver-cadmium-oxide contacts. Rated 20 amperes, 120 VAC, 60 Hz resistive, or 28 VDC; 1 horsepower 120/240 VAC 60 Hz. Action is SPST-N.O.-DM (one Form X). KR3 Series are 6-32 stud mounted on .437" mounting centers. Measure 1.6x1.67x1.52". KRP3-H Series have same specifications as above but are enclosed in clear plastic dust cover and have octal base. Both types have same coil rating as KA Series, shown on Page 412. Av. wt. 3 oz.

Stock No.	Mfr's Type	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
886-0655	KR3AH	24 VAC	6.04	4.55	4.32	4.09	3.18
886-0656	KR3AH	120 VAC	6.04	4.55	4.32	4.09	3.18
886-0658	KR3DH	12 VDC	5.79	4.35	4.05	3.82	2.97
886-0659	KR3DH	24 VDC	5.79	4.35	4.05	3.82	2.97
886-0661	KRP3AH	120 VAC	9.80	7.35	6.98	6.62	5.16
886-0663	KRP3DH	12 VDC	9.45	7.10	6.74	6.37	4.96
886-0664	KRP3DH	24 VDC	9.45	7.10	6.74	6.37	4.96
886-0665	KRP3DH	110 VDC	10.40	7.80	7.40	7.01	5.43

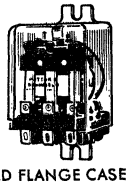
KUP SERIES 10-AMPERE ENCLOSED RELAYS



PLAIN CASE



MATCHING SOCKET



SLOTTED FLANGE CASE

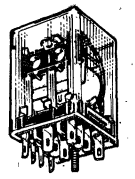
Plain Case. Industrial control 10-ampere relays for continuous operation. Terminals .187" quick-connect/solder type. Silver-cadmium-oxide contacts. Clear plastic dust cover. Matching 10-amp sockets listed below. **Slotted-Flange Case.** For direct-to-chassis mounting only. Slot width, .156". 1.531x1.408x1.908". Wt. 3 oz.

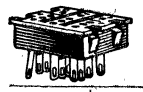
KUP SERIES WITH PLAIN CASE

Stock No.	Mfr's Type KUP-	Volts	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0770	5A15	6 AC	SPDT	5.12	4.10	3.89	3.69	2.87	2.67
886-0771	5A15	24 AC	SPDT	5.12	4.10	3.89	3.69	2.87	2.67
886-0772	5A15	120 AC	SPDT	5.12	4.10	3.89	3.69	2.87	2.67
886-0773	5A15	240 AC	SPDT	5.68	4.55	4.32	4.09	3.18	2.96
886-0774	5D15	6 DC	SPDT	4.93	3.95	3.75	3.55	2.77	2.57
886-0775	5D15	12 DC	SPDT	4.93	3.95	3.75	3.55	2.77	2.57
886-0776	5D15	24 DC	SPDT	4.93	3.95	3.75	3.55	2.77	2.57
886-0777	5D15	110 DC	SPDT	5.75	4.60	4.37	4.14	3.22	2.99
886-0778	11A15	6 AC	DPDT	6.25	5.00	4.75	4.50	3.50	3.25
886-0779	11A15	12 AC	DPDT	6.25	5.00	4.75	4.50	3.50	3.25
886-0780	11A15	24 AC	DPDT	6.25	5.00	4.75	4.50	3.50	3.25
886-0781	11A15	120 AC	DPDT	6.25	5.00	4.75	4.50	3.50	3.25
886-0782	11A15	240 AC	DPDT	6.81	5.45	5.18	4.90	3.81	3.54
886-0783	11D15	6 DC	DPDT	5.63	4.50	4.28	4.05	3.15	2.93
886-0784	11D15	12 DC	DPDT	5.63	4.50	4.28	4.05	3.15	2.93
886-0785	11D15	24 DC	DPDT	5.62	4.50	4.28	4.05	3.15	2.93
886-0786	11D15	110 DC	DPDT	6.50	5.20	4.94	4.68	3.64	3.38
886-0787	14A15	6 AC	3PDT	7.00	5.60	5.32	5.04	3.92	3.64
886-0788	14A15	120 AC	3PDT	7.56	6.05	5.75	5.45	4.24	3.64
886-0789	14A15	240 AC	3PDT	7.00	5.60	5.32	5.04	3.92	3.93
886-0790	14D15	6 DC	3PDT	6.44	5.15	4.89	4.64	3.60	3.35
886-0791	14D15	12 DC	3PDT	6.44	5.15	4.89	4.64	3.60	3.35
886-0792	14D15	24 DC	3PDT	6.44	5.15	4.89	4.64	3.60	3.35
886-0793	14D15	110 DC	3PDT	7.00	5.60	5.32	5.04	3.92	3.64
886-1420	*9KU1*	*Sold. Term. Socket*		.95	.79	.75	.71	.55	.51
886-1421	9KU2	PC Pin Term. Sock.		1.14	.95	.90	.86	.67	.62
886-1425	9KU6	Screw Term. Socket.....		Box of 4 for 14.00					
886-1422	9KU3	Hold-Down Springs. 3 oz.....		Box of 50 for 5.25					

KUP SERIES WITH SLOTTED-FLANGE CASE

Stock No.	Mfr's Type KNP-	Volts	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0800	14A55	6 AC	3PDT	7.00	5.60	5.32	5.04	3.92	3.64
886-0801	14A55	12 AC	3PDT	7.00	5.60	5.32	5.04	3.92	3.64
886-0802	14A55	24 AC	3PDT	7.00	5.60	5.32	5.04	3.92	3.64
886-0803	*14A55*	*120 AC*	*3PDT*	7.00	5.60	5.32	5.04	3.92	3.64
886-0804	14A55	240 AC	3PDT	7.56	6.05	5.75	5.45	4.24	3.93
886-0805	14D55	6 DC	3PDT	6.44	5.15	4.89	4.64	3.60	3.35
886-0806	14D55	12 DC	3PDT	6.44	5.15	4.89	4.64	3.60	3.35
886-0807	14D55	24 DC	3PDT	6.44	5.15	4.89	4.64	3.60	3.35
886-0808	14D55	110 DC	3PDT	7.00	5.60	5.32	5.04	3.92	3.64





KNP GENERAL-PURPOSE RELAYS

For AC or DC Electrical Control Applications

Small-size relay for general purpose applications where space is limited. Enclosed in clear polycarbonate dust cover. Silver-cadmium oxide contacts for SPDT, DPDT or 3PDT switching. Recognized under the Component Program of Underwriters Laboratories for ratings of 1/10 hp at 120 VAC, 3 amps. at 32 VDC, resistive, or 3 amps. at 240 VAC, 80% P.F. Relays have .110" quick connect/solder type terminals for easy connections. Mounts with No. 3-48 stud, or snap-in socket with solder or printed circuit terminals. Size, .98x1.00"x1.415" maximum. Actual wt., 1.4 oz. without socket.

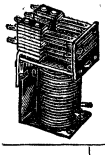
Stock No.	Mfr's Type KNP-	Coil Volts (Ohms)	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0617	5A21	6 AC	SPDT	4.50	3.75	3.56	3.38	2.63	2.44
886-0618	6A21	12 AC	SPDT	4.50	3.75	3.56	3.38	2.63	2.44
886-0619	5A21	24 AC	SPDT	4.50	3.75	3.56	3.38	2.63	2.44
886-0620	5A21	120 AC	SPDT	4.50	3.75	3.56	3.38	2.63	2.44
886-0621	5D21	6 DC	SPDT	4.30	3.60	3.42	3.24	2.52	2.34
886-0622	5D21	12 DC	SPDT	4.30	3.60	3.42	3.24	2.52	2.34
886-0623	5D21	24 DC	SPDT	4.30	3.60	3.42	3.24	2.52	2.34
886-0624	5D21	110 DC	SPDT	4.98	4.15	3.94	3.74	2.91	2.70
886-0625	11A21	6 AC	DPDT	5.35	4.45	4.23	4.01	3.12	2.89
886-0626	11A21	12 AC	DPDT	5.35	4.45	4.23	4.01	3.12	2.89
886-0627	11A21	24 AC	DPDT	5.35	4.45	4.23	4.01	3.12	2.89
886-0628	11A21	120 AC	DPDT	5.35	4.45	4.23	4.01	3.12	2.89
886-0629	11D21	6 DC	DPDT	4.80	4.00	3.80	3.60	2.80	2.60
886-0630	11D21	12 DC	DPDT	4.80	4.00	3.80	3.60	2.80	2.60
886-0631	11D21	24 DC	DPDT	4.80	4.00	3.80	3.60	2.80	2.60
886-0632	11D21	48 DC	DPDT	4.98	4.15	3.94	3.74	2.91	2.70
886-0633	11D21	110 DC	DPDT	5.60	4.65	4.42	4.19	3.26	3.02
886-0634	14A21	6 AC	3PDT	6.00	5.00	4.75	4.50	3.50	3.25
886-0635	14A21	12 AC	3PDT	6.00	5.00	4.75	4.50	3.50	3.25
886-0636	14A21	24 AC	3PDT	6.00	5.00	4.75	4.50	3.50	3.25
886-0637	14A21	120 AC	3PDT	6.00	5.00	4.75	4.50	3.50	3.25
886-0638	14D21	6 DC	3PDT	5.54	4.60	4.37	4.14	3.22	2.99
886-0639	14D21	12 DC	3PDT	5.54	4.60	4.37	4.14	3.22	2.99
886-0640	14D21	24 DC	3PDT	5.54	4.60	4.37	4.14	3.22	2.99
886-0641	14D21	48 DC	3PDT	5.70	4.75	4.51	4.28	3.33	3.09
886-0642	14D21	110 DC	3PDT	6.30	5.25	4.99	4.73	3.68	3.41
886-1413	*9KN1*	*Sold. Term. Sockets*		**Mult. of 10 EA. 10 Up .70**					
886-1414	9KN2	PC Pin Term. Sockets		**Mult. of 10 EA. 10 Up .70**					
886-1415	9KN3	Hold down Springs		**Mult. of 50 EA. 50 Up .12**					

KCP ENCLOSED SENSITIVE 2-AMPERE RELAYS

In transparent, high-impact weatherproof case. KCP5 and KCP11 plug into standard octal socket; KCP14 plugs into standard 11-pin socket. Gold-flashed silver contacts rated 2 amps. Size, 1 13/32x1 13/32x2" high. See Page 413 for sockets. Av. wt. 4 oz.

Resistance (Ohms)	Single Pole Pull-in	Sens.	Double Pole Pull-in	Sens.	Three Pole Pull-in	Sens.
2500	7.2 mA	125 mW	10.0 mA	250 mW	12.3 mA	375 mW
5000	5.0 mA	125 mW	7.2 mA	250 mW	8.7 mA	375 mW
10,000	3.6 mA	125 mW	5.0 mA	250 mW	6.1 mA	375 mW

Stock No.	Mfr's Type	Coil Volts (Ohms)	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0525	KCP5	2500Ω	SPDT	8.56	6.85	6.50	6.17	4.79	....
886-0526	KCP5	5000Ω	SPDT	8.68	6.95	6.60	6.26	4.86	....
886-0527	KCP5	10,000Ω	SPDT	9.25	7.40	7.03	6.66	5.18	....
886-0528	*KCP11*	*2500Ω*	*DPDT*	9.17	7.30	6.94	6.57	5.11	....
886-0529	KCP11	5000Ω	DPDT	9.25	7.40	7.03	6.66	5.18	....
886-0530	*KCP11*	*10,000Ω*	*DPDT*	9.81	7.85	7.45	7.06	5.49	....
886-0531	KCP14	2500Ω	3PDT	11.25	9.00	8.55	8.10	6.30	....
886-0532	KCP14	5000Ω	3PDT	11.37	9.10	8.64	8.19	6.37	....
886-0533	KCP14	10,000Ω	3PDT	11.93	9.55	9.07	8.60	6.69	....



GB SENSITIVE 5-AMPERE RELAYS

Medium-cost sensitive 5-amp relays. Sensitivity: 115 mW for single pole, and 275 mW for 4 pole. Silver contacts are designed for maximum self-cleaning action for minimized maintenance. (Pick-up is not adjustable.) Contacts are all rated at 5 amperes. Mounting: 8-32 tapped core and locating half-punch. Size, 2 15/32x1 23/32x1 1/16". Shpg. wt., 6 oz.

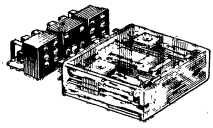
Stock No.	Mfr's Type	Coil mA	Coil Ohms	Action	EACH 1-9	10-24	25-49	50-99	100-Up
886-0206	GB5D	6.8	2500	SPDT	4.93	3.95	3.75	3.55	2.76
886-0205	GB5D	4.8	5000	SPDT	5.18	4.15	3.94	3.73	2.90
886-0209	GB11D	7.0	2500	DPDT	6.93	5.55	5.27	4.99	3.89
886-0208	GB11D	5.0	5000	DPDT	7.18	5.75	5.46	5.17	4.02
886-0207	GB11D	3.53	10,000	DPDT	7.81	6.25	5.94	5.62	4.38
886-0212	GB17D	10.5	2500	4PDT	8.25	6.60	6.27	5.94	4.62
886-0210	GB17D	5.25	10,000	4PDT	9.12	7.30	6.93	6.57	5.11

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

General-Purpose Relays

GENERAL PURPOSE

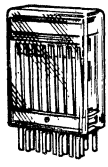
P & B R40 SERIES SLIMLINE® DC RELAYS



Flat, low-profile package 4PDT relays for printed circuit board use; permits 0.6" board mounting centers. Low power, approximately 180 mW/pole. Mechanical life: over 10 million operations. Electrical life: to 600,000 operations. High contact pressure: 15 grams minimum. Contacts: Four Form C. E1, solder terminals for plug-in mounting; E2, PC term.; E3, right-angle PC terminals. *Bifurcated low level contacts (100 mA). †Cross bar dry circuit contacts (500 μA). Size, 1.2x1.4x0.43" max. 1 oz.

Stock No.	Mfr's Type R40-	Coil Volts	Amps	EACH 1-9	10-49	50-99	100-Up
886-1180	E1-X4-V200	12	5	5.60	5.04	4.20	3.92
886-1181	E1-X4-V800	24	5	5.60	5.04	4.20	3.92
886-1189	E1-Y4-V200	12	2	5.35	4.82	4.01	3.75
886-1192	E1-Y4-V800	24	2	5.35	4.82	4.01	3.75
886-1196	E1-Z4-V200	12	*	5.85	5.27	4.39	4.10
886-1198	E1-Z4-V800	24	*	5.85	5.27	4.39	4.10
886-1175	E1-L4-V200	12	†	6.80	6.12	5.10	4.76
886-1176	E1-L4-V800	24	†	6.80	6.12	5.10	4.76
886-1210	E2-X4-V200	12	5	5.60	5.04	4.20	3.92
886-1211	E2-X4-V800	24	5	5.60	5.04	4.20	3.92
886-1215	E2-Y4-V800	24	2	5.35	4.82	4.01	3.75
886-1235	E3-X4-V200	12	5	5.60	5.04	4.20	3.92
886-1236	E3-X4-V800	24	5	5.60	5.04	4.20	3.92
886-1240	E3-Y4-V200	12	2	5.35	4.82	4.01	3.75
886-1241	E3-Y4-V800	24	2	5.35	4.82	4.01	3.75
886-1245	E3-Z4-V200	12	*	5.85	5.27	4.39	4.10
886-1246	E3-Z4-V800	24	*	5.85	5.27	4.39	4.10
886-1225	E3-L4-V200	12	†	6.80	6.12	5.10	4.76
886-1226	E3-L4-V800	24	†	6.80	6.12	5.10	4.76
886-1436	9XR40-1	E3 Socket		1.35	1.22	1.01	.945
886-1437	9XR40-2	E2 Socket		.95	.85	.71	.665
886-1438	9XR40-3	E1 Socket		1.00	.90	.75	.70

P & B KDP GENERAL-PURPOSE RELAY



Compact relay for dense packaging uses in electrical control systems. Has 8 Form C bifurcated contacts for simultaneous switching of several isolated outputs. 8PDT contacts rated 1 amp at 30 VDC or 0.5 amp at 120 VAC, resistive. Operate time: 15 msec max. at 25° C. Life: electrical, 100,000 operations, mechanical, 10 million operations. Temp. range, —45° to +70° C. 1.19x.56x1.54". Socket below. Wt., 1½ oz.

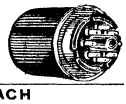
Stock No.	Mfr's Type	Coil Volts	Coil Ohms	EACH 1-24	25-49	50-99	100-Up
886-0538	KDP-29D11	24 DC	580	9.35	8.88	8.42	6.55
886-1408	9KD2	Socket, hold-down springs. . Pkg. of 10/9.50					

MAGNECRAFT W88CP PLUG-IN ENCLOSED RELAYS

Same as W88 relays at right, but enclosed in plastic cover. 3PDT has 11-pin plug; others, octal plug. *Has neon indicator. 2⅛x1⅜x1⅜". 5 oz.

Stock No.	Mfr's Type W88-	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-Up
850-0310	ACPX-4	115 AC	SPDT	6.17	5.86	5.55	5.24	4.01
850-0450	CPX-3	24 DC	SPDT	5.94	5.64	5.35	5.05	4.16
850-0460	CPX-13	7.2 mA	SPDT	6.49	6.17	5.84	5.52	4.54
850-0314	ACPX-8	115 AC	DPDT	6.91	6.56	6.22	5.87	4.49
850-0399	ANCPX-2*	115 AC	DPDT	8.02	7.62	7.22	6.82	5.61
850-0453	CPX-6	12 DC	DPDT	6.55	6.33	5.99	5.66	4.33
850-0454	CPX-7	24 DC	DPDT	6.55	6.33	5.99	5.66	4.33
850-0455	CPX-8	110 DC	DPDT	7.16	6.80	6.44	6.09	5.01
850-0463	CPX-16	10.0 mA	DPDT	6.93	6.58	6.24	5.90	4.85
850-0464	CPX-17	7.2 mA	DPDT	7.04	6.69	6.34	5.98	4.62
850-0318	ACPX-12	115 AC	3PDT	8.59	8.16	7.73	7.30	5.58
850-0457	CPX-10	12 DC	3PDT	8.12	7.71	7.31	6.90	5.68
850-0458	CPX-11	24 DC	3PDT	8.12	7.71	7.31	6.90	5.68
850-0466	CPX-19	12.3 mA	3PDT	8.47	8.05	7.62	7.20	5.93
850-0467	CPX-20	8.7 mA	3PDT	8.58	8.15	7.72	7.39	6.01

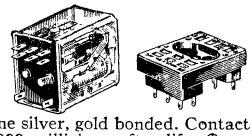
MAGNECRAFT W88HP SEALED DPDT PLUG-IN RELAYS



Contacts rated 10 A. Nominal power: AC units, 3VA; DC, 1.5 W. Octal socket. 2 1/32x1 11/16". 6 oz.

Stock No.	Mfr's Type	Coil Volts	Coil Ohm	EACH 1-9	10-24	25-49	50-99	100-Up
850-0355	W88AHPX-24	115AC	.....	12.65	10.74	10.17	9.61	7.91
850-0490	W88HPX-33	12DC	100	12.06	10.23	9.69	9.15	7.54
850-0491	W88HPX-34	24DC	400	12.06	10.23	9.69	9.15	7.54

PARELCO/P&B R10 SERIES DC INDUSTRIAL RELAYS



Transparent enclosure. Solder terminals, for stud or plug-in mounting (except printed circuit type E2). Mechanical Life: 100 million operations. Contacts: 2, 4 or 6 Form C; fine silver, gold bonded. Contact Res.: 50 milliohms max. initially; 200 milliohms after life. Oper. temp.: −55° to +72°C. 1.187x.735x.375" max. Wt. 1½ oz.

WITH BIFURCATED LOW LEVEL CONTACTS

Stock No.	Mfr's Type R10-	Coil V or mA DC	Contacts	EACH 1-9	10-49	50-99	100-Up
886-1105	E1-Z2-V700	24 V	2	3.65	3.29	2.74	2.56
886-1115	E1-Z4-V700	24 V	4	4.10	3.69	3.08	2.87
886-1120	E1-Z6-V430	24 V	6	5.30	4.77	3.98	3.71

WITH SENSITIVE CURRENT ADJUSTMENT

Contacts rated 2 amps except Z4 types, low level bifurcated.

886-1070	E1-Y2-J2.5K	5.8 mA	2	3.55	3.20	2.66	2.49
886-1071	E1-Y4-J2.5K	8.4 mA	4	3.95	3.56	2.96	2.77
886-1072	E1-Y4-J10.0K	4.5 mA	4	4.85	4.37	3.64	3.40
886-1110	E1-Z4-J1.0K	13.0 mA	4	4.45	4.01	3.34	3.12
886-1111	E1-Z4-J5.0K	6.2 mA	4	4.95	4.45	3.71	3.46

FOR PRINTED CIRCUIT BOARD MOUNTING

Contacts rated 2 amps except Z4 types, low level bifurcated.

886-1140	E2-Y2-V185	12 V	2	3.25	2.93	2.44	2.28
886-1141	E2-Y2-V700	24 V	2	3.25	2.93	2.44	2.28
886-1150	E2-Y4-V185	12 V	4	3.60	3.24	2.70	2.52
886-1151	E2-Y4-V700	24 V	4	3.60	3.24	2.70	2.52
886-1160	E2-Z4-V185	12 V	4	4.10	3.69	3.08	2.87
886-1161	E2-Z4-V700	24 V	4	4.10	3.69	3.08	2.87

R10 TELEPHONE TYPE RELAYS

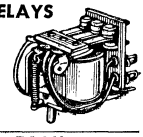
Contact ratings: Y Series, 2A; X Series, 5A.

886-1075	E1-Y2-V185	12 V	2	3.25	2.93	2.44	2.28
886-1076	E1-Y2-V700	24 V	2	3.25	2.93	2.44	2.28
886-1077	E1-Y2-V15.0K	110 V	2	4.95	4.46	3.72	3.47
886-1085	E1-Y4-V52	6 V	4	3.60	3.29	2.74	2.56
886-1086	E1-Y4-V185	12 V	4	3.60	3.29	2.74	2.56
886-1087	E1-Y4-V700	24 V	4	3.60	3.29	2.74	2.56
886-1088	E1-Y4-V2.5K	48 V	4	3.60	3.29	2.74	2.56
886-1089	E1-Y4-V15.0K	110 V	4	5.30	4.82	4.02	3.75
886-1094	E1-Y6-V90	12 V	6	4.65	4.19	3.49	3.26
886-1095	E1-Y6-V430	24 V	6	4.65	4.19	3.49	3.26
886-1096	E1-Y6-V9.0K	110 V	6	5.55	5.00	4.17	3.89
886-1050	E1-X2-V185	12 V	2	3.35	3.02	2.52	2.35
886-1051	E1-X2-V700	24 V	2	3.35	3.02	2.52	2.35
886-1052	E1-X4-V52	6 V	4	3.85	3.47	2.89	2.70
886-1053	E1-X4-V185	12 V	4	3.85	3.47	2.89	2.70
886-1054	E1-X4-V700	24 V	4	3.85	3.47	2.89	2.70
886-1055	E1-X4-V25K	48 V	4	3.85	3.47	2.89	2.70
886-1056	E1-X4-V15.0K	110 V	4	5.50	4.95	4.13	3.85
886-1057	E1-X6-V430	24 V	4	5.00	4.50	3.75	3.50
886-1430	9XR10-1	2PDT Socket, Spring, Ground Wire. Ea. .55					
886-1431	9XR10-2	4PDT Socket, Spring, Ground Wire. Ea. .60					
886-1432	9XR10-3	6PDT Socket, Spring, Ground Wire. Ea. .95					

BU AC-OPERATED BUZZER. Spring-steel armature buzzes when coil is energized. 1 1/32x1 1/32x1⅜". Mtg.: 6-32 tapped core. 2 oz.

Stock No.	Mfr's Type	Volts	Ohms	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0040	BU-6AC	6AC	2.75	2.56	2.05	1.94	1.85	1.44	1.33
886-0041	BU-12AC	12AC	13.25	2.56	2.05	1.94	1.85	1.44	1.33
886-0042	BU-24AC	24AC	50	2.56	2.05	1.94	1.85	1.44	1.33
886-0043	BU-120AC	120AC	1250	2.56	2.05	1.94	1.85	1.44	1.33

MAGNECRAFT W88 ALL-PURPOSE OPEN RELAYS

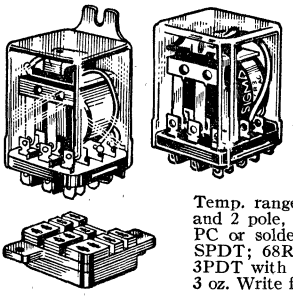


Versatile, low-cost clapper-type relays provide reliability and long-life adjustment stability. 10 A silver alloy contacts. Nominal power for AC units, 3 VA; DC, 1.5 W plate-current types: SPDT, 12 mW; DPDT, 250 mW; 3PDT, 375 mW. (*) coil ohms. 1¼x1 3/16x1¾". 3 oz.

Stock No.	Mfr's Type	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-Up
850-0405	W88-AX-4	115 AC	SPDT	4.50	3.82	3.62	3.42	2.81
850-0605	W88-X-3	12 DC	SPDT	4.03	3.42	3.24	3.06	2.52
850-0606	W88-X-4	24 DC	SPDT	4.03	3.42	3.24	3.06	2.52
850-0409	W88-AX-8	115 AC	DPDT	5.26	4.47	4.23	4.00	3.29
850-0609	W88-X-7	12 DC	DPDT	4.65	3.95	3.74	3.54	2.91
850-0611	W88-X-9	110 DC	DPDT	5.37	4.56	4.32	4.08	3.36
850-0619	W88-X-17	2500*	DPDT	4.95	4.20	3.98	3.76	3.09
850-0412	W88-AX-11	24 AC	3PDT	5.86	4.98	4.72	4.45	3.67
850-0413	W88-AX-12	115 AC	3PDT	5.86	4.98	4.72	4.45	3.67
850-0613	W88-X-11	12 DC	3PDT	5.19	4.41	4.18	3.94	3.25
850-0614	W88-X-12	24 DC	3PDT	5.19	4.41	4.18	3.94	3.25

Relays: Time Delay, 424-8—Reed, 426, 433-442—Telephone, 429—Spec. Purpose, 429-431

Sigma General-Purpose Relays



GENERAL-PURPOSE AC AND DC RELAYS

For light to medium load switching. .187" terminals solder, quick-connect or plug into sockets. Elec. life: 1 million oper. at 28 VDC; 500,000 at 115 VAC. Mech. life: 10 million oper. 10A rated contacts, 1.2W nom. pwr. Temp. range: Min., −49°F; Max., AC 1 and 2 pole, +131°F; DC, +158°F. Order PC or solder term. sockets below. 68R1, SPDT; 68R2, DPDT; 68R3 and 68R34, 3PDT with flanged case. ▪UL Recog. Wt. 3 oz. Write for larger quantity prices.

AC TYPES

Stock No.	Mfr's Type	COIL DATA Nom. VAC	Ohms	Pickup mA. VAC	EACH 1-9	10-49	50-74	75-99	100-Up
917-0885	68R1-12AC-SCO	12	21	10.2	4.12	3.50	3.33	3.15	2.80
917-0892	68R1-115AC-SCO	115	2250	93	4.12	3.50	3.33	3.15	2.80
917-0893	68R1-230AC-SCO	230	9110	196	4.54	3.85	3.66	3.47	3.08
917-0895	68R2-6AC-SCO	6	6	5.1	5.05	4.30	4.09	3.87	3.44
917-0897	68R2-12AC-SCO	12	21	10.2	5.05	4.30	4.09	3.87	3.44
917-0899	68R2-24AC-SCO	24	75	20.4	5.05	4.30	4.09	3.87	3.44
917-0903	68R2-115AC-SCO	115	2250	98	5.05	4.30	4.09	3.87	3.44
917-0904	68R2-230AC-SCO	230	9110	196	5.60	4.75	4.51	4.28	3.80
917-0906	68R3-6AC-SCO	6	4.5	5.1	5.80	4.85	4.61	4.37	3.88
917-0907	68R3-12AC-SCO	12	19	10.2	5.80	4.85	4.61	4.37	3.88
917-0909	68R3-24AC-SCO	24	74	20.4	5.80	4.85	4.61	4.37	3.88
917-0913	68R3-115AC-SCO	115	2000	98	5.80	4.85	4.61	4.37	3.88
917-0914	68R3-230AC-SCO	230	7500	196	6.25	5.30	5.04	4.77	4.24

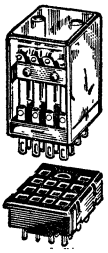
DC TYPES

Stock No.	Mfr's Type	COIL DATA Nom. VDC	Ohms	Pickup Max. VDC	EACH 1-9	10-49	50-74	75-99	100-Up
917-0886	68R1-12DC-SCO	12	120	9	4.00	3.40	3.23	3.06	2.72
917-0888	68R1-24DC-SCO	24	470	18	4.00	3.40	3.23	3.06	2.72
917-0891	68R1-110DC-SCO	110	10,000	83	4.54	3.85	3.66	3.47	3.08
917-0898	68R2-12DC-SCO	12	120	9	4.54	3.85	3.66	3.47	3.08
917-0900	68R2-24DC-SCO	24	470	18	4.54	3.85	3.66	3.47	3.08
917-0902	68R2-110DC-SCO	110	10,000	83	5.20	4.40	4.18	3.96	3.52
917-0908	68R3-12DC-SCO	12	120	9	5.20	4.40	4.18	3.96	3.52
917-0910	68R3-24DC-SCO	24	470	18	5.20	4.40	4.18	3.96	3.52
917-0912	68R3-110DC-SCO	110	10K	83	5.80	4.85	4.61	4.37	3.88
917-0082	AD621	Solder Terminal Socket			.88	.75	.71	.68	.60
917-0083	AD63	PC Terminal Socket			1.01	.85	.81	.77	.68

AC AND DC TYPES

Flanged case for direct-chassis mounting.

917-0923	68R34-115AC-SCO	115 (AC)	2K	98	5.80	4.85	4.61	4.37	3.88
917-0924	68R34-230AC-SCO	230 (AC)	7.5K	196	6.25	5.30	5.04	4.77	4.24
917-0918	68R34-12DC-SCO	12	120	9	5.20	4.40	4.18	3.96	3.52
917-0920	68R34-24DC-SCO	24	470	18	5.20	4.40	4.18	3.96	3.52
917-0922	68R34-110DC-SCO	110	10K	83	5.80	4.85	4.61	4.37	3.88

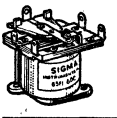


TYPE 67 AC AND DC 4PDT RELAYS

- Full 3 Ampere Rating AC or DC
- Choice of Sockets—Standard or Printed Circuit

Rugged miniature 4PDT relay is available for either AC or DC operation. Similar to Type 62 (pg. 417) but with in-line rather than stacked contacts and choice of sockets for either standard solder terminals or printed circuit terminals. Contacts rated 3 amperes, for both AC and DC types. Sensitivity, 1.2 VA for AC types, 900 milliwatts for DC types. Temperature range, −4°F to +140° F. Comes complete with plastic dust cover, designed for stud mounting with 14-prong plug. ▪U.L. Recog. 1/10 hp. Order type AD28 or AD29 socket (below). 1 5/16x1 7/64x5 5/64". 1 1/4 oz.

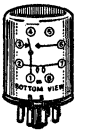
Stock No.	Mfr's Type and Coil Volts	Coil Ohms	EACH 1-9	10-49	50-74	75-99	100-249	250-Up
917-0861	67R4-12AC	43	5.50	5.00	4.75	4.50	4.00	3.25
917-0863	67R4-24AC	160	5.50	5.00	4.75	4.50	4.00	3.25
917-0867	67R4-115AC	3900	5.94	5.40	5.13	4.86	4.32	3.51
917-0860	67R4-6DC	40	4.84	4.40	4.18	3.96	3.52	2.86
917-0862	67R4-12DC	160	4.84	4.40	4.18	3.96	3.52	2.86
917-0864	67R4-24DC	650	4.84	4.40	4.18	3.96	3.52	2.86
917-0865	67R4-48DC	2600	5.06	4.60	4.37	4.14	3.68	2.99
917-0866	67R4-110DC	11k	6.16	5.10	4.85	4.59	4.08	3.32
917-0060	AD28Sdr.Term.Skt.		.66	.60	.57	.54	.48	.39
917-0062	AD29 P.C. Skt.		.66	.60	.57	.54	.48	.39



TYPE 65 COMMERCIAL SPDT RELAYS

Compact commercial relay gives positive response to low power signals. High adjustment stability, 5 million oper. mechanical life. Ideal for slide projectors, toys, games. Contacts rated 1 amp. Sensitivity, 90 mW. 65F1 is screw mtg. with solder term. 6 3/64x1 1/16x1 3/16". 65FP1 has terminals for printed circuit, 1 1/4x1 1/16x1 3/16". Wt. 1 oz.

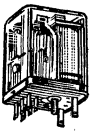
Stock No.	Mfr's Type and Coil Volts	Coil Ohms	EACH 1-24	25-99	100-499	250-Up
917-0851	*65F1A-12DC*	*1640*	1.80	1.60	1.52	1.44
917-0852	*65F1A-24DC*	*6560*	1.80	1.60	1.52	1.44
917-0854	*65FP1A-12DC*	*1640*	2.04	1.70	1.62	1.53
917-0855	65FP1A-24DC	6560	2.04	1.70	1.62	1.53



SPDT SNAP-SWITCH RELAYS

Snap-switch contact assembly provides positive operation whether input signal changes slowly or abruptly. Pin-hinge armature construction for mechanical life of 1 million oper. Contacts rated 2 A. Sens. 300 mW. Type 59A has dust cover, octal plug; 1 5/16"x1 19/32". 1 1/2 oz. 59F open, screw mtg., 2 9/32x1 1/8x 1 3/64". 2 oz.

Stock No.	Mfr's Type and Coil Voltage	Coil Ohms	EACH 1-9	10-99	100-249	250-Up
917-0750	59A01D-6DC	120	4.90	4.20	3.99	3.78
917-0751	59A01D-12DC	465	4.90	4.20	3.99	3.78
917-0752	59A01D-24DC	1800	4.90	4.20	3.99	3.78
917-0753	59F1D-12DC	465	2.88	2.45	2.33	2.21
917-0754	59F1D-24DC	1800	2.88	2.45	2.33	2.21



SERIES 70 GENERAL-PURPOSE RELAYS

Miniature relay for low-level to 5 amp multiple-circuit switching. ▪U.L. Approved. Directly interchangeable with most other types. Life of 50 million operations. Temperature range: +14°F to +158°F. Series 70's pick up signals as low as 85 mw. 70R2 are DPDT. 70R4 are 4PDT. 70R6 are 6PDT. Shipping wt. 1 oz.

STANDARD CONTACTS, 2 AMPERE

Stock No.	Type No.	Coil Data Nom. VDC	Resist. (ohms)	Nom. Power	EACH 1-9	10-49	50-74	75-99	100-Up
917-1014	70R2-12DC	12	185	700mw	3.84	3.25	3.09	2.93	2.60
917-1016	70R2-24DC	24	700	700mw	3.84	3.25	3.09	2.93	2.60
917-1020	70R2-110DC	110	15,000	700mw	5.55	4.70	4.47	4.23	3.76
917-1033	70R4-12DC	12	185	700mw	4.25	3.60	3.42	3.24	2.88
917-1035	70R4-24DC	24	700	700mw	4.25	3.60	3.42	3.24	2.88
917-1039	70R4-110DC	110	15,000	700mw	6.14	5.20	4.94	4.68	4.16
917-1052	70R6-12DC	12	90	1.4W	5.43	4.60	4.37	4.14	3.68
917-1058	70R6-110DC	110	9000	1.4W	6.84	5.80	5.51	5.22	4.64

STANDARD SCO CONTACT, 5-AMPERE

Bifurcated Contacts*

917-1013	70R2-6DC-SCO	6	52	700mw	3.84	3.25	3.09	2.93	2.60
917-1036	70R4-24DC-SCO	24	700	700mw	4.25	3.60	3.42	3.24	2.88
917-1038	70R4-48DC-SCO	48	2500	700mw	4.48	3.80	3.61	3.42	3.04
917-1053	70R6-12DC-SCO	12	90	1.4W	5.43	4.60	4.37	4.14	3.68
917-1057	70R6-48DC-SCO	48	1550	1.4W	5.72	4.85	4.61	4.37	3.88
917-1007	70R2T-12DC-SCO	12*	185	700mw	4.31	3.65	3.47	3.29	2.92
917-1008	70R2T-24DC-SCO	24*	700	700mw	4.31	3.65	3.47	3.29	2.92
917-1028	70R4T-12DC-SCO	12*	185	700mw	4.96	4.20	3.99	3.78	3.36
917-1030	70R4T-48DC-SCO	48*	2500	700mw	5.07	4.30	4.09	3.87	3.44
917-1047	70R6T-12DC-SCO	12*	90	1.4W	6.02	5.10	4.85	4.59	4.08
917-1048	70R6T-24DC-SCO	24*	430	1.4W	6.02	5.10	4.85	4.59	4.08

SENSITIVE TYPES

Stock No.	Type No.	Coil Data Resist. (Ohms)	Pickup Max. Ma	Dropout Min. MA	Pickup Power Mw	EACH 1-9	10-49	50-74	75-99	100-Up
917-1001	70R2S-1000	1000	8.5	.85	85	4.25	3.60	3.42	3.24	2.88
917-1002	70R2S-2500	2500	5.8	.58	85	4.25	3.60	3.42	3.24	2.88
917-1003	70R2S-5000	5000	4.1	.41	85	4.72	4.00	3.80	3.60	3.20
917-1004	70R2S-10,000	10,000	3.1	.31	85	5.19	4.40	4.18	3.96	3.52
917-1023	70R4S-2500	2500	8.4	.84	175	4.72	4.00	3.80	3.60	3.20
917-1024	70R4S-5000	5000	6.2	.62	175	5.19	4.40	4.18	3.96	3.52
917-1025	70R4S-10,000	10,000	4.5	.45	175	5.66	4.80	4.56	4.32	3.84
917-1041	70R65-1000	1000	16.0	1.6	250	6.02	5.10	4.85	4.59	4.08
917-1042	70R65-2500	2500	10.0	1.0	250	6.02	5.10	4.85	4.59	4.08
917-1043	70R65-5000	5000	7.2	.72	250	6.61	5.60	5.32	5.04	4.48

SOCKETS

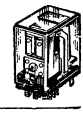
Stock No.	Description	Poles	EACH 1-24	25-49	50-74	75-99	100-Up
917-0084	Socket Assembly AD64	2	.65	.55	.52	.50	.44
917-0086	Socket Assembly AD65	4	.77	.65	.62	.59	.52
917-0087	Socket Assembly AD66	6	1.12	.95	.90	.86	.76
917-0088	Socket Assembly AD67	2	.65	.55	.52	.50	.44
917-0089	Socket Assembly AD68	4	.77	.65	.62	.59	.52
917-0090	Socket Assembly AD69	6	1.12	.95	.90	.86	.76

Relays: Mil, 405—Sensitive, 430-1—T0-5 Size, 445—Solenoids, 442-4—Coaxial, 446

General-Purpose Relays

GENERAL PURPOSE

SIGMA TYPE 62 UNIVERSAL MINIATURE PLUG-IN RELAYS



Types with std. contacts rated 2 A at 28 VDC/115 VAC; SCO contacts, 5 A at 28 VDC; 4 A at 115 VAC. Bifurcated-contact (T) for dry-circuit switching 2 A at 28 VDC, 1 A at 115 VAC. Sens. 700 mW (6PDT, 1.4 W). Sensitive types (S) 1 A at 28 VDC. Stud mount or plug-in to solder term. socket or choice of 3 PC term. sockets (AD41, AD42, AD43, .100″ grid). 1 7/64x 49/64″ (HxD) 2P, 61/64″ w.; 4P, 1 3/16″ w.; 6P, 1 25/64″ w. 1 oz.

Stock No.	Mfr's Type and Coil Volts	Coil Ohms	Action	EACH 1-9	10-49	50-74	75-99	100-249	250-Up
917-0759	*62R2-12DC*	185	DPDT	3.50	3.05	2.80	2.75	2.44	1.98
917-0760	62R2-24DC	700	DPDT	3.50	3.05	2.80	2.75	2.44	1.98
917-0762	62R2-110DC	15000	DPDT	5.20	4.50	4.28	4.05	3.60	2.93
917-0779	62R4-12DC	185	4PDT	4.00	3.40	3.23	3.06	2.72	2.21
917-0780	62R4-24DC	700	4PDT	4.00	3.40	3.23	3.06	2.72	2.21
917-0782	62R4-110DC	15000	4PDT	5.90	5.00	4.75	4.50	4.00	3.25
917-0801	62R6-12DC	90	6PDT	5.20	4.50	4.18	3.96	3.52	2.86
917-0802	62R6-24DC	430	6PDT	5.20	4.50	4.18	3.96	3.52	2.86
917-0804	62R6-110DC	9000	6PDT	6.80	5.60	5.15	5.04	4.48	3.64
917-0763	62R2-6DC-SCO	52	DPDT	3.70	3.15	2.99	2.84	2.52	2.05
917-0764	62R2-12DC-SCO	185	DPDT	3.70	3.15	2.99	2.84	2.52	2.05
917-0765	62R2-24DC-SCO	700	DPDT	3.70	3.15	2.99	2.84	2.52	2.05
917-0766	62R2-48DC-SCO	2500	DPDT	3.80	3.25	3.09	2.93	2.60	2.11
917-0767	62R2-110DC-SCO	15K	DPDT	5.40	4.60	4.37	4.14	3.68	2.99
917-0784	62R4-6DC-SCO	52	4PDT	4.22	3.60	3.42	3.24	2.88	2.34
917-0785	62R4-12DC-SCO	185	4PDT	4.22	3.60	3.42	3.24	2.88	2.34
917-0786	62R4-24DC-SCO	700	4PDT	4.22	3.60	3.42	3.24	2.88	2.34
917-0787	62R4-48DC-SCO	2500	4PDT	4.49	3.80	3.61	3.42	3.04	2.47
917-0788	62R4-110DC-SCO	15K	4PDT	6.10	5.20	4.94	4.68	4.16	3.38
917-0806	62R6-6DC-SCO	25	6PDT	5.65	4.80	4.56	4.32	3.84	3.12
917-0807	62R6-12DC-SCO	90	6PDT	5.65	4.80	4.56	4.32	3.84	3.12
917-0808	62R6-24DC-SCO	430	6PDT	5.65	4.80	4.56	4.32	3.84	3.12
917-0809	62R6-48DC-SCO	1550	6PDT	5.90	5.00	4.75	4.50	4.00	3.25
917-0810	62R6-110DC-SCO	9000	6PDT	6.80	5.80	5.51	5.22	4.64	3.77
917-0773	62R2T-6DC	52	DPDT	4.05	3.45	3.28	3.11	2.76	2.24
917-0774	62R2T-12DC	185	DPDT	4.05	3.45	3.28	3.11	2.76	2.24
917-0775	62R2T-24DC	700	DPDT	4.05	3.45	3.28	3.11	2.76	2.24
917-0776	62R2T-48DC	2500	DPDT	4.16	3.55	3.37	3.20	2.84	2.31
917-0777	62R2T-110DC	15K	DPDT	5.77	4.90	4.66	4.41	3.92	3.19
917-0795	62R4T-6DC	52	4PDT	4.70	4.00	3.80	3.60	3.20	2.60
917-0796	62R4T-12DC	185	4PDT	4.70	4.00	3.80	3.60	3.20	2.60
917-0797	62R4T-24DC	700	4PDT	4.70	4.00	3.80	3.60	3.20	2.60
917-0798	62R4T-48DC	2500	4PDT	4.80	4.10	3.90	3.69	3.28	2.67
917-0799	62R4T-110DC	15K	4PDT	6.35	5.40	5.13	4.86	4.32	3.51
917-0816	62R6T-6DC	25	6PDT	5.80	4.90	4.66	4.41	3.92	3.19
917-0817	62R6T-12DC	90	6PDT	5.80	4.90	4.66	4.41	3.92	3.19
917-0818	62R6T-24DC	430	6PDT	5.80	4.90	4.66	4.41	3.92	3.19
917-0819	62R6T-48DC	1550	6PDT	5.90	5.00	4.75	4.50	4.00	3.25
917-0820	62R6T-110DC	9000	6PDT	7.40	6.30	5.99	5.67	5.04	4.10

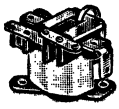
SENSITIVE RELAYS

Stock No.	Type and Coil Ohms	Pickup mW	EACH 1-9	10-49	50-74	75-99	100-249	250-Up
917-0769	62R2S-2500	85	4.00	3.40	3.23	3.06	2.72	2.21
917-0770	62R2S-5000	85	4.50	3.80	3.61	3.42	3.04	2.47
917-0771	62R2S-10,000	85	4.95	4.20	3.99	3.78	3.36	2.73
917-0790	62R4S-2500	175	4.50	3.80	3.61	3.42	3.04	2.47
917-0791	62R4S-5000	175	4.95	4.20	3.99	3.78	3.36	2.73
917-0792	62R4S-10,000	175	5.40	4.60	4.37	4.14	3.68	2.99
917-0812	62R6S-2500	250	5.80	4.90	4.66	4.41	3.92	3.19
917-0813	62R6S-5000	250	6.35	5.40	5.13	4.86	4.32	3.51
917-0814	62R6S-10,000	250	6.95	5.90	5.61	5.31	4.72	3.84

SOCKETS

917-0050	*AD22 2-Sold. Term. Socket*	.64	.55	.52	.50	.44	.36
917-0052	AD23 2-P P.C. Socket	.64	.55	.52	.50	.44	.36
917-0074	AD41 2-P P.C. Socket	.64	.55	.52	.50	.44	.36
917-0053	*AD24 4-Sold. Term. Socket*	.76	.65	.62	.59	.52	.42
917-0054	AD25 4-P P.C. Socket	.76	.65	.62	.59	.52	.42
917-0076	AD42 4-P P.C. Socket	.76	.65	.62	.59	.52	.42
917-0056	AD26 6-Sold. Term. Socket	1.12	.95	.90	.85	.76	.62
917-0058	AD27 6-P P.C. Socket	1.12	.95	.90	.85	.76	.62
917-0078	AD43 6-P P.C. Socket	1.12	.95	.90	.86	.76	.62

SIGMA TYPE 11 LOW-PRICED RELAYS



General-purpose DC or shaded pole AC. DC types for on-off circuits with gradually changing current; AC for on-off only. SPDT silver contacts: 1 A at 28 VDC/120 VAC. Up to 10g vibration or 75g shock, non-operating. Sens., DC relays 50 mW; AC relays 0.3 VA. For —40° to 122°F. U.L. Comp. Prog.-Recog., C.S.A. Listed. Screw mtg., solder terms., except *shoulder lug mtg., PC terms. 1 1/16x1 3/16x1 7/32″. 1 oz.

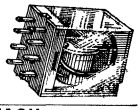
TYPE 11F-G/SIL DC RELAYS

Stock No.	Mfr's Type and Coil Ohms	mA DC	EACH 1-9	10-99	100-249	250-Up
917-0310	11F-250-G/SIL	14.0	3.48	2.95	2.80	2.66
917-0312	11F-550-G/SIL	9.5	3.48	2.95	2.80	2.66
917-0314	*11F-1000-GSL*	7.0	3.48	2.95	2.80	2.66
917-0316	11F-1500-G/SIL	5.8	3.48	2.95	2.80	2.66
917-0318	11F-2300-G/SIL	4.6	3.48	2.95	2.80	2.66
917-0320	11F-6000-G/SIL	2.9	3.72	3.20	3.04	2.88
917-0322	11F-9000-G/SIL	2.4	4.53	3.85	3.66	3.47
917-0326	11FP-1000-G/SIL*	7.0	3.52	3.00	2.85	2.70
917-0329	11FP-2300-G/SIL*	4.6	3.52	3.00	2.85	2.70

TYPE 11FZ-ACS/SIL AC RELAYS

Stock No.	Mfr's Type and Coil Ohms	V AC	EACH 1-9	10-49	50-74	75-99	100-Up
917-0334	11FZ-25-ACS/SIL	6	5.35	4.55	4.32	4.10	3.64
917-0337	11FZ-9000-ACS/SIL	115	6.30	5.35	5.08	4.82	4.28

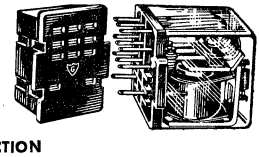
GUARDIAN NEW 1330/1335 DPDT 5-AMP RELAYS



Plug-in miniature relays (1 3/32x3/4x57/64″ HWD) take 1330-1ST solder terminal socket or 1330-2PC PC terminal socket. Socket cutout, .759x .830″ with .025″ radii at 4 corners. For chassis .031-.062″ thick. 5-amp contact rating at 30 VDC or 120 VAC resistive. Lexan cover. Av. wt. 1 oz.

Stock No.	Mfr's Type	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
802-1850	1330-2C-6A	6 AC	4.48	3.80	3.42	3.23	2.66
802-1852	1330-2C-12A	12 AC	4.48	3.80	3.42	3.23	2.66
802-1854	1330-2C-24A	24 AC	4.48	3.80	3.42	3.23	2.66
802-1856	1330-2C-120A	120 AC	4.72	4.00	3.60	3.40	2.80
802-1860	1335-2C-6D	6 DC	4.39	3.72	3.35	3.16	2.60
802-1862	1335-2C-12D	12 DC	4.39	3.72	3.35	3.16	2.60
802-1864	1335-2C-24D	24 DC	4.39	3.92	3.35	3.16	2.60
802-1849	1330-1ST	Solder Term. Skt.	1-9 Ea. .63	10-Up .50			
802-1859	1330-2PC	PC Term. Skt.	1-9 Ea. .63	10-Up .50			

GUARDIAN LOW-COST ENCLOSED 10 AMP RELAYS



Feature terminals that can be used as solder lug, socket plug-in, or with AMP 110 Faston quick-connect series. Contacts rated 10 amps at 115 VAC, non-inductive. 1-piece switch reduces contact resistance. 1 5/32x1 11/16x1 9/16″. Less socket, below. Shpg. wt., 3 oz.

DPDT ACTION

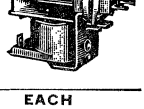
Stock No.	Type IR-	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-249	250-499
802-0300	1220-2C-6A	6 AC	6.07	4.40	3.96	3.74	3.08	2.86
802-0302	1220-2C-24A	24 AC	6.07	4.40	3.96	3.74	3.08	2.86
802-0304	1220-2C-120A	120 AC	6.07	4.40	3.96	3.74	3.08	2.86
802-0325	1225-2C-12D	12 DC	6.07	4.40	3.96	3.74	3.08	2.86
802-0327	1225-2C-24D	24 DC	6.07	4.40	3.96	3.74	3.08	2.86

3PDT ACTION

802-0310	1220-3C-24A	24 AC	6.75	4.95	4.46	4.21	3.47	3.22
802-0312	*1220-3C-120A*	120 AC	6.75	4.95	4.46	4.21	3.47	3.22
802-0314	1220-3C-240A	240 AC	6.90	5.23	4.71	4.45	3.66	3.40
802-0332	1225-3C-12D	12 DC	6.54	4.95	4.46	4.21	3.47	3.22
802-0334	1225-3C-24D	24 DC	6.75	4.95	4.46	4.21	3.47	3.22

Type 1220-51 Phenolic Relay Sockets. For use with solder lug or AMP Fasten 110 terminals. Shpg. wt. 2 oz.
802-0299. 1-9.....Each .80 10-Up.....Each .60

GUARDIAN SERIES 900-905 DPDT 10-A RELAYS



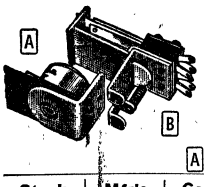
Low-cost DPDT relays featuring a trouble-free design that is based upon a minimum number of parts. All contacts are rated 10 amperes at 115 volts, AC resistive. One-piece switch mounting clips and return springs, molded bobbins and coil covers, keyed and locked lifters. 1 11/16x2 11/16x 15/64″. 5 oz.

Stock No.	Coil Volts	Stock No.	Coil Volts	EACH 1-9	10-24	25-Up
802-1450	14 AC	802-1456	6 DC	1.90	1.80	1.65
802-1452	120 AC	802-1458	12 DC	1.90	1.80	1.65
802-1454	240 AC	802-1460	24 DC	1.90	1.80	1.65

General-Purpose Relays

GUARDIAN RELAYS

200 SERIES RELAY ASSEMBLIES



Separate coils (A) and contact assemblies (B) for custom-designing your own relays. (Use Contact Switch Parts below to add poles.) Rated at 115 VAC, noninductive. Standard contact assembly size, 2⅞x1⅛x1¾". †Midget; size, 2 1/16x1⅛x1½". Av. shpg. wt., 3 oz.

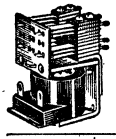
A RELAY ASSEMBLIES

Stock No.	Mfr's Type	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
802-1319	200-6A	6 AC	2.68	2.04	1.84	1.73	1.43	1.33
802-1323	200-12A	12 AC	2.68	2.04	1.84	1.73	1.43	1.33
802-1327	200-24A	24 AC	2.68	2.04	1.84	1.73	1.43	1.33
802-1333	*200-120A*	115 AC	2.76	2.37	2.13	2.01	1.66	1.54
802-1335	200-240A	230 AC	4.10	3.14	2.83	2.67	2.20	2.04
802-1321	200-6D	6 DC	2.90	2.20	1.98	1.87	1.54	1.43
802-1325	200-12D	12 DC	2.90	2.20	1.98	1.87	1.54	1.43
802-1329	200-24D	24 DC	2.90	2.20	1.98	1.87	1.54	1.43
802-1331	200-110D	110 DC	3.98	2.92	2.63	2.48	2.04	1.90

B CONTACT SWITCH ASSEMBLIES

Stock No.	Mfr's Type	Contacts Action	Amps	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
802-1311	200-1	SPDT	8	2.20	1.76	1.58	1.50	1.23	1.14
802-1313	200-2	DPDT	8	3.06	2.31	2.08	1.96	1.62	1.50
802-1315	200-4	DPDT	12.5	3.42	2.59	2.33	2.20	1.81	1.68
802-1317	200-5	4PDT	8	5.10	4.07	3.66	3.46	2.85	2.65
802-1305	200-M1†	SPDT	10	2.16	1.65	1.49	1.40	1.16	1.07
802-1307	200-M2†	DPDT	10	2.68	2.04	1.84	1.73	1.43	1.33
802-1309	200-M5†	4PDT	8	4.30	3.30	2.97	2.81	2.31	2.15

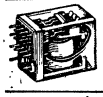
ALL-PURPOSE RELAYS



Specially designed to provide unusually heavy power control for their compact size. All are rated 10 amperes at 115 V. 60 Hz AC, except 4PDT types, rated 8 amperes. 1-hole base mounting. **Last digits of Type indicate coil voltage.** SPST normally open. **Phone or write for prices in larger quantities.** 1 11/16x1½x1". 4 oz.

Stock No.	Mfr's Type and Voltage	Action	EACH 1-9	10-24	25-49	50-99	100-Up
802-0202	640U-A-24AC	SPST	4.02	3.19	2.87	2.71	2.23
802-0204	640U-A-120AC	SPST	4.02	3.19	2.87	2.71	2.23
802-0207	640U-C-24AC	SPDT	4.30	3.47	3.12	2.95	2.43
802-0209	640U-C-120AC	SPDT	4.30	3.47	3.12	2.95	2.43
802-0214	640U-2C-24AC	DPDT	4.60	3.74	3.37	3.18	2.62
802-0216	640U-2C-120AC	DPDT	4.60	3.74	3.37	3.18	2.62
802-0240	645-2C-6DC	DPDT	4.60	3.74	3.37	3.18	2.62
802-0242	645-2C-12DC	DPDT	4.60	3.74	3.37	3.18	2.62
802-0244	645-2C-24DC	DPDT	4.60	3.74	3.37	3.18	2.62
802-0219	640U-4C-24AC	4PDT	6.70	5.50	4.95	4.68	3.85
802-0221	640U-4C-120AC	4PDT	6.70	5.50	4.95	4.68	3.85
802-0248	645-4C-24DC	4PDT	6.70	5.50	4.95	4.68	3.85
802-0250	645-4C-110DC	4PDT	7.00	5.78	5.20	4.91	4.05

1310 AND 1315 MINIATURE RELAYS



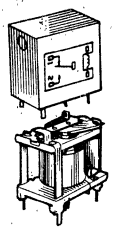
*4DPT plug-in or †4PDT printed circuit styles. ‡DPDT with neon light. **Push to test. Contacts rated 5 amps at 30 VDC or 120 VAC resistive. 11 7/64x5 5/64x1 7/64". ▪U.L. Recog. 1⅛ oz.

Stock No.	Mfr's Type	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
802-1810	1310C4C*	6 AC	5.90	5.00	4.50	4.25	3.50
802-1812	1310-4C*	12 AC	5.90	5.00	4.50	4.25	3.50
802-1814	1310-4C*	24 AC	5.90	5.00	4.50	4.25	3.50
802-1816	1310-4C*	120 AC	6.10	5.20	4.68	4.42	3.64
802-1830	1315-4C*	6 DC	5.05	4.30	3.87	3.66	3.01
802-1832	1315-4C*	12 DC	5.05	4.30	3.87	3.66	3.01
802-1834	1315-4C*	24 DC	5.05	4.30	3.87	3.66	3.01
802-1836	1315-4C*	110 DC	5.65	4.85	4.37	4.12	3.40
802-1820	1310P-4C†	6 AC	5.90	5.00	4.50	4.25	3.50
802-1822	1310P-4C†	12 AC	5.90	5.00	4.50	4.25	3.50
802-1824	1310P-4C†	24 AC	5.90	5.00	4.50	4.25	3.50
802-1826	1310P-4C†	120 AC	6.10	5.20	4.68	4.42	3.64
802-1840	1315P-4C†	6 DC	5.05	4.30	3.87	3.66	3.01
802-1842	1315P-4C†	12 DC	5.05	4.30	3.87	3.66	3.01
802-1844	1315P-4C†	24 DC	5.05	4.30	3.87	3.66	3.01
802-1846	1315P-4C†	110 DC	5.65	4.85	4.37	4.12	3.40
802-1818	1310N-4C‡	120 AC	6.80	5.80	5.22	4.93	4.06
802-1838	1315N-4C‡	24 DC	5.75	4.90	4.41	4.17	3.43
802-1839	1315N-4C‡	110 DC	6.35	5.45	4.91	4.63	3.82
802-1817	1310B-4C**	120 AC	6.80	5.80	5.22	4.93	4.06
802-1835	1315B-4C**	24 DC	5.75	4.90	4.41	4.17	3.43
802-1837	1315B-4C**	110 DC	6.35	5.45	4.91	4.63	3.82

Relay Sockets. ‡Solder terminals or §PC terms. 1 oz
802-1805. ‡Series 1 ST...Ea. .60 802-1807. §Series 2 PC....Ea. .60

CORNELL-DUBILIER RELAYS

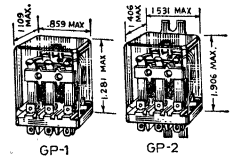
MINIATURE GENERAL PURPOSE RELAYS



600 SERIES. Sensitive relays with tamperproof nylon dust cover. Compact size with PC terminals. Ideal for remote control, warning systems, power amplifier, other light commercial/industrial uses. Recognized under the Component Program of Underwriter's Laboratories. High reliability and long life at rated loads. Palladium crossbar contacts; dry circuit to 2 amps resis. at 28 VDC or 115 VAC. Contacts: SPDT except 683 types, DPDT. Nom. DC coil power: SPDT, 100 mW; DPDT, 360 mW. 1.2x1.2x0.75". Shpg. wt. 1 oz.

Stock No.	Mfr's Type	Coil Volts	Coil Ohms	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-7510	603-6V	6 DC	340	2.11	2.00	1.90	1.42	1.18	1.11
755-7512	603-12V	12 DC	1350	2.43	2.31	2.19	1.64	1.36	1.28
755-7514	603-24V	24 DC	5400	2.82	2.68	2.54	1.90	1.58	1.48
755-7540	*683-6V*	6 DC	100	3.30	3.14	2.97	2.23	1.85	1.73
755-7542	683-12V	12 DC	400	3.36	3.19	3.02	2.27	1.88	1.76
755-7544	683-24V	24 DC	1500	3.43	3.26	3.09	2.32	1.92	1.80
755-7519	623-12V	12 AC	30	2.78	2.64	2.50	1.88	1.56	1.46
755-7520	623-24V	24 AC	110	2.82	2.68	2.54	1.90	1.58	1.48
755-7521	623-115V	115 AC	2100	3.02	2.87	2.72	2.04	1.69	1.59

C. P. CLARE GENERAL PURPOSE RELAYS



GP-1 GP-2

Type GP-1. Miniature 4PDT relays with dust cover enclosure built to meet U.L. Component Recognition. Silver-gold flashed contacts rated 3 A at 30VDC, or 120VAC, resistive. Solder terminals. Size: 1.28x .859x.109". Wt. 2 oz.

Type GP-3. 3PDT relay rated at 10 A at 28 VDC resistive or 120/300VAC. Has Lexan® dust cover. Mechanical life expectancy exceeds 100 million operations. **2-pole and single pole also available.** Size: 2.90x1.531x1.406".

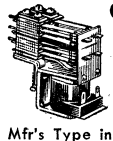
GP-1 SERIES 4PDT RELAYS

Stock No.	Mfr's Type	Volts	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
752-1650	GP1R11A0000	6 AC	5.35	4.55	4.32	4.10	3.19	2.96
752-1651	GP1R11A1000	12 AC	5.35	4.55	4.32	4.10	3.19	2.96
752-1652	GP1R11A2000	24 AC	5.35	4.55	4.32	4.10	3.19	2.96
752-1654	GP1R11A6000	120 AC	5.70	4.85	4.61	4.37	3.40	3.15
752-1655	GP1R11D0000	6 DC	5.10	4.30	4.09	3.87	3.01	2.80
752-1656	GP1R11D1000	12 DC	5.10	4.30	4.09	3.87	3.01	2.80
752-1657	GP1R11D2000	24 DC	5.10	4.30	4.09	3.87	3.01	2.80
752-1658	GP1R11D3000	48 DC	5.15	4.40	4.18	3.96	3.08	2.86
752-1659	GP1R11D4000	90 DC	5.40	4.60	4.37	4.14	3.22	2.99
752-1660	GP1R11D5000	110 DC	5.70	4.85	4.61	4.37	3.40	3.15
752-1662	GP1001 Socket, Solder Lug		.71	.60	.57	.54	.42	.39
752-1664	GP1003 Socket, Printed Circuit		.71	.60	.57	.54	.42	.39

GP-3 3PDT RELAYS

Stock No.	Mfr's Type	Volts	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
752-1670	GP3R231AA0000	6 AC	5.00	4.25	4.04	3.83	2.98	2.87
752-1671	GP3R231AA1000	12 AC	5.00	4.25	4.04	3.83	2.98	2.87
752-1672	GP3R231AA2000	24 AC	5.00	4.25	4.04	3.83	2.98	2.87
752-1673	GP3R231AA6000	120 AC	5.00	4.25	4.04	3.83	2.98	2.87
752-1674	GP3R231AA7000	240 AC	5.35	4.55	4.32	4.10	3.19	2.96
752-1675	GP3R231AD0000	6 DC	4.60	3.90	3.71	3.51	2.73	2.54
752-1676	GP3R231AD1000	12 DC	4.60	3.90	3.71	3.51	2.73	2.54
752-1677	GP3R231AD2000	24 DC	4.60	3.90	3.71	3.51	2.73	2.54
752-1678	GP3R231AD5000	110 DC	5.00	4.25	4.04	3.83	2.98	2.87
752-1666	GPS3001 Solder Terminal Socket		.81	.69	.66	.62	.48	.45
752-1668	GPS3003 Printed Circuit Terminal Socket		.93	.79	.75	.71	.55	.52

GUARDIAN 15-AMPERE ALL-PURPOSE RELAYS



Silver contacts rated at 15 amperes, 115 V, 60 Hz non-inductive load. AC coils usable −15%, +20% rated voltage; DC coils, −20%, +10%. Power required: AC—6 VA, 60 Hz AC; DC—1.5 watts min. and 3 watts max. Single screw center-hole mounting (8-32 tap). Solder lug terminals. **Last digits in Mfr's Type indicates coil voltage.** Size, 2 9/16x2 29/32". ▪AC type U.L. Component-Program Recognized. Av. shpg. wt. 4 oz.

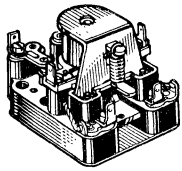
Stock No.	Mfr's Type	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
802-13552	40-A-120AC	SPST	4.21	3.57	3.21	3.04	2.50
802-13762	45-A-12DC	SPST	4.21	3.57	3.21	3.04	2.50
802-13782	45-A-24DC	SPST	4.21	3.57	3.21	3.04	2.50
802-13592	40-2C-24AC	DPDT	5.29	4.48	4.04	3.81	3.14
802-13632	40-2C-120AC	DPDT	5.29	4.48	4.04	3.81	3.14
802-13842	45-2C-12DC	4PDT	5.29	4.48	4.04	3.81	3.14
802-13702	40-4C-120AC	4PDT	7.75	6.57	5.91	5.58	4.60
802-13902	45-4C-12DC	4PDT	7.75	6.57	5.91	5.58	4.60
802-13952	45-4C-24DC	4PDT	7.75	6.57	5.91	5.58	4.60

Relays: Mil, 405—Sensitive, 430-1—T-Bar, 432—TO-5 Size, 445—Solenoids, 442-4—Coaxial, 446

Power Relays—Guardian, Sigma, Magnecraft

POWER RELAYS

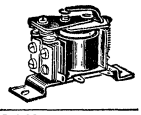
GUARDIAN 2600 SERIES 25 AMP CONTACT POWER RELAYS



Feature inverted coil construction that protects armature and contacts from mechanical damage or shorting. DPDT-AC coils rated at 240 V continuous with 75% power factor. Operating power requirement is 9.5 VA, 60 Hz. "Press-to-test" armature level for convenient manual circuit testing. 10 amp SPDT aux. switch available if needed—has solder lug blade tails, two mtg. holes on 1⅞" cent. 3⁵⁄₁₆x2½x2¹⁄₁₆". 12 oz.

Stock No.	Mfr's Type and Voltage	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
802-2032	2600U-DPDT-24AC	9.88	7.43	6.69	6.32	5.20	4.83
802-2033	2600U-DPDT-120AC	9.88	7.43	6.69	6.32	5.20	4.83
802-2034	2600U-DPDT-240AC	10.38	7.81	7.03	6.64	5.47	5.08
802-2035	2605U-DPDT-12DC	9.88	7.43	6.69	6.32	5.20	4.83
802-2036	2605U-DPDT-24DC	9.88	7.43	6.69	6.32	5.20	4.83
802-2037	2605U-DPDT-110DC	10.38	7.81	7.03	6.64	5.47	5.08
802-2038	2620U-DPST-24AC	7.51	5.65	5.09	4.80	3.96	3.67
802-2039	2620U-DPST-120AC	7.51	5.65	5.09	4.80	3.96	3.67
802-2040	2620U-DPST-240AC	8.17	6.15	5.54	5.23	4.31	4.00
802-2041	2625U-DPST-12DC	7.58	5.70	5.13	4.85	3.99	3.71
802-2042	2625U-DPST-24DC	7.58	5.70	5.13	4.85	3.99	3.71
802-2043	2625U-DPST-110DC	8.17	6.15	5.54	5.23	4.31	4.00
802-2031	2600U-SPDT-Aux. Sw.		1.49	1.34	1.27	1.04	.97
802-2030	2600U-Quick Conn. Term. Kit		.74	.67	.63	.52	.48

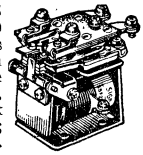
GUARDIAN 20 AMP HEAVY-DUTY SPST AC RELAYS



For switching currents up to 20 amperes @ 230 volts, 60 Hz AC, noninductive load. Phenolic contact mounting block has ⅝" dual contacts. Phenolic is tested at 1500 V breakdown to ground. Silver-alloy contacts are SPST, N.O. With hardware. 3x1⅞x1¾". 6 oz.

Stock No.	Type and Coil Volts	Coil Ohms	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
802-0165	IR-220-A120AC	600	7.39	5.56	5.00	4.73	3.89	3.61
802-0167	IR-220-A240AC	2500	8.12	6.11	5.50	5.19	4.28	3.97

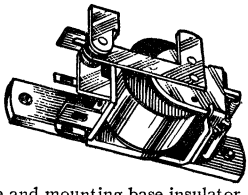
SIGMA OPEN TYPE 55 AC/DC POWER RELAYS



Multiple switching of resistive loads up to 15 amperes at 230 VAC, or up to 10 amperes at 30 VAC. Rugged and reliable types for continuous heavy duty use. Handle up to 60-ampere inrush current without contact welding. Temperature range, +14°F to +158°F. All types screw-mounted, with solder terminals. Size: Type 55F2 DPDT, 2¹⁄₁₆x2¹⁄₁₆x2¹⁵⁄₁₆"; Type 55F3 3PDT, 2¹¹⁄₁₆x1¹⁵⁄₁₆x1¹⁵⁄₁₆"; Type 55F4, 4PDT, 2⁵⁵⁄₆₄x2²⁄₃₂x2¹¹⁄₃₂". Average shpg. wt. 7 oz.

Stock No.	Mfr's Type and Coil Volts	Coil Ohm	Action	EACH 1-9	10-49	50-74	75-99	100-249	250-Up
917-0703	55F2-115AC	635	DPDT	10.05	8.90	8.46	8.01	7.12	5.79
917-0701	55F2-24DC	327	DPDT	9.70	8.60	8.17	7.74	6.88	5.59
917-0707	55F3-115AC	635	3PDT	11.41	10.10	9.60	9.09	8.08	6.57
917-0705	55F3-24DC	327	3PDT	11.07	9.80	9.31	8.82	7.84	6.37
917-0711	55F4-115AC	635	4PDT	13.44	11.90	11.31	10.71	9.52	7.74
917-0709	55F4-12DC	80	4PDT	12.76	11.30	10.74	10.17	9.04	7.35
917-0710	55F4-24DC	327	4PDT	12.76	11.30	10.74	10.17	9.04	7.35

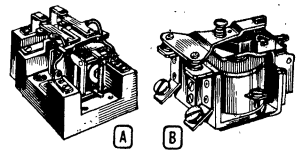
MAGNECRAFT 88K 15 AMP POWER SWITCHING RELAY



Provide lowest friction and maximum contact effectiveness. Silver cadmium oxide, gold-flashed contacts 15 amps @ 115VAC/32 VDC. Flexible moving contact arm for excellent contact wipe. Connections to terminals are made AMP Faston 250 receptacles on contacts, and Faston 110 on coil. Power: *3 VA. †1.5 W. Voltage operated relays pulled at 85% or less of nominal voltage at 25°C. With mounting base and mounting base insulator. Size (including mounting base) 2⅝x1⁵⁄₆₄x1¼". Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Coil Volts	Coil Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
850-0363	W88AKX-1*	24AC	.....	6.10	4.86	4.61	4.35	3.58
850-0364	W88AKX-2*	115AC	.....	6.10	4.86	4.61	4.35	3.58
850-0365	W88AKX-3*	230AC	.....	7.30	5.89	5.58	5.27	4.34
850-0536	W88KX-1†	6DC	25	5.80	4.66	4.41	4.17	3.43
850-0537	W88KX-2†	12DC	100	5.80	4.66	4.41	4.17	3.43
850-0538	W88KX-3†	24DC	400	5.80	4.66	4.41	4.17	3.43
850-0539	W88KX-4†	110DC	8000	6.70	5.40	5.11	4.83	3.98

[A] MAGNECRAFT HIGH VOLTAGE POWER RELAYS



Class 99. Designed for high-current switching. Molded contact barrier and phenolic base. Dielectric strength, 1500 VAC, rms. Screw terminals. Listed as across-the-line starters by Underwriter's Lab, Inc. except‡

Class 99 SPDT Relay. Single pole, double throw contacts (1 form "C") rated 25 amperes. 2½x2½x2½". Av. shpg. wt. 8 oz.

Stock No.	Mfr's Type	Coil Volts	Coil Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
850-0690	W99AX-2	115AC	.....	6.70	5.11	4.83	4.54	3.98
850-0691	W99AX-3	230AC	.....	6.90	5.27	4.98	4.69	4.10

Class 99 DPST Relay. Double pole, single throw contacts (2 form "A") N.O. rated 25 amps. 2⁵⁄₁₆x2½x2½". Av. wt. 9 oz.

850-0697	W99AX-9	115AC	.....	7.90	6.00	5.67	5.34	4.67
850-0698	W99AX-10	230AC	.....	8.00	6.17	5.82	5.48	4.80
850-0794	W99X-10	12DC	70	7.45	5.72	5.41	5.09	4.45
850-0795	W99X-11	24DC	290	7.47	5.74	5.42	5.10	4.47

Class 99 DPDT relay. DPDT contacts rated 25A, SPDT aux. contacts rated 5A. Power 3 VA. Screw terminals. 2½x4³⁄₃₂x2⁵⁄₁₆". Wt. 12 oz.

850-0703	W99AX-15	115AC	.....	11.30	9.39	8.87	8.34	7.30
850-0704	W99AX-16	230AC	.....	11.40	9.57	9.04	8.50	7.44

Class 99 DPDT Relay. Double pole, double throw contacts (2 form "C") rated 25 amps. 2⁵⁄₁₆x2½x3³⁄₁₆". Av. wt. 11 oz.

850-0693	W99AX-5	115AC	.....	9.91	7.59	7.17	6.74	5.90
850-0694	W99AX-6	230AC	.....	10.18	7.77	7.34	6.90	6.04
850-0790	W99X-6	12DC	70	9.58	7.31	6.90	6.50	5.68
850-0791	W99X-7	24DC	290	9.60	7.33	6.92	6.51	5.70

‡Class 99 SPST-N.O.-DB Relay. Normally open, double-break contacts (1 form "A") rated 50 amps. 2³⁄₃₂x2½x2½". Av. wt. 8 oz.

850-0675	W99ADX-1	24AC	.....	6.65	5.08	4.79	4.51	3.95
850-0676	W99ADX-2	115AC	.....	6.65	5.08	4.79	4.51	3.95
850-0677	W99ADX-3	230AC	.....	6.90	5.27	4.97	4.68	4.10
850-0720	W99DX-1	6DC	18	6.31	4.82	4.55	4.28	3.75
850-0721	W99DX-2	12DC	70	6.31	4.82	4.55	4.28	3.75
850-0722	W99DX-3	24DC	290	6.33	4.83	4.56	4.30	3.76
850-0723	W99DX-4	110DC	6000	6.77	5.17	4.88	4.59	4.02

[B] SPACE-SAVING POWER RELAYS

Classes 99S and 99SD. Similar to standard Class 99, but have no base. Same steel hinge pin armature bearings with oversize bearing surfaces for long life and contact effectiveness with adjustment stability. 99S: SPDT (1 Form "C") 25 amps. 99SD: SPDT N.O. (1 Form A)—double-break. 50 amps. 1⅞x½x2". Shpg. wt. 6 oz.

Stock No.	Mfr's Type	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
850-0750	W99SAX-1	24AC	8.67	6.62	6.25	5.88	5.15	4.59
850-0751	W99SAX-2	115AC	8.73	6.66	6.29	5.92	5.18	4.63
850-0752	W99SAX-3	230AC	8.99	6.86	6.48	6.10	5.33	4.76
850-0780	W99SX-1	6DC	8.38	6.40	6.04	5.69	4.98	4.44
850-0781	W99SX-2	12DC	8.40	6.42	6.06	5.70	4.99	4.46
850-0782	W99SX-3	24DC	8.43	6.44	6.08	5.72	5.01	4.47
850-0783	W99SX-4	110DC	8.81	6.72	6.35	5.98	5.23	4.67
850-0740	W99SADX-1	24AC	7.38	5.63	5.32	5.01	4.38	3.91
850-0741	W99SADX-2	115AC	7.48	5.71	5.39	5.07	4.44	3.96
850-0742	W99SADX-3	230AC	7.74	5.90	5.58	5.25	4.59	4.10
850-0765	W99SDX-1	6DC	7.19	5.49	5.19	4.88	4.27	3.81
850-0766	W99SDX-2	12DC	7.19	5.49	5.19	4.88	4.27	3.81
850-0767	W99SDX-3	24DC	7.24	5.53	5.22	4.91	4.30	3.84
850-0768	W99SDX-4	110DC	7.59	5.80	5.47	5.15	4.51	4.03

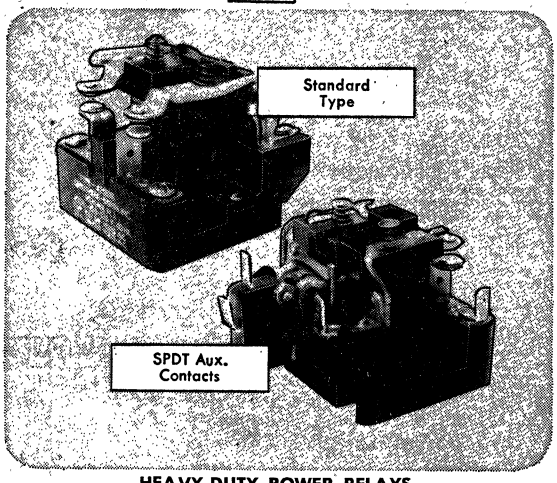
MAGNECRAFT 88KD 50-AMPERE GENERAL-PURPOSE RELAYS

Versatile relays with telephone-type-relay reliability at general-purpose-relay prices, for industrial applications. Heavy-duty silver alloy oxide, gold-flashed SPST-N.O. double make contacts rated 50 amperes at 115 VAC or 28 VDC, resistive. Stationary contacts assembled to insulated terminal board. Movable contacts and armature on molded phenolic insulator for excellent contact wipe. Terminals accept AMP Faston "250" receptacles on contacts, or "110" series coil. *Pull-in at 80% or less, DC; 85% or less, AC. †Resistance., ±10%. Single mtg. hole. 1¹⁄₁₆x1¹⁄₁₆x1½". Wt. 3 oz.

Stock No.	Mfr's Type	Coil V*	Coil Ohms†	EACH 1-9	10-24	25-49	50-99	100-Up
850-0510	W88KADX-1	24AC	...	6.25	5.04	4.77	4.51	3.71
850-0511	*W88KADX-2*	115AC	...	6.25	5.04	4.77	4.51	3.71
850-0525	W88KDX-1	6DC	25	5.54	4.47	4.23	4.00	3.29
850-0526	W88KDX-2	12DC	100	5.54	4.47	4.23	4.00	3.29
850-0527	W88KDX-3	24DC	400	5.54	4.47	4.23	4.00	3.29
850-0528	W88KDX-4	110DC	8000	6.58	5.30	5.02	4.74	3.91

Relays: Impulse, 422-3—Stepping, 422-4—Mercury Plunger, 425—Mercury-Wetted, 438, 441

Struthers-Dunn Inc. Power Relays



HEAVY-DUTY POWER RELAYS

- Contacts Rated 30 Amps
- Silver Cadmium-Oxide Contacts
- Available With Auxiliary Contacts

Heavy-duty power relays with DPST normally open, SPDT & DPDT silver cadmium-oxide contacts rated for 30 amps continuous service. Open construction, compact front panel mounted with screw connections. .250" quick connects available. SPDT, 120 volts, 10 amperes auxiliary contacts available. Standard coil voltages AC (10 VA) DC (2 W).

Optional Features on Relays Listed Below May Be Obtained Through Allied Electronics On Special Order. Contact Your Local Allied Office To Order—See Page 3 for locations.
.250" QUICK CONNECT TERMINALS
SPDT 115V, 10A AUXILIARY CONTACTS
BOTH .250" TERMINALS AND AUXILIARY CONTACTS

Stock No.	Type No.	Contacts	Coils	EACH 1-9	10-24	25-49	50-74	75-99	100-249
929-3XXX	425BXX	DPST	6, 12, 24, 120VAC	6.44	5.20	4.94	4.68	4.16	3.64
929-3240	425BXX	DPST	240VAC	7.06	5.70	5.42	5.13	4.56	3.99
929-4XXX	425BXX	DPST	6, 12, 24VDC	6.44	5.20	4.94	4.68	4.16	3.64
929-4110	425BXX	DPST	110VDC	7.32	5.90	5.61	5.31	4.72	4.13
929-5XXX	425XAX	SPDT	6, 12, 24, 120VAC	5.70	4.60	4.37	4.14	3.68	3.22
929-5240	245XAX	SPDT	240VAC	6.26	5.05	4.80	4.55	4.04	3.54
929-6XXX	425XAX	SPDT	6, 12, 24VDC	5.70	4.60	4.37	4.14	3.68	3.22
929-6110	425XAX	SPDT	110VDC	6.52	5.25	4.99	4.73	4.20	3.68
929-7XXX	425XBX	DPDT	6, 12, 24, 120VAC	8.56	6.90	6.56	6.21	5.52	4.83
929-7240	425XBX	DPDT	240VAC	9.36	7.55	7.17	6.80	6.04	5.29
929-7480	425XBX	DPDT	480VAC	10.42	8.40	7.98	7.56	6.72	5.88
929-8XXX	425XBX	DPDT	6, 12, 24VDC	8.56	6.90	6.56	6.21	5.52	4.83
929-8110	425XBX	DPDT	110VDC	9.36	7.55	7.17	6.80	6.04	5.29

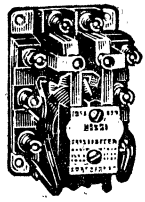
HOW TO ORDER

Where Stock Numbers Have X's in Last 4 Digits, You Must Complete By Adding Coil Voltage. Example: 929-3XXX, 425BXX @ 6VAC=929-3006.

A275KXX AND A275KXX91 REVERSING CONTACTORS

TYPE A275KXX. Uses 50% less coil power than solenoid types. Two 3-pole contactors on common frame, mechanically interlocked to prevent simultaneous closure, 1 hp at 120, 240, 480 VAC; 1, 2 or 3 phase with all contacts switching. 3 5/16x2 3/16x2 7/8". ■U.L. Recog. C.S.A. Listed. 1 lb. TYPE A275KXX91. Similar, but single pole double-throw auxiliary contacts on each armature. 3 5/8x2 3/4x2 7/8". 3 lbs. TYPE B175KXX. Larger, for heavier loads. 5 1/4x4 7/16x2 1/2". 4 lbs.

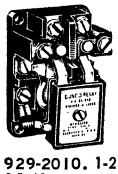
Stock No.	Mfr's Type	V AC	EACH 1-9	10-49	50-99	100-499	500-Up
929-0550	A275KXX	24	24.18	19.50	17.55	15.60	13.65
929-0553	A275KXX	120	24.18	19.50	17.55	15.60	13.65
929-0556	A275KXX	240	24.18	19.50	17.55	15.60	13.65
929-0560	A275KXX91	24	29.14	23.50	21.15	18.80	16.45
929-0563	A275KXX91	120	29.14	23.50	21.15	18.80	16.45
929-0566	A275KXX91	240	29.14	23.50	21.15	18.80	16.45
929-0730	B175KXX	115	36.58	29.50	26.55	23.60	20.65
929-0733	B175KXX	240	36.58	29.50	26.55	23.60	20.65



CADMIUM PLATED STANDARD MIDGET RELAYS

For control circuits, operation of small motors, heaters, lights. Contact resistive ratings: 6 amps at 24 or 115 VAC, or 24 VDC; 3 amps at 230 VDC; 0.5 amps at 115 VDC. Inrush on motor or lamp loads should not exceed 20 amps. All have insulation spacing in accordance with U.L. requirements for 300 volts. All metal parts have cadmium plating and chromate finish. Size, B1 series. 1 7/8x2 3/4"; A1XCX, 2 1/2x3 1/2". Av. shpg. wt. 1 lb.

Stock No.	Mfr's Type	V AC	Contact Action	EACH 1-9	10-49	50-99	100-499	500-Up
929-0710	B1HXX	115	DP-N.O.	13.38	10.30	9.27	8.24	7.21
929-0713	B1XAX	115	SPDT	14.82	11.40	10.26	9.12	7.98
929-0716	B1XBX	115	DPDT	18.84	14.50	13.05	11.60	10.13
929-0505	A1XCX	115	3PDT	23.08	19.60	17.64	15.68	13.72



415XBX SMALL POWER RELAY

For control of instruments, motors, valves, heating elements, etc. Heavy duty DPDT action with silver cadmium oxide, single-break contacts arranged for optimum wiping action. Coil is epoxy encapsulated for environmental protection. 115 V, 50-60 Hz AC. Continuous rated 15 A @ 115 VAC, resistive; 10 A @ 230 VAC, resistive Base, 1 7/8x2 3/4"; height, 1 3/4". Shpg. wt. 8 oz.

929-2010. 1-24.....Each 10.40
25-49.....Each 8.40 50-99.....Each 7.56
100-499.....Each 6.72 500-Up.....Each 5.88

INDUSTRIAL POWER RELAYS

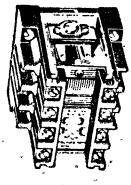
Single-coil with heavy duty contacts that transfer when coil is energized. For supervisory, interlocking, power transfer. Coils rated 15 VA AC, 7 watts DC. Contact ratings: Single-break type, 30 amps at 24, 115, 230 VAC or 24 VDC; 3 amps at 115 VDC; 3/4 amp at 230 VDC; double-break, 30 amps at 24, 115, 230 VAC or 24 VDC; 6 amps at 115 VDC; 3 amps at 230 VDC. *■U.L. Recog. Stud terminals. Type 84XBX 3x6 1/4"; others, 3x4 1/4". 1 lb.

Stock No.	Mfr's Type	V AC	Contact Action	EACH 1-9	10-49	50-99	100-499	500-Up
929-1455	*8BXX	115	DP-N.O.	31.06	23.90	21.51	19.12	16.73
929-1460	*8BXX	230	DP-N.O.	31.06	23.90	21.51	19.12	16.73
929-1450	*8AXA	115	1N.O.-1N.C.	31.06	23.90	21.51	19.12	16.73
929-1480	84XBX	115	DPDT	38.06	30.70	27.63	24.56	21.49

RATCHET SEQUENCE RELAYS

DPST cam-operated contacts continuously repeat predetermined sequence, stepped from one position to the next by impulse to the coil. B11 Miniature Types. B11BXX relay contacts open and close together; B11AXA contacts open and close alternately. Contacts rated 6 A @ 115 VAC or 24 VDC; 0.5 A @ 115 VDC. Six #6-32 stud terminals, front-connected. 2x 3 13/16". Shpg. wt., 1 lb. C85AXA Power Type. Contacts 20 A @ 115 VAC, 24 VDC; 10 A @ 230 A; 1 A @ 115 VDC; 1/4 A @ 230 VDC. 8-tooth ratchet. Coil 18 VA AC, 14 W DC. 3x5". Shpg. wt., 1 lb.

Stock No.	Mfr's Type	V AC	EACH 1-9	10-49	50-99	100-499	500-Up
929-0722	B11BXX	115	34.84	28.10	25.29	22.48	19.67
929-0719	B11AXA	115	34.84	28.10	25.29	22.48	19.67
929-0770	C85AXA	115	55.18	44.50	40.05	35.60	31.15



319 FRAME 300-VOLT PANEL-MOUNT

Use same magnet and contact assemblies as Type 219, Page 410, but have 14 screw terminals front-connected and separated by molded barriers. Mount in panel space only 2 11/16x2 1/2x2 7/8" deep. For high reliability in machine and other 300-volt industrial service. Manual actuator permits operation of contacts from outside of case for testing. For loads up to 10 amps. 115 VAC; other voltages available. Clear cover. 8 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
929-1970	319XDX	4PDT	17.98	14.50	13.78	12.33	10.15
929-1950	319DXB	4PNO/2PNC	17.98	14.50	13.78	12.33	10.15
929-1960	319FXX	6PNO	17.98	14.50	13.78	12.33	10.15

Relays: Time Delay, 424-8—Reed, 426, 433-442—Telephone, 429—Spec. Purpose, 429-431

Potter and Brumfield Relays

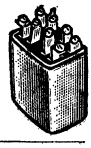
PR HEAVY DUTY FAST ACTING POWER RELAYS

Handle many industrial switching requirements. Silver contacts rated 25 amps except PR11AL5, 20 amps. With heavy screw-terminals. *Indicates auxilliary 5-amp contacts. All are ■ U.L. Recognized except PR11AL5. AC types also C.S.A. Listed. Nominal power: AC types, 9.8 VA at 50-60 Hz; DC types, 2 watts. Mtg: two 3/16" holes, 1 7/8" centers. Sizes: all are 2 1/2" wide; PR3 and PR5. 2 7/32x2 1/2"; PR7, 2 1/2x2 7/16"; PR11, 2 1/2x3 3/8". Shpg. wt. 12 oz.

DC COIL DATA				AC COILS (50-60 Hz) DATA			
Volts	Res. in Ohms	Volts	Res. in Ohms	Volts	Res. in Ohms	Volts	Res. in Ohms
6	18	6	.86	12	71	12	3.2
24	288	24	12	110	6050	120	290
.....	...	240	1.2K	480	4.5K	...	...

Stock No.	Type PR-	Coil Volts	Contacts	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0970	3AY	6 AC	SPST	6.39	4.80	4.56	4.32	3.36	3.12
886-0971	3AY	12 AC	SPST	6.39	4.80	4.56	4.32	3.36	3.12
886-0972	3AY	24 AC	SPST	6.39	4.80	4.56	4.32	3.36	3.12
886-0973	*3AY*	*120 AC*	*SPST*	6.39	4.80	4.56	4.32	3.36	3.12
886-0974	3AY	240 AC	SPST	7.05	5.30	5.04	4.77	3.71	3.45
886-0976	3DY	12 DC	SPST	6.39	4.80	4.56	4.32	3.36	3.12
886-0977	3DY	24 DC	SPST	6.39	4.80	4.56	4.32	3.36	3.12
886-0978	3DY	110 DC	SPST	7.32	5.50	5.23	4.95	3.85	3.58
886-0979	5AY	6 AC	SPDT	6.73	5.05	4.80	4.55	3.54	3.28
886-0980	5AY	12 AC	SPDT	6.73	5.05	4.80	4.55	3.54	3.28
886-0981	5AY	24 AC	SPDT	6.73	5.05	4.80	4.55	3.54	3.28
886-0982	*5AY*	*120 AC*	*SPDT*	6.73	5.05	4.80	4.55	3.54	3.28
886-0983	5AY	240 AC	SPDT	7.39	5.50	5.23	4.95	3.85	3.58
886-0984	5DY	6 DC	SPDT	6.73	5.05	4.80	4.55	3.54	3.28
886-0985	5DY	12 DC	SPDT	6.73	5.05	4.80	4.55	3.54	3.28
886-0986	5DY	24 DC	SPDT	6.73	5.05	4.80	4.55	3.54	3.28
886-0987	5DY	110 DC	SPDT	7.64	5.75	5.46	5.18	4.03	3.74
886-0988	7AY	6 AC	DPST	7.51	5.65	5.37	5.09	3.96	3.67
886-0989	7AY	12 AC	DPST	7.51	5.65	5.37	5.09	3.96	3.67
886-0990	*7AY*	*24 AC*	*DPST*	7.51	5.65	5.37	5.09	3.96	3.67
886-0991	*7AY*	*120 AC*	*DPST*	7.51	5.65	5.37	5.09	3.96	3.67
886-0992	7AY	240 AC	DPST	8.17	6.15	5.84	5.54	4.31	4.00
886-0993	7DY	6 DC	DPST	7.58	5.65	5.37	5.09	3.96	3.67
886-0994	7DY	12 DC	DPST	7.58	5.65	5.37	5.09	3.96	3.67
886-0995	7DY	24 DC	DPST	7.58	5.65	5.37	5.09	3.96	3.67
886-0996	7DY	110 DC	DPST	8.52	6.40	6.08	5.76	4.48	4.16
886-1002	11AY	6 AC	DPDT	9.92	7.45	7.08	6.71	5.22	4.84
886-1003	11AY	12 AC	DPDT	9.92	7.45	7.08	6.71	5.22	4.84
886-1004	11AY	24 AC	DPDT	9.92	7.45	7.08	6.71	5.22	4.84
886-1005	*11AY*	*120 AC*	*DPDT*	9.92	7.45	7.08	6.71	5.22	4.84
886-1006	*11AY*	*240 AC*	*DPDT*	10.58	7.95	7.55	7.16	5.57	5.17
886-1007	11AY	480 AC	DPDT	12.05	9.05	8.60	8.15	6.34	5.88
886-0997	11AL5	6 AC	DPDT*	12.58	9.45	8.98	8.51	6.62	6.14
886-0998	11AL5	12 AC	DPDT*	12.58	9.45	8.98	8.51	6.62	6.14
886-0999	11AL5	24 AC	DPDT*	12.58	9.45	8.98	8.51	6.62	6.14
886-1000	11AL5	120 AC	DPDT*	12.58	9.45	8.98	8.51	6.62	6.14
886-1001	11AL5	240 AC	DPDT*	13.24	9.95	9.45	8.96	6.97	6.47
886-1008	11DY	6 DC	DPDT	9.92	7.45	7.08	6.71	5.22	4.84
886-1009	11DY	12 DC	DPDT	9.92	7.45	7.08	6.71	5.22	4.84
886-1010	11DY	24 DC	DPDT	9.92	7.45	7.08	6.71	5.22	4.84
886-1011	11DY	110 DC	DPDT	10.84	8.15	7.74	7.34	5.71	5.30

AB AND ABC HEAVY-DUTY 10-AMP POWER RELAYS



Terminals fit snap-on connectors, or may be dip-soldered to printed circuit. Snap-on screw adapters included. DPDT silver contacts rated 10 amps. AC types U.L. Component-Program Recognized. C.S.A. Listed. *Open type mounts by two 8-32 tapped holes on 1 1/4" centers. Size, 1 15/16x1 13/32x3". Shpg. wt., 6 oz. All others have dust covers, mount by one 8-32 stud 3/8" long. Size, 1 31/64x2 3/32x2 25/32". Shpg. wt., 8 oz.

Stock No.	Mfr's Type	Coil Type	EACH 1-9	10-24	25-49	50-99	100-Up
886-0015	*AB11AY	120 AC	7.85	6.15	5.84	5.54	4.31
886-0018	ABC11AY	120 AC	9.45	7.40	7.03	6.66	5.18
886-0019	ABC11AY	240 AC	10.52	7.90	7.51	7.11	5.53
886-0021	ABC11D	12 DC	9.32	7.30	6.94	6.57	5.11
886-0022	ABC11D	24 DC	9.32	7.30	6.94	6.57	5.11

MB3D 60-AMP MINIATURE DC POWER RELAYS

For very high current applications. Contact arms are heavy brass with large silver contacts. Solder terminals. Rated 60 amps @ 28 VDC, resistive. SPST, double break, normally open. 1 5/8x2 27/32x1 3/8". Mounting: Four 3-48 holes on 3/8x3/8" centers. Both relays are type MB3D. Av. shpg. wt., 3 oz.

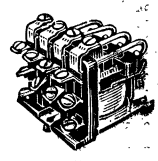
Stock No.	Coil Volts	Ohms	mA	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0835	12 DC	62.3	193	8.17	6.40	6.08	5.76	4.48	4.16
886-0836	24 DC	245.0	98	8.17	6.40	6.08	5.76	4.48	4.16

MR MEDIUM-DUTY POWER RELAYS

Medium-duty power relays for small motors, transmitters and other general-purpose applications. Contacts 7/32" diameter silver, rated 8 amps, except *10 amps. SPST relays are normally open. Sizes: SP units, 1 11/16x1 11/32x2 31/32"; DP units, 2x2 3/16x2 19/32"; 3-pole, 2x2 3/16x2 31/32". Mounting: 5/32" diameter holes on 2 1/4" centers for MR 3 and MR11, 2 3/8" centers for MR5 and MR14. Dust covers below. Wt., 5 oz.

Stock No.	Mfr's Type	Coil Volts	Coil Ohms	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
SPST*									
886-0885	MR3A	6 AC	2.75	4.95	4.50	4.28	4.05	3.15	2.93
886-0886	MR3A	24 AC	50.0	4.95	4.50	4.28	4.05	3.15	2.93
886-0887	MR3A	120 AC	1250.0	4.95	4.50	4.28	4.05	3.15	2.93
886-0889	MR3D	6 DC	24.0	4.51	4.10	3.90	3.69	2.87	2.67
886-0890	MR3D	12 DC	96.0	4.51	4.10	3.90	3.69	2.87	2.67
886-0891	MR3D	24 DC	360.0	4.51	4.10	3.90	3.69	2.87	2.67
SPDT									
886-0895	MR5A	6 AC	2.75	4.45	4.05	3.85	3.65	2.84	2.63
886-0896	MR5A	12 AC	13.25	4.45	4.05	3.85	3.65	2.84	2.63
886-0897	MR5A	24 AC	50.0	4.45	4.05	3.85	3.65	2.84	2.63
886-0898	*MR5A*	*120 AC*	*1250.0*	4.45	4.05	3.85	3.65	2.84	2.63
886-0899	MR5A	240 AC	4600.0	4.95	4.50	4.28	4.05	3.15	2.93
886-0900	MR5D	6 DC	24.0	4.13	3.75	3.56	3.38	2.63	2.44
886-0901	MR5D	12 DC	96.0	4.13	3.75	3.56	3.38	2.63	2.44
886-0902	MR5D	24 DC	360.0	4.13	3.75	3.56	3.38	2.63	2.44
886-0903	MR5D	110 DC	8000.0	4.70	4.30	4.09	3.87	3.01	3.80
DPDT									
886-0907	MR11A	6 AC	2.75	6.27	5.70	5.42	5.13	3.99	3.71
886-0908	MR11A	12 AC	13.25	6.27	5.70	5.42	5.13	3.99	3.71
886-0909	MR11A	24 AC	50.0	6.27	5.70	5.42	5.13	3.99	3.71
886-0910	MR11A	120 AC	1250.0	6.27	5.70	5.42	5.13	3.99	3.71
886-0911	MR11A	240 AC	4600.0	6.77	6.15	5.84	5.54	4.31	4.00
886-0912	MR11D	6 DC	24.0	5.95	5.40	5.13	4.86	3.78	3.51
886-0913	MR11D	12 DC	96.0	5.95	5.40	5.13	4.86	3.78	3.51
886-0914	MR11D	24 DC	360.0	5.95	5.40	5.13	4.86	3.78	3.51
886-0915	MR11D	110 DC	8000.0	6.55	5.95	5.65	5.36	4.17	3.87
3PDT									
886-0917	MR14A	6 AC	2.75	7.48	6.80	6.46	6.12	4.76	4.42
886-0918	MR14A	12 AC	13.25	7.48	6.80	6.46	6.12	4.76	4.42
886-0919	MR14A	24 AC	50.0	7.48	6.80	6.46	6.12	4.76	4.42
886-0920	MR14A	120 AC	1250.0	7.48	6.80	6.46	6.12	4.76	4.42
886-0921	MR14A	240 AC	4600.0	7.98	7.25	6.89	6.53	5.08	4.71
886-0923	MR14D	12 DC	96.0	7.05	6.40	6.08	5.76	4.48	4.16
886-0924	MR14D	24 DC	360.0	7.05	6.40	6.08	5.76	4.48	4.16
886-0925	MR14D	110 DC	8000.0	7.65	6.95	6.60	6.26	4.87	4.52

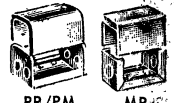
PM17 4PDT 25-AMP POWER RELAYS



Compact. For polyphase and heavy-duty switching. 4PDT. Silver-cadmium-oxide contacts rated at 25 amps, 220 V, 50-60 Hz, non-inductive. 1 hp per movable arm at 120 or 240 V single-phase. U.L. Component-Program Recognized and C.S.A. Listed except 480 V. Mount by key-hole and 2 channels for 8-32 screws on 2x2 1/2" triangular centers. Screw term. 2 45/64x2 31/32x3 23/64". Act. wt., 14 oz. Av. shpg. wt., 1 lb.

Stock No.	Type PM-	Coil Volts	Res. in Ohms	EACH 1-9	10-24	25-49	50-99	100-249
886-0950	17AY	12 AC	1.4	15.73	14.30	13.59	12.87	10.01
886-0951	17AY	24 AC	5.0	15.73	14.30	13.59	12.87	10.01
886-0952	*17AY*	*120 AC*	*120*	15.73	14.30	13.59	12.87	10.01
886-0953	17AY	240 AC	587	16.34	14.85	14.11	13.37	10.40
886-0954	17AY	480 AC	1790	17.33	15.75	14.96	14.18	11.03
886-0955	17DY	6 DC	8.2	15.02	13.65	12.97	12.29	9.56
886-0956	17DY	12 DC	33.0	15.02	13.65	12.97	12.29	9.56
886-0957	17DY	24 DC	132.0	15.02	13.65	12.97	12.29	9.56
886-0958	17DY	110 DC	2760.0	15.68	14.25	13.54	12.83	9.98

RELAY COVERS FOR PR, PM AND MR

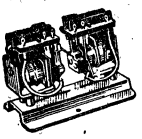


TYPE 35D013. Has sheet steel base, knockouts for 1/2"-dia. conduit and aluminum cover with 2 screws. Gray enamel. 3 1/8x3 3/8x5 5/16". Mounts 3 No. 10 holes on 1 7/8x4 1/8" centers. Wt., 1 lb.
TYPE 35D227. Size, 3 13/16x3 13/16x5 1/8". 1 lb.
TYPE 35D130. Size, 2 19/32x2 3/8x3 5/8". 8 1/2 oz.

Stock No.	Mfr's Type	Use With	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-1455	*35D013*	*PR*	3.81	3.45	3.28	3.11	2.42	2.24
886-1480	35D227	PM	3.81	3.45	3.28	3.11	2.42	2.24
886-1470	35D130	MR	2.53	2.20	2.09	1.98	1.54	1.43

Potter and Brumfield Relays

KB LATCHING RELAYS



One coil actuates relay to set latch; second coil releases latch. 4PDT except *6PDT. Contacts, 5-ampere silver or 10-ampere silver cadmium-oxide movables. Mounting, two 5/32" holes on 1 3/8" centers. AC 5-ampere types are U.L. Component Program Recognized and C.S.A. Listed. Suffix "G" is 10-amps, all other listings are 5-amps. Size: 2 23/32x1 5/32x2 15/16". Be sure to specify stock no., mfr's type, and coil volts when ordering. Shpg. wt., 7 oz.

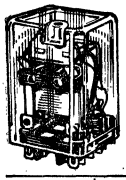
Stock No.	Type KB	Coil Volts	Res. in Ohms	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0485	17AY	6 AC	2.3	15.25	12.20	11.59	10.98	8.54	7.93
886-0486	17AY	12 AC	10	15.25	12.20	11.59	10.98	8.54	7.93
886-0487	17AY	24 AC	42	15.25	12.20	11.59	10.98	8.54	7.93
886-0488	17AY	120 AC	1030	15.25	12.20	11.59	10.98	8.54	7.93
886-0489	17AY	240 AC	4100	16.38	13.10	12.45	11.79	9.17	8.52
886-0490	17D	6 DC	13.1	13.69	10.95	10.40	9.86	7.67	7.12
886-0491	17D	12 DC	51.0	13.69	10.95	10.40	9.86	7.67	7.12
886-0492	17D	24 DC	230	13.69	10.95	10.40	9.86	7.67	7.12
886-0493	17D	110 DC	4560	15.50	12.40	11.78	11.16	8.68	8.06
886-0480	17AG	6 AC	2.3	15.38	12.30	11.69	11.07	8.61	8.00
886-0481	17AG	12 AC	10	15.38	12.30	11.69	11.07	8.61	8.00
886-0482	17AG	24 AC	42	15.38	12.30	11.69	11.07	8.61	8.00
886-0483	17AG	120 AC	1030	15.38	12.30	11.69	11.07	8.61	8.00
886-0484	17AG	240 AC	4100	16.50	13.20	12.54	11.88	9.24	8.58
886-0494	17DG	6 DC	13.1	14.00	11.20	10.64	10.08	7.84	7.28
886-0495	17DG	12 DC	52.0	14.00	11.20	10.64	10.08	7.84	7.28
886-0496	17DG	24 DC	230	14.00	11.20	10.64	10.08	7.84	7.28
886-0497	17DG	110 DC	4560	15.81	12.65	12.01	11.39	8.86	8.22
886-0499	23DG*	24 DC	230	17.00	13.60	12.92	12.24	9.52	8.84

KBP ENCLOSED LATCHING PLUG-IN RELAYS

Fast acting, positive latching relay designed for overload or memory work. Available for 120 volts AC, 12 volts DC and 24 volts DC. Momentary impulse to one of the coils operates relay to set latch. Second pulse to other coil releases it. Enclosed in translucent polypropylene cover for maximum protection. Suffix G, 10 amps; others 5 amps. Has 20-pin octal type plug for socket mounting. All 4PDT, except KBP20 which is 5PDT. Plug fits Amphenol socket. Type 77MIP20. 3.50x1.781x1.56". Specify Stock No., Type, Coil Volts. Shpg. wt., 8 oz.

886-0505	P17A	120 AC	.....	21.44	17.15	16.29	15.44	12.01	11.15
886-0506	P17AG	120 AC	.....	21.69	17.35	16.48	15.62	12.15	11.28
886-0510	P17D	24 DC	.....	19.88	15.90	15.11	14.31	11.13	10.34
886-0512	P17DG	12 DC	.....	20.25	16.20	15.39	14.58	11.34	10.53
886-0513	P17DG	24 DC	.....	20.25	16.20	15.39	14.58	11.34	10.53
886-0516	P20A	120 AC	.....	22.06	17.65	16.77	15.89	12.36	11.47
886-0517	P20AG	120 AC	.....	22.38	17.90	17.01	16.11	12.53	11.64
886-0519	P20DG	12 DC	.....	21.31	17.05	16.20	15.35	11.94	11.08
886-0520	P20DG	24 DC	.....	21.31	17.05	16.20	15.35	11.94	11.08

KUL MAGNETIC LATCHING RELAYS



Continuous duty single coil types. Uses a permanent magnet in parallel with normal magnetic circuit, requires only half the space of mechanical interlock types. Continuous latch condition even during loss of power. Contacts rated 10 amps at 28 VDC or 120 VAC, 80% power factor. —45° to +75° C. All are DPDT, except *SPDT. See KUP listing, page 414, for sockets. 1.406x.531x2.156". Av. wt., 3½ oz.

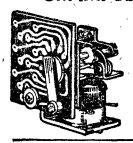
Stock No.	Type KUL-	Coil V	Coil Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
886-0758	5A15S*	120 AC	3700	7.58	6.30	5.99	5.67	4.41
886-0759	5D15S*	24 DC	472	6.55	5.45	5.18	4.91	3.82
886-0761	11A15S	12 AC	37	8.50	7.10	6.75	6.39	4.97
886-0762	11A15S	24 AC	176	8.50	7.10	6.75	6.39	4.97
886-0763	11A15S	120 AC	3700	8.50	7.10	6.75	6.39	4.97
886-0765	11D15S	12 DC	120	7.29	6.05	5.75	5.45	4.24
886-0766	11D15S	24 DC	472	7.29	6.05	5.75	5.45	4.24

GM 3-AMP IMPULSE/SEQUENCING RELAYS

Single-coil latching relay. For uses requiring up to 6 operations per shaft revolution. Two Form C contacts (DPDT) switched indirectly and alternately by cams. *Additional two Form C contacts operate directly by armature. Contacts rated 3 amps. Mtg., 8-32 tapped core. †120 VAC, 425 ohms; ‡24 VDC, 120 ohms. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100 Up
886-0026	GM11A	DPDT†	10.50	8.40	7.98	7.56	5.88
886-0027	*GM11AL11	DPDT†	14.94	11.95	11.35	10.76	8.37
886-0028	GM11D	DPDT‡	10.06	8.05	7.65	7.25	5.64

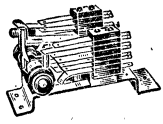
GM IMPULSE/SEQUENCING RELAYS WITH PC BOARDS



Uses design of GM series, below left, with added uni-directional printed circuit board with up to 12 steps. The board is attached to an extension of the ratchet shaft; the movable contact arm advances one position each time the armature drops out. *Coil volts 120 AC; 510 ohms. †24 DC; 144 ohms. Contact rating, ¼ watt. Size, 2.312x1.875x1.875". Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-Up
886-0220	GM1N10A	10-step*	12.94	10.35	9.84	9.32	7.25
886-0222	GM1N12A	12-step*	13.13	1.050	9.98	9.45	7.35
886-0221	GM1N10D	10-step†	12.63	10.10	9.60	9.09	7.07
886-0223	GM1N12D	12-step†	12.81	10.25	9.74	9.23	7.18

AP 5-AMP RATCHET IMPULSE RELAYS

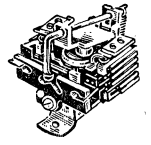


For applications requiring on-off or reversing action on alternate impulses. Gives positive operation on impulses as short as 60 ms. Stop mechanism. Intermittent duty. Contacts are 3/16" fine silver, rated 5 A at 120 V, 60 Hz. Coils are wound on molded bobbins. Has tinned solder terminals. Mtg: Three 5/32" dia. holes on 3 3/8x1 7/8" triangular cuts. AC types for 50-60 Hz. Size, 2 5/16x2 1/4x3 3/4". Av. shpg. wt., 9 oz.

ALL ARE DPDT EXCEPT *4PDT

Stock No.	Mfr's Type	Coil Volts	Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
886-0027	AP11A	6 AC	0.6	12.69	10.15	9.64	9.14	7.11
886-0028	AP11A	12 AC	2.28	12.69	10.15	9.64	9.14	7.11
886-0029	AP11A	120 AC	240	12.69	10.15	9.64	9.14	7.11
886-0030	AP11A	240 AC	900	13.38	10.70	10.17	9.63	7.49
886-0031	AP11D	6 DC	4.0	12.69	10.15	9.74	9.14	7.11
886-0032	AP11D	24 DC	65.0	12.69	10.15	9.64	9.14	7.11
886-0033	AP11D	110 DC	1350	13.63	10.90	10.36	9.81	7.63
886-0035	AP17A*	120 AC	240	15.38	12.30	11.69	11.07	8.61
886-0036	AP17D*	12 DC	15.5	15.38	12.30	11.69	11.07	8.61
886-0037	AP17D*	24 DC	65.0	15.38	12.30	11.69	11.07	8.61

PC 7.5-AMP IMPULSE RELAYS

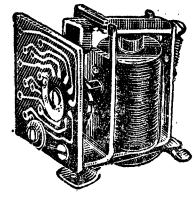


Armature and pusher assembly operate phenolic rocker switching from one contact pile to the other on alternate pulses. For on-off or reversing. Pulses may be as short as 60 milli-seconds at 5 Hz. Gold-flashed silver cadmium-oxide contacts rated 7.5 amps at 120 volts AC, resistive load. AC coils are for 50-60 Hz. Mtg., two 5/32" holes on 2 5/8" ctrs. Size, 2 1/16x2 31/32x2 5/64". Shpg. wt., 5 oz.

ALL ARE DPDT EXCEPT *4PDT

886-0935	PC11A	6 AC	0.6	8.19	6.55	6.22	5.90	4.59
886-0936	PC11A	12 AC	2.28	8.19	6.55	6.22	5.90	4.59
886-0937	PC11A	24 AC	8.8	8.19	6.55	6.22	5.90	4.59
886-0938	PC11A	120 AC	240.0	8.19	6.55	6.22	5.90	4.59
886-0939	PC11D	6 DC	4.0	7.88	6.30	5.99	5.67	4.41
886-0940	PC11D	12 DC	15.5	7.88	6.30	5.99	5.67	4.41
886-0941	PC11D	24 DC	65.0	7.88	6.30	5.99	5.67	4.41
886-0942	PC17A*	24 AC	8.8	11.25	9.00	8.55	8.10	6.30
886-0943	PC17A*	120 AC	240.0	11.25	9.00	8.55	8.10	6.30
886-0944	PC17D*	24 DC	65.0	11.00	8.80	8.36	7.92	6.16

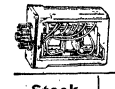
SA-1N-12A STEPPING RELAY



Twelve-position stepping relay for audio-level switching in TV remote control units, scoreboards and process controls. Printed circuit strips handle up to 250 mA. Armature-driven pawl operates ratchet wheel to drive movable contact in 30° steps. Coil voltage, 120; resistance, 140 ohms; power, 20 VA. Mounting: two 6-32 holes on 1 13/16" centers. Shpg. wt., 5 oz.

886-1290. 1-9 Each 9.62 10-24 Each 7.70
25-49....Each 7.31 50-99.....Each 6.93
100-249..Each 5.39 250-Up....Each 5.00

MAGNECRAFT 10-AMP LATCHING RELAY



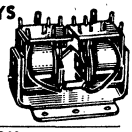
20-pin latching relay. 4PDT. 2 3/8x1 3/4x3 9/16" high. *AC Types, 6 VA. †DC Types, 3 W. Wt., 11 oz.

Stock No.	Mfr's Type 88-	COIL V	COIL Ohm	EACH 1-9	10-24	25-49	50-99	100-Up
850-0375	ALCPX-10*	6	.....	17.26	16.30	15.53	14.67	12.08
850-0376	ALCPX-11*	24	.....	17.26	16.39	15.53	14.67	12.08
850-0377	ALCPX-12*	120	.....	17.26	16.39	15.53	14.67	12.08
850-0555	LCPX-9†	6	12	15.99	15.19	14.39	13.59	11.19
850-0556	LCPX-10†	12	50	15.99	15.19	14.39	13.59	11.19
850-0557	LCPX-11†	24	200	15.99	15.19	14.39	13.59	11.19
850-0558	LCPX-12†	120	4000	16.26	15.45	14.63	13.82	11.38

Relays: Solid State, 101, 432—Gen. Purpose, 406-419—Power, 419-421, 425—Latching, 422-4, 445

Latching, Impulse and Stepping Relays

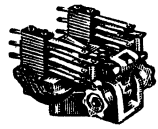
MAGNECRAFT INTERMITTENT-DUTY RELAYS



Two C class 88 clapper-type relays with interlocking latch-in levers mounted on a common base. Each relay is complete with independent operating coil. 10 A silver alloy contacts. Nominal power AC units, 6 VA; DC, 3 W. *4PDT; †6PDT. 1 15/16x1 3/4x2 11/16". 6 1/2 oz.

Stock No.	Mfr's Type W88-	Coil Volts	Coil Ohm	EACH 1-9	10-24	25-49	50-99	100-Up
850-0390	ALX-3*	24 AC	.....	13.96	11.38	10.78	10.18	8.39
850-0391	ALX-4*	115 AC	.....	13.96	11.38	10.78	10.18	8.39
850-0575	LX-2*	12 DC	50	11.99	10.36	9.82	9.27	7.64
850-0576	LX-3*	24 DC	200	11.99	10.36	9.82	9.27	7.64
850-0393	ALX-6†	24 AC	.....	15.95	13.74	13.01	12.29	10.12
850-0394	ALX-7†	115 AC	.....	15.95	13.74	13.01	12.29	10.12
850-0578	LX-5†	6 DC	12	14.65	12.61	11.95	11.29	9.30
850-0580	LX-7†	24 DC	200	14.65	12.61	11.95	11.29	9.30

GUARDIAN 660 IMPULSE RATCHET RELAYS



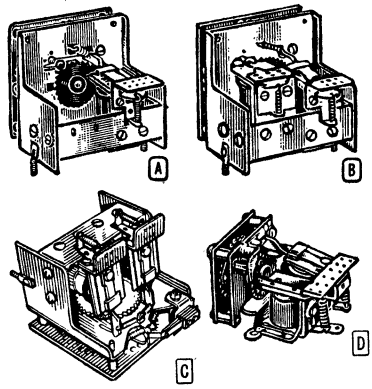
For on/off control of lighting, motors, etc. Life expectancy over 1,000,000 steps. Each impulse reverses contacts. Up to 10 steps per second possible. Heavy-duty silver contacts rated 12 1/2 amperes at 115 V, 60 Hz AC resistive. Size, 2 1/16x3x1 3/4". **Coil voltage is indicated by the last digits of Type column in table below.** Wt 8 oz.

Stock No.	Type and Coil Voltage	Action	EACH 1-24	25-49	50-99	100-249	250-Up
802-1410	660-C-24AC	SPDT	7.54	6.77	6.41	5.28	4.90
802-1414	660-C-120AC	SPDT	7.54	6.77	6.41	5.28	4.90
802-1418	*660-2C-120AC*	DPDT	8.14	7.33	6.92	5.70	5.29
802-1424	665-2C-24DC	DPDT	8.14	7.33	6.92	5.70	5.29
802-1420	660-4C-24AC	4PDT	11.83	10.65	10.06	8.28	7.69
802-1422	660-4C-120AC	4PDT	11.83	10.65	10.06	8.28	7.69
802-1426	665-4C-24DC	4PDT	11.83	10.65	10.06	8.28	7.69

GUARDIAN AC & DC STEPPING AND LATCHING RELAYS

AC AND DC STEPPING RELAYS

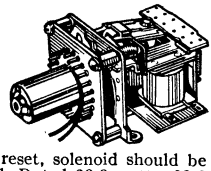
Specially designed stepping relays for accurate sequence selecting, pulse multiplying/dividing, circuit selecting, automatic/remote homing, counting and latching. All are 120 VAC except for §24 VDC type. All are direct drive units with switching completed on energization. Bridging contacts are rated at 1 1/2 amperes, 115 volts 60 Hz noninductive load. All are rated at 10% duty cycle out of each hour; maximum single period, 5 minutes. Will operate at 15% below or 10% above rated voltage. IR-PC and IR-MC are continuous-rotation types, constructed with micro-finished shaft and oilite shaft bearings. IR-PER and MER are electrical-reset types, with steel box-type frame. IR-MAS is add-and-subtract stepper. IR-PAS is bidirectional stepper. *Active contacts, including zero position. †Zero-position switch only. Wt., 2 lbs.



Stock No.	Mfr's Type	Fig.	No. Pts.	*Contacts	Size (HxWxD)	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
802-0060	IR-PC	A	40	40	3 1/2x3 3/8x3 3/8"	27.71	23.49	21.14	19.97	16.44	15.27
802-0053	IR-MC	....	24	24	2 3/16x3x3 1/4"	20.52	17.39	15.65	14.78	12.17	11.30
802-0063	IR-PER	B	40	36	3 9/16x3 3/8x3"	36.48	30.92	27.83	26.29	21.64	20.10
802-0057	IR-PAS	C	40	40	3 9/16x3 3/8x3 1/4"	36.48	30.92	27.83	26.29	21.64	20.10
802-0457	*MER*	D	24	22	2 3/16x3 5/16x2 3/16"	21.90	18.56	16.70	15.78	12.99	12.06
802-0455	§MER	D	24	22	2 3/16x3 5/16x2 3/16"	21.90	18.56	16.70	15.78	12.99	12.06
802-0050	IR-MAS	....	30	†	1 15/16x3 1/8x3 1/4"	23.98	20.33	18.30	17.28	14.23	13.21

STEPPING AND LATCHING RELAYS

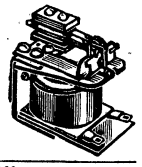
MER SOL STEPPING RELAYS



Same features as MER stepping relays listed above, but with an added solenoid to increase switching versatility. Energizing the solenoid physically moves the wipers away from the selector deck permitting advance or reset of wipers without contacting selector deck. Adds many switching advantages as well as increasing contact capacity and electrical life. Because of greatly reduced friction during reset, solenoid should be energized whenever reset coil is energized. Rated 20.8 watts, 20.9 VA. 20 steps per second. 24 points, with 22 active contacts. Overall size, (HWD), 4 17/32x3 7/16x2 3/16". Shpg. wt., 14 oz.

Stock No.	Mfr's Type MER-	Volts	EACH 1-9	10-24	25-49	50-99	100-Up
802-0452	SOL-120AC	120 AC	31.00	26.48	23.83	22.51	18.54
802-0450	SOL-24DC	24 DC	31.00	26.48	23.83	22.51	18.54

840L MIDGET LATCHING RELAYS

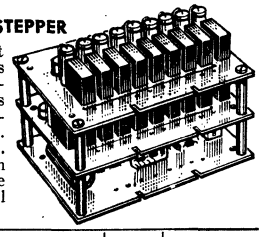


Single-coil construction. Designed for positive on-off control of positioning devices, remote controls, lighting circuits and similar industrial applications. Contacts are rated 5 amperes. Snap-action switch mechanism operates on impulses as short as 20 milliseconds. Contacts hold in the last position of switch when coil is de-energized. For 115 V, 60 Hz AC. Size, 1 5/8x1 1/8x 2 1/16". Shpg. wt., 4 oz.

Stock No.	Type IR-840-	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
802-0277	*L-C-120A*	SPST	6.40	5.23	4.71	4.45	3.66	3.40
802-0278	*L-2C-120A*	DPDT	7.50	6.30	5.67	5.36	4.41	4.10

LOGIC STEPPER AND AC RELAY

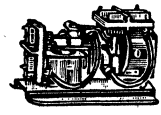
SLS SOLID STATE LOGIC STEPPER



Only solid-state stepper to accept either high level or logic level inputs with high noise immunity for industrial applications. Each step is a 115 VAC, 2 1/2 amps output, available in either 120 VAC or 24 VDC. Nonbridging, reverse-triggered type. Resetting won't cause energization of intervening contacts. Can be cascaded or paralleled. *External pulse, †Self pulse. 6x4 1/16x4".

Stock No.	Mfr's Type	Volts	Steps	EACH
802-0514	*SLS 110-2A111	120 VAC	10	130.00
802-0510	*SLS 110-1A211	24 VDC	10	112.00
802-0522	*SLS 120-2A111	120 VAC	20	225.00
802-0518	*SLS 120-1A211	24 VDC	20	189.00
802-0516	†SLS 110-25111	120 VAC	10	137.50
802-0512	†SLS 110-15211	24 VDC	10	119.50
802-0524	†SLS 120-25111	120 VAC	20	232.50
802-0520	†SLS 120-15211	24 VDC	20	196.90

4PDT, 10 AMP AC RELAYS



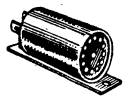
Two interlocking AC relays in metal frame bracket. Maintain circuits continuously without coil power consumption. Electrically pulse-operated; mechanical hold, electrical release. For 115 VAC. **Type IR-1200/1200-4C:** 1 1/16x1 3/4x2 7/8"; **Type IR-1200/1200UB** (U-shape bracket): 1 13/16x1 3/8x3 3/16". Shpg. wt. 6 oz.

Stock No.	Mfr's Type IR-	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
802-0285	1200/1200-4C	12.80	10.40	9.36	8.84	8.32	7.29
802-0283	1200/1200UB	12.80	10.40	9.36	8.84	8.32	7.28

ROTOMITE DC STEPPING RELAYS

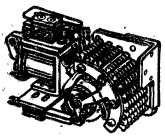
Stock No.	Type IR-705-	No. Pos.	V DC	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
802-0265	12P-6D	12	6	8.50	7.26	6.53	6.17	5.08	4.72
802-0267	12P-12D	12	12	8.50	7.26	6.53	6.17	5.08	4.72
802-0269	12P-24D	12	24	8.50	7.26	6.53	6.17	5.08	4.72

Small size enables use in business machines, vending, counting, sorting, model trains, etc. Completely enclosed. Contact ratings at 115 V, 60 Hz: 3 amps resistive, 1 amp inductive; rotate continuously up to 20 steps per second. Expected life over 1 million operations. 2x1 3/16" dia. 5 oz.

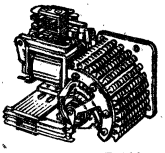


Stepping, Latching and Time Delay Relays

C. P. CLARE STEPPING SWITCHES

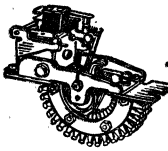


TYPE 210

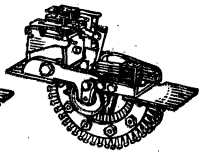


TYPE 211

Provide the most working capacity in the smallest space. Type 210 offers up to 12 levels of 10 points with life expectancy of 100 million steps at 12 levels. Type 211 offers up to 12 levels of 11 points, has same life as Type 210. Type 20 offers up to 16 levels of 20 points or 12 levels of 40 points with a life expectancy of 50 million steps at 16 levels. Type 26 offers up to 16 levels of 26 points or 10 levels of 52 points with same life as Type 20. Common Specifications: All switches have one bridging level, the remaining levels being non-bridging with 2C off-normal, 2C interrupter. Contacts rated at 0.1 A 115 VAC or 30 VDC with carry of 3 A. Operate time approx. 20 ms. at 25° C. Release time approx. 10 ms. Standard terminals are solder lug.



TYPE 20



TYPE 26

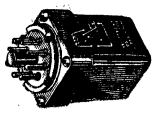
Stock No.	Mfr's Type	Volts DC	Coil Ohms	No. Levels	No. Points	Size, In. H.xW.xD.	EACH 1-4	5-9	10-24	25-Up
752-8881	210-2406A	24	24	6	10	2¾x4 9/16x1 13/16"	33.88	30.80	25.20	21.42
752-8886	210-11003A	110	600	3	10	2¾x4 9/16x1 19/64"	30.40	27.50	22.50	19.13
752-8896	211-2406A	24	24	6	11	2¾x4 9/16x1 13/16"	33.88	30.80	25.20	21.42
752-8899	211-11003A	110	600	3	11	2¾x4 9/16x1 19/64"	30.40	27.50	22.50	19.13
752-8805	20-2404A	24	35	4	20	4⅝x5 5/16x2⅛"	32.40	38.50	31.50	26.78
752-8811	20-11004A	110	600	4	20	4⅝x5 5/16x2⅛"	42.95	39.00	31.95	27.16
752-8817	26-2404A	24	35	4	26	4⅞x6 9/16x2½"	43.42	39.65	32.85	27.92
752-8821	26-11008A	110	600	8	26	4⅞x6 9/16x2½"	55.40	50.10	41.00	34.85

MAGNECRAFT 103LMPC MAGNETIC REED RELAY

SPDT bi-stable reed relay requires no coil current to hold contacts in either of two latching positions. Available with single-wound coils for switching upon polarity reversal, or double-wound coils having separate polarized windings. Contacts rated 10 VA at 200 V, maximum, or 0.2 amp maximum non-inductive. Life expectancy: 25-million operations at rated load. Steel cover provides excellent mechanical protection and magnetic shielding. 2⅝x4 1/64x¾". Size 1 case. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type W	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-99	100-Up
850-1180	103LMPCX4	6	250	8.34	7.07	6.36	6.01	5.66	4.95
850-1185	103LMPCX9	6	120/120	9.82	8.33	7.50	7.08	6.66	5.83
850-1186	103LMPCX10	12	460/460	9.82	8.33	7.50	7.08	6.66	5.83
850-1187	103LMPCX11	24	1800/1800	10.62	9.00	8.10	7.65	7.20	6.30

MAGNECRAFT W103LCP LATCHING PLUG-IN RELAY



SPDT bi-stable magnetic latching reed relay. Contact load rating: 10 VA at 0.2 amp max. Plug-in mounting for standard octal-style sockets. Single wound coil: LCPX 7-10, (1⅜x 1⅜x2⅛" high.) Double wound coil: dual input, LCPX 11-14, (1⅜x1⅜x2⅛" high.) Life: 25 million operations. Av. shpg. wt., 5 oz.

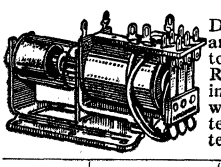
Stock No.	Mfr's Type W103-	COIL mA	V	Ohms	EACH 1-9	10-24	25-49	50-74	75-99	100-Up
850-1150	LCPX-7	....	6	250	9.79	8.30	7.47	7.06	6.64	5.81
850-1151	LCPX-8	....	12	1000	9.82	8.33	7.50	7.08	6.66	5.83
850-1152	LCPX-9	....	24	4000	10.11	8.57	7.71	7.28	6.86	6.00
850-1153	LCPX-10	4	....	7000	10.38	8.80	7.92	7.48	7.04	6.16
850-1154	LCPX-11	....	6	120/120	11.64	9.87	8.88	8.39	7.90	6.91
850-1155	LCPX-12	....	12	460/460	11.76	9.97	8.97	8.47	7.98	6.98
850-1156	LCPX-13	....	24	1800/1800	11.82	10.02	9.02	8.52	8.02	7.01
850-1157	LCPX-14	8	....	3000/3000	12.17	10.32	9.29	8.77	8.26	7.22

CDE TS SERIES TIME DELAY RELAYS

Solid-state circuit relays with ±1% repeatability. Dustproof polycarbonate case with octal plug. Infinite knob adjustment; DPDT 10-ampere contacts. AC/DC input; delay on energize. Reset: 25 milliseconds typical. Operating temperature: −40° to +85°C. Size, 1 13/32x2 17/32x2 13/16". Shpg. wt. 6 oz.

Stock No.	Mfr's Type	Input VAC/DC	Time Range, Sec.	EACH 1-24	25-49	50-99	100-Up
755-4720	TS012AB015	12	0-15	24.00	21.00	18.00	15.00
755-4730	TS024AB015	24	0-15	24.00	21.00	18.00	15.00
755-4740	TS115AB015	115	0-15	26.00	22.75	19.50	16.25
755-4725	TS012AB060	12	0-60	27.00	23.65	20.25	16.90
755-4735	TS024AB060	24	0-60	27.00	23.65	20.25	16.90
755-4745	TS115AB060	115	0-60	28.00	24.50	21.00	17.50

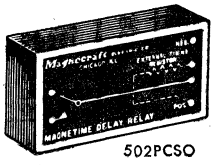
MAGNECRAFT 110 AIR-DASHPOT TIME DELAY RELAYS



DPDT silver-alloy contacts rated 10 amps. Operate delay adjustable from 0.2 to 45 sec. Repeat accuracy of ±10%. Resets in 2 seconds. AC relays have built-in diode rectification. Power: DC, 4 watts; AC, 7 volt-amperes. ‡Open, solder terminals. 7 oz. *Plug-in octal, †screw terminals. Metal dust covers. 1 lb.

Stock No.	Mfr's Type	Coil Volts	EACH 1-4	5-9	10-24	25-49	50-Up
850-1565	*W110ACPX-9	115 AC	34.00	29.79	26.81	25.32	23.83
850-1573	†W110ACSX-1	115 AC	36.22	30.07	27.06	25.56	24.06
850-1583	‡W110AX-9	115 AC	24.67	20.91	18.82	17.77	16.73
850-1593	‡W110X-9	24 DC	20.94	17.75	15.97	15.09	14.20
850-1594	‡W110X-10	110 DC	21.64	18.34	16.51	15.59	14.67

MAGNECRAFT PRINTED CIRCUIT TIME DELAY RELAYS



502PCSO

Combine rugged monolithic silicon structure with dry reed relay for isolated circuit switching. Two fully adjustable timing ranges, using remote pot or fixed resistor. Encapsulated in low profile PC package. SPST-NO (Form A) types rated 1 amp, 15 VA or 250 VAC maximum, resistive; SPDT (Form C) types rated 0.5 amp, 10 VA or 250 VAC max. resistive. 2¼x1¼x¾". Av. shpg. wt., 2 oz.

Class 502PCSO and 503PCSO. Time delay on operate, adjustable 100 msec. to 100 sec. using 60K ohm/sec. external resistor, or 1 sec. to 5 minutes at 10K/sec. Repeatability, ±5% at nominal voltage at 25°C after first cycle, ±10% over voltage or temp. range indicated. Polarity protection. Reset time, less than 10 msec.

Class 502PCSR and 503PCSR. Time delay on release, adjustable 200 msec. to 100 sec. using 25K ohm/sec. resistor, or 1 sec. to 5 min. at 6.5K/sec. Repeatability, ±2% at nom. voltage at 25°C, ±4% over voltage and temp. range. Temperature, +10° to +55°C.

CLASS 502PCSO SPST-NO (Form A) SLOW OPERATE RELAYS

Stock No.	Mfr's Type W502-	DC Volts ±15%	Timing Range	EACH 1-9	10-24	25-49	50-99	100-Up
850-2001	PCSOX-2	12	100 msec.	18.96	18.01	17.06	15.17	14.22
850-2002	PCSOX-3	24	to 100 sec.	18.96	18.01	17.06	15.17	14.22
850-2004	PCSOX-5	12	12 seconds	21.30	20.23	19.17	17.04	15.98
850-2005	PCSOX-6	24	to 5 min.	21.30	20.23	19.17	17.04	15.98

CLASS 502PCSR SPST-NO (Form A) SLOW RELEASE RELAYS

850-2025	PCSRX-2	12	200 msec.	26.73	25.39	24.06	21.38	20.05
850-2026	PCSRX-3	24	to 100 sec.	26.73	25.39	24.06	21.38	20.05
850-2028	PCSRX-5	12	1 second	29.84	28.35	26.86	25.36	22.38
850-2029	PCSRX-6	24	to 5 min.	29.84	28.35	26.86	25.36	22.38

CLASS 503PCSO SPDT (Form C) SLOW OPERATE RELAYS

Stock No.	Mfr's Type W503-	DC Volts ±15%	Timing Range	EACH 1-9	10-24	25-49	50-99	100-Up
850-2051	PCSOX-2	12	100 msec.	20.82	19.78	18.74	16.66	15.62
850-2052	PCSOX-3	24	to 100 sec.	20.82	19.78	18.74	16.66	15.62
850-2054	PCSOX-5	12	12 seconds	22.31	21.19	20.08	17.85	16.73
850-2055	PCSOX-6	24	to 5 min.	22.31	21.19	20.08	17.85	16.73

CLASS 503PCSR SPDT (Form C) SLOW RELEASE RELAYS

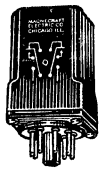
850-2075	PCSRX-2	12	200 msec.	28.59	27.16	25.73	22.87	21.44
850-2076	PCSRX-3	24	to 100 sec.	28.59	27.16	25.73	22.87	21.44
850-2078	PCSRX-5	12	1 second	31.70	30.12	28.53	25.36	23.78
850-2079	PCSRX-6	24	to 5 min.	31.70	30.12	28.53	25.36	23.78

Relays: Impulse, 422-3—Stepping, 422-4—Mercury Plunger, 425—Mercury-Wetted, 438, 441

Magnecraft Time Delay and Mercury Plunger Relays

NEW 214CP SOLID-STATE TIME DELAY RELAY

In the size of a general purpose relay, Magnecraft offers a fully adjustable solid-state time delay relay. Delay on operate mode. For 120 VAC input. Repeat accuracy is ±5% at nominal voltage, 25° C. Contacts are DPDT, rated 5 amps at 32 VDC or 115 VAC, resistive. Steady state current is 20 mA. Convenient top screwdriver time adjustment. Reset and recycle time is typically 100 msec. Transient protection to twice input voltage for 8 msec. Immune to false operation. Molded dust cover enclosure with standard 8-pin octal plug. Size, 2⅛x 1⅜x1⅜". Shpg. wt. 10 oz.



Compact Plug-In Case

Stock No.	Mfr's Type	Timing Range Sec.	EACH 1-9	10-24	25-49	50-99	100-Up
852-1966	W214ACPSOX-1	.300 to 30	21.27	20.21	19.14	17.01	15.95
852-1967	W214ACPSOX-2	3 to 240	21.27	20.21	19.14	17.01	15.95

SOLID-STATE TIME DELAY RELAY WITH 5% REPEATABILITY

Model 211CP. Combines solid-state timing circuit with dependable electromechanical relay to provide DPDT 10-ampere switching. Available in operate-delay and release-delay types, for either AC or DC operation. Timing repeatability: ±5% of setting at nominal voltage @ 25°C. Reset time, 100 ms typical. Three adjustable timing ranges: 1 to 10 sec., 1 to 180 sec., and 2 to 300 sec. Protected from voltage transients up to twice the nominal input voltage for periods up to 8 ms. Operating temperature: −10° to +55°C. Overall size, 2⅞x2⅜x1¾". Av. wt. 10 oz.

OPERATE DELAY TYPES (8-pin socket mounting)

Stock No.	Mfr's Type W211	Input in Volts	Timing Range Sec.	EACH 1-9	10-24	25-49	50-99	100-Up
850-1850	ACPSOX-5	120 AC	1 to 10	18.98	18.03	17.68	15.18	14.24
850-1852	*ACPSOX-7*	*120 AC*	*1 to 180*	18.98	18.03	17.68	15.18	14 24
850-1853	*ACPSOX-8*	*120 AC*	*2 to 300*	18.98	18.03	17.68	15.18	14.24
850-1879	CPSOX-1	24 DC	1 to 10	18.98	18.03	17.68	15.18	14.24
850-1881	CPSOX-3	24 DC	1 to 180	18.98	18.03	17.68	15.18	14.24
850-1882	CPSOX-4	24 DC	2 to 300	18.98	18.03	17.68	15.18	14.24

RELEASE DELAY TYPES (11-pin socket mounting)

850-1865	ACPSRX-5	120 AC	1 to 10	22.93	21.78	20.64	18.34	17.20
850-1867	ACPSRX-7	120 AC	1 to 180	22.93	21.78	20.64	18.34	17.20
850-1868	ACPSRX-8	120 AC	2 to 300	22.93	21.78	20.64	18.34	17.20
850-1890	CPSRX-1	24 DC	1 to 10	22.93	21.78	20.64	18.34	17.20
850-1892	CPSRX-3	24 DC	1 to 180	22.93	21.78	20.64	18.34	17.20
850-1893	CPSRX-4	24 DC	2 to 300	22.93	21.78	20.64	18.34	17.20

SOLID-STATE TIME DELAY RELAY WITH 1% REPEATABILITY

Model 212M. Units combine solid-state timing function circuit with rugged electromechanical relay for 10-ampere DPDT output switching. Has ±1% repeatability; extremely fast reset time. Plastic enclosure for surface mounting. Screw terminals, adjustable knob and calibrated dial that is individually calibrated for each time range with dial plate calibrated in seconds. By use of jumper wire across appropriate terminals, the slow operate model may be programmed for three different timing functions: time delay on operate; non-totalizer control and totalizer/pre-set counter. Slow release delay types may be programmed for time delay on release; interval timing and momentary actuation. 4¼x4½x1½". 14 oz.

OPERATE DELAY TYPES

Stock No.	Mfr's Type W212	Input in Volts	Timing Range sec.	EACH 1-9	10-24	25-49	50-99	100-Up
850-1925	MASOX-2	120 AC	.5 to 10	36.15	33.79	32.78	30.76	29.47
850-1926	MASOX-3	120 AC	5 to 100	37.74	35.29	34.25	32.18	30.80
850-1927	MASOX-4	120 AC	50 to 500	43.24	41.60	39.96	37.65	35.06

RELEASE DELAY TYPES

850-1946	MASRX-2	120 AC	.5 to 10	42.06	40.61	39.16	37.03	34.44
850-1947	MASRX-3	120 AC	5 to 100	43.82	42.32	40.82	38.65	35.93
850-1948	MASRX-4	120 AC	50 to 500	49.73	46.39	45.18	42.76	41.02

SOLID STATE TIME DELAY RELAY WITH 5% REPEATABILITY

Model 211M. (See 212M illus.) Contacts 10A at 32 VDC or 115 VAC.

OPERATE DELAY TYPES

Stock No.	Mfr's Type W211	Input in Volts	Timing Range sec.	EACH 1-9	10-24	25-49	50-99	100-Up
850-1901	MASOX-1	120 AC	.2-1	24.56	23.33	22.10	19.65	18.42
850-1902	MASOX-2	120 AC	1.0-10	24.56	23.33	22.10	19.65	18.42
850-1903	MASOX-3	120 AC	1.0-180	24.56	23.33	22.10	19.65	18.42
850-1904	MASOX-4	120 AC	2.0-300	24.56	23.33	22.10	19.65	18.42
850-1911	MSOX-1	24 DC	.2-1	24.56	23.33	22.10	19.65	18.42
850-1912	MSOX-2	24 DC	1.0-10	24.56	23.33	22.10	19.65	18.42
850-1913	MSOX-3	24 DC	1.0-180	24.56	23.33	22.10	19.65	18.42
850-1914	MSOX-4	24 DC	2.0-300	24.56	23.33	22.10	19.65	18.42

RELEASE DELAY TYPES

850-1906	MASRX-1	120 AC	.2-1	28.92	27.47	26.03	23.14	21.69
850-1907	MASRX-2	120 AC	1.0-10	28.92	27.47	26.03	23.14	21.69
850-1908	MASRX-3	120 AC	1.0-180	28.92	27.47	26.03	23.14	21.69
850-1909	MASRX-4	120 AC	2.0-300	28.92	27.47	26.03	23.14	21.69
850-1916	MSRX-1	24 DC	.2-1	28.92	27.47	26.03	23.14	21.69
850-1917	MSRX-2	24 DC	1.0-10	28.92	27.47	26.03	23.14	21.69
850-1918	MSRX-3	24 DC	1.0-180	28.92	27.47	26.03	23.14	21.69
850-1919	MSRX-4	24 DC	2.0-300	28.92	27.47	26.03	23.14	21.69

113C AIR DASHPOT TIME DELAY SWITCH

Push button . . release button . . time delay is on. No standby power required to perform timing function. SPDT 10 ampere contacts. Single hole panel mounting with ⅝" threaded bushing. Easily installed through grommet. Timing range adjustable 1-180 seconds. 3⅝x1⅝2x2 1/16". Shpg. wt. 10 oz.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-Up
850-1699	W113CX-1	12.96	12.31	11.66	10.37	9.72

C. P. CLARE MERCURY PLUNGER RELAYS (Formerly Ebert)

MINIATURE POWER RELAYS

Compact units capable of handling loads nearly twice that of ordinary armature-type units of equal size. Hermetically sealed, mercury-to-mercury contacts. No contacts to pit, stick or corrode. Full rating with inductive or resistive loads. Coil current, .042 amp, single pole; .080 amp, 2 pole. Handling capability is 20 amperes. For 120 VAC, 50-60 Hz. 1¼ lbs.

Stock No.	Type	Cont.	Size	1-9	10-Up
850-0041	WMR-1	SP NO	3x1⅞x1½"	13.35	11.68
850-0042	WMR-2	SP NC	4x1⅞x1½"	13.90	12.16
850-0043	WMR-11	2P NO	4½x3x1⅞"	24.75	21.65

STANDARD DUTY

Rated 35 amps (per pole) at 120 VAC. Coil operating current WEM-1 .050 amp; WEM-11, .120 amp. U.L. Recognized. For 120 V, 50-60 Hz AC. Wt. 2 lbs.

850-0044	WEM-1	SP NO	4¾x2⅝x2½"	15.10	13.20
850-0045	WEM-11	2P NO	5¼x4x3⅜"	29.20	25.52

HEAVY DUTY—60 AMPS

Type WHD-1 rated 60 amps for 120 V and 35 amps for 240 V, 60 Hz AC. Type WHD-11 2 pole relay; each pole, 60 amps at 120 V, and 35 amps at 240 V. Contact resistance: 4 milliohms maximum. Typical open contact insulation resistance of 20 kM ohms at 500 VDC. U.L. Recognized. For 120 V, 60 Hz AC only. Shpg. wt. 3 lbs.

850-0046	WHD-1	SP NO	2⅞x5¼x3¾"	22.35	19.50
850-0047	WHD-11	2P NO	2⅞x5⅝x3¾"	40.50	35.40

"100" RELAY—100 AMPS

Front-mounted load and coil terminals. Rated 100 amps at 120 V, AC or 12 kW resistive load capacity. Coil operating current is .260 amps. Contact resistance: 2 milliohms maximum. Mounting slots: Continuous center to center spacing from 2¾" to 3½". 4 lbs.

850-0900	100-1	SP NO	7x3½x3⅜"	43.10	37.70

"HI-POWER" ENCAPSULATED RELAYS

High performance relays have hermetically sealed steel shells with ceramic lined electrode chamber, epoxy insulation. Similar to "100" Type relays but with higher current capacity, maximum reliability. Impervious to physical or thermal shock, moisture and dirt.

TYPE A 25 AMPS MINIATURE

Load rating: AC: 25A at 120 V and 240 V, 20A at 380 V and 440 V, 15A at 480 V and 550 V. DC: 25A at 48 V, 20A at 120 V, 15A at 240mV. Contact resistance: less than 2 milliohms. A high performance relay with hermetically sealed steel tubes. Shpg. wt. 2 lbs.

Stock No.	Type	Cont.	Size	1-9	10-49
850-0030	WA-1	SP NO	4¼x3x2¼"	21.10	18.47
850-0031	WA-2	SP NC	4¼x3x2¼"	25.10	22.00
850-0032	WA-11	2P NO	4¼x4¼x2½"	40.75	35.60
850-0033	WA-111	3P NO	4¼x4¼x2½"	54.75	47.90

TYPE B—50 AMPS STANDARD

Load ratings: AC: 50A at 120 V, 35A at 240 V and 380 V, 30A at 440 V and 480 V, 25A at 550 V. DC: 50A at 48 V, 30A at 120 V, 25A at 240 V. Contact resistance: less than 2 milliohms. Type WB-1 mtg. hole spacing is 2½". Type WB-11 mtg. hole spacing is 3 7/64". 3 lbs.

850-0034	WB-1	SP NO	4¾x3x2¼"	24.65	21.60
850-0035	WB-11	2P NO	4¾x4¼x2½"	48.00	42.00

TYPE H—100 AMPS HEAVY DUTY

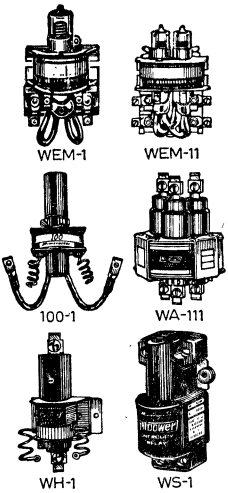
Load ratings: AC: 100A at 120 V, 90A at 240 V, 85A at 380 V, 80A at 440 V, 70A at 550 V. DC: 100A at 48 V, 80 A at 120 V, 60A at 220 V. Shpg. wt. 6 lbs.

850-0036	WH-1	SP NO	7½x4x3½"	64.50	56.50
850-0037	WH-11	2P NO	7½x6½x4"	129.00	113.00

TYPE S—25 AMP TYPE T—50 AMP

Completely encapsulated hi-power relays. Type S rated 25A at 120/240 V. Type T 50A, 120 V. Wt. 1 lb.

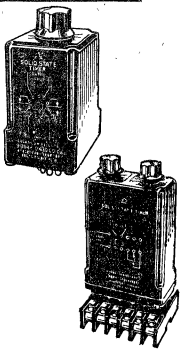
850-0048	WS-1	SP NO	3½x1¾x1⅜"	23.00	20.10
850-0049	WT-1	SP NO	3⅞x2x1⅞"	28.50	25.00



Relays: Mil, 405—Sensitive, 430-1—TO-5 Size, 445—Solenoids, 442-4—Coaxial, 446

TIME DELAY RELAYS

Struthers-Dunn Series 40 Time Delay Relays



Accuracy, 10%. Repeatability, 2%. Recycle time, 100 msec. Transient protection, 2 times rated voltage for 8 msec. Plug-in mounting. Dust covered. 2 7/16x1 1/2x5/8". Av. wt. 11 oz.

MODEL 42 OFF DELAY. DPDT 10-amp contacts transfer after a preset time, upon the opening of a SPST external pilot switch.

MODEL 43 MONITOR. DPDT 10-amp contacts transfer after a preset time. During preset timing range, time cycle can return to zero by an external SPST contact closure.

MODEL 44 REPEAT CYCLE. SPDT 10-amp contacts; 12-pin plug-in; adj. on/off delay.

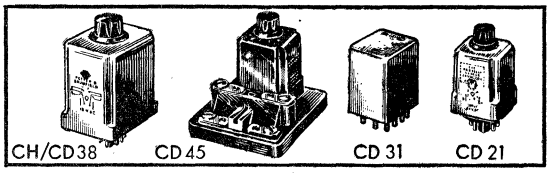
MODEL 45 ON DELAY. DPDT 10-amp contacts transfer after a preset time. Reset by removal of input power.

How to Order: In place of X in Stock Number, use (1) for 24 VAC (2) for 115 VAC, (3) for 24 VDC, or (4) for 48 VDC. For quality prices discount 10-24 price thus: 25-49, 5%; 50-74, 10%; 75-99, 20%

Stock No.	Mfr's Type	Delay Secs	Action	AC Type EACH 1-9	AC Type EACH 10-24	DC Type EACH 1-9	DC Type EACH 10-Up
929-144X	42	0.2-2	DPDT	29 38	23.50	26.88	21.50
929-145X	42	2-20	DPDT	29.38	23.50	26.88	21.50
929-146X	42	20-200	DPDT	29.38	23.50	26.88	21.50
929-147X	43	0.2-2	DPDT	36.88	29.50	35.63	28.50
929-148X	43	2-20	DPDT	36.88	29.50	35.63	28.50
929-149X	43	20-200	DPDT	36.88	29.50	35.63	28.50
929-150X	44	0.2-2	SPDT	74.38	59.50	71.88	57.50
929-151X	44	2-20	SPDT	74.38	59.50	71.88	57.50
929-152X	44	20-200	SPDT	74.38	59.50	71.88	57.50
929-153X	45	0.2-2	DPDT	24.75	19.80	23.13	18.50
929-154X	45	2-20	DPDT	24.75	19.80	23.13	18.50
929-155X	45	20-200	DPDT	24.75	19.80	23.13	18.50

POTTER & BRUMFIELD TIME DELAY DEVICES AND RELAYS

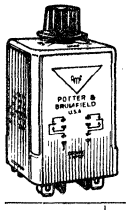
SERIES CH AND CD SOLID-STATE, TIME-DELAY DEVICES AND RELAYS



Meet many time delay requirements. Reset within milliseconds. Adjustable over entire time range. Plastic enclosures. Series CH: temp., —10° C to +55° C, acc., ±10%; reset, 100 msec; repeatability, ±2%. Series CD: temp., —40° C to +55° C; acc., ±5%; reset, 60 msec; repeatability, ±1%. CHB/CDB38 and CHD/CDD38 have internal DPDT 10-amp relay. Others are timer only; use with P & B relays: *KRP11AG or KRP14AG; †KRP5DG, KRP11DG, or KRP14DG; ‡KHP17D11 (CDH31 has 180-second fixed delay, adjustable from 1.8 to 120 sec. by using various values of 1/2-watt resistors); §PR11AY. CDB38-70012, CDD38-30012, CHB38-70011, 70013, and CHD38-30011, 30013 provide delay on release, others delay on operate. Wts.: CD21, 5 oz.; CD31, 3 oz.; CD38, 9 oz.; CD45, 7 oz.; CH38, 5 oz.

Stock No.	Mfr's Type	Input Volts	Delay Sec.	EACH 1-4	EACH 5-9	EACH 10-24	EACH 25-Up
886-0080	CHB38-30001	24 AC	1.0-10	23.00	19.95	18.95	17.96
886-0081	CHB38-30003	24 AC	1.0-180	23.00	19.95	18.95	17.96
886-0090	*CHB38-70001*	120 AC	1.0-10	23.00	19.95	18.95	17.96
886-0091	CHB38-70003	120 AC	1.0-180	23.00	19.95	18.95	17.96
886-0085	CHD38-30001	24 DC	1.0-10	22.00	18.95	18.00	17.06
886-0086	CHD38-30003	24 DC	1.0-180	22.00	18.95	18.00	17.06
886-0082	CHB38-70011	120 AC	1.0-10	27.90	23.95	22.75	21.56
886-0083	CHB38-70013	120 AC	1.0-180	27.90	23.95	22.75	21.56
886-0087	CHD38-30011	24 DC	1.0-10	25.40	21.95	20.85	19.76
886-0088	CHD38-30013	24 DC	1.0-180	25.40	21.95	20.85	19.76
886-0053	*CDB38-70003*	120 AC	0.1-10	51.50	44.25	42.04	39.83
886-0054	CDB38-70004	120 AC	0.6-60	51.50	44.25	42.04	39.83
886-0055	CDB38-70005	120 AC	1.8-180	51.50	44.25	42.04	39.83
886-0069	CDD38-30003	24 DC	0.1-10	49.00	42.00	39.90	37.80
886-0070	CDD38-30004	24 DC	0.6-60	49.00	42.00	39.90	37.80
886-0071	CDD38-30005	24 DC	1.8-180	49.00	42.00	39.90	37.80
886-0051	CDB21-70003*	120 AC	0.1-10	49.00	39.15	37.19	35.24
886-0050	CDB21-70001*	120 AC	1.8-180	45.00	39.15	37.19	35.24
886-0067	CDD21-30003†	24 DC	0.1-10	45.00	38.80	36.86	34.92
886-0075	CDH31-30005‡	24 DC	180	45.50	39.35	37.38	35.42
886-0065	CDB45-70002§	120 AC	0.6-60	43.10	37.50	35.63	33.75
886-0057	CDB38-70012	120 AC	0.6-60	60.00	52.90	50.26	47.61
886-0072	CDD38-30012	24 DC	0.6-60	57.00	49.95	47.45	44.96

CUB51 ADJUSTABLE TIME-DELAY RELAYS

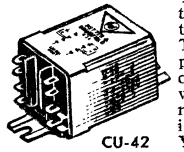


Knob-adjustable delay-on-operate time delay relays. DPDT contacts rated 10 amps at 28 VDC resistive, or 120 V, 60 Hz AC, 80% power factor. Calibrated dial. Tolerance: adjustable, ±10%. Repeatability, ±3%. Reset time, 150 msec. Recycle time, 150 msec. Transient protection of twice rated input voltage for up to 8 msec. Polarity protected. For operation at normal room temperature. Timing intervals are adjustable over timing ranges from 1 to 10 seconds or 1 to 120 seconds. Size, 1.53x1.406x2.782" max. (including knob). 120 VAC. Shpg. wt. 3 1/2 oz.

Stock No.	Type CUB51-	Time Delay Seconds	EACH 1-4	EACH 6-9	EACH 10-24	EACH 25-49	EACH 50-Up
886-0131	70010	1-10	21.60	16.30	15.49	14.67	13.04
886-0132	70120	1-120	23.40	17.85	16.96	16.07	14.28

CU SERIES FIXED AND ADJUSTABLE TIME DELAY RELAYS

CU-41



CU-42

Where fast reset time and excellent repeatability are required. Designed for delay-on-operate use, with fixed timing tolerance of ±5% and resistor adjustable tolerance of ±10%. Ideal for vending equipment, machine tool control or process controls. Each unit contains internally-mounted 10-amp DPDT relay. Type CU-41 uses KUP series socket listed on page 414. Type CU-42 enclosures have flanged cases for mounting directly to chassis. Units with adjustable time delay require external resistor for operation.* Resistances indicated in table below are for maximum delay time. Yellow Lexan case. Av. shpg. wt. 4 1/4 oz.

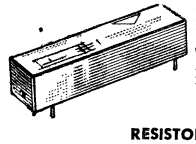
FIXED DELAY TYPES

Stock No.	Mfr's Type	Delay (Sec.)	Input Volts	EACH 1-4	EACH 5-9	EACH 10-24	EACH 25-Up
886-0125	CUA41-70010	10	120AC	17.75	14.20	13.49	12.78
886-0126	CUA41-70120	120	120AC	19.69	15.75	14.96	14.18
886-0133	CUC41-30010	10	24DC	17.75	14.20	13.49	12.78
886-0134	CUC41-30120	120	24DC	19.69	15.75	14.96	14.18
886-0124	CUA41-30010	10	24AC	17.75	14.20	13.49	12.78
886-0129	CUA42-70010	10	120AC	17.75	14.20	13.49	12.78
886-0130	CUA42-70120	120	120AC	19.69	15.75	14.96	14.18
886-0137	CUC42-30010	10	24DC	17.75	14.20	13.49	12.78
886-0138	CUC42-30120	120	24DC	19.69	15.75	14.96	14.18
886-0128	CUA42-30010	10	24AC	17.75	14.20	13.49	12.78

RESISTOR-ADJUSTABLE DELAY TYPES (LESS RESISTOR)

Stock No.	Mfr's Type	Delay (Sec.)	Volts	Res.* (Ohms)	EACH 1-4	EACH 5-9	EACH 10-24	EACH 25-Up
886-0148	CUF41-70010	1-10	120AC	200k	18.75	15.00	14.25	13.50
886-0149	CUF41-70120	1-120	120AC	2.4 meg	20.38	16.30	15.49	14.67
886-0157	CUH41-30010	1-10	24DC	160k	18.75	15.00	14.25	13.50
886-0158	CUH41-30120	1-120	24DC	2 meg	20.38	16.30	15.49	14.67
886-0144	CUF41-30010	1-10	24AC	200k	18.75	15.00	14.25	13.50
886-0153	CUF42-70010	1-10	120AC	200k	18.75	15.00	14.25	13.50
886-0154	CUF42-70120	1-120	120AC	2.4 meg	20.38	16.30	15.49	14.67
886-0161	CUH42-30010	1-10	24DC	160k	17.50	14.00	14.25	13.50
886-0162	CUH42-30120	1-120	24DC	2 meg	20.38	16.30	15.49	14.67
886-0151	CUF42-30010	1-10	24AC	200k	18.75	15.00	14.25	13.50

CJ SERIES TIME DELAY REED RELAYS



Dry reed relay in enclosure with solid-state timing components .2" ctr. PC pins. Reset or recycling time, less than 60 ms. CJH adjustable ±10%. —10° to +55° C. External resistor for max. time (not included): *750K, †1.8 meg. .687 h. x 2.718" (max.). **Phone or write for prices on larger quantities.**

RESISTOR ADJUSTABLE ON OPERATE

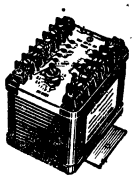
Stock No.	Mfr's Type	Time Sec.	Input Volts	Action Input	EACH 1-4	EACH 5-9	EACH 10-24	EACH 25-Up
886-0104	CJH-01-20010*	0.1-10	12VDC	SPST NO	24.75	19.80	18.81	17.82
886-0105	CJH-01-20120†	1-120	12VDC	SPST NO	28.19	22.55	21.42	20.30
886-0106	CJH-01-30010*	0.1-10	24VDC	SPST NO	24.75	19.80	18.81	17.82
886-0107	CJH-01-30120†	1-120	24VDC	SPST NO	28.19	22.55	21.42	20.30
886-0108	CJH-02-20010*	0.1-10	12VDC	SPST NC	25.56	20.45	19.43	18.41
886-0109	CJH-02-20120†	1-120	12VDC	SPST NC	28.44	22.75	21.61	20.48
886-0111	CJH-03-20010*	0.1-10	12VDC	SPDT	26.56	21.25	20.19	19.13
886-0112	CJH-03-20120†	1-120	12VDC	SPDT	30.00	24.00	22.80	21.60
886-0113	CJH-03-30010*	0.1-10	24VDC	SPDT	26.56	21.25	20.19	19.13
886-0114	CJH-03-30120†	1-120	24VDC	SPDT	30.00	24.00	22.80	21.60

Relays: Mil, 405—Sensitive, 430-1—TO-5 Size, 445—Solenoids, 442-4—Coaxial, 446

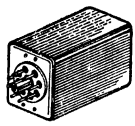
Intermatic Solid-State Time Delay Relays

Designed for all variable on-delay timing requirements. Silicon semiconductors and tantalum capacitor for high accuracy and stability. Time ranges: 0.05 to 500 seconds. ±1% repeatability. Dial accuracy, ±5% of nominal setting. Recycle time, 50 msec. 0° to 130°F. ambient Max. power consumption, 4½ watts. Protected against voltage transients and polarity changes. See charts at right for action. *115 AC, †24 DC. Av. wt. 14 oz.

Wide selection of ranges for on or off delay



Surface Mount



Plug in

SERIES SS-15 AND SS-16 SURFACE-MOUNT TIMERS

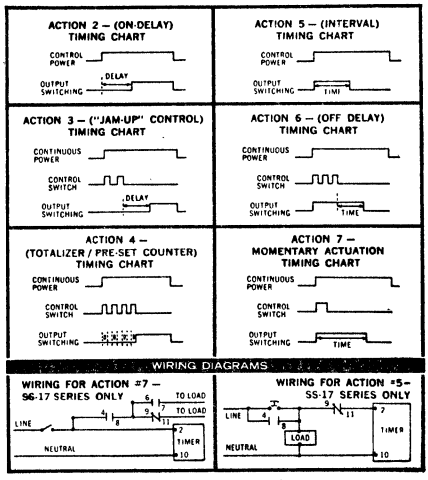
For machine tool, process, flow and motor control, welding equipment, etc. Housed in steel surface mount case. All terminals on top for easy wiring, locking type adjustment bushing with slot for timing control. 3⅝x3⅞x3⅝". Output switching: DPDT, 10 amps. §Action, see chart at right.

SERIES SS-15 (ON DELAY) §2, 3, 4

Stock No.	Type SS-	Range (Secs.)	EACH
818-1255	15222-B*	.05-.5	46.10
818-1263	15223-B†	.05-.5	46.10
818-1257	15222-C*	.5-5	46.10
818-1265	15223-C†	.5-5	46.10
818-1259	15222-D*	5-50	46.10
818-1267	15223-D†	5-50	46.10
818-1261	15222-E*	50-500	48.10
818-1269	15223-E†	50-500	48.10

SERIES SS-16 (OFF DELAY) §5, 6, 7

Stock No.	Type SS-	Range (Secs.)	EACH
818-1271	16822-B*	.05-.5	46.10
818-1279	16823-B†	.05-.5	46.10
818-1273	16822-C*	.5-5	46.10
818-1281	16823-C†	.5-5	46.10
818-1275	16822-D*	5-50	46.10
818-1283	16823-D†	5-50	46.10
818-1277	16822-E*	50-500	48.10
818-1285	16823-E†	50-500	48.10



SERIES SS-12 AND SS-13 PLUG-IN TIMERS

Economy timers for most industrial uses such as with packaging machines, flow controls, plastic molding machines, etc. Offer reliability and accuracy for all timing applications in the range of 1-180 seconds. Complete transistorization reduces moving parts. All-silicon semiconductors and a tantalum timing capacitor are used to provide stability over a wide temperature range and the circuitry is designed to eliminate changes in timing due to input voltage fluctuations. The heavy-duty contacts of the single-pole double throw long-life relay are made of silver cadmium oxide. Input: 120 VAC. Output switching: DPDT 10 amps. Size, 4¾x2x2". Fits standard sockets. §Action, see chart at right.

SERIES SS-12 (ON DELAY) 8-PIN §2

Stock No.	Type SS12-	Range (Secs.)	EACH
818-1249	222II	1-15	18.54
818-1250	222JJ	1-60	18.54
818-1251	222KK	1-180	18.54

SERIES SS-13 (OFF DELAY) 11-pin §6

Stock No.	Type SS13-	Range (Secs.)	EACH
818-1252	622II	1-15	19.54
818-1253	622JJ	1-60	19.54
818-1254	622KK	1-180	19.54

SERIES SS-17 AND SS-18 SURFACE MOUNT TIMERS WITH EXTRA RELAY

Have additional relay for instantaneous contacts which act as extension or control switch. Locking-type bushing for adjusting time periods. Input: 115 VAC. Output switching: one N.O., one N.C. timed contact; one N.O., one N.C. instantaneous contact, 10 amps. §Action, see chart above.

Stock No.	Type SS-	Action§	Range (Secs)	EACH 1-24	25-49	50-99	100-Up
818-1300	17212-C	On Delay 2, 5, 7	.5-5	56.11	53.20	50.40	44.80
818-1302	17212-D	On Delay 2, 5, 7	5-50	56.11	53.20	50.40	44.80
818-1315	18612-C	Off Delay 6	.5-5	56.11	53.20	50.40	44.80
818-1317	18612-D	Off Delay 6	5-50	56.11	53.20	50.40	44.80

SERIES SS-10, SS-11, SS-20 AND SS-21 PLUG-IN OR SURFACE MOUNT TIMERS

Achieve ±2% accuracy to insure repeatability and proper operation of timed mechanism. Input: *115 VAC, except †24 VDC. Output switching: DPDT, 5 amps. Size, 4¾x2x2". Series SS-20 is 8-Pin Plug-In. Series SS-21 is 11 Pin Plug-In. SS-10 and SS-11 are 11 Pin Plug-In or Surface Mount. §Action, see chart above.

Stock No.	Type SS-	Action§	Range (Secs)	EACH 1-24	25-49	50-Up
818-1325	20222-Y*	On Delay 2	.5-30	29.06	27.55	26.10
818-1330	20223-Y†	On Delay 2	.5-30	29.06	27.55	26.10
818-1335	21622-Y*	Off Delay 6	.5-30	29.06	27.55	26.10
818-1340	21623-Y†	Off Delay 6	.5-30	29.06	27.55	26.10

SS-10 SERIES §2, 3, 4

Stock No.	Type SS10-	Range msec	Mtg.	EACH 1-24	25-Up
818-1200	222B*	.05-5	Plug	46.10	43.70
818-1216	223B†	.50-.5	Plug	46.10	43.70
818-1204	222C*	.5-5	Plug	46.10	43.70
818-1220	223C†	.5-5	Plug	46.10	43.70
818-1208	222D*	5-50	Plug	46.10	43.70
818-1212	222E*	50-500	Plug	48.10	45.60
818-1202	222B1*	.05-.5	Sur.	46.10	43.70
818-1206	222C1*	.5-5	Sur.	46.10	43.70
818-1210	222D1*	5-50	Sur.	46.10	43.70
818-1214	222E1*	50-500	Sur.	48.10	45.60

SS-11 SERIES §5, 6, 7

Stock No.	Type SS-11	Range msec	Mtg.	EACH 1-24	25-Up
818-1225	822B*	.05-.5	Plug	46.10	43.70
818-1241	823B†	.05-.5	Plug	46.10	43.70
818-1229	822C*	.5-5	Plug	46.10	43.70
818-1244	823C†	.5-5	Plug	46.10	43.70
818-1233	822D*	5-50	Plug	46.10	43.70
818-1248	823D†	5-50	Plug	46.10	43.70
818-1237	822E*	50-500	Plug	48.10	45.60
818-1227	822B1*	.05-.5	Sur.	46.10	43.70
818-1231	822C1*	.5-5	Sur.	46.10	43.70
818-1235	822D1*	5-50	Sur.	46.10	43.70
818-1239	822E1*	50-500	Sur.	48.10	45.60

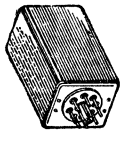
REMOTE POTENTIOMETERS

Selection of remote potentiometers for positive remote control of all timers on this page. Select the potentiometer for your needs by time range that corresponds to your timer. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Range (Secs.)	EACH
818-1100	99B	.05-.5	2.00
818-1101	99C	.5-5	2.00
818-1102	99D	5-50	2.00
818-1103	99E	50-500	2.00
818-1104	99V	.5-30	2.00

LOW-COST TIME DELAY RELAYS

- Fill Many of Your Time Delay Needs at Low Cost
- Choice of Types for On-Delay or Off-Delay
- Compact Packaging to Fit Standard Octal Socket



Now Intermatic makes it possible for you to meet many of your time delay relay needs at much lower cost. This series is designed for all variable on-delay and off-delay timing requirements. Offer high accuracy and stability. Fit standard octal socket. Repeatability accuracy is ±5%. Fully protected against voltage transients and polarity changes. Input: 120 volts AC or DC, except †24 volts AC or DC. Output switching: single pole double throw, 3 amperes. Series SS-6, on-delay; series SS-8, off-delay. Shpg. wt. ½ lb.

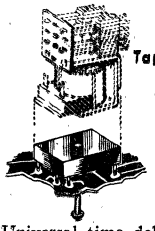
Stock No.	Type SS-	Range (Secs.)	EACH 1-9	10-24	25-49	50-99	100-Up
818-1115	6262-II	1-15	9.51	8.65	8.25	7.81	7.38
818-1121	6263-II†	1-15	9.51	8.65	8.25	7.81	7.38
818-1117	6262-JJ	1-60	9.51	8.65	8.25	7.81	7.38
818-1123	6263-JJ†	1-60	9.51	8.65	8.25	7.81	7.38
818-1119	6262-KK	1-180	9.51	8.65	8.25	7.81	7.38
818-1125	6263-KK†	1-180	9.51	8.65	8.25	7.81	7.38
818-1135	8562-II	1-15	12.05	10.95	10.40	9.85	9.30
818-1141	8563-II†	1-15	12.05	10.95	10.40	9.85	9.30
818-1137	8562-JJ	1-60	12.05	10.95	10.40	9.85	9.30
818-1143	8563-JJ†	1-60	12.05	10.95	10.40	9.85	9.30
818-1139	8562-KK	1-180	12.05	10.95	10.40	9.85	9.30
818-1145	8563-KK†	1-180	12.05	10.95	10.40	9.85	9.30

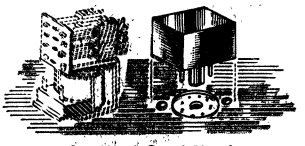
Relays: Solid State, 101, 432—Gen. Purpose, 406-419—Power, 419-421, 425—Latching, 422-4, 445

Time Delay Relays and Relay Service Tools

GUARDIAN TIME DELAY RELAYS

UNIVERSAL TIME DELAY MODULES





Standard Octal Plug-In

- Permits Replacing Defective Relays without Replacing Entire Timing Circuit

Universal time delay module offering complete flexibility in the selection of relays, delays and coil voltages. Accepts Guardian Series Relays 240, 640, 1200, 1220, and 2100. Tapered base accepts relays directly for PC mounting; standard octal base mounts in octal socket, with relay wired in the conventional manner. Module acts as relay driver, use with external terminal adjustment with resistor for desired time delay. In Mfr's Type No., -O indicates On-Attract; -R indicates On-Release. Full instructions. Av. wt., 2½ oz.

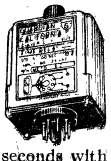
TAPERED BASE FOR PC MOUNTING

Stock No.	Mfr's Type IR-	Time Range Sec.	Volts	EACH 1-9	10-49	50-Up
802-0102	TMT-O-100-24DC	.5-100	24DC	14.48	11.59	11.10
802-0114	TMT-R-100-24DC	.5-100	24DC	19.50	15.60	14.94
802-0108	TMT-O-300-24DC	100-300	24DC	18.45	14.76	14.14
802-0120	TMT-R-300-24DC	100-300	24DC	23.40	18.72	17.94
802-0105	TMT-O-100-115AC	.5-100	115AC	14.48	11.59	11.10
802-0117	TMT-R-100-115AC	.5-100	115AC	19.50	15.60	14.94
802-0111	TMT-O-300-115AC	100-300	115AC	18.45	14.76	14.14
802-0123	TMT-R-300-115AC	100-300	115AC	23.40	18.72	17.94

STANDARD OCTAL BASE

802-0070	TMP-O-100-24DC	.5-100	24DC	16.13	12.91	12.37
802-0082	TMP-R-100-24DC	.5-100	24DC	21.85	17.48	16.75
802-0076	TMP-O-300-24DC	100-300	24DC	19.06	15.25	14.61
802-0088	TMP-R-300-24DC	100-300	24DC	24.82	19.86	19.02
802-0073	TMP-O-100-115AC	.5-100	115AC	16.13	12.91	12.37
802-0085	TMP-R-100-115AC	.5-100	115AC	21.85	17.48	16.75
802-0079	TMP-O-300-115AC	100-300	115AC	19.06	15.25	14.61
802-0091	TMP-R-300-115AC	100-300	115AC	24.82	19.86	19.02

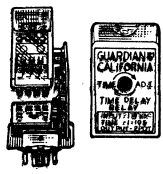
BDT SERIES TIME DELAYS



Versatile commercial time-delay relay operates efficiently on either high or low line in applications where accurate time-delay values are required. Repeatability at nominal temperature and voltage is 2% with temperature stability. Offers unmatched compactness for applications where circuit space-saving becomes crucial. Has replaceable electro-mechanical relay. Available in 120 VAC or 24 VDC with time ranges of 1 to 10 seconds or 10 to 60 seconds with screw type adjustable pot. Termination is standard (8-pin) octal plug with a temperature range of 0°C to +55°C. Operation is on-attract, and output is rated at 5 amperes DPDT. 1.45x1.39x2.15". Wt. 3 oz. Higher quantity pricing available.

Stock No.	Mfr's Type IR-BDT-	Time Range (in sec.)	Volts	EACH 1-9	10-24	25-49	50-Up
802-0035	0-10-120VAC	1-10	120 VAC	23.00	17.10	16.25	15.40
802-0037	0-60-120VAC	10-60	120 VAC	23.45	17.60	16.75	15.85
802-0034	0-10-24VDC	1-10	24 VDC	22.40	16.90	16.05	15.20
802-0036	0-60-24VDC	10-60	24 VDC	23.00	17.10	16.25	15.40

MET SERIES TIME DELAY

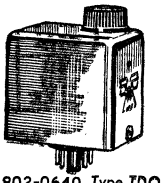


- Quality-engineered for High Tolerance
- Performs with a Repeatability of 1%
- Adjust Time-delay Values with Ease

Economy-designed, time-delay device features high tolerance and outstanding repeatability of 1%, long life performance. Both delay-on-operate and delay-on-release types in two timing ranges: 0.5 seconds to 100 seconds and 100 to 300 seconds. Single-turn pot for convenient adjustment. Available in 24 VAC, 120 VAC, and 24 VDC Accuracy of ±10% of normal setting over voltage and temperature range. Contacts rated at 10 A resistive at 115 VAC. Standard octal plug. 0 in part number indicates delay on operate; R, delay on release. 1.90x2.40x3.50". Wt. 4 oz.

Stock No.	Mfr's Type MET-	Time Range (in sec.)	Volts	EACH 1-9	10-24	25-49	50-Up
802-0470	O-100-24VAC	.5-100	24 VAC	22.50	18.00	17.10	16.20
802-0478	O-300-24VAC	100-300	24 VAC	23.87	19.10	18.15	17.20
802-0474	O-100-120VAC	.5-100	120 VAC	22.00	17.60	16.70	15.85
802-0482	O-300-120VAC	100-300	120 VAC	23.87	19.10	18.15	17.20
802-0472	O-100-24VDC	.5-100	24 VDC	22.50	18.00	17.10	16.20
802-0480	O-300-24VDC	100-300	24 VDC	23.87	19.10	18.15	17.20
802-0486	R-100-24VAC	.5-100	24 VAC	32.75	26.20	24.90	23.60
802-0493	R-300-24VAC	100-300	24 VAC	33.62	26.90	25.55	23.95
802-0490	R-100-120VAC	.5-100	120 VAC	31.87	25.50	24.25	22.95
802-0497	R-300-120VAC	100-300	120 VAC	32.81	26.25	24.95	23.65
802-0488	R-100-24VDC	.5-100	24 VDC	32.75	26.20	24.90	23.60
802-0495	R-300-24VDC	100-300	24 VDC	33.62	26.90	25.55	23.95

DPDT 5 AMP TIME DELAY RELAY



Relay operating from 115 VAC ±10% 50-60 Hz. Recycle time, 100 milliseconds; repeatability, 5% of nominal setting; accuracy, 10% of nominal setting. 10-turn pot adjusts from 0.5 to 30 seconds. Temperature range, −10°F to +100°F. Plug-in octal mounting. Chart included with relay shows number of turns for required time delay. Size 3x2.062x2.625". Shpg. wt. 8 oz.

802-0640. *Type TDO-62C30-115A*...1-9...20,10..10-49, Each 16.32
50-99, Each.....15.69 100-Up, Each.....14.12

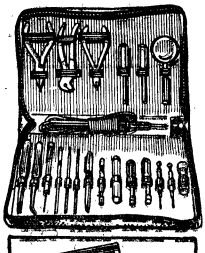
10 AMP 3PDT SOLID-STATE TIME DELAYS

Solve problems of operation control, recycling, safety delays, programmed sequences. Welded 3PDT encapsulated timing module handles 10 A resistive load. Has 15-turn pot with accuracy of ±5% over combined voltage and temperature range (−40°F, +150°F), for setting and resetting. Recycle time is 50 milliseconds; repeatability, ±1%. DC units are polarity protected. Faston 110 mounting. Chart included shows No. turns for required delay. 3x1.678x1.391". 5 oz.

Stock No.	Mfr's Type	Coil Volts	Delay Sec.	EACH 1-4	5-49	50-99
802-0621	TD-63C15	115VAC	1-15	37.12	29.70	26.73
802-0615	TD-33C15	24DC	1-15	30.25	24.20	21.88
802-0623	TD-63C60	115VAC	10-60	37.57	30.06	27.54
802-0617	TD-33C60	24VDC	10-60	31.48	25.19	22.67
802-0625	TD-63C180	115VAC	50-180	46.06	36.85	33.16

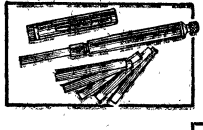
JONARD ELECTRONIC SERVICE TOOLS

K-600 20-PIECE ELECTRONIC TOOL SET



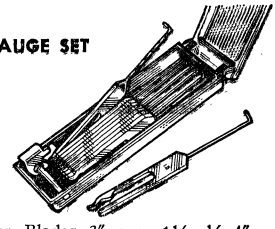
Designed and specially produced for assembly, service, and repair of electronic equipment. Speeds up handling of complex components. Set contains chain-nose, groove-grip, and diagonal cutting pliers; standard and Phillips screwdrivers; magnifier; soldering iron; straight and bent-nose tweezers; solder aid; alignment tool; 2 needle files; pin vise; solder core; 3/16" and ¼" nut drivers; 2 jewelers screwdrivers; and pen burnisher with 12 blades. Durable leather zippered case for easy portability. 2 lbs.
830-0350....Each 40.00 2-Up.....37.00

POCKET-TYPE CONTACT BURNISHERS



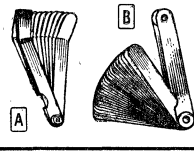
Six blades stored in plastic pen. 4½x⅜" dia.
830-0357. PB-7 Pen and 6-0.007" Blades...4.80
830-0356. PB-3 Pen and 6-0.0035" Blades..4.90
830-0212. B-7 Blades for PB-7...Pkg. of 25 4.50
830-0211. B-3 Blades for PB-3...Pkg. of 25 4.80

WIRE THICKNESS GAUGE SET



Specially designed for use in restricted places. Blades bend 90° 3/16" from tip. Supplied with nine blades marked in metric scale from 0.1 mm. to 1.5 mm. Press blade selector guide and blade pops up for use, or selected blade may be pulled out for tight spaces. Blades, 3"; case, 1¼ x½x4".
830-0462. T-271 Gauge Set. 1-9...21.35 10-Up....19.40

JONARD THICKNESS GAUGES



A T-225 ANGLES GAUGE, 9 blades, .009" to .026". 5 oz.
830-0460. 1-9.3.50 10-Up.2.80

B T-720N STRAIGHT GAUGE, 26 blades, .0015" to .025". 4 oz.
830-0470. 1-9.5.50 10-Up.4.40

Relays: Solid State, 101, 432—Gen. Purpose, 406-419—Power, 419-421, 425—Latching, 422-4, 445

Telephone and Special Purpose Relays

P & B TELEPHONE-TYPE RELAYS

LS 4-AMP MEDIUM-COIL RELAYS

Short springs and lightweight armature for fast action. Stainless steel bearing for long life—100 million operations. Bifurcated palladium contacts: 4 amps at 120 V, 60 Hz, resistive; DC 4 amps, 150 watts. Nominal coil power, 1.8 watts. Tinned, pierced solder-type terminals. Two 6-32 tapped holes on ¾″ centers. 1 11/16x2⅛x1⅛″. 5 oz.

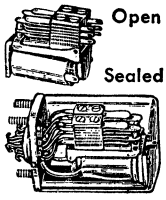
Stock No.	Mfr's Type	Coil Volts	Ohms	Action	EACH 1-9	10-24	25-Up
886-0829	LS17D	24 DC	300	4PDT	8.13	6.50	5.50
886-0830	LS17D	48 DC	1300	4PDT	8.38	6.70	5.67
886-0831	LS23D	24 DC	300	6PDT	9.81	7.85	6.64

MG 2-AMP SUBMINIATURE DC RELAYS

Relay for DC Subminiature use. Withstands shock and vibration of 10g from 55 to 500 Hz. Temperature range of −55° to +85° C. All are 4PDT, except *DPDT. Contacts are 3/32″ dia. silver, gold-flashed; rated 2 amps @ 28 VDC or 120 VAC resistive. Mounting: 4 tapped No. 3-48 holes on ⅜″ centers. Overall size (open) 1 1/16x1 1/16x1¼″. †In table indicates coil VDC. Av. shpg. wt. 2 oz.

Stock No.	Type MG-	†	Ohms	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0855	11D*	12	90	7.50	6.00	5.70	5.40	4.20	3.90
886-0856	11D*	24	365	7.50	6.00	5.70	5.40	4.20	3.90
886-0857	17D	12	90	10.06	8.05	7.65	7.25	5.64	5.23
886-0858	17D	24	365	10.06	8.05	7.65	7.25	5.64	5.23

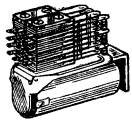
MH 5-AMP MINIATURE DC RELAYS



Space-saving. 4PDT, except *6PDT. Two types: open, and hermetically sealed metal housing (denoted by suffix M). Contacts, ⅛″ dia. gold-flashed silver, rated 5 amps. Sealed models have hook-end solder terminals. Mounting: Open types, four 3-48 tapped holes on ⅜x⅜″ centers; sealed models, three 6-32 threaded studs on 1¼x½″ centers. Sizes: Open, 1 39/64x2 5/32x1 9/16″; sealed, 1 11/16x1 1/32x2½″. †Coil VDC. Wts.; open, 3 oz.; sealed, 6 oz.

Stock No.	Type MH-	†	Ohms	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0865	17D	12	96.0	8.69	6.95	6.60	6.26	4.87	4.52
886-0866	17D	24	365.0	8.69	6.95	6.60	6.26	4.87	4.52
886-0867	17DM	12	96.0	17.44	13.95	13.25	12.56	9.77	9.07
886-0868	23D*	12	62.3	10.88	8.70	8.27	7.83	6.09	5.66
886-0869	23D*	24	245.0	10.88	8.70	8.27	7.83	6.09	5.66

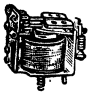
ML 3-AMP MINIATURE HIGH-SENSITIVITY DC RELAYS



Excellent sensitivity with outstanding switching capabilities. Type ML11D is DPDT; ML17D is 4PDT. Wide range of uses—ideal for transistorized computer networks, telephone systems. Single contact arms have ⅛″ dia. gold-flashed contacts rated at 3 amps (120 V, 60 Hz, resistive) for an estimated mechanical life of 10,000,000 operations. Solder lug connections. Type of mounting: four 3-48 holes on ⅜″ centers. Size, 1 19/32x¾x 1 31/32″. Av. shpg. wt., 3 oz.

Stock No.	Type ML-	Coil Ohms	Coil mA	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0875	11D	2500	4.0	9.19	7.35	6.98	6.62	5.15	4.78
886-0876	11D	5000	2.83	9.38	7.50	7.13	6.75	5.25	4.88
886-0877	11D	10k	2.0	9.81	7.85	7.46	7.06	5.30	5.10
886-0878	17D	2500	5.65	10.88	8.70	8.27	7.83	6.09	5.66
886-0879	17D	5000	4.0	11.13	8.90	8.46	8.01	6.23	5.79
886-0880	17D	10k	2.83	11.56	9.25	8.79	8.33	6.48	6.01

KT DPDT 5-AMP ANTENNA-SWITCHING RELAYS



Useful for switching antenna between transmitter and receiver. Glass base insulation provides minimum loss in RF applications. For 300-ohm line. Mounts by one 6-32 stud. Fine silver contacts are rated at 5 amps. Size: 1¼x1⅝x1 11/16″. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Coil Volts	Res., Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
886-0745	KT11A	6 AC	6.1	5.38	4.30	4.09	3.87	3.01
886-0746	KT11A	120 AC	2250	5.38	4.30	4.09	3.87	3.01
886-0747	KT11D	6 DC	32.1	5.38	4.30	4.09	3.87	3.01
886-0748	KT11D	12 DC	120	5.38	4.30	4.09	3.87	3.01

C. P. CLARE LB AND LB6PDT SERIES

Miniature telephone-type relays with excellent switching capacity and versatility. Ideal for military, commerical or industrial uses. Six form C contacts rated 2 amps. Mechanical life, 100,000,000 operations. LB series for direct PC mounting; LBP Series for direct plug-in socket mounting (sockets below). 1.24x1.00x1.220″. Av. wt., 1 oz.

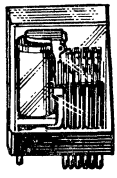
Stock No.	Type LB-	Stock No.	Type LBP-	Coil V	Coil Ohms	EACH 1-9	10-24	25-Up
752-3775	0060B00	752-3790	0060B00	12	130	5.75	5.18	4.89
752-3777	0060D00	752-3792	0060D00	24	590	5.75	5.18	4.89
752-3785	0060N00	752-3799	0060N00	48	2100	7.10	5.40	5.10
752-5565	RP15450-G5	Solder Lug Socket				1.35	1.27	1.15
752-5566	RP15450-G6	PC Board Socket				1.35	1.27	1.15

LA 4PDT SERIES

Four-pole-double-throw relay. Miniature telephone-type relays are ideal for process controls communications equipment, aircraft, many other military and industrial applications. Four form C contacts are rated at 2 amperes each. LA series for direct PC mounting; LAP series for direct plug-in mtg. (sockets below). Mechanical life rated at 100,000,000 operations. Compact size, only 1.24x1.07x.750″. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Coil V	Coil Ohm	EACH 1-9	10-24	25-Up
752-3735	LA0040B00	12	130	5.66	4.64	4.38
752-3740	LA0040H00	14	200	5.66	4.64	4.38
752-3737	LA0040D00	24	590	5.66	4.64	4.38
752-3747	LA0040N00	48	2100	5.80	4.86	4.59

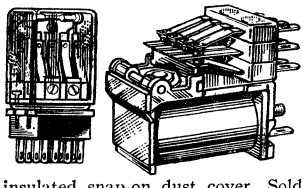
JDP TELEPHONE RELAYS



Compact, industrial telephone-type relay, for application ranging from switching in simple alarm circuits to sophisticated computer functions. Switch combination of 4, 6, and 8 pole Double-throw with contacts rated at 4 amps, 150 watts with an operate time of 5 milliseconds minimum. Mechanical life expectancy of $70x10^6$ operations. Relays are enclosed in dust cover; socket has soldering lug terminals. Dimensions; 2 41/64H, 1 25/64W, 1 23/32″D, 6 and 8 pole 2 7/64″D.

Stock No.	Mfr's Type	Coil V	Coil Ohm	Contact Action	EACH 1-4	5-9	10-24	25-Up
752-3152	JDP244C24	24	500	4PDT	19.00	17.00	15.30	14.45
752-3154	JDP246C24	24	300	6PDT	19.00	17.00	15.30	14.45
752-3156	JDP248C24	24	200	8PDT	19.00	17.00	15.30	14.45
752-3162	JDP484C24	48	1300	4PDT	19.00	17.00	15.30	14.45
752-3164	JDP486C24	48	1000	6PDT	19.00	17.00	15.30	14.45
752-3166	JDP488C24	48	100	8PDT	19.00	17.00	15.30	14.45

MAGNECRAFT CLASS 77 MINIATURE-SIZE 4DPT RELAY



Telephone-type relay features miniature-size 4DPT contact combination, 5 A contact rating and greater contact pressure without increasing coil power. Precision-built hinge-pin armature bearings, oversize surfaces. Silver-cadmium oxide contacts, gold flash. Molded resin insulation. Molded, insulated snap-on dust cover. Solder terminals. High dielectric strength. 1 17/64x1 19/32x5 5/64″. Av. shpg. wt., 2 oz.

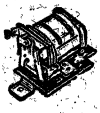
Stock No.	Mfr's Type	Coil Volts	Coil Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
850-0225	W77CSX-1	6DC	40	5.83	5.04	4.77	4.51	3.58
850-0226	W77CSX-2	12DC	160	5.83	5.04	4.77	4.51	3.58
850-0227	W77CSX-3	24DC	600	5.94	5.13	4.86	4.58	3.65
850-0228	W77CSX-4	48DC	2500	6.10	5.27	5.00	4.72	3.75
850-0229	W77CSX-5	110DC	10,000	6.57	5.67	5.37	5.07	4.03

AC version of Class 77 relays. 4PDT. 5-amp contact rating. 1 7/64x ¾x1 9/32″. Wt., 2 oz. Molded sockets rated at 5 amps. 1 oz.

850-0220	W77ACSX1	115AC	.....	6.56	5.66	5.36	5.07	4.02
850-2096	70-161-1 Solder socket w/ret.			.64	.52	.49	.46	.44
850-2098	70-161-3 Printed Circuit Sock.			.64	.52	.49	.46	.44

Relays: Impulse, 422-3—Stepping, 422-4—Mercury Plunger, 425—Mercury-Wetted, 438, 441

Sensitive and Special Purpose Relays



SIGMA TYPE 41 SPDT RELAYS

DC types are for on-off or gradually changing signals; shaded-pole AC for high-speed keying. High release for circuits with high idle current. SPDT silver contacts 2 A, except *5 A § 10 A, at 28 VDC or 120 V AC. AC sensitivity: ACS, .2VA; ACG, .4VA; DC sensitivity, 40 mW. Open types, 2¼x1¼x1⅝". Wt., 3 oz. Enclosed, 1²¹⁄₆₄x1²¹⁄₆₄x2³⁄₆₄". ■U.L. Recog., C.S.A. Listed. Shpg. wt., 3 oz. Write For Larger Quantity Prices.

UNENCLOSED AC RELAYS—SOLDER TERMINALS

Stock No.	Mfr's Type and Coil Ohms	Coil VAC or DC mA	EACH 1-9	10-49	50-74	75-99	100-Up
917-0520	41FZ-10-ACG/BSL	6§	5.62	5.00	4.75	4.50	4.00
917-0521	41FZ-35-ACS/SIL	6	6.46	5.80	5.51	5.22	4.64
917-0523	41FZ-5000-ACG/BSL	115§	5.86	5.25	4.99	4.73	4.20
917-0524	41FZ-10000-ACS/SIL	115	7.20	6.45	6.13	5.81	5.16

UNENCLOSED DC RELAYS—SOLDER TERMINALS

917-0510	41F-200-S/SIL	15.0	6.22	5.55	5.27	5.00	4.44
917-0511	41F-500-S/SIL	9.0	6.22	5.55	5.27	5.00	4.44
917-0512	41F-1000-S/SIL	6.5	6.22	5.55	5.27	5.00	4.44
917-0514	41F-5000-S/SIL	3.0	6.46	5.80	5.51	5.22	4.64
917-0515	41F-10000-S/SIL	2.0	6.84	6.10	5.80	5.49	4.88

ENCLOSED AC RELAYS—OCTAL PLUG-IN

917-0535	41ROZ-5000-ACG/BSL	115*	8.28	7.40	7.03	6.66	5.92
917-0536	41JOZ-12000-ACS/SIL	150	17.42	15.90	15.11	14.31	12.72

ENCLOSED DC RELAYS—OCTAL PLUG-IN

917-0530	41RO-1000-S/SIL	6.5	8.84	8.50	8.08	7.65	6.80
917-0532	41RO-5000-S/SIL	3.0	9.08	9.00	8.55	8.10	7.20
917-0533	41RO-10000-S/SIL	2.0	9.50	9.35	8.88	8.42	7.48
917-0537	41RO6-1000-S/SIL	6.5	8.84	7.90	7.51	7.11	6.32
917-0538	41RO6-2500-S/SIL	4.0	8.84	7.90	7.51	7.11	6.32
917-0539	41RO6-5000-S/SIL	3.0	9.08	8.10	7.70	7.29	6.48

SIGMA TYPE 4 PLATE-CIRCUIT RELAYS

DC relays for 20 mW applications. For vacuum tube plate circuits, transistor circuits with high idle current and applications requiring high release or stable trip values. 2-amp SPDT contacts. Type 4F unenclosed; for screw mtg.; solder terminal and coil lead conn. 1⅝x1⅝x1½". Shpg. wt., 3 oz. Type 4R not illus. has aluminum dust cover; 5-pin plug-in mounting. ■U.L. Recog., C.S.A. Listed. For burglary protection equipment. 1½x1½x2⁹⁄₁₆". Wt., 5 oz.

Stock No.	Mfr's Type and Coil Ohms	mA DC	EACH 1-9	10-49	50-74	75-99	100-Up
917-0150	4F-1000-S/SIL	4.5	8.95	8.00	7.60	7.20	6.40
917-0154	4F-2500-S/SIL	3.0	8.95	8.00	7.60	7.20	6.40
917-0158	4F-5000-S/SIL	2.0	9.40	8.40	7.98	7.56	6.72
917-0161	4F-8000-S/SIL	1.6	9.90	8.70	8.27	7.83	6.96
917-0164	4F-10,000-S/SIL	1.4	9.90	8.70	8.27	7.83	6.96
917-0170	4R-1000-S/SIL	4.5	12.50	10.90	10.36	9.81	8.72
917-0174	4R-5000-S/SIL	2.0	13.20	11.25	10.69	10.13	9.00
917-0177	4R-8000-S/SIL	1.6	13.50	11.55	10.97	10.40	9.24
917-0180	4R-10,000-S/SIL	1.4	13.50	11.55	10.97	10.40	9.24

SIGMA TYPE 42 DPDT RELAYS

Enclosed type have octal plug-in bases and plastic dust covers. Open type have solder terminals. DC sensitivity: (S) 100 mW; (G) 200 mW. AC units, 0.30 VA for ACS type, 0.50 VA for ACG types. Withstand vibration, 10g to 55 Hz; shock 100g (non-operating). Contacts 5 A @ 28 VDC, 120 VAC. exc. †2 A. 1²¹⁄₆₄x1²¹⁄₆₄x2". ■U.L. Recog. C.S.A. 3 oz.

AC RELAYS

Stock No.	Mfr's Type and Coil Ohms	Coil VAC or mA DC	EACH 1-9	10-49	50-74	75-99	100-Up
917-0570	42ROZ-8-ACG/SIL	6	9.38	8.40	7.98	7.56	6.72
917-0572	42ROZ-200-ACG/SIL	24	9.38	8.40	7.98	7.56	6.72
917-0573	42ROZ-4000-ACG/SIL	115	9.38	8.40	7.98	7.56	6.72
917-0585	42RO6Z-4000-ACG/SIL	115	9.38	8.40	7.98	7.56	6.72
917-0550	42JOZ-4000-ACG/SIL	115	16.22	14.50	13.78	13.05	11.60
917-0574	42ROZ-7000-ACS/SIL	115†	11.26	10.05	9.54	9.04	8.04

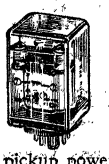
ENCLOSED DC RELAYS

917-0552	42RO-200-G/SIL	32	9.38	8.40	7.98	7.56	6.72
917-0553	42RO-500-G/SIL	20	9.38	8.40	7.98	7.56	6.72
917-0554	42RO-1000-G/SIL	14	9.38	8.40	7.98	7.56	6.72
917-0555	42RO-2500-G/SIL	9	9.38	8.40	7.98	7.56	6.72
917-0556	42RO-5000-G/SIL	6.5	9.80	8.75	8.31	7.88	7.00
917-0557	42RO-10000-G/SIL	4.5	10.04	8.95	8.50	8.06	7.16
917-0558	42RO-12000-G/SIL	4.0	10.52	9.40	8.93	8.46	7.52
917-0577	42RO6-500-G/SIL	20	9.38	8.40	7.98	7.56	6.72
917-0578	42RO6-1000-G/SIL	14	9.38	8.40	7.98	7.56	6.72
917-0583	42RO6-1000-S/SIL	10†	10.34	9.25	8.79	8.33	7.40
917-0579	42RO6-2500-G/SIL	9	9.38	8.40	7.98	7.56	6.72
917-0581	42RO6-10000-G/SIL	4.5	10.04	8.95	8.50	8.06	7.16
917-0560	42RO-150-S/SIL	26†	10.34	9.25	8.79	8.33	7.40
917-0562	42RO-500-S/SIL	14†	10.34	9.25	8.79	8.33	7.40
917-0563	42RO-1000-S/SIL	10†	10.34	9.25	8.79	8.33	7.40
917-0564	42RO-2500-S/SIL	6.2†	10.34	9.25	8.79	8.33	7.40
917-0565	42RO-5000-S/SIL	4.5†	10.70	9.75	9.07	8.60	7.64
917-0566	42RO-10000-S/SIL	3.1†	11.02	9.85	9.36	8.87	7.88

SIGMA TYPE 5 EXTRA-SENSITIVE RELAYS

SPDT extra-sensitive DC relays. Withstand shocks to 100g. Silver contacts rated 1 A except *.25 A. ■U.L. Recog. for use in burglary protection equipment. C.S.A. Listed. Type 5F has screw mtg.; solder term. 1¹¹⁄₁₆x1¾x1⁵⁄₁₆". Shpg. wt., 3 oz. Type 5R, not illus. has aluminum dust cover; 5-pin plug-in mtg. 1½x1½x2¼". 5 oz.

Stock No.	Mfr's Type and Coil Ohms	mA DC	EACH 1-9	10-49	50-74	75-99	100-Up
917-0205	5F-1000-S/SIL	2.3	13.30	11.35	10.78	10.22	9.08
917-0208	5F-1000-SS/PAL	1.0*	15.22	12.90	12.26	11.61	10.32
917-0211	5F-5000-S/SIL	1.0	14.33	12.15	11.54	10.94	9.72
917-0214	5F-10,000-S/SIL	.70	15.69	13.30	12.64	11.97	10.64
917-0217	5F-10,000-SS/PAL	.30*	17.46	14.80	14.06	13.32	11.84
917-0220	5F-16,000-S/SIL	0.55	16.93	14.35	13.63	12.92	11.48
917-0225	5R-1000-S/SIL	2.3	16.93	14.35	13.63	12.92	11.48
917-0227	5R-2500-S/SIL	1.4	16.93	14.35	13.63	12.92	11.48
917-0229	5R-5000-S/SIL	1.0	17.81	15.10	14.35	13.59	12.08
917-0232	5R-10,000-S/SIL	.70	19.11	16.20	15.39	14.58	12.96
917-0235	5R-16,000-S/SIL	0.55	20.59	17.45	16.58	15.71	13.96



SIGMA TYPE 48 LOW-PRICED SPDT RELAYS

Low-cost, sensitive relays which are excellent for use with burglar, police and fire alarm systems. Operate from mimimum of 5- or 10-milliwatt input. Bridge-type contact structure, with solid silver contacts to assure long life and dependable operation. Compliant armature provides excellent contact wipe to prevent troublesome intermittents. Temperature range, −4°F to +158°F. Contacts rated 2 amps with pickup power of 10 milliwatts. Type 48F is screw mounting open type, with 5 solder terminals. Insulated from chassis. 1¹⁷⁄₆₄x1⁷⁄₁₆x2⁹⁄₃₂". Shpg. wt. 3 oz. Type 48RO comes in a plastic dust cover with octal plug. Overall size, 2³⁄₆₄x1²³⁄₆₄". Shpg. wt. 4 oz. For Quantities 250-Up, contact nearest Allied office.

Stock No.	Mfr's Type and Coil Ohms	mA DC	EACH 1-9	10-49	50-74	75-99	100-Up
917-0600	48F-1000-G/SIL	3.2	7.38	6.70	6.37	6.03	5.36
917-0601	48F-2500-G/SIL	2.0	7.38	6.70	6.37	6.03	5.36
917-0602	48RO-1000-G/SIL	3.2	8.64	7.85	7.46	8.07	6.28
917-0603	48RO-2500-G/SIL	2.0	8.64	7.85	7.46	7.07	6.28

MAGNECRAFT

W88H SEALED DPDT PLUG-IN RELAYS

Contacts rated 10 A. Nominal power: AC units, 3VA; DC, 1.5 W. Octal socket. 2½x1¹¹⁄₁₆". 6 oz.

Stock No.	Mfr's Type	Coil Volts	Coil Ohm	EACH 1-4	5-9	10-24	25-49	50-Up
850-0355	W88AHPX-24	115AC	....	14.25	11.30	10.74	10.17	9.61
850-0490	W88HPX-33	12DC	100	13.60	10.77	10.23	9.69	9.15
850-0491	W88HPX-34	24DC	400	13.60	10.77	10.23	9.69	9.15

TYPE W33H SEALED 5-AMP SUBMINIATURE DC RELAY

(Not illus.) Silver alloy contacts. 4PDT with 14-pin header. Nominal power required, 3-watts. Size, 1⁴¹⁄₆₄x1¹¹⁄₃₂x3¹⁄₃₂". Wt. 5 oz.

850-0110	W33HSX183	24DC	280	23.60	16.70	15.03	14.20	13.36

GUARDIAN

DPDT 10 AMP PLATE CIRCUIT RELAYS

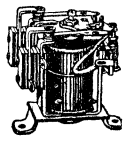
High current relays feature extra long coil for greater sensitivity. Readily adaptable to voltage operating as well as sensitive plate control circuits. Relay coil is impregnated for reliability and long life operation. Average power requirement, 0.2 watt. Fine silver contacts assure maximum current sensitivity and conductivity. Mounting: 8-32 (NC-2) center hole. Overall size, 2⅛x2x1½". Shpg. wt. 6 oz.

Stock No.	Mfr's Type	Coil Ohms	mA DC	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
802-0180	IR-625-2.5	2.5k	9	5.40	4.90	4.41	4.17	3.43	3.19
802-0182	IR-625-5	5k	6.3	5.76	5.23	4.71	4.45	3.66	3.40
802-0184	IR-625-10	10k	4.5	7.02	6.38	5.74	5.42	4.47	4.15

Relays: Solid State, 101, 432—Gen. Purpose, 406-419—Power, 419-421, 425—Latching, 422-4, 445

Potter & Brumfield Sensitive, Special-Purpose Relays

LM SENSITIVE 5-AMP RELAYS



Armature spring-tension adjustment and adjustable residual screw permits settings for specific voltages and currents. (LM5; 0.1 to .015 watts. LM11; 0.2 to 0.07 watts.) Silver contacts rated at 5 amperes. LM5 is SPDT; LM11 is DPDT. Mtg., two 6-32 holes on 1 13/16" centers. Sizes: LM5, 2 5/16x1 1/4x2 7/16"; LM11, 2 3/16x2 5/32x2 1/2". 6 oz.

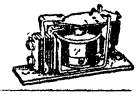
Stock No.	Mfr's Type	Ohms	mA	Action	EACH 1-9	10-24	25-49	50-Up
886-0820	LM5	2500	6.3	SPDT	5.40	4.55	4.32	4.10
886-0821	LM5	5000	4.5	SPDT	5.75	4.80	4.56	4.32
886-0822	LM5	10k	3.2	SPDT	6.10	5.15	4.89	4.64
886-0823	LM11	2500	9.0	DPDT	7.80	6.55	6.22	5.90
886-0824	LM11	5000	6.3	DPDT	8.00	6.75	6.41	6.08
886-0825	LM11	10k	4.5	DPDT	8.85	7.40	7.03	6.66

RS5D LIGHTWEIGHT SENSITIVE 2-AMP RELAYS

Sensitivity, 60 mW. Operate, 25 ms; release, less than 5 ms. SPDT contacts rated 2 amps. *6VDC type .†12 VDC. Wt. 2 oz.

Stock No.	Ohms	mA	EACH 1-9	10-24	25-49	50-99	100-Up
886-1275	335	*	3.64	3.05	2.90	2.75	2.14
886-1276	1350	†	3.80	3.20	3.04	2.88	2.24
886-1277	2500	5.0	3.94	3.30	3.14	2.97	2.31
886-1278	5000	3.5	4.30	3.60	3.42	3.24	2.56
886-1279	10k	2.5	5.00	4.20	3.99	3.78	2.94

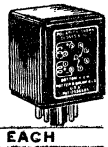
LB-5 SENSITIVE 5-AMPERE RELAYS



For any circuit supplying as little as 200 milliwatts of DC. Breakdown, 500 V, rms. Contacts: 5 amps, 28 V, SPDT action. Adjustable. For DC only. Mtg., two 3/16" holes on 2 7/32" ctrs. 3 oz.

Stock No.	Ohms	mA	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0815	2500	9	3.40	3.00	2.71	2.57	2.00	1.85
886-0816	5000	6.3	3.65	3.20	2.90	2.75	2.14	1.98
886-0817	10,000	4.5	3.96	3.40	3.14	2.97	2.31	2.15

ULTRA-SENSITIVE MDP POLARIZED HIGH-SPEED RELAYS



Contacts: bi-stable (*)—one form C contact arrangement, center-stable (†)—one form K contact arrangement. Rated: Bi-stable .01-.1 amp. 25-150 V; center-stable (silver) 3 amps resistive @ 28 VDC. 1 7/16x1 7/16x 1 13/16". Dust Cover. 8 or 12-pin plugs. ‡Resistance per coil. §Barber-Colman equiv., AYLZ, except #Sigma 72A-OZ-TCP. Wt. 9 oz.

Stock No.	Type MDP-	Coils No.	mA	Res. ‡	§ AYLZ-	EACH 1-9	10-49	50-Up
886-0840	*300-1	2	1.5	150	#160TG	24.65	22.19	20.95
886-0841	†1006	1	0.32	330	7305-100	28.20	25.38	23.97
886-0842	†1007	1	0.27	480	7306-100	28.20	25.38	23.97
886-0843	†1011	1	0.10	3500	7310-100	28.20	25.38	23.97
886-0844	†1013	1	0.067	7200	7312-100	28.20	25.38	23.97
886-0845	†2009	2	0.32	1000	7358-100	28.20	25.38	23.97
886-0846	†2011	2	0.17	2300	7360-100	28.20	25.38	23.97

SM MIDGET SENSITIVE 1/4-AMP RELAYS

For voltage or current-actuating applications. Voltage actuated relays, SM-D. Current relays, SM-L. SPDT contacts, rated 1/4 amp. Stationary contacts gold-flashed silver; movables, rhodium. Units are sealed hermetically in steel tubes. 7-pin miniature tube-type bases. 3/4" dia. 1 11/16" high above socket. Order standard 7 pin min. tube sockets. 2 oz.

Stock No.	Mfr's Type	VDC	Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
886-1370	SM5DS	6	80	7.95	7.65	7.27	6.89	5.36
886-1371	SM5DS	12	360	7.95	7.65	7.27	6.89	5.36
886-1372	SM5DS	24	900	7.95	7.65	7.27	6.89	5.36
886-1376	SMFLS	3.9 mA	5000	9.60	7.95	7.55	7.16	5.57
886-1375	SM5LS	2.7 mA	10k	10.56	8.50	8.08	7.65	5.95

PW HERMETICALLY SEALED 1-AMPERE RELAYS

Precision, lightweight DC relays. DS suffix are voltage-actuated. LS current-actuated. Mounts in 7-pin miniature tube socket. Silver contacts rated at 1 amp. 49/64" dia.; 1 11/16" high. 2 oz.

886-1020	PW5DS	6	202	14.00	12.45	11.26	10.67	8.30
886-1021	PW5DS	12	810	14.00	12.45	11.26	10.67	8.30
886-1022	PW5DS	24	3240	14.00	12.45	11.26	10.67	8.30
886-1025	PW5LS	2.8*	5000	14.50	12.90	11 64	11.03	8.58
886-1024	PW5LS	2.0*	10,000	15.30	13.35	12.07	11.43	8.89

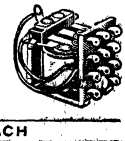
SS5D DC SENSITIVE 2-AMP DUAL-COIL RELAY

Precision SPDT relay that operates on 2.5 mW. Withstands up to 4.75 watts. Ideal for low-energy circuits. Dual series-connected coils operate heavy-duty armature supported by two jeweled needle bearings. Dual-coil construction adapts for use as a differential relay by connecting each coil in a separate circuit. Coil resistance, 10k. Contacts rated 2 amps. Mounts by two 6-32 tapped holes on 23/32" centers. 1 11/16x1 5/16x1 3/4". Wt. 4 oz.

886-1380. 1-9.....Each 19.50 10-24.....Each 16.05
25-49....Each 15.25 50-99..Each 14.45 100-Up....Each 11.24

SPECIAL-PURPOSE

KM 2-AMP SUBMINIATURE RELAYS



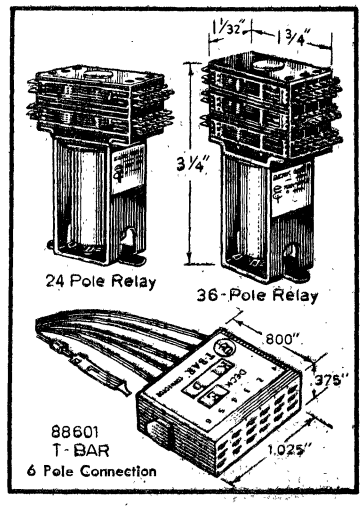
For multiple switching applications. Used extensively in small business machines, alarm systems, and communications. Withstand 30g shock. Weight 0.58 oz. 3/32" silver contacts rated at 2 amps. Solder terminals. Mount by 2-56 tapped core and locating half-punch. Size: 1 1/8x53/64x35/64". Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-Up
886-0605	KM5D	6 DC	SPDT	5.00	4.00	3.80	3.60	2.80
886-0606	KM5D	12 DC	SPDT	5.00	4.00	3.80	3.60	2.80
886-0607	KM5D	24 DC	SPDT	5.00	4.00	3.80	3.60	2.80
886-0609	KM11D	6 DC	DPDT	5.50	4.40	4.18	3.96	3.08
886-0610	KM11D	12 DC	DPDT	5.50	4.40	4.18	3.96	3.08
886-0611	KM11D	24 DC	DPDT	5.50	4.40	4.18	3.96	3.08
886-0613	KM14D	6 DC	3PDT	6.31	5.05	4.80	4.55	3.54
886-0614	KM14D	12 DC	3PDT	6.31	5.05	4.80	4.55	3.54
886-0615	KM14D	24 DC	3PDT	6.31	5.05	4.80	4.55	3.54

T-BAR SERIES 801 AND 805 MULTIPLE-CONTACT RELAYS

Contact rating: non-inductive; 150 watts, 3 A make/break, 500 W, 5 A carry. Contact Life: min. 20,000,000 cycles @ 100 mils to min. of 100,000 — 3 A, 150 watts res. Operate/release times less than 30 ms. Temp. range −55°C to +85°C. Terminals may be soldered or wires may be crimped to snap-on terminals (below) for connection of STR size 22, 24, 26 wire. 805, same as 801 also to latch; pulse with reverse polarity to unlatch.

Stock No.	Mfr's Type	Coil VDC	Ohms	Amps	Watts @Nom. Volts	Cont. Arr.	EACH 1-9	10-24	25-49	50-74	75-Up
774-0075	801-4C24	24	193.0	.124	2.98	4PDT	10.15	9.23	8.77	8.33	7.94
774-0081	801-8C24	24	193.0	.124	2.98	8PDT	14.53	13.21	12.55	11.92	11.36
774-0087	801-12C12	12	49.1	.244	2.96	12PDT	18.46	16.79	15.95	15.15	14.44
774-0088	801-12C24	24	193.0	.124	2.98	12PDT	16.78	15.26	14.50	13.77	13.12
774-0091	801-12C110	110	3963.0	.028	3.05	12PDT	16.78	15.26	14.50	13.77	13.12
774-0096	801-24C12	12	45.0	.267	3.19	24PDT	33.22	30.20	28.69	27.26	25.97
774-0097	801-24C24	24	174.0	.138	3.32	24PDT	30.18	27.44	26.07	24.76	23.60
774-0098	801-24C28	28	227.0	.123	3.44	24DPT	30.18	27.44	26.07	24.76	23.60
774-0100	801-24C110	110	3450.0	.032	3.54	24PDT	30.18	27.44	26.07	24.76	23.60
774-0105	801-36C12	12	28.0	.429	5.16	36PDT	44.74	40.68	38.65	36.71	34.98
774-0106	801-36C24	24	111.0	.216	5.15	36PDT	40.67	36.98	35.13	33.37	31.80
774-0107	801-36C28	28	150.0	.187	5.23	36PDT	40.67	36.98	35.13	33.37	31.80
774-0108	801-36C110	110	2355.0	.047	5.18	36PDT	40.67	36.98	35.13	33.37	31.80
774-0115	801-48C12	12	22	.545	6.54	48PDT	56.41	51.29	48.73	46.29	44.11
774-0116	801-48C24	24	94	.255	6.12	48PDT	56.41	51.29	48.73	46.29	44.11
774-0170	805-12C-24	24	.....	.....	6	12PDT	27.28	24.80	23.56	22.38	21.26
774-0171	805-24C-24	24	.....	.....	6	24PDT	37.80	34.40	32.70	31.10	29.50

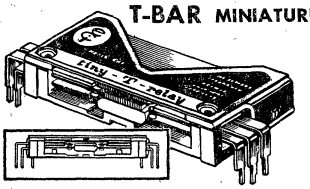


T-BAR CONNECTOR. Package consists of one connector block (6 pole) with 20 easy-to-crimp contacts; 2 labels and 1 retaining clip provides quick, sure connections. Wt. 2 oz.
774-0195. 88601 T-Bar Connector. 1-99.....Each 1.35 100-Up.....Each 1.25
774-0190. 8601-51 Crimping Tool....59.75 774-0193. 8601-61 Extraction Tool.....9.00

Relays: Impulse, 422-3—Stepping, 422-4—Mercury Plunger, 425—Mercury-Wetted, 438, 441

Flatpack Relays and Voltage Sensors

T-BAR MINIATURE FLATPACK RELAYS



Series 401 Tiny-T Relays

Multiple non-reed relay for fast switching of microamps to 3-amp loads. Low height (.360") and standard tin-plated .100x.100 grid terminal layout for printed-circuit applications. Ideal for use in computers, business machines, automatic testers, process controls, and many other applications. Actuator and contact assembly is enclosed in plastic housing. No sliding or bearing surfaces or pivots to wear out. Minimum mechanical life, over 100,000,000 operations. Contact life, 10,000,000 cycles at 100 milliwatts; 200,000 cycles at 150 watts, 3 amps resistive; 100,000 cycles at 3 amps, 115 VAC resistive. Contacts are gold bonded over fine silver. Type 401-4A is rated at 0.042 amp; Overall size, .360x2.30x.910". Type 401 is 4PST, Type 404 is DPST. Shpg. wt. 1 oz.

SPECIFICATIONS

Coil Power at Nominal Voltage: Type 4A, 1 watt; **Contact Rating:** mV to 500 VAC, resistive load 3 amps at 115 VAC; 5 amps 500 watts carry. **Contact Arrangement:** 4 poles, "2" single throw n.o.: **Contact Life:** 10,000,000 cycles at 100 mW: 200,000 cycles at 150 watts. 3 A resistive; 100,000 cycles at 3 A. 115 VAC resistive; 10 milliohms or less contact resistance. **Operating Time:** 8 ms. **Release Time:** 5 ms.

Stock No.	Mfr's Type	Coil		EACH				
		VDC	Ohms	1-9	10-24	25-49	50-99	100-Up
774-0050	401-4A12	12	144	5.88	5.75	5.48	5.23	4.26
774-0051	401-4A24	24	576	5.88	5.75	5.48	5.23	4.26
774-0053	401-4A48	48	2304	5.88	5.75	5.48	5.23	4.26
774-0064	404-2A	12	145	5.88	5.75	5.48	5.23	4.26
774-0065	404-2A	24	576	5.88	5.75	5.48	5.23	4.26
774-0066	404-2A	48	2300	5.88	5.75	5.48	5.23	4.26

POTTER & BRUMFIELD

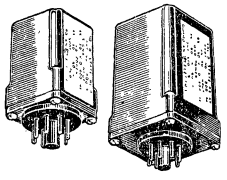
CS SERIES SOLID-STATE VOLTAGE SENSORS

Series 30010, 70010 offer adj. pick-up, drop-out voltages. *Series 31010, 71010 have fixed pick-up, adj. drop-out voltages. Current drain: 3 mA (max.); after sensing, 30 mA. Set-point accuracy: 1%. DC types have reverse polarity protection. 2 Form C (DPDT) contacts: 3 amps @ 28 VDC resistive; 120 VAC resistive. Operating temp., −40°C to +55°C. 2⅞x1¾x2⅜". AC types—50/60 Hz. Octal plug, nylon dust cover. Av. shpg. wt., 10 oz.

Stock No.	Type CS	Pick-Up Range	Drop-Out Range	V	EACH		
					1-9	10-24	25-49
866-0117	J38-30010	20-30 V	18-28 V	AC	30.20	28.69	27.18
866-0118	J38-70010	92-140 V	90-138 V	AC	32.95	31.30	29.66
866-0119	L38-30010	20-30 V	18-28 V	DC	26.20	24.89	23.58
866-0120	L38-71010	105 V*	90-103 V	AC	29.20	27.74	26.28
866-0121	L38-31010	22 V*	16-20 V	DC	23.15	21.99	20.84

GUARDIAN

SERIES 6100 AND 6300 SOLID-STATE RELAYS

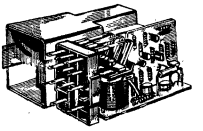


Feature externally adjustable pull-in voltage level from 80-130 volts AC or DC, with close differential between pull-in and dropout. Universal control voltage (AC or DC) with complete circuit isolation from load switching circuit. Internal filtering prevents random turn-on of "off" contacts. Controls lamp, inductive or normal resistive loads fron 10 mA to 3 amps at 115 V, 60 Hz AC. Takes quick-connect (listed below) and Amphenol octal sockets listed on page 405. **Series 6100.** 1 amp, with quick-connect terminals. 1 19/32x1 23/32x2" high, including tabs. **Series 6110:** 1 amp, octal plug-in. 1⅜x1⅝x2 23/32" high, with plug. **Series 6300:** 3-amp quick-connect. 1.578x1.783x3.312". **Series 6310:** 3 amp, octal plug-in. 1 19/32x1 23/32x3⅜". Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Terminals	Contacts		EACH		
			Form	Amps	1-9	10-49	50-99
802-2050	6100-THA	QC	A	1	21.00	17.95	16.16
802-2052	6100-THC	QC	C	1	26.80	22.95	20.66
802-2054	6110-OHA	Octal	A	1	22.00	18.50	16.65
802-2056	6110-OHC	Octal	C	1	27.80	23.50	21.50
802-2060	6300-THA	QC	A	3	24.20	20.45	18.40
802-2062	6300-THC	QC	C	3	32.00	27.45	24.71
802-2064	6310-OHA	Octal	A	3	24.40	20.95	18.86
802-2066	6310-OHC	Octal	C	3	33.20	28.95	26.06
802-1720	1220	QC Sockets. Each 1-9 .60 10-Up .55					

GUARDIAN

PROTECTIVE SENSOR DEVICES



Fast-acting voltage, frequency and phase rotation sensors with accurate repeat cycle characteristic of solid-state input sensors combined with 3PDT, 10-ampere relay output. Plastic dust cover. Accepts printed-circuit socket, chassis-mount, clip or chassis-mounted socket. Temperature range, 0° to +50°C. Life, 1,000,000 operations minimum. Relay contacts rated 10 amperes resistive at 115 VAC. Transient protection: 600 volts, 3-phase; 2500 volts, others. Electrical latch or unlatch by wiring 24 VDC or 115 VAC enclosed relays (802-0327 and 802-0304, page 417).

3-PHASE, 4-WIRE VOLTAGE SENSING DEVICE

Unit detects, when sufficient voltage is applied, from 3-phase source of 95 VAC, or if there is loss or drop in line averaging 50 VAC. Use as a warning or lockout device to protect 3-phase motors and systems. Designed for pull and drop out; will repeat close values, taking into account unevenly loaded lines which cause drastic rise and fall in other lines. Wt., 5 oz.

Stock No.	Mfr's Type	AC Volts	EACH
802-0135	IR-AV2-611	115, 60 Hz	34.20

OVER-VOLTAGE SENSING DEVICE

Output relay energizes as input voltage rises to adjusted sense-point. De-energizes as input voltage drops to approx. 2.5V below sense-point. Adj. sense-point permits use as either under or over voltage detector. Sense-point adj. thru top of relay cover. 400 Hz; 24 V, AC or DC versions available, allow 3 wks. Wt., 5 oz.

Stock No.	Mfr's Type	Volts	Adj. Range	EACH
802-0140	IR-VS1-610	115 VAC, 60 Hz	90-130 VAC	42.90

UNDER-VOLTAGE SENSING DEVICE

Output relay energizes at its low-voltage pull-in point. Independent of control circuit. Remains energized until voltages rise to adjusted sense-point. 400 Hz version available. Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Volts	Adj. Range	EACH
802-0145	IR-VS2-610	115 VAC, 60 Hz	90-130 VAC	42.90

4-WIRE PHASE ROTATION SENSOR DEVICE

With ABC phase rotation, output relay is energized by 75 VAC balanced phase inputs. If rotation becomes improper, or if phase inputs are lost, relay de-energizes. Restore relationships, relay re-energizes. Non-latching. 400 Hz version available. 5 oz.

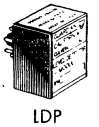
Stock No.	Mfr's Type	AC Volts	EACH
802-0138	IR-PR1-610	115, 60 Hz	39.95

FREQUENCY SENSOR ADJUSTABLE SENSE-POINT DEVICE

Under or over-frequency detector. Output relay energizes as freq. rises to sense-point, de-energizes when frequency drops to approximately 1.5% of sense-point. Also, AC generator speed detect., destruct. freq. trip-out, AC power loss detector. Wt., 5 oz.

Stock No.	Mfr's Type	AC Volts	Adj. Range	EACH
802-0137	IR-FS1-610	115, 60 Hz	45-66 Hz	55.20

VOLTAGE LEVEL DETECTORS



LDP

LDT

Measure levels of voltage with precise, pin-point accuracy. Series LDT and LDP are inexpensive, and both sensitive relay drivers possess many excellent operational characteristics. Either a fixed or variable external resistor can be used to adjust the sense level over a range of 85 to 135 VAC, 50 to 60 Hz, which allows functioning as an under or over-level detector in a 115 VAC system. Once fixed, the sense point is extremely stable despite variations in temperature; repeatability is to within 1%. Input voltage is available in 24 VAC, 120 VAC, 230 VAC, and 24 VDC. Temperature range, −10°C to +55°C. Choice of either flat pack* or octal plug† termination. Select output switch from the following quality-controlled Guardian relays: 640, 645, 1200, 1205, 1220, 1225, 2600 Series (see pages 417-419). LDT: 2.00x2.00x.64", LDP: 1.5x1.50x1.00". Av. shpg. wt. 2½ oz.

Stock No.	Mfr's Type	Volts	EACH			
			1-9	10-24	25-49	50-Up
802-0415	*LDT-100-24VAC	24 VAC	17.46	14.80	14.06	13.30
802-0419	*LDT-100-120VAC	120 VAC	17.46	14.80	14.06	13.30
802-0421	*LDT-100-230 VAC	230 VAC	22.60	19.20	18.40	17.10
802-0417	*LDT-100-24VDC	24 VDC	17.80	15.10	14.35	13.60
802-0405	†LDP-100-24VAC	24 VAC	21.12	17.90	17.00	16.10
802-0409	†LDP-100-120VAC	120 VAC	21.12	17.90	17.00	16.10
802-0411	†LDP-100-230VAC	230 VAC	26.30	22.30	20.90	19.10
802-0407	†LDP-100-24VDC	24 VDC	20.70	17.55	16.70	15.80

Relays: Impulse, 422-3—Stepping, 422-4—Mercury Plunger, 425—Mercury-Wetted, 438, 441

Magnetic Reed Switches

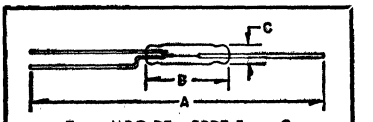
HAMLIN INC

DRY AND MERCURY-WETTED REED SWITCHES

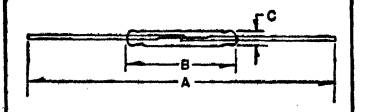
- **Ultra Compact and Highly Sensitive with Rapid Cycling Rate**
- **Hermetically Sealed for Dependability**
- **Unaffected by Temperature or Pressure**
- **Ideal for A Wide Variety of Systems and Instrument Applications**

Dry and mercury-wetted magnetic reed switches that are precision crafted for reliable operation under the most critical conditions. Offer excellent flexibility in a broad range of applications. Hermetically sealed for safe, dependable use in any atmosphere—even under explosive conditions. Unaffected by high or low temperature extremes or pressure. Offer long life. Compact size with high sensitivity and rapid cycling rate make these switches ideal for a wide variety of industrial uses.

Excellent for use in position indicators, counting instruments, limiting switches, flow meters, communications instruments and reed relays. Actuating time: 1 millisecond or less. Dry reed switches have life expectancy of 10 million operations; mercury wetted switches, 1 billion operations. Contacts: Form A (SPST-N.O.) or C (SPDT). May be actuated by permanent or electro magnets. Permanent magnets sold at right. See chart for switch dimensions. Av. shpg. wt., 1 oz. each.



Type MRG-DT—SPDT Form C
ACTUAL SIZE 2.125"



Type MRR-2—SPST Form A
ACTUAL SIZE 2.250"

DIMENSION CHART FOR SWITCHES *Oval Envelope

Size Code	1	2	3	4	5	6	7	8	9	10	11	12
(A) Overall L. Nom.	2.000	2.000	1.385	2.125	2.125	2.250	2.250	3.375	3.375	3.250	3.465	2.250
(B) Glass L. Max.	.375	.500	.475	.560	.610	.800	.800	1.610	1.562	2.100	1.640	.800
(C) Glass Dia. Max.	.090	.070	.100x .072*	.092	.130	.090	.130	.195	.218	.218	.212	.105

MAGNETS FOR SWITCHES BELOW

Stock No.	Mfr's Type	Size	EACH 1-9	EACH 10-Up
807-0001	H-31-604	1/16x1/16x1/2"	.40	.30
807-0002	H-32-605	3/16x3/16x1"	.50	.35
807-0003	H-33-606	1/8x1/8x3/4"	.40	.30
807-0004	H-34-607	1/4x1/4x1"	.60	.40

MINIATURE MAGNETIC REED SWITCHES

Stock No.	Mfr's Type	Size Code	Form	Max. DC Contact Ratings, W.	Max. Amps	Max. DC Volts	Min. VDC Break-down	Stock Ampere Turn Pull-in	Actuating Magnet	EACH 1-9	10-24	25-99	100-999	1000-4999	5000-Up
807-0030	MRR-2-185	7	A	10	.500	200	300	30±7.5	H-33	1.53	1.15	.83	.66	.50	.35
807-0024	MRH-15-185	7	A	10	.500	50	300	30±7.5	H-33	2.80	2.10	1.80	1.70	1.33	.90
807-0064	MLC-2-186	12	A	10	.500	100	300	30±10	H-33	1.40	1.05	.70	.55	.35	.25

SUB-MINIATURE MAGNETIC REED SWITCHES

807-0037	MSRR-2-185	6	A	10	.500	200	300	30±7.5	H-33	1.53	1.15	.83	.66	.50	.35
807-0066	MSRR-2CD-155	6	A	3	.500	200	300	25±7.5	H-33	1.76	1.32	1.12	1.06	.83	.56

TINY MAGNETIC REED SWITCHES

807-0039	MTRR-2-185	4	A	10	.250	100	300	30±7.5	H-33	1.76	1.32	.95	.75	.69	.56
807-0025	MRG-DT-175	5	C	3	.250	28	250	27.5±7.5	H-33	5.60	4.20	3.00	2.40	2.25	2.00
807-0065	MLC-DT-186	5	C	3	.250	28	250	30±10	H-33	2.70	2.10	1.70	1.33	1.20	.90

MICRO AND MINI MAGNETIC REED SWITCHES

807-0022	MMRR-2-185	1	A	3	.010	28	250	30±7.5	H-31	2.46	1.85	1.31	1.05	.95	.79
807-0020	MINI-2-115	2	A	3	.110	28	200	30±7.5	H-31	2.80	2.10	1.85	1.70	1.00	.60
807-0047	MINI-DT-125	3	C	.1	.010	10	200	27.5±7.5	H-31	8.40	6.30	5.00	4.75	4.50	4.25

STANDARD MAGNETIC REED SWITCHES

807-0013	DRG-2-425	10	A	15	1.0	250	500	70±7.5	H-34	1.06	.79	.56	.45	.35	.30
807-0014	DRR-1-425	10	A	15	1.0	400	500	70±7.5	H-34	1.19	.89	.64	.51	.39	.31
807-0015	DRR-5-425	10	A	25	1.0	1000	1500	70±7.5	H-34	2.11	1.58	1.35	1.10	1.00	.70
807-0018	DRT-5-425	10	A	50	3.0	1000	1500	70±7.5	H-34	2.80	2.10	1.50	1.20	1.10	.90

COMPACT MAGNETIC REED SWITCHES

Stock No.	Mfr's Type	Size Code	Form	Max. DC Contact Ratings, W.	Max. Amps	Max. DC Volts	Min. VDC Break-down	Stock Ampere Turn Pull-in	Actuating Magnet	EACH 1-9	10-24	25-99	100-999	1000-4999	5000-Up
807-0040	SRR-2-425	8	A	15	1.0	400	500	70±7.5	H-32	1.19	.89	.64	.51	.39	.31
807-0006	DRR-DTH-445	9	C	10	.5	250	1000	72.5±7.5	H-32	3.50	2.63	1.88	1.50	1.35	1.10
807-0007	DRT-DTH-445	9	C	20	1.5	500	1000	72.5±7.5	H-32	5.60	4.20	3.65	3.40	2.66	1.60
807-0063	DLC-DT-327	9	C	10	.5	200	350	55±15	H-32	1.76	1.32	1.12	1.06	.83	.56

HIGH-VOLTAGE MAGNETIC REED SWITCHES

807-0008	DRVT-5-658	10	A	50	3.0	3500	5000	120±20	H-34	4.20	3.15	2.50	2.25	2.00	1.50
807-0009	DRVT-10-658	10	A	50	3.0	7500	10000	120±20	H-34	5.60	4.20	3.00	2.40	2.25	2.00
807-0010	DRVT-15-979	10	A	50	3.0	12500	15000	200 max.	H-34	11.20	8.40	7.25	6.80	5.32	4.20
807-0011	DRVT-20-979	10	A	50	3.0	17500	20000	200 max.	H-34	16.80	12.60	11.00	10.20	7.98	6.00

HIGH-CURRENT MAGNETIC REED SWITCHES

807-0045	DRAC-5-999	11	A	700	3.0	240	700	250 max.	H-34	7.00	5.25	4.60	4.10	3.60	3.10
807-0046	DRAC-6-999	11	A	85	3.0	110	2000	250 max.	H-34	7.00	5.25	4.60	4.10	3.60	3.10

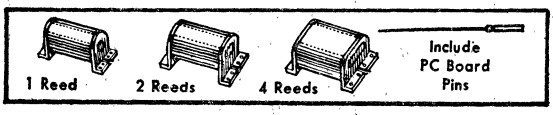
MERCURY-WETTED MAGNETIC REED SWITCHES

807-0021	MRC-3-387	7	A	28	1.0	100	1000	65±15	H-33	5.60	4.20	3.00	2.90	2.50	1.75
807-0019	HRC-1-535	10	A	50	3.0	400	1000	80±7.5	H-34	2.80	2.10	1.50	1.20	1.00	1.00
807-0062	MTHG-2-327	4	A	1	.1	10	500	55±15	H-33	4.20	3.15	2.75	2.55	2.00	1.35

Relays: Solid State, 101, 432—Gen. Purpose, 406-419—Power, 419-421, 425—Latching, 422-4, 445

Reed Coils and Relays

JAMES STANDARD AND MINIATURE-SIZE REED COILS



Reed coils provide new flexibility in reed switching for the instrument and systems engineer, giving him the freedom to establish his own electrical characteristics and layout. Accept up to 4 reed switches for combination switching and logic systems—control relays can be assembled with desired switching of "A," "B" or "C" circuits. Have pins for PC board mounting. Shpg. wt., 2 oz.

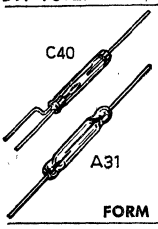
MINIATURE-SIZE REED COILS

Stock No.	Mfr's Type	Capsule Capacity	DC V	Coil Res. (ohms)	EACH 1-9	10-24	25-49	50-99	100-Up
597-7801	7001	1	6	250	1.78	1.55	1.32	1.16	1.01
597-7802	7002	2	6	142	1.87	1.64	1.39	1.22	1.06
597-7803	7003	3	6	71	1.87	1.64	1.39	1.22	1.06
597-7804	7004	4	6	38	1.87	1.64	1.39	1.22	1.06
597-7804	7005	1	12	1040	2.22	1.96	1.66	1.46	1.27
597-7806	7006	2	12	575	2.36	2.07	1.76	1.55	1.35
597-7807	7007	3	12	285	2.36	2.07	1.76	1.55	1.35
597-7808	7008	4	12	167	2.36	2.07	1.76	1.55	1.35
597-7809	7009	1	24	3520	2.70	2.31	1.98	1.75	1.54
597-7810	70010	2	24	2100	2.74	2.38	2.02	1.78	1.50
597-7811	70011	3	24	1090	2.74	2.38	2.02	1.78	1.50
597-7812	70012	4	24	650	2.74	2.38	2.02	1.78	1.50

STANDARD-SIZE REED COILS

Stock No.	Mfr's Type	Capsule Capacity	DC V	Coil Res. (ohms)	EACH 1-9	10-24	25-49	50-99	100-Up
597-7826	7026	1	6	222	1.88	1.66	1.40	1.24	1.08
597-7827	7027	2	6	97	2.44	2.11	1.79	1.58	1.37
597-7828	7028	3	6	38	2.44	2.11	1.79	1.58	1.37
597-7829	7029	4	6	29	2.44	2.11	1.79	1.58	1.37
597-7830	7030	1	12	860	2.36	2.08	1.77	1.50	1.36
597-7831	7031	2	12	355	2.50	2.16	1.84	1.62	1.40
597-7832	7032	3	12	235	2.50	2.16	1.84	1.62	1.40
597-7833	7033	4	12	120	2.50	2.16	1.84	1.62	1.40
597-7834	7034	1	24	3400	2.70	2.30	1.96	1.73	1.50
597-7835	7035	2	24	1520	2.73	2.36	2.00	1.77	1.53
597-7836	7036	3	24	860	2.73	2.36	2.00	1.77	1.53
597-7837	7037	4	24	510	2.73	2.36	2.00	1.77	1.53

SIGMA-GENERAL REED MAGNETIC REED SWITCHES



Magnetic Reed Form A and Form C switches for low-power electronic circuits. Feature high sensitivity, fast operation (1 ms max.) and resistance to shock (15g's up to 2000 Hz). Control and instrumentation, counting, position indicating, logic and limit switching. This is a true Form C, not magnetically biased. *Center gap, †Offset gap, §Resistive.

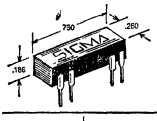
FORM A SPST—PULL-IN RANGE: 20-90 AT

Stock No.	Mfr's Type	Size D.xL.	Load § Amps max	Watts DC	VA AC	EACH 1-19	20-99	100-499	500-Up
917-0114	3A14-003*	.100x.800	0.5	6	10	1.00	.82	.72	.62
917-0116	3A14-007*	.100x.800	1.0	8	12	1.00	.82	.72	.62
917-0118	3A31-012†	.090x.560	0.5	6	10	1.10	.90	.79	.68
917-0119	3A31-013†	.090x.560	1.0	8	12	1.10	.90	.79	.68

FORM C SPDT—PULL-IN RANGE: 40-90 AT

917-0124	3C05-058†	.125x.625	0.5	6	10	3.00	2.50	2.10	1.80
917-0125	3C05-059†	.125x.625	0.75	10	15	3.00	2.50	2.10	1.80
917-0128	3C40-080†	.090x.625	0.25	4	6	3.00	2.50	2.10	1.80

SIGMA DIL SERIES 191 SPST, DPST, SPDT



Standard 14-pin, dual in-line pkg. reed relays. Operating time: 1.0 ms (max.) @ rated voltage. Isolation resistance: 10^9 ohm (min.). May be supplied with internal diode suppression, electromagnetic and electrostatic shielding. Av. shpg. wt. 1 oz.

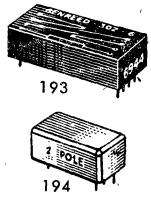
Stock No.	Mfr's Type	Coil VDC	Coil Ohms	Rating Form	Rating Watts	EACH 1-9	10-24	25-Up
917-1202	191TE1A1-5S	5	500	1A	0.5	4.10	3.50	3.15
917-1201	191TE1A1-5G	5	200	1A	0.5	3.90	3.30	2.97
917-1204	191TE1A1-6S	6	500	1A	0.5	4.10	3.50	3.15
917-1203	191TE1A1-6G	6	200	1A	0.5	4.10	3.50	3.15
917-1205	191TE1A1-12G	12	1250	1A	0.5	4.10	3.50	3.15
917-1206	191TE1A1-12L	12	500	1A	0.5	3.90	3.30	2.97
917-1213	191TE2A1-5G	5	200	2A	0.5	6.45	5.50	4.95
917-1214	191TE2A1-6G	6	200	2A	0.5	6.45	5.50	4.95
917-1215	191TE2A1-12G	12	500	2A	0.5	6.45	5.50	4.95
917-1216	191TE2A1-24L	24	1200	2A	0.5	7.08	6.00	5.40
917-1208	191TE1C1-5S	5	200	1C	0.25	5.90	5.00	4.50
917-1207	191TE1C1-5G	5	150	1C	0.25	5.65	4.80	4.32
917-1210	191TE1C1-6S	6	200	1C	0.25	5.90	5.00	4.50
917-1209	191TE1C1-6G	6	150	1C	0.25	5.90	5.00	4.50
917-1211	191TE1C1-12G	12	500	1C	0.25	5.90	5.00	4.50
917-1212	191TE1C1-24L	24	1250	1C	0.25	5.65	4.80	4.32

P & B JDT DUAL THIN-LINE REED RELAYS

Dual inline terminals on .11" centers. SPST contacts rated 10 watts min res. (50 VDC and 0.5 max. switching). Oper. time: 4 msec max at 25°C w. contact bounce of 0.3 msec. Release time; 2 msec max. Shpg. wt., 4100, ½ oz; 8100, ¾ oz.

886-0262	4100	7	115	4A	0.31	7.65	5.71	4.86
886-0263	4105	12	480	4A	0.31	7.65	5.71	4.86
886-0264	4110	24	1850	4A	0.31	8.30	6.19	5.27
886-0265	8100	6	60	8A	0.6	12.95	9.66	8.22
886-0266	8105	12	260	8A	0.6	12.95	9.66	8.22
886-0267	8110	24	1050	8A	0.6	13.70	10.22	8.70

SIGMA-GENERAL REED MINIATURE REED RELAYS



Magnetically operated relays control low power multi-circuits in minimum space. Standard PC contacts. Contact rating: 0.5A. Low-level life expectancy (resistive) more than 50 million operations. Operate, bounce, release times: 2 ms. 193 Series, plastic housing; 194 Series, metal housing. Last two digits in 193 Series Type No. indicate coil voltage (DC). 194 Series coil voltage 26.5VDC. Last three digits in 194 Type indicate MIL-R-5757/29- group. 2 oz.

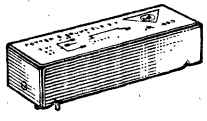
193 SERIES

Stock No.	Mfr's Type	Coil Ohms	Action	EACH 1-9	10-24	25-99	100-Up
917-1227	193RE1C3-24G	1500	SPDT	5.58	4.65	4.19	3.72
917-1230	193RE2C3-24G	1500	DPDT	8.82	7.35	6.62	5.88
917-1225	193RE1A3-12G	280	SPST	4.20	3.50	3.15	2.80
917-1226	193RE1A3-24G	1500	SPST	4.20	3.50	3.15	2.80
917-1228	193RE2A3-12G	280	DPST	5.52	4.60	4.14	3.68
917-1229	193RE2A3-24G	1500	DPST	5.52	4.60	4.14	3.68

194 SERIES

917-1236	194HE1C-22002	1450	SPDT	8.80	7.35	6.62	5.88
917-1239	194HE2C-22005	925	DPDT	12.48	10.40	9.36	8.32
917-1236	194HE1A-22001	2350	SPST	7.08	5.90	5.31	4.72
917-1237	194HE2A-22003	925	DPST	8.70	7.25	6.53	5.80

POTTER & BROMFIELD JR SERIES RELAYS



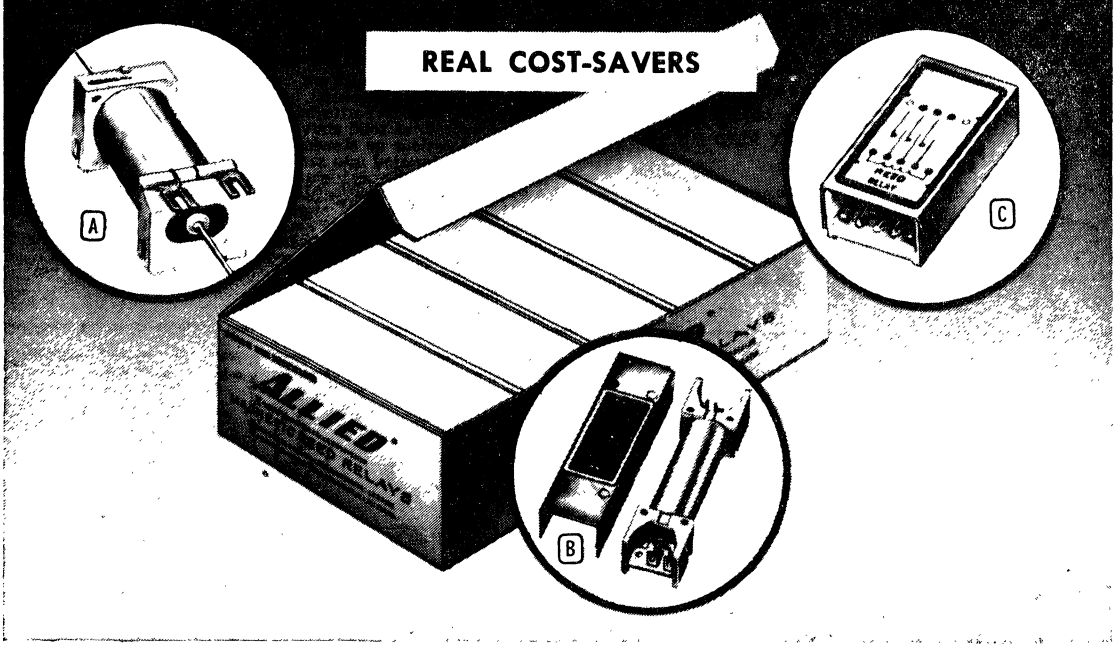
Insulated with glass supported nylon, acetate film and glass. Hermetically sealed. Printed circuit pin terminals. Form A, SPST-N.O. Form B. SPST-N.C.; *True Form C (uses reed switch with two stationary and one movable contact. N.C. until coil is energized causing an SPDT break before make). Operating time, 3 milliseconds. Operating temperature range: −50°C to +85°C. Breakdown: 500 V rms 60 Hz between insulated parts. Size, 2 13/16x 19/32" dia. Av. shpg. wt. 2½ oz.

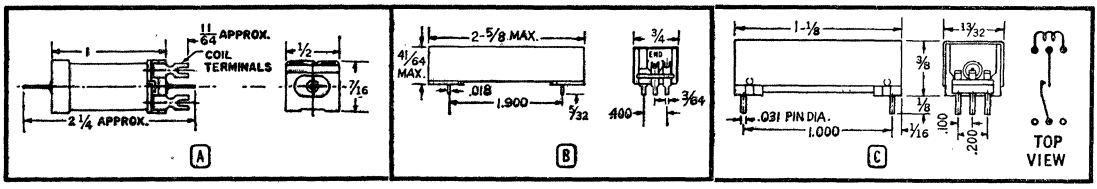
Stock No.	Type JR-	Coil VDC	Coil Ohms	Contact Rating Form	Contact Rating Watts	EACH 1-9	10-24	25-Up
886-0340	1000	6	150	1A	15	3.20	2.39	2.03
886-0341	1001	6	100	2A	15	4.30	3.21	2.73
886-0351	1020	6	150	1A	50	4.50	3.36	2.86
886-0356	1040	6	150	1C*	10	8.05	6.01	5.11
886-0342	1005	12	600	1A	15	3.20	2.39	2.03
886-0343	1006	12	400	2A	15	4.30	3.21	2.73
886-0345	1008	12	150	4A	15	6.00	4.48	3.81
886-0363	1086	12	200	1A, 1B	15	5.30	3.95	3.37
886-0358	1045	12	600	1C*	10	8.05	6.01	5.11
886-0352	1025	12	600	1A	50	4.50	3.36	2.86
886-0347	1010	24	2400	1A	15	3.75	2.80	2.38
886-0348	1011	24	1600	2A	15	4.55	3.39	2.89
886-0350	1013	24	600	4A	15	6.30	4.70	4.00
886-0364	1088	24	800	1A, 1B	15	5.65	4.22	3.59
886-0360	1050	24	2400	1C*	10	8.40	6.27	5.33
886-0353	1030	24	2400	1A	50	4.85	3.62	3.08

Allied is your direct factory source for relays and coils at OEM prices. Our service assures fast nationwide shipment.

Relays: Mil, 405—Sensitive, 430-1—TO-5 Size, 445—Solenoids, 442-4—Coaxial, 446

Allied U.S. Made High-Quality Reed Relays Bring You the Best Prices Yet Available!





BUY ALLIED'S REED RELAYS IN STANDARD BOXES OF 100 FOR BIG SAVINGS

Feature an integrally molded nylon bobbin and terminal board for maximum insulation and mechanical protection for the hermetically sealed glass reed capsule. Standard size models feature a rugged 1-piece support terminal fastened to terminal board and soldered stress-free to the switch leads, assuring unaffected performance from external stress. Miniature models have welded capsule leads and support terminals for highest strength and lowest resistance. Unitized steel cover for added shileding. Quantities of 100, packed in 10 sleeves per box.

CROSS REFERENCE GUIDE

Allied	P&B	Struthers-Dunn	Magnecraft	C.P. Clare
AMA2001-4	JR1000	RRN	W101MX	MRMC1041
AMP2006-9	JR1005	MRRX	W101MPCX	MRMC1041
AMP2011-14	JM1086	MRRN	W104MPCX	MRM1042
AMP2050-2	JM1011	MRRK	W102MPCX	MRMC1043
AMP2057-59	JR1030	MRR	W103MPCX	MRMC1043

Stock No.	Allied Type No.	Contact Action	Coil Data VDC†	Coil Data Ohms*	Contact Load Rating	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
A OPEN STYLE MOLDED DRY REED RELAYS											
703-2001	AMA2001	SPST-N.O.	6	100		2.14	1.75	1.60	1.36	1.26	1.19
703-2002	AMA2002	SPST-N.O.	12	250	10 VA @ .5 A	2.14	1.75	1.60	1.36	1.26	1.19
703-2003	AMA2003	SPST-N.O.	24	500	or 200 VDC	2.14	1.75	1.60	1.36	1.26	1.19
703-2004	AMA2004	SPST-N.O.	4	500	Max. Resis.	2.54	2.05	1.80	1.58	1.50	1.44
B STANDARD SIZE MODULAR PRINTED CIRCUIT REED RELAYS											
703-2057	AMP2057	SPDT	6	60	10 Va Max.	4.80	4.19	3.73	3.26	3.03	2.80
703-2058	AMP2058	SPDT	12	250	@ 5 A	4.80	4.19	3.73	3.26	3.03	2.80
703-2059	AMP2059	SPDT	24	1000	or 250 VDC Max. Resis.	4.80	4.19	3.73	3.26	3.03	2.80
703-2050	AMP2050	SPST-N.O.	6	70	15 Va Max. @ 1 A	3.22	2.61	2.40	2.03	1.89	1.75
703-2051	AMP2051	SPST-N.O.	12	250	Max. or 250 VDC	3.22	2.61	2.40	2.03	1.89	1.75
703-2052	AMP2052	SPST-N.O.	24	1000	Max. Resistive	3.22	2.61	2.40	2.03	1.89	1.75
C MINIATURE MODULAR PRINTED CIRCUIT REED RELAYS											
703-2011	AMP2011	SPDT	6	7	3 Va Max. @ .5 A	5.48	4.93	4.38	3.84	3.56	3.29
703-2012	AMP2012	SPDT	12	300	Max. or 200 VDC	5.48	4.93	4.38	3.84	3.56	3.29
703-2013	AMP2013	SPDT	24	1100	Max. Resistive	5.48	4.93	4.38	3.84	3.56	3.29
703-2014	AMP2014	SPDT	5	300		6.02	4.82	4.82	4.21	3.91	3.61
703-2006	AMP2006	SPST-N.O.	6	70	10 Va Max.	3.08	2.77	2.46	2.16	2.00	1.85
703-2007	AMP2007	SPST-N.O.	12	300	@ .5 A Max.	3.08	2.77	2.46	2.16	2.00	1.85
703-2008	AMP2008	SPST-N.O.	24	1100	or 200 VDC	3.08	2.77	2.46	2.16	2.00	1.85
703-2009	AMP2009	SPST-N.O.	5	450	Max. Resistive	3.51	3.16	2.81	2.46	2.28	2.11

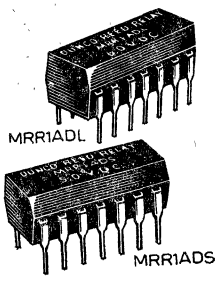
†Voltage operated relays pull in at 80% or left of nominal voltage @ 25°C; *Values ±10% @ 25°C.

See Pages 406 and 407 for Other Cost-Saving Allied Relays

Struthers-Dunn Dry Reed Relays

Dry Reed Relays in a wide variety of package designs. All feature contamination-proof, glass-sealed reed switches; non-critical mounting; complete magnetic shielding for exceptionally fast low-level and light-duty switching. Form A (SPST-NO), Form B (SPST-NC) or C (SPDT) contacts.

HOW TO ORDER
Where stock number has X in last digit, complete by adding the following number code: 1 = 6VAC, 2 = 12VAC, 3 = 24VAC, 4 = 115VAC, 5 = 240VAC, 6 = 6VDC, 7 = 12VDC, 8 = 24VDC, 9 = 110VDC.



MRR1AD DUAL-IN-LINE MINIATURE DRY REED RELAYS

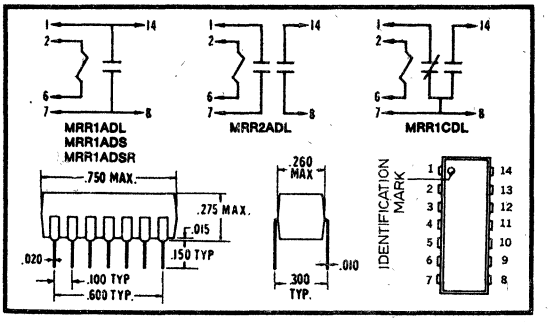
- IC Compatible
- Minimum Buffering
- Dual-In-Line Mounting
- Operate from DTL, TTL or HNIL Logic

Miniature dry reed relays are designed to be compatible with solid state devices in general, and standard 14-pir dual-in-line integrated circuits in particular. Can be made sufficiently sensitive to operate at solid state logic output levels. Have same terminal locations as standard 14-terminal dual-in-line IC's and may be inserted into same PC board spacings. Standard contact configuration consists of one Form A (SPST-NO) 10 VA miniature dry reed switch. MRR1ADL types feature low cost; are available with 6 or 12 volt coils. MRR1ADS types are extra-sensitive, operating on less than 50 mW, for use with IC and discrete logic systems. MRR2ADLX types have 2 Form A contacts. 5-volt DC relays are compatible with DTL and TTL logic for computer interfacing. 12-volt DC types are for use with HNIL logic systems for industrial controls.

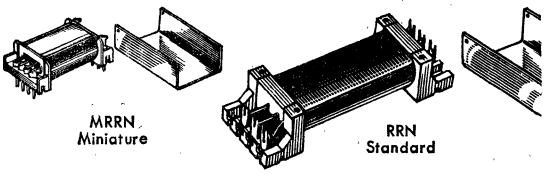
MRR1AD SPECIFICATIONS AND PRICES

Contact Ratings: 10 VA non-inductive. Operate Time: 1 msec max. Ambient Temp.: −10° to +70°C. except MRR1ADSR, to +25°C. Life: 5 million operations at max. rating. Size: .750x.275x.260".

Stock No.	Mfr's Type	Nom. Volts	Max. Ambient "Must Operate" V	mA	mW	Nom. at 25°C Oper. mW	Resis. Ohms	EACH 1-9
926-3785	MRR1ADSR	5.0	4.0	9.0	40	50	500	5.43
926-3782	MRR1ADS	5.0	4.0	9.3	37	70	360	5.43
926-3783	MRR1ADS	12.0	9.0	5.2	47	100	1440	5.43
926-3776	MRR1ADL	6.0	4.8	11.2	54	100	360	4.22
926-3777	MRR1ADL	12.0	9.6	5.6	54	100	1440	4.22
926-3778	MRR2ADLX	5.0	3.4	28	90	200	125	7.45
926-3779	MRR2ADLX	6.0	4.0	32	130	280	125	7.45
926-3780	MRR2ADLX	12.0	8.2	16	130	280	500	7.45
926-3781	MRR2ADLX	24.0	16.3	28	130	280	2000	7.45



MRRN AND RRN OPEN RELAYS FOR PC MOUNTING



Compact inexpensive dry reed relays for minimum cost applications. Coils and reed—switch capsules are protected by snap-on metal cans that also provide magnetic shielding. Reed switch leads connect to "in-line" non-magnetic printed circuit terminals. Terminal spacing: MRRN series miniature relays, 0.1"; RRN series standard relays, 0.2". See How To Order Information at top of page.

Stock No.	Mfr's Type	Contacts	Coil Ohms 6 V	12 V	24 V	Size, Inches	EA., 1-9 6/12V	24 V
926-350X	MRRN1A	1A	70	300	1100	1.125x.406x.375	3.98	4.45
926-351X	MRRN2A	2A	70	300	1100	1.125x.535x.375	5.65	6.02
926-352X	MRRN3A	3A	50	220	850	1.125x.609x.375	7.70	7.70
926-353X	MRRN4A	4A	40	160	640	1.125x.706x.375	9.65	9.65
926-355X	MRRN1B	1B	70	300	1100	1.125x.535x.375	4.45	4.94
926-356X	MRRN2B	2B	50	220	850	1.125x.609x.375	6.38	6.75
926-360X	MRRN1C	1C	70	300	1100	1.125x.406x.375	7.84	7.84
926-361X	MRRN2C	2C	50	220	850	1.125x.609x.375	10.50	10.50
926-362X	MRRN3C	3C	40	160	640	1.125x.706x.375	15.10	15.10
926-445X	RRN1A	1A	70	250	1000	2.500x.740x.641	3.62	3.62
926-446X	RRN2A	2A	70	250	1000	2.500x.958x.641	5.55	5.55
926-447X	RRN3A	3A	50	175	750	2.500x1.188x.641	6.38	6.38
926-448X	RRN4A	4A	40	150	600	2.500x1.418x.641	8.45	8.45
926-450X	RRN1B	1B	70	250	1000	2.500x.958x.641	4.10	4.10
926-451X	RRN2B	2B	50	175	750	2.500x1.188x.641	6.26	6.26
926-455X	RRN1C	1C	70	750	1000	2.500x.740x.641	7.00	7.00
926-456X	RRN2C	2C	50	175	750	2.500x1.188x.641	10.00	10.00
926-457X	RRN3C	3C	40	150	600	2.500x1.418x.641	13.60	13.60

MRRK SERIES MINIATURE PLASTIC CASE RELAYS FOR PC MOUNTING

Miniature plastic case reed relays combine the low cost of "open" relays with the mechanical protection of molded or encapsulated units. Ultrasonically welded thermoplastic case with high insulation characteristics has standoff pads near terminations to facilitate production-line soldering and easy cleaning when mounted on PC boards. Internal magnetic shields. Size, 1.290x.660x.445". Terminal spacing: 0.1" grid. See How To Order Information at top of page.

Stock No.	Mfr's Type	Contacts	Coil Ohms 6 V	12 V	24 V	EACH, 1-9 6/12V	24 V
926-339X	MRRK1A	1A	100	400	1600	4.34	4.82
926-341X	MRRK2A	2A	100	400	1600	6.26	6.50
926-342X	MRRK3A	3A	100	400	1600	8.45	8.45
926-340X	MRRK1A1B	1A1B	100	400	1600	.6.75	6.75
926-345X	MRRK1B	1B	100	400	1600	4.82	5.05
926-346X	MRRK2B	2B	100	400	1600	7.00	7.00
926-348X	MRRK1C	1C	100	400	1600	8.45	8.45
926-349X	MRRK2C	2C	100	400	1600	12.10	12.10

QUANTITY PRICING

To obtain quantity prices, use the following discount tables:

10-24—17% off 1-9 Price
25-49—22% off 1-9 Price
50-Up—27% off 1-9 Price

for larger quantities, contact your nearest Allied Office.

BASIC SWITCH CHARACTERISTICS

Rating	Miniature Switches Form A	Form B	Form C	Standard Switches Form A	Form B	Form C
Max. Volts	250	250	100	250	250	250
Max. Amps	0.500	0.500	0.250	1.0	1.0	0.5
Max. VA	10	10	3	15	15	10
Operate, msec	0.5-1.5	0.5-1.5	0.5-1.5	1.5-2.0	1.5-2.0	1.5-2.0
Release, msec	0.5-1.5	0.5-1.5	0.5-1.5	0.5-1.5	0.5-1.5	0.5-1.5
Bounce (oper.)	0.5	.....	0.5	0.5	.....	4.0
Bounce (rel.)	.....	0.5	2.0	.....	0.5	4.0
Life, dry circuit*	200	200	50	200	200	200
Life, half rating*	20	20	20	100	100	50
Life, full rating*	10	10	10	20	20	20

*Millions of operations.

Specify Complete Stock No. and Mfr's Type No. When Ordering

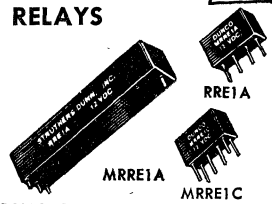
Reed Relays

STRUTHERS-DUNN EPOXY ENCAPSULATED DRY REED RELAYS

MRRE AND RRE SERIES REED RELAYS FOR PC MOUNTING

Consists of dry reed switch and coil in epoxy-filled plastic shell. Encapsulated construction prevents shifting or change of adjustment. Coils withstand 10% overvoltage without exceeding allowable temperature rise limits. Magnetically shielded; 100% tested for proper operation at 20% below rated voltage. MRRE relays are miniature size, .750x.300x.450". REE relays are standard size, 2.710x.560x.560". All types have round wire leads for PC mounting. Add suffix to indicate voltage (6, 12 or 24 VDC); See How To Order and Quantity Pricing Information Below.

- Rugged Encapsulated Construction
- Economical, Stable and Reliable
- PC Board Mounting



Stock No.	Mfr's Type	Contacts	Coil Resistance, Ohms 6 VDC	12 VDC	24 VDC	EACH 1-9
929-330X	MRRE1A	1 Form A	150	600	2400	7.58
929-332X	MRRE1C	1 Form C	150	600	2400	10.70
929-430X	RRE1A	1 Form C	200	800	3200	3.13
929-432X	RRE1C	1 Form A	200	800	3200	5.55

SPECIFICATIONS

Contact Ratings: MRRE with 1 Form A contact, up to 10 VA; Form C, 3 VA. REE with 1 Form A contact, up to 15 VA; Form C, 10 VA. Rated 250 V except MRRE1C, 100 V. Current, 500 mA except MRRE1C, 250 mA and RRE1A, 1000 mA. Dielectric: 1000 V, contacts to coil. MRRE, 250 V across contacts; RRE, 500 V across contacts. Insulation Resistance: MRRE, 1000 megohms; RRE, 10,000 megohms. Life: MRRE, 10 million operations at full contact rating; RRE, 20 million. Operating Time: 0.5-1.5 msec except MRRE1A, 0.5-1.0; RRE1A, 1.5-3.0.

MRR AND RR SERIES RELAYS WITH AXIAL LEADS

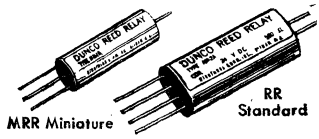
MRR SERIES WITH MINIATURE REED SWITCHES

Stock No.	Mfr's Type	Contacts	Coil Res. Ohm 6VDC	12 V	24 V	Size, Inches	EACH 1-9 6/12V	24 V
926-379X	MRR1A	1A	288	1152	4600	1.062x.425 dia.	5.05	7.45
926-380X	MRR2A	2A	144	576	2300	1.062x.430x.515	7.45	9.26
926-382X	MRR4A	4A	72	288	1152	1.062x.535x.810	12.78	12.78
926-385X	MRR12A	12A	24	94	384	1.062x.635x1.805	32.90	32.90

RR SERIES WITH STANDARD SIZE REED SWITCHES

926-460X	RR1A	1A	90	360	1440	1.875x.655 dia.	3.85	3.85
926-461X	RR2A	2A	36	145	580	1.875x.670x.840	6.02	6.02
926-463X	RR4AF	4A	24	95	380	1.875x.810x1.385	10.40	10.40
926-465X	RR1B	1B	90	360	1440	1.875x.55 dia.	4.95	4.95

Reed switches, coils and axial terminal leads are rigidly epoxy-molded into one-piece units that provide maximum mechanical protection. Leads may be soldered directly to terminal studs or supporting wiring, or bent at right angles for printed circuit use. Wrap-around metal cans provide magnetic shielding. MRR Series is miniature type, 1.062" long. RR Series is standard size, 1.875" long. Terminal grid spacing: MRR Series, 0.115"; RR Series, 0.2". See How To Order and Quantity Pricing Information Below.

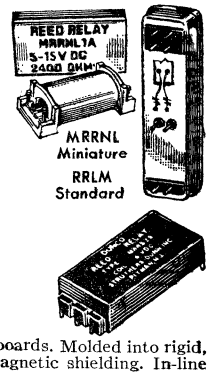


MRRNL AND RRLM SERIES MAGNETIC LATCHING RELAYS

Must Operate Voltage: 3.0 VDC at 25°C; 4.0 VDC at 70°C. Maximum Voltage: 18.0 VDC. Operate Time: 1 msec typical. Release Time: Form A, 1 msec typical; Form C, 2 msec. Size: MRRNL series, 1-1/8x3/8x.535"; RRLM series, 2.938x.600x.550".

Stock No.	Mfr's Type	Contacts	Coil Resis., Ohms 6VDC	12 V	24 V	DC Res. Load	EACH
926-365X	MRRNL1A	1A		2400		10 watts	6.63
926-367X	MRRNL1C	1C		2400		3 watts	9.65
926-369X	MRRNL2A	2A		2400			7.84
926-440X	RRLM1CM	1C	288	1152	4600		14.20
926-442X	RRLM1CM102	1C	120	580	1920		15.30

Contacts "remember" which coil was last energized, with no power applied except for the short time pulses to change contact positions. Relays transfer contact position over wide range from 3-18 VDC without changing characteristics or causing any deterioration in performance. Steel cover provides magnetic shielding and mechanical protection. Coils are bifilar wound. MRRNL are miniature; RRLM are standard size.



MRRS SERIES LOW-PROFILE EPOXY-MOLDED RELAYS FOR PC MOUNTING

Stock No.	Mfr's Type	Contacts	Coil Res., Ohms 6 VDC	12 V	24 V	Size, Inches	EACH
726-370X	MRRS1A	1A	144	576	2300	1.300x.500x.350	5.30
726-372X	MRRS2A	2A	95	380	1440	1.300x.625x.350	7.35
726-374X	MRRS4A	4A	31	125	500	1.300x1.00x.350	9.26
726-371X	MRRS1A1B	1A1B	31	125	500	1.300x1.00x.350	10.10
726-375X	MRRS1B	1B	95	380	1400	1.300x.625x.350	7.35

- Miniature—Only .350" High
- In-Line PC Terminals

1, 2 and 4-pole reed relays for use on PC boards. Molded into rigid, homogeneous structures with internal magnetic shielding. In-line PC terminals are on 0.172" grid spacing.

HOW TO ORDER AND QUANTITY PRICING INFORMATION

HOW TO ORDER: Replace X in Stock Number with number to indicate desired voltage. 1—6VAC, 2—12VAC, 3—24VAC, 4—115VAC, 5—240VAC, 6—6VDC, 7—12VDC, 8—24VDC, 9—110VDC.

QUANTITY PRICING: Find the EACH PRICE for the item desired (shown in table with Stock Number), find this price in 1-9 column in table below, follow to right for quantity price column desired.

EACH 1-9	10-24	25-49	50-Up
3.13	2.60	2.47	2.34
3.85	3.20	3.04	2.88
4.95	4.10	3.90	3.69
5.05	4.20	4.00	3.78
5.30	4.40	4.18	3.96
5.55	4.60	4.37	4.14
6.02	5.00	4.75	4.50
6.63	5.50	5.32	4.95
7.35	6.10	5.80	5.49
7.45	6.20	5.90	5.58
7.58	6.30	6.00	5.67

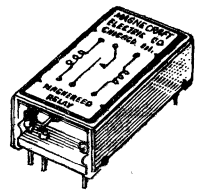
EACH 1-9	10-24	25-49	50-Up
7.84	6.50	6.18	5.85
9.26	7.70	7.31	6.93
9.65	8.00	7.60	7.20
10.10	8.40	8.00	7.56
10.40	8.60	8.18	7.74
10.70	8.90	8.45	8.01
12.78	10.60	10.10	9.54
14.20	11.80	11.20	10.62
15.30	12.70	12.10	11.43
32.90	27.30	25.95	24.57

MAGNECRAFT MAGNETIC LATCHING REED RELAYS

CLASS 101LMPC

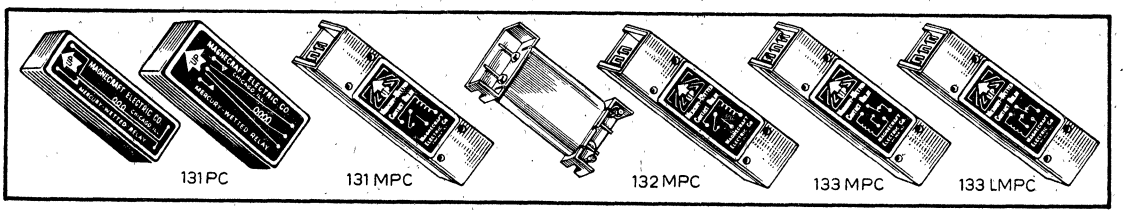
Stock No.	Mfr's Type W101	Coil VDC Min.	Nom.	Max.	Coil Ohms	EACH 1-9	10-Up
850-0820	LMPCX-9	2.4	3	3.5	5.5/33	10.50	9.20
850-0821	LMPCX-10	4	5	6	20/150	10.50	9.20
850-0822	LMPCX-11	4	6	8	30/250	10.50	9.20
850-0823	LMPCX-12	10	12	14	85/585	10.50	9.20
850-0824	LMPCX-13	22	24	16	265/3200	10.50	9.20

SPST. Provide latching function without use of standby power or a permanent biasing magnet. Ideal for interfacing with logic circuits. Latches and stays latched even under vibration, shock, power interruptions or transients. Contact Load Rating: 3 VA at .010 A max. or 28 VDC max. resistive. Operate Time: 1 msec typ. Size, 1 1/8x3/8x3 9/64". PC mounting.



Magnecraft Mercury-Wetted Dry Reed Relays

MERCURY-WETTED-CONTACT REED RELAYS



W131PCX MINIATURE ENCAPSULATED MAGNEREED

Epoxy-encapsulated, mercury-wetted-contact reed relays with PC contacts. Fast low-level and low-load switching. Contacts rated 28 VA at 1 A or 100 V maximum resistive. Operate and release time 1 ms, average. No contact bounce maintains stability of adjustment. Life rated at load, 100 million cycles. Contact resistance, 50 milliohms, average. All normally open. Operating position, upright, not more than 30° from vertical. Nominal power: SPST, 600 mW; DPST, 900 mW. Actual wt.; SPST, 1 oz.; DPST, 2 oz. Wt., 4 oz.

SPST TYPES 9/16x1/2x1 1/2"

Stock No.	Mfr's Type	Coil V	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-99	100-Up
850-1737	131PCX-9	12	250	10.55	8.44	7.60	7.17	6.75	5.91
850-1738	131PCX-10	24	1000	10.69	8.55	5.70	7.27	6.84	5.99

DPST 9/16x11/16x1 1/2"

850-1740	131PCX-12	6	40	13.28	10.62	9.56	9.03	8.50	7.43
850-1741	131PCX-13	12	150	13.32	10.66	9.59	9.06	8.53	7.46
850-1742	131PCX-14	24	650	13.39	10.71	9.64	9.10	8.57	7.50

W131MPC MINIATURE MODULAR RELAYS

Modular packaged mercury-wetted reed relays with PC contacts. Snap-on steel enclosures. Contacts rated 28 VA at 1 A or 100 V maximum resistive. 1 ms average operate, release time. Life at rated load, 100 million cycles. All N.O. contacts. In table, suffix 2-5 have SPST-N.O. (1 form "A") contacts; nominal power, 600 mW; size, 3/8x13/32x1". Suffix 6-9 have DPST-N.O. (2 form "A") contacts; nominal power, 700 mW; 3/8x39/64x1". Av. shpg. wt., 4 oz.

850-1715	131MPCX-2	6	70	8.00	6.40	5.76	5.44	5.12	4.82
850-1716	131MPCX-3	12	300	8.10	6.48	5.83	5.51	5.18	4.88
850-1717	131MPCX-4	24	1100	8.16	6.53	5.88	5.55	5.22	4.92
850-1718	131MPCX-5	48	4300	8.73	6.98	6.28	5.93	5.58	5.25
850-1719	131MPCX-6	6	50	14.41	11.53	10.38	9.80	9.22	8.67
850-1720	131MPCX-7	12	220	14.48	11.58	10.42	9.84	9.26	8.72
850-1721	131MPCX-8	24	850	14.56	11.65	10.48	9.90	9.32	8.77
850-1722	131MPCX-9	48	3300	14.91	11.93	10.74	10.14	9.54	8.98

MAGNEREED MERCURY-WETTED REED RELAYS

Operate/release time, 2 milliseconds average. Operating position, upright (can be operated at up to 30° from vertical). Life expectancy, more than 25 million operations. 50 milliohm contact res. Snap-on steel enclosure. PC pins on 0.2" grid. 2 5/8x41/64x3/4". Wt., 4 oz.

SERIES 132MPC SPST N.O. 50 VA up to 400 VAC resistive.

Stock No.	Mfr's Type	Coil V	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-Up
850-1755	132MPCX2	6	70	7.29	5.83	5.25	4.96	4.66
850-1756	132MPCX3	12	250	7.29	5.83	5.25	4.96	4.66
850-1757	132MPCX4	24	1000	7.29	5.83	5.25	4.96	4.66
850-1758	132MPCX5	48	4000	7.50	6.00	5.40	5.10	4.80

SERIES 133MPC SPDT. 50 VA at up to 400 VAC resistive.

850-1796	133MPCX2	6	70	10.52	8.42	7.58	7.16	6.74
850-1797	133MPCX3	12	250	10.52	8.42	7.58	7.16	6.74
850-1798	*133MPCX4*	24	1000	10.52	8.42	7.58	7.16	6.74
850-1799	133MPCX5	48	4000	10.75	8.60	7.74	7.31	6.88

W133LMPC BI-STABLE LATCHING RELAYS

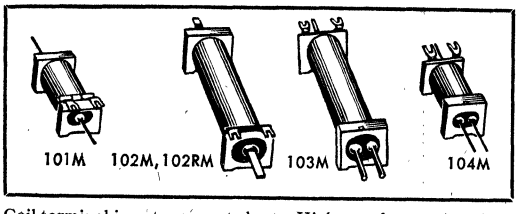
Upright modular pkg. No coil curr. required to hold either latching position. SPDT Form C break-before-make contact rated 2 A or 400 V. 2 ms operate. Single-wound, 150 mW; double-wound, 200 mW. 2 5/8x3/4x41/64". *Milliamperes. Wt. 2 oz.

850-1775	133LMPCX17	40*	70	12.34	9.87	8.88	8.39	7.90
850-1776	133LMPCX18	6	250	12.34	9.88	8.89	8.40	7.90
850-1777	133LMPCX19	12	1000	12.40	9.92	8.93	8.43	7.94
850-1778	133LMPCX20	24	4000	12.59	10.07	9.06	8.56	8.06
850-1779	133LMPCX21	4*	7000	12.71	10.17	9.15	8.64	8.14

DOUBLE-WOUND COILS (†Per winding)

850-1780	133LMPCX22	80*	30†	14.04	11.23	10.11	9.55	8.98
850-1781	133LMPCX23	6	120†	14.06	11.25	10.13	9.56	9.00
850-1782	133LMPCX24	12	460†	14.15	11.32	10.19	9.62	9.06
850-1783	133LMPCX25	24	1800†	14.28	11.42	10.28	9.71	9.14
850-1784	133LMPCX26	8*	3000†	14.38	11.50	10.35	9.78	9.20

LOW-COST IN-LINE DRY REED RELAYS



Coil terminal inserts prevent shorts. High-speed operation, long life, sealed contacts. Axial leads.

Class 101M. Miniature. SPST N.O. Contact rating: 12 volt-amps max. at 0.25 amp, or 100 VAC max. Nominal coil power, 600 mW. Operate time, 1 ms; release, 0.5 ms. Average life, 5 million operations. 2 1/4x1/2x7/16". Av. shpg. wt., 2 oz.

Class 102M. Std. size. SPST, N.O. Contact rating: 15 volt-amps max. at 1 amp, or 250 VAC max. Nominal coil power, 300 mW. Operate time, 3 ms; release, 0.5 ms. Average life, 20 million operations. 3 1/2x1 9/32x1/2". Av. shpg. wt., 3 oz.

Class 103M. Std. size. SPDT Form C. Contact rating: 10 VA max. at 0.5 amp, or 250 VAC max. Nominal coil power, 300 mW. Operate time, 2 ms; release, 0.5 ms. Average life, 25 million operations. 3 7/16x1 1/2x1 9/32". Av. shpg. wt., 2 oz.

Class 104M. Miniature. SPDT Form C. Contact rating: 3 VA max. at 0.25 amp, or 28 VAC max. Nominal coil power, 500 mW. Operate time, 1 ms; release, 1 ms. Average life, 10 million operations. 1x7/16x1/2". *IC compatible. Av. shpg. wt. 2 oz.

Standard size. SPST, normally open, rated 3 amps. Contact load rating, 100 VA at 3 amps maximum or 250 volts AC. Operate time, 1.5 milliseconds. Release time, 1 millisecond average. Contact bounce, 1 millisecond average. Provide high current switching and high reliability at low cost. Operate in any mounting position. Size, 2 1/4x1/2x7/16". Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Coil mA	Coil VDC	Coil ±10% Ohms	EACH 1-9	10-24	25-49	50-74	75-Up
850-0845	W101MX-1	....	6	100	2.75	2.20	1.98	1.87	1.76
850-0846	*W101MX-2*	....	12	250	2.81	2.25	2.03	1.91	1.80
850-0847	W101MX-3	....	24	500	2.81	2.25	2.03	1.91	1.80
850-0848	W101MX-4	9	.....	2500	3.03	2.43	2.19	2.07	1.94
850-0985	W102MX-1	40	.....	100	2.73	2.18	1.96	1.85	1.74
850-0986	W102MX-2	....	6	200	2.81	2.25	2.03	1.91	1.80
850-0987	W102MX-3	....	12	500	2.81	2.25	2.03	1.91	1.80
850-0988	W102MX-4	....	24	2000	3.09	2.47	2.22	2.10	1.98
850-0989	W102MX-5	5.5	.....	5000	3.29	2.63	2.37	2.24	2.10
850-1265	W103MX-1	....	6	200	5.29	4.23	3.81	3.60	3.38
850-1266	W103MX-2	....	12	500	5.29	4.23	3.81	3.60	3.38
850-1267	*W103MX-3*	....	24	2000	5.56	4.45	4.01	3.78	3.56
850-1268	W103MX-4	5.5	.....	5000	5.78	4.62	4.16	3.93	3.70
850-1470	W104MX-1	....	6	200	7.04	5.63	5.07	4.79	4.50
850-1471	W104MX-2	....	12	250	7.10	5.68	5.11	4.83	4.54
850-1472	W104MX-3	....	24	500	7.10	5.68	5.11	4.83	4.54
850-1473	W104MX-4	9	.....	2500	7.34	5.87	5.28	4.99	4.70
850-0857	W104MX-35	....	5*	500	3.35	2.68	2.41	2.28	2.14
850-0861	W104MX-41	....	3*	250	3.35	2.68	2.41	2.28	2.14
850-0852	W104MX-9	....	5*	500	7.75	6.20	5.58	5.27	4.96
850-0853	W104MX-10	....	3*	250	7.75	6.20	5.58	5.27	4.96

CLASS 102RMX IN-LINE POWER REED RELAYS

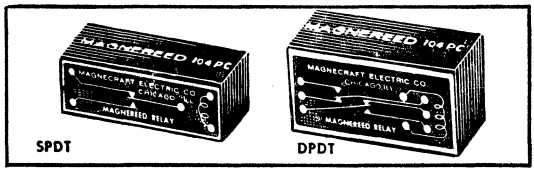
Stock No.	Mfr's Type W102-	Coil Res., Ohms	Coil Volts	EACH 1-9	10-24	25-49	50-74	75-99	100-Up
850-1035	RMX-5	200	6 VDC	5.23	4.18	3.76	3.55	3.34	2.93
850-1036	RMX-6	500	12 VDC	5.28	4.22	3.80	3.59	3.38	2.95
850-1037	RMX-7	2000	24 VDC	5.41	4.33	3.90	3.68	3.46	3.03
850-1038	RMX-8	5000	48 VDC	5.66	4.53	4.08	3.85	3.62	3.17

Relays: Time Delay, 424-8—Reed, 426, 433-442—Telephone, 429—Spec. Purpose, 429-431

Dry Reed Relays

Magnecraft

ENCAPSULATED DRY-REED RELAYS



Inherent reliability and very long life, combined with exceptionally fast low-level and low-load switching, make Magnereed relays the logical choice for a tremendous range of applications. Rigid, tinned terminals and compact size make these relays the wise choice for printed circuit mounting. Encapsulation of the assembly in epoxy resin eliminates breakage and protects coil. Nylon bobbin integrally molded with terminal board supports and terminal pins riveted in position. Hermetically sealed against dust, damage.

TYPE W101PCX MINIATURE MAGNEREED

Normally open contacts are rated at 10 VA @ ½ amp maximum or 200 volts DC maximum, non-inductive. Operating time 1 ms; release time ½ ms average. Operating life expectancy: 5,000,000 cycles at maximum ratings Nominal power 600 mW. Contact resistance, 150 milliohms, average. Capacitance across contacts, 0.8 pF. Av. shpg. wt. 1 oz.

SPST—N.O. TYPES 9/16x½x1½" (Nominal Power 600 mW)

Stock No.	Mfr's Type	mA or VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-Up
850-0870	101PCX-5	6 V	65	6.39	5.11	4.60	4.34	4.09
850-0871	101PCX-6	12 V	250	6.45	5.16	4.64	4.39	4.13
850-0872	101PCX-7	24 V	1000	6.58	5.26	4.73	4.47	4.21

DPST—N.O. TYPES 9/16x11/16x1½" (Nominal Power 900 mW)

850-0874	101PCX-9	6 V	40	8.94	7.15	6.43	6.08	5.72
850-0875	101PCX-10	12 V	150	8.98	7.18	6.46	6.10	5.74
850-0876	101PCX-11	24 V	650	9.05	7.24	6.52	6.15	5.79

TYPE W102PCX STANDARD MAGNEREED

Normally open contacts are rated 15 VA @ 1 ampere; 250 V maximum, non-inductive. Operating time 3 ms average; release ½ ms average. Life expectancy: 20,000,000 cycles. Contact resistance, 100 milliohms average. Any operating position. 1 oz.

SPST—N.O. TYPES ⅝x21/32x2¼" (Nominal Power 400 mW)

850-1010	102PCX-2	12 V	400	5.31	4.83	4.35	4.10	3.86
850-1011	102PCX-3	24 V	1500	5.35	4.87	4.38	4.14	3.90

DPST—N.O. TYPES ⅝x1¼x2¼" (Nominal Power 700 mW) 2 oz.

850-1014	102PCX-6	12 V	200	6.90	6.28	5.65	5.34	5.02
850-1015	102PCX-7	24 V	800	6.96	6.33	5.70	5.38	5.06

TYPE W103PCX STANDARD MAGNEREED

Contacts are rated 10 VA res., ½ amp or 250 V maximum, non-ind. Operating time 2 ms average; release time ½ ms average. Life: 25,000,000 cycles. No biasing magnet. Contact resistance: 100 milliohms average. Any operating position. Shpg. wt., 1 oz.

SPDT TYPES ⅝x21/32x2¼" (Nominal Power 400 mW)

850-1290	103PCX-1	6 V	100	7.94	7.22	6.50	6.14	5.78
850-1291	103PCX-2	12 V	400	8.00	7.27	6.54	6.18	5.82
850-1292	103PCX-3	24 V	1500	8.05	7.32	6.59	6.22	5.86
850-1293	103PCX-4	6.5 mA	5000	8.54	7.76	6.98	6.60	6.21

DPDT TYPES ⅝x1¼x2¼" (Nominal Power 700 mW) 2 oz.

850-1294	103PCX-5	6 V	50	11.85	10.77	9.69	9.15	8.62
850-1295	103PCX-6	12 V	200	11.87	10.79	9.71	9.17	8.63
850-1296	103PCX-7	24 V	800	11.92	10.84	9.76	9.21	8.67
850-1297	103PCX-8	9.0 mA	5000	12.44	11.31	10.18	9.61	9.05

TYPE W104PCX MINIATURE MAGNEREED

Contacts are rated 3 VA @ 0.25 amp or 28 V, max. non-ind. Operate and release, 1 ms. average. No biasing magnet. Contact resistance, 150 milliohms average. Life, 10 million cycles. 1 oz.

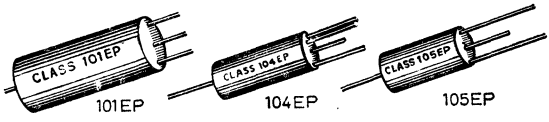
SPDT 9/16x½x1½" (Nominal Power 600 mW)

850-1497	104PCX-8	12 V	225	11.13	10.12	9.11	8.60	8.10
850-1498	104PCX-9	24 V	1000	11.24	10.22	9.20	8.69	8.18
850-1499	104PCX-10	8 mA	5000	11.70	10.64	9.58	9.04	8.51

DPST TYPES 9/16x11/16x1½" (Nominal Power 900 mW) 3 oz.

850-1493	104PCX-4	12 V	150	16.08	14.62	13.16	12.43	11.70
850-1494	104PCX-5	24 V	650	16.15	14.68	13.21	12.48	11.74

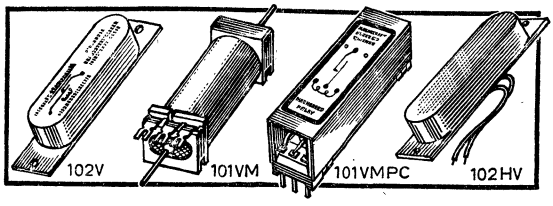
MINIATURE ENCAPSULATED RELAYS



Fully encapsulated in epoxy resin, highly resistant to mechanical shock, excessive humidity and corrosive atmospheres. Precious metal contacts. Type 101: SPST-N.O. contact load rating, 12 VA at ½ amp. max. or 200 VAC max. non-inductive. Operate, 1 ms. Release ½ ms. average. Contact resistance, 150 milliohms average. 1x7/16" dia. Type 104: SPDT, 3 VA maximum at ¼ A max. or 28 V maximum non-inductive. 1 ms. operate and release time. Size, 1x7/16" diameter. Type 105: SPST-N.O., 0.1 VA maximum at 10 mA or 12 volts maximum. Operate time, ¼ ms av., release time, ½ ms av. 7/16x¼" diameter. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	mA or VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-99	100-Up
850-0805	101EPX-5	6 V	65	4.53	3.62	3.26	3.08	2.90	2.53
850-0806	101EPX-6	12 V	225	4.53	3.62	3.26	3.08	2.90	2.53
850-0807	101EPX-7	24 V	1000	5.30	4.24	3.82	3.60	3.39	2.97
850-0808	101EPX-8	8 mA	5000	5.85	4.68	4.21	3.98	3.74	3.28
850-1410	104EPX-2	6 V	65	9.13	7.37	6.63	6.26	5.90	5.16
850-1411	104EPX-3	12 V	225	9.13	7.37	6.63	6.26	5.90	5.16
850-1412	104EPX-4	24 V	1000	10.06	8.05	7.25	6.84	6.44	5.64
850-1413	104EPX-5	8 mA	5000	10.69	8.55	7.70	7.27	6.84	5.99
850-1520	105EPX-1	6 V	90	7.73	6.18	5.56	5.25	4.94	4.33
850-1521	105EPX-2	12 V	350	7.73	6.18	5.56	5.25	4.94	4.33
850-1522	105EPX-3	24 V	1300	7.88	6.30	5.67	5.36	5.04	4.41

HIGH-VOLTAGE REED RELAYS



TYPE 101VM. Open style, molded design with axial leads. Sealed SPST N.O. contacts rated 1000 VDC at 1 mA max. non-ind. Nom. pwr., 600 mW. Operate, 1 ms. ½x7/16x1". Type 101 VMPC. Snap-on PC steel enclosure. SPST N.O. contacts rated 1000 VDC max. at .001 amp resistive. Nom. pwr., 700 mW. Operate, 1 ms. 1⅛x39/64x⅜". Type 102V. Molded constr. SPST N.O. contacts rated 50 VA at 3 A, 5000 VDC max. resistive. Operate 3 ms. Cover internally insulated, offers shielding. 4⅛x15/16x⅞". Type W102HVX. Molded PC package. SPST N.O. contacts rated 10,000 V at .001 A max. non-ind. Nom. Pwr.: 1.5 mW. 4½x¾x⅞". Type 102UHVX. SPST N.O. contacts rated at 20,000 VDC max. at .001 amps max. non-ind. Av. wt. 3 oz.

1000 VOLTS

Stock No.	Mfr's Type	mA or VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-Up
850-0896	101VMX-1	6 V	100	13.63	10.90	9.81	9.27	8.72
850-0897	101VMX-2	12 V	250	13.66	10.93	9.83	9.28	8.74
850-0898	101VMX-3	24 V	500	13.66	10.93	9.83	9.29	8.74
850-0899	101VMX-4	9 mA	2500	13.90	11.12	10.01	9.45	8.90
850-0889	101VMPCX-1	6 V	50	14.88	11.90	10.71	10.12	9.52
850-0890	101VMPCX-2	12 V	220	14.96	11.97	10.77	10.17	9.58
850-0891	101VMPCX-3	24 V	850	15.00	12.00	10.80	10.20	9.60
850-0892	101VMPCX-4	48 V	3300	15.28	12.22	11.00	10.39	9.78

5000 VOLTS

850-1069	102VX-49	6 V	70	15.06	13.69	12.32	11.64	10.95
850-1070	102VX-50	12 V	250	15.06	13.69	12.32	11.64	10.95
850-1071	102VX-51	24 V	1000	15.10	13.73	12.36	11.67	10.98
850-1072	102VX-52	48 V	4000	15.16	13.78	12.40	11.71	11.02
850-1075	102VX-55	24 V	2900	15.57	14.15	12.74	12.03	11.32

10,000 VOLTS

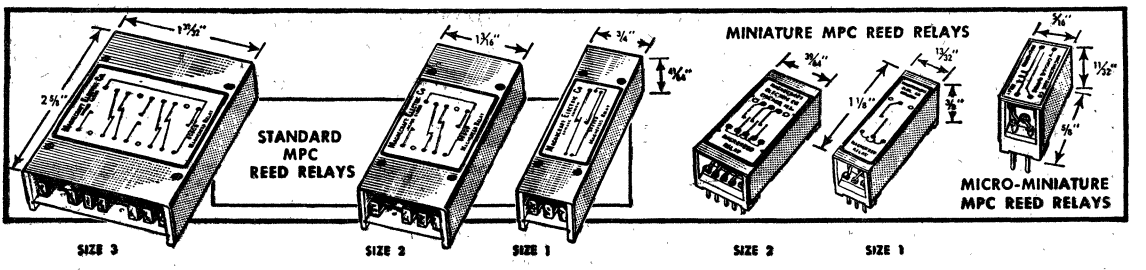
Stock No.	Mfr's Type	VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-99
850-0930	W102HVX-1	6	25	24.85	19.88	17.89	16.90	15.90
850-0931	W102HVX-2	12	100	24.85	19.88	17.89	16.90	15.90
850-0932	W102HVX-3	24	400	24.85	19.88	17.89	16.90	15.90

20,000 VOLTS

850-1045	102UHVX-1	6	25	42.03	33.62	30.26	28.58	26.90
850-1046	102UHVX-2	12	100	42.03	33.62	30.26	28.58	26.90
850-1047	102UHVX-3	24	400	42.03	33.62	30.26	28.58	26.90

Relays: Mil, 405—Sensitive, 430-1—TO-5 Size, 445—Solenoids, 442-4—Coaxial, 446

Magnecraft Modular Package Dry Reed Relays



- Snap-On Steel Enclosure Prevents Interaction with Other Relays
- Terminal Pins on 0.2" Grid Centers for Printed-Circuit Plug-In Mounting

Ultra reliable dry reed relays with contact leads soldered stress-free to rugged terminal posts. Reed capsule contacts are hermetically sealed with inert gas in glass capsule to completely protect them from dust, contamination, moisture or tampering. Reed leads are gold-plated or tinned for ease in soldering connecting lead wires. Reed lead mounting assembly provides fastening lead to bobbin for stress relief to minimize forces being exerted to glass during soldering. Coil is accurately wound on specially designed one-piece molded bobbin insulated for excellent dielectric characteristics. Tinned coil terminals, molded in bobbin, avoid shorts.

STANDARD MAGNEREED DRY REED RELAYS

SERIES 102MPC SPST N.O. Operate time, less than 3 msec. av. Release, less than ½ msec av. Gold contacts—rated 15 VA, non-inductive at 1 amp, or 250 VAC. Life expectancy, 20 million operations at maximum rating. ½-watt nominal DC rating. Overall size, 2⅝x4 1/64x¾". Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Coil V DC	Coil Ohm	EACH 1-9	10-24	25-49	50-74	75-99	100-Up
850-0950	W102MPCX6	6	70	4.12	3.29	2.96	2.79	2.63	2.30
850-0951	W102MPCX7	12	250	4.12	3.29	2.96	2.79	2.63	2.30
850-0952	W102MPCX8	24	1000	4.12	3.29	2.96	2.79	2.63	2.30
850-0953	W102MPCX9	48	4000	4.33	3.46	3.11	2.94	2.77	2.42

SERIES 102MPC 3PST N.O. ¾-watt nom. DC. Contacts, 15 VA at 1A or 250 VAC non-ind. 2⅝x4 1/64x1 3/16". Wt. 2 oz.

850-0970	W102MPCX49	12	175	7.04	5.63	5.07	4.79	4.51	3.95
850-0971	W102MPCX50	24	750	7.21	5.77	5.20	4.91	4.62	4.04

SERIES 102MPC 6PST N.O. 1½-watt nom. DC. Contacts rated 15 VA at 1A or 250 VAC non-ind. 2⅝x4 1/64x1 31/32". Wt. 2 oz.

850-0973	W102MPCX52	6	25	11.48	9.18	8.27	7.81	7.34	6.43
850-0974	W102MPCX53	12	100	11.63	9.30	8.37	7.91	7.44	6.51
850-0975	W102MPCX54	24	375	11.69	9.35	8.42	7.95	7.48	6.55

SERIES 103MPC SPDT. Operate time, 2 msec release time, less than ½ msec av. Contact bounce, 4 millisecond av. on release. Gold contacts rated 10 VA, at ½ amp max. or 250 VDC max., non-inductive. Life, 25 million operations at max. rating. ½-watt nom. DC. 2⅝x4 1/64x1 13/16". Shpg. wt. 3 oz.

850-1210	W103MPCX2	6	70	7.29	5.83	5.25	4.96	4.66	4.08
850-1211	W103MPCX3	12	250	7.29	5.83	5.25	4.96	4.66	4.08
850-1212	W103MPCX4	24	1000	7.29	5.83	5.25	4.96	4.66	4.08
850-1213	W103MPCX5	48	4000	7.50	6.00	5.40	5.10	4.80	4.20

SERIES 103MPC DPDT. ¾-watt nom. DC. Contacts rated 10 VA at ½ A, or 250 VAC. 2⅝x4 1/64x1 13/16". Wt. 2 oz.

850-1238	W103MPCX30	6	50	9.38	8.33	7.50	7.09	6.67	5.84
850-1239	W103MPCX31	12	175	9.38	8.33	7.50	7.09	6.67	5.84
850-1240	W103MPCX32	24	750	10.59	8.47	7.63	7.20	6.78	5.93

SERIES 103MPC 4PDT. Size 3. 1½-watt nom. DC. Contacts rated 10 VA at ½ A or 250 VAC. 2⅝x4 1/64x1 31/32". Wt. 3 oz.

850-1242	W103MPCX34	6	25	18.25	14.60	13.14	12.41	11.68	10.22
850-1243	W103MPCX35	12	100	18.38	14.70	13.23	12.50	11.76	10.29
850-1244	W103MPCX36	24	375	18.46	14.77	13.29	12.55	11.82	10.34

SERIES 102RMP POWER REED RELAYS. SPST N.O. Size 1. ½-watt nominal, DC. Contact load rating, 100 VA, 3 A max., or 250 volts max. 2⅝x4 1/64x¾". Shpg. wt. 1 oz.

850-1025	W102RMPCX2	12	250	9.85	7.88	7.09	6.70	6.31	5.52
850-1026	W102RMPCX3	24	1000	9.91	7.93	7.14	6.74	6.34	5.55
850-1027	W102RMPCX4	48	4000	10.23	8.18	7.36	6.95	6.54	5.73

I.C. COMPATIBLE REED RELAYS

850-0840	W101MPCX104	5	450	5.15	4.12	3.71	3.50	3.30	2.88
850-1460	W104MPCX46	5	300	9.41	7.53	6.78	6.40	6.02	5.27

LOW COST P.C. REEL RELAYS

850-0978	W102MPCX145	6	70	3.13	2.50	2.25	2.13	2.00	1.89
850-0979	W102MPCX146	12	250	3.13	2.50	2.25	2.13	2.00	1.89
850-0980	W102MPCX147	24	1000	3.13	2.50	2.25	2.13	2.00	1.89

MINIATURE DRY REED RELAYS

SERIES 101 MPC SPST N.O. Operate time, 1 millisecond, av.; release time, .5 millisecond, av. Contact load rating: 10 VA max. at ½ A or 200 VDC max., non-inductive. Contact bounce, .5 millisecond, av. Life expectancy, 5 million operations. ½-watt nominal DC. Low profile, compact design saves space. No taller than commonly used capacitors and resistors . . only ⅜" high. Size, 1⅛x1 3/32x⅜". 1 oz.

Stock No.	Mfr's Type	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-99	100-499	500-Up
850-0830	W101MPCX1	6	70	4.50	3.60	3.24	3.06	2.88	2.52	2.34
850-0831	W101MPCX2	12	300	4.50	3.60	3.24	3.06	2.88	2.52	2.34
850-0832	*W101MPCX3*	24	1100	4.54	3.63	3.27	3.09	2.90	2.54	2.36
850-0833	101MPCX4	48	4300	4.71	3.77	3.39	3.20	3.02	2.64	2.45

LOW-PRICED MINIATURE RELAYS (less cover)

850-0842	W101MPCX122	6	70	2.33	1.86	1.83	1.80	1.78	1.64	1.46
850-0843	W101MPCX123	12	300	2.33	1.86	1.83	1.80	1.78	1.64	1.46
850-0844	W101MPCX124	24	1100	2.33	1.86	1.83	1.80	1.78	1.64	1.46

SERIES 101MPC 3PST. .7-watt nom. DC. Contacts rated 12 VA at ½ A or 200 VDC. 1⅛x3 9/64x⅜". Wt. 3 oz.

850-0835	W101MPCX6	12	220	8.44	6.75	6.08	5.74	5.40	4.73	4.39
850-0836	W101MPCX7	24	850	8.46	6.77	6.09	5.75	5.42	4.74	4.40

SERIES 104MPCX SPDT. Operate/release time, 1 millisecond, av. Contact bounce: N.O., 0.5 millisecond; NC. 2 milliseconds. Rated 3 VA max. at ¼ A or 28 volts max. Life expectancy, 10 million operations at rated load. ½-watt nom. DC. Contact resistance, 150 milliohms, aver. Size, 1⅛x1 3/32x⅜". Shpg. wt. 1 oz.

850-1440	W104MPCX1	6	70	8.53	6.82	6.14	5.80	5.46	4.77	4.43
850-1441	W104MPCX2	12	300	8.54	6.83	6.15	5.81	5.46	4.78	4.44
850-1442	W104MPCX3	24	1100	8.56	6.85	6.17	5.82	5.48	4.80	4.45

SERIES 104MPCX DPDT. .7-watt nominal. DC. Operate/release time, 1 ms. average. Contact Bounce, less than ½ ms. aver. N.O. contacts; less than 2 ms, NC contacts. 1⅛x3 9/64x⅜". Shpg. wt. 3 oz.

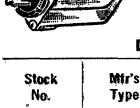
850-1445	W104MPCX6	12	220	14.54	11.63	10.47	9.89	8.30	8.14	7.56
850-1446	W104MPCX7	24	850	14.56	11.65	10.49	9.90	9.32	8.16	7.57

MICROMINIATURE DRY REED RELAYS

SERIES 105MPC SPST N.O. Operate time, 250 microseconds, average. Release time, 500 microseconds, average. Rating: 0.1 VA max. at 10 mA or 12 volts max. non-inductive. 0.3 watts nominal, DC. Contact resistance, 200 milliohms, average. Life expectancy, 10 million operations at rated load. ⅝x1 1/32x5/16". Wt. 1 oz.

Stock No.	Mfr's Type	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-99	100-499	500-Up
850-1547	W105MPCX1	6	120	6.81	5.45	4.91	4.63	4.36	3.82	3.54
850-1548	W105MPCX2	12	500	6.83	5.47	4.92	4.65	4.38	3.83	3.56
850-1549	W105MPCX3	24	2000	6.98	5.58	5.02	4.74	4.46	3.91	3.63

TYPE W103CPX ENCLOSED PLUG-IN MAGNEREED RELAY



Dry reed relay plug-in assembly. Consist of 2 or 3 Type 103 break-before-make relays with common coil, in "High impact" plastic housing. Oper., release times less than 3 ms, each. Nom. power, 300 mW. 2⅛x1⅞x1⅜". Av. shpg. wt., 6 oz.

DPDT TYPES—8-PIN OCTAL PLUGS

Stock No.	Mfr's Type	mA or VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-99	100-Up
850-1115	W103CPX-7	6 V	75	16.15	12.92	11.63	10.98	10.34	9.04
850-1116	W103CPX-8	12 V	300	16.19	12.95	11.66	11.01	10.36	9.07
850-1117	W103CPX-9	24 V	1000	16.26	13.01	11.71	11.06	10.41	9.11
850-1118	W103CPX-10	8 mA	5000	16.96	13.57	12.21	11.53	10.86	9.50

3PDT TYPES—11-PIN PLUGS

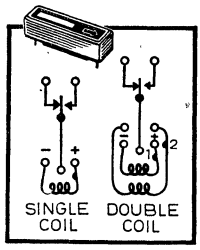
850-1120	W103CPX-12	12 V	150	21.04	16.83	15.15	14.31	13.46	11.78
850-1121	W103CPX-13	24 V	650	21.19	16.95	15.26	14.41	13.56	11.87
850-1122	W103CPX-14	10 mA	5000	21.88	17.50	15.75	14.86	14.00	12.25

Relays: Solid State, 101, 432—Gen. Purpose, 406-419—Power, 419-421, 425—Latching, 422-4, 445

C. P. Clare Mercury-Wetted and Reed Relays

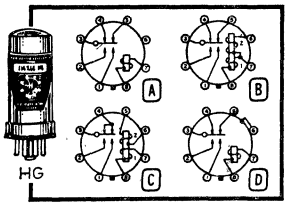
MERCURY-WETTED TYPES

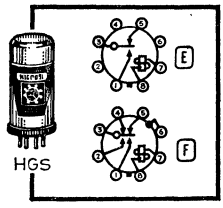
SERIES HGSM RELAYS



Relay modules for PC board mounting. 1000 Series is SPDT make-before-break; 5000 Series is SPDT break-before-make. Contacts rated at 2 amps, 500 volt max., 100 V.A. at rated load. Max. dissipation, 2 watts at 25°C. Temp. rise: 30°C per watt at 25°C ambient. .040″ dia. terminals require .063″ dia. mtg. hole. Single side-stable; †bistable double wound. **For larger-quantity prices, contact Allied.** 5/8x5/8x2 1/16″. Wt. 3 oz.

Stock No.	Type	Coil Ohms	Must Opr. mA	Must Rel. mA	Must Opr. VDC	Max. VDC	EACH 1-9	10-24	25-Up
752-2706	HGSM1005	65	37.4	6.2	2.7	11.4	11.45	8.59	8.02
752-2708	HGSM1007	90	37.7	6.3	3.8	13.4	11.45	8.59	8.02
752-2710	HGSM1009	275	17.0	2.8	5.2	23.4	11.45	8.59	8.02
752-2711	HGSM1010	450	12.9	2.1	6.4	30.0	11.45	8.59	8.02
752-2712	HGSM1011	675	11.6	1.9	8.6	36.7	11.45	8.59	8.02
752-2702	HGSM1002	940	10.1	1.7	10.5	43.3	11.45	8.59	8.02
752-2701	HGSM1001	1425	8.3	1.4	13	53.4	11.45	8.59	8.02
752-2703	HGSM1003	2400	7.35	1.2	20.6	69.2	11.45	8.59	8.02
752-2724	HGSM1063†	460/	±7.8	.....	±3.95	30.3			
		460	7.8				12.20	9.15	8.54
752-2717	HGSM1016†	1100/	7.25	.....	8.77	46.9			
		1100	5.7		6.9	46.9	12.20	9.15	8.54
752-2743	HGSM5021	65	37.4	6.2	2.7	11.4	11.45	8.59	8.02
752-2745	HGSM5035	275	17.0	2.8	5.2	23.4	11.45	8.59	8.02
752-2739	HGSM5009	450	12.9	2.1	6.4	30.0	11.45	8.59	8.02
752-2740	HGSM5010	675	11.6	1.9	8.6	36.7	11.45	8.59	8.02
752-2741	HGSM5011	940	10.1	1.7	10.5	43.3	11.45	8.59	8.02
752-2735	HGSM5001	1425	8.3	1.4	13	53.4	11.45	8.59	8.02
752-2736	HGSM5002	1950	7.5	1.2	17.6	62.4	11.45	8.59	8.02
752-2747	HGSM5064	2400	7.35	1.2	20.6	69.2	11.45	8.59	8.02
752-2737	HGSM5003†	1100/	7.25	.....	8.77	46.9			
		1100	5.7		6.99	46.9	12.20	9.15	8.54





SERIES HG AND HGS RELAYS

HG, SPDT make-before break contacts rated 5 amps at 500 volts, 250 V.A. max. HG2, two switch capsules for DPDT action; HG3, 3PDT; HG4, 4PDT. Life expectancy, 22x10⁹. 2.63x1.312″ dia. Base figures (see illus. above): *A, ‡B, †C, §D. Av. shpg. wt., 5 oz.

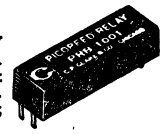
752-2619	HG-1019§	40	67	30	2.9	11	17.10	12.83	11.97
752-2612	HG-1012§	130	37	16	5.4	20	17.10	12.83	11.97
752-2626	HG-1026*	500	20	8.7	11	39	17.10	12.83	11.97
752-2604	HG-1004*	700	19	8.3	15	45	17.10	12.83	11.97
752-2630	HG-1043*	1000	15	6.6	17	55	17.10	12.83	11.97
752-2601	HG-1001†	2500	10	4.4	28	87	17.45	14.83	12.23
752-2602	HG-1002†	4000	7.5	3.3	33	110	10.45	7.84	7.32
752-2609	HG-1009†	7000	5.8	2.6	45	145	18.00	13.50	12.60
752-2771	HG2A1002†	140	67	28	10	24	27.75	20.81	19.43
752-2778	HG2A1015†	1250	22	9.3	30	71	27.75	20.81	19.43
752-2770	HG2A1001†	5000	11	47	62	142	27.75	20.81	19.43
752-2773	HG2A1004‡	5000	11	47	62	142	27.75	20.81	19.43
752-2785	HG3A1004†	315	44	19	15	36	36.00	27.00	25.20
752-2787	HG3A1006‡	500	35	15	19	45	36.00	27.00	25.20
752-2797	HG4A1011§	390	42	18	18	40	46.30	34.73	32.41

HGS, all rated at 2 amps, 500 volts. 100 VA max. 1000 Series—SPDT make-before-break, 5000 Series—SPDT break-before-make. All single side stable but *bi-stable, †chopper. Fig. #E, ¶F. 5 oz.

752-2666	HGS-1015#	90	6.3	1.1	.63	13	14.15	10.61	9.91
752-2662	HGS-1009#	600	2.9	0.69	1.9	34	14.15	10.61	9.91
752-2660	HGS-1006#	2500	1.4	0.17	3.9	70	14.50	10.88	10.13
752-2676	HGS-1048¶	4000	1.25	0.25	5.5	90	15.10	11.33	10.57
752-2668	HGS-1017#	11,000	0.72	0.12	8.7	148	15.10	11.33	10.57
752-2687	HGS-5008¶	4000	1.25	0.25	5.5	90	15.10	11.33	10.57
752-2691	HGS-5016#	25,000	0.52	0.09	14.3	224	15.10	11.33	10.57
752-2683	HGS-5004#*	4000	0.48		2.1	90	15.10	11.33	10.57
752-2692	HGS-5017#†	600			6.3 Vac		14.75	11.06	10.33

REED TYPES

PICOREED REED RELAYS



Sealed contacts rated 0.5 amp max. at 100 V and 10 VA max.; 1.0 amp max. at rated load. Sizes: *.187x.250x.781″; †.225x.380x.781″; ‡.225x.480x.781″; §.225x.580x.781″. PC mount. Prefix indicates contact form; PRB, 1 Form A; PR2B 2 Form A. Av. wt. 1 oz.

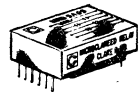
Stock No.	Mfr's Type	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-99	100-249	250-Up
752-4910	PRB-2010*	6	387	3.25	2.75	2.48	2.20	2.06
752-4930	PR2B-2007†	6	136	4.72	4.00	3.60	3.20	3.00
752-4950	PR3B-2006‡	6	117	6.20	5.25	4.73	4.20	3.94
752-4970	PR4B-2005§	6	88	7.67	6.50	5.85	5.20	4.87
752-4911	PRB-2013*	12	1200	3.25	2.75	2.48	2.20	2.06
752-4933	PR2B-2011†	12	740	4.72	4.00	3.60	3.20	3.00
752-4952	PR3B-2009‡	12	483	6.20	5.25	4.73	4.20	3.94
752-4972	PR4B-2008§	12	351	7.67	6.50	5.85	5.20	4.87
752-4904	PRB-2016*	24	5380	3.60	3.05	2.75	2.44	2.29
752-4935	PR2B-2014†	24	3042	5.07	4.30	3.87	3.44	3.23
752-4954	PR3B-2013‡	24	2254	6.55	5.55	4.99	4.44	4.16
752-4974	PR4B-2012§	24	1856	8.02	6.80	6.12	5.40	5.10
752-4917	PRB-3010*	5	387	3.60	3.05	2.75	2.44	2.29

HIGH SENSITIVITY REED RELAYS

More sensitive relays of the PRB Series (see above) allow PC board spacing of .500″ centers. All Picoreed reed relays have speed to 500 μsec. operate time at nominal coil power. Life expectancy is 100x10⁶ operations at low-level loads, 5x10⁶ at 28VDC, 0.125 amps. The 5-volt series requires an operate voltage of 3.75 volts at 25°C. Sizes: *.350x.400x.800″; †.350x.500x.800″. Av. wt. 1 oz.

752-4909	PRB-2009H*	6	535	3.54	3.00	2.70	2.40	2.25
752-4931	PR2B-2007H†	6	297	5.02	4.25	3.83	3.40	3.19
752-4934	PRB-2013H*	12	2870	3.54	3.00	2.70	2.40	2.25
752-4932	PR2B-2010H†	12	1180	5.02	4.25	3.83	3.40	3.19
752-4914	PRB-2016H*	24	11900	4.01	3.40	3.06	2.72	2.55
752-4934	PR2B-2013H†	24	3780	5.49	4.65	4.19	3.72	3.49
752-4916	PRB-3009H*	5	535	4.01	3.40	3.06	2.72	2.55
752-4937	PR2B-3007H†	5	297	5.49	4.65	4.19	3.72	3.49

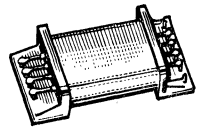
MRME RELAYS



MicroClareed relays offering the same high standards of the Picoreed relays but only one-fifth the size. Epoxy molded modules. Contacts rated at 15 VA maximum, 3/4 amp maximum. Size: length, 1 19/64″; height, 25/64″; widths, *1 3/32″, †33/64″, ‡39/64″, and §45/64″. Av. wt. 1 oz.

Stock No.	Mfr's Type	V	Coil Ohms	Contact Form	EACH 1-9	10-24	25-99	100-249	250-Up
752-4055	MRME-1041*	6	218	1A	4.13	3.50	3.15	2.80	2.63
752-4065	MR2ME-1041†	6	168	2A	5.61	4.75	4.28	3.80	3.56
752-4075	MR3ME-1041‡	6	125	3A	7.08	6.00	5.40	4.80	4.58
752-4085	MR4ME-1041§	6	95	4A	8.56	7.25	6.53	5.80	5.44
752-4056	MRME-1042*	12	790	1A	4.13	3.50	3.15	2.80	2.63
752-4066	MR2ME-1042†	12	635	2A	5.61	4.75	4.28	3.80	3.56
752-4076	MR3ME-1042‡	12	510	3A	7.08	6.00	5.40	4.80	4.58
752-4086	MR4ME-1042§	12	410	4A	8.56	7.25	6.53	5.80	5.44
752-4057	MRME-1043*	24	3060	1A	4.72	4.00	3.60	3.20	3.00
752-4067	MR2ME-1043†	24	2580	2A	6.20	5.25	4.73	4.20	3.94
752-4077	MR3ME-1043‡	24	1950	3A	7.38	6.25	5.63	5.00	4.69
752-4087	MR4ME-1043§	24	1500	4A	9.15	7.75	6.98	6.20	5.81

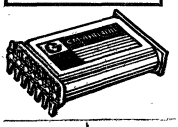
MRB MICROCLAREED RELAYS



Offer signal level to 10 VA switching capabilities, total input/output isolation, 800 microsecond typical switching speeds in a miniature relay. Coil power requirements as low as 10 milliwatts. Operations will exceed 100 x 10⁶ at signal level loads. Molded epoxy base with metal cover and 1.000″x0.100″ grid mounting centers for printed circuit board mounting. Size, length, 1.135 max.; ht., .350 max.; width, .360-.560″. Av. wt. 3 oz.

752-4020	MRB1A06	6	340	1A	2.83	2.40	2.16	1.95	1.80
752-4024	MRB2A06	6	180	2A	4.01	3.40	3.06	2.72	2.55
752-4028	MRB3A06	6	130	3A	5.19	4.40	3.96	3.52	3.30
752-4032	MRB4A06	6	70	4A	6.37	5.40	4.86	4.32	4.05
752-4021	MRB1A12	12	1400	1A	2.83	2.40	2.16	1.92	1.80
752-4025	MRB2A12	12	730	2A	4.01	3.40	3.06	2.72	2.55
752-4029	MRB3A12	12	570	3A	5.19	4.40	3.96	3.52	3.30
752-4033	MRB4A12	12	320	4A	6.37	5.40	4.86	4.32	4.05
752-4022	MRB1A24	24	4340	1A	3.19	2.70	2.43	2.16	2.03
752-4026	MRB2A24	24	2500	2A	4.37	3.70	3.33	2.96	2.76
752-4030	MRB3A24	24	1540	3A	5.55	4.70	4.23	3.76	3.53
752-4034	MRB4A24	24	790	4A	6.73	5.70	5.13	4.56	4.28

Dual Inline Reed Relays and Solenoids

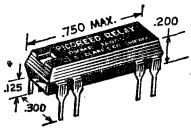


C. P. CLARE CRT SERIES REED RELAYS

Up to 6. Form A contacts. 20 mill. operations. Contacts: 15 VA max., non-induct., 1 A max.; 250 V with 5 A max. load (not switched). Operate time less than 4.0 ms.

Stock No.	Mfr's Type	Coil V	Coil Ohms	Contact Form	EACH 1-9	10-24	25-99	100-249	250-Up
752-1007	CRT-1007	6	160	1A	4.13	3.50	3.15	2.80	2.63
752-1020	CR2T-1004	6	88	2A	5.31	4.50	4.05	3.60	3.38
752-1040	CR4T-1105	6	56	4A	7.67	6.50	5.85	5.20	4.88
752-1060	CR6T-1003	6	31	6A	10.03	8.50	7.65	6.80	6.38
752-1010	CRT-1010	12	600	1A	4.13	3.50	3.15	2.80	2.63
752-1022	CR2T-1006	12	235	2A	5.31	4.50	4.05	3.60	3.38
752-1042	CR4T-1107	12	136	4A	7.67	6.50	5.85	5.20	4.88
752-1063	CR6T-1006	12	120	6A	10.03	8.50	7.65	6.80	6.38
752-1013	CRT-1013	24	2500	1A	5.31	4.50	4.05	3.60	3.38
752-1026	CR2T-1010	24	1400	2A	6.49	5.50	4.95	4.40	4.13
752-1046	CR4T-1111	24	835	4A	8.85	7.50	6.75	6.00	5.63
752-1066	CR6T-1009	24	510	6A	11.21	9.50	8.55	7.60	7.13

C. P. CLARE PRME SERIES PICOREED® RELAYS

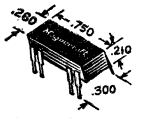


.180" Maximum Height

New DIP package. Compatible with automatic insertion equip. for direct PCB or standard DIP socket mounting. Form A switching (10 VA) in IC compatible TO-116 package. Coil draws 13 mA from 5 V logic supplies. Fast 125 µsec. operating time with proper coil drive. Response, 600 µsec. max. @ nominal coil voltage. Release time is 100 µsec., typically. All types: SPST-NO contacts; .100" grid terminal spacing; .180" high. Wt. 1 oz.

Stock No.	Type PRME-	Coil V	Coil Ohms	Coil mW	EACH 1-9	10-24	25-99	100-249	250-Up
752-4985	1A005	5	380	66	4.72	4.00	3.60	3.20	3.00
752-4986	1A006	6	380	95	4.13	3.50	3.15	2.80	2.63
752-4992	1A012	12	530	272	4.13	3.50	3.15	2.80	2.63
752-4996	1A024	24	2000	288	4.13	3.50	3.15	2.80	2.63

MAGNECRAFT DUAL-IN-LINE 8-PIN REED RELAYS



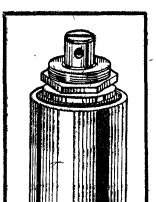
New DIP line of relays are compatible with IC packaging. Offer the optimum in automated insertion. Epoxy-molded—ideal where high density packaging is essential. 5 VDC type will operate directly from TTL or DTL circuits. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Coil V	Coil Power Req.	Contact Form	1-9	10-24	25-49	50-74	75-Up
850-1705	W117DIP-9	5	150 mW	DPST-NO 2A	5.37	4.68	4.21	3.98	3.74
850-1706	W117DIP-10	6	300 mW		4.83	4.20	3.78	3.57	3.36
850-1707	W117DIP-11	12	300 mW		4.83	4.20	3.78	3.57	3.36
850-1708	W117DIP-12	24	300 mW		4.83	4.20	3.78	3.57	3.36
850-1709	W118DIP-1	5	150 mW	SPDT 1C	9.57	7.80	7.02	6.63	6.24
850-1710	W118DIP-2	6	300 mW		8.97	7.30	6.57	6.21	5.84
850-1711	W118DIP-3	12	300 mW		8.97	7.30	6.57	6.21	5.84
850-1712	W118DIP-4	24	300 mW		8.97	7.30	6.57	6.21	5.84

GUARDIAN DC PULL-TYPE OR AC/DC PUSH-TYPE SOLENOIDS

TUBULAR PULL TYPES—24 VDC

Intermittent types should not be energized over 5 minutes or allowed to rise beyond 85° C above 25° C ambient temp. without cooling. Continuous types will not have temperature rise of more than 85° C above 25° C ambient @ rated voltage. Threaded bushing. Life, 10,000,000 operations. **Note: Stroke and Lift measurements or Types TP2X4 and fT2X4 given in grams @ inches.**



Clean Design for Side-by-Side Mounting

Stock No.	Mfr's Type	Duty	Volts	Ohms	Strokes and Lift Ounces @ Inches Min.	Max.	Size L.xDia.	Shpg. Wt., Oz.	EACH 1-24	25-49	50-99	100-249	250-Up
802-0527	TP2X	Pulse	24DC	200	30 @ .010	5 @ .050	½x¼"	1	5.64	5.08	4.79	3.95	3.67
802-0528	TP4X7	Cont.	24DC	80	5 @ 1/16	¾ @ ¼	⅞x½"	7	4.41	3.97	3.75	3.09	2.87
802-0529	TP4X7	Cont.	24DC	240	1½ @ 1/16	¼ @ ⅛	⅞x½"	7	5.02	4.52	4.27	3.51	3.26
802-0530	TP4X12	Int.	24DC	38	12 @ 1/32	0.5 @ ¾	1½x1"	9	5.25	4.73	4.46	3.68	3.41
802-0531	TP4X12	Cont.	24DC	160		0.5 @ 5/16	1½x1"	9	5.36	4.82	4.56	3.75	3.48
802-0538	TP8X16	Int.	24DC	15	65 @ 1/10	1¾ @ ¼	1x1½"	1	6.17	5.55	5.24	4.32	4.01
802-0539	TP8X16	Cont.	24DC	105	26 @ 1/16	1¾ @ ⅝	2x1"	1	6.28	5.65	5.34	4.40	4.08
802-0542	TP12X13	Int.	24DC	14	120 @ ⅛	6 @ ⅞	1⅝x1½"	10	7.33	6.60	6.23	5.13	4.76
802-0543	TP12X13	Cont.	24DC	85	48 @ ⅛	1 @ ¾	1⅝x1½"	10	7.54	6.79	6.47	5.28	4.90
802-0544	TP12X19	Int.	24DC	9.5	130 @ ⅛	5 @ 1½	2⅜x1½"	10	7.96	7.16	6.77	5.57	5.17
802-0545	TP12X19	Cont.	24DC	59	65 @ ⅛	1 @ 1	2⅜x1½"	10	8.06	7.25	6.85	5.64	5.24
802-0549	T2X4	Pulse	24DC	200	35 @ .010	6 @ .080	½x¼"	1	5.64	5.08	4.79	3.95	3.67
802-0552	T3.5X9	Int.	24DC	58	11 @ 1/32	1 @ ½	1⅛x7/16"	2	3.26	2.93	2.77	2.28	2.12
802-0550	T3.5X9	Cont.	24DC	295	4.5 @ 1/32	.25 @ 5/16	1⅛x7/16"	2	3.36	3.02	2.86	2.35	2.18
802-0556	T4X7	Int.	24DC	82	12 @ 1/32	1 @ ¼	⅞x½"	7	4.41	3.97	3.75	3.09	2.87
802-0554	T4X7	Cont.	24DC	240	4 @ 1/32	.25 @ 5/32	⅞x½"	7	4.52	4.07	3.84	3.16	2.97
802-0560	T4X12	Int.	24DC	48	15 @ 1/32	1 @ ¾	1½x½"	9	4.73	4.26	4.02	3.31	3.07
802-0558	T4X12	Cont.	24DC	229	8 @ 1/32	1 @ 5/16	1½x½"	9	4.83	4.35	4.11	3.38	3.14
802-0564	T4X16	Int.	24DC	29	17 @ 1/32	.5 @ 1⅛	2x½"	15	5.04	4.54	4.28	3.53	3.28
802-0562	T4X16	Cont.	24DC	145	10 @ 1/32	.5 @ ⅞	2x½"	15	5.15	4.64	4.38	3.61	3.35
802-0568	T6X12	Int.	24DC	48	30 @ 1/16	1 @ ⅞	1½x¾"	14	5.25	4.73	4.46	3.68	3.51
802-0566	T6X12	Cont.	24DC	125	16 @ 1/16	1.5 @ ½	1½x¾"	14	5.36	4.82	4.55	3.75	3.48
802-0572	T8X9	Int.	24DC	30	50 @ 1/16	1 @ 9/16	1⅛x1"	16	5.41	4.87	4.60	3.79	3.52
802-0570	T8X9	Cont.	24DC	130	15 @ 1/16	1 @ ⅜	1⅛x1"	16	5.46	4.91	4.64	3.82	3.55
802-0576	T8X16	Int.	24DC	15	80 @ 1/16	2 @ 1¼	2x1"	1	5.67	5.10	4.82	3.97	3.69
802-0574	T8X16	Cont.	24DC	95	32 @ 1/16	2 @ ⅝	2x1"	6	5.78	5.20	4.91	4.04	3.76
802-0580	T12X13	Int.	24DC	14	150 @ ⅛	8 @ ⅞	1⅝x1½"	10	6.83	6.15	5.81	4.78	4.44
802-0578	T12X13	Cont.	24DC	90	48 @ ⅛	1 @ ¾	1⅝x1½"	10	7.04	6.34	5.98	4.93	4.58
802-0584	T12X19	Int.	24DC	9.5	165 @ ⅛	6 @ 1½	2⅜x1½"	10	7.46	6.71	6.34	5.22	4.85
802-0582	T12X19	Cont.	24DC	59	80 @ ⅛	1 @ 1¼	2⅜x1¼	10	7.56	6.80	6.43	5.29	4.91

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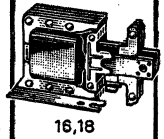

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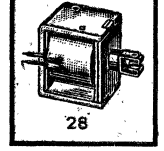


28

12, 24 AND 120 VOLT AC/DC PUSH-TYPES

Intermittent or continuous duty. Lengths of the push rods are equal to the maximum stroke length specified. Types 11P and 28P are approximately 20% less power than listed. Other specifications same as above.

802-1071	11P	Int.	24AC	3.5	25 @ ⅛	6 @ ½	1 5/16x1 27/32x3/16"	7½	4.17	3.75	3.54	2.92	2.71
802-1062	11P	Cont.	24AC	8	12 @ ⅛	1 @ 1	1 5/16x1 27/32x3/16"	7½	4.17	3.75	3.54	2.92	2.71
802-1072	11P	Int.	120AC	85	25 @ ⅛	6 @ 1	1 5/16x1 27/32x3/16"	7½	4.17	3.75	3.54	2.92	2.71
802-1065	11P	Cont.	120AC	200	12 @ ⅛	1 @ 1	1 5/16x1 27/32x3/16"	7½	4.17	3.75	3.54	2.92	2.71
802-1096	16P	Int.	120AC	41	90 @ ⅛	30 @ ¾	1⅝x1¼x1⅝"	7½	4.78	4.30	4.06	3.35	3.11
802-1097	16P	Cont.	120AC	85	50 @ ⅛	10 @ ¾	1⅝x1¼x1⅝"	7½	4.78	4.30	4.06	3.35	3.11
802-1107	18P	Int.	120AC	8.8	280 @ ⅛	80 @ 1	2 1/16x1 13/16x2½"	16½	6.29	5.66	5.35	4.40	4.09
802-1108	18P	Cont.	120AC	19.7	145 @ ⅛	40 @ 1	2 1/16x1 13/16x2½"	16½	6.29	5.66	5.35	4.40	4.09
802-1142	28P	Int.	24AC	7.5	35 @ 1/16	5 @ ½	1⅛x1 5/16x1 3/16"	3½	4.17	3.75	3.54	2.92	2.71
802-1143	28P	Cont.	24AC	17.4	20 @ 1/16	2.5 @ ½	1 3/16x1 5/16x1⅛"	3½	4.17	3.75	3.54	2.92	2.71
802-1144	28P	Int.	120AC	220	35 @ 1/16	5 @ ½	1 3/16x1 5/16x1⅛"	3½	4.46	4.01	3.79	3.12	2.90
802-1145	28P	Cont.	120AC	400	20 @ 1/16	2.5 @ ½	1 3/16x1 5/16x1⅛"	3½	4.46	4.01	3.79	3.12	2.90
802-1074	11P	Int.	24DC	32	34 @ ⅛	2 @ ⅞	1 3/16x1 5/16x1⅞"	7½	3.64	3.28	3.09	2.55	2.37
802-1063	11P	Cont.	24DC	72	25 @ ⅛	1 @ ⅞	1 5/16x2 7/32x1 3/16"	7½	3.64	3.28	3.09	2.55	2.37
802-1143	28P	Int.	12DC	13	35 @ 1/16	2 @ ½	1 3/16x1 5/16x1⅛"	3½	3.39	3.05	2.88	2.37	2.20
802-1147	28P	Cont.	12DC	27	24 @ 1/16	1 @ ⅜	1 3/16x1 5/16x1½"	3½	3.39	3.05	2.88	2.37	2.20
802-1148	28P	Int.	24DC	50	35 @ 1/16	2 @ ½	1 3/16x1 5/16x1½"	3½	3.39	3.05	2.88	2.37	2.20
802-1149	28P	Cont.	24DC	104	24 @ 1/16	1 @ ⅜	1 3/16x1 5/16x1½"	3½	3.39	3.05	2.88	2.37	2.20

Guardian Solenoids and Solenoid Switches

INDUSTRIAL AC AND DC SOLENOIDS

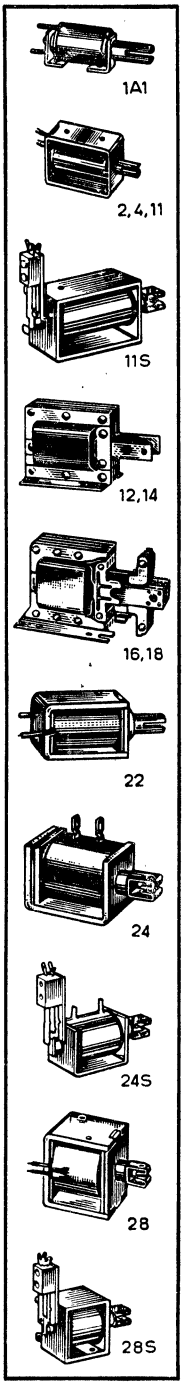
Popular solenoids and solenoid with switches available in a wide range of voltages and sizes to meet the exacting requirements of industry and military applications. The widely used box-frame solenoids Types 11 and 28 are for either AC or DC voltages. Guardian's famous laminated solenoids Types 16 and 18 are for AC operation only. Choose from *Intermittent or †Continuous styles: intermittent-duty coils should not be energized for more than five consecutive minutes or be permitted to rise more than 85°C above 25°C ambient without time for cooling between cycles; continuous-duty types will not have a temperature rise of more than 85°C at rated voltage and ambient. **Solenoid with switches** (suffix S in Mfr's Type No.), have SPDT molded switch rated at 10 amps at 115 VAC, for switching without addition of a relay in circuit. Intermittent solenoid switch gives continuous duty with external resistor. Specify Allied Stock No., Mfr's Type No., volts and duty when ordering. HD indicates heavy-duty.

AC TYPES (SPECIFY TYPE NO., VOLTS AND DUTY) *INTERMITTENT †CONTINUOUS

Stock No.	Mfr's Type	Volts	Ohms	Stroke and Lift, Ounces @ Inches Min.	Stroke and Lift, Ounces @ Inches Max.	Size, Inches (HxWxL)	Shpg. Wt., Oz.	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
802-1003	1A1*	120	.00	8 @ 1/8"	2 @ 1/2"	1 1/16x15/16x1 3/4	4 1/2	4.30	3.64	3.28	3.09	2.55	2.37
802-1000	1A1†	120	675	3 @ 1/8"	.5 @ 3/8"	1 1/16x15/16x1 3/4	4 1/2	4.30	3.64	3.28	3.09	2.55	2.37
802-1009	2*	120	60	33 @ 1/8"	4.5 @ 7/8"	1 5/8x1 7/16x1 9/16	10	5.02	4.25	3.83	3.61	2.98	2.76
802-1006	2†	120	166	10 @ 1/8"	1.5 @ 7/8"	1 5/8x1 7/16x1 9/16	10	5.02	4.25	3.83	3.61	2.98	2.76
802-1018	2HD*	120	36	38 @ 1/8"	16 @ 3/4"	1 11/16x1 7/16x1 13/16	13	11.81	10.01	9.01	8.51	7.01	6.51
802-1014	2HD†	120	113	17 @ 1/8"	4 @ 3/4"	1 11/16x1 7/16x1 13/16	13	11.81	10.01	9.01	8.51	7.01	6.51
802-1037	4*	120	37	23 @ 1/8"	22 @ 1"	1 5/8x1 7/16x2	14 1/2	5.72	4.85	4.37	4.12	3.40	3.15
802-1032	4†	120	133	8 @ 1/8"	6 @ 1"	1 5/8x1 7/16x2	14 1/2	5.72	4.85	4.37	4.12	3.40	3.15
802-1051	9*	120	220	17 @ 1/8"	8 @ 1/2"	1x1 1/16x1 5/32	4	2.80	2.37	2.13	2.01	1.66	1.54
802-1049	9†	120	350	11 @ 1/8"	4 @ 1/2"	1x1 1/16x1 5/32	4	2.80	2.37	2.13	2.01	1.66	1.54
802-1056	10*	120	74	4 @ 1/8"	25 @ 1/2"	1 13/32x1 3/8x1 1/16	6 1/2	3.19	2.70	2.43	2.30	1.89	1.76
802-1053	10†	120	172	20 @ 1/8"	10 @ 1/2"	1 13/32x1 3/8x1 1/16	6 1/2	3.19	2.70	2.43	2.30	1.89	1.76
802-1066	11*	24	3.5	25 @ 1/8"	6 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.30	3.64	3.28	3.09	2.55	2.37
802-1057	11†	24	8	12 @ 1/8"	1 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.30	3.64	3.28	3.09	2.55	2.37
802-1077	11S*	115	85	25 @ 1/8"	6 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	5.65	4.79	4.31	4.07	3.35	3.11
802-1070	11*	115	85	25 @ 1/8"	6 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.30	3.64	3.28	3.09	2.55	2.37
802-1061	11†	115	200	12 @ 1/8"	1 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.30	3.64	3.28	3.09	2.55	2.37
802-1082	12*	115	100	32 @ 1/8"	4 @ 1"	1 7/16x1 3/16x1 5/8	6	6.09	5.16	4.64	4.39	3.61	3.35
802-1080	12†	115	150	22 @ 1/8"	6 @ 3/4"	1 7/16x1 3/16x1 5/8	6	6.09	5.16	4.64	4.39	3.61	3.35
802-1087	14*	115	11	110 @ 1/8"	50 @ 1 1/2"	2 1/16x1 15/16x2 7/16	19	8.22	6.97	6.27	5.92	4.88	4.53
802-1085	14†	115	18	60 @ 1/8"	35 @ 1 1/2"	2 1/16x1 15/16x2 7/16	19	8.22	6.97	6.27	5.92	4.88	4.53
802-1094	16*	115	41	90 @ 1/8"	30 @ 3/4"	1 7/16x1 1/4x1 5/8	7 1/2	5.02	4.25	3.83	3.61	2.98	2.76
802-1090	16†	115	85	50 @ 1/8"	10 @ 3/4"	1 7/16x1 1/4x1 5/8	7 1/2	5.02	4.25	3.83	3.61	2.98	2.76
802-1092	16†	230	350	50 @ 1/8"	10 @ 3/4"	1 7/16x1 1/4x1 5/8	7 1/2	5.37	4.55	4.10	3.87	3.19	2.96
802-1104	18*	115	8.8	280 @ 1/8"	80 @ 1"	2 1/16x1 13/16x2 1/2	16 1/2	6.80	5.76	5.18	4.90	4.03	3.94
802-1100	18†	115	19.7	145 @ 1/8"	40 @ 1"	2 1/16x1 13/16x2 1/2	16 1/2	6.80	5.76	5.18	4.90	4.03	3.94
802-1106	18*	230	45	280 @ 1/8"	80 @ 1"	2 1/16x1 13/16x2 1/2	16 1/2	7.41	6.28	5.65	5.34	4.40	4.08
802-1102	18†	230	78	145 @ 1/8"	40 @ 1"	2 1/16x1 13/16x2 1/2	16 1/2	7.41	6.28	5.65	5.34	4.40	4.08
802-1130	24†	115	500	10 @ 1/16"	2 @ 5/8"	1x2 7/32x1 1/4	3	4.65	3.94	3.55	3.35	2.76	2.56
802-1140	24S†	115	500	10 1/2 @ 1/16"	2 @ 5/8"	1x2 7/32x1 1/4	3	6.00	5.09	4.58	4.33	3.56	3.31
802-1165	28*	115	220	35 @ 1/16"	5 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.65	3.94	3.55	3.35	2.76	2.56
802-1156	28†	115	400	20 @ 1/16"	2.5 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.65	3.94	3.55	3.35	2.76	2.56
802-1198	38*	120	860	14 @ 1/32"	1 @ 9/32"	3/4x3/4x49/64	2	2.18	1.85	1.67	1.57	1.30	1.20
802-1196	38†	120	1500	9 @ 1/32"	1 @ 1/4"	3/4x3/4x49/64	2	2.18	1.85	1.67	1.57	1.30	1.20

DC TYPES (SPECIFY TYPE NO., VOLTS AND DUTY) *INTERMITTENT †CONTINUOUS

Stock No.	Mfr's Type	Volts	Ohms	Stroke and Lift, Ounces @ Inches Min.	Stroke and Lift, Ounces @ Inches Max.	Size, Inches (HxWxL)	Shpg. Wt., Oz.	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
802-1016	2HD*	24	20	100 @ 1/8"	5 @ 3/4"	1 11/16x1 7/16x1 25/32	13	12.17	10.31	9.28	8.76	7.22	6.70
802-1012	2HD†	24	64	50 @ 1/8"	1 @ 5/8"	1 11/16x1 7/16x1 25/32	13	12.17	10.31	9.28	8.76	7.22	6.70
802-1035	4*	24	15	110 @ 1/8"	4 @ 1"	1 5/8x1 7/16x2 1/16	14 1/2	5.72	4.85	4.37	4.12	3.40	3.15
802-1030	4†	24	54	55 @ 1/8"	2.5 @ 7/8"	1 5/8x1 7/16x2 1/16	14 1/2	5.72	4.85	4.37	4.12	3.40	3.15
802-1039	4*	115	346	110 @ 1/8"	4 @ 1"	1 5/8x1 7/16x2 1/16	14 1/2	6.09	5.16	4.64	4.39	3.61	3.35
802-1047	4HD*	24	15	156 @ 1/8"	21 @ 3/4"	1 5/8x1 7/16x2 3/16	15	8.73	7.40	6.67	6.29	5.18	4.81
802-1042	4HD†	24	50	70 @ 1/8"	1 @ 3/4"	1 5/8x1 7/16x2 3/16	15	8.73	7.40	6.67	6.29	5.18	4.81
802-1050	9*	24	52	16 @ 1/8"	1 @ 1/8"	1x1 1/16x1 5/32	4	2.80	2.37	2.13	2.01	1.66	1.54
802-1048	9†	24	90	10 @ 1/8"	1 @ 7/16"	1x1 1/16x1 5/32	4	2.80	2.37	2.13	2.01	1.66	1.54
802-1054	10*	24	37	26 @ 1/8"	4 @ 1/2"	1 13/32x1 3/8x1 1/16	6 1/2	3.19	2.70	2.43	2.30	1.89	1.76
802-1052	10†	24	69	16 @ 1/8"	1 @ 1/2"	1 13/32x1 3/8x1 1/16	6 1/2	3.19	2.70	2.43	2.30	1.89	1.76
802-1064	11*	6	2	34 @ 1/8"	2 @ 7/8"	1 3/16x1 5/16x1 7/8	7 1/2	4.30	3.64	3.28	3.09	2.65	2.37
802-1055	11†	6	4.5	25 @ 1/8"	1 @ 7/8"	1 3/16x1 27/32x1 5/16	7 1/2	4.30	3.64	3.28	3.09	2.55	2.37
802-1068	11*	24	32	34 @ 1/8"	2 @ 7/8"	1 3/16x1 27/32x1 5/16	7 1/2	4.30	3.64	3.28	3.09	2.55	2.37
802-1059	11†	24	72	25 @ 1/8"	1 @ 7/8"	1 3/16x1 27/32x1 5/16	7 1/2	4.30	3.64	3.28	3.09	2.55	2.37
802-1074	11P*	24	32	34 @ 1/8"	2 @ 7/8"	1 3/16x1 5/16x1 7/8	7 1/2	4.92	4.17	3.75	3.54	2.92	2.71
802-1063	11P†	24	72	25 @ 1/8"	1 @ 7/8"	1 3/16x1 5/16x1 7/8	7 1/2	4.92	4.17	3.75	3.54	2.92	2.71
802-1073	11S†	24	72	25 @ 1/8"	2 @ 3/4"	1 3/16x1 27/32x1 5/16	7 1/2	5.65	4.79	4.31	4.07	3.35	3.11
802-1115	22*	6	4	24 @ 1/16"	1 @ 3/8"	3/4x3/4x1 1/4	2 1/2	4.00	3.39	3.05	2.88	2.37	2.21
802-1111	22†	6	9	13 @ 1/16"	.5 @ 3/8"	3/4x3/4x1 1/4	2 1/2	4.00	3.39	3.05	2.88	2.37	2.21
802-1117	22*	24	60	24 @ 1/16"	1 @ 3/8"	3/4x3/4x1 1/4	2 1/2	4.00	3.39	3.05	2.88	2.37	2.21
802-1113	22†	24	144	13 @ 1/16"	.5 @ 3/8"	3/4x3/4x1 1/4	2 1/2	4.00	3.39	3.05	2.88	2.37	2.21
802-1159	28*	6	3.3	35 @ 1/16"	2 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.00	3.39	3.05	2.88	2.37	2.21
802-1161	28*	12	13	35 @ 1/16"	2 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.00	3.39	3.05	2.88	2.37	2.21
802-1150	28†	12	27	24 @ 1/16"	1 @ 3/8"	1 3/16x1 5/16x1 1/8	3 1/2	4.00	3.39	3.05	2.88	2.37	2.20
802-1163	28*	24	50	35 @ 1/16"	2 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.00	3.39	3.05	2.88	2.37	2.20
802-1154	28†	24	104	24 @ 1/16"	1 @ 3/8"	1 3/16x1 5/16x1 1/8	3 1/2	4.00	3.39	3.05	2.88	2.37	2.20
802-1170	28S*	24	50	35 @ 1/16"	2 @ 1/2"	2 1/4x1 5/16x1 9/16	3 1/2	5.37	4.55	4.10	3.87	3.19	2.96
802-1168	28S†	24	104	24 @ 1/16"	1 @ 3/8"	2 1/4x1 5/16x1 9/16	3 1/2	5.37	4.55	4.10	3.87	3.19	2.96
802-1197	38*	24	72	21 @ 1/32"	1 @ 1/4"	3/4x3/4x49/64	2	2.18	1.85	1.67	1.57	1.30	1.20
802-1195	38†	24	175	10 @ 1/32"	1/2 @ 5/32"	3/4x3/4x49/64	2	2.18	1.85	1.67	1.57	1.30	1.20



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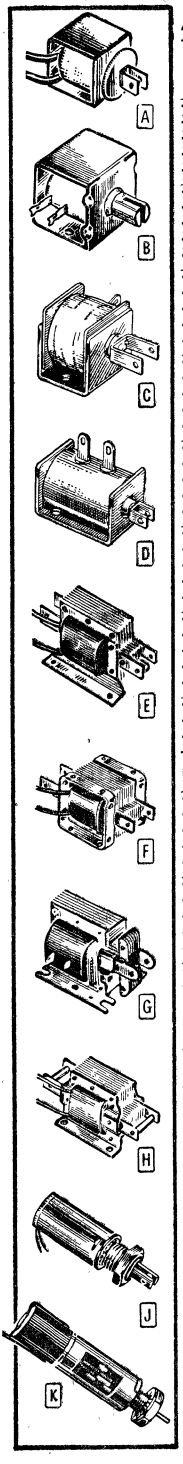
SOLENOID SECTION

Dormeyer Solenoids

Figures A and B are Super-D box-frame solenoids: quiet, cool operation; greater heat dissipation; high seating pull; anti-residual spring; phenolic bobbin; high temperature rating. Figures C and D are Super-U folded-frame light-duty solenoids for use where quiet seating pull is not vital. Figures E and F are C-1 general-purpose solenoids; zinc-dichromate coating; moisture-resistant or moisture-proof coils, high temperature rating. Fig. G is Super-T laminated solenoid: zinc-dichromate coating; bakelite bobbin; stainless-steel anti-residual spring. Figure H is C-1 machine-tool laminated solenoid for heavy-duty service; zinc-dichromate coating. Figure J types are compact, low-cost tubulars. simplified stud mount with anti-turn feature; low-residual force: stainless-steel plunger cavity; friction reducing coating on plungers; Fig. K, push-type version of Fig. J, with built-in return-spring.



AC TYPES (Specify Mfr's Type No., Volts, and Duty) *Intermittent. †Continuous. §Push-Pull. Av. shpg. wt., 1½ lbs.

Stock No.	Mfr's Type	Fig.	V	Ohms	A	Max. Stroke (In.)	Max. Lift (Oz.)	HxWxD	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
769-6210	B18-507-A-3	A	*115	964	.07	¼	19	¾x¾x4 9/64"	3.06	2.86	2.29	1.91	1.45	1.22
769-6200	B18-7-A-3	A	†115	1500	.04	¼	13	¾x¾x4 9/64"	3.06	2.86	2.29	1.91	1.45	1.22
769-6219	B20-501-A-1	B	*115	338	.12	½	32	1 5/16x1 3/16x1 9/64"	3.31	3.12	2.49	2.09	1.58	1.32
769-6216	B20-1-A-1	B	†115	580	.03	½	13	1 5/16x1 3/16x1 9/64"	3.31	3.12	2.49	2.09	1.58	1.32
769-6222	B21-1-A-1	B	†115	234	.10	⅝	32	1 5/16x1 5/16x1 13/64"	3.61	3.38	2.72	2.27	1.71	1.45
769-6229	B22-1-A-1	B	†115	119	.12	1	29	1 15/32x1 5/16x1 39/64"	4.95	4.64	3.73	3.10	2.36	1.98
769-6233	B24-1-A-1	B	†115	173	.11	1¼	16	1 5/16x1 5/16x2"	4.68	4.40	3.50	2.92	2.24	1.87
769-6267	C9-519-A-14	C	*115	74	.37	½	80	1 13/32x1 3/8x1 1/16"	2.70	2.39	2.02	1.69	1.30	1.13
769-6265	C9-19-A-14	C	†115	172	.13	½	50	1 13/32x1 3/8x1 1/16"	2.75	2.40	2.05	1.72	1.32	1.15
769-6270	C15-519-A-14	C	*115	220	.18	½	55	1x1 1/16x1 9/64"	2.37	2.07	1.77	1.48	1.14	.99
769-6337	388-1	C	†115	113	.245	½	72	1 13/32x1 3/8x1 27/32"	2.75	2.40	2.05	1.72	1.32	1.15
769-6338	389-1	C	*115	79	.360	½	80	1 13/32x1 3/8x1 27/32"	2.70	2.39	2.02	1.69	1.30	1.13
769-6341	430-1	D	†115	500	.083	½	16	⅞x¾x1⅝"	2.33	2.03	1.73	1.45	1.11	.94
769-6342	431-1	D	*115	291	.174	½	35	⅞x¾x1⅝"	2.27	2.00	1.71	1.42	1.09	.95
769-6315	1-1	E	*115	21	.55	1	144	2 3/32x1 25/32x2½"	6.29	5.89	4.72	3.95	2.99	2.52
769-6318	6-1	E	†115	51	.23	1	64	2 3/32x1 25/32x2½"	6.29	5.89	4.72	3.95	2.99	2.52
769-6322	11-1	E	*115	1.7	2.7	1½	800	3 1/16x2¼x3⅝"	11.24	10.54	8.42	7.03	5.34	4.49
769-6321	10-1	E	†115	6.4	.63	1½	288	3 1/16x2¼x3⅝"	11.24	10.54	8.42	7.03	5.34	4.49
769-6347	447-1	E	*115	1	4.2	2	800	3 1/16x2⅝x3⅝"	13.47	12.63	10.09	8.40	6.42	5.39
769-6333	158-1	E	†115	3.54	.8	2	256	3 1/16x2⅝x3⅝"	13.47	12.63	10.09	8.40	6.42	5.39
769-6326	16-1	§E	*115	23	.56	1	112	2 3/32x1 25/32x2½"	7.41	6.96	5.55	4.65	3.54	2.97
769-6324	14-1	§E	†115	56	.21	1	96	2 3/32x1 25/32x2½"	7.41	6.96	5.55	4.65	3.54	2.97
769-6332	149-1	§F	*115	1.94	2.9	2	768	3¼x2 11/16x3¼"	16.89	15.84	12.67	10.57	8.01	6.76
769-6329	45-1	§F	†115	7.1	.68	2	320	3¼x2 11/16x3¼"	16.89	15.84	12.67	10.57	8.01	6.76
769-6346	446-1	§F	*115	1.07	3.8	2	608	3¼x3 1/16x3¼"	19.92	18.67	14.95	12.45	9.49	7.96
769-6335	229-1	§F	†115	3.95	1.42	2	224	3¼x3 1/16x3¼"	19.92	18.67	14.95	12.45	9.49	7.96
769-6351	1000-M-1	G	†115	88	13	¾	80	1 7/16x1 7/16x2¼"	5.15	4.81	3.86	3.22	2.57	2.17
769-6355	1500-M-1	G	*115	57.2	.38	¾	112	1 7/16x1 7/16x2¼"	5.15	4.81	3.86	3.22	2.57	2.17
769-6353	1001-M-1	G	†220	35.4	.065	¾	80	1 7/16x1 7/16x2¼"	5.34	4.99	4.00	3.34	2.66	2.24
769-6357	2005-M-1	G	†115	20.5	.41	1 1/16	176	2 1/16x1 13/16x3"	6.49	6.14	4.95	4.08	3.25	2.76
769-6362	2255-M-1	G	*115	18.3	.54	1 1/16	192	2 1/16x1 13/16x3"	6.31	6.00	4.81	3.94	3.12	2.63
769-6359	2006-M-1	G	†220	81.6	.20	1 1/16	176	2 1/16x1 13/16x3"	6.68	6.31	5.12	4.19	3.34	2.84
769-6364	*2536-M-1*	G	†115	14.9	.45	1 1/16	256	2 1/16x2 1/16x3"	7.87	7.35	5.88	4.93	3.91	3.28
769-6367	2786-M-1	G	*115	11.7	.77	1 1/16	392	2 1/16x2 1/16x3"	7.38	6.89	5.52	4.65	3.69	3.12
769-6370	3000-M-1	G	†115	6.2	.60	1⅜	352	2 15/16x2⅜x3 13/16"	9.86	9.23	7.42	6.22	4.94	4.20
769-6374	3500-M-1	G	*115	4.8	1.15	1⅜	416	2 15/16x2⅜x3 13/16"	9.17	8.55	6.80	5.76	4.56	3.87
769-6371	3001-M-1	G	†220	26.1	.30	1⅜	352	2 15/16x2⅜x3 13/16"	10.06	9.42	7.58	6.33	5.02	4.27
769-6380	7110-2A	§H	*110	14.9	.85	1 3/32	208	2 23/32x2 3/16x4 3/16"	12.10	11.33	9.08	7.58	5.75	4.84

DC TYPES (Specify Mfr's Type No., Volts, and Duty) *Intermittent. †Continuous. Av. shpg. wt., 1½ lbs.

769-6213	B18-760-A-3	A	*12	24.2	.50	¼	14	¾x¾x5 9/64"	3.06	2.86	2.29	1.91	1.45	1.22
769-6205	B18-259-A-3	B	†24	119	.2	¼	11	¾x¾x5 9/64"	3.06	2.86	2.29	1.91	1.45	1.22
769-6224	B21-754-A-1	B	*12	7	1.7	⅝	72	1 5/16x1 5/16x1 13/64"	3.61	3.38	2.72	2.27	1.71	1.45
769-6231	*B22-754-A-1*	B	*12	5.3	2.3	1	144	1 15/32x1 5/16x1 39/64"	4.95	4.64	3.73	3.10	2.36	1.98
769-6239	B24-255-A-1	B	†6	4	1.5	1¼	60	1 5/16x1 5/16x2"	4.68	4.40	3.50	2.92	2.24	1.87
769-6247	B24-755-A-1	B	*6	1.6	3.8	1¼	96	1 5/16x1 5/16x2"	4.68	4.40	3.50	2.92	2.24	1.87
769-6245	B24-754-A-1	B	*12	6.3	1.9	1¼	96	1 5/16x1 5/16x2"	4.68	4.40	3.50	2.92	2.24	1.87
769-6237	B24-253-A-1	B	†24	60	.4	1¼	60	1 5/16x1 5/16x2"	4.68	4.40	3.50	2.92	2.24	1.87
769-6243	B24-753-A-1	B	*24	25.4	.95	1¼	96	1 5/16x1 5/16x2"	4.68	4.40	3.50	2.92	2.24	1.87
769-6235	B24-251-A-1	B	†115	1348	.09	1¼	60	1 5/16x1 5/16x2"	4.68	4.40	3.50	2.92	2.24	1.87
769-6252	B25-754-A-1	B	*12	5.7	2.1	2	104	1 15/32x1 5/16x2½"	6.75	6.34	5.08	4.23	3.21	2.71
769-6259	C8-772-A-14	C	*12	14.8	.81	½	26	13/16x¾x1⅛"	2.08	1.91	1.56	1.30	1.00	.87
769-6257	C8-271-A-14	C	†24	126	.19	½	13	13/16x¾x1⅛"	2.15	1.89	1.63	1.37	1.04	.90
769-6255	C8-269-A-14	C	†115	2400	.05	½	13	13/16x¾x1⅛"	2.22	1.94	1.67	1.39	1.07	.93
769-6262	C8-769-A-14	C	*115	1500	.08	½	26	13/16x¾x1⅛"	2.11	1.84	1.58	1.32	1.01	.88

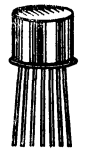
DC TUBULAR AND PUSH TYPES (Specify Mfr's Type No., Volts, and Duty) *Int. †Cont. ‡Pulse. Av. shpg. wt., 1½ lbs.

769-6275	P2-1L	J	†12	39	.33	¼	11	1x½" dia.	4.89	4.31	3.70	3.10	2.37	2.09
769-6276	P2-2L	J	†24	167.5	.15	¼	11	1x½" dia.	5.03	4.44	3.81	3.18	2.43	2.15
769-6279	P2-101L	J	*12	30.5	.42	¼	15	1x½" dia.	4.89	4.31	3.70	3.10	2.37	2.09
769-6281	P2-201L	J	‡12	6.85	1.85	5/16	24	1x½" dia.	4.89	4.31	3.70	3.10	2.37	2.09
769-6282	P2-202L	J	‡24	30.5	.83	5/16	24	1x½" dia.	5.03	4.44	3.81	3.18	2.43	2.15
769-6285	P4-1L	J	†12	23.25	.55	½	45	1½x¾" dia.	5.83	5.14	4.41	3.69	2.82	2.48
769-6286	P4-2L	J	†24	99	.26	½	45	1½x¾" dia.	5.95	5.25	4.51	3.77	2.88	2.55
769-6289	P4-101L	J	*12	15.25	.83	⅝	55	1½x¾" dia.	5.83	5.14	4.41	3.69	2.82	2.48
769-6290	P4-202L	J	‡24	15.25	1.7	⅝	70	1½x¾" dia.	5.95	5.25	4.51	3.77	2.88	2.55
769-6292	P6-1L	J	†12	19.5	.65	⅝	100	2x1" dia.	7.00	6.17	5.29	4.42	3.38	2.99
769-6293	*P6-2L*	J	†24	82	.31	⅝	100	2x1" dia.	7.12	6.28	5.39	4.51	3.44	3.04
769-6296	P6-101L	J	*12	8.4	1.5	⅝	125	2x1" dia.	7.00	6.17	5.29	4.42	3.38	2.99
769-6297	P6-202L	J	‡24	14.25	1.8	⅝	150	2x1" dia.	7.12	6.28	5.39	4.51	3.44	3.04
769-6300	P8-1L	K	†12	39	.33	¼	6	2x½" dia.	6.34	5.58	4.78	4.00	3.03	2.67
769-6301	P8-2L	K	†24	167.5	.15	¼	6	2x½" dia.	6.52	5.74	4.93	4.10	3.12	2.75
769-6304	P8-101L	K	*12	30.5	.42	¼	11	2x½" dia.	6.34	5.58	4.78	4.00	3.03	2.67
769-6305	P8-201L	K	‡12	6.9	1.85	¼	20	2x½" dia.	6.34	5.58	4.78	4.00	3.03	2.67
769-6306	P8-202L	K	‡24	30.5	.83	¼	20	2x½" dia.	6.52	5.74	4.93	4.10	3.12	2.75
769-6308	P10-1L	K	†12	23.3	.55	¼	40	2.6x¾" dia.	7.55	6.66	5.69	4.76	3.62	3.19
769-6309	P10-2L	K	†24	101.5	.26	¼	40	2.6x¾" dia.	7.73	6.80	5.84	4.86	3.71	3.26
769-6311	P10-101L	K	*12	15.3	.83	¼	48	2.6x¾" dia.	7.55	6.66	5.69	4.76	3.62	3.19

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

TO-5, Latching and Microminiature Relays

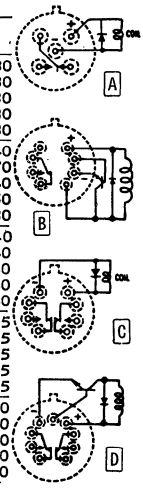
TELEDYNE TYPE TO-5 SIZE RELAYS

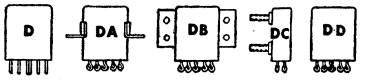


Performance-tested relays ideal for high-isolation switching and RF applications. Feature all-welded construction; TO-5 transistor type enclosure, hermetically sealed. Meet MIL-R-5757D. Type 712 is industrial version, useful in many applications. Suffix D of Type No. indicates internal 1N5315 diode for arc suppression; Suffix T indicates internal 2N222A transistor driver chip. *SPDT contacts. †DPDT contacts. Life: 10,000,000 operations at low level: 1,000,000 at 0.5 amp, 28V DC resistive; 100,000 at 1 amp, 28V DC resistive. Contact Resistance, 0.1 ohm maximum before life test, 0.2 ohm after life test at max. current. Operative Power, pull-in at 25° C: 431, 40 mW; 432, 60 mW; 412, 130 mW; 712 185 mW; others, 100 mW. Contact Bounce, less than 1.5 ms, except 420/422, 2.0 ms; 712, 4.0 ms max. Overload, 2 amps at 28 VDC. Vibration, 30 G's to 3000 cps. Shock, 80 G's for 11 ms. −65° C to +125° C, except 712, −55°C to +70°C. Operate Time. 2 ms. Can Height: Types 411, 412, 0.265"; 420, 421, 422, 712 are 0.275"; 431, 432, 0.375".

Stock No.	Mfr's Type	Coil Fig.	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-Up	
959-1925	411-6*	E	6	125	24.72	20.60	18.55	16.50	E
959-1927	411-9*	E	9	280	24.72	20.60	18.55	16.50	
959-1929	411-12*	E	12	500	24.72	20.60	18.55	16.50	
959-1931	411-18*	E	18	1130	24.72	20.60	18.55	16.50	
959-1933	411-26*	E	26.5	2000	24.72	20.60	18.55	16.50	
959-1901	411D-6*	A	6	125	29.52	24.60	22.55	20.50	F
959-1903	411D-9*	A	9	280	29.52	24.60	22.55	20.50	
959-1905	411D12*	A	12	500	29.52	24.60	22.55	20.50	
959-1908	411D-18*	A	18	1130	29.52	24.60	22.55	20.50	
959-1910	411D-26*	A	26.5	2000	29.52	24.60	22.55	20.50	
959-1914	411T-6*	B	6	125	31.92	26.60	24.55	22.50	G
959-1916	411T-9*	B	9	280	31.92	26.60	24.55	22.50	
959-1918	411T-12*	B	12	500	31.92	26.60	24.55	22.50	
959-1920	411T-18*	B	18	1130	31.92	26.60	24.55	22.50	
959-1922	411T-26*	B	26.5	2000	31.92	26.60	24.55	22.50	
959-1964	412-6†	F	6	98	32.64	27.20	24.50	21.80	H
959-1966	412-9†	F	9	220	32.64	27.20	24.50	21.80	
959-1968	412-12†	F	12	390	32.64	27.20	24.50	21.80	
959-1970	412-18†	F	18	880	32.64	27.20	24.50	21.80	
959-1972	412-26†	F	26.5	1560	32.64	27.20	24.50	21.80	
959-1940	412D-6†	F	6	98	37.44	31.20	28.50	25.80	J
959-1942	412D-9†	F	9	220	37.44	31.20	28.50	25.80	
959-1944	412D-12†	F	12	390	37.44	31.20	28.50	25.80	
959-1946	412D-18†	F	18	880	37.44	31.20	28.50	25.80	
959-1948	412D-26†	F	26.5	1560	37.44	31.20	28.50	25.80	

Stock No.	Mfr's Type	Coil Fig.	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-Up	
959-1952	412T-6†	D	6	98	39.84	33.20	30.50	27.80	A
959-1954	412T-9†	D	9	220	39.84	33.20	30.50	27.80	
959-1956	412T-12†	D	12	390	39.84	33.20	30.50	27.80	
959-1958	412T-18†	D	18	880	39.84	33.20	30.50	27.80	
959-1960	412T-26†	D	26.5	1560	39.84	33.20	30.50	27.80	
959-1977	420-26†	G	26.5	2000	42.48	35.40	35.40	35.40	B
959-1979	421-26*	H	26.5	2000	34.44	28.70	28.70	28.70	
959-1981	422-26	J	26.5	2000	47.28	39.40	39.40	39.40	
959-1983	431-4.0K*	E	26.5	4000	28.32	23.60	21.55	19.50	
959-1985	432-26†	F	26.5	3300	36.24	30.20	27.50	24.80	
959-2016	712-6†	F	6	100	11.88	9.90	9.90	9.40	C
959-2019	712-9†	F	9	220	11.88	9.90	9.90	9.40	
959-2021	712-12†	F	12	390	11.88	9.90	9.90	9.40	
959-2024	712-18†	F	18	880	11.88	9.90	9.90	9.40	
959-2027	712-26†	F	26.5	1560	11.88	9.90	9.90	9.40	
959-1989	712D-6†	C	6	100	13.38	11.15	11.15	10.65	D
959-1991	712D-9†	C	9	220	13.38	11.15	11.15	10.65	
959-1993	712D-12†	C	12	390	13.38	11.15	11.15	10.65	
959-1995	712D-18†	C	18	880	13.38	11.15	11.15	10.65	
959-1997	712D-26†	C	26.5	1560	13.38	11.15	11.15	10.65	
959-2002	712N-6†	D	6	100	16.68	13.90	13.90	13.40	
959-2004	712N-9†	D	9	220	16.68	13.90	13.90	13.40	
959-2006	712N-12†	D	12	390	16.68	13.90	13.90	13.40	
959-2008	712N-18†	D	18	880	16.68	13.90	13.90	13.40	
959-2010	712N-26†	D	26.5	1560	16.68	13.90	13.90	13.40	





P&B SC SINGLE COIL AND SL LATCHING RELAYS

SC is single-coil permanent magnet relay, has polarized coil circuit. SL magnetic dual-coil latching relay—coils may be series-connected for polar operation. Meet MIL-R-5757E, quality assurance std.—MIL-Q-9858A and MSPC SPEC 339 −65° to +125°C. Contacts, 3 amps at 28 VDC; 1 amp at 120 V, 60 Hz, resistive. SC11D 8-pin takes Cinch 54A20730 receptacle; SL11D 11-pin takes Viking P/N VB10/3DV .1 receptacle. *Indicates relay meets specifications of MIL-R-5757/10C. Size, .795x.359x.890". Wt. 2 oz.

Stock No.	Mfr's Type	Ohms	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
886-1310	SC11D	35	6	22.90	19.60	18.62	17.64	13.72
886-1311	SC11D	135	12	22.90	19.60	18.62	17.64	13.72
886-1312	SC11D	550	24	22.90	19.60	18.62	17.64	13.72
886-1315	SC11DA	135	12	22.90	19.60	18.62	17.64	13.72
886-1316	SC11DA	550	24	22.90	19.60	18.62	17.64	13.72
886-1320	SC11DB	35	6	22.90	19.60	18.62	17.64	13.72
886-1321	SC11DB	135	12	22.90	19.60	18.62	17.64	13.72
886-1322	SC11DB	550	24	22.90	19.60	18.62	17.64	13.72
886-1327	SC11DC	550	24	22.90	19.60	18.62	17.64	13.72
886-1332	SC11DD	550	24	22.90	19.60	18.62	17.64	13.72
886-1336	SC7141*	.....	24	23.00	19.75	18.76	17.78	13.83
886-1340	SL11D	40	6	25.00	21.45	20.38	19.31	15.02
886-1341	SL11D	160	12	25.00	21.45	20.38	19.31	15.02
886-1342	SL11D	630	24	25.00	21.45	20.38	19.31	15.02
886-1350	SL11DA	160	12	25.00	21.45	20.38	19.31	15.02
886-1351	SL11DA	630	24	25.00	21.45	20.38	19.31	15.02
886-1355	SL11DB	40	6	25.00	21.45	20.38	19.31	15.02
886-1356	SL11DB	160	12	25.00	21.45	20.38	19.31	15.02
886-1357	SL11DB	630	24	25.00	21.45	20.38	19.31	15.02
886-1360	SL11DC	630	24	25.00	21.45	20.38	19.31	15.02
886-1364	SL11DD	630	24	25.00	21.45	20.38	19.31	15.02

P&B MICROMINIATURE SEALED DPDT RELAYS

FC Series Relays. Conventional microminiature types. Mount flat on printed circuit boards. Plug into 0.2" grid. Hermetically sealed—meet all applicable specs of MIL-R-5757E, quality assurance standard—MIL-Q-9858A, MSFC-SPEC-339. Pick-up is 160 mW. Temp.: −65°C to +125°C. Size: .485x1.100". Wt. 1 oz.

886-0167	FC11D	60	6DC	21.34	19.40	18.43	17.46	13.58
886-0168	FC11D	210	12DC	21.34	19.40	18.43	17.46	13.58
886-0169	FC11D	900	24DC	21.34	19.40	18.43	17.46	13.58

FL Series Latching Relays. Similar to FC Series listed above, but employ dual-coil design. Remain firmly latched in either armature position without applied coil power. Shpg. wt., 1 oz.

886-0172	FL11D	67.5	6DC	23.92	21.75	20.66	19.58	15.23
886-0173	FL11D	230	12DC	23.9	21.75	20.66	19.58	15.23
886-0174	FL11D	1000	24DC	23.92	21.75	20.66	19.58	15.23

P&B TL 4PDT LATCHING RELAYS

Microminiature 4PDT latching relay. Coils are encapsulated and hermetically sealed. Strong magnetic forces in the de-energized relay lock the gold-plated, silver-alloy contacts in the desired position, rendering them impervious to shock well beyond the specified range. Rated 3 amps, at 28 VDC resistive load. Temperature range, −65° to +125° C. Meet or exceed applicable sections of MIL-R-5757E and MSFC-SPEC-339. Mounting same as SC/SL types Overall size, 1 1/32x1 13/64x3/4 inches. Av. shpg. wt. 2 oz.

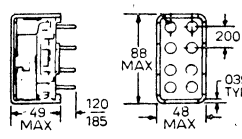
Stock No.	Mfr's Type	Ohms	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
886-1385	TL17D	600	24 DC	36.51	31.75	30.16	28.58	22.23
886-1392	TL17DB	600	24 DC	36.51	31.75	30.16	28.58	22.23
886-1398	TL17DA	600	24 DC	36.51	31.75	30.16	28.58	22.23

P&B HC SERIES HALF-SIZE CRYSTAL CAN RELAYS

Meets MIL-R-5757E, complies with MSFC-SPEC-339. Bifurcated, gold-plated silver DPDT contacts (2 amps at 28 VDC). *Plug-in case; †solder terminals. Temp. −65° to +125°C. Size, .8x.4x4". Wt. 1/2 oz.

886-0252	HC11D*	814	24	21.00	19.30	18.34	17.37	13.51
886-0253	HC11DA†	814	24	21.00	19.30	18.34	17.37	13.51

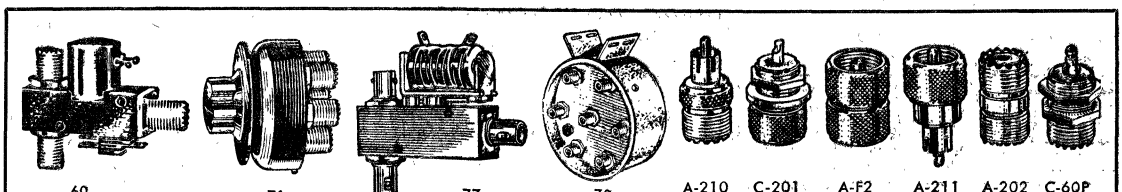
P&B HP MICROMINIATURE RELAYS



Designed for printed circuit board mounting where space is at a premium. Encased in black, hi-impact dust covers for maximum protection. The HP Series is non-polarized, non-latching half-size relay with terminals arranged on a .200" grid, suitable for plug-in or soldering. Its specifications are tailored to fit the performance demands of sophisticated equipment such as TV cameras and other products having hi-density circuits. Hi-torque motor offers consistent positive action. Long-life DPDT gold-plated silver contacts rated low-level to 2 amps at 30VDC, resistive; 0.5 amp max at 120 VAC. Highlights: Insulation resistance, 1000 megaohms min., at 500 VDC; break-down voltage, 500 V rms. Size: .49x.88x.48". HPS types have metal cap. *Socket/retainer ring. Shpg. wt. 1 oz.

Stock No.	Mfr's Type	DC V	Coil Res., Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
886-0256	HP-11D	12	218	9.19	8.35	7.93	7.52	5.85
886-0257	HP-11D	24	870	9.19	8.35	7.93	7.52	5.85
886-0259	HPS-110	12	218	11.11	10.10	9.60	9.09	7.07
886-0260	HPS-110	24	870	11.11	10.10	9.60	9.09	7.07
886-1405	9 HP1 Socket*			.4°	.47	.43	.34	.31

Coaxial Relays, Switches, Connectors

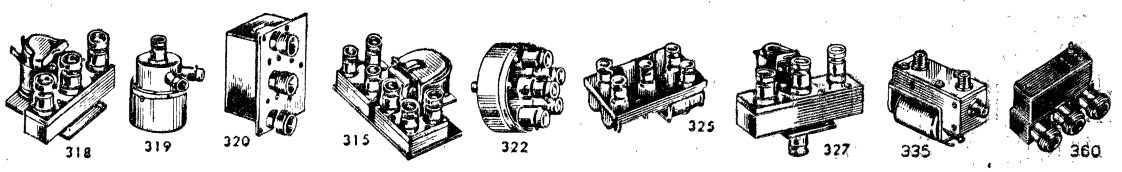


DOW-KEY COAXIAL RELAYS, SWITCHES AND CONNECTORS

UHF conn. except #BNC. All are 50 ohms. **60 Series.** For up to 1 kW. VSWR less than 1.15:1, DC to 500 MHz. Types with asterisk (*) have receiver-protecting connector for 100 dB RF isolation. 0-500 MHz. Types ending in "2" include external DPDT contacts (5 amps @ 110 VAC). 2¾x3¾x1⅛". 10 oz. **260 Series.** DPDT switch for up to 1 kW, 0-500 MHz. VSWR below 1.15:1; isolation exceeds 30 dB @ 500 MHz; loss under 0.03 dB @ 30 MHz. Life, over 1 million operations. 2¾x3¾x1¾". Wt., 12 oz. **260B Series.** Above, but internally connected in de-energized position. Types with dagger (†) include external DPDT contacts for aux. circuits (5 A @ 110 VAC). 12 oz. **Type 71.** SP6T weatherproof switch. 1 kW, 0-500 MHz; VSWR, 1.1:1 at 100 MHz; isolation, 40 dB at 100 MHz; over 1 million operations. 5¾" dia., 2¼" deep. Mtg. strap. 3 lbs. **77 Series.** Miniature SPDT relays; up to 250 watts, DC to 1000 MHz. VSWR, 1.1:1 at 400 MHz. Crosstalk, 35 dB at 400 MHz. Insertion loss, under .03 at 500 MHz. §SPDT auxiliary contacts; 5 amps @ 110 VAC. 2⅜x 2⅛x1 1/16". 5 oz. **78 Series.** Manual coax switches (not wafer switches) rated 1 kW to 500 MHz. VSWR, 1.05:1 at 150 MHz. Isolation, 50 dB at 500 MHz, 80 dB at 30 MHz. −55° to +85° C. Silver-plated connectors, fine silver contacts. ‡Transfer-crossover switch. Dial plates, knobs. 3" dia. x 1⅛". 12 oz.

Stock No.	Mfr's Type	Action	Coil V	Voltage Range	EACH EA.	2-9	10-24	25-49	50-Up
771-6703	60-2204	SPDT	12 DC	9.5-14	17.96	15.65	14.37	13.48	12.57
771-6709	60-2304	SPDT	28 DC	19-31	17.96	15.65	14.37	13.48	12.57
771-6711	60-2604	SPDT	115 AC	100-125	17.96	15.65	14.37	13.48	12.57
771-6706	60-2228*	SPDT	12 DC	9.5-14	19.78	17.25	15.82	14.83	13.85
771-6714	60-2628*	SPDT	115 AC	110-115	19.78	17.25	15.82	14.83	13.85
771-6717	60-222842*	SPDT	12 DC	9.5-14	21.78	19.00	17.42	16.34	15.25
771-6720	60-232842*	SPDT	28 DC	19-31	21.78	19.00	17.42	16.34	15.25
771-6724	60-161842*	SPDT	115 AC	100-125	21.78	19.00	17.42	16.34	15.25
771-6722	60-260442	SPDT	115 AC	100-125	19.97	17.41	15.97	14.97	13.97
771-6780	260-2204	DPDT	12 DC	9.5-14	29.94	26.10	23.96	22.45	20.95
771-6782	260-2604	DPDT	115 AC	100-125	29.94	26.10	23.96	22.45	20.95
771-6672	260B2604	DPDT	115 AC	110-125	30.23	26.39	24.18	22.68	21.16
771-6775	206B260442†	DPDT	115 AC	110-125	32.31	28.20	25.85	24.23	22.62
771-6728	71-260402	SP6T	115 AC	110-125	68.03	59.40	54.42	51.02	47.62
771-6737	77-220202#	SPDT	12 DC	9.5-14	14.55	12.68	11.64	10.91	10.18
771-6742	77-230202#	SPDT	28 DC	19-31	14.55	12.68	11.64	10.91	10.18
771-6739	77-220232§#	SPDT	12 DC	9.5-14	14.55	12.68	11.64	10.91	10.18
771-6745	77-230232§#	SPDT	28 DC	19-31	16.12	14.05	12.90	12.10	11.28
771-6751	78-0204	SPDT	.....	.....	18.48	16.11	14.78	13.86	12.94
771-6756	78-0304	SP3T	.....	.....	19.08	16.63	15.26	14.30	13.36
771-6761	78-0604	SP6T	.....	.....	20.66	18.00	16.54	15.50	14.46
771-6766	78-0904	‡T-C	.....	.....	21.97	19.15	17.58	16.48	15.38
771-6748	78-0202#	SPDT	.....	.....	20.78	18.10	16.63	15.59	14.54
771-6754	78-0302#	SP3T	.....	.....	22.10	19.25	17.69	16.58	15.47
771-6759	78-0602#	SP6T	.....	.....	26.00	22.63	20.81	19.50	18.20
771-6614	C-201	Male UHF panel conn. for ⅝" hole. 1 oz.			1.36	1.18	1.08	1.01	.95
771-6605	A-210	Female UHF to male phono type conn. 1 oz.			1.56	1.37	1.25	1.17	1.09
771-6609	A-F2	Double male UHF locking type conn. 1 oz.			.97	.84	.77	.72	.68
771-6607	A-211	Male UHF to male phono type conn. 1 oz.			1.67	1.45	1.33	1.25	1.16
771-6602	A-202	Double female UHF type conn. 1 oz.			1.03	.89	.83	.77	.72
771-6612	C-60P	Female UHF panel conn. for ⅝" hole. 1 oz.			.87	.77	.70	.66	.61

AMPHENOL COAXIAL RELAYS



Precision coax units. Maximum time to operate and release is 20 milliseconds. Gold-plated, fine silver contacts assure reliable low-level operation. Minimum life expectancy is 1,000,000 cycles, when switch is operated at speeds of less than 10 Hz. Switches are impedance matched to 50-ohm cable, though loss is negligible with 75-ohm cable. Operation is break-before-make. Units meet applicable portions of military connector specifications as follows: BNC connectors, MIL-C-3608; Type N connectors, MIL-C-71. All materials used are corrosion resisting types or are suitably plated to withstand the 48-hour test condition "B" requirement of MIL-STD-202. *Transfer type SA1348/U. †Miniature type with 5116 screw-on connection. §Dynaform high-frequency type.

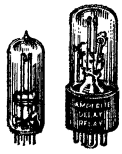
Stock No.	Mfr's Type	Termination	Action	Connectors	Freq. (MHz)	Power (W)	Coil Volts	Coil Ohms	Wt., Oz.	EACH 1-4	5-9	10-24	25-Up
714-7505	315-010002-3	Open	SPDT	BNC	1000	100	26 DC	280	4	25.62	21.35	18.30	16.23
714-7507	316-010082-3	Short	SPDT	BNC	2750	100	26 DC	280	4½	31.50	26.25	22.30	19.95
714-7511	316-010102-8	Short	SPDT	BNC	2750	100	115 AC	550	6½	33.60	28.00	24.00	21.28
714-7513	317-010202-3	Short	SPDT	BNC	2750	100	26 DC	280	4½	29.93	24.94	21.38	18.95
714-7518	318-010381-0	Short	SPDT	BNC	2750	100	lever manual	.....	4½	32.03	26.69	22.88	20.28
714-7523	318-010382-3	Short	SPDT	BNC	2750	100	26 DC	280	4½	29.82	24.85	21.30	18.89
714-7525	318-010395-8	Short	SPDT	BNC	3000	100	115 AC	550	6½	32.03	26.69	22.88	20.28
714-7527	318-010407-3	Open	SPDT	BNC	2750	100	26 DC	280	4½	29.82	24.85	21.30	18.89
714-7529	318-011165-3	Res.	SPDT	BNC	2750	100	26 DC	280	4½	37.59	31.33	26.85	23.81
714-7531	318-011576-8	Res.	SPDT	BNC	2750	100	115 AC	550	6½	36.69	33.08	28.35	25.14
714-7533	319-011141-0	Open	SPDT	BNC	1000	100	rotary manual	.....	4½	51.98	43.31	37.13	32.92
714-7535	320-010931-3	Open	SPDT	N	1200	1000	26 DC	200	20	77.49	65.48	55.35	49.08
714-7539	321-011064-3	Open	DPDT	BNC	1000	100	26 DC	200	10	40.95	34.13	29.95	25.94
714-7545	323-011651-3	Open	1P4T	BNC	900	100	26 DC	280	14	57.75	48.13	41.25	36.58
714-7543	322-011442-0	Open	1P6T	BNC	2750	100	rotary manual	.....	12	75.60	63.00	54.00	47.88
714-7547	323-011506-3	Short	1P4T	BNC	1500	100	26 DC	280	14	57.75	48.13	41.25	36.58
714-7550	325-011635-3	Short	1P6T	BNC	900	100	26 DC	280	21	73.95	61.60	52.80	46.82
714-7552	325-011641-3	Open	1P6T	BNC	900	100	26 DC	280	21	73.92	61.60	52.80	46.82
714-7554	327-010582-3*	.....	Transfer	BNC	1000	100	26 DC	280	10½	41.48	34.56	29.63	26.27
714-7560	335-010871-3†	Open	SPDT	5116	1500	100	26 DC	280	3	34.44	28.70	24.60	21.81
714-7580	360-11891-15§	Open	SPDT	BNC	6000	100	26 DC	.....	4	45.99	38.33	32.85	29.13
714-7582	360-11892-15§	Open	SPDT	TNC	6000	100	26 DC	.....	4	45.99	38.33	32.85	29.13

Relays: Impulse, 422-3—Stepping, 422-4—Mercury Plunger, 425—Mercury-Wetted, 438, 441

Relays, Contact Protectors, Light Controls, Buzzers

AMPERITE THERMAL RELAYS

Energized heater close contacts for NO Types or open for C Types after rated delay period. Relay heater operates on AC or DC. Heater draws two watts; may operate continuously. SPST contact is 3 amps at 115 VAC; 1 amp at 220 VAC. Voltage breakdown: 800 volts; heater-to-contact, 800 volts, except *250 volt contact and 500 volts heater-to-contact for units with delays of 10 seconds or less. Temperature range: −55°C to +70°C. Tolerance, ±30%. Octal base size, 1 9/16-in. diameter, 2 7/8-in. high, less prongs. Nine-pin miniature size for easy fit, anywhere. Made to the most rigid specifications and exacting tolerances in the industry. Measures 3/4 inches diameter, by 2 5/8 inches high (measurements do not include prongs). **When Ordering, Please Specify Type Number As Well As Stock Number.** Average shpg. wt., 4 oz., octal base; 2 oz., 9-pin miniature.



A MINIATURE 9-PIN TUBE SHELL

Delay Sec.	Type NO. Normally Open					
	Stock No.	6.3 V	Stock No.	26 V	Stock No.	115 V
2*	711-1051	6N02T	711-1251	26N02T	711-1451	115N02T
3*	.....	.....	711-1253	26N03T	711-1453	115N03T
5*	711-1055	6N05T	711-1255	26N05T	711-1455	115N05T
10*	711-1059	6N010T	711-1259	26N010T	711-1459	115N010T
15	711-1061	6N15T	.....	.....	.....	.....
20	.....	.....	711-1263	26N020T	711-1463	115N020T
30	711-1065	6N010T	711-1265	26N030T	711-1465	115N020T
45	711-1067	6N045T	.....	.....	711-1467	115N045T
60	.....	.....	711-1269	26N060T	711-1469	115N060T
90	.....	.....	.....	.....	.....	.....
120	.....	.....	711-1275	26N0120T	711-1475	115N0120T

Delay Sec.	Type C. Normally Closed					
	Stock No.	6.3 V	Stock No.	26 V	Stock No.	115 V
2*	711-1001	6C2T	711-1201	26C2T	711-1401	115C2T
3*	.....	.....	711-1203	26C3T	711-1403	115C3T
5*	711-1005	6C5T	711-1205	26C5T	711-1405	115C5T
10*	711-1009	6C10T	711-1209	26C10T	711-1409	115C10T
15	.....	.....	711-1211	26C15T	711-1411	115C15T
20	711-1013	6C20T	711-1213	26C20T	711-1413	115C20T
30	711-1015	6C30T	.....	.....	711-1415	115C30T
45	.....	.....	.....	.....	.....	.....
60	711-1019	6C60T	711-1219	26C60T	711-1419	115C60T
90	.....	.....	.....	.....	711-1423	115C90T
120	711-1025	6C120T	.....	.....	711-1425	115C120T

PRICE EACH.....1-9, 3.90.....10-49, 2.95.....50 Up 2.40

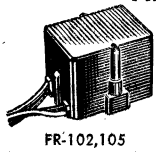
B OCTAL BASE TUBE SHELL

Delay Sec.	Type NO. Normally Open					
	Stock No.	6.3 V	Stock No.	26 V	Stock No.	115 V
2*	711-1050	6N02	711-1250	26N02	711-1450	115N02
3*	.....	.....	711-1252	26N03	711-1452	115N03
5*	711-1054	6N05	711-1254	26N05	711-1454	115N05
10*	711-1058	6N010	711-1258	26N010	711-1458	115N010
15	711-1060	6N015	711-1260	26N015	711-1460	115N015
20	711-1062	6N020	711-1262	26N020	711-1462	115N020
30	711-1064	6N030	711-1264	26N030	711-1464	115N030
45	711-1066	6N045	.....	.....	711-1466	115N045
60	711-1068	2N060	711-1268	26N060	711-1468	115N060
120	711-1074	6N0120	711-1274	26N0120	711-1474	115N012
180	711-1078	6N0180	711-1278	26N0180	711-1478	115N180

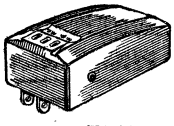
Delay Sec.	Type C. Normally Closed					
	Stock No.	6.3 V	Stock No.	26 V	Stock No.	115 V
2*	711-1000	6C2	711-1200	26C2	711-1400	115C2
3*	.....	.....	711-1202	26C3	711-1402	115C3
5*	711-1004	6C5	711-1204	26C5	711-1404	115C5
10*	711-1008	6C10	711-1208	115C10	711-1408	115C10
15	.....	.....	711-1210	26C15	711-1410	115C15
20	.....	.....	.....	.....	711-1412	115C20
30	711-1014	6C30	711-1214	26C30	711-1414	115C30
45	.....	.....	.....	.....	711-1416	115C45
60	711-1018	6C60	.....	.....	711-1418	115C60
120	.....	.....	.....	.....	711-1424	115C120
180	711-1028	6C180	711-1228	26C180	711-1428	115C180

PRICE EACH.....1-9, 3.90.....10-49, 2.95.....50 Up 2.40

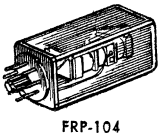
ALCO ISOLATION REMOTE RELAYS



FR-102,105



FRE-103



FRP-104

FR-102 and 105. Provide low voltage for high voltage circuits. Combine step-down transformer and sensitive AC relays in a single laminated-core construction. For 110 VAC, but relay activated by shorting low voltage provided by step-down transformer. Plastic cover. Max. load, 5 A @ 117 V. Oper. V. 95-125 V. Curr. consumed, 40 mA. Isolated V., under 30 V. 6" leads. Type FR-105 has slightly more compact, contoured case. With cover, 2 1/8x1 3/4x1 1/4".

FRE-103 Plug-In. Similar to SPDT type FR-102, but with plug for standard wall outlet and 3-way receptacle to select normally open or normally closed controlling circuit. Miniature jack on side serves as plug-in for remote controlling unit. **FRP-104 Octal Plug.** Standard octal base plug added. Plastic dust cover. Free booklet containing 28 design ideas. Wt., 5 oz.

Stock No.	Type	Description	EACH			
			1-9	10-99	100-499	500-Up
700-1901	*FR-102*	SPDT-Basic	5.56	4.45	3.47	3.03
700-1904	FR-105	SPDT-Basic	4.81	3.85	3.01	2.62
700-1902	FRE-103	SPDT-Plug-In	6.19	4.95	3.82	3.37
700-1903	*FRP-104*	SPDT-Octal	6.81	5.45	4.25	3.71

ITT CONTACT PROTECTORS

Reduce current surges. Effective protection for relay contacts controlling inductive circuits. Suppress arcing and RF transients. Consists of selenium rectifier cells back-to-back and in one compact tubular unit. Negligible effect on circuit operation. Pigtail leads. For loads operating up to 40 times per second and drawing up to 600 mA current. 1 oz.

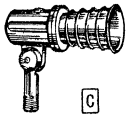
Stock No.	Type No.	Voltage Range	Max. mA	Size	EACH		
					1-24	25-99	100-Up
821-1001	8A1PA1	0-26 AC	200	25/64x5/8"	1.12	.72	.57
821-1005	8A2PS1	23-44 DC	250	25/64x5/8"	1.12	.72	.57
821-1009	8A3PS1	45-66 DC	250	25/64x3/4"	1.35	.87	.68
821-1013	8A4PS1	67-88 DC	250	25/64x3/4"	1.35	.87	.68
821-1021	8A5PS1	89-110 DC	250	25/64x3/4"	1.35	.87	.68
821-1017	8A5PA5	105-130 AC	200	25/64x15/16"	1.77	1.14	.89
821-1025	8A6PS1	111-132 DC	250	25/32x15/16"	1.57	1.01	.87
821-1029	8A7PS1	133-154 DC	250	25/32x15/16"	1.57	1.01	.87
821-1051	15A1PA1	0-26 AC	400	1/2x5/8"	1.17	.75	.59
821-1055	15A2PS1	23-44 DC	600	1/2x5/8"	1.17	.75	.59
821-1059	15A3PS1	45-66 DC	600	1/2x3/4"	1.42	.91	.71
821-1067	15A5PS1	89-110 DC	600	1/2x3/4"	1.42	.91	.71
821-1063	15ASPA5	105-130 AC	400	1/2x15/16"	1.97	1.27	.79
821-1071	15A7PS1	133-154 DC	600	1/2x15/16"	1.72	1.11	.88

OMEGA TYPE 3030 AC BUZZER

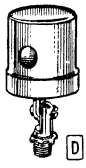
Low cost buzzer that is ideal for thermo, end-of-cycle use. 6-32 tapped mounting hole. Size, 7/8x1 13/32x25/32". Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	V AC	Coil Ohms	EACH				
				1-24	25-49	50-99	100-249	250-Up
878-0500	3030-1	6	45	1.50	1.43	1.35	1.05	.98
878-0501	3030-2	12	45	1.50	1.43	1.35	1.05	.98
878-0502	3030-3	24	150	1.50	1.43	1.35	1.05	.98
878-0503	3030-4	120	3000	1.50	1.43	1.35	1.05	.98

INTERMATIC LIGHT CONTROL DEVICES

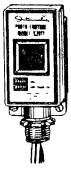


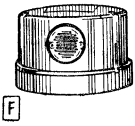
C



D

E





F

Lights turn on at dusk, off at dawn completely automatically. Modern printed circuits are housed in sturdy, weather-tight aluminum. Self-cleaning lens and moisture-proof photocell assure reliability in all weather. Will handle tungsten, mercury vapor or fluorescent lighting applications. AC.

C SERIES K1600. Photocell and Par lampholder complete in one unit. Can be connected with separate light cluster for decorative or flood lighting. 1/2" threaded mount. 3-5 fc on, 7-10 off. Size, 6 9/16x2 7/8x6 5/8". Shpg. wt. 1 lb.

D SERIES K1100. Adjustable stem permits mounting at any angle up to 80°. 2 fc on, 5 fc off. Size, 5 3/4x2 1/2". Shpg. wt. 1/2 lb.

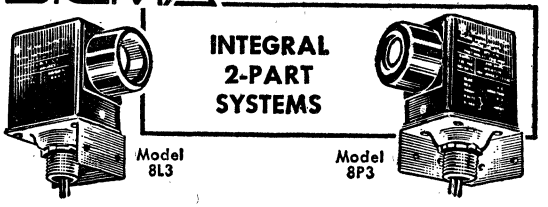
E SERIES K1800, K2000, K2300. Fail-safe operation assures lighting will remain "ON" should control circuit fail. *Rated below for tungsten only; rated 1250W for mercury vapor, fluorescent use. K1800: 2-7 fc on, 5-12 off. K2011: 1 1/2 fc on, 5-9 fc off. K2311: 2-5 fc on, 8-12 off. 4x1 3/4x2". Shpg. wt. 3/4 lb.

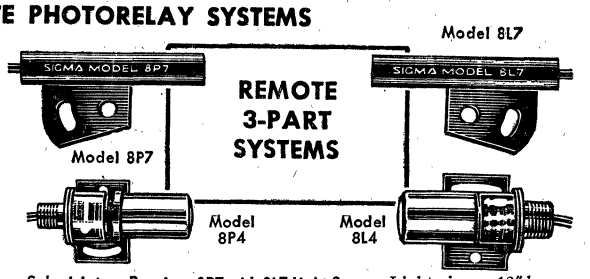
F SERIES K2100. Molded case has three-prong NEMA twist-and-lock plug. 2 1/2 fc on, 5 1/2 fc off. 3 1/8 dia.x2". Shpg. wt. 1/2 lb.

Stock No.	Type	Fig.	Volts	Watts	Hz	EACH
818-1005	K1111	D	105-130	650	60-50	14.25
818-1006	K1112	D	208-240	650	60-50	14.25
818-1014	K1121	D	105-130	1500	60-50	15.78
818-1016	K1122	D	208-240	1500	60-50	15.78
818-1040	K1611	C	105-130	1000	60-50	12.74
818-1042	K1811	E	120	*1800	60	11.24
818-1043	K1812	E	240	*1800	60	11.24
818-1044	K2011	E	125-130	*1500	60-50	9.35
818-1045	K2111	F	105-130	1000	60-50	11.24
818-1046	K2112	F	208-240	1000	60-50	11.24
818-1048	K2311	E	105-130	3000	60-50	15.48

Photoelectric Systems and Components

SIGMA INTEGRAL AND REMOTE PHOTORELAY SYSTEMS





High-Speed Types 8P8 and 8P10. Gives up to 1200 operations per minute with a maximum range of 12 feet. Has resistive rating of 5 amps maximum at 28 volts DC or 115 volts AC, and 2.5 amps at 230 volts AC. Provides up to 100 million mechanical operations. Types 8P8 and 8P10 have SPDT contacts.

General-Purpose Type 8P3. Will provide up to 600 operations per minute. Has a 10-amp resistive rating at 28 volts DC or 115 volts AC, and 5 amps at 230 volts DC. Designed to give up to 10 million mechanical operations. Operates up to 12 feet from light source. Has SPDT contact arrangement.

Light Source 8L3-115. All three systems above may be used with your own light source, or with the 8L3-115 Light Source listed in the table below. Leads are #18 AWG, with an average 18" length. Operating temperature range, +32° to +122°F. 2½x1²⁹⁄₃₂x3¹⁄₁₆".

Stock No.	Mfr's Type	Mounting and Size	Wt. Oz.	EACH
917-0266	8P8-115	½" conduit fitting, mounting bracket. 2½x1²⁹⁄₃₂x3⁷⁄₁₆"	13	48.75
917-0268	8P10-115	5-pin plug. 2½x1²⁹⁄₃₂x3³⁄₁₆"	8	46.55
917-0260	*8P3-115*	*½" conduit fitting, mounting bracket. 2½x1²⁹⁄₃₂x3¹¹⁄₁₆"*	13	24.35
917-0254	*8L3-115*	*Light source for 8P8-115, 8P10-115, 8P3-115 listed above*	13	17.70

Subminiature Receiver 8P7 with 8L7 Light Source. Light gives a 12" beam for 10 operations per second. Lamp life is rated for up to 4000 hours of operation. Leads are #22 AWG, averaging 10" in length. Each unit only 1½" long, and 5⁄16" in diameter. Av. wt., 1 oz.

Miniature Receiver 8P4 with 8L4 Light Source. Provides a maximum operating range of 25 feet, for 10 operations per second. Light source has an adjustable focus. 10" long #18 AWG leads. 3 oz.

8A, 8A3 Amplifier-Relay Control. Solid-state. 8A has plug-in replaceable DPDT relay. 5A @ 28 VDC or 115/230 VAC. 8A3 has 50 ms to 20 sec. time delay. 10A @ 28 VDC res., 5A @ 230 V. Source voltage both units 115/230 VAC. Oper. range, +32° to +122° F. 2 lbs.

NOTE: Each system must include an 8A Amplifier Control, and the appropriate Light Source shown in table below. Amplifier Control Housing optional. Av. 9 lbs. **Write for prices on quantities of 25 up.**

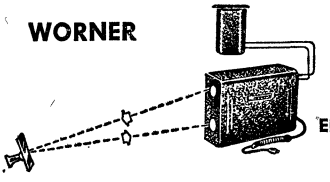
Stock No.	Mfr's Type	Mounting	EACH
917-0264	8P7	Lead wires, mounting bracket	16.10
917-0258	8L7	Light source for 8P7 above	11.65
917-0262	8P4	⅜" conduit fitting, mtg. bracket	17.70
917-0256	*8L4*	*Light source for 8P4 above*	15.50
917-0250	8A	Amp. relay control, chassis only	66.50
917-0252	8A3	Amp. with time delay	89.10
917-0098	AT373-1	Control Housing. 11½x10¹¹⁄₁₆x4¼"	17.50

TYPE 8R MINIATURE LOW-PRICED PHOTORELAYS

120 cycles/minute for 1 million electrical operations, minimum. Rugged plug-in unit. 8RC01A has ⅝" light-sensitive aperture, 8RC02A has plastic shield with 3⁄32" aperture for positive operation under high ambient light. —40° to +140°F. ■U.L. Recog. C.S.A. Listed.

Stock No.	Mfr's Type	EACH 1-24	25-49	50-74	75-99	100-249
917-0272	8RCO1A	20.15	17.71	16.79	14.92	13.06
917-0274	8RCO2A	20.15	17.71	16.79	14.92	13.06

WORNER PHOTOELECTRIC COMPONENTS & SYSTEMS

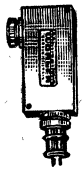


MODEL 61T "FOTO-ELECTRIC" ANNOUNCER

Light Source, Mirror and Warning Chime

Effective low-cost "electronic receptionist" for office, factory, other commercial applications. Light source and photocell are contained in one housing; a mirror reflects back to unit. When light beam is broken, warning chime sounds. Features reliable, all transistor design. Outfit consists of "Fotoelectric" unit, mirror and chime. Unit may be placed three to ten feet from mirror. Instructions. Size, 8¼x6½x2¾". 110-120 V, 50-60 Hz AC.
989-1919. Shpg. wt. 9 lbs. **71.28**
989-1933. Extra Chime. 2 lbs. **6.75**

WORNER MINIATURE PHOTOELECTRIC COMPONENTS

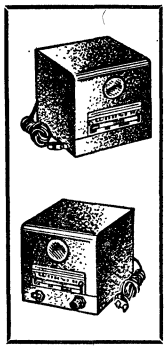


Perfect for use even in areas with severe space limitations. Excellent for high-speed counting. Up to 500 counts per minute when powered by Model 67 Amplifier-Relay, listed below. Units are housed in tough, one-piece aluminum cases that are expertly machined. Designed for pin-point detection on cross-over beam at distances from 3 to 12". Directional beam supervises objects 1" or larger at distances up to 8-feet. Miniature Models M-36 and M-26 install vertically as illustrated. Installation instructions. With 6-ft. cable. 1¼x¾x2½-in. Wt. 12 oz.

MODEL M-36 VERTICAL LIGHT SOURCE. Takes operating voltage from Model 67 Amplifier-Relay below. Shpg. wt. 12 oz.
989-1914. ..... **42.48**

MODEL M-26 VERTICAL PHOTOCELL RECEIVER. Highly efficient. Up to 500 counts per minute when used with Model 67 Amplifier. 12 oz.
989-1910. ..... **46.95**

MODEL 67 AMPLIFIER DPDT RELAY. (Not illustrated). DPDT contacts are rated at 40 amps non-inductive and 5 amps inductive at 110 VAC. For use with Model M-36 Light Source and Model M-26 Photocell Receiver above. Size, 6x8x6". 110-120 VAC, 50-60 Hz. AC.
989-1922. Shpg. wt. 8 lbs. **107.61**



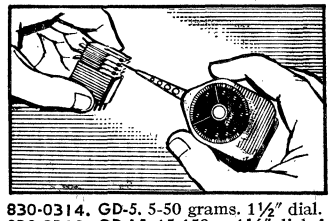
ECONOMY MODEL 4000 "WATCHMAN"

Two-unit photoelectric system for actuating burglar alarms. Light-source has infrared filter for invisible beam. Switch for continuous or momentary alarm. Sensitivity control. Six-volt output for alarm. For indoor use at distances up to 50 feet. Size, 5x5x5½". 110-120 V, 50-60 Hz AC.
989U1940. Shpg. wt. 11¾ lbs. **101.88**

MODEL 5100 "WATCHMAN"

(Not illustrated). Deluxe amplifier and light source for actuating burglar alarms. Has invisible beam light source. Switch for continuous or momentary alarm. Meter jack for plate circuit test. Alarm setting protected by lock. Sensitivity control. Six-volt output for alarm. For indoor applications with distances up to 100 feet. For 110-120 V, 50-60 Hz AC. Size, 5x5x5½". Ship. wt. 14 lbs.
989U1945 ..... **143.94**

JONARD DYNAMOMETERS

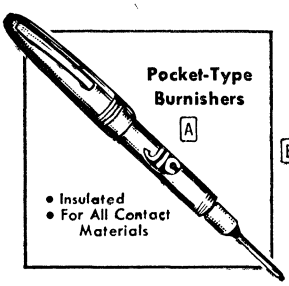


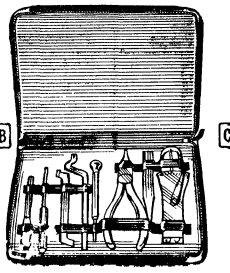
Dial gauges determine force necessary to actuate delicate mechanisms. Measurements can be made clockwise or counterclockwise. All gauges equipped with maximum reading pointer. Ideal for relays, switches, contacts, central office equipment, motors, etc. Wt. 5 oz.

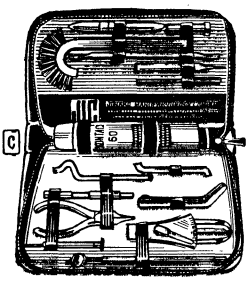
830-0314. GD-5. 5-50 grams. 1½" dial. 1-9	**14.91**	10-Up	**13.55**
830-0318. GD-15. 15-150 g. 1½" dial. 1-9	**14.91**	10-Up	**13.55**
830-0322. GD-100. 100-1000 g. 2½" dial. 1-9	**34.38**	10-Up	**31.25**

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Jonard Relay Adjusting Tools and Gauges



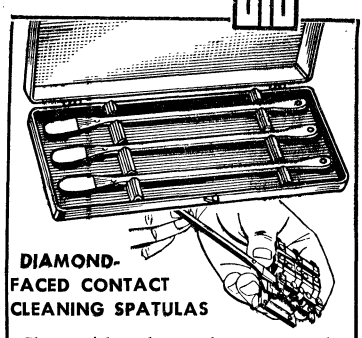




A *P-4 and P-6 Pocket Burnishers.* Leave no residue on contact. Replaceable blades. Insulated. Pocket clip. 3/8x5 1/2".
P-4 Burnisher. With 12 RB4 (1/4x1 1/4") blades.
830-0366. *Wt. 5 oz.* Ea. 5.25 2-Up.... 4.50
P-6 Burn. With 12 RB6 (3/16x1 3/4") blades.
830-0370. Wt. 5 oz. Ea. 5.25 2-Up.... 4.50
830-0375. *RB4 Blades.* 2 oz. Ea. 5.25 2-Up 4.50
830-0377. RB6 Blades... Ea. 5.25 2-Up 4.50

B KR-6 Compact 8-Piece Tool Kit. For setting, adjusting, testing relays. Carbon steel, polished finish. Includes: spring adjuster; armature arm bender; armature stop bender; duckbill plier; contact burnisher; 0-50 gram spring tension gauge; swivel head screwdvr; fine point tweezer. Case.
830-0354.... Ea. 32.40 2-Up..... 26.00

C Model K-55 15-Piece Master Tool Kit. Precision-made and professionally-designed group of tools for adjusting and maintaining relays, contactors, switches, controls, and other components for the telecommunication and similarly related electronic industries. Complete 15-piece kit includes: two spring adjustors (SA-7, SA-17); duckbill plier; inspection mirror; armature arm bender; Penfile contact burnisher; tension measuring gauge; screwdriver; 4-in-one tool; back-stop bender; angle thickness gauge; tweezer; selector switch contact cleaning brush; twelve replacement burnisher blades; can of "Kontact 60" spray. Supplied complete with leather storage case for all tools. Shpg. wt., 3 1/2 lbs.
830-0344.... Ea. 50.00 2-Up..... 44.00

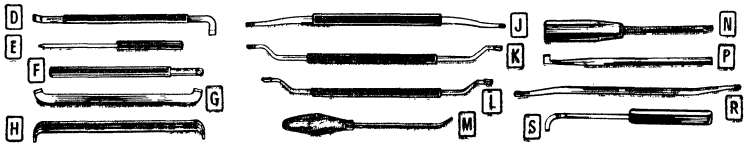


DIAMOND-FACED CONTACT CLEANING SPATULAS

Clean with only gentle pressure, do not disturb contact gap. Type 200. .019" diamond grain. Type 300. .017" diamond grain. Have two diamond faces. Type 400. .011" diamond grain. Type K-234. Set of one each in plastic case. 6" long. *Per set. Wt., 2 oz.

Stock No.	Type	For Relays	EACH
830-0240	D-200	Industrial	6.30
830-0244	D-300	Intermediate	6.30
830-0248	D-400	Sensitive	6.30
830-0349	*K-234*	*Set of 3*	*19.95

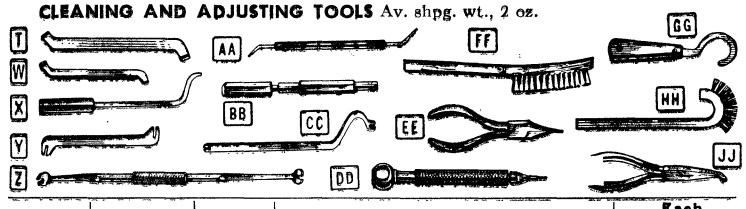
RELAY SPRING ADJUSTING TOOLS



Quality made of plated and polished high carbon steel, heat treated and tempered. Have insulated handles for use with "live" equipment. Av. shpg. wt., 3 oz.

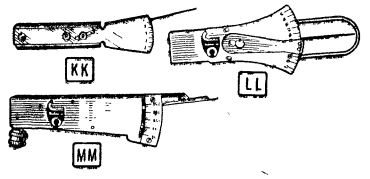
Stock No.	Mfr's Type	Fig.	Description	Slot Width	Lgth.	EACH 1-4	EACH 5-Up
830-0396	SA-6A	D	Cross, lengthwise slots	.030"	5 1/2"	4.18	3.35
830-0404	SA-7	E	For miniature relays	.015"	4 1/2"	2.34	1.90
830-0406	SA-8	F	For heavy springs	.058"	4"	4.09	3.25
830-0384	S-201	G	Aid spring adjuster	.034"	4 1/4"	4.41	3.50
830-0420	SA-24	H	Crosswise slots .040"x.028"	.....	5 1/2"	4.51	3.60
830-0412	SA-17	J	For all relay types	.023"	8"	5.34	4.25
830-0410	SA-16	K	Lengthwise slot	.031"	8"	4.48	3.55
830-0392	SA-2	L	Gen. type, chisel edge	.023"	7"	4.26	3.40
830-0426	SA-143	M	Bent; single saw slot	.025"	8"	3.92	3.15
830-0430	SA-163	N	Straight driver; cross slot	.038"	5 1/2"	3.84	3.10
830-0434	SA-175	P	Close-set saw slot	.031"	5 1/4"	4.34	3.48
830-0416	SA-20	R	For closely-set springs	.022"	7"	5.34	4.30
830-0422	SA-25	S	Angled; single saw slot	.032"	6 1/2"	4.09	3.25

CLEANING AND ADJUSTING TOOLS Av. shpg. wt., 2 oz.



Stock No.	Type	Fig.	Description	Each 1-4	Each 5-Up
830-0205	AB-20	T	Arm bender armature, 3 slots .114"	2.76	2.15
830-0206	AB-21	W	Arm bender wrench, .120" slot	2.60	2.06
830-0339	J-34	X	Pole piece adjuster, 3" lg.	1.84	1.68
830-0380	S-187	Y	Double dog adjuster, .114" slots	3.01	2.40
830-0259	DW-16	Z	Offset wrench, 3/16" open.	3.82	3.48
830-0263	DW-32	Z	Offset wrench, 7/32" open.	3.82	3.48
830-0255	DW-4	Z	Offset wrench, 1/4" open.	3.82	3.48
830-0388	S-457	AA	Wire and Spring aid, 5 1/2" lg.	3.70	3.40
830-0275	FW-24	BB	Wrench/Screwdriver; 7/32", 1/4"	4.50	3.40
830-0440	SB-22	CC	Armature stop adj., slot .033"	2.67	2.15
830-0335	J-23	DD	Screwdriver guide pin, 4 1/2" lg.	5.01	3.98
830-0358	PL-8	EE	Duck bill pliers, 5 1/2" lg.	7.52	6.00
830-0480	WB-65	FF	Nickel-silver wire brush, 9" lg.	3.50	2.80
830-0220	BC-23	GG	Bank cleaner; 6" lg., 1 1/2" dia.	3.93	3.58
830-0331	HB-75	HH	Curved hair brush; 8" lg., 1 3/4" radius	2.97	2.70
830-0362	PLS-9	JJ	Bent nose duck bill pliers, 5 1/2" lg.	8.27	6.60

TENSION GAUGES



HEAVY DUTY TYPE

KK G-700 Spring Tension Gauge. 50 gram steps, both sides from 0-700 grams. 5 oz.
830-0310. 1-4..Ea. 11.95 10-Up..Ea. 9.60

CENTER-ZERO TYPES

LL G-10 Spring Tension Gauge. 1 gram steps, both sides from 0-10 grams. 5 oz.
830-0285. 1-4..Ea. 10.19 5-Up..Ea. 8.20

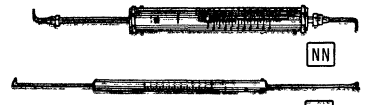
LL G-30 Spring Tension Gauge. 2 gram steps, both sides from 0-30 grams. 5 oz.
830-0290. 1-4..Ea. 10.19 5-Up..Ea. 8.20

LL G-50 Spring Tension Gauge. 5 gram steps, both sides from 0-50 grams. 5 oz.
830-0294. 1-4..Ea. 10.19 5-Up..Ea. 8.20

LL G-150 Spring Tension Gauge. 10 gram steps, both sides from 0-150 grams. 5 oz.
830-0305. 1-4..Ea. 10.19 5-Up..Ea. 8.20

PRESET TYPE

MM GP-50 Preset Spring Tension Gauge. 5 gram steps, both sides 0-50 gm. 3 oz.
830-0327. 1-4..Ea. 10.86 5-Up...Ea. 8.70



NN GPP-1 0-1000 GRAMS. Specially designed for use where accurate measurement of tension and compression of spring loaded devices is required. Measures spring tension of relays, switches, contacts, and other spring loaded devices. Also measures triggers, pull pins, pushbuttons and may be used for fine wire pull tests. Has easy-to-read scale calibrated in 50 gram steps. Diameter, 5/8-inch, length, 9 1/4 inches. 6 oz.
830-0328.... Ea. 40.99 2-Up.... 32.80

PP GPP-2 0-110 GRAMS. Measures tension and compression of spring loaded devices with tension of from 0 to 110 grams. 5 gram steps. Dia. 3/8", length, 11". 2 oz.
830-0329.... Ea. 20.54 2-Up..... 16.40

Industrial Counters

HANDY INDEX TO TIMERS AND COUNTERS

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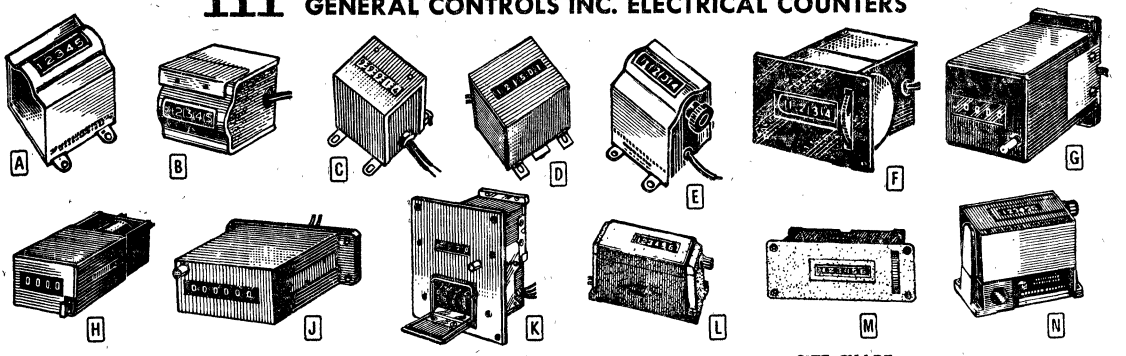
Curtis	453	Ind. Timer	456	Paragon	463

ITT GENERAL CONTROLS INC. ELECTRICAL COUNTERS



All counters for use in 60 Hz operation. Available in either base (A in Type No.) or panel mount (B in Type No.) types.

PREFIX "CE40." For coin equipment and moderate-duty industrial applications. Minimum make-time .050 second, break time .050 second. Rated at 600 cpm. Enclosed in tamperproof case. Reset units count to 4 digits, non-reset to 5. Shpg. wt., 1 lb.

PREFIX "CE47." For built-in applications on lab and industrial equipment, with high speed and accuracy. Pushbutton reset except CE47BE402, electric reset. CE47AP402 is base mount; others panel mount. Counts 4 digits at 1200 cpm, 30-million count life. 1 lb.

PREFIX "CE50." Nonreset electric counter. Counts to 99,999 (at 600 cpm) and repeats. Minimum life of 1,000,000 counts. AN, base; BN, panel mounting. Aluminum tamperproof enclosure. Operating Temperatures, 0°F to 160°F. ▪U.L. Recog. 120 VAC. 5 oz.

PREFIX "CE59." Pushbutton reset, for 3 or 4 digits. Suffix "302" indicates 3-digit; "402," 4-digit. Rated 1000 cpm, 10-million count life. CE59AP, base mount; CE59BP, panel mount. Wt., 6 oz.

PREFIX "CE60." Non-reset type for use at temperatures from —40° F to +160° F. Rated at 600 cpm, 1-million count life minimum. CE60AN is base mount; CE60BN is panel mount. Shpg. wt., 8 oz.

PREFIX "CE61." Fast pushbutton reset type counts to 6 digits. Rated 1000 cpm, 10-million count life. CE61AP602 is base mount. CE61BP602 is panel mounting. Shpg. wt., 1½ lbs.

PREFIX "CE62." Predetermined output actuates switch when counter reaches preset number. Reset by button or electric pulse. Button opens door to expose easily-set wheels. Panel mount. CE62BP402 has pushbutton reset; CE62BE402 has electric reset with 0.30 second min. pulse. Rated at 900 cpm, 20-million count life. Counts to 4 digits. Shpg. wt., 2½ lbs.

PREFIX "CE600." For general industrial applications. Minimum make and break time, .030 second. Enclosed in dust-resistant housing. Rated at 1000 cpm, with 50-million count life. Continuous-duty coils. Counts to 6 digits. Shpg. wt., 1 lb.

PREFIX "CE800." Heavy-duty, with 200-million count life. For drill and punch presses, etc. Minimum make and break time is .030 second. Die-cast aluminum housing. Dustproof and tamperproof. Rated at 1000 counts per minute. Continuous duty coils. 5 lbs.

PREFIX "CE900." 6-digit, continuous-duty industrial quality. 1200 cpm with 100 million count life. Minimum make and break time, 0.25 sec. 5 watts power. Shpg. wt. 1 lb.

NON-RESET TYPES

Stock No.	Mfr's Type	Fig.	AC Volts	EACH 1-9	10-24	25-49	50-99	100-Up
820-0026	CE40AN502	A	120	7.75	6.59	6.20	5.81	5.43
820-0034	CE40BN502	B	120	8.35	7.10	6.68	6.26	5.85
820-0042	CE50AN502U	C	120	4.50	3.83	3.60	3.38	3.15
820-0044	CE50BN502U	C	120	4.50	3.83	3.60	3.38	3.15
820-0054	CE60AN601	D	24	8.25	7.01	6.60	6.19	5.78
820-0056	CE60AN602	D	120	8.25	7.01	6.60	6.19	5.78
820-0058	CE60BN601	D	24	8.75	7.44	7.00	6.56	6.13
820-0060	CE60BN602	D	120	8.75	7.44	7.00	6.56	6.13

SIZE CHART

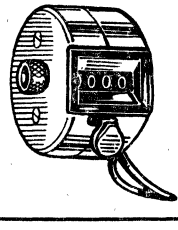
Fig.	Size	Mount Type and Mtg. Centers
A & E	2.484x1.719x1.563"	Base—1.125x1.937"
B	1.562x1.719x2.422"	Panel—.812x640"
C	2.675x1.350x1.563"	Base—1.125x1.750"; Panel—1.563x2.675"
D	2.500x1.530x1.742"	Base—1.860x1.125"; Panel—.781x.351"
F	1.937x2.812x2.422"	Panel—1.562x2.437"
G	2.756x3.150x2.283"	Base—1.890x1.181"; Panel—2.362x.709"
H	0.877x3.598x1.043"	Base—.590x.709"
H	1.535x3.878x1.576"	Panel—1.259x.689"
J	1.181x2.992x3.188"	Base—2.795x.787"; Panel—2.992x1.181"
K	3.780x2.500x2.913"	Panel—3.307x2.441"
L	2.500x1.656x3.500"	Base—3.234x1.359"
M	2.812x1.875x4.437"	Panels—4.063x1.500"
N	3.125x5.625x4.687"	Base—5.250x2.500"

RESET TYPES

Stock No.	Mfr's Type	Fig.	AC Volts	EACH 1-9	10-24	25-49	50-99	100-Up
820-0028	CE40AS402	E	120	15.25	12.96	12.20	11.44	10.67
820-0030	CE40BS401	F	24	15.95	13.56	12.76	11.96	11.17
820-0032	CE40BS402	F	120	15.95	13.56	12.76	11.96	11.17
820-0036	CE47AP402	G	120	22.00	18.70	17.60	16.50	15.40
820-0040	CE47BP402	G	120	22.00	18.70	17.60	16.50	15.40
820-0038	CE47BE402	G	120	41.00	34.85	32.80	30.75	28.70
820-0046	CE59AP302	H	120	17.70	15.05	14.16	13.28	12.39
820-0048	CE59AP402	H	120	18.35	15.60	14.68	13.76	12.85
820-0050	CE59BP302	H	120	17.70	15.05	14.16	13.28	12.39
820-0052	CE59BP402	H	120	18.35	15.60	14.68	13.76	12.89
820-0063	CE61AP602	J	120	25.50	21.68	20.40	19.13	17.85
820-0064	CE61BP602	J	120	26.50	22.53	21.20	19.88	18.55
820-0068	CE62BP402	K	120	56.20	47.77	44.96	42.15	39.34
820-0066	CE62BE402	K	120	69.80	59.33	55.89	52.35	48.86
820-0070	CE900CS601	L	24	20.60	17.51	16.48	15.45	14.42
820-0072	CE900CS602	L	120	20.60	17.51	16.48	15.45	14.42
820-0074	CE900BS601	M	24	23.00	19.55	18.40	17.25	16.10
820-0076	CE900BS602	M	120	23.00	19.55	18.40	17.25	16.10
820-0078	CE800CS602	N	120	55.60	46.75	44.00	41.25	38.50

MICRONTA HAND TALLY 4-DIGIT COUNTER

TYPE 63-835

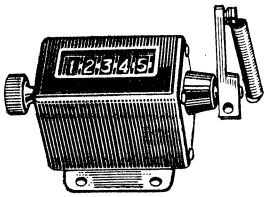


This handy little gadget has hundreds of uses. Fits in the palm of your hand. Fast pushbutton knob reset prevents inconvenient delays. Accurately counts from 0 to 9999. Comes in a very attractive polished chrome steel case, resists perspiration stains and corrosion. Easy to read at a quick glance. Overall measurement: 1⅞x1 5/16". 910-0035. Shpg. wt. ¼ lb.....2.99

▪Recognized Under the Component Program of Underwriter's Laboratories, Inc.

Counters, Controllers and Accessories

ALLIED'S OWN RESET COUNTERS



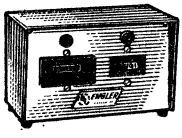
Available in Choice of Ratchet or Hand-Operated Models

These precision-crafted Allied counters are designed for years of trouble-free performance. The ratchet type counter is ideal for use with production machines, vending machines, etc., where minimum space is required. Hand-operated types are extremely useful in assembly-line parts counting, inventory uses, etc. Ratchet counter has five-digit capacity, black case. Maximum count speed of 500 per minute. Size, 1½x2½x1¼". Desk tally hand-operated counter has 4 digit capacity, chrome plated case. Size, 2½x1⅜x2⅛". Both ratchet and hand-operated types have reset feature. **Order below.**

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-49	50-99	100-Up
706-0050	*0050*	4 digit desk tally	3.95	3.50	3.20	3.00	2.94
706-0055	*0055*	5 digit ratchet	4.50	4.05	3.64	3.27	3.05

ENGLER MC SERIES MASTER CONTROLLERS FOR DATA PROCESSING MACHINES

T Series



TC Series

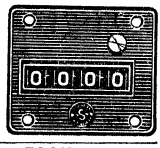
C Series

Designed to record actual production time on tabulating equip. Model 1T has built-in time delay and is used to record the actual productive time a key driven machine is in a productive cycle. Model 3T meter is similar to 1T, but without time delay. Model 3C counter designed for high speed operation—up to 2400 cpm. Model 1TC, combination of meter 1T and counter 3C, simultaneously records elapsed time and counts-per-minute. Model 3TC, combination of meter 3T and counter 3C, operates similar to Model 1TC, but has no DC time delay relay. All for 110 VAC. **Available in 1/10 or 1/100 Hr. increments. Complete Stock No. with 0 for 1/10 and 1 for 1/100 Hr. Example: 786-501X at 1/10 Hr.=786-5010.** Shpg. wts.: 1T, 3T, 3C, 4 lbs; 1TC and 3TC, 8 lbs.

Stock No.	Mfr's Type	EACH	2-9	10-Up
786-501X	1T	57.00	54.00	51.25
786-504X	3T	29.50	28.00	26.50
786-503X	3C	100.00	95.00	90.00
786-502X	1TC	146.00	138.50	131.00
786-505X	3TC	120.00	114.00	108.00

SIMPSON ELECTROMECHANICAL COUNTERS

Precision counters offer instant number change and wide angle visibility. Count to 9,999. 100 ms per count, (600 counts per minute.) White on black numerals, 0.2" high, 0.15" wide. Bezel with black matte finish; steel frame, formed aluminum cover. Size, 2.25x1.84x2.25". Av. shpg. wt., 12 oz.



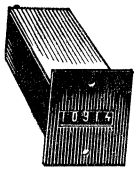
Stock No.	Model No.	Type No.	Voltage	EACH 1-4	5-9	10-24	25-49
918-1005	103	12643	120 VAC	18.70	16.80	15.12	14.28
918-1007	104	12641	6 VDC	18.70	16.80	15.12	14.28
918-1008	104	12642	12 VDC	18.70	16.80	15.12	14.28

CRAMER

MINIATURE ELECTRONIC COUNTER

MODEL 767E. High speed, non-reset, impulse counter provides record of events in response to input pulses. 5-digit, non-reset. Operates quietly at rates to 1000 counts/minute. Total count of 99,999. Mounts in 1.12x91" rectangular hole; 4.38" deep; 1.18x 1.38" bezel. For 24 VDC. From Yugoslavia. Shpg. wt. 6 oz.

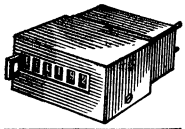
765-0767.....Each 10.75



HECON HIGH PERFORMANCE COUNTER MODULES

Electromagnetic counters, speeds up to 60 cps. Low power consumption. Life expectancy in excess of 200 million operations. Modular design lets you select individual counter configuration. Accessories provide unlimited flexibility. **When ordering, specify part number for basic counter module and accessories.**

PLUG-IN TOTALIZOR. Basic counter only. Counting range 999,999 with manual push button reset (electric can be added). Counter advances through half step on count pulse, spring return completes count. Duty cycle 100%. Size: .984"Hx1.969"Wx2.717" D. Wt. 1 lb.

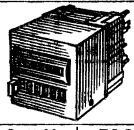


Stock No.	Type	Digits	CPS	Coil V	EACH
806-0604	G0404 165-4	6	25	24 DC	32.00
806-0605	G0404 174-4	6	25	90 DC	32.00
806-0606	G0404 189-1	6	10	115 AC	37.00

PLUG-IN SUBTRACTING PREDETERMINING. Basic counter only. Provides manual push button preset up to 9,999 (electric can be added). Subtracts one count for each input pulse. SPDT switch (max. 0.6 amp at 48 VDC, 0.1 amp at 125 VDC, 1.0 amp at 250 VDC). Size: 1.969"Hx1.969"Wx2.717"D. Wt. 1 lb.

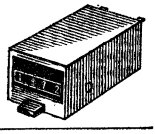
Stock No.	Type	Digits	CPS	Coil V	EACH
806-0641	G0441 164-4	4	25	24 DC	59.00
806-0642	G0441 173-4	4	25	90 DC	59.00
806-0643	G0441 189-1	4	10	115 AC	63.00

PLUG-IN ADDING PREDETERMINING. Basic counter only. Adds up to any preset number to 999,999. Manual push button reset (electric can be added). Actuation a SPDT switch (max, 0.6 amp at 48 VDC, 0.1 amp at 125 VDC, 1.0 amp at 250 VDC). Size: 1.969"Hx1.969"Wx2.717"D.



Stock No.	Type	Digits	CPS	Coil V	EACH
806-0622	G0422 164-4	6	25	24 DC	55.00
806-0623	G0422 173-4	6	25	90 DC	55.00
806-0624	G0422 189-1	6	10	115 AC	59.00

BASE MOUNT MINIATURE TOTALIZOR. 4 digit, Power Cons. 2.5W, Count-Speed 20 CPS, on/off time 25msc. 1.181x.985x2.598".

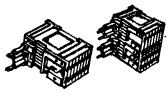


Stock No.	Type	Coil Volts	EACH
806-0656	G0856 002-3	12 DC	21.00
806-0657	G0856 003-3	24 DC	21.00
806-0658	G0856 005-3	110 DC	21.00

AUTO RECYCLING COUNTER. For 442 or 441 for automated sequential batching w/o supervision. Recycles counter for next operation within 200 ms.

Stock No.	A4023-	Digits	CPS	Volts	EACH
806-0100	130-4	6	25	24 DC	106.00
806-0101	138-1	6	10	115 AC	112.00
806-0102	330-4	4	25	24 DC	112.00
806-0103	338-1	4	10	115 AC	117.00

SOCKET BOXES. Counters plug into socket box for mtg. and interchangeability.

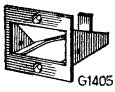


Stock No.	Type	For Series	EACH
806-0668	G1 405 022	404	2.00
806-0670	G1 405 025	422, 441	4.00
806-0672	G1 405 028	431	4.00
806-0673	G1 405 033	432	4.00

PANEL FRAMES

G1405 005

G1405 009

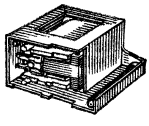


G1405 001

Allow counters to be panel mounted in conjunction with socket boxes, which mount on panel frames. 2.362" W.

Stock No.	Type	For Series	Ht.	EACH
806-0661	G1405 001	404	1.968	1.00
806-0663	G1405 005	442, 441, 431, 432	2.953	2.00
806-0666	G1405 009	For combinations	3.937	3.00

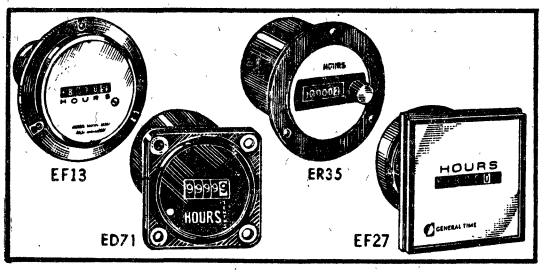
ELECTRIC RESET. When remote reset is required. Unit is attached to rear of socket box. Power cons: 20 W, duty cycle 10%, 1 min. max.



Stock No.	Type	Voltage	EACH
806-0680	G1405 104	24 DC	8.00
806-0681	G1405 109	90 DC	8.00
806-0682	G1405 125	115 AC	13.00

Timers, Counters and Stop Clocks

GENERAL TIME TIMERS



ELAPSED TIME INDICATORS

Wide variety of meters for use where accurate time readings are required. All are synchronous-motor driven. Round, square bezel, panel mount and rear mount available. Resetable or non-resetable, readout is digital with a range of five figures plus tenths; in hrs. and tenths or minutes and tenths. All units 120 VAC, 60 Hz. Operating temp., −12°C to +55°C. Registers hours, tenths, unless otherwise noted. ■U.L. Recognized. NR types: non-reset; R: reset.

Model No.	Bezel	Depth	Dia. of Unit	Max. Motor Rating, W	Leads or Terminals
EF13 NR	2⅞″ rd.	1 51/64″	2 17/64″	2.5	6″ leads
EF27 NR	2⅜″ sq.	1 23/32″	2.077″	5.0	6″ leads
ED71 NR	1¾″ sq.	2 37/64″	1 17/32″	2.5	11¼″ leads
ED72 NR	1¾″ sq.	2 37/64″	1 17/32″	2.5	Solder
EN30 NR	3″ sq.	3 5/16″	2 22/32″	3.7	8-32 studs
ER30 R	3″ sq.	3 5/16″	2 22/32″	3.7	8-32 studs
ER35 R	3½″ rd.	3 5/16″	2 22/32″	3.7	8-32 studs
EN35 NR	3½″ rd.	3 5/16″	2 22/32″	3.7	8-32 studs

120 VOLTS AC

†Registers minutes and tenths.

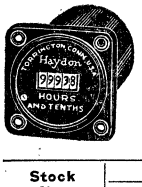
Stock No.	Mfr's Type	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
800-0110	EF1333†	10.52	9.99	9.47	8.94	8.42	7.89
800-0112	EF1335	10.52	9.99	9.47	8.94	8.42	7.89
800-0118	EF2733†	12.39	11.77	11.15	10.53	9.91	9.30
800-0120	EF2735	12.39	11.77	11.15	10.53	9.91	9.30
800-0108	ED7112	25.54	23.32	22.09	20.87	19.64	18.40
800-0122	EN3010†	18.70	17.77	16.83	15.90	14.96	14.03
800-0124	EN-3012	18.70	17.77	16.83	15.90	14.96	14.03
800-0130	ER3020†	27.12	25.76	24.41	23.05	21.69	20.34
800-0132	ER3022	27.12	25.76	24.41	23.05	21.69	20.34
800-0134	ER3520†	27.12	25.76	24.41	23.05	21.69	20.34
800-0136	ER3522	27.12	25.76	24.41	23.05	21.69	20.34

240 VOLTS AC

†Registers minutes and tenths.

800-0111	EF1333	11.45	10.66	10.31	9.74	8.42	7.89
800-0113	EF1335	11.45	10.66	10.31	9.74	8.42	7.89
800-0119	EF2733	13.32	12.66	11.99	11.33	10.66	9.99
800-0121	EF2735	13.32	12.66	11.99	11.33	10.66	9.99
800-0109	ED7112	25.48	24.21	22.94	21.66	20.38	19.11
800-0131	ER3020†	28.05	26.65	25.25	23.85	22.44	21.04
800-0125	EN3012	19.64	18.66	17.68	16.69	15.71	14.73
800-0133	ER3022	28.05	26.65	25.25	23.85	22.44	21.04
800-0135	ER3520†	28.05	26.65	25.25	23.85	22.44	21.04
800-0137	ER3522	28.05	26.65	25.25	23.85	22.44	21.04

HERMETICALLY-SEALED MILITARY-TYPE INDICATOR



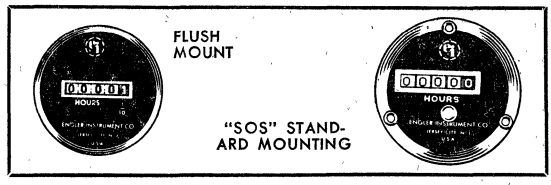
TYPE 7010-004. MS28053-5. Registers hours and tenths up to 9,999.9. Synchronous hysteresis motor. For operation from 115 VAC, 400 Hz. Operating temp., −55°C to +85°C. 1¾″ square bezel, 2 37/64″ deep. Barrel dia., 1½″. 4 mounting holes on 1 5/16″ ctrs. Shock: 50 g, 11 ms. Vibration to 1000 cycles at 10 g. Dielectric strength, 500 v rms, 60 Hz for one minute. Meets MIL-M-7793C and MIL-E-5272C spec. MIL STD MS-28053-5 solder terminals. Shpg. wt., ¾ lb.

Stock No.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
800-0385	41.14	39.08	37.03	34.97	32.91	30.86

GLOSSARY OF TIMER FUNCTIONS

Reset Timers have mechanism so timer returns to starting position automatically after measuring a set time which can be delay or interval function. **Delay** refers to a situation requiring specific time delay before a load circuit is energized. **Interval** is where load is to be turned on and kept on for a specific interval, then turned off automatically. **Repeat Cycle Timers** have cams to turn snap-action switches on or off according to pre-set time intervals, in a definite sequence. **Elapsed Time Indicators** show numerically the passage of time.

ENGLER



ELAPSED-TIME METERS

Large numeral dial readout. No overruns. Ideal on mobile equipment where mileage does not give adequate maintenance data. Withstands shock, vibration and temperature environment. Sealed to meet MIL specs. Case dia. 2.135″. 110 V, 60 Hz AC. 440-550 V, 60 Hz AC units available on Special Order. Av. wt. 1 lb.

Standard Mtg. — AC METERS — Flush Mtg.

Stock No.	Mfr's Type	Minimum Reading	Maximum Reading	Reset	Stock No.	Mfr's Type
786-5105	10NL2	1/10 hr.	10,000 hrs.	Non	786-5104	10NL0
786-5101	10FL2	1/10 hr.	10,000 hrs.	Front	786-5100	10FL0
786-5131	13FL2	1/10 min.	10,000 min.	Front	786-5130	13FL0
786-5109	10SL2	1/10 hr.	10,000 hrs.	Side	786-5108	10SL0

Standard Mtg. — DC METERS (1/10,000 HRS.) — Flush Mtg.

Stock No.	Type	Volts	Reset	Stock No.	Type
786-1040	J12N6	12	Non	786-1030	J12NO

PRICES FOR AC AND DC METERS

Stock No.	Mfr's Type	Reset	Volts	EACH 1-9	10-24	25-49	50-99	100-149	150-Up
786-5105	10NL2	Non	110 AC	17.00	15.30	14.50	13.70	12.75	9.35
786-5101	10FL2	Front	110 AC	24.00	21.60	20.40	19.20	18.00	13.20
786-5131	13FL2	Front	110 AC	24.00	21.60	20.40	19.20	18.00	13.20
786-5109	10SL2	Side	110 AC	24.00	21.60	20.40	19.20	18.00	13.20
786-5104	10NL0	Non	110 AC	17.00	15.30	14.50	13.70	12.75	9.35
786-5100	10FL0	Front	110 AC	24.00	21.60	20.40	19.20	18.00	13.20
786-5130	13FL0	Front	110 AC	24.00	21.60	20.40	19.20	18.00	13.20
786-5108	10SL0	Side	110 AC	24.00	21.60	20.40	19.20	18.00	13.20
786-1040	J12N6	Non	12 DC	20.75	18.70	17.70	16.65	15.15	11.40
786-1030	J12N0	Non	12 DC	20.75	18.70	17.70	16.65	15.15	11.40

786-1339. Type AC-29. Mounting Bracket ..... Each 1.10

"S-O-S" HOUR METERS

"Service-on-Signal" hour meters can be programmed at machine, or set up easily for remote control operation. Meters light up when maintenance is due. Metal case; Lexan face plate; shatterproof light; 3-hole 2 17/32″ diameter bolt circle. Protected side reset. Available preset from 10-90 hours (in 10 hour increments), and from 100-1000 hours (in 100 hr. increments). **How to Complete Stock Number:** Use the first digit of number of hours desired to complete last digit of Stock Number. Example: 786-190X becomes 786-1902 for a 20-hour meter. Shpg. wt. 12 oz.

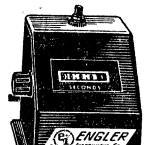
Stock No.	Mfr's Type	Range in Hours	Volts	EACH 1-9	10-Up
786-190X	SOS10N-L2	10-90	115 VAC	36.50	32.75
786-191X	SOS10N-L2	100-900	115 VAC	36.50	32.75
786-1920	SOS10N-L2	1000	115 VAC	36.50	32.75
786-192X	SOSJ12N-2	10-90	12 VDC	39.50	35.50
786-193X	SOSJ12N-2	100-900	12 VDC	39.50	35.50
786-1940	SOSJ12N-2	1000	12 VDC	39.50	35.50
786-195X	SOSJ24N-2	10-90	24 VDC	39.50	35.50
786-196X	SOSJ24N-2	100-900	24 VDC	39.50	35.50
786-1970	SOSJ24N-2	1000	24 VDC	39.50	35.50

SERIES 200 AC HOUR METERS

Registers to 99,999, plus tenths of an hour. Accuracy, 1% of elapsed time. Synchronous motor. Temperature, −65°F to +165°F. Counter drums have 3/16″ high figures. Hours, white on black; tenths, black on white. Dielectric strength, 1000 VDC. Insulation resistance, 100 megohms at 100 V ±10%. Rated voltage input, 10%; rated frequency input, 5%. UL approved. Lexan case. Universal bolt circle fits 2 17/32, 2 17/16″ dia. Flange, 2 27/32″. Wt. ½ lb.

786-5210. Type 10N-G7. 115VAC, 60 Hz. 1-4 . . 10.50 5-Up . . 9.95
786-5220. Type 20N-G7. 230VAC, 60 Hz. 1-4 . . 11.50 5-Up . . 10.95

ELECTRIC STOP CLOCK



STOP CLOCK

Timer (for 115-volt AC) totalizes and gives split second registering of elapsed time. Instantaneous start-stop feather-touch push button. Immediately resettable. Heavy-duty metal cased instrument never needs servicing. Model CS60 reads in seconds and tenths, Model CS24 in minutes and hundredths. Specify model desired.

786-0330. Model CS60.
1-9 . . . . . Each 40.00
25-49 . . . . Each 28.50
100-149 . . Each 25.00

786-0320. Model. CS24.
10-24 . . . . . Each 30.50
50-99 . . . . . Each 27.00
150-Up . . . . Each 22.50

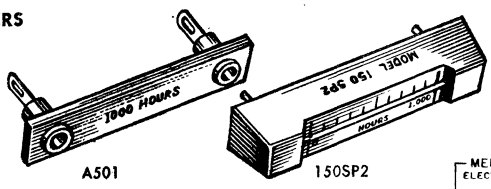
See New Subminiature Elapsed Timers on Page 455

Elapsed Time Meters

ELAPSED TIME METERS

CURTIS INSTRUMENTS E-T METERS

Permit test equipment calibration by actual hours of use. Provide time-to-failure data. Indicate time elapse of klystrons, magnatrons, vidicon tubes, recording heads, electrical or combustion, battery ampere-hrs.



A501 150SP2

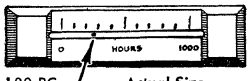
150-SP2 METER. Meter element in a high-impact case. One-in., 10-division scale. Range: 2-10,000 hours. Typical DC requirements: 100 hours @ 104 μA; 500 @ 20.8 μA; 1000 @ 10.4 μA. Unmarked scale, desired hour scale determines current. Uses .080" long and .050" diameter polarized pins, requires A501 socket. 1 13/16" long, 3/8" wide. Av. shpg. wt. 2 oz.
763-1560. 1-9 9.35 10-49 8.00 50-Up. 6.35

A501 Socket. For 150-SP2 meter described above.
763-0010. 1-24...Ea. .59 25-Up..Ea. .45

A601 Lens. Fits 150-SP2, 550-CP. Molded acrylic. Magnifies, protects capillary. 1 oz.
763-0020. 1-24...Ea. .59 25-Up..Ea. .45

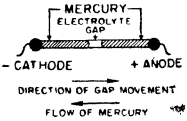
120-PC METER. Microminiature. For recording mean time-to-failure data on individual PC boards. Works from any stable DC voltage. Incorporates resistors rated to obtain proper current for desired time interval from specified DC voltage input. Clear epoxy sealed. Leads on 0.9" centers. 1.11x .22x.18". Shpg. wt. 1 oz.
763-1230. 1-9 8.18 10-49 7.50 50-Up. 5.78

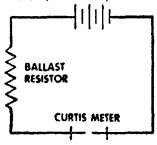
R-6 AUTOSETTER. Fully automatic operation. Resets 150-SP2, meter in 3 hours or less. Takes up to 5 meters. 4x7x4". 117 volts, 60 Hz AC. Shpg. wt. 4 lbs.
763-0075.....Ea. 81.83 2-Up.....59.50



120-PC Actual Size

Elapsed Time is Read by Position of Gap on Meter (see below).

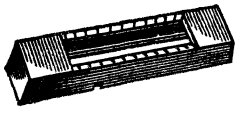




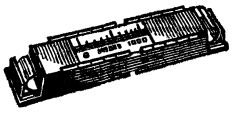
Direct-reading current integrators measure current vs. time electrochemically. Reversible, reusable. Mount, read in any position.

Full-Scale Hours	Microamps
100	41.6
500	8.34
1000	4.16
2000	2.08
3000	1.38

NEW! CP3 SERIES INDACHRON E-T METERS



520-CP3

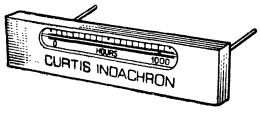


120-CP3

120 CP3 METER. A low-cost monitor for preventative maintenance scheduling and other jobs requiring a simple means of reset to zero in the field. Features instant reset, easy readability, overrun safety, infinite cycles, scales for any type of scheduling program, compact size. Counts operation cycles—from pulsed inputs. Operates from 0° to 50° C. Withstands 20g 50-500 Hz vibration. Attitude insensitive. ABS body. Adhesive mounting. Terminations: 8" wire leads, #26 ga. AWG, vinyl insulated. Operates from DC current established in the parent equipment to provide the desired time constant, i.e.: 1000 hours equals 3.2 microamperes. 0.4x1.9x0.35". Shpg. wt. 2 oz.
763-1109. 1-49.....Each 9.40 50-Up.....Each 8.75

MODEL 520 CP3. As above, but operates from 115 VAC; has a zener diode and resistor power supply rated to obtain proper current from 115 VAC input according to the desired time scale. Internally regulated for line voltage variations.
763-5209. 1-49.....Each 11.75 50-Up.....Each 10.95

"INDACHRON" ELAPSED TIME METERS



- Easily Installed in Office Machines, Appliances
- Choice of Adhesive or PC Card Mounting

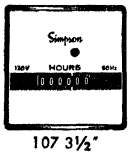
"L" Series. For warranty "metering" and service logging applications. 520L for 115 VAC, includes zener diode power supply. 120L uses DC current in parent equipment to provided desired time constant. Current for 1000 hr. is 6.41 μA; 10,000 hr., .641 μA. 1.63" long. Wt. 1 oz. In Mfr's Type, 1000=1000 hours, 10k=10,000 hours.

Stock No.	Mfr's Type	Mounting	Voltage	EACH 1-99	EACH 100-Up
763-1210	120LC-1000	Flat PC Card	DC	6.00	4.30
763-1211	120LC-10k	Flat PC Card	DC	6.00	4.30
763-1220	120LT2-1000	Back/Adhesive	DC	6.25	4.47
763-1221	120LT2-10k	Back/Adhesive	DC	6.25	4.47
763-1200	120LA-1000	Adhesive	DC	6.25	4.47
763-1201	120LA-10k	Adhesive	DC	6.25	4.47
763-5260	520LT-1000	Edge/Adhesive	115 VAC	8.75	6.37
763-5261	520LT-10k	Edge/Adhesive	115 VAC	8.75	6.37
763-5265	520LT2-1000	Back/Adhesive	115 VAC	8.75	6.37
763-5266	520LT2-10k	Back/Adhesive	115 VAC	8.75	6.37
763-5255	520LA-1000	Adhesive	115 VAC	8.75	6.37
763-5256	520LK-10k	Adhesive	115 VAC	8.75	6.37

SIMPSON ELAPSED TIME METERS AND COUNTERS

ELAPSED TIME METERS

106 2½"



107 3½"

55ET 3½"

57ET 3½"

Rugged 2½" and 3½" elapsed time panel meters give accurate readout even under adverse vibration, temperature, and voltage conditions. Stop positively without error-causing over-runs. Indicate to 99999.9, then recycle. *Voltage adapters for Model 106. Measure 2 9/16" deep. Shpg. wt. 12 oz.

Stock No.	Model No.	Type No.	Voltage	EACH 1-4	EACH 5-9	EACH 10-24	EACH 25-Up
918-1011	106	13530	6 VDC	23.38	21.00	18.90	17.85
918-1012	*	13535	12 VDC	1.17	1.05	.95	.89
918-1013	*	13538	24 VDC	1.17	1.05	.95	.89
918-1014	107	13521	120 VAC	17.54	15.75	14.18	13.39
918-1015	107	13526	240 VAC	17.54	15.75	14.18	13.39
918-0791	55ET	3580	120 VAC	29.72	26.70	24.03	22.69
918-0793	57ET	3590	120 VAC	29.72	26.70	24.03	22.69
918-0792	55ET	3600	240 VAC	30.00	27.00	24.30	22.95
918-0794	57ET	3610	240 VAC	30.00	27.00	24.30	22.95

HOUR METERS

Wide-Vue Elapsed Time Meters. 3½" meters read elapsed time to 99,999.9 hours. Perform with high level of accuracy even under the most severe or disruptive conditions. Bezel is constructed of top-quality thermosetting materials which are sturdy enough to withstand extremely high impact. Black matte finish. Black numbers on white background. Overall size is 3.25x3.25x3". Av. shpg. wt. 12 oz.

Stock No.	Model No.	Type No.	Voltage	1-4	5-Up
918-3698	1357 ET	03595	120 VAC	29.72	26.70
918-3699	1357 ET	03615	240 VAC	30.00	27.00

Century Series Elapsed Time Meters. 3½" meters read elapsed time to 99,999.9 hours. Rugged glass and phenolic construction plus modern clean cut design. Black numbers on white background. Overall size is 3x3x3". Av. shpg. wt. 12 oz.

918-5290	2153 ET	17720	120 VAC	29.72	26.70
918-5291	2153 ET	17721	240 VAC	30.00	27.00

SEALED TIME LAPSE INDICATOR

2½" meters read elapsed time to 9999.9, then recycle. Sealed construction makes Model 108 suitable in presence of corrosive fumes, dust, or high humidity. Black, magnetically shielded case, solder lug terminals. 3.32" deep. Shpg. wt. 12 oz.

918-1016	108	03585	120 VAC	39.66	35.60	32.04	30.26
918-1017	108	03605	240 VAC	40.33	36.25	32.63	30.81

INDUSTRIAL TIMER CORP.

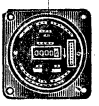
SERIES "S" SIGNALLING TIMERS

Motor-driven, manual set process timer with audible signal at end of time interval or time delay. Buzzer sounds until manually shut off or until timing cycle is restarted. SPDT 10-amp contacts. 3 15/16Dx 5Hx5W". 117 VAC. **Specify Range and complete stock with suffix shown in ( ):** 5 min. (5), 15 min. (6), 30 min. (7), 1 hour (8), 3 hours (9). Range is max. cycle time.
815-042X. Shpg. wt. 3 lbs. 1-9.....Each 29.00
10-24.....Ea. 24.65 25-49.....Each 23.20
50-99..Ea. 21.75 100-249..Ea. 20.30 250-Up. Each 18.85

Relays: Impulse, 422-3—Stepping, 422-4—Mercury Plunger, 425—Mercury-Wetted, 438, 441

Elapsed and Interval Timers

Model C2


Model C5

Series P

INDUSTRIAL TIMER NON-RESET TIMERS

MODEL C2. Provides an accurate account of machine running-time—easy to compute production costs from elapsed time shown, or determine time to replace components with a predetermined life expectancy. Equipped with non-resettable counters that mark every 1/10 hour; total time-range of 10,000 hours. Completely enclosed 3½" round bakelite meter case; require 2⅞" panel mounting hole. With stud-type terminals. For 115 V. 60 Hz AC. Shpg. wt. 2 lbs.

MODEL C4. Same as Model C2 above, but has open-type construction. 2½" dia. mtg. flange; overall depth is 2³⁄₁₆". Wt. 2 lbs.

Stock No.	Mfr's Type	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
815-0050	C-2	20.00	18.00	17.00	16.00	25.00	14.00
815-0052	C-4	16.50	14.85	14.03	13.20	12.38	11.55

RESET TIME TOTALIZERS

MODEL C5. Same as units described above, but you can reset totalizer back to zero at any time. Completely enclosed in baked, black finished steel housing 2⅞" in diameter, 3¼" long. Has heavy steel mounting flange measuring 3¼"x3¼". Screw terminals on back. 115 V, 60 Hz AC. Shpg. wt. 2 lbs.

MODEL C7. Same as Model C5 described above, but employing open-type construction. Size, 2¾x2½x3". Shpg. wt. 2 lbs.

Stock No.	Mfr's Type	EACH 1-4	5-9	5-9	10-24	50-99	100-Up
815-0053	C-5	42.50	38.25	36.13	34.00	31.88	29.75
815-0054	C-7	34.50	31.05	29.33	27.60	25.88	4.125

INDUSTRIAL TIMER
SERIES P AUTOMATIC RESET TIMERS

Multi-purpose interval timer with automatic reset. Provided with receptacle for remote starter, and standard AC receptacle for load. Load-switch contacts are rated at 15 amps. Built-in toggle switch is provided for manually operating the load circuit permanently when timed operation is not required. Completely portable, unit is supplied with AC cord and is housed in metal case with keyhole slots in back for wall mounting. Overall size, 5x5x3". For 110-120 V, 60 Hz AC. Shpg. wt. 3 lbs.

Stock No.	Mfr's Type	Time Set. Max.	Min.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
815-0304	P-4R	15 sec	¼ sec	33.00	29.70	28.05	26.40	24.75	23.10
815-0302	P-2R	30 sec	½ sec	33.00	29.70	28.05	26.40	24.75	23.10
815-0301	P-1M	1 min	1 sec	33.00	29.70	28.05	26.40	24.75	23.10
815-0303	P-3M	3 min	3 sec	33.00	29.70	28.05	26.40	24.75	23.10
815-0305	P-5M	5 min	5 sec	33.00	29.70	28.05	26.40	24.75	23.10

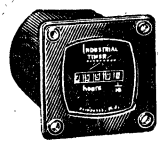
INDUSTRIAL TIMER
SERIES PAB INSTANT-RESET TIMERS

Series PAB

Extremely accurate, instant-reset, automatic timers designed for heavy-duty use in industrial control applications. Features instant reset adjustment. Electrically operated clutch drives actuating arm to dial setting selected, and automatically releases. Spiral spring resets arm in split second. Output terminals can be wired for circuit transfer applications. Switch contacts rated 15 amps at 115 volts AC with non-inductive load. Metal enclosure has ½" knockouts for use with rigid or flexible conduit. 7⅛x5⅛x4¼". For 110-120 volts, 60 Hz AC. Shpg. wt. 4 lbs.

Stock No.	Type PAB-	Time Set. Max.	Min.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
815-0316	15S	15 sec	¼ sec	55.00	49.50	46.75	44.00	41.25	38.50
815-0317	30S	30 sec	½ sec	55.00	49.50	46.75	44.00	41.25	38.50
815-0319	60S	60 sec	1 sec	55.00	49.50	46.75	44.00	41.25	38.50
815-0315	15M	15 min	15 sec	55.00	49.50	46.75	44.00	41.25	38.50
815-0318	60M	60 min	1 min	55.00	49.50	46.75	44.00	41.25	38.50

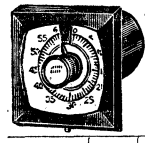
INDUSTRIAL TIMER
AC AND DC RUNNING-TIME METERS



With non-resettable counters that mark every 1/10 hour; total range 10,000 hours. In electrical apparatus, wired in parallel with main ON-OFF switch; on non-electrical equipment, wired between ground and primary of ignition coil; on diesel-powered equipment, connected to starting battery. C-8, powered by solenoid clock movement. C-9, powered by synchronous motor. Mount with 4 screws in 2³⁄₁₆" cutout. Require 3⅝" behind panel. *Universal from 12 to 32 volts DC. Wt. 1 lb.

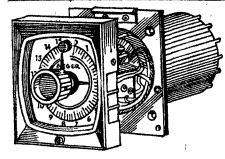
Stock No.	Mfr's Type	Volts	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
815-0040	C-8	6 DC	19.25	17.32	16.36	15.40	14.44	13.48
815-0041	C-8	* DC	19.25	17.32	16.36	15.40	14.44	13.48
815-0042	C-9	115 AC	19.25	17.32	16.36	15.40	14.44	13.48

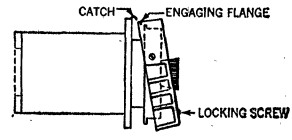
INDUSTRIAL TIMER
PBM SERIES TIMER



Pressing pushbutton closes load switch for duration of preset timed interval. Timer automatically resets and begins new interval when button is depressed. SPDT contacts rated 25 amps non-inductive at 115 V, 60 Hz AC. Wt. 3 lbs.

Stock No.	Type PBM-	Time Set. Max.	Min.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
815-0323	6S	6 sec	1/10sec	22.50	20.25	19.13	18.00	16.88	15.75
815-0325	15S	15 sec	¼ sec	22.50	20.25	19.13	18.00	16.88	15.75
815-0327	30S	30 sec	½ sec	22.50	20.25	19.13	18.00	16.88	15.75
815-0329	60S	60 sec	1 sec	22.50	20.25	19.13	18.00	16.88	15.75
815-0322	5M	5 min	5 sec	22.50	20.25	19.13	18.00	16.88	15.75
815-0324	15M	15 min	15 sec	22.50	20.25	19.13	18.00	16.88	15.75
815-0326	30M	30 min	30 sec	22.50	20.25	19.13	18.00	16.88	15.75
815-0328	60M	60 min	60 sec	22.50	20.25	19.13	18.00	16.88	15.75
815-0320	3H	3 hr.	3 min	22.50	20.25	19.13	18.00	16.88	15.75

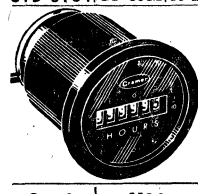




INDUSTRIAL TIMER GP PLUG-IN INTERVAL TIMER

Automatic reset, synchronous motor driven plug-in timing control. Easy installation and removal. Completely interchangeable with over 80% of most widely used plug-in timers. Provides two delayed set and two instantaneous sets of contacts. Features Spider Clutch, a unique concept in instrument clutching which incorporates high accuracy of infinite engagement clutches with mechanical integrity of toothed clutches Switches are rated 10 amps, non-inductive at 125/250 VAC and have a mechanical life of 10 million cycles and 500,000 cycles at 10 amps Neon pilot lamp built into dial to indicate timer motor is receiving power. Repeat accuracy: ¼%. Reset time less than ½sec. for full scale. Size: 4⅛x3²⁷⁄₃₂x4⁹⁄₃₂". Requires mounting hole 3¹⁄₁₆" ±¹⁄₁₆". 3 lbs.

Stock No.	Mfr's Type	Time Setting Max.	Min.	EACH 1	2-6	7-49	50-99	100-Up
815-0157	GP-6S	6 sec	1/10 sec	46.50	39.53	37.20	34.88	32.55
815-0161	GP-60S	60 sec	1 sec	46.50	39.53	37.20	34.88	32.55
815-0163	GP-30M	30 min	30 sec	46.50	39.53	37.20	34.88	32.55
815-0164	GP-60M	60 min	60 sec	46.50	39.53	37.20	34.88	32.55



CRAMER
ELAPSED TIME INDICATORS

MODEL 635G. Non-reset. High accuracy motor; large numerals on 1" wheels. 6-digit register. Mounts in 2.22" dia. panel hole; 2²³⁄₃₂" deep; 2.69" dia. bezel. U.L. Listed. 115 V, 60 Hz AC. ¾ lb.

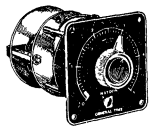
Stock No.	Mfr's Type	Total Count	EACH 1-9	10-24	25-49	50-Up
765-0115	635GL100	99,999.9 minutes	11.75	9.99	8.93	8.39
765-0116	635GM100	999,999 minutes	11.75	9.99	8.93	8.39
765-0117	*635GS100*	99,999.9 hours	11.75	9.99	8.93	8.39
765-0118	635GT100	999,999 hours	11.75	9.99	8.93	8.39

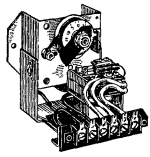
MODEL 636. As above but with pushbutton mechanism for instant reset to zero. 5-digit. Mounts in 2.22" dia. hole; 3⁷⁄₃₂" deep. 115 V, 60 Hz AC Wt. ¾ lb.

765-0120	*636XE100*	9999.9 seconds	28.25	22.32	21.47	20.62
765-0121	636XK100	99[illegible].9 minutes	28.25	22.32	21.47	20.62
765-0122	636XL100	9999.9 minutes	28.25	22.32	21.47	20.62
765-0123	636XS100	9999.9 hours	28.25	22.32	21.47	20.62

General Time Timers, Elapsed Time Indicators

SERIES BN ADJUSTABLE RESET TIMERS





Panel or rear mounting; interval or delay timing. Built-in relay, adjustable time range. Apply to all operations requiring a compact, dependable unit for direct control of electrical loads.

BN41 (INTERVAL) AND BN42 (DELAY) PANEL MOUNT. Dial and setting knob with readout of elapsed time by pointer in center of knob. SPDT relay rated 10 amps at 125 or 250 VAC. Timing motor rated 5 watts max. at 120 VAC, 60 Hz. Repeat accuracy, ±¾ of 1% of total time range. Screw terminal block, 3 5/16 sq. x 4⅜" behind panel. Requires 3 3/16" diameter mounting hole. ■U.L. Recognized.

BN25 (INTERVAL) AND BN22 (DELAY) REAR MOUNT. Same specifications as BN41 and BN42 except have chassis or back panel mount. ■U.L. Recognized. Measures 3.375" width, x 4.202" height, x 3.750" depth.

PANEL MOUNTING (DELAY)

Stock No.	Mfr's Type	Time Setting Max.	Time Setting Min.	Maximum Reset Time	Dial Grades Major	Dial Grades Minor
800-0043	BN42-001	6 sec.	.3 sec.	.5 sec.	1 sec.	.1 sec.
800-0044	BN42-003	15 sec.	.8 sec.	1.0 sec.	1 sec.	.2 sec.
800-0045	BN42-004	30 sec.	1.5 sec.	1.5 sec.	5 sec.	.5 sec.
800-0046	BN42-005	60 sec.	3.0 sec.	1.5 sec.	10 sec.	1.0 sec.
800-0047	BN42-006	120 sec.	6.0 sec.	10 sec.	20 sec.	2.0 sec.
800-0048	BN42-007	5 min.	.2 min.	15 sec.	1 min.	.1 min.
800-0049	BN42-008	10 min.	.4 min.	120 sec.	1 min.	.2 min.

PANEL MOUNTING (INTERVAL)

800-0034	BN41-001	6 sec.	.3 sec.	.5 sec.	1 sec.	.1 sec.
800-0036	BN41-003	15 sec.	.8 sec.	1.0 sec.	1 sec.	.2 sec.
800-0037	BN41-004	30 sec.	1.5 sec.	1.5 sec.	5 sec.	.5 sec.
800-0038	BN41-005	60 sec.	3.0 sec.	1.5 sec.	10 sec.	1.0 sec.
800-0039	BN41-006	120 sec.	6.0 sec.	10 sec.	20 sec.	2.0 sec.
800-0040	BN41-007	5 min.	.2 min.	15 sec.	1 min.	.1 min.
800-0041	BN41-008	10 min.	.4 min.	120 sec.	1 min.	.2 min.

REAR MOUNTING (DELAY)

Stock No.	Mfr's Type	Time Setting Max.	Time Setting Min.	Max. Reset Time	Dial Grade Major	Dial Grade Minor
800-0023	BN22-006	5.4 sec.	.3 sec.	.5 sec.	1 sec.	.1 sec.
800-0018	BN22-001	13.5 sec.	.7 sec.	.5 sec.	1 sec.	.5 sec.
800-0019	BN22-002	54 sec.	3.0 sec.	1.5 sec.	5 sec.	1.0 sec.
800-0022	BN22-005	108 sec.	6.0 sec.	2.5 sec.	10 sec.	1.0 sec.
800-0020	BN22-003	4.5 min.	15 sec.	5.0 sec.	1 min.	5.0 sec.
800-0021	BN22-004	9.5 min.	30 sec.	120 sec.	1 min.	5.0 sec.

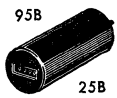
REAR MOUNTING (INTERVAL)

800-0031	BN25-006	5.4 sec.	.3 sec.	.5 sec.	1 sec.	.1 sec.
800-0026	BN25-001	13.5 sec.	.7 sec.	.5 sec.	1 sec.	.5 sec.
800-0027	BN25-002	54 sec.	3.0 sec.	1.5 sec.	5 sec.	1.0 sec.
800-0030	BN25-005	108 sec.	6.0 sec.	2.5 sec.	10 sec.	1.0 sec.
800-0028	BN25-003	4.5 min.	15 sec.	5.0 sec.	1 min.	5.0 sec.
800-0029	BN25-004	9.5 min.	30 sec.	120 sec.	1 min.	5.0 sec.

Mounting Type	NET EACH, LOTS OF 1-9	10-24	25-49	50-99	100-Up
Panel	31.56	28.40	26.82	25.25	23.67
Rear	26.18	23.56	22.25	20.94	19.64

SUBMINIATURE TIMERS AND COUNTERS

Meets MIL-M-7793D. Four digit readouts. All 400 Hz, 115 volts, except † 26 volts AC and ‡ 28 VDC. Count Rate, 20 per second. 1.5W pwr. consumption. Wt. .50 to max. of 1.75 oz.



95B 25B

16B

95C 25C B16

C-2

Adj. Flange

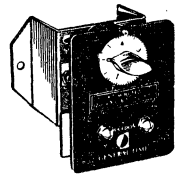
Fixed Flange Type C

Stock No.	MIL Type	Mfr's Type	Mtg. Flange	Temp. Note*
800-0822	MS17322-6	95C8CE	Fixed	O
800-0823	MS17322-6A	95C8CE-50	Fixed	A
800-0824	MS27651	95C8CE-200	Fixed	A
800-0820	MS17322-8	95C8A	None	O
800-0821	MS17322-8A	95C8A-50	None	A
800-0827	MS17322-10	95C8C2	Movable	A
800-0729	MS27650-4†	25C8CE-200	Fixed	A
800-0727	None†	25C8A	None	A
ROUND CASE—Max. Hrs. 9999				
800-0812	MS17322-2	95B8CE	Fixed	O
800-0813	MS17322-2A	95B8CE-50	Fixed	A
800-0810	MS17322-4	95B8A	None	O
800-0811	MS17322-4A	95B8A-50	None	A
800-0814	MS17322-9	95B8C2	Movable	A
800-0712	MS17321-2‡	16B8CE-70	Fixed	B
800-0708	MS17321-4‡	16B8A-70	None	B
800-0710	MS17321-9‡	16B8C2	Movable	B
EVENTS COUNTERS-Square case-Max. readout 9999				
800-0024	None‡	B16C8A	None	C
800-0025	None‡	B16C8CE	Fixed	C
800-0032	None‡	B16C8C2	Movable	C

*Note A = −65° C to +125°C. 0 = −55°C to +85°C. B = −55°C to +100°C. C = −65°F to +257°F.

Mfr's Type	1-4 Each	5-9 Each	10-Up Each
95C and 25C	53.00	39.00	32.00
95B and 25B	54.00	40.00	33.00
16B	155.00	132.00	117.00
B16C	68.00	53.00	43.00

TYPE DA TIME-DELAY TIMERS



SERIES DA1103. SPDT, 20-amp switch, 125 VAC or 250 VAC, resistive. For a wide variety of applications in electrical equipment control. Internal clutch—engages and disengages when motor is energized and de-energized. Convenient knob adjustment. Measures 3⅜x 2 11/16x3⅛". ■U.L. Recognized. **Series DA2100.** Same as above unit, but has lock-nut adjustment. Shpg. wt. 1½ lbs.

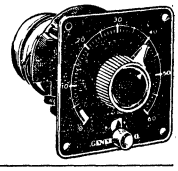
120 VOLTS AC

Stock No.	Type DA-	Time Range	EACH 1-9	10-24	25-49	50-99	100-Up
800-0050	*11031*	*0-14 sec.*	18.47	16.62	15.70	14.77	13.85
800-0052	11032	0-57 sec.	18.47	16.62	15.70	14.77	13.85
800-0054	11033	0-4.5 min.	18.47	16.62	15.70	14.77	13.85
800-0062	21001	0-14 sec.	18.47	16.62	15.70	14.77	13.85
800-0064	21002	0-57 sec.	18.47	16.62	15.70	14.77	13.85
800-0066	21003	0-4.5 min.	18.47	16.62	15.70	14.77	13.85
800-0068	21004	0-9.5 min.	18.47	16.62	15.70	14.77	13.85

240 VOLTS AC

800-0051	11031	0-14 sec.	19.40	17.46	16.49	15.52	14.55
800-0053	11032	0-57 sec.	19.40	17.46	16.49	15.52	14.55
800-0055	11033	0-4.5 min.	19.40	17.46	16.49	15.52	14.55
800-0063	21001	0-14 sec.	19.40	17.46	16.49	15.52	14.55
800-0067	21003	0-4.5 min.	19.40	17.46	16.49	15.52	14.55
800-0069	21004	0-9.5 min.	19.40	17.46	16.49	15.52	14.55

TYPE BJ12 PUSHBUTTON INTERVAL TIMER



Panel-mount pushbutton timer with readout. For control of electrical equipment such as copying machines, mixers, ovens, tumbling, etc. Automatically resets to preset interval. SPDT 15-amp, 120 or 240-volt AC switch ■U.L. Recognized and C.S.A. Listed. Faceplate. 3 5/16x3 5/16". For 120 volts, 60 Hz AC. **Specify time range: 30 sec., 60 sec., 5 min., or 1 hr.** 1½ lbs.

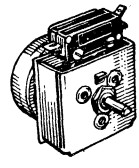
Stock No.	Type	Time Range	EACH 1-9	10-24	25-49	50-99	100-Up
800-0012	BJ12	30S	21.04	18.93	17.89	16.83	15.77
800-0013	BJ12	60S	21.04	18.93	17.89	16.83	15.77
800-0015	BJ12	5M	21.04	18.93	17.89	16.83	15.77
800-0017	BJ12	1H	21.04	18.93	17.89	16.83	15.77

PANEL MOUNTING RESET TIMER

TYPE DP 11. Provides delay or interval timing. Timing motor has internal clutching mechanism. Time ranges set by external control knob. Available in ranges from 15 sec. to 5 min. Standard readout. SPDT snap-action switch rated 10 amps, 120 or 240 volt AC resistive switch. Installs with screw type terminals. Dial size, 3 5/16x3 5/16". Requires 3 9/32" behind dial. 120 V, 60 Hz. **Specify time range: 15, 30, 60, 120 sec, or 5 min.** 1 lb.

Stock No.	Type	Time Range	EACH 1-9	10-24	25-49	50-99	100-Up
800-0090	DP11	15S	22.44	20.20	19.07	17.95	16.83
800-0091	DP11	30S	22.44	20.20	19.07	17.95	16.83
800-0092	DP11	60S	22.44	20.20	19.07	17.95	16.83
800-0093	DP11	120S	22.44	20.20	19.07	17.95	16.83
800-0094	DP11	5M	22.44	20.20	19.07	17.95	16.83

TYPE AB51 HANDSET INTERVAL TIMER



Hand set interval timer consisting of synchronous motor, appliance type SPDT switch and setting shaft with gearing. For appliances, amusement devices, vending machines, medical equipment, production machinery, battery charging equipment, other applications. Rotation of shaft energizes motor and load. Upon completion of cycle, load switch opens. Setting can be changed while motor is energized. Switch rated 25 A, ¾ hp at 120 VAC. Motor rated 5 W, 60 Hz; 3.4 W, 50 Hz. Three mounting holes on .562 radius tapped 8-32. Setting shaft ¼" diameter, flatted to 5/32" for ½". 3 15/16x2½x2⅜" behind panel. Less knob and dial. For 120 VAC. **Specify time range: 1 minute, 15 minutes, 60 minutes, 2 hours, 8 hours, 24 hours.** ■U.L. Recognized. Shpg. wt., ¾ lbs.

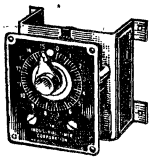
Stock No.	Type	Time Range	EACH 1-9	10-24	25-49	50-99	100-Up
800-0002	AB51	1M	8.42	7.58	7.15	6.73	6.31
800-0004	AB51	15M	9.42	7.58	7.15	6.73	6.31
800-0006	AB51	60M	8.42	7.58	7.15	6.73	6.31
800-0007	AB51	2H	8.42	7.58	7.15	6.73	6.31
800-0009	AB51	8H	8.42	7.58	7.15	6.73	6.31
800-0011	AB51	24H	8.42	7.58	7.15	6.73	6.31

TIMERS SECTION

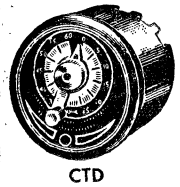
Timing Equipment by Industrial Timer

HIGH-ACCURACY TIME-DELAY CONTROLS

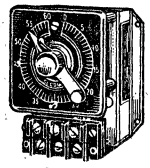
CH



CSF



CTD



TDAB

TDAF

SERIES 90

SERIES CH AND CSF TIME-DELAY TIMERS

Automatic reset units. For use where fixed or adjustable delay is needed between closing one circuit and opening or closing another. SPDT switch rated 10 amps at 115 VAC, with non-inductive load. All types have external clutch. CH for front-panel mounting; CSF for back-panel mtg.; all have 4-screw mtg. holes. Overall size: CH, 3 7/16x3 9/16x3 7/8"; CSF, 2 3/4x3 1/16x 2 29/32". 110-120 V, 60 Hz AC. ■U.L. Recog. 1 1/2 lbs.

Stock No.	Mfr's Type	Max. Time Cycle	Stock No.	Mfr's Type	Max. Time Cycle	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
815-0075	CH-6S	6 sec.	815-0070	CH-1M	1 min.	26.50	22.53	21.20	19.87	18.55	17.23
815-0076	CH-15S	15 sec.	815-0072	CH-3M	3 min.	26.50	22.53	21.20	19.87	18.55	17.23
815-0077	CH-30S	30 sec.	815-0074	CH-5M	5 min.	26.50	22.53	21.20	19.87	18.55	17.23
815-0109	CSF-6S	6 sec.	815-0103	CSF-1M	1 min.	23.00	19.55	18.40	17.25	16.10	14.95
815-0110	CSF-15S	15 sec.	815-0105	CSF-3M	3 min.	23.00	19.55	18.40	17.25	16.10	14.95
815-0111	CSF-30S	30 sec.	815-0107	CSF-5M	5 min.	23.00	19.55	18.40	17.25	16.10	14.95

SERIES CTD TIME-DELAY TIMERS

Synchronous-motor-driven. Clutch engages and drives gear train when motor is energized—when de-energized, it returns to reset position. All have 60 dial divisions. For front-panel mounting in 3" diameter hole. Bakelite case has terminals at rear. SPDT contacts rated at 10 amps. Flange dia., 3 3/16". Depth behind panel: 4 5/32". For 110-120 V, 60 Hz AC. ■U.L. Recog. Shpg. wt., 1 1/2 lbs.

815-0124	CTD-6S	6 sec.	815-0118	CTD-1M	1 min.	30.50	25.93	24.40	22.88	21.35	19.83
815-0125	CTD-15S	15 sec.	815-0120	CTD-3M	3 min.	30.50	25.93	24.40	22.88	21.35	19.83
815-0126	CTD-30S	30 sec.	815-0122	CTD-5M	5 min.	30.50	25.93	24.40	22.88	21.35	19.83

SERIES TDAB AND TDAF TIME-DELAY TIMERS

Series TDAB (back-mounted) and Series TDAF (panel-mounted) timers for circuit controls where adjustable or fixed time-delay is required between the closing or opening of one circuit and the closing or opening of another circuit. For applications requiring high repetitive accuracy, fast reset, and heavy usage. Automatic reset of timing/switching movement in less than 0.2 second. Ideal for plastic molding equipment, packaging machinery, graphic arts equipment and other uses. Snap-action switches (SPDT) rated 10 amps. Sizes: TDAB, 4 9/16x3 17/32x4 1/8"; TDAF, 4 1/2x3 5/8x3 3/8". For 110-120 volts, 60 Hz AC. Shpg. wt., 4 lbs.

Max. Time Cycle	Dial Div.	BACK MOUNT Stock No.	BACK MOUNT Type TDAB-	PANEL MOUNT Stock No.	PANEL MOUNT Type TDAF-	Max. Time Cycle	Dial Div.	BACK MOUNT Stock No.	BACK MOUNT Type TDAB-	PANEL MOUNT Stock No.	PANEL MOUNT Type TDAF-
1 sec.	1/60 sec.	.....	.....	815-0540	1S	3 min.	3 sec.	815-0511	3M	815-0542	3M
3 sec.	1/20 sec.	.....	.....	815-0543	3S	5 min.	5 sec.	815-0513	5M	815-0544	5M
6 sec.	1/10 sec.	.....	.....	815-0545	6S	15 min.	15 sec.	815-0515	15M	815-0546	15M
15 sec.	1/4 sec.	815-0516	15S	815-0547	15S	30 min.	30 sec.	815-0517	30M	815-0548	30M
30 sec.	1/2 sec.	.....	.....	815-0549	30S	60 min.	60 sec.	815-0519	60M	815-0550	60M
60 sec.	1 sec.	815-0520	60S	815-0551	60S	3 hrs.	3 min.	815-0510	3H	815-0541	3H

Type	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
Any TDAB or TDAF	43.00	36.55	34.40	32.25	30.10	27.95

SERIES 90 TIME-DELAY TIMERS

Rugged, compact timer for use in applications where the time-delay cycle is infrequently changed, or permanently fixed. Excellent for use in photocopy equipment, induction heating units, transmitters, etc. Changes in time delay cycle are made by loosening set screw and offsetting one cam arm in relation to the other. Totally enclosed, snap-action SPDT switch contacts are rated at 10 amps at 115-230 volts AC. Overall size (HWD): 2 5/8x2 1/4x2 1/4". For 115 V, 60 Hz AC. ■U.L. Recognized. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Settings Min.	Settings Max.	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
815-0601	90-6S	1/2 sec.	6 sec.	17.00	14.45	13.60	12.75	11.90	11.05
815-0602	90-15S	1 1/2 sec.	15 sec.	17.00	14.45	13.60	12.75	11.90	11.05
815-0603	90-30S	3 sec.	30 sec.	17.00	14.45	13.60	12.75	11.90	11.05
815-0604	90-60S	6 sec.	1 min.	17.00	14.45	13.60	12.75	11.90	11.05
815-0605	90-90S	9 sec.	1 1/2 min.	17.00	14.45	13.60	12.75	11.90	11.05

MTD

SERIES MTD TIME-DELAY TIMERS

- Match Modern Panel-Instruments
- Plastic Face Protects Indicators
- Mounts Through 3" Hole in Panel

Provides a predetermined timed delay between the closing of one load circuit and the operation of the timers isolated load switch. Load contacts are rated 10 amps, are SPDT snap-action, and are brought out to snap-on terminals at the rear of the timer. A rugged plastic face protects the setting and progress indicators from dust and damage. Mounts through a 3-inch hole in panel and is firmly secured by a bracket screwed to the rear of timer case. For 115VAC, 60 Hz. *Min. time cycle. Shpg. wt. 2 1/2 lbs.

Stock No.	Type MTD-		Time Range	1-9	10-24	25-49	50-99	100-249	250-Up
815-0277	3H	3H	*3 Min.	30.50	25.92	24.40	22.87	21.35	19.82
815-0278	5M	5M	*5 Sec.	30.50	25.92	24.40	22.87	21.35	19.82
815-0279	6S	6S	*1/10 Sec.	30.50	25.92	24.40	22.87	21.35	19.82
815-0280	15M	15M	*15 Sec.	30.50	25.92	24.40	22.87	21.35	19.82
815-0281	15S	15S	*1/4 Sec.	30.50	25.92	24.40	22.87	21.35	19.82
815-0282	30M	30M	*30 Sec.	30.50	25.92	24.40	22.87	21.35	19.82
815-0283	30S	30S	*1/2 Sec.	30.50	25.92	24.40	22.87	21.35	19.82
815-0284	60M	60M	*1 Min.	30.50	25.92	24.40	22.87	21.35	19.82
815-0285	60S	60S	*1 Sec.	30.50	25.92	24.40	22.87	21.35	19.82

SERIES GTD TIME-DELAY TIMERS

- Synchronous Motor SPDT Load Switch
- Dial Calibrated in 60 Increments
- Time Adjusted with Knob on Dial Face

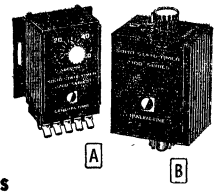
Instant automatic reset—as soon as clutch is disengaged, an internal spring returns actuating arm to its reset position in a fraction of a second. SPDT load-switch is rated 10 amps non-inductive. Requires 3" mounting hole. No screw holes needed—a single screw under flange of timer tightens bracket against edge of panel. 4x4 3/8" flange, 4 23/32" behind panel. With screw terminals. *Min. time and calibration. 115VAC, 60 Hz. 2 lbs.

Stock No.	Type GTD-		Time Range	1-9	10-24	25-49	50-99	100-249	500-Up
815-0165	5M	5M	*5 Sec.	39.50	33.58	31.60	29.63	27.65	25.68
815-0168	15M	15M	*15 Sec.	39.50	33.58	31.60	29.63	27.65	25.68
815-0169	15S	15S	*1/4 Sec.	39.50	33.58	31.60	29.63	27.65	25.68
815-0170	30M	30M	*30 Sec.	39.50	33.58	31.60	29.63	27.65	25.68
815-0171	30S	30S	*1/2 Sec.	39.50	33.58	31.60	29.63	27.65	25.68
815-0172	60M	60M	*1 Min.	39.50	33.58	31.60	29.63	27.65	25.68

■Recognized Under the Component Program of Underwriters' Laboratories, Inc.

New General Time Solid-State Timers

Exceptional repeat accuracy, transient protection, ten time ranges, isolated outputs, AC or DC input, relay or solid state switch, and no first cycle effect. Repeat accuracy: ±2% of set point under constant voltage and temperature: under 1 sec. a constant of 20 msec applies. Temp. Ranges: +10° C to +55° C ambient. Plug-In (Fig. A): 2.5 W x 1.875 D x 4.505″ H. (including .625″ H knob and .58″ plug length) max. Rear Mount (Fig. B): 3⅞ W x 2½ D (plus knob. 625″) x 4⅜″ H. U.L. and CSA recognized.



TIME RANGE SUFFIX. Min. reset time 100 msec except 300 msec for lower third of time band on 2111.

Code	Suffix	Time Setting Max.	Time Setting Min.	Code	Suffix	Time Setting Max.	Time Setting Min.
A	−001	1 sec	.10 sec	G	−060	60 sec	3.0 sec
B	−003	3 sec	.15 sec	H	−118	3 min	9.0 sec
C	−005	5 sec	.25 sec	I	−130	5 min	15.0 sec
D	−010	10 sec	.50 sec	J	−160	10 min	60.0 sec
E	−015	15 sec	.75 sec	K	−190	15 min	90.0 sec
F	−030	30 sec	1.5 sec				

SPECIFICATIONS

Series 2111 and 2211 are Delay Mode Timers. Series 2112 and 2212 are Interval or D.O.D. Mode Timers. Plug-In (Fig. A): all 8 pin except 2112—11 pin. Rear Mount (Fig. B): (*) 4 terminals delay mode (**) 6 terminals interval or D.O.D. (†) 8 terminals delay mode (††) 10 terminals interval or D.O.D.

INPUT SUFFIX: −1P for 117 V AC/DC, 50/60 Hz and 3.5 watts max. −1C for 24 V AC/DC, 50/60 Hz and 3.5 watts max.

OUTPUT SUFFIX: −F for DPDT, with relay and either 117 V AC, 10 amps resistive, 5 amps inductive or 117 V AC 2.5 amps resistive or 28 V DC 10 amps resistive. −Y for SPST, solid state, 117 to 24 VAC, lamp inductive or resistive.

PLUG-IN DELAY TIMERS

Stock No.	Type	Code	1-4	5-9	10-24	25-49	50-99	100-Up
800-1001	2111-1CF-001	A	24.10	21.75	21.20	20.10	17.85	16.75
800-1003	2111-1CF-003	B	24.10	21.75	21.20	20.10	17.85	16.75
800-1005	2111-1CF-005	C	24.10	21.75	21.20	20.10	17.85	16.75
800-1010	2111-1CF-010	D	24.10	21.75	21.20	20.10	17.85	16.75
800-1015	2111-1CF-015	E	24.10	21.75	21.20	20.10	17.85	16.75
800-1020	2111-1CF-030	F	24.10	21.75	21.20	20.10	17.85	16.75
800-1030	2111-1CF-060	G	24.10	21.75	21.20	20.10	17.85	16.75
800-1040	2111-1CF-118	H	24.10	21.75	21.20	20.10	17.85	16.75
800-1049	2111-1CF-160	I	30.60	27.60	27.05	25.60	23.00	21.85
800-1060	1111-1CF-190	J	32.20	29.10	28.35	26.95	24.40	23.00
800-1201	2111-1PF-001	A	24.85	22.35	21.80	20.65	18.35	17.20
800-1203	2111-1PF-003	B	24.85	22.35	21.80	20.65	18.35	17.20
800-1205	2111-1PF-005	C	24.85	22.35	21.80	20.65	18.35	17.20
800-1210	2111-1PF-010	D	24.85	22.35	21.80	20.65	18.35	17.20
800-1215	2111-1PF-015	E	24.85	22.35	21.80	20.65	18.35	17.20
800-1220	2111-1PF-030	F	24.85	22.35	21.80	20.65	18.35	17.20
800-1230	2111-1PF-060	G	24.85	22.35	21.80	20.65	18.35	17.20
800-1240	2111-1PF-118	H	24.85	22.35	21.80	20.65	18.35	17.20
800-1249	2111-1PF-160	I	31.40	28.30	27.70	26.25	23.55	22.40
800-1260	2111-1PF-190	J	33.25	29.80	29.05	27.60	25.00	23.55
800-1101	2111-1CY-001	A	29.60	26.60	25.95	24.55	21.85	20.45
800-1103	2111-1CY-003	B	29.60	26.60	25.95	24.55	21.85	20.45
800-1105	2111-1CY-005	C	29.60	26.60	25.95	24.55	21.85	20.45
800-1110	2111-1CY-010	D	29.60	26.60	25.95	24.55	21.85	20.45
800-1115	2111-1CY-015	E	29.60	26.60	25.95	24.55	21.85	20.45
800-1120	2111-1CY-030	F	29.60	26.60	25.95	24.55	21.85	20.45
800-1130	2111-1CY-060	G	29.60	26.60	25.95	24.55	21.85	20.45
800-1140	2111-1CY-118	H	29.60	26.60	25.95	24.55	21.85	20.45
800-1159	2111-1CY-160	I	36.50	32.90	32.20	30.50	27.35	26.00
800-1160	2111-1CY-190	J	38.40	34.65	33.75	32.05	29.05	27.35
800-1301	2111-1PY-001	A	30.30	27.25	26.60	25.20	22.40	21.00
800-1303	2111-1PY-003	B	30.30	27.25	26.60	25.20	22.40	21.00
800-1305	2111-1PY-005	C	30.30	27.25	26.60	25.20	22.40	21.00
800-1310	2111-1PY-010	D	30.30	27.25	26.60	25.20	22.40	21.00
800-1315	2111-1PY-015	E	30.30	27.25	26.60	25.20	22.40	21.00
800-1320	2111-1PY-030	F	30.30	27.25	26.60	25.20	22.40	21.00
800-1330	2111-1PY-060	G	30.30	27.25	26.60	25.20	22.40	21.00
800-1340	2111-1PY-118	H	30.30	27.25	26.60	25.20	22.40	21.00
800-1349	2111-1PY-160	J	37.20	33.55	32.85	31.15	27.95	26.55
800-1360	2111-1PY-190	K	39.15	35.35	34.45	32.75	29.65	27.95

REAR MOUNT DELAY TIMERS

Stock No.	Type	Code	1-4	5-9	10-24	25-49	50-99	100-Up
800-1801	2211-1CF-001†	A	25.00	22.40	21.85	20.70	18.40	17.25
800-1803	2211-1CF-003†	B	25.00	22.40	21.85	20.70	18.40	17.25
800-1805	2211-1CF-005†	C	25.00	22.40	21.85	20.70	18.40	17.25
800-1810	2211-1CF-010†	D	25.00	22.40	21.85	20.70	18.40	17.25
800-1815	2211-1CF-015†	E	25.00	22.40	21.85	20.70	18.40	17.25
800-1820	2211-1CF-030†	F	25.00	22.40	21.85	20.70	18.40	17.25
800-1830	2211-1CF-060†	G	25.00	22.40	21.85	20.70	18.40	17.25
800-1840	2211-1CF-118†	H	25.00	22.40	21.85	20.70	18.40	17.25
800-1848	2211-1CF-160†	I	31.50	28.45	27.85	26.35	23.70	22.50
800-1860	2211-1CF-190†	J	33.25	30.00	29.20	27.75	25.15	23.70
800-2001	2211-1PF-001†	A	25.65	23.00	22.45	21.30	18.90	17.70
800-2003	2211-1PF-003†	B	25.65	23.00	22.45	21.30	18.90	17.70
800-2005	2211-1PF-005†	C	25.65	23.00	22.45	21.30	18.90	17.70
800-2010	2211-1PF-010†	D	25.65	23.00	22.45	21.30	18.90	17.70
800-2015	2211-1PF-015†	E	25.65	23.00	22.45	21.30	18.90	17.70
800-2020	2211-1PF-030†	F	25.65	23.00	22.45	21.30	18.90	17.70
800-2030	2211-1PF-060†	G	25.65	23.00	22.45	21.30	18.90	17.70
800-2040	2211-1PF-118†	H	25.65	23.00	22.45	21.30	18.90	17.70
800-2048	2211-1PF-160†	I	32.30	29.15	28.55	27.25	24.25	23.05
800-2060	2211-1PF-190†	J	34.00	30.70	29.95	28.45	25.75	24.25
800-1901	2211-1CY-001*	A	30.50	27.40	26.70	25.30	22.50	21.10
800-1903	2211-1CY-003*	B	30.50	27.40	26.70	25.30	22.50	21.10
800-1905	2211-1CY-005*	C	30.50	27.40	26.70	25.30	22.50	21.10
800-1910	2211-1CY-010*	D	30.50	27.40	26.70	25.30	22.50	21.10
800-1915	2211-1CY-015*	E	30.50	27.40	26.70	25.30	22.50	21.10
800-1920	2211-1CY-030*	F	30.50	27.40	26.70	25.30	22.50	21.10
800-1930	2211-1CY-060*	G	30.50	27.40	26.70	25.30	22.50	21.10
800-1940	2211-1CY-118*	H	30.50	27.40	26.70	25.30	22.50	21.10
800-1948	2211-1CY-160*	I	37.60	33.90	33.15	31.40	27.20	26.80
800-1960	2211-1CY-190*	J	39.70	35.70	34.75	33.00	29.95	28.15
800-2101	2211-1PY-001*	A	31.30	28.10	27.40	25.95	23.05	21.65
800-2103	2211-1PY-003*	B	31.30	28.10	27.40	25.95	23.05	21.65
800-2105	2211-1PY-005*	C	31.30	28.10	27.40	25.95	23.05	21.65
800-2110	2211-1PY-010*	D	31.30	28.10	27.40	25.95	23.05	21.65
800-2115	2211-1PY-015*	E	31.30	28.10	27.40	25.95	23.05	21.65
800-2120	2211-1PY-020*	F	31.30	28.10	27.40	25.95	23.05	21.65
800-2130	2211-1PY-030*	G	31.30	28.10	27.40	25.95	23.05	21.65
800-2140	2211-1PY-040*	H	31.30	28.10	27.40	25.95	23.05	21.65
800-2148	2211-1PY-048*	I	38.35	34.55	33.80	32.05	28.20	27.35
800-2160	2211-1PY-060*	J	40.40	36.40	35.50	33.70	30.55	28.75

PLUG-IN INTERVAL TIMERS

800-1401	2112-1CF-001	A	27.40	25.50	24.95	23.60	21.00	19.50
800-1403	2112-1CF-003	B	27.40	25.50	24.95	23.60	21.00	19.50
800-1405	2112-1CF-005	C	27.40	25.50	24.95	23.60	21.00	19.50
800-1410	2112-1CF-010	D	27.40	25.50	24.95	23.60	21.00	19.50
800-1415	2112-1CF-015	E	27.40	25.50	24.95	23.60	21.00	19.50
800-1420	2112-1CF-030	F	27.40	25.50	24.95	23.60	21.00	19.50
800-1430	2112-1CF-060	G	27.40	25.50	24.95	23.60	21.00	19.50
800-1440	2112-1CF-118	H	27.40	25.50	24.95	23.60	21.00	19.50
800-1449	2112-1CF-160	I	35.40	31.60	30.75	29.20	26.35	24.60
800-1460	2112-1CF-190	J	36.00	33.00	32.05	30.40	27.45	25.60
800-1601	2112-1PF-001	A	29.20	26.20	25.60	24.25	21.55	20.00
800-1603	2112-1PF-003	B	29.20	26.20	25.60	24.25	21.55	20.00
800-1605	2112-1PF-005	C	29.20	26.20	25.60	24.25	21.55	20.00
800-1610	2112-1PF-010	D	29.20	26.20	25.60	24.25	21.55	20.00
800-1615	2112-1PF-015	E	29.20	26.20	25.60	24.25	21.55	20.00
800-1620	2112-1PF-030	F	29.20	26.20	25.60	24.25	21.55	20.00
800-1630	2112-1PF-060	G	29.20	26.20	25.60	24.25	21.55	20.00
800-1640	2112-1PF-118	H	29.20	26.20	25.60	24.25	21.55	20.00
800-1648	2112-1PF-160	I	36.20	32.30	31.45	29.85	26.95	25.15
800-1660	2112-1PF-190	J	37.90	33.75	32.80	31.10	28.10	26.20
800-1501	2112-1CY-001	A	33.80	30.30	29.60	28.05	24.95	23.15
800-1503	2112-1CY-003	B	33.80	30.30	29.60	28.05	24.95	23.15
800-1505	2121-1CY-005	C	33.80	30.30	29.60	28.05	24.95	23.15
800-1510	2112-1CY-010	D	33.80	30.30	29.60	28.05	24.95	23.15
800-1515	2112-1CY-015	E	33.80	30.30	29.60	28.05	24.95	23.15
800-1520	2112-1CY-030	F	33.80	30.30	29.60	28.05	24.95	23.15
800-1530	2112-1CY-060	G	33.80	30.30	29.60	28.05	24.95	23.15
800-1540	2112-1CY-118	H	33.80	30.30	29.60	28.05	24.95	23.15
800-1548	2112-1CY-160	J	40.00	36.70	35.75	33.90	30.60	28.55
800-1560	2112-1CY-190	K	42.00	38.35	37.25	35.35	31.90	29.75
800-1701	2112-1PY-001	A	34.60	31.00	30.30	28.70	25.50	23.65
800-1703	2112-1PY-003	B	34.60	31.00	30.30	28.70	25.50	23.65
800-1705	2112-1PY-005	C	34.60	31.00	30.30	28.70	25.50	23.65
800-1710	2112-1PY-010	D	34.60	31.00	30.30	28.70	25.50	23.65
800-1715	2112-1PY-015	E	34.60	31.00	30.30	28.70	25.50	23.65
800-1720	2112-1PY-030	F	34.60	31.00	30.30	28.70	25.50	23.65
800-1730	2112-1PY-060	G	34.60	31.00	30.30	28.70	25.50	23.65
800-1740	2112-1PY-118	H	34.60	31.00	30.30	28.70	25.50	23.65
800-1748	2112-1PY-160	J	41.80	37.40	36.40	34.55	31.20	29.10
800-1760	2112-1PY-190	K	43.75	39.10	38.00	36.00	32.55	30.35

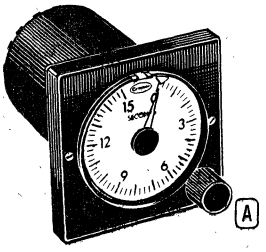
REAR-MOUNT INTERVAL TIMERS

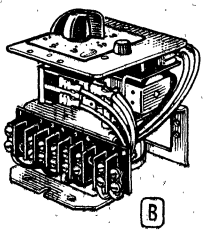
800-2201	2212-1CF-001††	A	29.30	26.25	25.70	24.30	21.60	20.10
800-2203	2212-1CF-003††	B	29.30	26.25	25.70	24.30	21.60	20.10
800-2205	2212-1CF-005††	C	29.30	26.25	25.70	24.30	21.60	20.10
800-2210	2212-1CF-010††	D	29.30	26.25	25.70	24.30	21.60	20.10
800-2215	2212-1CF-015††	E	29.30	26.25	25.70	24.30	21.60	20.10
800-2220	2212-1CF-030††	F	29.30	26.25	25.70	24.30	21.60	20.10
800-2230	2212-1CF-060††	G	29.30	26.25	25.70	24.30	21.60	20.10
800-2240	2212-1CF-118††	H	29.30	26.25	25.70	24.30	21.60	20.10
800-2248	2212-1CF-160††	I	36.30	32.55	31.70	30.10	27.15	25.35
800-2260	2212-1CF-190††	J	39.20	34.00	33.00	31.30	28.30	26.35
800-2401	2212-1PF-001††	A	30.10	27.00	26.35	24.95	22.20	20.60
800-2403	2212-1PF-003††	B	30.10	27.00	26.35	24.95	22.20	20.60
800-2405	2212-1PF-005††	C	30.10	27.00	26.35	24.95	22.20	20.60
800-2410	2212-1PF-010††	D	30.10	27.00	26.35	24.95	22.20	20.60
800-2415	2212-1PF-015††	E	30.10	27.00	26.35	24.95	22.20	20.60
800-2420	2212-1PF-030††	F	30.10	27.00	26.35	24.95	22.20	20.60
800-2430	2212-1PF-060††	G	30.10	27.00	26.35	24.95	22.20	20.60
800-2440	2212-1PF-118††	H	30.10	27.00	26.35	24.95	22.20	20.60
800-2448	2212-1PF-160††	I	37.20	33.25	32.40	30.75	27.75	25.90
800-2460	2212-1PF-190††	J	39.00	34.75	33.80	32.05	28.95	27.00
800-2301	2212-1CY-001**	A	34.90	31.20	30.50	28.90	25.70	23.85
800-2303	2212-1CY-003**	B	34.90	31.20	30.50	28.90	25.70	23.85
800-2305	2212-1CY-005**	C	34.90	31.20	30.50	28.90	25.70	23.85
800-2310	2212-1CY-010**	D	34.90	31.20	30.50	28.90	25.70	23.85
800-2315	2212-1CY-015**	E	34.90	31.20	30.50	28.90	25.70	23.85
800-2320	2212-1CY-030**	F	34.90	31.20	30.50	28.90	25.70	23.85
800-2330	2212-1CY-060**	G	34.90	31.20	30.50	28.90	25.70	23.85
800-2340	2212-1CY-118**	H	34.90	31.20	30.50	28.90	25.70	23.85
800-2348	2212-1CY-160**	I	42.25	37.80	36.80	34.90	31.50	29.40
800-2360	2212-1CY-190**	J	44.40	39.50	38.35	36.40	32.85	30.65
800-2501	2212-1PY-001**	A	35.70	31.90	31.20	29.95	26.25	24.35
800-2503	2212-1PY-003**	B	35.70	31.90	31.20	29.95	26.25	24.35
800-2505	2212-1PY-005**	C	35.70	31.90	31.20	29.95	26.25	24.35
800-2510	2212-1PY-010**	D	35.70	31.90	31.20	29.95	26.25	24.35
800-2515	2212-1PY-015**	E	35.70	31.90	31.20	29.95	26.25	24.35
800-2520	2212-1PY-030**	F	35.70	31.90	31 20	29.95	26.25	24.35
800-2530	2212-1PY-060**	G	35.70	31.90	31.20	29.95	26.25	24.35
800-2540	2212-1PY-118**	H	35.70	31.90	31.20	29.95	26.25	24.35
800-2548	2212-1PY-160**	I	43.00	38.50	37.50	35.60	32.10	29.95
800-2560	2212-1PY-190**	J	45.10	40.25	39.15	37.10	33.50	31.25

Timing Equipment, 452-463—Counters, 450-452

Timers and Time Switches

CRAMER RESET TIMERS


A


B

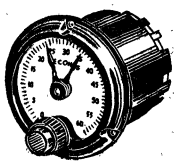
A MODEL 400S PLUG-IN RESET TIMERS. Setting pointer holds at set point, progress pointer shows time remaining. Momentary or sustained contact, interval or delay timing. Reset time, 300 msec, 10 amps resistive. 3 1/16" dia. x 4 5/32". 115 V, 60 Hz AC. Wt., 2 lbs.

Stock No.	Mfr's Type	Time Range	EACH 1-4	5-9	10-24	25-49	50-Up
765-0503	400S-60S	60 sec.	52.50	48.25	38.12	36.67	35.22
765-0501	400S-5M	5 min.	52.50	48.25	38.12	36.67	35.22
765-0502	400S-60M	60 min.	54.54	50.25	39.70	38.19	36.68
765-0500	400S-5H	5 hrs.	54.54	50.25	39.70	38.19	36.68

B MODEL 472 SURFACE-MOUNT AUTOMATIC RESET TIMERS. Synchronous motor driven with two cam-actuated switches, one solenoid-actuated. Differential clutch. For momentary or sustained contact, interval or delay timing. Repeat accuracy better than 1%. 3 21/32x3 25/32x2 7/8". U.L. Listed. 115 V, 60 Hz AC, *220 V. 1¼ lbs.

765-0516	472A-E15S	15 sec.	34.80	32.00	25.28	24.32	23.36
765-0519	472A-E30S	30 sec.	34.80	32.00	25.28	24.32	23.36
765-0521	472A-E60S	60 sec.	34.80	32.00	25.28	24.32	23.36
765-0513	472A-E5M	5 min.	34.80	32.00	25.28	24.32	23.36
765-0515	472A-E15M	15 min.	34.80	32.00	25.28	24.32	23.36
765-0518	472A-E30M	30 min.	34.80	32.00	25.28	24.32	23.36
765-0520	472A-E60M	60 min.	34.80	32.00	25.28	24.32	23.36
765-0512	472A-E5H	5 hrs.	37.00	34.20	27.02	25.99	24.97
765-0517	472A-E24H	24 hrs.	37.00	34.20	27.02	25.99	24.97
765-0514	472A-E5M*	5 min.	35.60	33.00	26.07	25.08	24.09

CRAMER INTERVAL TIMER

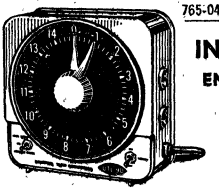

MODEL 241

MODEL 241. Automatic reset. Pushbutton start. Repeat accuracy: ±0.25% full scale. Silver-cadmium oxide, SPDT snap-action contacts rated 15 amps @ 125 V. Screw lug terminals. Size: 3¼" dia. x 3⅛" d. behind panel. 115 VAC, 60 Hz.

Stock No.	Type	Time Range	1-4	5-9	10-24	25-49	50-Up
765-0446	241	60 Sec.	35.60	33.50	28.48	26.47	22.46
765-0442	241	5 Min.	35.60	33.50	28.48	26.47	22.46
765-0443	241	15 Min.	35.60	33.50	28.48	26.47	22.46
765-0445	241	60 Min.	35.60	33.50	28.48	26.47	22.46
765-0441	241	5 Hrs.	35.60	33.50	28.48	26.47	22.46
765-0444	241	24 Hrs.	35.60	33.50	28.48	26.47	22.46

INDUSTRIAL TIMER

ENCLOSED AND PANEL MOUNT TIMERS

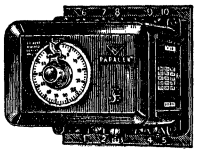

UTL Enclosed

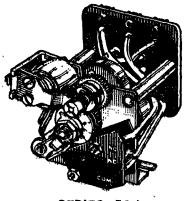
UTF Panel Mount

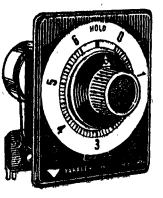
Both UTL and UTF models are manual set synchronous motor driven interval timers. UTL series features large 7" diameter dial for easy reading. Controls a circuit both during and after the timed interval. Toggle-switch controlled buzzer enables use as signalling timer or count-down clock. UTF series offer extreme accuracy in compact size. Have concentric knob and hand dial. SPDT switching. UTL series have receptacle terminals, UTF has terminal strip. Both have 10-ampere contact ratings at 115 V, 60 Hz AC. Av. shpg. wt. 1½ lbs.

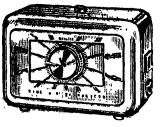
Stock No.	Mfr's Type	Max. Time Cycle	Dial Division	EACH
815-0570	UTL-15M	15 Min.	¼ Sec.	37.00
815-0574	UTL-60M	60 Min.	1 Sec.	30.00
815-0572	UTL-15H	15 Hour	15 Min.	37.00
815-0576	UTL-60H	60 Hour	1 Hour	30.00
815-0562	UTF-15M	15 Min.	¼ Sec.	26.00
815-0563	UTF-60M	60 Min.	1 Sec.	24.00
815-0564	UTF-15H	15 Hour	15 Min.	26.00
815-0568	UTF-60H	60 Hour	1 Hour	26.00

PARAGON TIME SWITCHES AND TIMERS


SERIES 500


SERIES 536


SERIES 2600


SERIES AT

SERIES FA AND FF

SERIES PW

SERIES SW

500 SERIES AUTOMATIC RESET

For staggered compressor starts, short cycle protection. Sub-panel mounting. Type *500-102-0 "on" delay, †501-102-0 interval, ‡502-102-0 "off" delay. 2-SPDT switches rated at 720 VA per pole. 0-60 sec., 1 sec. div. 4 5/16x4¼x4 3/16". ■U.L. Recog., C.S.A. Listed. 110-120 V, 60 Hz AC. Wt., 2½ lbs.

Stock No.	EACH 1-3	4-5	6-11	12-24
882-0051*	40.00	38.00	36.00	34.00
882-0052†	40.00	38.00	36.00	34.00
882-0053‡	40.00	38.00	36.00	34.00

536 SERIES AUTOMATIC RESET

Electromechanical time delay relays for plant process control. Ideal for use as staggered load start timers. *Type 536-021-0 "on" delay or †Type 536-121-0 "off" delay. Sub-panel mounting. 10 amps noninductive. SPDT. 60 sec. time range, 6 sec. divisions. Other types available with ranges from 15 sec. to 3 hrs. 3 3/4x2 3/4x3". For 110-120 V, 60 Hz AC. Shpg. wt., 1¼ lbs.

Stock No.	EACH 1-3	4-5	6-11	12-24
882-0054*	22.00	20.90	19.80	18 70
882-0055†	22.00	20.90	19.80	18.70

2600 MANUAL PRESET INTERVAL

Ideal for control of heating and air conditioning systems, amusement rides, pumps, motor control. Panel mounting. Hold position energizes a load without timing—must be manually terminated. SPDT. 10 amps non-inductive. *15 min. time range, 15 sec. div.; †60 min. time range, 60 sec. div. 4½x 3 13/16x3½". 110-120 V, 60 Hz AC. 1¾ lbs.

Stock No.	Mfr's Type	EACH 1-3	4-5	6-11	12-24
882-0062	2605-0*	15.00	14.25	13.50	12.75
882-0063	2607-0†	15.00	14.25	13.50	12.75

AT SERIES 60-MINUTE INTERVAL TIMERS

Preset timer shuts off after preset interval lapses. AT45-O rated 1600 watts; has buzzer that sounds at end of timed period. AT3160-O; 840 watts, no buzzer. 3⅜x5⅛x 2 3/16". U.L. recognized, C.S.A. listed. Supplied with 4 foot cord. 110-120 Volts, 60 Hz. Shpg. wt. 1½ lbs.

Stock No.	Mfr's Type	Descrip.	EACH 1-9	10-Up
882-0010	AT45-0	1600 Watt	13.30	10.64
882-0013	AT3160-0	840 Watt	9.15	7.29

FA AND FF SERIES INTERVAL TIMERS

Manually preset timer. Fits flush in outlet box. 13.8 amps, 120 V, nonind. 4½x2¾x 1 3/16". Ivory plate, gold color dial. ■U.L. Recog., C.S.A. 110-120 V, 60 Hz AC. ¾ lb.

Stock No.	Mfr's Type	Time Range	Div.	EACH 1-9	10-Up
882-0021	FF15-0	0-15 Min.	½ Min.	8.20	7.38
882-0022	FF51-0	0-60 Min.	1 Min.	8.20	7.38
882-0020	FA51-0	0-20 Hrs.	30 Min.	8.20	7.38

PW/SW PERCENTAGE TIMERS

Cycle repeater controls with percentage calibration on dials. Panel mount (PW) or surface mount (SW). Can be set to 100% ON or OFF if desired. SPDT switch rated at 15 amps non-inductive or ½ HP. Repeat accuracy: ±½%. For electric heat, chemical feed, lubrication, etc. Shpg. wt. 1 lb.

Stock No.	Mfr's Type	Range	EACH 1-3	4-5	6-11	12-24
882-0037	PW10M-0	10 Min.	21.45	20.38	19.31	18.23
882-0038	PW30M-0	30 Min.	21.45	20.38	19.31	18.23
882-0039	PW60M!0	60 Min.	21.45	20.38	19.31	18.23
882-0040	SW10M-0	10 Min.	21.45	20.38	19.31	18.23
882-0041	SW30M-0	30 Min.	21.45	20.38	19.31	18.23
882-0042	SW60M-0	60 Min.	21.45	20.38	19.31	18.23

Assorted Test Equipment, 477, 478, 480-482, 489, 492, 497, 500-502, 510-516

Precision Timers and Cycle Timers

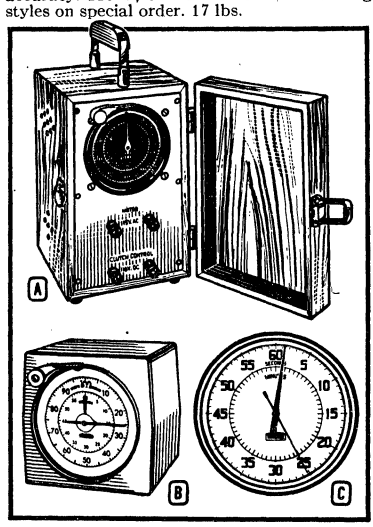
TIMERS SECTION

STANDARD ELECTRIC PRECISION ELECTRIC TIMERS

A Model AC-1 Cycle Counter. Excellent for portable use. Comes with carrying handle for that purpose. Total count is 60 seconds with 1/100 second scale and cycle divisions for easy readability. Accuracy is ±.01 second. Comes complete with high-grade rugged walnut-grain formica case which measures only 8¾x5¾x7½ inches. For use with 115 volts AC, 60 Hz. Weight is approximately 8 lbs., which is light enough for almost any portable application.

B "S" Series Elapsed-Time Timers. Supplied in 5x5x4¼" Kralastic case. Panel mount types require 4⅝" square hole. Pendant switch start/stop control on 3-foot cord on portable units; terminals on panel units. 5-foot power cord. Dial, 3 13/16" diameter. For use on 115 Volts AC, 60 Hz. Accuracy: S-1, ±.01 second; S-10, ±.02 second; S-6, ±.0002 minute; S-60, ±.1 second; SM—60, ±.002 minute. Average weight is only 5 lbs.

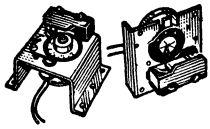
C Model SW-1 and SS-60 10" Dial Timers. Surface wall mounting with local start, stop and reset. Can be wired remote. SS-60 totalizes 60 minutes with 0.1 second accuracy; SW-1 totalized 60 seconds with .01 second accuracy. 115 V, 60 Hz AC. Other mounting styles on special order. 17 lbs.



Stock No.	Mfr's Type	Fig.	Description	Time Range	Scale Div.	EACH	2-Up
948-0401	S-1	B	Portable manual-reset	60 sec.	1/100 sec.	111.05	95.00
948-0402	S-1-ER	B	S-1 with electric reset	60 sec.	1/100 sec.	142.00	122.00
948-0403	S-1-P	B	Panel-mt. manual-reset	60 sec.	1/100 sec.	115.73	99.00
948-0404	S-1-P-ER	B	S-1-P with electric reset	60 sec.	1/100 sec.	147.29	126.00
948-0405	S-1-3H-10-P	B	S-1-P, with 3rd hand to totalize 10 minutes	60 sec.	1/100 sec.	174.18	149.00
948-0410	S-10	B	Portable manual-reset	1000 sec.	1/10 sec.	86.50	74.00
948-0411	S-10-ER	B	S-10 with electric reset	1000 sec.	1/10 sec.	118.06	101.00
948-0412	S-10-P	B	Panel-mt. manual-reset	1000 sec.	1/10 sec.	91.18	78.00
948-0413	S-10-P-ER	B	S-10-P; electric reset	1000 sec.	1/10 sec.	122.74	105.00
948-0406	S-6	B	Portable manual-reset	10 min.	1/1000 min.	107.54	92.00
948-0407	S-6-P	B	Panel-mt. manual-reset	10 min.	1/1000 min.	112.22	96.00
948-0460	S-60	B	Portable manual-reset	60 min.	1/5 sec.	81.83	70.00
948-0461	S-60-ER	B	S-60 with electric reset	60 min.	1/5 sec.	113.39	97.00
948-0462	S-60-P	B	Panel-mt. manual reset	60 min.	1/5 sec.	86.50	74.00
948-0463	S-60-P-ER	B	S-60-P; electric reset	60 min.	1/5 sec.	118.06	101.00
948-0360	SM-60	B	Portable manual-reset	60 min.	1/100 min.	86.50	74.00
948-0361	SM-60-P	B	Panel-mt. manual-reset	60 min.	1/100 min.	91.18	78.00
948-0010	AC-1	A	Cycle counter	60 sec.	1/100 sec.	196.39	168.00
948-0391	SW-1	C	10" wall-mount	60 sec.	1/100 sec.	178.85	153.00
948-0362	SS-60	C	10" wall-mount	60 min.	1/5 sec.	144.95	124.00

CRAMER CYCLE TIMERS

SINGLE POLE CYCLE TIMERS


524 527

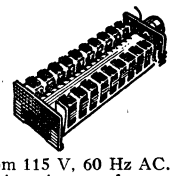
524 SERIES. Chassis only for single circuit repeat cycle control. Cam adjusts for operation over 2-98% of time cycle. SPDT switch rated 20 amps non-inductive at 125, 250 or 480 VAC. Repeat accuracy, ±0.9°. Order motor and gear separately. UL recog. 115 VAC. 2¾x3 5/16x2 17/32".
765-0524. Shpg. wt. 1½ lbs. **Each 10.75**

527 SERIES. Complete timer for continuous repeat cycle. SPDT switch, adj. cam, sync. motor. 115 V., 60 Hz. 2 11/16x3x2 11/32". 765-0530; 60 Sec., 765-0527; 5 Min., 765-0528; 30 Min., 765-0529; 60 Min. Wt. 1 Lb. ..... Each 14.25

HOW TO ORDER MODELS 524 AND 540

Choose basic chassis, either Model 524 single-pole or 540 multi-pole. Then select time cycle from chart below, and order appropriate motor and gear rack. **Example:** For 6-pole with 60-sec. cycle, order 6-pole chassis Model 540-6, motor 3MBO, gear rack B2-2926-7. **INDICATE COMPLETE STOCK NO. See below.**

MULTI-POLE CYCLE TIMERS



540 SERIES. Versatile multi-pole cycle timer on controls 2 to 10 independent circuits. Cams are individually adjustable over approximately 2 to 98% of total cycle; can provide any desired sequence or program. Chassis incorporates baseplate, cams and switches. SPDT switches rated 15 amps non-inductive at 115 VAC. Repeat accuracy, ±1.8°. UL recognized. For operation from 115 V, 60 Hz AC. **Order motor and gear rack separately from table at bottom of page.** Av. shpg. wt. 4 lbs.

Stock No.	Mfr's Type	Circuit	Overall Length	EACH
765-0540	540-2	2-pole	4 9/16"	19.75
765-0542	540-4	4-pole	5 9/16"	30.00
765-0544	540-6	6-pole	6 9/16"	41.55
765-0546	540-8	8-pole	7 9/16"	52.75
765-0548	540-10	10-pole	8 9/16"	66.00

MOTOR AND GEAR RACK SELECTION CHART FOR MODEL 524 AND 540 CYCLE TIMERS

Motor Speed	40 rpm	20 rpm	10 rpm	8 rpm	4 rpm	1⅓ rpm	⅔ rpm	⅙ rpm	1/18 rpm	1/45 rpm	⅔ rph	⅙ rph
Motor 524 Stock No.	1DK6 765-0401	1KK6 765-0403	3BK6 765-0405	3DK6 765-0407	3MK6 765-0409	4NK6 765-0411	5DK6 765-0413	6JK6 765-0415	7NK6 765-0417	8MK6 765-0419	8RK6 765-0421	9MK6 765-0423
Motor 540 Stock No.	1DB0 765-0400	1KB0 765-0402	3BB0 765-0404	3DB0 765-0406	3MB0 765-0408	4NB0 765-0410	5DB0 765-0412	6JB0 765-0414	7NB0 765-0416	8MB0 765-0418	8RB0 765-0420	9MB0 765-0422

Motors for models 524 and 540. Specify Type and Stock No. From above. ½ lb. 7.50

Cycle Time Gear Rack Number, for Model 524	Model 540	Sec.	Sec.	Sec.	Sec.	Sec.	Min.	Min.	Min.	Min.	Hours	Hours	Hours
B2-4804-01	B2-2926-01	3.0	6.0	12.0	15.0	30.0	1.5	3.0	12.0	36.0	1.5	3.0	12.0
B2-4804-02	B2-2926-02	3.5	7.0	14.0	17.5	35.0	1.75	3.5	14.0	42.0	1.75	3.5	14.0
B2-4804-03	B2-2926-03	4.0	8.0	16.0	20.0	40.0	2.0	4.0	16.0	48.0	2.0	4.0	16.0
B2-4804-04	B2-2926-04	4.5	9.0	18.0	22.5	45 0	2.25	4.5	18.0	54.0	2.25	4.5	18.0
B2-4804-05	B2-2926-05	5.0	10.0	20.0	25.0	50.0	2.5	5.0	20.0	60.0	2.5	5.0	20.0
B2-4804-06	B2-2926-06	5.5	11.0	22.0	27.5	55.0	2.75	5.5	22.0	66.0	2.75	5.5	22.0
B2-4804-07	B2-2926-07	6.0	12.0	24.0	30.0	60.0	3.0	6.0	24.0	72.0	3.0	6.0	24.0
B2-4804-08	B2 2926-08	6.5	13.0	26.0	32.5	65.0	3.25	6.5	26.0	78.0	3.25	6.5	26.0
B2-4804-09	B2-2926-09	7.0	14.0	28 0	35.0	70 0	3.5	7.0	28.0	84.0	3.5	7.0	28.0
B2-4804-10	B2-2926-10	7.5	15.0	30.0	37.5	75.0	3.75	7.5	30.0	90.0	3.75	7.5	30.0
B2-4804-11	B2-2926-11	8.0	16.0	32.0	40.0	80.0	4.0	8.0	32.0	96.0	4.0	8.0	32.0
B2-4804-12	B2-2926-12	8.5	17.0	34.0	42.5	85.0	4.25	8.5	34.0	102.0	4.25	8.5	34.0
B2-4804-13	B2-2926-13	9.0	18.0	36.0	45.0	90.0	4.5	9.0	36.0	108.0	4.5	9.0	36.0
B2-4804-14	B2-2926-14	9.5	19.0	38.0	47.5	95.0	4.75	9.5	38.0	114.0	4.75	9.5	38.0
B2-4804-15	B2-2926-15	10.0	20.0	40.0	50.0	100.0	5.0	10.0	40.0	120.0	5.0	10.0	40.0
B2-4804-16	B2-2926-16	10.5	21.0	42.0	52.5	105.0	5.25	10.5	42.0	126.0	5.25	10.5	42.0

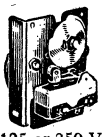
TO COMPLETE STOCK NO. add last two digits of **TYPE** to XX. Ex: 765-03XX Type B2-4804-1 is 765-0301. Type B2-4804-10 is 765-0310.

765-03XX. Gear Rack for Model 524. Specify type. ⅛ lb. . . 3.00
765-02XX. Gear Rack for Model 540. Specify type ⅛ lb. . . 3.00

TIMERS SECTION

Repeating-Cycle and Cam Timers

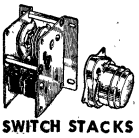
GENERAL TIME TYPE RG21 REPEATING-CYCLE TIMERS



Repeat cycle timers are designed to run continuously, repeating a set cycle of make-break switching operations as long as the motor is energized. This unit may be applied to operations requiring only a single time cycle. Wireable through contacts for 1-cycle limit. Adjustable timing-cycle cam. SPDT, 20-amp switch. 125 or 250 VAC, resistive, 50-60 Hz. ¼" shaft. 120 VAC. Size 3¼x 2⁹⁄₁₆x2⁹⁄₃₂". ■U.L. Recognized. Shpg. wt., 1 lb.

Stock No.	Type RG-	Time Range	EACH 1-9	10-24	25-49	50-99	100-Up
800-0312	21093	1 min.	14.70	12.84	12.12	11.41	10.69
800-0313	21094	5 min.	14.70	12.84	12.12	11.41	10.69
800-0315	21096	15 min.	14.70	12.84	12.12	11.41	10.69
800-0316	21097	30 min.	14.70	12.84	12.12	11.41	10.69
800-0317	21098	60 min.	14.70	12.84	12.12	11.41	10.69

SERIES RE62 REPEAT CYCLE MULTI-CAM TIMERS



SWITCH STACKS

Same specifications as RG21, except 2 to 6 switches may be actuated during cycle. Requires one motor, one or more switch stacks. Two-switch unit size, 2⁵⁄₁₆x3⁵⁄₃₂x3⁹⁄₁₆"; add ¹¹⁄₁₆" to depth for each additional switch. U.L. Recognized. *Number of switches.

Stock No.	Mfr's Type RE-	*	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
800-0276	62-091	2	13.60	12.56	11.91	11.24	10.58	9.92
800-0278	63-092	3	18.20	16.79	16.13	15.03	14.14	13.24
800-0280	64-093	4	22.80	21.00	19.91	18.80	17.69	16.58
800-0282	65-094	5	27.80	25.66	24.32	22.97	21.62	20.26
800-0284	66-095	6	32.40	29.89	28.33	26.74	25.17	23.60

DRIVE MOTOR SPECIFICATIONS

Order one with switch stacks for complete unit. *Cam shaft speed for one revolution. Prices below.

Stock No.	Mfr's Type	Time Range (*)	Stock No.	Mfr's Type	Time Range (*)
800-0150	MP10-390	7.5 sec.	800-0154	MP10-394	5 min.
800-0160	MP10-400	10 sec.	800-0155	MP10-395	10 min.
800-0151	MP10-391	15 sec.	800-0156	MP10-396	15 min.
800-0152	MP10-392	30 sec.	800-0157	MP10-397	30 min.
800-0153	MP10-393	1 min.	800-0158	MP10-398	60 min.
800-0161	MP10-401	2 min.	800-0159	MP10-399	4 hrs.

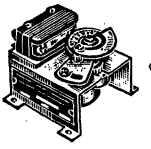
1-4	5-9	10-24	25-49	50-99	100-249
7.05	6.53	6.18	5.84	5.50	5.16

INDUSTRIAL TIMER CM, MC AND RC SERIES CAM TIMERS

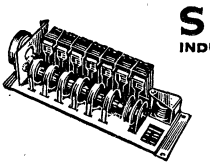
GEAR-AND-RACK ASSEMBLIES CHART

Stock No.	Gear As'bly Type No.†	Foundation Units CM-2 MC-2 RC-2	CM-4 MC-4 RC-4	CM-5 MC-5 RC-5	CM-6 MC-6 RC-6	CM-8 MC-8 RC-8	C-M10 MC-10 RC-10
		Overall Time Cycles Available S=Seconds M=Minutes H=Hours					
815-0129	E-12	10S	40S	2M	3M20S	20M	2H
815-0130	E-15	12½S	50S	2M30S	4M10S	25M	2H30M
815-0061	C-12	15S	60S	3M	5M	30M	3H
815-0063	C-14	17½S	70S	3M30S	5M50S	35M	3H30M
815-0028	B-12	20S	80S	4M	6M40S	40M	4H
815-0065	C-18	22½S	90S	4M30S	7M30S	45M	4H30M
815-0030	B-15	25S	100S	5M	8M20S	50M	5H
815-0010	A-12	30S	2M	6M	10M	60M	6H
815-0012	A-14	35S	140S	7M	11M40S	70M	7H
815-0014	A-16	40S	160S	8M	13M20S	80M	8H
815-0016	A-18	45S	3M	9M	15M	90M	9H
815-0018	A-20	50S	200S	10M	16M40S	100M	10H
815-0020	A-22	55S	220S	11M	18M20S	110M	11H
815-0022	A-24	60S	4M	12M	20M	2H	12H
815-0024	A-30	75S	5M	15M	25M	2H30M	15H
815-0026	A-36	90S	6M	18M	30M	3H	18H

†GEAR-AND-RACK ASSEMBLY.....Each 1.75



Series CM



Series RC

SINGER
INDUSTRIAL TIMER DIV.

Corrosion-Resistant Aluminum Cams Have Single Screw Adjustment For Setting On/Off Period From 2% to 98% Of The Complete Time Cycle

HOW TO ORDER CAM TIMERS

Foundation Units: Use RC series for single cycle. MC or CM for continuous rotation. Use CM series for single switch. MC or RC for multi-switch. Select time cycle desired from gear and rack assemblies chart; determine the specific foundation unit from the column head directly above time cycle. **NOTE: Foundation units determine length of time cycle, for example, RC, CM, or MC-5 handle time cycles from 2 M to 18 M. Select your specific time cycle closest to middle of complete range.** *Specify Stock No. and Mfr's type of both gear and rack assemblies and foundation unit.*

SERIES CM RECYCLING-CAM FOUNDATION UNITS (Order Gear-and-Rack Assembly Separately, Above)

Series CM Recycling Timer. Repeats a definite, electrical "Off-On" cycle continuously. Corrosion-resistant aluminum cams have single screw adjustment for setting "On" or "Off" period from 2% to 98% of complete cycle. Contacts rated 10 amps at 115 VAC or 220VAC, 60 Hz. U.L. Recog. Consists of two units: a gear-and-rack assembly and CM chassis-mounted foundation. 2⁷⁄₁₆x3x3¹⁄₁₆". 1½ lbs.

Stock No.	Mfr's Type	EACH 1-3	4-5	6-11	12-24	25-49	50-99	100-249	250-499
815-0085	CM-2	18.75	17.81	16.88	15.94	15.00	14.06	13.13	12.19
815-0086	CM-4	18.75	17.81	16.88	15.94	15.00	14.06	13.13	12.19
815-0087	CM-5	18.75	17.81	16.88	15.94	15.00	14.06	13.13	12.19
815-0088	CM-6	18.75	17.81	16.88	15.94	15.00	14.06	13.13	12.19
815-0090	CM-8	18.75	17.81	16.88	15.94	15.00	14.06	13.13	12.19
815-0092	CM-10	18.75	17.81	16.88	15.94	15.00	14.06	13.13	12.19

SERIES MC AND RC FOUNDATION UNITS (Order Gear-and-Rack Assembly Separately, Above)

Series MC Multi-Cam Recycling Timer. Identical to CM timer above, but controls more than one circuit. Cams are mounted on single driving shaft, coupled to the motor by a gear-and-rack assembly. See "How to Order" above, right.

Series RC Single-Cycle Multi-Cam Timer. Provides a single timed electrical cycle upon momentary actuation from a remote position. Cam control multiple circuits. Cams individually adjustable. Has all the advantages of MC timers plus the single-cycle homing control.

2-CIRCUIT Shpg. wt. 2 lbs.

815-0201	MC-2-2	33.75	32.06	30.37	28.69	27.00	25.31	23.63	21.94	815-0347	RC-2-2	48.75	46.31	43.87	41.44	39.00	36.56	34.12	31.69
815-0210	MC-4-2	33.75	32.06	30.37	28.69	27.00	25.31	23.63	21.94	815-0356	RC-4-2	48.75	46.31	43.87	41.44	39.00	36.56	34.12	31.69
815-0219	MC-5-2	33.75	32.06	30.37	28.69	27.00	25.31	23.63	21.94	815-0365	RC-5-2	48.75	46.31	43.87	41.44	39.00	36.56	34.12	31.69
815-0228	MC-6-2	33.75	32.06	30.37	28.69	27.00	25.31	23.63	21.94	815-0374	RC-6-2	48.75	46.31	43.87	41.44	39.00	36.56	34.12	31.69
815-0236	MC-8-2	33.75	32.06	30.37	28.69	27.00	25.31	23.63	21.94	815-0383	RC-8-2	48.75	46.31	43.87	41.44	39.00	36.56	34.12	31.69
815-0244	MC-10-2	33.75	32.06	30.37	28.69	27.00	25.31	23.63	21.94	815-0392	RC-10-2	48.75	46.31	43.87	41.44	39.00	36.56	34.12	31.69

4-CIRCUIT Shpg. wt. 2 lbs.

815-0203	MC-2-4	50.75	48.21	45.67	43.14	40.60	38.06	35.53	32.99	815-0349	RC-2-4	66.25	62.94	59.63	56.31	53.00	49.69	46.38	43.06
815-0212	MC-4-4	50.75	48.21	45.67	43.14	40.60	38.06	35.53	32.99	815-0358	RC-4-4	66.25	62.94	59.63	56.31	53.00	49.69	46.38	43.06
815-0221	MC-5-4	50.75	48.21	45.67	43.14	40.60	38.06	35.53	32.99	815-0367	RC-5-4	66.25	62.94	59.63	56.31	53.00	49.69	46.38	43.06
815-0230	MC-6-4	50.75	48.21	45.67	43.14	40.60	38.06	35.53	32.99	815-0376	RC-6-4	66.25	62.94	59.63	56.31	53.00	49.69	46.38	43.06
815-0238	MC-8-4	50.75	48.21	45.67	43.14	40.60	38.06	35.53	32.99	815-0385	RC-8-4	66.25	62.94	59.63	56.31	53.00	49.69	46.38	43.06
815-0246	MC-10-4	50.75	48.21	45.67	43.14	40.60	38.06	35.53	32.99	815-0394	RC-10-4	66.25	62.94	59.63	56.31	53.00	49.69	46.38	43.06

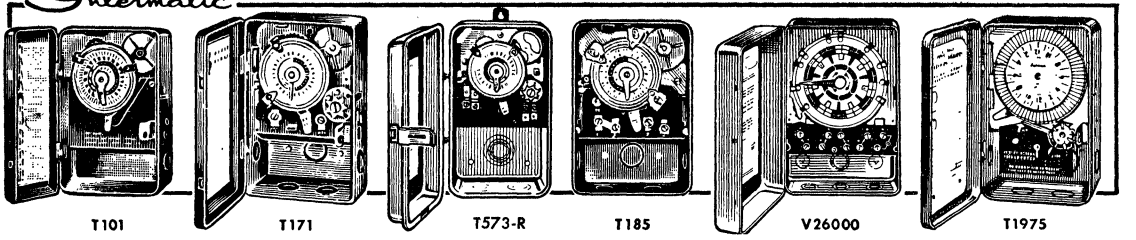
6-CIRCUIT Shpg. wt. 4 lbs.

815-0205	MC-2-6	67.25	63.89	60.53	57.17	53.80	50.44	47.08	43.71	815-0351	RC-2-6	83.75	79.56	75.38	71.19	67.00	62.81	58.63	54.44
815-0214	MC-4-6	67.25	63.89	60.53	57.17	53.80	50.44	47.08	43.71	815-0360	RC-4-6	83.75	79.56	75.38	71.19	67.00	62.81	58.63	54.44
815-0223	MC-5-6	67.25	63.89	60.53	57.17	53.80	50.44	47.08	43.71	815-0369	RC-5-6	83.75	79.56	75.38	71.19	67.00	62.81	58.63	54.44
815-0232	MC-6-6	67.25	63.89	60.53	57.17	53.80	50.44	47.08	43.71	815-0378	RC-6-6	83.75	79.56	75.38	71.19	67.00	62.81	58.63	54.44
815-0240	MC-8-6	67.25	63.89	60.53	57.17	53.80	50.44	47.08	43.71	815-0387	RC-8-6	83.75	79.56	75.38	71.19	67.00	62.81	58.63	54.44
815-0248	MC-10-6	67.25	63.89	60.53	57.17	53.80	50.44	47.08	43.71	815-0396	RC-10-6	83.75	79.56	75.38	71.19	67.00	62.81	58.63	54.44

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's 480-499—Scopes, 503-505

Time Switches and Timers

Intermatic



T101 T171 T573-R T185 V26000 T1975

For dependable automatic control of lighting, signs, process control, heating and cooling, etc. Most have "Alloy-T" tungsten rated contacts that handle surges up to 8 times rating. Large, easy-to-read dials. Heavy gauge steel cases with hinged cover, padlock hasp. ■U.L. Recog.; C.S.A. Listed.

TYPE T101 24-HOUR TIME SWITCH

SPST switch provides 1 to 12 "on-off" operations per day. Minimum setting, one hour. Rated 40 amps inductive, 4375 watts; 2 hp motor. 5x3x7⅞". 125 V, 60 Hz AC. 3 lbs.
818-1417. 1-9. Ea. 13.11 10-Up. Ea. 11.34
TYPE T103. As above, except DPST.
818-1420. 1-9. Ea. 14.07 10-Up. Ea. 12.64
TYPE T104. Above, except DPST, for 250 V.
818-1421. 1-9. Ea. 15.36 10-Up. Ea. 13.29
TYPE P101. Same as T101 except portable, with 2-prong cord set, receptacle. 10 amps.
818-1413. 1-9. Ea. 14.07 10-Up. Ea. 12.64

TYPE T171 "SKIPPER". Same as T101 but permits omitting selected days of week cycle.
818-1450. 1-9. Ea. 16.88 10-Up. Ea. 14.59
TYPE T173. Same as T171, except DPST.
818-1452. 1-9. Ea. 18.37 10-Up. Ea. 15.89
TYPE T174. Same except DPST, for 250 V.
818-1453. 1-9. Ea. 19.12 10-Up. Ea. 16.54
TYPE T175. Same as T171, except SPDT.
818-1454. 1-9. Ea. 18.37 10-Up. Ea. 15.89

T573-R HEAVY-DUTY TIME SWITCH

Rugged switch for indoor or outdoor mounting. Has 24-hour dial and skipper feature that omits selected days of week from time cycle. DPST contacts rated 55 amps inductive, 6875 watts, per pole; 2 hp motor load. Raintight case, 5½x3 9/16x9⅝". Rated for 125 V, 60 HZ AC. Wt., 4 lbs.
818-1520. 1-9. Ea. 28.52 10-Up. Ea. 24.67

TYPE T185 DELUXE TIME SWITCH

Provides up to 12 independently controlled "on-off" cycles. Adjustable from 5-60 minutes. Minimum interval, 2 hours. Can be used as SPST-NO; SPST-NC; or SPDT, alternate open and closed. Rated 40 amps (4375 watts, tungsten) at 125 VAC. With 3 triggers (1 for each cycle); up to 12 can be used. Tungsten rated for incandescent light loads with a surge more than 8 times normal. 7¾x5x3". U.L. Listed. For 110-120 V, 60 Hz. 3 lbs.
818-1465. 1-9. Ea. 17.25 10-Up. Ea. 14.92

V26000 7-DAY TIME SWITCH

With 7 sets of trippers to set a different On-Off program each day of the week. For heating, pumps, other single to three-phase loads. Up to 4 operations per day; 3-hour minimum interval. 40 amps tungsten per pole; 690 VA pilot duty; 1 hp. 10⅞x7⅜x3⅝". ■U.L. Recog. 125 V, 60 Hz. 6¼ lbs.
818-1570. V26001 4PST.
818-1572. V26003 4P: 2N.O.-S N.C.
1-9.....Each 29.64 10-Up.....Each 25.64

T1975 "SKIPPER" PROGRAM TIMER

"Supervisor" with 96 trippers for 48 "on" and 48 "off" operations every 24 hours. Min. interval, 15 minutes. For full-time control of heating, air conditioning, etc." Skipper" feature omits selected days. Has 7-day Skipper wheel with handy push-pull tabs. SPDT switch rated 20 amps at 125 V, 60 Hz AC. Synchronous, self-start motor, snap-out mechanism. ■U.L. Recog. 3¾ lbs.
818-1550. 1-9. Ea. 29.28 10-Up. Ea. 25.32

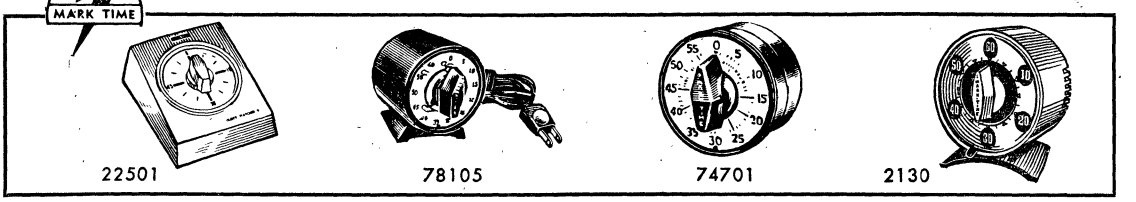
TRIPPERS

TYPE 107T19GR ON-CUTOFF TRIPPER. For "Skipper" types only. Wt., 3 oz.
818-1595.....Each .42
TYPE 79T8A SKIPPING SCREWS. For "Skipper" types only. Shpg. wt., 8 oz.
818-1585. Pkg. of 2.....Per Set .17

EXTRA TRIPPER. For T185 only. Cam can be set for duration of "on-off" cycle.
818-1466. Wt. 4 oz.....**Each 1.67**
TYPE 107T8A "ON AND OFF" TRIPPERS. For all Intermatic switches (except T185).
818-1590. Wt. 2 oz.....**Per Set .42**

MARK-TIME AUTOMATIC TIMER AND TIME SWITCHES

MARK TIME



22501 78105 74701 2130

MODEL 22501 "LONG RING" BELL TIMER

Times intervals up to 60 minutes with loud bell tones. Spring-driven. Ideal for office or lab. White plastic finish. Size, 5½x4x2". Shpg. wt. 12 oz.
859-1241. 1-4....Ea. 4.98 5-11....Ea. 4.66 12-Up....Ea. 4.19

SERIES 78100 PROFESSIONAL TIME SWITCHES

AC receptacle turns off devices after preset time. 10 amps, 125 VAC. *Designed for timing developers, enlargers, etc.; adjustable stop for repeat settings; "hold" feature. ■U.L. Recog., C.S.A. Listed. 3⅜x3¾x3½". 110-120 V, 60 Hz AC. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Maximum Setting	EACH 1-4	5-11	12-Up
859-1261	78174*	60 Seconds	8.77	7.88	7.00
859-1258	78104	30 Minutes	8.33	7.46	6.63
859-1259	78105	60 Minutes	8.33	7.46	6.63
859-1260	78126	12 Hours	8.33	7.46	6.63

PHOTOGRAPHIC TIMER

Type 56407. Not illus.; styled like 78105; non-electric. Adjustable stop for easy dark room settings. Up to 30 minutes. Shpg. wt. 1 lb.
859-1251. 1-4....Ea. 6.65 5-11....Ea. 5.96 12-Up....Ea. 5.30

STANDARD BUILT-IN TIME SWITCHES

SPDT switches easily set for "off-type" or "on-type" use, 2 9/16x1 19/32". Rated 20 amps at 125-240 VAC. For panel or 4" octagon switch box. Satin-chrome dial, black knob. ■U.L. Recog. 9 oz.
859-1254. *Type 74701.* For up to 15-minute intervals.
859-1255. *Type 74702.* For up to 30-minute intervals.
859-1256. *Type 74703.* For up to 60-minute intervals.
1-4.....Ea. 7.31 5-11.....Ea. 6.56 12-Up.....Ea. 5.83

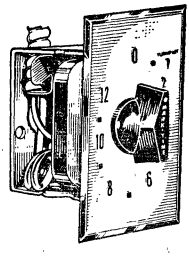
MODEL 2130 TWO-SPEED BELL TIMER

- **Special Timing Switch Gives Two Timing Positions**
- **Times in Seconds up to 6 minutes or in minutes up to 60**
- **Flexibility Allows Timing of Virtually Any Activity**

Here's a unit that's two timers in one. A flick of a switch gives short or long timings. No more guessing as to how long something has been working—no more costly and disappointing mistakes. You know for sure when what you are timing is ready, when it's finished to perfection. Times in seconds up to six minutes or in minutes up to 60 minutes. Use short-timing position for cake mixing, photography, telephone use, etc. Use long-timing for cooking, sun lamps, exercising. Bell-tone signals when time is up. Spring-powered. Upright case on non-tip pedestal. 4" dia., 2½" deep. Wt. 18 oz.
859-1230. 1-4....Ea. 6.01 5-11....Ea. 5.33 12-Up....Ea. 4.79

WALL-BOX TIME SWITCHES

Fit std. wallbox. Automatically turn off devices after preset time. 20 amps, 125V. *"Hold" feature for continuous use. ■U.L. Recognized, C.S.A. Listed. 110-120 V, 60 Hz AC. Wt., 9 oz.

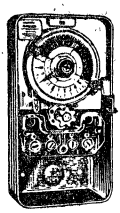


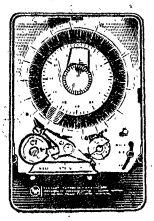
Stock No.	Mfr's Type	Max. Setting	EACH 1-4	5-Up
859-1266	90004	5 Minutes	6.76	5.99
859-1267	90005	15 Minutes	6.76	5.99
859-1268	90006	30 Minutes	6.76	5.99
859-1271	90021*	3 Minutes	6.76	5.99
859-1272	90024*	60 Minutes	6.76	5.99
859-1270	*90015**	*12 Hours*	6.76	5.99

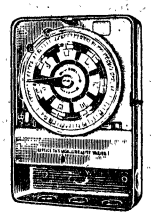
Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

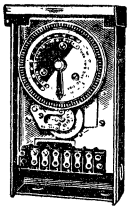
■ Recognized Under the Component Program of Underwriter's Laboratories, Inc.

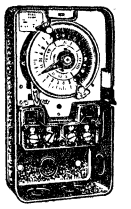
Paragon Time Switches for Industry


SERIES 4000


23001-OS


SERIES 7000


SERIES 1015


SERIES 4000SZ

4000 24-HOUR 40-AMP TIME SWITCHES

AC timers. Snap-out movement. Up to 7 on-off operations per day. Minimum 90 min. between operations. 4800 watts tungsten load per pole at 120V. *Skip-A-Day omits selected day(s). Set of on-off trippers. 7 13/16x4 1/8x2 15/16".

882-0075. 4001-0 SPST. 1-2.....Ea. 12.36
3-9.....Ea. 11.30 10-Up.....Ea. 10.69
882-0076. *4003-OS. DPST.....Ea. 17.62
882-0078. *4005-OS. SPDT.....Ea. 17.62
2-9.....Ea. 16.50 10-Up.....Ea. 15.24

EXTRA TRIPPERS

Stock No.	Type	Set of	For
882-0045	X-2772	On-Off Trippers	4000
882-0046	X-3495	6 Cutout (Skip-A-Day) Pins	4000S
882-0048	X-4299	On-Off Trippers	7000
882-0047	X-3596	5 On-Off Dial Pins	8025
882-0049	X-4444	6 Regular Trippers, Skip, or Prewarn	23000
882-0050	X-4445	6 Half Trippers for Main Signal	23000

Per Set.....42

23001-OS PROGRAMMER

Prewarning rings 1-3 minutes before main signal. Timed signals adjustable 4-60 secs. 24-hour dial in 5-minute increments. Skip-A-Day—signals can be omitted for any 12 or 24-hour period. Also has manual operation. SPST, 5 amps, 120 V. Nine regular trippers for Skip-A-Day, 12 regular trippers, 24 half-trippers for main and/or prewarning signals. 10 7/8x7 3/8x3 5/8". For 110-120 V, 60 Hz AC. Shpg. wt. 8 1/2 lbs.

882-0111. Ea. 80.13 2-Up.....Ea. 72.37

7000 7-DAY SKIP-A-DAY SWITCHES

Up to 4 automatic on-off operations per day or 28 per week. Any day or days can be omitted. Make settings week in advance. 3 hrs. min. between operations. 7-day dial. With 7 sets of trippers. For 110-120 V, 60 Hz AC.

WITH 7-DAY DIAL. 7007-0, 4PST, N.O., 40-amp, T-rated. 7008-0, 4P, 2 N.O., 2 N.C., 40 amp. 10 7/8x7 3/8x3 5/8". 6 1/2 lbs.

882-0090. 7007-0. **882-0091.** 7008-0.
Ea. 27.70 2-9....26.00 10-Up....24.02

SERIES 1015 ON-OFF, SKIP-A-DAY

Type 1015-CRS. For traffic signals, music systems, more. 24-hour dial equipped with 96 self-retaining trippers. Operation for any 15 min. period per 24 hrs. obtained by sliding the tripper in or out with fingers. Skip-A-Day dial permits skipping pre-selected days of the week. For indoor-outdoor applications. One control for two voltages. SPDT. 10 amps at 120 VAC; 5 amps at 240 VAC. 10x5 1/2x4". Shpg. wt. 8 lbs.

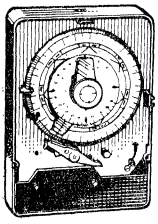
882-0056. Type 1015-CRS.....Ea. 35.64
2-Up.....Ea. 28.60

4000SZ ASTRO® DIAL SKIP-A-DIAL

Astro Dial allows the time control to operate in relation to the setting of the sun. It can be set to come "on" at sunset and "off" at sunrise, or "off" at any preselected time between 9:30 pm and 2:30 am. Resetting the time control with seasonal changes is unnecessary. Skip-A-Dial eliminates operation on preselected days. T-rated at 40-amps. With indoor case. 7 3/16x4 1/8x2 15/16". 110-120 V, 60 Hz AC. 3 1/2 lbs.

882-0077. 4003-OSZ. DPST Ea.....27.77
2-Up.....23.04
882-0079. 4005-OSZ. SPDT. Ea.....27.77
2-Up.....23.04

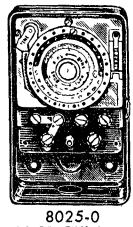
OFFICE/PLANT 7-DAY PROGRAM CONTROL FOR COMPLETE TIMING USES



Specially designed for security systems. 7-day dial allows automatic "ON-OFF" operation at different hours each day of the week. Any day or days of the week can be omitted without disrupting the weekly schedule. "ON" settings can be set as short as 90 min. Available in for different mounts: mechanism in steel case; in flush case; panel mount; in U bracket. Switch cap., 5 amps. Pilot duty, 125 VA. Timing motor, 120 V, 60 Hz AC.

Stock No.	Mfr's Type	Description	EACH 1-9	EACH 10-Up
882-0065	27001-0	Indoor Type Case	65.52	52.50
882-0125	27001-0M	Movement Only, for Panel Mount	65.52	52.50
882-0134	27031-0	Flash Mounted Case	87.43	69.50
882-0122	28001-0B	Bracket Mounted	65.52	52.50

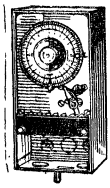
ALL-PURPOSE SWITCH

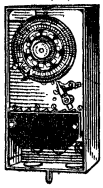

8025-0

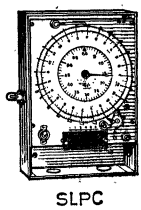
TYPE 8025-0. Offers dependable, low-cost operation for a wide variety of industrial/commercial applications. Allows 1-12 automatic operations per day with adjustable 30 seconds to 27 1/2 min. "on" time, two hours minimum between each. Rated 40 amps (2 hp), 120 V. With 4 sets of on-off trippers. 7 3/8x4 11/16x4". 110-120 V, 60 Hz AC. 3 1/2 lbs.

882-0105. Ea. 23.52 2-9 21.30 10-Up 19.47

LUMENITE AUTOMATIC TIME SWITCHES WITH POWER FAILURE-SAFE FEATURE


LW


W


SLPC

SERIES LW TIME SWITCHES

Equipped with slow-speed high-torque, synchronous motor. Load may be programmed over a 24-hour period by attaching "On" and "Off" trippers to appropriate time intervals. All have 20 amp switch capacity, minimum of 30 minute interval between operations. Gray hammertone finish. 110-120 V, 60 Hz AC. 10x4 7/8x4". Series LW-A.9 has spring reserve motor which will operate clock for 20 hours should AC power fail. 1 lb.

Stock No.	Mfr's Type	Contact Action	EACH 1-5	EACH 6-11	EACH 12-Up
846-8020	LW-112	SPDT	27.50	24.25	21.25
846-8022	LW-112-A.9	SPDT	68.00	61.00	48.50
846-8027	LW-122	DPDT	31.50	28.50	22.50
846-8031	LW-122-A.9	DPDT	72.00	65.00	49.50

SERIES W TIME SWITCHES

The seven-day equivalent to the LW series described at left. Provide a preset program of operation for one week; operations as close as two hours apart instead of thirty minutes. Series W-A.9 equipped with spring reserve motor should AC power failure occur. Clock will operate 20 hours. Shpg. wt. 1 lb.

Stock No.	Mfr's Type	Contact Action	EACH 1-5	EACH 6-11	EACH 12-Up
846-8070	W-112	SPDT	31.50	28.50	22.50
846-8072	W-112-A.9	SPDT	72.00	65.00	49.50
846-8077	W-122	DPDT	32.00	29.00	23.00
846-8081	W-122-A.9	DPDT	76.00	68.00	52.50

SLPC TIME SIGNAL PROGRAM CLOCKS

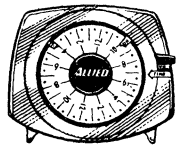
Provides a variable 0-60 second signal or switch closure at predetermined times during 24 hours. Minimum of 5 minutes between operations. Sunday and holiday skip feature. Typical applications include the signaling of coffee breaks, lunch hours or closing times for factories and schools. Gray crackle finish. For 110V, 60 Hz AC. 20-amp switch. 12x8x4". Shpg. wt. 2 lbs.

Stock No.	Mfr's Type	Amps	Watts	Circuits	EACH 1-5	EACH 6-11	EACH 12-Up
846-8052	SLPC-1003	10	1000	1	95.00	85.50	60.00

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

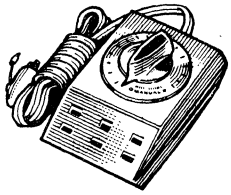
Micronta 24-Hour Timers for Dependable Control

MODEL 63-857 ALL-PURPOSE TIMER HANDLES A VARIETY OF EQUIPMENT



Extremely versatile timer has hundreds of uses around the plant, office, store, or home. Turns lights or appliances ON and OFF at preset times. Programed control of lights discourages prowlers by giving your property a "someone is there" look while you're away. Operation is repeated automatically every 24 hours; time never needs resetting. Easy to use—lights or appliances plug into timer, then timer plugs into wall outlet. Turns appliances ON at the desired time, turns them OFF from 15 minutes to 23½ hours later. Operates on 125 volts and handles 1875 watts total power. Has 6-ft. line cord with plug. Large 24-hour dial has one ON and OFF control. Size, 5x4x 2½". Complete with instructions. U.L. Listed. AC.
910-0005. Shpg. wt. 2 lbs. **7.95**

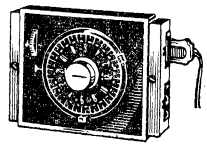
MODEL 63-633 4-HOUR TIMED APPLIANCE EXTENSION CORD



- Use As Time Switch, Extension Cord, 3-Way AC Outlet
- Control Up to 3 Appliances

Times small appliances or lights and turns them off at a preset time up to four hours. Simply insert plug into any wall outlet, plug up to 3 devices into 3-way outlet, and set knob for desired time cycle. It is also an extension cord to bring power to an area of the room having no outlet. When used like this, the timing feature still performs to turn off appliances or lights at a preset time. Or knob can be set at manual position for use as an ordinary extension cord without timing. Operation of timing feature is easy: just turn knob to desired shutoff time and automatic switch turns appliances off. SPST switch, 10 amps, 125 VAC. Cream base with brass-finished dial plate. 5½-ft. rubberized cord with plug. U.L. Listed. AC.
910-0006. Shpg. wt. 1 lb. **6.95**

MODEL 63-860 24-HOUR TIMER REPLACES WALL-SWITCH, OUTLET

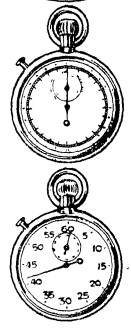


Offers built-in convenience. Installs easily and quickly in electrical box, replacing wall-switch or baseboard outlet. Has two receptacles: one for automatic time control, one continuously on for regular electric service. Appliances and lights plugged into the timed outlet are turned ON and OFF at the times you preset on the control dial; timer repeats automatically each 24 hours without manual resetting. Has 15 min.-23½ hour timing range. 125V, 1875W. U.L. Listed. AC.
910-0004. Shpg. wt. 2 lbs. **9.95**

MODEL 63-620 CLOCK WATCHER TIMER

Times intervals up to 60 minutes with bell tone. Spring driven, requires no AC power. Great for appliances, lighting displays, etc. Handsomely styled with white enamel finish. Protective, no-mar base won't tip. Inclined dial.
910-0003. Shpg. wt. 12 oz. **3.99**

POPULAR SWISS JEWELED STOPWATCHES FOR TIMING ANY EVENT OR OPERATION

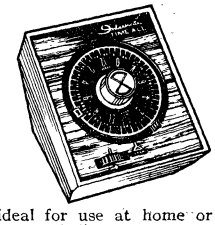


SPORTS MODEL 63-635. Accurate stopwatch for all sports events. Measures split-second finish time accurately and easily. Measurements are 1/10 second. Outer dial registers up to 30 seconds. Small hand counts up to 15 minutes. START, STOP, CONTINUE controls work from crown. Side-button for return to zero. One jewel.
910-0002. Shpg. wt. 1 lb. **10.95**

1/5 SECOND TIME-OUT MODEL 63-611. Inner dial registers up to 30 minutes. START, STOP, CONTINUE controls work from crown. Side-button for return to zero. Easy to read and use. One jewel.
910-0001. Shpg. wt. 1 lb. **10.95**

INTERMATIC "TIME-ALL"

MODEL E911 24-HOUR TIMER



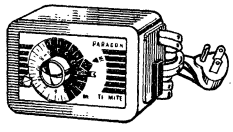
- Offers Dependable Control of All Appliances and Lights
- Easy-to-Read Face with 24-Hour AM and PM Divisions
- Automatically Repeats Time Cycle Every 24 Hours

Compact, automatic timing device is ideal for use at home or place of business. Lets you program an on/off light pattern to simulate occupancy while away from the premises, turn air conditioners on or off, control lighting displays, much more. The E911, once set, can be forgotten, for it automatically repeats every 24 hours. Angled face for easy access and viewing, time-arrow on dial to show actual time, controls at top for easy access. Dial has AM and PM divisions for full 24-hour period. Single direction on/off switch and push-pull activation/deactivation knob. Minimum on time, 15 minutes, maximum off time, 23 hours, 45 minutes. Durable one-piece case, color-coded on-off trippers. 3¾x4½x3½". 5-ft. cord. 120 VAC, 15 A, 1875 W. U.L. Listed.
818-1000. Shpg. wt. 2 lbs. **Ea. 11.24** 2-Up ..... **Ea. 9.70**

MODEL E1010 WALL-SWITCH TYPE TIMER

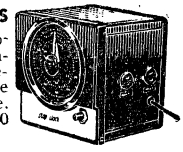
No need to hide your timer—mounts in any standard wall-switch box and replaces the switch to give you full 24-hour ON/OFF control of lights or appliances. Override switch allows manual control. Great for stores or in homes. Discourages prowlers by normal on/off programing of lights. Turns on at time programed, turns off from 15 minutes to 23¾ hours later. For 2x3x2" box. 5⅛x 3 11/16x2¼". 120 VAC, 15A, 1875W. U.L. Listed.
818-1001. 1½ lbs. **Ea. 9.99** 2-Up ..... **Ea. 7.97**

PARAGON AIR-CONDITIONER TIMERS FOR 24-HOUR CONTROL



Turns air conditioners ON and OFF at times you select. Has 24-hour dial for full 24-hour control. Minimum time between ON and OFF settings is 2 hours. Rated 12 amps at 120V and 240V AC. Four no-mar feet for desk use of timer, two holes in the backplate for wall mounting. Beige case, 2⅝x4⅛x2⅜". With 5-ft. cord, right-angle grounding plug, 3-wire receptacle. Shpg. wt. 1¾ lb.
882-0001. Type AC1-0 for 120 Volts. **Ea. 11.24** 2-Up .... **Ea. 10.88**
882-0002. Type AC4-20 for 208-240 Volts. **Ea. 12.75** 2-Up **11.88**

INDUSTRIAL TIMER® STOP CLOCKS



Measure time intervals for process and production controls, time studies, more. Synchronous motor, cone clutch 360° engagement, automatic wear compensation. Remote start-stop, reset receptacles on side of case. Front-panel reset button. Reset time, .010 sec. 5x5x4 25/32". 115V, 60 Hz AC. 5 lbs.

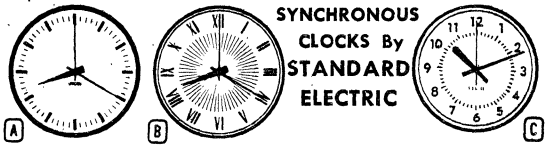
MODEL SC-100. Measures 1/100 second to 60 seconds.
815-0435. 1-9 ..... **Each 68.50**
10-24 ..... **Each 58.23** 25-49 ..... **Each 54.80**
50-99 ..... **Each 51.38** 100-259 ..... **Each 47.95** 250-Up ..... **Each 44.53**

MODEL SC-60. Measures 1 second to 60 minutes.
815-0432. 1-9 ..... **Each 68.50**
10-24 ..... **Each 58.23**
25-49 ..... **Each 54.80**
50-99 ..... **Each 51.38**
100-249 ..... **Each 47.95**
250-Up ..... **Each 44.53**

SETH-THOMAS ACROTYNE COMMERCIAL WALL CLOCK

Cordless—operates about a year on one "D" cell. Transistorized with electronic circuit tuning fork and magnetic coupling. Adjustable within ±2 seconds per day. White convex dial; black numerals, hands; red sweep second hand. Steel case. 14½" dia. 2¾" depth. 12" dial. 4½ lbs.
942-0613. No. 612 Bronze. Ea. **40.00**
2-Up ..... **Each 32.50**
942-0612. No. 613 Chrome. Ea. **42.00**
2-Up ..... **Each 35.00**

SYNCHRONOUS CLOCKS By STANDARD ELECTRIC

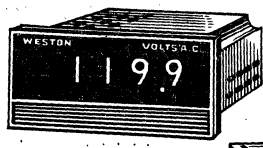


Handsome, synchronous motor clocks suitable for school or office. Surface wall mounting. Black numerals or markers, hour and minute hands. Red sweep second hand. 12" dial with round case. Senate, white dial, black case. Tempo, Apollo, white dial, aluminum case. Forum, satin bronze finish dial, bronze case. 115V, 60 Hz AC. 9 lbs.

948-0300. [A] Senate. No Numerals. **Ea. 19.83** 2-Up .... **Ea. 17.80**
948-0500. [C] Tempo. Arabic Numerals. **Ea. 19.64** 2-Up. **Ea. 17.80**
948-0100. [B] Forum. Roman Numerals. **Ea. 24.55** 2-Up. **Ea. 22.00**
948-0001. [B] Apollo. Roman Numerals. **Ea. 19.64** 2-Up. **Ea. 17.80**

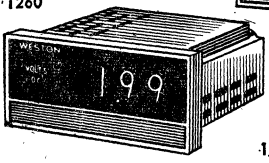
Weston Digital Panel Meters, Clock

1289



1262

1260



1290

1292

1294

Specifications	Model 1294	Model 1290	Model 1292	Model 1260
Accuracy	0.05% Rdg. ±1 Digit 25°C ±10°C 117V ±10%	±0.1% FS ±1 Digit 25°C ±10°C 117V ±10%	±0.1% FS ±1 Digit 26°C ±10°C 117V ±10%	±0.5% FS ±1 Digit 25°C ±10°C 117V ±10%
Reading/Sec	5/sec	6/sec	5/sec	10/sec
CMMR	80 db @ 60 Hz	80 db @ 60 Hz	80 db @ 60 Hz	80 db with 1000 ohms
NMRR	35 db @ 60 Hz	35 db @ 60 Hz	35 db @ 60 Hz	35 db @ 60 Hz
Power Requirements	117V ±10% 7 watts 60-400 Hz	117V ±10% 5 watts 60-400 Hz	117V ±10% 7 watts 60-400 Hz	117V ±10% 10 watts 50-400 Hz
Response Time to Full Scale	Less than 1 second	Less than 1 second	Less than 2 seconds	Approximately 1 second
Approx. Wt.	1½ Lbs.	1¼ Lbs.	1¼ Lbs.	Less than 1 Lb.
Overrange	100% (1.9999)	100%	100%	25%
Full Buffered Display	Yes	Yes	Yes	No
Complete Mounting From Front of Panel	Yes	Yes	Yes	Yes
Dimension	1.75"Hx4"Wx4.25"D	1.75"Hx4"Wx4.25"D	1.75"Hx4"Wx4.25"D	1.75"Hx4"Wx4.25"D
BCD	None	Yes 1-2-4-8	Yes 1-2-4-8	No
Logic Levels	T^2L	"1" ≥ 1.0V "0" ≤ 0.4V	"1" ≥ 1.0V "0" ≤ 0.4V	None

MODEL 1292 PANEL METER

High accuracy miniature 3½-digit panel meter occupies only 7 sq. in. panel space. Provides rapid read-out for positive numerical identification. Out-of-range indication ±300%, except on 1000V range. Operating temperature 5°C to 45°C. May be stored in temperature range of −40°C to 70°C. CMR: 80 dB with 1000 ohm unbalance at 60 Hz. Uses plug-in Nixies. Full specs listed above.

Stock No.	DC Range	Imped-ance	EACH 1-4	EACH 5-9
985-4630	0-100 mV	100 megs	283.50	268.50
985-4620	0-1V	1000 megs	283.50	268.50
985-4621	0-10V	10 megs	283.50	268.50
985-4622	0-100 V	10 megs	283.50	268.50
985 4623	0-1000 V	10 megs	283.50	268.50
985-4601	0-1 μA	100k Ω	283.50	268.50
985-4602	0-10 μA	10k Ω	283.50	268.50
985-4605	0-100 μA	1k Ω	283.50	268.50
985 4610	0-1 mA	100 Ω	283.50	268.50
985-4611	0-10 mA	10 Ω	283.50	268.50
985-4612	0-100 mA	1 Ω	283.50	268.50

985-4118. 97670 PC Connector. 4 oz. ..... Ea. 3.75

MODEL 1260 PANEL METER

Precision miniature panel meter has 2½-digit scale, offers economy along with high quality, extreme accuracy. Bipolar digital meter utilizes dual slope integrating technique to give extremely rapid read-out of numerical data in fast-reading characters. Operating temperature range +5°C to +45°C. May be stored in temperatures ranging from −40°C to +70°C. Polarized viewing window. Soldered-in Nixies. Full specifications listed in table above.

Stock No.	DC Range	Imped-ance	EACH 1-4	EACH 5-9
985-4116	0-199 mV	20K Ω	133.50	126.50
985-4109	0-1.99 V	200K Ω	133.50	126.50
985-4110	0-19.9 V	2 megs	133.50	126.50
985-4111	0-199 V	2 megs	133.50	126.50
985-4115	0-100 kV	2 megs	133.50	126.50
985-4102	0-19.9 μA	10k Ω	133.50	126.50
985-4103	0-199 μA	1k Ω	133.50	126.50
985-4105	0-1.99 mA	100 Ω	133.50	126.50
985-4106	0-19.9 mA	10 Ω	133.50	126.50
985-4107	0-199 mA	1 Ω	133.50	126.50

985-4117. 9760 PC Connector. 4 oz. ..... Ea. 3.00

MODEL 1290 PANEL METER

Front-mounting, converts analog input to digital display. Takes 7 sq. in. panel space. Min. full scale range: 0-100 mV DC. Max. full scale range: 0-1000 VDC, Sensitivity: 100 mV, 10k ohms; 1 V 100k ohms; 10 V to 1000 V, 1 megohm. Rejection: common mode, 80 dB with 1000 ohm unbalance; normal mode, 35 dB. Dual slope integration with sensing intervals related to line frequency. Uses plug-in Nixies. Self-adjusting hardware included. Bezel front.

Stock No.	DC Range	Over-Range	EACH 1-4	EACH 5-9
985-4215	0-100.0 mV	199.9 mV	260.00	270.00
985-4206	0-1.000 V	1.999 V	260.00	247.00
985-4207	0-10.00 V	19.99 V	260.00	247.00
985-4208	0-100.0 V	199.9 V	260.00	247.00
985-4209	0-1000 V	.....	260.00	247.00
985-4201	0-10.00 μA	19.99 μA	260.00	247.00
985-4202	0-100.0 μA	199.9 μA	260.00	247.00
985-4203	0-1.000 mA	1.999 mA	260.00	247.00
985-4204	0-10.00 mA	19.99 mA	260.00	247.00
985-4205	0-100.0 mA	199.9 mA	260.00	247.00

MODEL 1294 PANEL METER

Highly accurate miniature 4½ digit panel meter provides digital display in legible, quickly-read characters to reduce possibility of human reading error. Precise operation from a top-rated component. Utilizes dual slope integrating technique for rapid, exact readings. Nixies are plug-in type for quick repair, provide non-blinking, flicker-free display. Full specs in table above.

Stock No.	DC Range	EACH 1-4	EACH 5-9
985-4715	100.0 mV	375.00	356.25
985-4706	1.000 V	350.00	332.50
985-4707	10.00 V	350.00	332.50
985-4708	100.0 V	350.00	332.50
985-4709	1000 V	350.00	332.50
985-4701	10.00 μA	350.00	332.50
985-4702	100.0 μA	350.00	332.50
985-4703	1.000 mA	350.00	332.50
985-4704	10.00 mA	350.00	332.50
985-4705	100.0 mA	350.00	332.50

MODEL 1289 DIGITAL CLOCK

Solid-state time reference for logging systems and other applications. 12 hour, 60 minute basis with AM or PM indication. Synchronizes to 60 Hz or 50 Hz power line or external source. TTL BCD output for hours/minutes or minutes/seconds. 1.75x4x4.25". For 117 V ±10%, 50/60 Hz. Shpg. wt. 1 lb.

985-1289. 1-4 ..... Each 196.00 5-9 ..... Each 185.00

MODEL 1262 DIGITAL AC LINE MONITOR

Designed for measurement of AC line voltages between 100-130 VAC with accuracy of ±0.2 V (2 digits). May also be used for measurements of from 0-150 VAC with 0.1 V resolution. Dual slope integration for long-term stability. Repairable (not potted) circuits. Size, 1.75x4x4.25". For 117 V 50-60 Hz. Shpg. wt. 1 lb.

985-1262. 1-4 ..... Each 219.00 5-9 ..... Each 195.00

Specify Stock No., Range and Model No. on Meter Orders

Digital Panel Meters, Portable Test Instruments

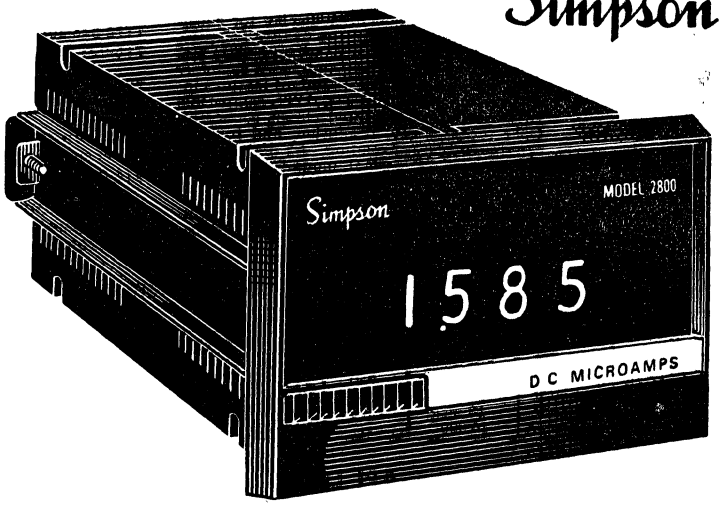
MODEL 2800 DIGITAL PANEL METERS

Simpson

Digital readout panel meters provide accurate, instantaneous numerical indication of voltage and current in a wide variety of industrial and commercial applications. Feature easy-to-read non-blinking display and convenient front panel zero adjustment. Advanced solid-state circuit with integrated circuits for outstanding reliability. 100% overrange capability for increased versatility; flashing "1" lights to the left of other digits to indicate overrange.

Reverse polarity is indicated by a light to the right of other digits; linear 15% underrange permits reading complements of negative values. Storage circuitry holds indication until input changes. Common mode rejection: greater than 90 dB at 60 Hz with 1000-ohm unbalance. Series mode rejection: greater than 35 dB. Ambient temperature range: +15° to +35°C for rated accuracy of ±0.1%, ±1 digit.

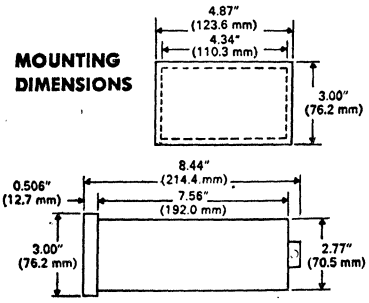
Ultra durable cold gas glow readout tubes have 200,000 hour life. Three full-time readout digits. Compact styling—see detailed dimensions, shown below. For 117 V, 60 Hz AC operation. Av. shpg. wt. 3½ lbs.



- Advanced Solid-State Design with Integrated Circuits
- Linear 15% Underrange Permits Reading Negative Values
- 100% Overrange Capability for Increase Versatility

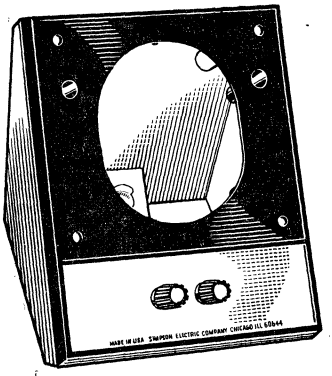
PANEL CUTOUT REQUIREMENT: 4.37" (111.0 mm) x 2.80" (71.1 mm)

MOUNTING DIMENSIONS



Stock No.	Range DC	Max. Indication (With Overrange)	Input Impedance *Voltage Drop	EACH 1-3	EACH 4-Up
918-5510	00.0-99.9 mV	199.9 mV	10k	235.00	210.00
518-5512	.000-.999 V	1.999 V	100k	235.00	210.00
918-5513	0.00-9.99 V	19.99 V	1 megohm	235.00	210.00
918-5514	00.0-99.9 V	199.9 V	1 megohm	235.00	210.00
918-5515	000.-999. V	1010 V	1 megohm	235.00	210.00
918-5501	0.00-9.99 μA	19.99 μA	50 mV*	235.00	210.00
918-5502	00.0-99.9 μA	199.9 μA	50 mV*	235.00	210.00
918-5504	.000-.999 mA	1.999 mA	50 mV*	235.00	210.00
918-5505	0.00-9.99 mA	10.99 mA	50 mV*	235.00	210.00
918-5506	00.0-99.9 mA	199.9 mA	50 mV*	235.00	210.00

MODEL 2100 4½-in. PORTABLE INSTRUMENT MOUNTING KIT



- Complete Kit for Mounting a 4½" Meter
- Easily Assembled, Instructions Included

Case assembly allows mounting a 4½" meter to meet specific needs. Rear hole permits mounting fuse holder as required; nylon plug covers hole when not in use. Kit includes case, panel assembly, legend overlay, two binding posts, nylon plug, hardware, complete assembly instructions. See Simpson meter section, page 471, for a complete selection of 4½" meters to choose from. Av. shpg. wt. 1 lb.

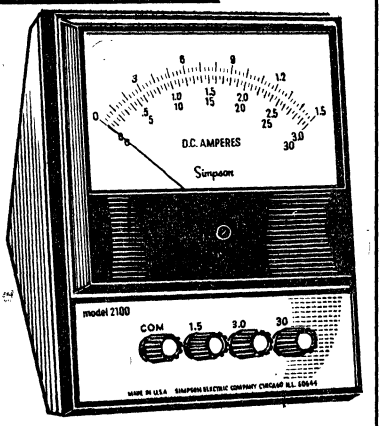
919-7949. 1-3....Ea. 8.35 4-Up....Ea. 7.50

NEW AT ALLIED!

MODEL 2100 4½-IN. PORTABLE INSTRUMENTS

- Large Scale Has Knife-Edge Pointer
- Non-Fogging Glass Lens, Plastic Case
- Polished, Spring-Loaded Jewels

For electrical measurements in schools, labs, industry. Modern styling features white case and new Century Series meter. Self-shielded DC and AC rectifier movements. DC instruments have ±2% full-scale accuracy; AC instruments have ±3% full-scale accuracy. Four color-coded, multi-range binding posts, one common and three for range selection. Binding posts accept pin tips, spade lugs, banana plugs or wire. Rear hole permits mounting fuse holder (nylon plug cover). 5.70x5.15x5.55".

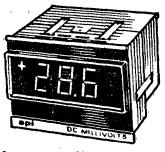


Stock No.	Mfr's Type	Instrument	Range	EACH 1-3	EACH 4-Up
919-7950	17950	DC Ammeter	0-1.5-3-30 A	38.70	34.80
919-7951	17951	DC Milliammeter	0-1-10-100 mA	38.70	34.80
919-7952	17952	DC Milliammeter	0-25-50-500 mA	38.70	34.80
919-7953	17953	DC Microammeter	0-10-50-250 μA	74.50	66.90
919-7954	17954	DC Voltmeter	0-15-3-30 V	38.70	34.80
919-7955	17955	DC Voltmeter	0-10-25-100-V	39.70	35.70
919-7956	17956	AC Voltmeter	0-3-15-150 V	55.50	49.80
919-7957	17957	AC Voltmeter	0-30-150-300 V	55.50	49.80

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's 480-499—Scopes, 503-505

Digital Panel Meters and Comparators

API DIGITAL PANEL METERS



MODEL 4304. Digital panel meters have 7/8" high seven-bar segmented display for excellent readability. All are top-quality 3½-digit models, for front or rear panel mounting. Require only 1½" behind panel, with remotely mounted power supply. Standard features include autopolarity and T^2L/DTL compatible BCD output with printed circuit connector. Offer repeatability, resolution, and freedom from reading errors. Accuracy: 0.1% of reading, ±1 digit. Rejection: 100 dB common mode, 30 dB normal mode. Over-Range: 100%. Resolution: 0.05%. Input impedance: up to 1000 megohms, as shown in tables at left. Input connections by screw terminals or standard printed circuit card connector. Order connectors, right. With front panel mounting hardware. 4½" w. x 3" h. x 3⅝" d. behind panel. Av. shpg. wt. 1½ lbs.

CONNECTORS AND ACCESSORIES

TYPE 345-207 INPUT CONNECTOR.
716-0212. Shpg. wt. 3 oz.....Ea. 4.87 4-Up.....3.90

TYPE 345-215 BCD CONNECTOR.
716-0211. Shpg. wt. 3 oz.....Ea. 4.87 4-Up.....3.90

1126-279 INTERCONNECTING CABLE. 24" long. For remote mounting of power supply. Has Amphenol connectors 143-010-01 and 133-010-21.
716-0208. Shpg. wt. 8 oz.....Ea. 11.80 4-Up.....9.45

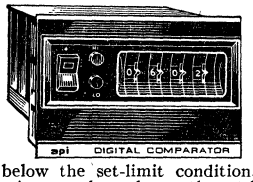
1125-208 MOUNTING BEZEL. With hardware, for mounting meter behind panel.
716-0209. Shpg. wt. 4 oz.....Ea. 2.60 4-Up.....1.65

MODEL 4304 3½-DIGIT PANEL METERS

Stock No.	DC Range	Input Imp., Ohms	Max. Input Volts	EACH 1-3	EACH 4-Up
716-1075	0-199.9 mV	100 meg.	250	344.00	272.25
716-1076	0-1.999 V	1000 meg.	250	344.00	272.25
716-1077	0-19.99 V	10 meg.	1000	344.00	272.25
716-1078	0-199.9 V	10 meg.	1000	344.00	272.25
716-1070	0-19.99 μA	10,000	.....	344.00	272.25

Stock No.	DC Range	Input Imp., Ohms	Max. Input Volts	EACH 1-3	EACH 4-Up
716-1071	0-199.9 μA	1000	.....	344.00	272.00
716-1072	0-1.999 mA	100	.....	344.00	272.00
716-1073	0-19.99 mA	10	.....	344.00	272.00
716-1074	0-199.9 mA	1	.....	344.00	272.00
.....	.....	.....	.....	.....	.....

API DIGITAL COMPARATORS AND ACCESSORIES



MODEL 4310. Panel-mounted 3½ or 4½ digit comparators compare the BCD 1, 2, 4 and 8 input data to a preselected high limit. For use with Model 4304 Digital Panel Meter (above). Models 4310-10 and 4310-20 let you choose limit setting with special thumbwheel switches. Indicator light shows above or below the set-limit condition. Polarity switch gives the choice minus or plus value or the set limit.

Limit action occurs when the input data reaches the limit point of the preset sign. For example, with a limit point of −.500, output conditions do not change until the input rises from a more negative value in a positive direction to −.500. Input indicates overrange or polarity. Logic "1" is 4 volts maximum, logic "0" is 0.4 maximum at 3.2 milliamps. Output: logic +4.0 volts when input is at or above the set limit, −0.4 volts when the input is below. Output relay: SPDT 2 amps, 120 VAC resistive. The power supply separates from the front in the thumbwheel models.

Accessories listed at right. Use optional buffer with API digital panel meters when two to four comparators are used. Optional 24" interconnecting cable connects logic circuitry to control module. Use type 1126-308 24" interfacing cable (optional) between API DPM and comparator (3-digit model). Use type 1126-309 24" interfacing cable (optional) between API DPM and two comparators (3-digit model). Optional input connector connects other instruments. Bezel trim for rear panel mounting only. Av. wt. 2 lbs.

MODEL 4310 DIGITAL COMPARATORS

Stock No.	Mfr's Type	Range	Input Data	EACH 1-3	EACH 4-Up
716-1085	4310-10	±0-1999	3 digits overrange polarity	229.00	183.00
716-1087	4310-20	±0-9999	4 digits overrange polarity	270.00	216.00

CONNECTORS AND ACCESSORIES

TYPE 1126-330 BUFFER. Shpg. wt. 4 oz.
716-1090.....Ea. 41.70 4-Up.....33.35

TYPE 1126-307 INTERCONNECTING CABLE. Shpg. wt. 4 oz.
716-1091.....Ea. 34.70 4-Up.....27.80

TYPE 1126-401 INTERFACING CABLE. Shpg. wt. 4 oz.
716-1092.....Ea. 25.00 4-Up.....20.00

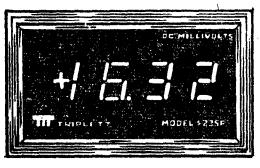
TYPE 1126-402 INTERFACING CABLE. Shpg. wt. 4 oz.
716-1096.....Ea. 41.70 4-Up.....33.35

TYPE 345-240 INPUT CONNECTOR. Shpg. wt. 4 oz.
716-1093.....Ea. 4.87 4-Up.....3.90

TYPE 345-215 BCD OUTPUT CONNECTOR. For use with API digital panel meter. Shpg. wt. 2 oz.
716-1094.....Ea. 4.87 4-Up.....3.90

TYPE 1125-208 BEZEL TRIM. For rear panel mounting only.
716-1095. Shpg. wt. 1 oz.....Ea. 20.90 4-Up.....16.70

TRIPLETT 4235-F DIGITAL PANEL METERS



A low cost 3½ digit model suitable for use in production testing, general tests, servicing and educational applications. Compact self-contained unit is ready for panel-mounted or bench-top use.

Unit employs a dual slope analog to digital conversion technique, providing high noise rejection, stability and accuracy, for precise voltage or current measurements. Seven bar fluorescent readout provides single plane display for wide angle ease of viewing—no radiation. Virtually no kickback current for true accuracy. Fast 1 second reading response. Movable decimal point. Display hold capability. Display blanks when measurement is overrange (prevents error).

Panel cut for either front or rear panel mounting. Available in 6 ranges from 19.99 mV to 1000 VDC and 7 ranges from 1.999 μA to 1.000 ADC. Power supply included. With molded case. *Tolerance: ±1%. Temperature coefficient <50 PPM/°C. Av. wt. 1 lb.

SPECIFICATIONS

Voltage accuracy: (+23°C, ±1°C) ±0.1% of reading, ±1 digit.
Current accuracy: (+23°C, ±1°C) ±0.15% of reading, ±1 digit.
Common mode rejection ratio: 80:1 dB. **Normal mode rejection ratio:** 30:1 dB (60 Hz). **Operating range:** 0 to 40°C. **Temperature coefficient (199.9 mV and above):** ±(.01% of reading + .005% of scale)/°C. **Temperature coefficient (19.99 mV):** ±(.01% of reading +.01% of scale)/°C. **Power requirement:** 105 to 125 VAC, 50-60 Hz, 2.0 watts. **Size:** 2.359 max. x 4.140 max. x 4.846 max.

Stock No.	DC Ranges	Input Impedance nominal	Max. Voltage	EACH 1-3	EACH 4-Up
955-9508	0-19.99 mV	100 megohms	100	260.00	240.00
955-9509	0-199.9 mV	1000 megohms	250	260.00	240.00
955-9510	0-1.999 V	1000 megohms	250	260.00	240.00
955-9511	0-19.99 V	10 megohms	1000	260.00	240.00
955-9512	0-199.9 V	10 megohms	1000	260.00	240.00
955-9513	0-1000 V	10 megohms	1000	260.00	240.00

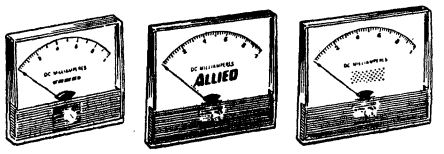
Stock No.	DC Ranges	Shunt Resistance*	Max. Current	EACH 1-3	EACH 4-Up
955-9502	0-1.999 μA	10k ohms	2 mA	260.00	240.00
955-9503	0-19.99 μA	10k ohms	2 mA	260.00	240.00
955-9504	0-199.9 μA	1k ohms	10 mA	260.00	240.00
955-9505	0-1.999 mA	100 ohms	20 mA	260.00	240.00
955-9506	0-19.99 mA	10 ohms	100 mA	260.00	240.00
955-9507	0-199.9 mA	1 ohm	500 mA	260.00	240.00
955-9501	0-1.999 A	.1 ohm	2.5 amps	260.00	240.00

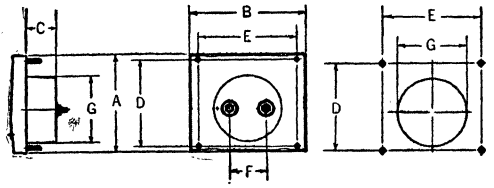
Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's, 480-499—Scopes, 503-505

Allied's own "Clear View" Panel Meters

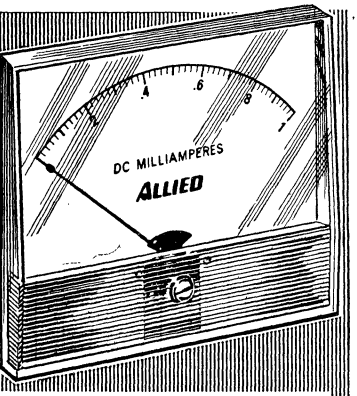
CUSTOM DESIGN YOUR OWN METER FACES

YOU CAN ORDER THESE ALLIED® PANEL METERS WITH DIAL FACES OF YOUR OWN DESIGN

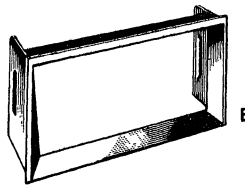




Dim.	2½"	3½"	4½"
A	2.38"	3.00"	4.00"
B	2.57"	3.44"	4.70"
C	1.06"	1.06"	1.06"
DxE	1.88" sq.	2.25" sq.	3.56" sq.
F	1.40"	1.40"	1.40"
G	2.18"	2.75"	2.75"



COMPLETE BEZEL KIT



Includes Bezel, Brackets, Screws

Fits all 4½" Allied meters.
701-0470 ..... 2.05
As above, but for 3½" meters.
701-0468 ..... 1.95

- **Easy-to-read Knife Edge Pointer**

Wide selection of rugged, easy-to-read panel meters. Have 2% full scale accuracy. Feature spring back jewels and shielded meter movement—can be mounted on ferrous panels without loss of accuracy. Supplied with all necessary mounting and terminal hardware. All have ¼-28x.43" terminals.

- **Full Scale Accuracy of 2%**

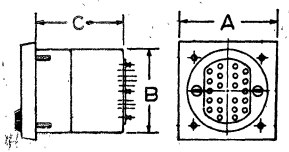
All mounting studs are .52". Mounting studs: 2½" and 3½" Models, 4-40x.53"; 4½", 6-32x.53". *Rectifier type. **For prices on order for 100 or more meters of any one type—with either Allied standard or "Custom-Design" scale faces—contact the Allied facility nearest you.** Av. shpg. wt., 1 lb.

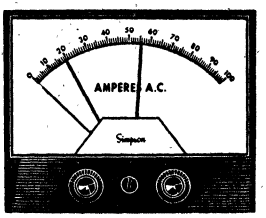
HOW TO ORDER

On orders for 25 or more of any one type of Allied meter shown on these pages, you can have your name or logo placed on the standard scale face. Extra charge for standard scale meters in quantities of 25-99, with your name or logo, $35.00. This is a one-time charge. No charge in quantities of 100 or more. For meters with scales in one color other than black, $60.00; 2 colors, $85.00; 3 colors, $110.00. Extra charges made one time only—no extra charges on subsequent orders with same meter face. To order, indicate the Stock No., and also include meter range, size, and send logo or print of scale wanted.

Range	Ohms	2½" METERS Stock No.	EACH 1-9	10-24	25-49	50-99	3½" METERS Stock No.	EACH 1-9	10-24	25-49	50-99	4½" METERS Stock No.	EACH 1-9	10-24	25-49	50-99
DC MICROAMMETERS																
25-0-25	3000	701-0010	22.00	17.40	15.80	14.70	701-0230	22.70	18.90	16.25	15.15	701-0309	23.75	18.80	17.00	15.80
0-50	3000	701-0011	21.25	16.80	15.20	14.15	701-0234	22.30	17.62	15.96	14.85	701-0311	23.35	18.45	16.70	15.50
50-0-50	2000	701-0012	19.15	15.10	13.70	12.75	701-0238	20.30	16.05	14.52	13.50	701-0313	21.00	16.60	15.00	13.95
0-100	2000	701-0013	18.85	14.90	13.50	12.50	701-0242	19.80	15.65	14.15	13.15	701-0315	20.65	16.30	14.80	13.75
100-0-100	600	701-0014	18.45	14.60	13.20	12.30	701-0245	19.40	15.32	13.90	12.90	701-0317	20.30	16.05	14.52	13.50
0-200	600	701-0015	17.85	14.10	12.80	11.90	701-0247	19.05	15.05	13.65	12.63	701-0319	19.90	15.75	14.25	13.25
DC MILLIAMMETERS																
0-1	14	701-0020	17.40	14.20	13.30	12.50	701-0250	18.10	14.95	14.05	13.20	701-0321	19.30	16.15	15.05	13.95
0-3	5	701-0021	17.40	14.20	13.30	12.50	701-0252	18.10	14.95	14.05	13.20	701-0323	19.30	16.15	15.05	13.95
0-10	5.0	701-0022	17.40	14.20	13.30	12.50	701-0254	18.10	14.95	14.05	13.20	701-0325	19.30	16.15	15.05	13.95
0-15	3.3	701-0023	17.40	14.20	13.30	12.50	701-0256	18.10	14.95	14.05	13.20	701-0327	19.30	16.15	15.05	13.95
0-20	2.5	701-0024	17.40	14.20	13.30	12.50	701-0258	18.10	14.95	14.05	13.20	701-0329	19.30	16.15	15.05	13.95
0-50	1.0	701-0025	17.75	14.46	13.60	12.85	701-0260	19.80	16.50	15.45	14.75	701-0331	19.95	16.50	15.65	14.80
0-100	.5	701-0026	17.75	14.46	13.60	12.85	701-0264	19.80	16.50	15.45	14.75	701-0333	19.95	16.50	15.65	14.80
0-200	.25	701-0027	17.75	14.46	13.60	12.85	701-0266	19.80	16.50	15.45	14.75	701-0335	19.95	16.50	15.65	14.80
DC AMMETERS																
0-1	.050	701-0001	17.75	14.46	13.60	12.85	701-0201	19.80	16.50	15.45	14.75	701-0301	19.95	16.50	15.65	14.80
0-5	.010	701-0002	17.75	14.46	13.60	12.85	701-0205	19.80	16.50	15.45	14.75	701-0303	19.95	16.50	15.65	14.80
0-10	.005	701-0003	17.75	14.46	13.60	12.85	701-0210	19.80	16.50	15.45	14.75	701-0305	19.95	16.50	15.65	14.80
0-15	.0033	701-0004	17.75	14.46	13.60	12.85	701-0215	19.80	16.50	15.45	14.75	701-0307	19.95	16.50	15.65	14.80
DC MILLIVOLTMETERS																
0-50	10	701-0040	17.60	14.35	13.50	12.70	701-0268	19.50	16.20	15.30	14.35	701-0337	19.95	16.50	15.65	14.80
0-100	20	701-0045	17.60	14.35	13.50	12.70	701-0270	19.50	16.20	15.30	14.35	701-0339	19.95	16.50	15.65	14.80
DC VOLTMETERS (1000 Ohms/Volt)																
0-10	.....	701-0100	19.10	16.05	14.95	13.80	701-0275	19.30	16.15	15.05	13.95	701-0341	21.10	17.50	16.35	15.50
0-15	.....	701-0105	19.10	16.05	14.95	13.80	701-0277	19.30	16.15	15.05	13.95	701-0343	21.10	17.50	16.35	15.50
0-30	.....	701-0110	19.10	16.05	14.95	13.80	701-0279	19.30	16.15	15.05	13.95	701-0345	21.10	17.50	16.35	15.50
0-50	.....	701-0115	19.10	16.05	14.95	13.80	701-0281	19.30	16.15	15.05	13.95	701-0347	21.10	17.50	16.35	15.50
0-100	.....	701-0120	19.10	16.05	14.95	13.80	701-0283	19.30	16.15	15.05	13.95	701-0349	21.10	17.50	16.35	15.50
0-150	.....	701-0125	19.10	16.05	14.95	13.80	701-0285	19.30	16.15	15.05	13.95	701-0351	21.10	17.50	16.35	15.50
0-300	.....	701-0130	19.10	16.05	14.95	13.80	701-0287	19.30	16.15	15.05	13.95	701-0353	21.10	17.50	16.35	15.50
AC VOLTMETERS (1000 Ohms/Volt)																
0-150*	.....	701-0435	21.10	17.50	16.35	15.50	701-0445	21.85	18.25	16.65	14.85	701-0455	22.75	18.40	16.70	15.70
0-300*	.....	701-0440	21.10	17.50	16.35	15.50	701-0450	21.85	18.25	16.65	14.85	701-0460	22.75	18.40	16.70	15.70
AC AMMETERS (3 Milliohms)																
0-5	.....	.....	.....	.....	.....	.....	701-0401	18.50	15.40	14.50	13.65	701-0420	22.10	17.80	16.90	15.40
0-10	.....	.....	.....	.....	.....	.....	701-0403	20.05	16.30	15.40	14.50	701-0425	22.10	17.80	16.90	15.40

Controllers and Panel Instruments





METER DIMENSIONS

Mfr's Type	Meter Size	Movement	A	B	C
3323TXA	3½"	Taut-Band	3.25"	2.72"	4.25"
3323XA	3½"	Pivot/Jewel	3.25"	2.72"	4.25"
3324TXA	4½"	Taut-Band	4.68"	2.72"	4.25"
3324XA	4½"	Pivot/Jewel	4.68"	2.72"	4.25"
3344XA	4½"	Taut-Band	4.68"	2.72"	4.25"
3326XA	4x6"	Pivot/Jewel	5.84"	2.72"	4.25"

CONTACTLESS METER RELAYS

- Rugged Seal® Construction
- Fully Self-Contained

These relays combine the functions of an indicator, switch, and ultra-high gain amplifier in one unit. Photoconductor system activates relays at pre-set point on meter. Dual control types activate circuit at both high and low limit points. For use where utmost reliability on small differential or small power is desired. Ideal for alarm control or limit applications on equipment designed for unattended operation. Use infinite-life lamps, photoconductor sensors, all solid-state circuit. Built-in output relays for each control point handle 10 amps at 115 VAC resistor on each contact (DPDT types handle 20 amps total per point.) Fail-safe—relays open in case of power failure. Indication accuracy, ±2% of full-scale; dead-band, 0.25%. For 115 V, 50-500 Hz AC. Av. shpg. wt. 1½ lbs.

MODEL 3323TXA 3½" TAUT-BAND

Range DC	Single Control (High Limit) Stock No.	EACH 1-9	10-24	25-Up	Double Control (High/Low) Stock No.	EACH 1-9	10-24	25-Up
0-100 μA	918-5532	126.00	113.10	101.97	918-5542	159.00	143.25	128.93

MODEL 3323XA 3½" PIVOT-AND-JEWEL

0-50 mV	918-5655	124.90	112.20	100.98	918-5665	158.50	142.50	120.25

MODEL 3324TXA 4½" TAUT-BAND

0-50 μA	918-5730	143.20	128.10	115.29	918-5741	177.00	158.25	142.43

MODEL 3324XA 4½" PIVOT-AND-JEWEL

0-500 μA	918-5834	130.00	116.40	104.46	918-5844	162.80	146.55	131.90
0-1 mA	918-5850	128.80	115.20	103.68	918-5860	162.50	145.50	130.95

MODEL 3344XA 4½" AC PIVOT-AND-JEWEL

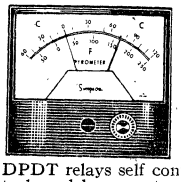
0-5 A*	918-6210	142.00	127.05	114.35	918-6220	176.00	157.35	141.62

*AC ranges.

MODEL 3326XA 4x6" PIVOT-AND-JEWEL

0-50 μA	918-6160	137.50	123.15	110.84	918-6164	171.50	153.30	137.97
0-50 mV	918-6163	132.80	118.80	106.92	918-6167	166.70	149.10	134.19

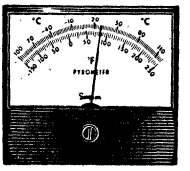
MODEL 3324XA 4½" TEMPERATURE CONTROLLERS



- Rugged Seal Construction
- Completely Self Contained
- Single or Double Control

Indicating pyrometer controllers have cold-end and copper compensation. Higher range controllers (500° and above) have thermocouple break protection. Calibrated for 5 or 10 ohms external; resistor assembly included for easy thermocouple calibration. DPDT relays self contained, handle over 2000 watts. Double control models use external power supply (included). Thermocouples not supplied. Shpg. wt. 1 lb.

Range	Ext. Ohms	Single Stock No.	Single EACH	Double Stock No.	Double EACH
−75° to +225°F	5	918-5880	134.00	918-5890	174.30
0° to +300°F	5	918-5881	134.00	918-5891	174.30
0° to +500°F	10	918-5882	130.80	918-5892	171.00
0° to +750°F	10	918-5883	130.80	918-5893	171.00
0° to +1000°F	10	918-5884	130.80	918-5894	171.00
0° to +1500°F	10	918-5885	130.80	918-5895	171.00



Model 3324

PYROMETERS

- Two Models—Standard and Rugged Seal
- Easy-to-Read Scales, Precise Tracking
- Centigrade and Fahrenheit Graduations

Precision-engineered for a lifetime of accurate, dependable performance. Easy-to-read 4½" pyrometers feature high sensitivity, ruggedness and precise tracking. Both models are compensated for ambient temperature changes and include copper circuit compensation. Model 29 is standard type, 3324 is rugged seal type. All meter scales are marked with both Fahrenheit and Centigrade graduations. Thermocouples listed in table are iron-constantan and calibrated to exactly 5 or 10 ohms, ±1% per table. Shpg. wt., 2 lbs.

MODEL 29

Stock No.	Range °F	Range °C	Ext. Ohms	Sens. in mA	EACH 1-9	10-24	25-Up
918-0525	−150-+250	−100-+120	10	.40	42.60	38.25	34.30
918-0526	0-300	−20-+150	5	.40	42.60	38.25	34.30
918-0527	0-500	−20-+260	10	.35	42.60	38.25	34.30
918-0528	0-750	−20-+400	10	.30	42.60	38.25	34.30
918-0529	0-1000	−20-+540	10	.28	42.60	38.25	34.30
918-0530	0-1500	−20-+820	10	.42	39.60	38.55	32.10
918-0531	0-2000	−20-+1200	10	.43	39.60	35.55	32.10
918-0532	0-2500	−20-+1380	10	.40	39.60	35.55	32.10

MODEL 3324 RUGGED SEAL

918-5910	−150-+250	−100-+120	10	.40	58.00	52.05	49.50
918-5911	0-300	−20-+150	5	.40	58.00	52.05	49.50
918-5912	0-500	−20-+260	10	.35	58.00	52.05	49.50
918-5913	0-750	−20-+400	10	.30	58.00	52.05	49.50
918-5914	0-1000	−20-+540	10	.28	58.00	52.05	49.50
918-5916	0-1500	−20-+820	10	.42	55.00	49.35	46.50
918-5915	0-2000	−20-+1200	10	.43	55.00	49.35	46.50
918-5917	0-2500	−20-+1380	10	.40	55.00	49.35	46.50

THERMOCOUPLES

*SS indicates Stainless Steel, GC indicates Glass Cloth.

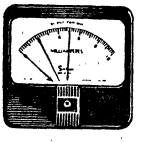
Stock No.	Resis. (ohms)	Over-braid*	Lgth. (in.)	Gauge	EACH 1-9	10-24	25-Up
918-4695	5	SS	162	20	18.35	16.50	14.10
918-4696	10	GC	137	24	6.50	5.85	4.05
918-4697	10	GC	34	30	5.42	4.90	4.20
918-4698	10	SS	325	20	33.50	30.15	27.85

1150 6" DC MICROAMMETERS

6" rectangular panel meters. Accuracy, of ±2%. Ranges 15 through 100 use high-flux movements designated as Model 1150H and cannot be calibrated for operation on steel panels. Ranges 200 through 500 use a 1⅝" shallow-core movement designated as Model 1150E. Shpg. wt., 2 lbs.

2% ACCURACY

Stock No.	Range, μA	EACH 1-9	10-24	25-Up
918-2123	0-15	51.55	46.35	44.10
918-2124	0-25	46.25	41.55	39.45
918-2125	0-50	42.00	37.80	36.00
918-2126	0-100	40.40	36.30	34.50
918-2127	0-200	35.35	31.80	30.15
918-2128	0-500	34.40	30.90	29.40



29XA ADJUSTABLE METER RELAYS

Current or voltage actuated. Excellent for alarm, control, or limit-setting uses. Non-locking contacts can be positioned along scale arc with external control. Meter front is 4.66x4.20". Body dia., 2.75". Depth (body plus front), 1.66". Contact positioning control extends .34" from front. Shpg. wt., 1 lb.

Stock No.	Type	Range	1-9, EA.	10-24, EA.	25-49, EA.
918-0331	DC μA	0-50	69.00	61.95	58.95
918-0332	DC μA	0-100	66.00	50.25	56.40
918-0333	DC μA	0-500	61.00	54.75	52.05
918-0350	DC mA	0-1	59.40	53.40	50.85
918-0355	DC mV	0-50	59.50	53.55	51.00

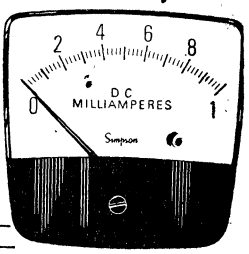
See pages 465, 468-475 for the entire line of Simpson panel meters. Allied can supply Simpson panel meters in quantities larger than those shown. Simply contact the Allied Electronics facility nearest you for complete information.

"Bold Vue" and "Wide Vue" Panel Meters

Simpson

2½" AND 3½" "BOLD-VUE" PANEL METERS

- Three-Hole Mounting for Simplified Installation
- Contemporary Styling, Easy-to-Read Numerals
- Annular DC Movements—Damped Iron-Vane AC Movements



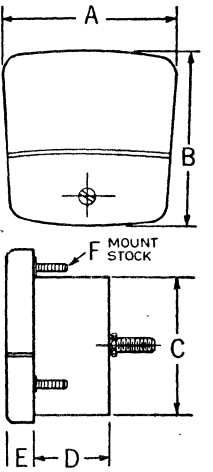
Specially designed three-hole mount meters with modern styling and bold numerals for easy reading. Self-shielded meter movements are unaffected by steel panels or stray magnetic fields. All have ±2% full-scale accuracy. DC meters have annular movements; AC types equipped with magnetically damped iron-vane movements. All have molded black phenolic cases with high-temperature plastic covers. Red tapered lance pointer. Recessed zero adjustments. Scale Lengths: 1222, 2.2"; 1223, 3.0"; 1252, 2.2"; 1253, 3.0". See mounting dimensions in table below, left. Supplied with necessary mounting and terminal hardware. Av. shpg. wt., 2½" meters, 11 oz.; 3½" meters, 13 oz.

DC VOLTMETERS

Range	Model 1223—3½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-49	Model 1222—2½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-49
0-10	918-2477	24.40	21.90	19.71	918-2377	23.50	21.15	19.03
0-15	918-2478	24.40	21.90	19.71	918-2378	23.50	21.15	19.03
0-30	918-2480	24.40	21.90	19.71	918-2380	23.50	21.15	19.03
0-50	918-2481	24.40	21.90	19.71	918-2382	23.50	21.15	19.03
0-100	918-2482	24.40	21.90	19.71	.....	.....	.....	.....
DC MICROAMMETERS								
0-50	918-2429	29.00	26.10	23.69	918-2329	28.50	25.65	23.08
0-100	918-2430	27.75	24.00	21.60	918-2330	25.30	22.95	20.60
0-200	918-2431	24.40	21.90	19.71	.....	.....	.....	.....
50-0-50	918-2434	25.75	24.00	21.60	918-2334	26.10	23.40	21.06
DC MILLIAMMETERS								
0-1	918-2450	22.90	20.55	18.49	918-2350	22.15	19.95	17.95
0-50	918-2458	22.90	20.55	18.49	.....	.....	.....	.....
0-100	918-2460	22.90	20.55	18.49	.....	.....	.....	.....
0-500	918-2465	22.90	20.55	18.49	.....	.....	.....	.....
DC AMMETERS								
0-1	918-2400	23.50	21.15	19.03	.....	.....	.....	.....
0-5	918-2404	23.50	21.15	19.03	918-2304	22.50	20.25	18.22
0-10	918-2405	23.50	21.15	19.03	918-2305	22.50	20.25	18.22

AC AMMETERS

Range	Model 1253—3½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-49	Model 1252—2½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-49
0-5	918-2810	19.75	17.40	15.66	918-2704	18.75	16.50	14.85
0-10	918-2805	19.75	17.40	15.66	918-2705	18.75	16.50	14.85
0-15	918-2806	19.75	17.40	15.66	918-2706	18.75	16.50	14.85
0-25	918-2807	20.00	18.00	16.20	918-2707	19.30	17.25	15.52
AC VOLTMETERS								
0-150	918-2883	24.00	21.60	19.44	918-2712	22.40	20.10	18.09
0-300	918-2886	24.00	21.60	19.44	.....	.....	.....	.....



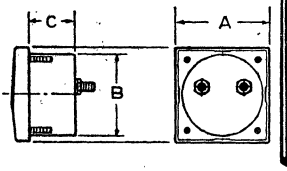
MOUNTING DIMENSIONS

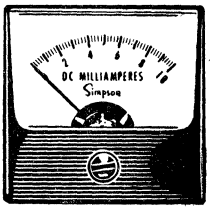
Dim.	2½"	3½"
A	2¾"	3½"
B	2 11/16"	3½"
C	2.17"	2.75"
D	1.19"	1.19"
E	.47"	.47"
F	#4-40	#6-32

EASY-TO-READ "WIDE VUE" PANEL METERS

Mfr's Type	A	B	C	Mfr's Type	A	B	C
728T	8.00"	3.00"	1.23"	1329	4.68"	2.75"	1.08"
1212	1.76"	1.50"	.87"	1329T	4.68"	2.75"	1.08"
1214	1.76"	1.50"	.87"	1347	3.25"	2.73"	1.08"
1227	2.46"	2.17"	1.06"	1349	4.68"	2.75"	1.08"
1247	2.47"	2.17"	1.06"	1357	3.25"	2.73"	1.08"
1257	2.47"	2.17"	1.06"	1359	4.68"	2.75"	1.08"
1327	3.25"	2.73"	1.08"	1379	4.68"	2.75"	1.68"
1327T	3.25"	2.73"	1.08"				

METER DIMENSIONS





Have specially formulated plastic covers for wide-angle readability and maximum protection. 3½" meters have scales ½" longer than conventional types. DC and AC rectifier meters have "self-shielded" movement. AC milliammeters and ammeters are calibrated for use on 25 Hz through 800 Hz. All other AC meters have iron-vane movement. Terminals are 8-32 studs with hex nuts. Accuracy: ±2% full scale except Model 1214 AC Rectifier Types ±3% of full scale. Av. shpg. wt. 1 lb.

DC VOLTMETERS

Range	Model 1212—1½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 1227—2½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 1327—3½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 1329—4½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up
0-5	918-2275	22.00	19.80	18.75	918-2575	23.50	21.15	20.10	918-3275	24.35	21.90	20.85	918-3475	26.70	24.00	22.80
0-10	918-2277	22.00	19.80	18.75	918-2577	23.50	21.15	20.10	918-3277	24.35	21.90	20.85	918-3477	26.70	24.00	22.80
0-15	918-2278	22.00	19.80	18.75	918-2578	23.50	21.15	20.10	918-3278	24.35	21.90	20.85	918-3478	26.70	24.00	22.80
0-25	918-2279	22.00	19.80	18.75	918-2579	23.50	21.15	20.10	918-3279	24.35	21.90	20.85	918-3479	26.70	24.00	22.80
0-30	918-2280	22.00	19.80	18.75	918-2580	23.50	21.15	20.10	918-3280	24.35	21.90	20.85	918-3480	26.70	24.00	22.80
0-50	918-2281	22.00	19.80	18.75	918-2581	23.50	21.15	20.10	918-3281	24.35	21.90	20.85	918-3481	26.70	24.00	22.80
0-100	918-2282	22.00	19.80	18.75	918-2582	23.50	21.15	20.10	918-3282	24.35	21.90	20.85	918-3482	26.70	24.00	22.80
0-150	918-2283	22.00	19.80	18.75	918-2583	23.50	21.15	20.10	918-3073	24.35	21.90	20.85	918-3483	26.70	24.00	22.80
0-200	.....	.....	.....	.....	918-2584	23.50	21.15	20.10	918-3284	24.35	21.90	20.85	918-3484	26.70	24.00	22.80
0-300	918-2286	22.00	19.80	18.75	918-2586	23.50	21.15	20.10	918-3286	24.35	21.90	20.85	918-3486	26.70	24.00	22.80
0-500	918-2287	27.40	24.60	23.40	918-2587	24.35	21.90	20.85	918-3287	25.50	22.95	21.75	918-3487	27.50	24.75	23.55
0-750	.....	.....	.....	.....	918-2588	29.70	26.70	25.35	918-3288	25.50	22.95	21.75	918-3488	27.50	24.75	23.55
0-1000	.....	.....	.....	.....	918-2589	30.50	27.45	26.10	918-3289	31.50	28.35	27.00	918-3489	33.70	30.30	28.60

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's 480-499—Scopes, 503-505

"Wide-Vue" Panel Meters (Cont'd)

DC MILLIVOLTMETERS

Range	Model 1212—1½" Stock No.	EACH 1-9	10-24	25-Up	Model 1227—2½" Stock No.	EACH 1-9	10-24	25-Up	Model 1327—3½" Stock No.	EACH 1-9	10-24	25-Up	Model 1329—4½" Stock No.	EACH 1-9	10-24	25-Up
0-50	918-2271	22.00	19.80	18.75	.....	22.50	20.25	19.20	918-3270	23.50	21.15	20.10	918-3470	25.50	22.95	21.75

DC MICROAMMETERS

0-50	918-2229	27.50	24.75	23.55	918-2529	28.60	25.65	24.30	918-3229	29.05	25.65	24.75	918-3429	31.40	28.20	26.85
0-100	918-2230	24.50	22.05	21.00	918-2530	25.50	22.95	21.75	918-3230	26.70	24.00	22.80	918-3430	29.75	26.70	25.35
0-200	918-2231	22.35	20.10	19.05	918-2531	23.20	20.85	19.80	918-3231	24.35	21.90	20.85	918-3431	26.70	24.00	22.80
0-500	918-2232	22.00	19.80	18.75	918-2532	22.85	20.55	19.50	918-3232	24.00	21.60	20.55	918-3432	26.00	23.40	22.20
25-0-25	918-2233	27.70	24.90	23.70	.....	.....	.....	.....	918-3233	29.35	26.40	25.05	918-3433	31.55	28.35	27.00
50-0-50	918-2234	24.90	22.35	21.15	918-2534	26.00	23.40	22.20	918-3234	26.70	24.00	22.80	918-3434	29.90	26.85	25.50
100-0-100	918-2235	22.50	20.25	19.20	918-2535	23.50	21.15	20.10	918-3235	24.50	22.05	21.00	918-3435	27.00	24.30	23.10
500-0-500	918-2236	21.35	19.20	18.15	918-2536	22.35	20.10	19.05	918-3236	23.20	20.85	19.80	918-3436	24.50	22.05	21.00

DC MILLIAMMETERS

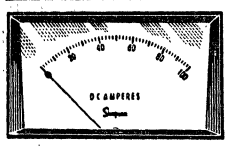
0-1	918-2250	21.00	18.90	18.00	918-2550	22.20	19.95	18.90	918-3250	22.85	20.55	19.50	918-3450	24.35	21.90	20.85
0-3	.....	.....	.....	.....	918-2552	22.20	19.95	18.90	918-3252	22.85	20.55	19.50	918-3452	24.35	22.95	21.75
0-5	918-2253	21.00	18.90	18.00	918-2553	22.20	19.95	18.90	918-3253	22.85	20.55	19.50	918-3453	24.35	21.90	20.85
0-10	918-2254	21.00	18.90	18.00	918-2554	22.20	19.95	18.90	918-3254	22.85	20.55	19.50	918-3454	24.35	21.90	20.85
0-15	918-2255	21.00	18.90	18.00	918-2555	22.20	19.95	18.90	918-3255	22.85	20.55	19.50	.....	.....	.....	.....
0-20	.....	.....	.....	.....	918-2556	22.20	19.95	18.90	918-3256	22.85	20.55	19.50	918-3456	24.35	21.90	20.85
0-25	918-2257	22.00	19.80	18.75	918-2557	22.00	19.80	18.25	918-3257	23.50	21.55	20.10	918-3457	25.50	22.95	21.75
0-50	918-2259	22.00	19.80	18.75	918-2558	22.00	19.80	18.25	918-3258	23.50	21.55	20.10	918-3458	25.50	22.95	21.75
0-100	918-2260	22.00	19.80	18.75	918-2560	22.00	19.80	18.25	918-3283	23.50	21.55	20.10	918-3460	25.50	22.95	21.75
0-150	918-2261	22.00	19.80	18.75	918-2561	22.00	19.80	18.25	918-3261	23.50	21.55	20.10	918-3461	25.50	22.95	21.75
0-200	918-2262	22.00	19.80	18.75	918-2562	22.00	19.80	18.25	918-3262	23.50	21.55	20.10	918-3462	25.50	22.95	21.75
0-250	918-2263	22.00	19.80	18.75	918-2563	22.00	19.80	18.25	918-3263	23.50	21.55	20.10	918-3463	25.50	22.95	21.75
0-500	918-2265	22.00	19.80	18.75	918-2564	22.00	19.80	18.25	918-3265	23.50	21.55	20.10	918-3465	25.50	22.95	21.75
0-750	.....	.....	.....	.....	.....	.....	.....	.....	918-3266	23.50	21.55	20.10	918-3466	25.50	22.95	21.75
0-1000	.....	.....	.....	.....	918-2567	22.00	19.80	18.25	918-3267	23.50	21.55	20.10	918-3467	25.50	22.95	21.75

DC AMMETERS (*Require shunts, see page 473)

0-1	918-2200	22.00	19.80	18.75	918-2500	22.50	20.25	19.20	918-3200	23.50	21.15	20.10	918-3400	25.50	22.95	21.75
0-1.5	.....	.....	.....	.....	918-2501	22.50	20.25	19.20	918-3201	23.50	21.15	20.10	.....	.....	.....	.....
0-2	918-2202	22.00	19.80	18.75	918-2502	22.50	20.25	19.20	918-3202	23.50	21.15	20.10	918-3402	25.50	22.95	21.75
0-3	918-2203	22.00	19.80	18.75	918-2503	22.50	20.25	19.20	918-3203	23.50	21.15	20.10	918-3403	25.50	22.95	21.75
0-5	918-2204	22.00	19.80	18.75	918-2504	22.50	20.25	19.20	918-3204	23.50	21.15	20.10	918-3404	25.50	22.95	21.75
0-10	918-2205	22.00	19.80	18.75	918-2505	22.50	20.25	19.20	918-3205	23.50	21.15	20.10	918-3405	25.50	22.95	21.75
0-15	918-2206	22.00	19.80	18.75	918-2506	22.50	20.25	19.20	918-3206	23.50	21.15	20.10	918-3406	25.50	22.95	21.75
0-25	.....	.....	.....	.....	918-2507	22.50	20.25	19.20	918-3207	23.50	21.15	20.10	918-3407	25.50	22.95	21.75
0-30	.....	.....	.....	.....	918-2508	22.50	20.25	19.20	918-3208	23.50	21.15	20.10	918-3408	25.50	22.95	21.75
0-50	918-2209	22.00	19.80	18.75	918-2509	22.50	20.25	19.20	918-3209	23.50	21.15	20.10	918-3409	25.50	22.95	21.75
*0-100	.....	.....	.....	.....	918-2511	22.50	20.25	19.20	918-3211	23.50	21.15	20.10	918-3411	25.50	22.95	21.75
*0-150	.....	.....	.....	.....	918-2512	22.50	20.25	19.20	918-3212	23.50	21.15	20.10	.....	.....	.....	.....
*0-200	.....	.....	.....	.....	918-2513	22.50	20.25	19.20	.....	.....	.....	.....	918-3413	25.50	22.95	21.75
*0-300	.....	.....	.....	.....	918-2514	22.50	20.25	19.20	918-3214	23.50	21.15	20.10	918-3414	25.50	22.95	21.75
*0-500	.....	.....	.....	.....	.....	.....	.....	.....	918-3215	23.50	21.15	20.10	918-3415	25.50	22.95	21.75
15-0-15	.....	.....	.....	.....	.....	.....	.....	.....	918-3218	24.85	22.35	21.15	.....	.....	.....	.....
30-0-30	.....	.....	.....	.....	.....	.....	.....	.....	918-3219	24.85	22.35	21.15	.....	.....	.....	.....

RECTIFIER-TYPE AC VOLTMETERS

Range	Model 1214—1½" Stock No.	EACH 1-9	10-24	25-Up	Model 1247—2½" Stock No.	EACH 1-9	10-24	25-Up	Model 1347—3½" Stock No.	EACH 1-9	10-24	25-Up	Model 1349—4½" Stock No.	EACH 1-9	10-24	25-Up
0-5	.....	.....	.....	.....	918-2675	28.10	25.20	24.00	918-3575	32.00	28.80	27.30	918-3675	35.60	31.95	30.30
0-10	918-2291	30.25	27.15	25.80	918-2677	28.10	25.20	24.00	918-3577	32.00	28.80	27.30	918-3677	35.60	31.95	30.30
0-50	.....	.....	.....	.....	.....	.....	.....	.....	918-3581	32.00	28.80	27.30	918-3681	35.60	31.95	30.30
0-150	918-2294	30.25	27.15	25.80	918-2683	28.10	25.20	24.00	918-3583	32.00	28.80	27.30	918-3683	35.60	31.95	30.30
0-300	.....	.....	.....	.....	918-2686	28.10	25.20	24.00	918-3586	32.00	28.80	27.30	918-3686	35.60	31.95	30.30



BEHIND-PANEL BEZEL MOUNTS

For modern, streamlined appearance on 3½" and 4½" "Wide-Vue" meters; also interchangeable with flush and recess meters of many popular styles. Behind panel mounting on thickness of ⅛" to 3/16". Black satin enamel finish. With bezel, brackets, screws, template, instructions. 8 oz.

Stock No.	Mfr's Type	Meter Size	EACH
918-2799	1253	3½"	2.25
918-2122	1123	4½"	2.25

AC VOLTMETERS (See Page 469 for Dimensions)

Range	Model 1257—2½" Stock No.	EACH 1-9	10-24	25-Up	Model 1357—3½" Stock No.	EACH 1-9	10-24	25-Up	Model 1359—4½" Stock No.	EACH 1-9	10-24	25-Up
0-15	918-2978	21.35	19.20	18.15	918-3778	21.50	20.10	19.05	918-3878	25.00	22.50	21.35
0-50	918-2981	21.35	19.20	18.15	918-3781	21.50	20.10	19.05	918-3881	25.00	22.50	21.35
0-150	918-2983	22.35	19.80	19.05	918-3783	24.00	21.40	20.55	918-3883	25.50	22.95	21.75
0-300	918-2986	22.35	19.80	19.05	918-3786	24.00	21.40	20.55	918-3886	25.50	22.95	21.75

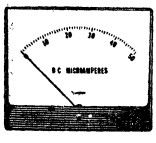
AC MILLIAMMETERS (See Page 469 for Dimensions)

0-50	918-2958	22.00	18.15	17.25	918-3758	24.35	19.20	18.15	918-3850	22.70	20.40	19.35
0-100	918-2960	22.00	18.15	17.25	918-3760	24.35	19.20	18.15	918-3860	22.70	20.40	19.35
0-500	918-2965	22.00	18.15	17.25	918-3765	24.35	19.20	18.15	918-3865	22.70	20.40	19.35

AC AMMETERS (See Page 469 for Dimensions)

0-5	918-2904	22.00	18.15	17.25	918-3704	24.35	19.20	18.15	918-3804	22.70	20.40	19.35
0-10	918-2905	22.00	18.15	17.25	918-3705	24.35	19.20	18.15	918-3805	22.70	20.40	19.35
0-25	918-2907	20.20	18.15	17.80	918-3707	22.20	19.95	18.90	918-3807	22.70	20.40	20.00
0-50	918-2909	20.20	18.15	17.80	918-3709	22.20	19.95	18.90	918-3809	22.70	20.40	20.00

8" TAUT-BAND DC MICROAMMETER



Sensitive DC microammeter boasts scale nearly 7" long. ±2% full-scale accuracy. Av. shpg. wt. 1 lb.

Range	Stock No.	EACH 1-9	10-24	25-Up
0-25	918-1926	51.50	46.35	44.10
0-50	918-1927	45.40	40.80	38.85
0-100	918-1928	43.90	39.45	37.50

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's, 480-499—Scopes, 503-505

"Wide Vue" and "Century" Panel Meters

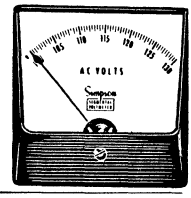
Simpson

"WIDE VUE" PANEL METERS (Cont'd)

SEGMENTAL VOLTMETERS

Types 1347, 1349. Indicate very small changes in input conditions—significant portion of voltage range is expanded to full scale. Measure voltage from 100-130 AC. Use for monitoring line voltage. Operating frequency range, 20-20,000 Hz. Accuracy, ±0.5% center scale at 25°C and 60 Hz sine wave. Dimensions: Frequency influence, less than 0.5%. Max. input, 150 Vrms. **Model 1347,** 3.25x3.25x2.73" mtg. dia. **Model 1349,** 4.68x4.00x2.75" mtg. dia.
918-3582. Type 1347 3½". 1½ lbs. Ea. 78.50 4-Up.....Ea. 63.00
918-3682. Type 1349 4½". 1½ lbs. Ea. 78.50 4-Up.....Ea. 63.00

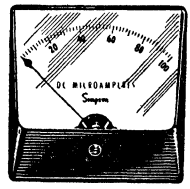
Type 1349 Multi-Range 4½" Meter. Expanded scale ranges of 100-130, 200-260, 400-520 AC volts. Operating range, 20-20,000 Hz. Accuracy, ±0.5% center scale. Frequency influence, less than 0.5%. Max. input, 150/300/600 Vrms. For use in line voltage monitoring. Dimensions, 4.28x4.00x2.75" mtg. dia. 1½ lbs.
918-3684..Ea. 87.00 4-Up....Ea. 78.30



TAUT-BAND DC MICROAMMETERS

"Wide-Vue" microammeters with sensitive taut band movement for greatly increased repeatability and lower resistance. Have 25% fewer parts than meters with core magnet movements. Meet rigid quality and performance standards. Black phenolic case, plastic cover. Dimensions P. 469. Shpg. wt. 1 lb.

Range	Model 1327T—3½" Stock No.	EACH 1-9	10-24	25-Up	Model 1329T—4½" Stock No.	EACH 1-9	10-24	25-Up
0-10	918-3124	47.60	42.75	40.65	918-3324	51.40	46.20	43.95
0-15	918-3125	42.60	38.25	36.30	918-3325	46.40	41.70	39.60
0-25	918-3126	41.20	37.05	35.25	918-3326	44.70	40.20	38.25
0-50	918-3127	31.50	28.35	27.00	918-3327	33.90	30.45	28.95
0-100	918-3128	29.00	26.10	24.75	918-3328	32.10	28.80	27.30



MODEL 1379 WIDE-VUE WATTMETERS

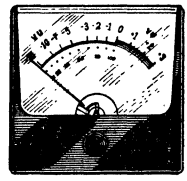
Dynamometer-type meters for measurement of DC and single-phase AC power with frequencies to 250 Hz. Feature easy-to-read "Wide-Vue" scales. All units can be used with power factors below 50% if maximum ratings are observed. All are calibrated for either magnetic or non-magnetic panels and for frequency range from 25 to 125 Hz. *In table below indicates compensated meter, accuracy ±3% of full scale reading. Others have accuracy of ±2% of full scale reading. Dimensions P. 469. Av. shpg. wt., 1 lb.

Stock No.	Range Watts	Max. Amps	Max. Volts	EACH 1-9	10-24	25-Up
918-3950	0-10*	.175	300	79.00	70.95	67.50
918-3951	0-20*	.400	300	79.00	70.95	67.50
918-3953	0-30*	.650	300	79.00	70.95	67.50
918-3955	0-75	1.0	150	59.20	53.10	50.55
918-3956	0-150	2.0	150	59.20	53.10	50.55
918-3957	0-300	4.0	150	59.20	53.10	50.55
918-3958	0-600	4.0	300	63.10	56.70	54.00
918-3959	0-750	10.0	150	59.20	53.10	50.55
918-3960	0-1500	10.0	300	63.10	56.70	54.00
918-3961	0-3000	20.0	300	63.10	56.70	54.00

"WIDE-VUE" VU METERS WITH −20 TO +3 RANGE

- Self-Shielded Annular Movement
- Not Affected by Magnetic Fields

For broadcast and communications use. Have plastic covers for wide-angle readability; show volume level in both VU and percentage modulation. Type A scale stresses level in VU for monitoring wire lines. Type B scale stresses percentage use of transmitter output in radio communications. Dimensions P. 469. Av. shpg. wt., 1½ lbs.



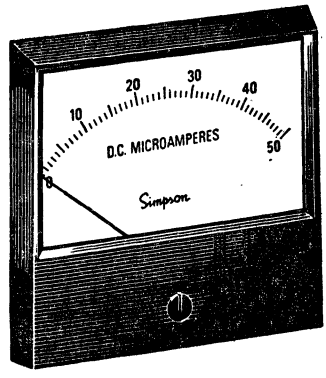
Stock No.	EACH 1-9	10-24	25-Up	Stock No.	EACH 1-9	10-24	25-Up
Model 1214—A Scale—1½"							
918-2296	33.70	30.30	28.80	.....	.....	.....	.....
Model 1347—A Scale—3½"				Model 1347—B Scale—3½"			
918-3596	38.10	34.20	32.55	918-3598	38.20	34.20	32.55
Model 1349—A Scale—4½"				Model 1349—B Scale—4½"			
918-3696	41.40	37.20	35.40	918-3697	41.40	37.20	35.40

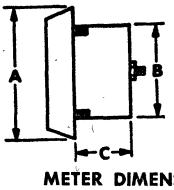
"CENTURY SERIES" PANEL METERS

FEATURING EASY-TO-READ METER DESIGN CONCEPT

- Lenses made of phenolic and glass
- Longer scales than conventional types

Easy-to-read "Century" panel meters with specially formulated lenses of phenolic and glass for wide-angle readability and maximum protection. Feature longer meter scales—3½" meters have scales ½" longer than conventional types. DC and AC-rectifier meters have "self-shielded" movements unaffected by steel panels or stray magnetic fields. All other AC meters have iron vane, magnetically damped movement. Recessed zero adjustments. Polished and spring-loaded jewels prevent damage from shock and vibration. Meter terminals are 8-32 size studs with hex type nuts. Suffix "TB" indicates Taut-Band construction. Offer a meter accuracy that is ±2% of full scale reading. The AC rectifier types offer a meter accuracy that is ±3% of full scale. See chart and diagram at left for complete dimensions of meters in this section. Average shpg. wt. 1 lb.





METER DIMENSIONS

Model	Front A	Body Dia. B	Depth C
2121	1.75"	1.51"	.90"
2124-2124TB	4.20"	2.69"	1.34"
2144	4.20"	2.69"	1.34"
2154	4.20"	2.69"	1.34"
2123-2123TB	3.00"	2.69"	1.34"
2143	3.00"	2.69"	1.34"
2153	3.00"	2.69"	1.34"
2122-2122TB	2.38"	2.16"	1.34"
2142	2.38"	2.16"	1.34"
2152	2.38"	2.16"	1.34"

DC MILLIAMMETERS

Range	Model 2121-1½" Stock No.	EACH 1-9	10-24	25-49	Model 2122-2½" Stock No.	EACH 1-9	10-24	25-49	Model 2123-3½" Stock No.	EACH 1-9	10-24	25-49	Model 2124-4½" Stock No.	EACH 1-9	10-24	25-49
0-1	918-4550	21.00	18.90	17.01	918-4650	22.15	19.95	17.95	918-4750	22.90	20.55	18.49	918-4850	24.40	21.90	19.71
0-3	918-4552	.....	.....	.....	.....	.....	.....	.....	918-4752	22.90	20.55	18.49	.....	.....	.....	.....
0-5	918-4553	21.00	18.90	17.01	918-4653	22.15	19.95	17.95	918-4753	22.90	20.55	18.49	918-4853	24.40	21.90	19.71
0-10	918-4554	21.00	18.90	17.01	918-4654	22.15	19.95	17.95	918-4754	22.90	20.55	18.49	918-4854	24.40	21.90	19.71
0-25	918-4557	22.00	19.80	17.82	918-4657	22.50	20.25	18.22	918-4757	23.45	21.15	19.03	.....	.....	.....	.....
0-50	918-4558	22.00	19.80	17.82	918-4658	22.50	20.25	18.22	918-4758	23.45	21.15	19.03	918-4858	25.30	22.95	20.60
0-100	918-4560	22.00	19.80	17.82	918-4660	22.50	20.25	18.22	918-4760	23.45	21.15	19.03	918-4860	25.30	22.95	20.60
0-200	918-4562	22.00	19.80	17.82	918-4662	22.50	20.25	18.22	918-4762	23.45	21.15	19.03	.....	.....	.....	.....
0-300	.....	.....	.....	.....	.....	.....	.....	.....	918-4764	23.45	21.15	19.03	.....	.....	.....	.....
0-500	918-4565	22.00	19.80	17.82	918-4665	22.50	20.25	18.22	918-4765	23.45	21.15	19.03	918-4865	25.30	22.95	20.60

DC MILLIVOLTMETERS

0-50	.....	.....	.....	.....	918-4670	22.50	20.25	18.22	918-4770	23.45	21.15	19.03	918-4870	25.30	22.95	20.60

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's, 480-499—Scopes, 503-505

Simpson "Century" and "Designer" Panel Meters

CENTURY SERIES PANEL METERS (Cont'd)

DC VOLTMETERS

Range	Model 2121-1½" Stock No.	EACH 1-9	10-24	25-49	Model 2122-2½" Stock No.	EACH 1-9	10-24	25-49	Model 2123-3½" Stock No.	EACH 1-9	10-24	25-49	Model 2124-4½" Stock No.	EACH 1-9	10-24	25-49
0-5	918-4575	22.00	19.80	17.82	918-4675	23.45	21.15	19.03	918-4775	24.40	21.90	19.21	.....	.....	.....	.....
0-10	918-4577	22.00	19.80	17.82	918-4677	23.45	21.15	19.03	918-4777	24.40	21.90	19.21	918-4877	27.75	24.00	21.60
0-15	918-4578	22.00	19.80	17.82	918-4678	23.45	21.15	19.03	918-4778	24.40	21.90	19.21	918-4878	27.75	24.00	21.60
0-25	918-4579	22.00	19.80	17.82	918-4679	23.45	21.15	19.03	918-4779	24.40	21.90	19.21	.....	.....	.....	.....
0-30	918-4580	22.00	19.80	17.82	918-4680	23.45	21.15	19.03	918-4780	24.40	21.90	19.21	918-4880	27.75	24.00	21.60
0-50	918-4581	22.00	19.80	17.82	918-4681	23.45	21.15	19.03	918-4781	24.40	21.90	19.21	918-4881	27.75	24.00	21.60
0-100	918-4582	22.00	19.80	17.82	918-4682	23.45	21.15	19.03	918-4782	24.40	21.90	19.21	918-4882	27.75	24.00	21.60
0-150	918-4583	22.00	19.80	17.82	918-4683	23.45	21.15	19.03	918-4783	24.40	21.90	19.21	918-4883	27.75	24.00	21.60
0-300	.....	.....	.....	.....	918-4686	23.45	21.15	19.03	918-4786	24.40	21.90	19.21	.....	.....	.....	.....
0-500	918-4587	27.40	24.60	22.14	.....	.....	.....	.....	918-4787	25.30	22.95	20.60	.....	.....	.....	.....

DC AMMETERS

‡Use external portable shunts

0-1	918-4500	22.00	19.80	17.82	.....	.....	.....	.....	918-4700	23.45	21.15	19.03	918-4800	25.30	22.95	20.60
0-3	918-4503	22.00	19.80	17.82	918-4603	22.50	20.25	18.22	918-4703	23.45	21.15	19.03	.....	.....	.....	.....
0-5	918-4504	22.00	19.80	17.82	918-4604	22.50	20.25	18.22	918-4704	23.45	21.15	19.03	918-4804	25.30	22.95	20.60
0-10	918-4505	22.00	19.80	17.82	918-4605	22.50	20.25	18.22	918-4705	23.45	21.15	19.03	918-4805	25.30	22.95	20.60
0-15	918-4506	22.00	19.80	17.82	918-4606	22.50	20.25	18.22	918-4706	23.45	21.15	19.03	918-4806	25.30	22.95	20.60
0-25	918-4507	22.00	19.80	17.82	918-4607	22.50	20.25	18.22	918-4707	23.45	21.15	19.03	.....	.....	.....	.....
‡0-50	918-4509	22.00	19.80	17.82	918-4609	22.50	20.25	18.22	918-4709	23.45	21.15	19.03	918-4809	25.30	22.95	20.60
‡0-100	.....	.....	.....	.....	.....	.....	.....	.....	918-4711	23.45	21.15	19.03	918-4811	25.30	22.95	20.60
‡0-200	.....	.....	.....	.....	.....	.....	.....	.....	918-4713	23.45	21.15	19.03	.....	.....	.....	.....

DC MICROAMMETERS

TB-Taut Band

0-10TB	.....	.....	.....	.....	.....	.....	.....	.....	918-4724	47.90	42.75	38.47	918-4824	52.15	46.70	41.58
0-15TB	.....	.....	.....	.....	.....	.....	.....	.....	918-4725	42.75	38.25	34.42	918-4825	46.40	41.70	37.53
0-25TB	.....	.....	.....	.....	918-4626	39.35	35.40	31.86	918-4726	41.05	37.05	33.35	918-4826	49.15	40.20	36.18
0-50	918-4529	27.60	24.75	22.27	918-4629	28.60	25.65	23.08	918-4729	28.20	26.10	23.49	918-4829	31.20	28.20	25.38
0-50TB	.....	.....	.....	.....	.....	.....	.....	.....	918-4727	31.60	28.35	25.51	918-4827	33.90	30.45	27.40
0-100TB	.....	.....	.....	.....	.....	.....	.....	.....	918-4728	29.10	26.10	23.49	918-4828	32.05	28.80	25.92
0-100	918-4530	25.85	22.05	19.85	918-4630	25.50	22.95	20.65	918-4730	27.75	24.00	21.60	918-4830	29.90	26.70	24.03
0-200	918-4531	22.40	20.10	18.09	918-4631	23.20	20.85	18.76	918-4731	24.40	21.90	19.71	.....	.....	.....	.....
0-200TB	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	918-4831	30.05	27.15	24.43
0-500	918-4532	22.00	19.80	17.82	918-4632	22.90	20.55	18.49	918-4732	24.40	21.90	19.71	918-4832	26.05	23.40	21.06
25-0-25	918-4533	27.85	24.90	22.41	.....	.....	.....	.....	918-4733	29.40	26.40	23.16	918-4833	31.60	28.35	25.51
0-10-50	918-4534	24.90	22.35	20.11	918-4634	26.10	23.40	21.06	918-4734	27.75	24.00	21.60	918-4834	29.90	26.85	24.16
50-0-100	918-4535	22.50	20.25	18.22	918-4635	23.45	21.15	19.03	918-4735	24.50	22.05	19.85	918-4835	26.90	24.30	21.87
500-0-500	918-4536	21.35	19.20	17.28	.....	.....	.....	.....	918-4736	23.15	20.85	18.16	918-4836	24.50	22.05	19.85

AC VOLTMETERS

Range	Model 2152-2½" Stock No.	EACH 1-9	10-24	25-Up	Model 2153-3½" Stock No.	EACH 1-9	10-24	25-Up	Model 2154-4½" Stock No.	EACH 1-9	10-24	25-Up
0-10	918-5277	21.40	19.20	17.28	918-5377	22.40	20.10	17.09	.....	.....	.....	.....
0-15	.....	.....	.....	.....	918-5378	22.40	20.10	17.09	.....	.....	.....	.....
0-150	918-5283	22.40	20.10	18.29	918-5383	24.00	20.60	17.09	918-5483	25.55	22.95	20.65
0-250	.....	.....	.....	.....	918-5385	24.00	20.60	17.09	918-5485	25.55	22.95	20.65
0-300	918-5286	22.40	20.10	18.29	918-5386	24.00	20.60	17.09	918-5486	25.55	22.95	20.65

AC AMMETERS

0-1	918-5200	20.20	18.15	16.33	918-5300	21.35	19.20	17.28	.....	.....	.....	.....
0-2	.....	.....	.....	.....	918-5302	21.35	19.20	17.28	.....	.....	.....	.....
0-3	.....	.....	.....	.....	918-5303	21.35	19.20	17.28	.....	.....	.....	.....
0-5	918-5204	20.20	18.15	16.33	918-5304	21.35	19.20	17.28	918-5404	22.75	20.40	18.36
0-10	918-5205	20.20	18.15	16.33	918-5305	21.35	19.20	17.28	918-5405	22.75	20.40	18.36
0-15	918-5206	20.20	18.15	16.33	918-5306	21.35	19.20	17.28	918-5406	22.75	20.40	18.36
0-25	918-5207	21.05	18.90	17.01	918-5307	22.15	19.95	17.95	918-5407	23.50	21.15	19.03
0-50	918-5209	21.05	18.90	17.01	918-5309	22.15	19.95	17.95	918-5409	23.50	21.15	19.03
0-75	.....	.....	.....	.....	918-5310	21.35	19.20	17.28	.....	.....	.....	.....
0-100	.....	.....	.....	.....	918-5311	21.35	19.20	17.28	.....	.....	.....	.....
0-200	.....	.....	.....	.....	.....	.....	.....	.....	918-5413	22.75	20.40	18.36
0-300	.....	.....	.....	.....	.....	.....	.....	.....	918-5414	22.75	20.40	18.36

AC RECTIFIER VOLTMETERS

Range	Model 2142-2½" Stock No.	EACH 1-9	10-24	25-Up	Model 2143-3½" Stock No.	EACH 1-9	10-24	25-Up	Model 2144-4½" Stock No.	EACH 1-9	10-24	25-Up
0-150	.....	.....	.....	.....	918-5060	32.25	28.80	25.92	918-5160	35.60	31.95	27.70

SEGMENTAL VOLTMETERS

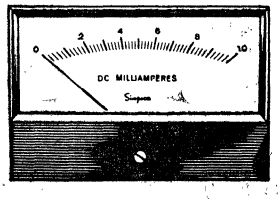
Accuracy is 0.5% in percent of center scale

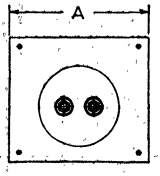
100-130	.....	.....	.....	.....	918-5050	69.95	63.00	56.70	918-5150	70.55	63.58	57.10

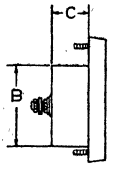
VU METER (Range −20 to +3 dB)

"A" Scale	918-4996	37.25	33.45	30.10	918-5096	38.00	34.20	30.78	918-5196	41.35	37.20	33.48

DESIGNER SERIES® PANEL METERS







METER DIMENSIONS

Mfr's Type	Meter Size	A	B	C
523	3½"	3.95"	2.16"	1.31"
543	3½"	3.95"	2.16"	1.31"
553	3½"	3.95"	2.16"	1.31"
524	4½"	4.50"	2.16"	1.31"
544	4½"	4.50"	2.16"	1.31"
554	4½"	4.50"	2.16"	1.31"

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

"Designer" Round and Rectangular Meters

Simpson

DESIGNER SERIES PANEL METERS (Cont'd)

Made to provide enhanced appearance, easy-to-read scales, and low height design for use in modern electronic equipment. Feature spring-loaded jewel movements, glass windows. Bright red knife-edge pointers. DC types have "self-shielded" meter movements—unaffected by stray magnetic fields. AC types have sensitive iron vane meter movement. ±2% full-scale accuracy. Black phenolic cases and covers. With mounting hardware. **See table on previous page for dimensions.** Av. shpg. wt. 1 lb.

DC MICROAMMETERS

Range	Model 523—3½" Stock No.	EACH 1-9	10-24	25-Up	Model 524—4½" Stock No.	EACH 1-9	10-24	25-Up
0-25	918-1326	36.00	32.40	29.16	918-1426	39.25	35.70	32.13
0-50	918-1329	29.00	26.10	23.69	918-1429	31.40	28.20	25.38
0-100	918-1330	27.75	24.00	21.60	918-1430	29.75	26.70	24.03
0-200	918-1331	24.40	21.90	19.71	918-1431	27.75	24.00	21.60
50-0-50	918-1334	27.75	24.00	21.60	918-1434	29.90	26.85	24.16
100-0-100	918-1335	24.50	22.05	19.84	918-1435	27.10	24.30	21.87

DC MILLIAMMETERS

0-1	918-1350	22.90	20.55	18.49	918-1450	24.40	21.90	19.71
0-100	918-1360	23.50	21.15	19.03	918-1460	25.30	22.95	20.60

DC AMMETERS

0-10	918-1305	23.50	21.15	19.03	918-1405	25.30	22.95	20.60

1000 OHMS-PER-VOLT DC VOLTMETERS

0-15	918-1378	24.40	21.90	19.71	918-1478	27.75	24.00	21.60
0-30	918-1380	24.40	21.90	19.71	918-1480	27.75	24.00	21.60
0-50	918-1381	24.40	21.90	19.71	918-1481	27.75	24.00	21.60
0-150	918-1383	24.40	21.90	19.71	918-1483	27.75	24.00	21.60

2000 OHMS-PER-VOLT AC AMMETERS

Range	Model 553—3½" Stock No.	EACH 1-9	10-24	25-Up	Model 554—4½" Stock No.	EACH 1-9	10-24	25-Up
0-5	918-1751	21.40	19.20	17.28	918-1851	24.90	22.35	20.11
0-10	918-1752	21.40	19.20	17.28	918-1852	24.90	22.35	20.11
0-50	918-1755	21.40	19.20	17.28	918-1855	25.30	22.95	20.60

AC VOLTMETERS

0-150	918-1765	24.00	21.60	19.44	918-1865	25.30	22.95	20.60
0-300	918-1767	24.00	21.60	19.44	918-1867	25.30	22.95	20.60

VU METER (Range —20 to +3 db)

	Model 543—3½" A Scale				Model 544—4½" A Scale			
A Scale	918-1491	38.00	34.20	30.78	918-1493	41.40	37.20	33.48

PORTABLE SHUNTS FOR DC AMMETERS

50 mV. 0.65 ohm. With 5-ft. leads.

Amps	Stock No.	Type	1-9, EA.	10-24, Ea.	25-49, Ea.
50	918-6709	6709	13.00	11.70	10.53
75	918-6711	6711	13.00	11.70	10.53
100	918-6713	6713	13.00	11.70	10.53
150	918-6714	6714	13.00	11.70	10.53
200	918-6715	6715	13.00	11.70	10.53

CURRENT TRANSFORMERS

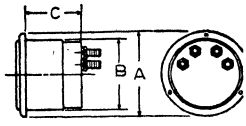
Amps	Stock No.	Type	EACH	Amps	Stock No.	Type	EACH
50	918-3053	1293	31.50	250	918-3066	1313	17.00
75	918-3065	1306	23.45	300	918-3059	1300	19.30
100	918-3057	1297	19.30	400	918-3061	1305	21.35
150	918-3058	1298	17.00	500	918-3060	1301	23.15

Inserted one turn primary type for use with switchboard and panel AC ammeters where external transformers are required. High-dielectric insulation. Secondary rated 5 amps. 1 lb.

ROUND AND RECTANGULAR PANEL METERS

METER DIMENSIONS

Mfr's Type	Meter Size	A	B	C
25	3½"	3.50"	2.75"	1.31"
27, 37	3½"	3.00"	2.75"	1.36"
29, 39	4½"	4.66"	2.75"	1.00"
55	3½"	3.50"	2.75"	1.31"
57	3½"	3.50"	2.75"	1.31"
59	4½"	4.66"	2.75"	1.00"
127, 157	2½"	2.37"	2.17"	1.45"



3½" Models 25, 55 — 2½" Models 127, 157; 3½" Models 27, 37, 57 — 4½" Models 29, 39, 59

2% accuracy. AC meters have iron-vane movements, 20-100 Hz, except AC milliammeters-ammeters, 20-1000 Hz. Bakelite cases. (†) Supplied with external multiplier. 1 lb.

DC MILLIAMMETERS

Range	Model 127 2½" Rect.	EACH 1-9	10-24	25-Up	Model 26 3½" Rnd.	Model 27 3½" Rect.	EACH 1-9	10-24	25-Up	Model 29 4½" Rect.	EACH 1-9	10-24	25-Up
0-1	918-1050	21.90	19.95	17.95	918-0150	918-0250	22.85	20.55	18.49	918-0453	24.40	21.90	19.71
0-5	918-1053	21.90	19.95	17.95	918-0153	918-0253	22.85	20.55	18.49	918-0453	24.40	21.90	19.71
0-10	918-1054	21.90	19.95	17.95	918-0154	918-0254	22.85	20.55	18.49	918-0454	24.40	21.90	19.71
0-50	.....	.....	.....	.....	918-0158	918-0258	23.50	21.15	19.03	918-0458	25.55	22.95	20.65
0-100	918-1060	22.45	20.25	18.22	918-0160	918-0260	23.50	21.15	19.03	918-0460	25.55	22.95	20.65
0-500	918-1065	22.45	20.25	18.22	918-0165	918-0265	23.50	21.15	19.03	918-0465	25.55	22.95	20.65

DC VOLTMETERS

†Have external multiplier resistors. 1.5-300 volt units are 1000 ohms/volt; 500-5000 volt units are 2000 ohms/volt.

0-3	918-1074	23.55	21.15	19.03	918-0174	918-0274	24.40	21.90	19.71	918-0474	26.75	24.00	21.60
0-5	918-1075	23.55	21.15	19.03	918-0175	918-0275	24.40	21.90	19.71	918-0475	26.75	24.00	21.60
0-10	918-1077	23.55	21.15	19.03	918-0177	.....	24.40	21.90	19.71	918-0477	26.75	24.00	21.60
0-15	918-1078	23.55	21.15	19.03	918-0178	918-0278	24.40	21.90	19.71	918-0478	26.75	24.00	21.60
0-25	918-1079	23.55	21.15	19.03	918-0179	.....	24.40	21.90	19.71	918-0479	26.75	24.00	21.60
0-50	918-1081	23.55	21.15	19.03	918-0181	918-0281	24.40	21.90	19.71	918-0481	26.75	24.00	21.60
0-100	918-1082	23.55	21.15	19.03	918-0182	918-0282	24.40	21.90	19.71	918-0482	26.75	24.00	21.60
0-150	918-1083	23.55	21.15	19.03	918-0183	918-0283	24.40	21.90	19.71	918-0483	26.75	24.00	21.60
0-250	918-1085	23.55	21.15	19.03	918-0185	.....	24.40	21.90	19.71	918-0485	26.75	24.00	21.60
0-300	.....	.....	.....	.....	918-0186	918-0286	24.40	21.90	19.71	918-0486	26.75	24.40	21.60
0-500	918-1087	24.35	21.90	19.71	918-0187	918-0287	25.55	22.95	20.65	918-0487	27.50	24.75	22.27
†0-1000	.....	.....	.....	.....	918-0189	918-0289	31.50	28.35	25.51	918-0489	33.75	30.30	27.27
†0-1500	.....	.....	.....	.....	.....	918-0290	31.50	28.35	25.51	918-0490	34.00	30.60	27.54
†0-5000	.....	.....	.....	.....	.....	918-0295	34.25	30.90	27.81	918-0495	37.75	33.90	30.51

DC MILLIVOLTMETERS

0-50	918-1070	22.45	20.25	18.22	918-0181	.....	23.55	21.15	19.03	918-0481	25.55	22.95	20.65

DC MICROAMMETERS

0-50	918-1029	28.55	25.65	23.08	918-0129	918-0229	28.80	26.00	23.40	918-0429	31.20	28.20	25.38
0-100	918-1030	25.45	22.95	20.60	918-0130	918-0230	26.75	24.00	21.60	918-0430	29.75	26.70	24.03
0-200	918-1031	23.20	20.85	18.76	918-0131	918-0231	24.40	21.90	19.71	918-0431	26.75	24.00	21.60
0-500	918-1032	22.90	20.55	18.49	918-0132	918-2032	24.05	21.60	19.44	918-0432	26.25	23.40	21.06
25-0-25	.....	.....	.....	.....	.....	.....	.....	.....	.....	918-0433	31.50	28.35	25.51
50-0-50	.....	.....	.....	.....	918-0134	918-0234	26.75	24.00	21.60	918-0434	29.90	26.85	23.98
100-0-100	.....	.....	.....	.....	918-0135	918-0235	24.50	22.05	19.79	918-0435	27.00	24.30	21.87
500-0-500	.....	.....	.....	.....	.....	918-0236	22.25	19.95	17.95	918-0436	31.50	28.35	25.51

Assorted Test Equipment, 477, 478, 480-482, 489, 492, 497, 500-502, 510-516

Panel Meters

ROUND AND RECTANGULAR PANEL METERS (Cont'd)

DC AMMETERS

Range	Model 127 2½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 25 3½" Rnd.	Model 27 3½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 29 4½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up
0-2	918-1002	22.45	20.25	18.22	918-0102	918-0202	23.55	21.15	19.03	918-0402	25.55	22.95	20.65
0-3	918-1003	22.45	20.25	18.22	918-0103	918-0203	23.55	21.15	19.03	918-0403	25.55	22.95	20.65
0-5	918-1004	22.45	20.25	18.22	918-0104	918-0204	23.55	21.15	19.03	918-0404	25.55	22.95	20.65
0-10	918-1005	22.45	20.25	18.22	918-0105	918-0205	23.55	21.15	19.03	918-0405	25.55	22.95	20.65
0-25	918-1007	22.45	20.25	18.22	.....	918-0207	23.55	21.15	19.03	918-0407	25.55	22.95	20.65
0-50	.....	.....	.....	.....	918-0109	918-0209	23.55	21.15	19.03	918-0409	25.55	22.95	20.65

AC MILLIAMMETERS

Range	Model 157 2½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 55 3½" Rnd.	Model 57 3½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 59 4½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up
0-100	918-1260	20.20	18.15	16.28	918-0760	918-0860	21.25	19.20	17.28	918-0960	22.75	20.40	18.36
0-250	918-1263	20.20	18.15	16.28	.....	918-0863	21.25	19.20	17.28	918-0963	22.75	20.40	18.36
†0-500	918-1265	20.20	18.15	16.28	918-0765	918-0865	21.25	19.20	17.28	918-0965	22.75	20.40	18.36

AC VOLTMETERS

0-5	.....	.....	.....	.....	918-0775	918-0875	22.35	20.10	18.09	918-0975	25.00	22.50	20.25
0-10	918-1277	21.25	19.20	17.28	918-0777	.....	22.35	20.10	18.09	918-0977	25.00	22.50	20.25
0-15	918-1278	21.25	19.20	17.28	.....	918-0878	22.35	20.10	18.09	918-0978	25.00	22.50	20.25
0-25	918-1279	21.25	19.20	17.28	918-0779	918-0879	22.35	20.10	18.09	918-0979	25.00	22.50	20.25
0-50	918-1281	21.25	19.20	17.28	918-0781	918-0881	22.35	20.10	18.09	918-0981	25.00	22.50	20.25
0-150	918-1283	22.35	20.10	18.09	918-0783	918-0883	24.05	21.60	19.44	918-0983	25.75	22.95	20.65
0-250	918-1285	22.35	20.10	18.09	918-0785	918-0885	24.05	21.60	19.44	918-0985	25.75	22.95	20.65
0-300	918-1286	22.35	20.10	18.09	918-0786	918-0886	24.05	21.60	19.44	918-0986	25.75	22.95	20.65
†0-500	.....	.....	.....	.....	918-0787	918-0887	30.35	27.30	24.57	918-0987	22.75	20.40	18.36

AC AMMETERS

0-1	918-1200	20.20	18.15	16.33	918-0700	918-0800	21.25	19.20	17.28	918-0900	22.75	20.40	18.36
0-3	918-1203	20.20	18.15	16.33	918-0703	918-0803	21.25	19.20	17.28	918-0903	22.75	20.40	18.36
0-5	918-1204	20.20	18.15	16.33	918-0704	918-0804	21.25	19.20	17.28	918-0904	22.75	20.40	18.36
0-10	918-1205	20.20	18.15	16.33	918-0705	918-0805	21.25	19.20	17.28	918-0905	22.75	20.40	18.36
0-15	918-1206	20.20	18.15	16.33	918-0706	918-0806	21.25	19.20	17.28	918-0906	22.75	20.40	18.36
0-25	918-1207	21.05	18.90	17.01	918-0707	918-0807	22.15	19.95	17.95	918-0907	23.50	21.15	19.03
0-30	918-1208	21.05	18.90	17.01	918-0708	918-0808	22.15	19.95	17.95	918-0908	23.50	21.15	19.03
0-50	918-1209	21.05	18.90	17.01	918-0709	918-0809	22.15	19.95	17.95	918-0909	23.50	21.15	19.03
0-75	.....	.....	.....	.....	918-0710	918-0810	21.25	19.20	17.28	918-0910	22.75	20.40	18.36

RF AMMETERS

Internal thermocouple type. Self-shielding meter movment. Have ±2% accuracy full scale. Simpson's Annular meter movement and calibrated for non-magnetic panel. Model 37: mounting flange, 2/10"; depth, 1²³⁄₆₄"; body dia., 2¾". Model 39: mounting flange, 6/10"; depth, 1"; body dia., 2¾". Shpg. wt. 1 lb.

Range	Model 37 3½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 39 4½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up
0-1	.....	.....	.....	.....	918-0600	30.90	27.75	24.97
0-2	918-0552	27.00	24.30	21.87	.....	.....	.....	.....
0-3	918-0553	27.00	24.30	21.87	918-0604	30.90	27.75	24.97
0-5	918-0555	27.00	24.30	21.87	918-0605	30.90	27.75	24.97

MODEL 79 WATTMETERS

Not illus.) Flange, 4.2x4.66"; 2.75" dia.; 1.68" dp. Av. wt. 1 lb.

Stock No.	Range Watts	Max. Amps	Max. Volts	EACH 1-9	EACH 10-24	EACH 25-Up
918-0991	0-50	2.0	150	79.00	70.95	63.85
918-0992	0-75	1.0	150	59.00	53.10	47.79
918-0996	0-750	10.0	150	59.00	53.10	47.79
918-0997	0-1500	10.0	300	63.00	56.70	51.03

MODEL 47 AND 142 VU METERS

Volume level indicators for use in broadcasting and communications. Show level both in VU and percentage modulation. VU scale A, —20 to +3. 3900-ohm internal impedance across 600-ohm lines (zero reference, 1 mW). Meets all electrical and ballistic specifications of ASA and Bell Laboratories. Model 47: Flange, 3½" nom.; depth, 1²³⁄₆₄"; body dia., 2¾". Model 142: Flange, 4½"; depth, 1"; dia., 3¼". *Illuminated (6.8V). Shpg. wt. 1 lb.

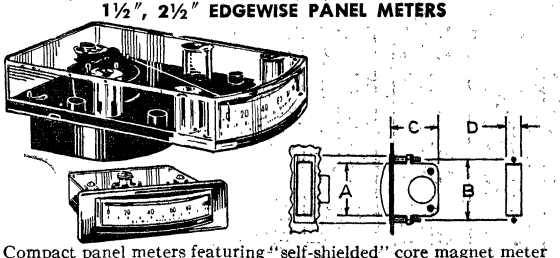
Stock No.	Model	EACH 1-9	EACH 10-24	EACH 25-Up
918-0696	47	37.75	34.20	30.78
918-1196	142	41.40	37.20	33.48
918-1198	142*	45.25	40.65	36.58

MODEL 27 DC GALVANOMETERS

D'Arsonval movements. Resistance: 500-0-500 μamp meter, 46 ohms: 75-0-75 μamp, 1850 ohms. Scale marked 50-0-50. 3½" rectangular case. Body dia., 2¾"; depth, 1.36".

Stock No.	Range	1-9, EACH	10-24, EACH	25-Up, EACH
918-0222	500-0-500	23.20	20.85	18.76
918-0221	75-0-75	28.50	25.65	23.08

1½", 2½" EDGEWISE PANEL METERS

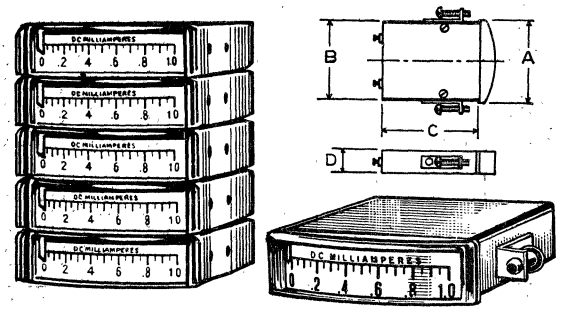


Compact panel meters featuring "self-shielded" core magnet meter movements—calibrations remain unaffected by stray magnetic fields. Meter accuracy is ±2% of full scale reading. DC voltmeters have 1000 ohms/volt sensitivity (except *2000 ohms/volt). In dust-proof molded lucite cases. Solder lug terminals, except 0-5 DC ammeter (Type 1522), stud-type terminals. Standard scales with black numbers on white background. Shipped with bezel and two speed nuts. Av. shpg. wt., 12 oz.

METER DIMENSIONS

Model No.	Flange with Bezel	Height, Barrel	Depth (Total)	Scale Length
1521	0.75x2.25"	1.13"	2.00"	1.375"
1522	1.00x3.25"	1.22"	3.50"	1.875"
1542	1.00x3.25"	1.22"	3.50"	1.875"

STACKING EDGEWISE PANEL METERS



Miniature meters for easy installation in panels, modern streamlined appearance for equipment. Boast "self-shielded" core magnet movement that eliminates protruding barrel. Meter scale extends to nearly full width and height of meter—no wasted space. Accuracy, ±2% of full scale reading. Type 1921: scale length, 1.37"; panel cutout, .525x1.718"; depth behind panel, 2.3". Type 1622: scale length, 1.85"; panel cutout, .562x2.312"; depth behind panel, 2.3". Av. shpg. wt., ¾ lb.

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's 480-499—Scopes, 503-505

Panel Meters (Cont'd)

PANEL METERS

Simpson

1½", 2½" EDGEWISE PANEL METERS (Cont'd)

TYPE 1521 1½" METERS

Stock No.	Mfr's Type	Range	EACH 1-9	10-24	25-Up
918-4063	1521	0 50 DC Voltmeter	21.40	19.20	17.28
918-4069	1521	*0-500 DC Voltmeter	21.65	19.50	17.55
918-4040	1521	0-1 DC Milliammeter	21.05	18.90	17.01
918-4042	1521	0-10 DC Milliammeter	21.05	18.90	17.01
918-4045	1521	0-100 DC Milliammeter	22.00	19.80	17.82
918-4048	1521	0-500 DC Milliammeter	22.00	19.80	17.82
918-4031	1521	0-50 DC Microammeter	28.40	25.50	22.95
918-4032	1521	0-100 DC Microammeter	25.00	22.50	20.25

TYPES 1522 AND 1542 2½" METERS

918-4163	1522	0-50 DC Voltmeter	23.45	21.15	19.03
918-4165	1522	0-150 DC Voltmeter	23.45	21.15	19.03
918-4169	1522	*0-500 DC Voltmeter	23.60	21.45	19.30
918-4120	1522	0-5 DC Ammeter	24.90	22.35	20.01
918-4140	1522	0-1 DC Milliammeter	23.20	20.85	18.76
918-4142	1522	0-10 DC Milliammeter	23.20	20.85	18.76
918-4145	1522	0-100 DC Milliammeter	24.20	21.75	19.57
918-4148	1522	0-500 DC Milliammeter	24.20	21.75	19.57
918-4131	1522	0-50 DC Microammeter	30.25	27.30	24.57
918-4132	1522	0-100 DC Microammeter	27.40	24.60	22.14
918-4196	1542	VU Meter "A" Scale	38.50	34.65	31.18

STACKING EDGEWISE PANEL METERS (Cont'd)

TYPE 1921 1½" METERS

Stock No.	Range	EACH 1-9	10-24	25-Up
918-4421	0-15 DC Voltmeter	25.05	22.50	20.25
918-4462	0-25 DC Voltmeter	25.05	22.50	20.25
918-4440	0-1 DC Milliammeter	24.55	22.05	19.84
918-4443	0-25 DC Milliammeter	25.85	23.25	20.92
918-4444	0-50 DC Milliammeter	25.85	23.25	20.92
918-4448	0-500 DC Milliammeter	25.85	23.25	20.92
918-4455	0-50 DC Millivoltmeter	26.20	23.95	21.19
918-4431	0-50 DC Microammeter	31.85	28.65	25.78
918-4434	0-500 DC Microammeter	25.45	22.95	20.65

TYPE 1622 2½" METERS

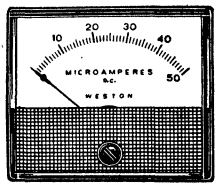
918-4361	0-15 DC Voltmeter	25.00	23.85	21.46
918-4362	0-25 DC Voltmeter	25.00	23.85	21.46
918-4365	0-150 DC Voltmeter	25.00	23.85	21.46
918-4340	0-1 DC Milliammeter	26.40	23.70	21.33
918-4343	0-25 DC Milliammeter	27.40	24.60	22.14
918-4344	0-50 DC Milliammeter	27.40	24.60	22.14
918-4348	0-500 DC Milliammeter	27.40	24.60	22.14
918-4355	0-50 DC Millivoltmeter	27.75	24.90	22.41
918-4331	0-50 DC Microammeter	33.20	29.85	26.86
918-4334	0-500 DC Microammeter	26.85	24.15	21.73

WESTON PANEL METERS

Pivot And Jewel Movement

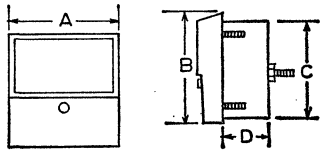
2% Accuracy

Dust And Static Free



MODEL 2021—DC VOLTMETERS—PIVOT AND JEWEL—2½"

Range	Clear Front	Black Front	EACH 1-9	10-24	25-49	50-99
0-5	985-2251	985-3251	20.10	18.10	17.10	16.10
0-50	985-2256	985-3256	20.10	18.10	17.10	16.10
0-200	985-2259	985-3259	20.10	18.10	17.10	16.10
DC AMMETER (SELF-CONTAINED)						
0-5	985-2288	985-3288	19.00	17.10	16.15	15.20
DC MILLIAMMETERS						
0-1	985-2312	985-3312	19.00	17.10	16.15	15 70
0-10	985-2315	985-3315	19.00	17.10	16.15	15.70
0-50	985-2317	985-3317	19.00	17.10	16.15	15.70
0-100	985-2318	985-3318	19.00	17.10	16.15	15.70
0-200	985-2319	985-3319	19.00	17.10	16.15	15.70
0-500	985-2321	985-3321	19.00	17.10	16.15	15.70
MODEL 2031—DC VOLTMETERS—PIVOT AND JEWEL—3½"						
0-10	985-2264	985-3264	20.70	18.70	17.70	16.70
0-25	985-2266	985-3266	20.70	18.70	17.70	16.70
0-50	985-2268	985-3268	20.70	18.70	17.70	16.70
0-150	985-2070	985-3070	20.70	18.70	17.70	16.70
DC AMMETERS						
0-1	985-2295	985-3295	19.60	17.70	16.75	15.80
0-5	985-2297	985-3297	19.60	17.70	16.75	15.80
0-10	985-2298	985-3298	19.60	17.70	16.75	15.80
DC MILLIAMMETERS						
0-1	985-2322	985-3322	19.60	17.70	16.75	15.80
0-10	985-2325	985-3325	19.60	17.70	16.75	15.80
0-50	985-2327	985-3327	19.60	17.70	16.75	15.80
0-500	985-2331	985-3331	19.60	17.70	16.75	15.80
MODEL 2032—AC VOLTMETER (RECTIFIER TYPE)						
0-150	985-2758	985-3758	26.70	24.05	22.85	21.65
MODEL 2041—DC VOLTMETERS—PIVOT AND JEWEL—4½"						
0-5	985-2275	985-3275	20.05	18.05	17.05	16.05
0-10	985-2276	985-3276	20.05	18.05	17.05	16.05
0-25	985-2278	985-3278	20.05	18.05	17.05	16.05
0-50	985-2280	985-3280	20.05	18.05	17.05	16.05
0-200	985-2283	985-3283	20.05	18.05	17.05	16.05
DC MILLIAMMETER						
0-1	985-2332	985-3332	20.95	17.85	16.90	15.95
0-5	985-2334	985-3334	20.95	17.85	16.90	15.95
0-50	985-2337	985-3337	20.95	17.85	16.90	15.95
DC AMMETER (SELF-CONTAINED)						
0-1	985-2304	985-3304	20.95	17.85	16.90	15.95
0-2	985-2305	985-3305	20.95	17.85	16.90	15.95
0-5	985-2306	985-3306	20.95	17.85	16.90	15.95
DC MICROAMMETER						
0-50	985-2359	985-3359	26.25	23.65	22.50	21.35
0-100	985-2360	985-3360	24.25	21.85	20.75	19.75
0-200	985-2361	985-3361	23.40	21.05	20.00	19.00
0-500	985-2362	985-3362	22.30	20.05	19.00	18.00



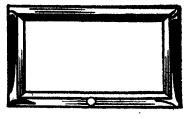
METER DIMENSIONS PIVOT AND JEWEL

Model	Front A	Front B	Body Dia. C	Deph. H D
2021	2.80"	2.40"	2.20"	1.14"
2031	3.50"	2.98"	2.98"	1.14"
2041	4.53"	4.05"	2.75"	1.14"

PIVOT AND JEWEL MOVEMENT

2% accuracy long-scale meters have clear-view plastic fronts sealed and treated to remain dust and static-free. Pivot mechanism uses spring-back jewels for rugged use. DC and AC rectifier meters are shielded to isolate movement from magnetic influence by steel panels or stray magnetic fields. AC meters have iron vane movement. With mounting hardware. Terminals are 8-32 studs with hex nuts; 5 amps and above terminals ¼-28.

BEHIND-PANEL BEZELS



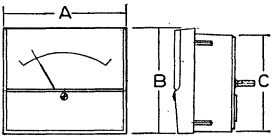
Behind panel mounting. Max. panel thickness ⅛". Black satin. Hardware, template. Av. shpg. wt. 8 oz.

Stock No.	For Model	Meter Size	EACH 1-9	10-24	25-49	50-99
985-2500	2021	2½"	2.00	1.80	1.70	1.60
985-2501	2031	3½"	2.00	1.80	1.70	1.60
985-2502	2041	4½"	2.00	1.80	1.70	1.60

Assorted Test Equipment, 477, 478, 480-482, 489, 492, 497, 500-502, 510-516

PANEL METERS

WESTON Panel Meters



DIMENSIONS IN INCHES

Type	Front A	Front B	Body Dia. C	Depth D
2021	2.80	2.40	2.20	1.14
2031	3.50	2.98	2.75	1.14
2041	4.53	4.05	2.75	1.14

2000 SERIES PANEL METERS

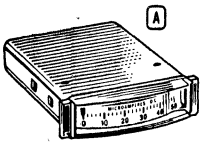
Accuracy: ±2% full scale. "Taut Band" construction provides high sensitivity. CORMAG mechanism provides full shielding from magnetic effects and gives long term stability. Flattened scale arc improves readability. Meets ANSI C39.1 standard. Improved dust sealing. Knife-edge pointer. Av. shpg. wt. 1 lb.

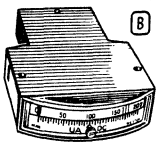
DC VOLTMETERS TAUT BAND 3½″

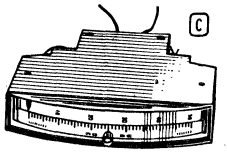
Range	Model 2031 Clear Front	Model 2031 Black Front	EACH 1-9	10-24	25-49	50-99
0-5	985-2013	985-3013	22.65	20.40	19.25	18.15
0-50	985-2018	985-3018	22.65	20.40	19.25	18.15
0-200	985-2021	985-3021	22.65	20.40	19.25	18.15
DC AMMETERS TAUT BAND 3½″ (Self Contained)						
0-1	985-2044	985-3044	21.55	19.40	18.30	17.25
0-5	985-2046	985-3046	21.55	19.40	18.30	17.25
0-10	985-2047	985-3047	21.55	19.40	18.30	17.25
DC MILLIAMMETERS TAUT BAND 3½″						
0-1	985-2070	985-3070	21.55	19.40	18.30	17.25
0-50	985-2075	985-3075	21.55	19.40	18.30	17.25
0-100	985-2076	985-3076	21.55	19.40	18.30	17.25
0-500	985-2079	985-3079	21.55	19.40	18.30	17.25
DC MICROAMMETERS TAUT BAND 3½″						
0-50	985-2097	985-3097	27.30	24.60	23.20	21.85
0-100	985-2098	985-3098	25.60	23.05	21.70	20.50
0-200	985-2099	985-3099	24.25	21.85	20.60	19.40
50-0-50	985-2101	985-3101	24.25	21.85	20.60	19.40

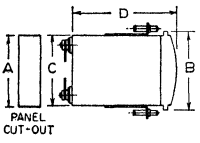
DC VOLTMETERS TAUT BAND 2½″

Range	Model 2021 Clear Front	Model 2021 Black Front	EACH 1-9	10-24	25-49	50-99
0-5	985-2001	985-3001	20.10	18.10	17.10	16.10
0-50	985-2006	985-3006	20.10	18.10	17.10	16.10
0-200	985-2009	985-3009	20.10	18.10	17.10	16.10
DC AMMETERS TAUT BAND 2½″ (Self Contained)						
0-5	985-2038	985-3038	19.00	18.85	16.15	15.20
DC VOLTMETERS TAUT BAND 4½″						
Range	Model 2041 Clear Front	Model 2041 Black Front	EACH 1-9	10-24	25-49	50-99
0-5	985-2025	985-3025	24.00	21.60	20.40	19.20
0-50	985-2030	985-3030	24.00	21.60	20.40	19.20
0-200	985-2033	985-3033	24.00	21.60	20.40	19.20
DC AMMETERS TAUT BAND 4½″						
0-1	985-2052	985-3052	22.95	20.45	19.45	18.30
0-2	985-2053	985-3053	22.95	20.45	19.45	18.30
0-5	985-2054	985-3054	22.95	20.45	19.45	18.30
DC MILLIAMMETER TAUT BAND 2½″						
0-1	985-2060	985-3060	20.95	18.85	17.80	16.75
0-10	985-2063	985-3063	20.95	18.85	17.80	16.75
0-50	985-2065	985-3065	20.95	18.85	17.80	16.75
0-100	985-2066	985-3066	20.95	18.85	17.80	16.75
DC MICROAMMETERS TAUT BAND 2½″						
0-50	985-2090	985-3090	26.75	24.10	22.75	21.40
0-100	985-2091	985-3091	24.85	22.40	21.15	19.90
0-200	985-2092	985-3092	24.85	22.40	21.15	19.90
0-500	985-2093	985-3093	24.85	22.40	21.15	19.90
50-0-50	985-2094	985-3094	24.85	22.40	21.15	19.90
100-0-100	985-2095	985-3095	24.85	22.40	21.15	19.90
DC MILLIAMMETERS TAUT BAND 4½″						
0-5	985-2082	985-3082	20.90	20.45	19.45	18.30
0-50	985-2085	985-3085	20.90	20.45	19.45	18.30
0-300	985-2088	985-3088	20.90	20.45	19.45	18.30
0-500	985-2089	985-3089	20.90	20.45	19.45	18.30
DC MICROAMMETERS TAUT BAND 4½″						
0-50	985-2104	985-3104	28.65	25.75	24.35	22.90
0-100	985-2105	985-3105	26.70	23.85	22.40	20.95
0-200	985-2106	985-3106	25.95	23.05	21.65	20.20
0-500	985-2107	985-3107	24.50	21.60	20.20	18.75









DIMENSIONS IN INCHES

Type	A	B	C	D
111	1.65	1.81	1.615	.....
121	2.177	.....	2.47	2.984
131	3.437	3.796	3.30	3.171

WESTON THIN-LINE EDGEWISE PANEL METERS

- Completely Flat—Can be Stacked
- Cormag Mechanism Self Shielding

Space-saving edgewise meters are completely flat in order to be easily stacked. Self-shielded Cormag® mechanism, shock abosrbing jewel movement. In-line red pointer and scale to eliminate parallax. Also front mounted zero corrector (except Model 111) is included. All DC voltmeters are 5,000 ohms/volt; AC voltmeters are 2000 ohms/volt. Easy horizontal mounting: clips fasten to meter behind panel accuracy: 2% of full scale reading on DC meters, 3% on AC. Especially designed to meet ASA C-39.1 specifications. Avg. shpg. wt. ¼ lb.

A MODEL 111 1½″ METERS

DC VOLTMETERS

Stock No.	Range	EACH 1-9	10-24	25-Up
985-1139	0-10	18.25	16.42	14.78
985-1141	0-25	18.25	16.42	14.78
985-1143	0-50	18.25	16.42	14.78
985-1145	0-150	18.25	16.42	14.78
DC AMMETER (Self Contained)				
985-1101	0-1	20.75	18.67	16.80
DC MILLIAMMETERS				
Stock No.	Range	EACH 1-9	10-24	25-Up
985-1125	0-1	17.50	15.75	14.17
985-1126	0-5	17.50	15.75	14.17
985-1127	0-10	17.50	15.75	14.17
985-1129	0-25	18.25	16.42	14.78
DC MICROAMMETERS				
985-1115	0-50	22.50	20.25	18.22
985-1116	0-100	19.25	17.32	15.59
985-1117	0-200	18.00	16.20	14.58
985-1118	0-500	17.75	15.97	14.37
985-1120	50-0-50	19.25	17.32	15.59

MODEL 112 RECTIFIER AC VOLTMETER

985-1125	0-150	23.25	20.92	18.83

B MODEL 121 2½″ METERS

DC VOLTMETERS

Stock No.	Range	EACH 1-9	10-24	25-Up
985-1339	0-10	20.75	18.67	16.80
985-1341	0-25	20.75	18.67	16.80
985-1343	0-50	20.75	18.67	16.80
985-1345	0-150	20.75	18.67	16.80
985-1346	0-300	20.75	18.67	16.80
DC AMMETER (Self Contained)				
985-1300	0-1	20.75	18.67	16.80
DC MILLIAMMETERS				
985-1325	0-1	19.75	17.77	16.99
985-1326	0-5	19.75	17.77	15.99
985-1327	0-10	19.75	17.77	15.99
985-1332	0-150	20.75	18.67	16.80
985-1333	0-250	20.75	18.67	16.80
DC MICROAMMETERS				
985-1315	0-50	25.00	22.50	20.25
985-1316	0-100	21.50	19.35	17.41
985-1317	0-200	20.25	18.22	16.40
985-1318	0-500	20.00	18.00	16.20
985-1320	50-0-50	21.50	19.35	17.41

MODEL 122 RECTIFIER AC VOLTMETERS

985-1355	0-150	25.50	22.95	20.65
985-1358	0-300	25.50	22.95	20.65

C MODEL 131 3½″ METERS

DC VOLTMETERS

Stock No.	Range	EACH 1-9	10-24	25-Up
985-1539	0-10	23.00	20.70	18.63
985-1541	0-25	23.00	20.70	18.63
985-1543	0-50	23.00	20.70	18.63
985-1544	0-100	23.00	20.70	18.63
985-1546	0-300	23.00	20.70	18.63
DC AMMETER (Self Contained)				
985-1500	0-1	23.00	20.70	18.63
DC MILLIAMMETERS				
985-1525	0-1	22.00	19.80	17.82
985-1531	0-100	23.00	20.70	18.63
DC MICROAMMETERS				
Stock No.	Range	EACH 1-9	10-24	25-Up
985-1515	0-50	27.25	24.52	22.07
985-1516	0-100	23.75	21.37	19.23
985-1517	0-200	22.75	20.47	18.42
985-1518	0-500	22.50	20.25	18.22
985-1520	50-0-50	23.75	21.37	19.23

MODEL 132 RECTIFIER AC VOLTMETERS

985-1555	0-150	28.00	25.20	22.68
985-1558	0-300	28.00	25.20	22.68

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's 480-499—Scopes, 503-505

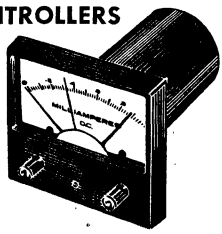
Accurate Controllers and Pyrometers

ASSORTED TEST GEAR

api

ULTIMETER" SOLID-STATE METER-RELAY CONTROLLERS

Model 503-X. Relay control independent of meter movement, yet control point is set with familiar red pointer. Solid-state, with integrated circuits used for comparison functions. Wired failsafe, automatic reset. Relay output, SPDT, 5A at 115 VAC resistive. ±1% F. S. accuracy. Model 603 X temperature controllers have cold junction compensation and thermocouple break protection.



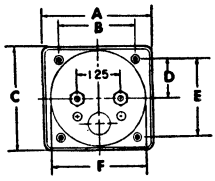


TABLE OF DIMENSIONS IN INCHES

Type	A	B	C	D	E	F	G	H	J
503	4.71	4.00	4.27	2.02	3.56	2.79	0.761	1.95	2.62
603	5.75	5.25	4.36	2.15	3.00	2.79	0.761	1.95	2.62

MODEL 503 X Shpg. wt., 1½ lbs.

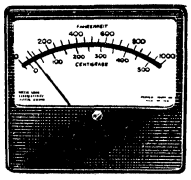
DC Range	Imp. Ohms	Single Set-Point, EA. Stock No.	1-9	10-24	Double Set-Point, EA. Stock No.	1-9	10-24
0-1 μA	10k	716-0480	186.50	152.00	716-0490	216.00	175.75
0-10 μA	1000	716-0481	175.00	130.15	716-0491	177.25	144.40
0-50 μA	200	716-0482	136.25	111.15	716-0492	165.25	134.90
50-0-50 μA	100	716-0483	142.25	115.90	716-0493	172.15	139.65
0-100 μA	100	716-0484	130.15	106.40	716-0494	155.90	130.15
0-1 mA	10	716-0485	130.15	106.40	716-0495	155.90	130.15
0-10 mV	10k	716-0486	142.25	115.90	716-0496	172.15	139.65
0-50 mV	50k	716-0487	130.15	106.40	716-0497	159.25	130.65

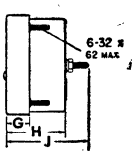
MODEL 603 X (*Thermocouple) Shpg. wt., 1½ lbs.

Range °F	*	Single Set-Point, EA. Stock No.	1-9	10-24	Double Set-Point, EA. Stock No.	1-9	10-24
0-150	I/C	716-0980	186.50	152.00	716-0990	216.00	175.75
0-300	I/C	716-0981	175.00	142.50	716-0991	202.50	166.25
0-500	I/C	716-0982	169.50	137.75	716-0992	198.50	161.50
0-750	I/C	716-0983	169.50	137.75	716-0993	198.50	161.50
0-1000	I/C	716-0984	169.50	137.75	716-0994	198.50	161.50
0-1500	C/A	716-0985	169.50	137.75	716-0995	198.50	161.50
0-2500	C/A	716-0986	169.50	137.75	716-0996	198.50	161.50

MODEL 503 PYROMETER—2% ACCURACY

Thermocouple-actuated with copper error-compensation. Automatic bimetal cold-junction correction. External resistor adjusts for thermocouples up to 10 ohms. Mirrored F° and C° scales. Knife-edge pointers. I/C for Iron-Constantan; C/A for Chromel-Alumel; Cu/C, Copper Constantan. Phenolic case. Scale arc, 4". 2 lbs.



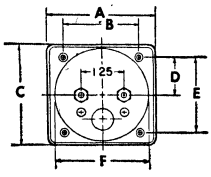


Stock No.	Temperature Range °F	°C	Thermocouple	EACH 1-9	10-24
716-0601	−200/+100	−130/+40	Cu/C	53.40	46.00
716-0600	−75/+225	−60/+110	I/C	44.40	38.10
716-0602	0/300	0/150	I/C	44.40	38.10
716-0603	0/500	0/260	I/C	44.40	38.10
716-0604	0/750	0/400	I/C	44.40	38.10
716-0605	0/1000	0/500	I/C	44.40	38.10
716-0606	0/1500	0/800	C/A	44.40	38.10
716-0607	0/2000	0/1100	C/A	41.30	35.40
716-0608	0/2500	0/1650	C/A	41.30	35.40

MODEL 603-I PYROMETER—1% ACCURACY

Same as Model 503 above, but offer 1% accuracy. Scale arc 5".

716-1001	0/300	0/150	I/C	56.25	48.25
716-1002	0/500	0/260	I/C	56.25	48.25
716-1003	0/750	0/400	I/C	56.25	48.25
716-1004	0/1000	0/500	I/C	56.25	48.25
716-1005	0/1500	0/800	C/A	56.25	48.25
716-1006	0/2000	0/1100	C/A	54.50	46.75
716-1007	0/2500	0/1370	C/A	54.50	46.75
716-1008	0/3000	0/1650	PLT 13%	56.25	48.25



Adjustable External Resistor Compensates Up to 10 Ohms

TABLE OF DIMENSIONS IN INCHES

Type	A	B	C	D	E	F	G	H	J
503	4.71	4.00	4.27	2.02	3.56	2.79	0.76	1.95	2.62
603	5.75	5.25	4.36	2.15	3.00	2.79	0.76	1.95	2.62

2-MODE PROPORTIONAL TEMPERATURE CONTROLLERS

MODEL 227 SOLID-STATE CONTROLLERS

Stock No.	Temperature Range	Thermocouple	EACH
716-0202	0-250° F	Type J	219.75
716-0203	0-300° F	Type J	219.75
716-0201	100-400° F	Type J	219.75
716-0204	0-500° F	Type J	219.75
716-0206	0-800° F	Type J	219.75
716-0207	0-1000° F	Type J	219.75
716-0205	500-1500° F	Type K	219.75

Low-cost proportional output controller with automatic reset to eliminate process "droop." For resistive loads to 10 amps at 120 or 240 VAC. Maintains 1° F straight line control. Temperature is set on calibrated dial. Control function independent of meter indication. Accuracy, ±1%, with 5% proportional band. Reset, fixed at 5 minutes per reset (field-changeable). Calibrated for iron-constantan (Type J) or chromel-alumel (Type K) thermocouples; handles up to 100-ohm thermocouple without adjustment. Electrical cold junction compensation, thermocouple break protection. Size, 6¾x2¾x7". Av. shpg. wt. 8 lbs.

MODEL 232 HIGH-READABILITY SOLID-STATE TEMPERATURE CONTROLLER

WITHOUT TEMPERATURE INDICATOR METER

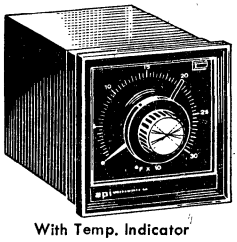
Temp. Range	Model 232-1RN EACH Stock No.	1-9	10-24	Model 232-2RN EACH Stock No.	1-9	10-24
0-300°F	716-0230	105.25	91.25	716-0250	132.50	110.50
0-500°F	716-0231	105.25	91.25	716-0251	132.50	110.50
0-800°F	716-0232	105.25	91.25	716-0253	132.50	110.50
0-1000°C	716-0234	105.25	91.25	716-0254	132.50	110.50
0-1000°F	716-0235	105.25	91.25	716-0255	132.50	110.50
0-2000°F	716-0238	105.25	91.25	716-0258	132.50	110.50
0-2500°F*	716-0239	105.25	91.25	716-0259	132.50	110.50

WITH TEMPERATURE INDICATOR METER

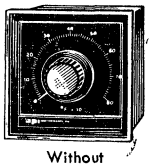
	232-1RM			232-2RM		
0-300°F	716-0240	132.50	110.50	716-0260	162.50	135.95
0-500°F	716-0241	132.50	110.50	716-0261	162.50	135.95
0-800°F	716-0243	132.50	110.50	716-0263	162.50	135.95
0-1000°F	716-0244	132.50	110.50	716-0264	162.50	135.95
0-1000°C	716-0245	132.50	110.50	716-0265	162.50	135.95
0-2000°F	716-0248	132.50	110.50	716-0268	162.50	135.95
0-2500°F*	716-0249	132.50	110.50	716-0269	162.50	135.95

0.1 Degree Control Sensitivity

6.5 Inch Indicator Scale



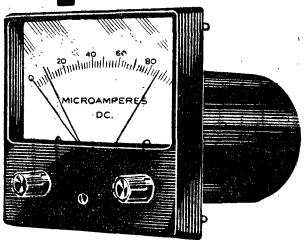
With Temp. Indicator



Without Indicator

High resolution control and limit using integrated circuits. Push-turn center knob sets temperature; also doubles as push button reset for limit/alarm applications. High controller accuracy: ±2% of span. Handles up to 100-ohm thermocouple without adjustment. Cold junction compensation. Break-protected thermocouple of iron-constantan except *chromel-alumel. SPDT relay rated 5 amps. Model 232-1RN is on-off/limit; 232-2RNis time proportioning. 6 watts, 120/240 VAC. Size, 3¾x3¾x5 31/32". Wt. 4 lbs.

"Compack I" Optical Meter-Relay Controllers



CONTACTLESS ADJUSTABLE SET-POINT INDICATING METER RELAY CONTROLLERS

Monitor or Control Any Signal Measurable on a Panel Meter:

- Motor Load, rpm
- Voltage
- Inductance
- Phase
- Resistance
- Current
- Pressure, Temp.
- Vacuum

Below set point: (on a high set point meter) light is focused on photocell keeping load relay coil energized (fail safe). At or above set point: light is abruptly cut off from photocell, instantly de-energizing coil and closing contacts. Operation unaffected by ambient light. Double set point units energize both relay coils when signal is between the two set points. Shpg. wt., 3 lbs.

OPTICAL METER RELAY FEATURES

Taut-Band Construction for Sensitive Meter Ranges . . . Continuous Reading Above and Below Set Point . . . Advanced Solid-State Circuitry, Wired Fail-Safe.

"COMPACK" CONTROL CIRCUITS

ON-OFF CONTROLS

MODELS 503-KH (SINGLE SET POINT) AND 503-KD (DOUBLE SET POINT). Package contains power supply, control circuitry and load relay coupled to Optical Meter-Relay. Connections are made to terminals in rear of meter barrel as shown right. Control circuit is simple phase-sensitive AC bridge which triggers an SCR on or off as the photocell changes resistance. The SCR "on" energizes the load relay coil. All circuit components are normally energized below set point, keeping the system fail-safe. May easily be converted to a push-button reset latching circuit. SPDT (Form C) relay contacts rated 5 amps at 115 VAC resistive. Scale arc length, 4". *Indicates taut-band meter movement.

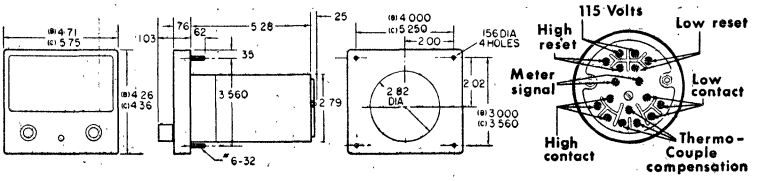
†AC LOAD METER. Range 0—47 mA AC to match secondary of current transformers listed. Dial reads 0-150% of motor load. May be used with any transformer listed, to monitor or control motor load. When ordering AC Load Meter, order transformer appropriate to your application.

ON-OFF TEMPERATURE CONTROLS

MODELS 603-KH (SINGLE SET POINT) AND 603-KD (DOUBLE SET POINT). Medium resistance, thermocouple actuated pyrometers with electrical cold junction and copper error compensation; automatic thermocouple break protection. Mirrored scales calibrated in °F and °C. Adjustable for thermocouples up to 10 ohms. May be used for control or alarm applications. Scale arc approx. 5". All have taut-band movements.

TIME PROPORTIONING TEMP. CONTROLS

MODEL 603-KTP. Same compensation and thermocouple break protection as temperature controls above, but with proportional control from relay output. Ratio of relay "on" time to "off" time proportional to deviation from set point. Has approx. 3% PR band. Capable of straight line temperature control as close as ±1°F. Has adjustable time cycle and PR band. Taut-band meter.



Model 503 is (B) Dimension — Model 603 is (C) Dimension

Range DC	Model 503-KH Single Set Point: Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 503-KD Double Set Point: Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up
0-10 μA*	716-0341	162.50	139.00	132.05	716-0330	177.50	164.00	155.80
0-20 μA*	716-0342	148.50	127.00	120.65	716-0331	163.75	152.00	144.40
0-50 μA*	716-0343	141.45	121.00	114.95	716-0332	156.00	146.00	138.70
0-100 μA*	716-0344	135.60	116.00	110.20	716-0333	164.85	141.50	134.45
50-0-50 μA*	.....	.....	.....	.....	716-0334	165.40	141.00	133.95
5-0-5 μA*	.....	.....	.....	.....	716-0335	191.75	164.00	155.80
0-1 mA	716-0345	127.45	109.00	103.55	716-0336	156.65	134.00	127.30
0-10 mV*	716-0346	140.30	120.00	114.00	716-0337	169.50	145.00	137.75
0-50 mV	716-0347	129.75	111.00	105.45	716-0338	158.95	136.00	129.20
0-1 mA AC	716-0348	127.45	109.00	103.55	716-0339	166.35	138.00	131.10
†AC Load	716-0349	132.10	113.00	107.35	716-0340	166.35	142.00	134.90

TRANSFORMERS AVAILABLE FOR AC LOAD METER (†)

Stock No.	Range Amps	EACH	Stock No.	Range Amps	EACH
716-2003	3	8.13	716-2015	15	8.13
716-2005	5	8.13	716-2025	25	8.13
716-2007	7.5	8.13	716-2030	30	8.13
716-2010	10	8.13	716-2050	50	8.13

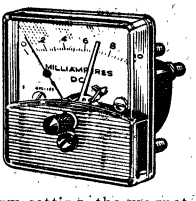
Temp. Range °F	Thermo-couple	Model 603-KH Single Set Pt.: Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 603-KD Double Set Pt.: Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up
0/300	I/C	716-0821	149.80	138.00	131.10	716-0801	177.00	163.00	154.85
0/500	I/C	716-0822	146.55	135.00	128.25	716-0802	173.70	160.00	152.00
0/800	I/C	716-0823	146.55	135.00	128.25	716-0803	173.70	160.00	152.00
0/1000	I/C	716-0824	146.55	135.00	128.25	716-0804	173.70	160.00	152.00
0/1500	C/A	716-0825	143.30	132.00	125.40	716-0805	171.20	157.00	149.15
0/2500	C/A	716-0826	143.30	132.00	125.40	716-0806	171.20	157.00	149.15

MODEL 603-KTP TIME PROPORTIONING TEMPERATURE CONTROL

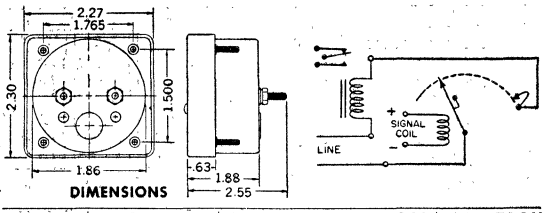
Stock No.	Temperature Range °F	Temperature Range °C	Thermo-couple	EACH 1-9	EACH 10-24	EACH 25-Up
716-0841	0-300	0-150	I/C	189.15	174.25	165.54
716-0842	0-500	0-260	I/C	187.00	172.25	163.64
716-0843	0-800	0-400	I/C	187.00	172.25	163.64
716-0844	0-1000	0-500	I/C	187.00	172.25	163.64
716-0845	0-1500	0-800	C/A	183.45	169.00	160.55
716-0846	0-2500	0-1370	C/A	183.45	169.00	160.55

LOW-COST ALARM METER-RELAY

- Indicating Meter, As Well As Alarm
- Full-Scale Adjustable Alarm Pointer
- Sensitivities to 100 Microamps



Used for monitoring motor load, gas content, overvoltage, current leakage, etc. Allows direct alarm action from meter relay contacts without need for a special DC power supply or amplifier. The indicating meter pointer carries a gold plated steel contact and the adjustable alarm pointer carries 2 small gold plated magnets for a contact. When the indicating pointer reaches an alarm setting, the magnet positively locks the contacts together, closing the alarm circuit. Operate reliably on as little as 6 volts, AC or DC, and will handle up to 115 volts, 100 mA. Manually reset. *Coil resistance, 2.5k. †AC Load Alarm, high set point. †† AC Load Alarm, low set point. Range, 0-47 mA to match current transformers listed in table above. When ordering, specify transformer primary range amps to match your application. Shpg. wt., 8 oz.



Stock No.	Range	1-9, EACH	10-24, EACH	25-Up, EACH
716-0120	0-1 mA DC	43.20	37.00	35.15
716-0130	0-1 mA AC	48.00	41.00	38.95
716-0140	0-100 μA DC*	50.20	43.56	41.33
716-0150	0-50 mV DC	43.20	37.00	35.15
716-0102	AC Load†	48.00	41.00	38.95
716-0101	AC Load††	48.00	41.00	38.95

Specify Stock No., Range and Model No. on All Meter-Relay Orders

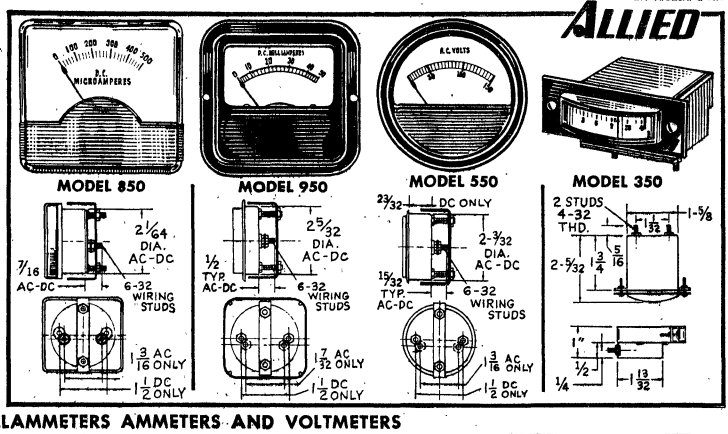
Allied Panel Meters

5% PANEL METERS

Attractive, rugged, dependable instruments with accuracy well within ±5%. DC meters are polarized-vane solenoid type. AC meters are double-vane repulsion type with jeweled bearing. Model 850 has snap-on plastic crystal; mounts in 2 5/32-2 1/32" hole. Model 950 all metal; mounts in 2 5/32" hole. Model 550 round metal case with bezel; mounts in 2 5/32" hole. Model 350 edgewise meter; mounts in rectangular hole 1 21/32x1 7/32". Av. shpg. wt. 6 oz.

METER DIMENSIONS

Model	Front	Body Dia.	Dp. Behind Panel
850	2 5/16x2 17/32"	2 1/64"	2 3/32"
950	2 9/16x2 5/8"	2 5/32"	5/8" AC, 1 3/32" DC
550	2 5/16"	2 3/32"	7/8" AC, 2 3/32" DC
350	1/2x2 3/8"	1 5/8x1/2"	1 3/4"



DC MILLAMMETERS AMMETERS AND VOLTMETERS

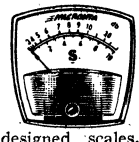
Range	Model 850 Stock No.	EACH 1-9	10-24	25-49	50-Up	Model 950 Stock No.	EACH 1-9	10-24	25-49	50-Up	Model 550 Round Stock No.	EACH 1-9	10-24	25-49	50-Up	Model 350 Edgewise Stock No.	EACH 1-9	10-24	25-49	50-Up
0-1 mA	701-8336	5.20	4.20	3.70	3.00	701-9336	5.00	4.39	3.76	3.13	701-5336	5.00	4.39	3.76	3.13	701-3300	5.54	3.95	3.56	3.16
0-5 mA	701-8302	3.84	3.20	2.85	2.35	701-9302	4.30	3.78	3.23	2.69	701-5302	4.30	3.78	3.23	2.69	701-3302	4.60	3.24	2.88	2.70
0-10 mA	701-8303	3.66	3.10	2.72	2.25	701-9303	3.72	3.26	2.79	2.33	701-5303	3.72	3.26	2.79	2.33	701-3303	4.60	3.24	2.88	2.70
0.25 mA	.....	.....	.....	.....	.....	701-9305	3.72	3.26	2.79	2.33	701-5305	3.72	3.26	2.79	2.33	.....	.....	.....	.....	.....
0-50 mA	701-8306	3.40	3.00	2.55	2.10	701-9306	3.72	3.26	2.79	2.33	701-5306	3.72	3.26	2.79	2.33	701-3306	4.60	3.24	2.88	2.70
0-100 mA	701-8307	3.40	3.00	2.55	2.10	701-9307	3.72	3.26	2.79	2.33	701-5307	3.72	3.26	2.79	2.33	701-3307	4.60	3.24	2.88	2.70
0-150 mA	.....	.....	.....	.....	.....	701-9308	3.72	3.26	2.79	2.33	701-5308	3.72	3.26	2.79	2.33	.....	.....	.....	.....	.....
0-200 mA	701-8309	3.40	3.00	2.55	2.10	701-9309	3.72	3.26	2.79	2.33	701-5309	3.72	3.26	2.79	2.33	.....	.....	.....	.....	.....
0-300 mA	701-8310	3.40	3.00	2.55	2.10	701-9310	3.72	3.26	2.79	2.33	701-5310	3.72	3.26	2.79	2.33	.....	.....	.....	.....	.....
0-500 mA	701-8312	3.40	3.00	2.55	2.10	701-9312	3.72	3.26	2.79	2.33	701-5312	3.72	3.26	2.79	2.33	.....	.....	.....	.....	.....
0-1 A	701-8201	3.40	3.00	2.55	2.10	701-9201	3.72	3.26	2.79	2.33	701-5201	3.72	3.26	2.79	2.33	.....	.....	.....	.....	.....
0-5 A	701-8203	3.40	3.00	2.55	2.10	701-9203	3.72	3.26	2.79	2.33	701-5203	3.72	3.26	2.79	2.33	701-3203	4.60	3.24	2.88	2.70
0-10 A	701-8205	3.40	3.00	2.55	2.10	701-9205	3.72	3.26	2.79	2.33	701-5205	3.72	3.26	2.79	2.33	701-3205	4.60	3.24	2.88	2.70
0-15 A	701-8206	3.40	3.00	2.55	2.10	701-9206	3.72	3.26	2.79	2.33	701-5206	3.72	3.26	2.79	2.33	.....	.....	.....	.....	.....
0-25 A	701-8207	4.30	3.78	3.32	2.69	701-9207	4.20	3.69	3.15	2.63	701-5207	4.20	3.69	3.15	2.63	.....	.....	.....	.....	.....
5-0-5 A	701-8211	4.30	3.78	3.32	2.69	701-9211	4.00	3.52	3.00	2.50	701-5211	4.00	3.52	3.00	2.50	.....	.....	.....	.....	.....
10-0-10 A	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	701-3213	4.60	3.30	2.96	2.78
20-0-20 A	701-8214	4.30	3.78	3.32	2.69	701-9214	4.20	3.69	3.15	2.63	701-5214	4.20	3.69	3.15	2.63	.....	.....	.....	.....	.....
30-0-30 A	701-8215	4.30	3.78	3.32	2.69	701-9215	4.20	3.69	3.15	2.63	701-5215	4.20	3.69	3.15	2.63	.....	.....	.....	.....	.....
50-0-50 A	701-8216	4.30	3.78	3.32	2.69	701-9216	4.20	3.69	3.15	2.63	701-5216	4.20	3.69	3.15	2.63	.....	.....	.....	.....	.....
0-3 V	.....	.....	.....	.....	.....	701-9102	3.72	3.26	2.79	2.33	701-5102	3.72	3.26	2.79	2.33	.....	.....	.....	.....	.....
0-5 V	701-8104	3.40	3.00	2.55	2.10	701-9104	3.72	3.26	2.79	2.33	701-5104	3.72	3.26	2.79	2.33	701-3104	4.60	3.30	2.96	2.78
3-0-3 V	.....	.....	.....	.....	.....	701-9103	3.72	3.26	2.79	2.33	701-5103	3.72	3.26	2.79	2.33	.....	.....	.....	.....	.....
0-10 V	701-8107	3.40	3.00	2.55	2.10	701-9107	3.72	3.26	2.79	2.33	701-5107	3.72	3.26	2.79	2.33	701-3107	4.60	3.30	2.96	2.78
0-15 V	701-8108	3.40	3.00	2.55	2.10	701-9108	3.72	3.26	2.79	2.33	701-5108	3.72	3.26	2.79	2.33	701-3108	4.60	3.30	2.96	2.78
0-25 V	701-8109	4.30	3.78	3.32	2.69	701-9109	3.96	3.48	2.98	2.48	701-5109	3.96	3.48	2.98	2.48	.....	.....	.....	.....	.....
0-150 V	.....	.....	.....	.....	.....	701-9115	3.96	3.48	2.98	2.48	701-5115	3.96	3.48	2.98	2.48	.....	.....	.....	.....	.....

AC VOLTMETERS, AMMETERS

0-10 V	701-8403	5.00	4.10	3.60	3.10	701-9403	5.40	4.75	4.05	3.37	701-5403	5.40	4.75	4.05	3.37	.....	.....	.....	.....	.....
0-15 V	701-8404	5.00	4.10	3.60	3.10	701-9404	5.40	4.75	4.05	3.37	701-5404	5.40	4.75	4.05	3.37	701-3404	5.80	4.00	3.55	3.34
0-150 V	701-8406	5.40	4.65	3.95	3.20	701-9406	5.40	4.75	4.05	3.37	701-5406	5.40	4.75	4.05	3.37	701-3406	6.40	4.60	4.14	3.68
0-1 A	701-8501	4.86	4.20	3.57	3.05	701-9501	4.89	4.27	3.49	3.05	701-5501	4.89	4.27	3.49	3.05	.....	.....	.....	.....	.....
0-5 A	701-8503	4.86	4.20	3.57	3.05	701-9502	4.89	4.27	3.49	3.05	701-5502	4.89	4.27	3.49	3.05	.....	.....	.....	.....	.....
0-10 A	701-8504	4.86	4.20	3.57	3.05	701-9503	4.89	4.27	3.49	3.05	701-5503	4.89	4.27	3.49	3.05	.....	.....	.....	.....	.....
0-500 mA	.....	.....	.....	.....	.....	701-9605	5.56	4.92	4.20	3.50	701-5605	5.56	4.92	4.20	3.50	.....	.....	.....	.....	.....

MICRONTA®

MINIATURE PANEL METERS

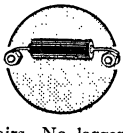


- Better Than 2% Accuracy
- Ideal for Hobbyists

Easy-to-read modernly designed scales. 1 3/16x1 1/8x1 1/2". Require 1 9/16" hole. Shpg. wt. 8 oz. Order desired movement below.

910-4516. 22-016. 0-150 VAC.....Ea. 2.98
910-4517. 22-017. 0-50 μA.....Ea. 4.95
910-4518. 22-018. 0-1 DC mA.....Ea. 2.98
910-4519. 22-019. VU, −20 to +3(0-100%) .....Each 3.95
910-4520. 22-02. Signal Strength...Ea. 2.98

Metergard

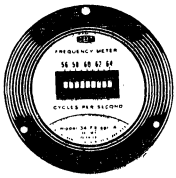


Prevents Bent Pointers and Damaged Pivots, Due to Overloads

Ends expensive meter repairs. No larger than a paper capacitor. Metergard wires across any meter from 25μA to 25mA to protect against overloads of up to 10,000%. Will not change accuracy of meter. 1/4 oz.

849-4002. 1-9.....Each 2.95
10-49....Each 2.60 50-99.....Each 2.39
100-249..Each 2.19 250-Up.....Each 1.95

JBT REED FREQUENCY METERS



Vibrating reed design with high Q for fast response and accuracy within ±0.3%. Flush panel, MIL-M-6B mounting. Flange, 3 1/2"; body dia. 2 11/16"; depth 2 23/32". For 100-130 volts.

MODEL 33-FX. For 400 Hz power sources, particularly aircraft. Range: 380 to 420 Hz with frequencies in 5 Hz steps. 1.5 watts power consumption. 90 ohms/volt.

826-5353. Wt. 12 oz. 1-3.....Each 44.00 4-Up.....Each 41.78

MODEL 34-FX. Range: 56-64 Hz, in 1 Hz steps. 1 watt. 110 ohms/V.

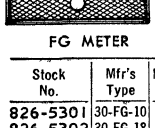
826-5373. Wt. 12 oz. 1-3.....Each 35.30 4-Up.....Each 33.45

JBT FG FREQUENCY METERS

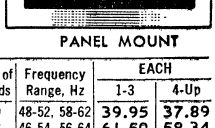
Modern-styled frequency meters designed to enhance any installation. 3 1/2" wide and 3" high, designed for flush mounting. Designed to match most models of other manufacturer's meters.

Special design flexibility is provided by the use of a half-bezel adapter (listed in table at right) that acts as a "picture window" to outline a panel area 3.83x 2.27" and effectively concentrate attention in the portion of the dial to be read. Permanently calibrated dials need no further adjustments.

High Q characteristics make them ideal for measuring frequency in electronic circuits. Retain high accuracy under almost all conditions, not affected by poor waveforms, external magnetic disturbances or line voltage fluctuations. 100-130 VAC. Av. wt., 1 lb.



FG METER

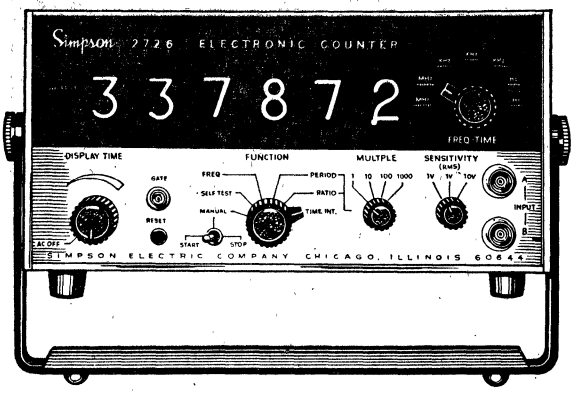


PANEL MOUNT

Stock No.	Mfr's Type	No. of Reeds	Frequency Range, Hz	EACH 1-3	4-Up
826-5301	30-FG-10	10	48-52, 58-62	39.95	37.89
826-5302	30-FG-18	18	46-54, 56-64	61.50	58.34
826-5323	31-FG-5	5	58-62	35.20	33.34
826-5324	31-FG-7	7	57-63	37.49	35.56
826-5370	34-FG-9	9	56-64	39.52	37.67
826-5364	34-FG-11	11	55-65	40.25	38.33
826-5365	34-FG-21	21	45-65	53.30	50.55
826-5001	13A-234	Half-Bezel Adapter		3.21	3.05

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's, 480-499—Scopes, 503-505

Digital Test Equipment



Simpson

- Six Time Bases Controlled by Crystal-Controlled Clock
- Range of 5 Hz to 32 MHz
- Automatic Overrange Feature

MODEL 2726 SIX-DIGIT FREQUENCY COUNTER

General-purpose six-digit electronic counter is a real help in laboratories, production, servicing, and digital systems for industrial control. Provides numerical display of average frequencies from 5 Hz to 32 MHz in 6 time bases. Also measures time intervals, period, and frequency ratio; totalizes pulses over a standard time range. Features automatic overrange capability allowing as much as nine-digit resolution.

Solid-state design with monolithic integrated circuits provides the utmost in accuracy, stability, and reliable performance. Front panel switch selects six time bases from 0.1 msec to 10 seconds, precisely controlled by internal crystal-controlled clock. Display time is adjustable from approximately 5 displays per second to "hold," which can be held indefinitely. All functions are controlled at front panel, including manual stop/start control and self-testing circuitry.

Single switch selects all functions; no plug-in adapters needed. A second switch selects the six time bases/frequency ranges. Readouts include decimal point for easy reading. Readouts are cold-gas glow tubes with 200,000-hour rated life. Accuracy is within ±0.001%, ±1 digit, over temperature range of +15°C to +55°C. Complete specifications shown at left. Top-quality components are used throughout to assure accuracy. All internal parts are mounted on a single PC board for easy access to test points. Special baffle and filter minimize reflections for most effective digital display. Metal case, 4x8¼x11″. For 115 or 230 V, 50-60 Hz AC; 20 watts. Can be used with Rack Mount Kits, below.

919-2762. Shpg. wt. 8 lbs. **Each 620.00** 4-Up.....**Each 575.00**

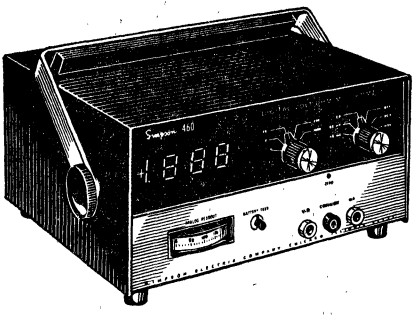
FREQUENCY COUNTER SPECIFICATIONS

Frequency Range: 5 Hz to 32 MHz in 6 ranges. **Period Range:** Single period, 100 μsec to 0.2 sec. Multiple period, 100 nsec to 0.2 sec. **Frequency Ratio:** Single, 1 to 1.999999x10⁶. Multiple, 0.001 to 1.999999x10⁶. **Time Interval:** 100 μsec to 1.99999 x10⁶ sec. **Totalization:** 0.0 to 1.999999x10⁶ counts. **Time Base:** 0.00001, 0.0001, 0.001, 0.01, 0.1, 1.0, and 10.0 seconds. **Input Sensitivity:** Channel A, 0.1 V rms maximum. Channel B, 0.1 V rms. 200 Hz to 2 MHz; 0.3 V rms 5 Hz to 200 Hz. **Input Impedance:** Channel A, 1 megohm shunted by 30 pF. Channel B, 500k ohms shunted by 30 pF. **Maximum Input Voltage:** 230 V rms on 0.1 to 1.0 volt range.

MODEL 2725 FIVE-DIGIT FREQUENCY COUNTER

Same as above, but five-digit display. Maximum Readings: Frequency Ratio, 1 to 1.9999x10⁵; Time interval, 300 μsec to 1.9999x10⁵; Totalization, 0 to 1.9999x105.

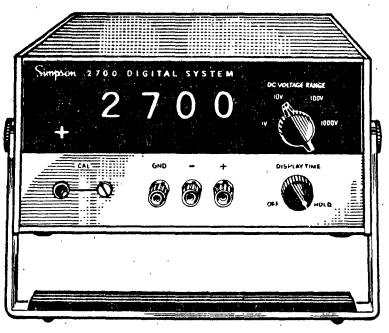
919U2725. Shpg. wt. 8 lbs. **Each 565.00** 4-Up.....**Each 525.00**



MODEL 460 PORTABLE DIGITAL VOM

Combines the advantages of high accuracy, multiple range testing with non-blinking digital numerical display and front-panel analog meter readout. Self-contained battery or line operation makes it ideal for field assignments or lab situations where line power is not available or causes interference. Automatically recharges the batteries whenever line operated. Battery operation substantially extends common mode rejection. Instant readout, no warm-up time required. Numerals are formed by positive seven-segment build-up. Automatic plus or minus and overrange indication. Analog meter readout shows peaks or nulls at a glance, tells test area indicated, and tests battery condition. Ranges: (Maximum Readings): AC, DC Volts, 199.9 mV; 1.999, 19.99, 199.9, 1000 V(600 V on AC). AC, DC Current: 199.9 μA; 1.999, 19.99, 199.9, 1999 mA. Resistance: 199.9 ohms; 1.999, 19.99, 199.9, 1999 k ohms; 19.99 megohms. Accuracy: DCV, ±0.1% of reading ±1 digit; ACV, ±0.5-1.%0 ±1 digit. Handle acts as tilt-up base. Metal case, 4x8½x7⅞″. For 115 V, 50/60/400 Hz or 4 nickel-cadmium "D" batteries (not supplied).

919-0460.....**Each 425.00** 4-Up.....**Each 395.00**



MODEL 2700 FOUR-DIGIT VOLTMETER WITH UP TO 110% OVERRANGE

Solid-state DC digital voltmeter offers four-digit readout with ±0.05% (±1 digit) accuracy over a temperature range of +20° to +30° C. Has fully automatic polarity selection and indication; linear to 110% overrange. Convenient pushbutton front panel calibration check. Ranges: DC Volts; 000.1 to 999.9; 00.01 to 99.99; 0.001 to 9.999; .0001 to .9999. Response Time: 5 seconds maximum, to reach rated accuracy after 0 to full range step change. Sampling Rate: variable from 5 readings per second to "hold." Input: 10.2 megohms on all ranges. Resolution; 100 μV on 1,000-volt range. Stable FET input. Virtually unaffected by temperature: change in indication is less than .05% for 20° C change in temperature. Cold gas glow readout tubes have 200,000-hour life. Heavy-duty metal case, 4x8¼x11″. For 115/230 V, 50-60 Hz AC.

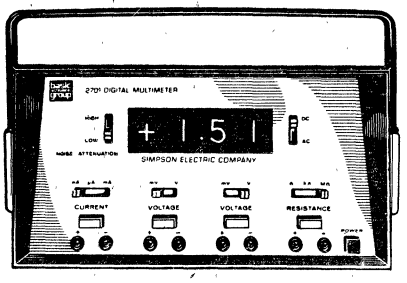
919U2700. Shpg. wt. 8 lbs.....**Each 662.00** 4-Up.....**Each 615.00**

PLUG-IN MODULES. Add capabilities to Model 2700 DC voltmeter above. 1 lb.

919-2701. Resistance: 1k, 10k ohms, 100k ohm, 10 meg. **Ea. 107.00** 4-Up..**Ea. 100.00**
919-5103. DC Current: 1, 10, 100 mA, 1 amp.....**Ea. 107.00** 4-Up..**Ea. 100.00**
919-5102. AC Voltage: 1, 10, 100, 1000 VAC.....**Ea. 214.00** 4-Up..**Ea. 200.00**

RACK MOUNTING KIT. For Model 2700, 2725 or 2726. Standard 5¼x19″ panel.
919-2702. Shpg. wt. 1 lb.....**Each 21.40** 4-Up.....**Each 20.00**

2-UNIT RACK MOUNTING KIT. For two model 2700, 2725 or 2726 units. 5¼x19″.
919-2703. Shpg. wt. 1½ lbs.....**Each 27.00** 4-Up.....**Each 25.00**



MODEL 2701 DIGITAL MULTIMETER

Versatile new digital multimeter provides accurate numerical displays of voltage, current and resistance. Features ultra-convenient operation—simply set the magnitude switch, then press the button—reading appears as a three-digit number complete with decimal point and polarity sign. Decimal point automatically switches over three decade ranges, eliminating the possibility of scale interpolation error. Offer, wider selection of ranges than conventional VOM's, yet has the input impedance of a VTVM. AC, DC Volts, 0.01-9.99, 10.0-99.9, 100-999 mV; 1.00-9.99, 10.0-99.9; 100-600 volts. AC, DC Current: 100-999 nA; 1.00-9.99, 10.0-99.9, 100-999 μA; 1.00-9.99, 10.0-99.9, 100-999 mA. Resistance: 10.0-99.9 100-999 ohms; 1.00-9.99, 10.0-99.9, 100-999 k ohms; 1.00-99.9, 10.0-99.9, 100-999 megohms. Accuracy: ±1.5% of reading, ±0.2% full range. Temperature range: −10° to +35° C. Solid-state with integrated circuits. 100,000 hour cold-gas glow readout tubes. Metal case, 5½x10x10″. 105-130 V, 60 Hz AC.

919U2704. Shpg. wt. 14 lbs.....**Each 880.00** 4-Up.....**Each 835.00**

Assorted Test Equipment, 477, 478, 480-482, 489, 492, 497, 500-502, 510-516

Lowest Cost ($199.50) Digital Multimeter

ESTERLINE ANGUS DIGITAL MULTIMETER

Priced Lower Than Any Other!

Loaded with the Features of Much More Expensive Units

- 21 Switch-Selectable Ranges—8 AC Voltage and Current, 8 DC Voltage and Current, 5 Resistance
- High Sensitivity—Measures in 10 mV and 10 μA Steps on Lowest Voltage and Current Ranges
- Solid State Construction—Silicon Transistors, Diodes and Integrated Circuits
- Accurate Readings to 10% Over-range
- Damage-proof—Cannot be Harmed by Overload on Any Range
- Non-Ambiguous, Easily Interpreted Display
- Panel Display Will Not Blink
- Automatically Positioned Decimal Point
- Linear Readings—No Crowding on AC or Resistance Scales
- Hi-Impact Plastic Case
- Compact Size—Only 5¼x6⅞x2⅜"—weighs only 2½ lbs.

ESTERLINE ANGUS MODEL DM3550 DIGITAL MULTIMETER

Packed with features normally found only on much more expensive units. Check all the features (at left) and specifications (below) to see what a great buy this is.

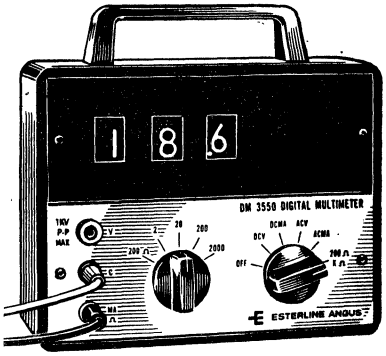
SPECIFICATIONS

Functions: DC Volts, DC Current, AC Volts, AC Current, Resistance. **Ranges** (full scale): 0-2-20-200-1000 DC volts; 0-2-20-200-2000 DC mA: 0-2-20-200-700 (maximum limit 1000 volts p-p) rms AC volts (25 Hz to 10 kHz); 0-2-20-200-2000 rms AC mA (25 Hz to 10 kHz); 0-200-2000-20k-200k-2000k ohms. **Resolution:** Volts, 10 mV; current, 10 μA; resistance, 1 ohm. **Display:** Three-digit numerial. **Accuracy** (full scale): DC voltage, 1%; DC current, 1.5%; AC voltage, 1.5%; AC current, 1.5%; resistance, 2%. **Input Impedance:** 1 megohm on all voltage ranges; 2 volts drop maximum on currnet ranges. **Sample Rate:** Approximately 60 per second.

Full Scale Range, Ohms	Maximum Circuit Current	Maximum Open Circuit Voltage
200	10 mA	+15 volts with respect to common on lowest range
2000	1 mA	
20k	100 μA	
200k	10 μA	
2000k	1 μA	

The Esterline Angus Digital Multimeter is supplied in hi-impact plastic case with carrying handle. Size, 5¼x6⅞x2⅜". Complete with test leads. For 120 volts, 50-60 Hz AC. 90-day warranty. Wt. 3 lbs.
541-3550. Each 199.50 4-Up...Ea. 179.95

Vinyl Covered Carrying Case. Provides added protection. Wt. 4 oz.
541-3551. Each 14.50 4-Up.....Ea. 13.10

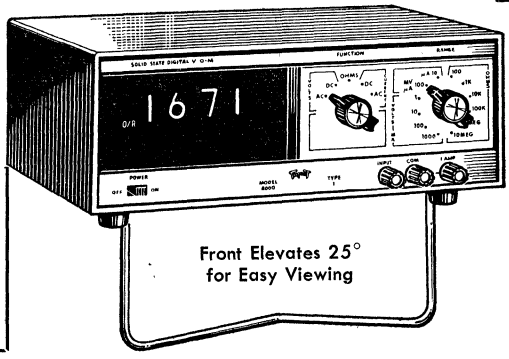


STURDY VINYL COVERED CASE (Below) PROTECTS UNIT—Only $14.50

TRIPLETT Digital Multimeter

MODEL 8000 TABLE-TOP 3½-DIGIT DIGITAL MULTIMETER

- Fast Response and 0.1% DC Accuracy with Virtually No Kickback Current
- Compact, Rugged Low-Profile Design
- Shielded Case with Modular Construction
- Protective Circuitry Prevents Damage
- Three Gas-Filled Read out Tubes with Decimal Point, Automatic 50% Over-range
- Auto-Polarity for DC Measurements
- High AC Accuracy, Nearly Perfect Linearity



Compact table-top digital multimeter gives precise measurement of DC voltage and current, resistance, and rms value of sinusoidal voltages and currents. Measurements are displayed with excellent resolution in the decimal system, by three gas-filled readout tubes. Numeral "1" is displayed for over-range measurements. Display includes a movable decimal point, automatic over-range indication, auto-polarity for DC functions. Quick response, with virtually no kickback current to affect accuracy. Offers high AC accuracy with nearly perfect linearity and 10-megohm input resistance.

Low-profile design in shielded case with modular construction for easy operation and maintenance; weighs only 9¼ lbs. All solid-state, using premium PC boards. Steel sheet is used for main chassis and internal module covers for extra strength and isolation. Protective circuitry prevents damage when voltages as high as 1000 V AC or DC are applied as inputs on any range. Has an much as 50% overrange (1500 count); sample rate of six times per second. Powered by 115 or 230 (±10) volts AC, 50/60 Hz; 12 watts. Stored metal leg elevates the front panel approximately 25° for table-top use. Handsome etched aluminum panel clearly marks all ranges and functions. Size, 4⅛x10 5/16x8⅞". Shpg. wt. 10 lbs.

SPECIFICATIONS

DC Volts: 0-0.1-1.0-10-100-1000 volts with accuracy of ±0.1% of reading, ±1 digit; temperature coefficient, ±.01%/°C (0° to 40° C); input resistance, 10 megohms on all ranges. **AC Volts:** 0-0.1-1.0-10-100-1000 volts with accuracy of ±0.2% of reading, ±1 digit (up to 10 V), ±0.3% ±1 digit for 100 and 1000 V ranges; input impedance, 10 megohms. **Resistance:** 0-100-1k-10k-100k ohms with accuracy of ±0.2% of reading, ±1 digit; 0-1-10 megohms with accuracy of ±0.3% of reading, ±1 digit. **AC Current:** 0-10 μA, 0-0.1-1.0-10-100 mA, 0-1 amp with accuracy of ±0.4% of reading, ±1 digit, to 10 kHz; full scale voltage drop of 100 mV on all ranges. **DC Current:** 0-10 μA, 0-0.1-10-100 mA, 0-1 amp with accuracy of ±0.2% of reading, ±1 digit; 100 mV drop. **Rejection:** AC common mode, greater than 80 dB at 60 Hz; series mode, greater than 40 dB. **Sample Rate:** 6 times per second. **Over-range:** 50% (1500 count).

956-8001. 1-3.....Each 610.00 4-Up.....Each 575.00

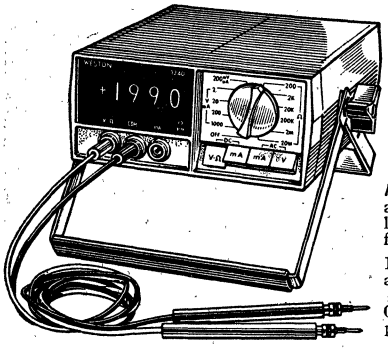
956-8000. Model 8000-A. Same as above, with instant replay memory; retains readings indefinitely for later comparison with real time readings. **1-3.....Each 678.00 4-Up.....Each 630.00**

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

DIGITAL TEST EQUIPMENT

Weston Digital Test Equipment

DUAL-SLOPE DIGITAL MULTIMETERS



MODELS 1240 AND 1241 DIGITAL MULTIMETERS

- All Circuits Fully Protected Against Overloads
- 200-mV Range Allows Use of Weston Transducers
- 200 ms Integrating Time
- Excellent Interference Rejection

Model 1240. 26 range. Protected in all ranges and circuits. 200 ms integrating time. Excellent rejection of 50, 60 and 400 Hz interference or any multiple of 200 ms.

Ranges: DC Volts: 0-0.2 V (input impedance 1000 megs), 0-20-200-1000V (10 megs); ±0.1% (±1 digit). AC Volts: 0-200 mV, 0-2-20-200-500V. Input imp. 1 meg at 50 pF. Accuracy: ±0.5%, 40 Hz to 10 kHz; ±1%, 10 to 20 kHz. DC Current: 0-200 μA (±0.25%), 0-2-20 mA (±0.2%), 0-200 mA (±0.3%), 0-2 amps (±0.5%). Voltage drop 0.2V all ranges. AC Current: 0-200 μA, 0-2-20-200 mA, 0-2 A (±1% max. error). Voltage drop: 0.2V all ranges. Freq. Range: 40 Hz to 10 kHz. Resistance: 0-200-2k-20k-200k ohms, 0-2 megs, 0-20 megs. 5 lbs.

986-7840. Ea. 492.50 4-Up.....394.50

Model 1241. Above, with following ranges: VDC: 0-0.2V (input imp. 100 megs), 0-2V (1000 megs), 0-20-200-1000V (10 megs). Resistance: as above. 5 lbs.

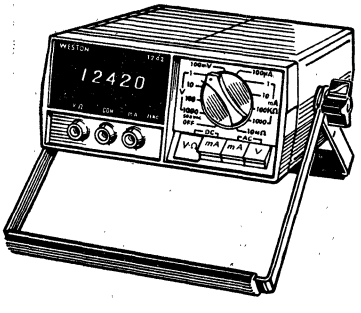
986-7841. Ea. 349.50 4-Up.....289.00

986-7842. Carry Case. Ea.....24.40

4-Up.....19.50

SPECIFICATIONS

Out-of-Range Indicator: Flashing light. **Lighted Polarity Indicator. Temp. Range:** 10° to 40°C. **Temperature Influence:** ±0.005% reading/°C, ±0.005% full scale/°C. **Humidity:** 85% at 36°C. **Vibration:** 5-10 cycles for 1 hour at 0.4 G, 10-50 cycles for 11 ms at 2 G. **Shock:** 50 G on 3 axes. **CMR:** 80 dB at 60 Hz w/ 1000 ohm unbalance. **NMR:** 35 dB at 60 Hz. **Readings/Second:** 5. **Power:** 115, 230V, +15%, −10%, 6 watts, 50-400 Hz AC. **Size:** 7x3x 7 29/32". **Weight:** 4 lbs.



MODELS 1242 AND 1243 DIGITAL MULTIMETERS

- All Input Circuits Overload Protected
- All Fuses Replaceable from Outside Case
- High-Impact, Shock Resistant Case
- Single Range Selector

Model 1242. Portable digital multimeter features 25 ranges for measuring AC and DC Voltage, AC and DC Current, and resistance. Can be rack mounted or used as a bench meter, and its size allows it to be carried in a standard attache case. All input circuits are overload-protected by resistor-diode networks, fuses or both. Single range selector and feather touch function switches.

Ranges: VDC: 0-0.1V (Input Impedance 100 megs), 0-1V (1000 megs), 0-10-100-1000V (10 megs); accuracy ±0.05%. VAC: 0-100 mV-1-10-100-500V (1 meg); ±0.5% max. error. DC Amps: 0-100 μA-1-10-100 mA-1A, 0.2 V voltage drop; ±0.3% max. error. AC Amps: 0-100 μA-1-10 mA, ±0.35% Rdg ±0.05% full scale; 0-100 mA-1 A ±0.5% Rdg ±0.05% full scale, 0.2 V voltage drop. Frequency Range: 40 Hz to 10 kHz. Resistance: 0-1k ohms (±0.15%), 0-10k-100k (±0.1%), 0-1 Meg (±0.25%), 0-10 Megs (±0.5%). 7x3x7.9". 5 lbs.

986-1242. Ea. 795.00 4-Up.....595.00

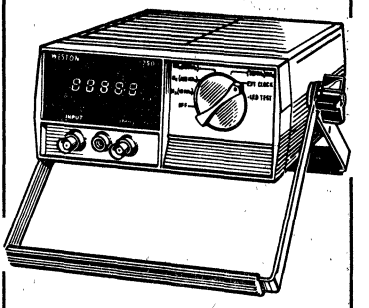
Model 1243. Above with isolated BCD output.

986-1243. Ea. 867.00 4-Up.....695.00

SPECIFICATIONS

Out-of-Range Indicator: Illuminated arrow. **Lighted Polarity Indicator. Temp. Range:** 10°-40°C. **Temp. Influence:** ±0.004% Rdg/°C, ±0.005% FS/°C. **Humidity:** 85% @ 36°C. **Vibration:** 5-10 Hz for 1 hour at 0.4 G, 10-50 Hz for 11 ms at 2 G. **Shock:** 50 G on 3 axes. **CMR:** 80 dB at 60 Hz with 1000 ohms unbalance. **NMR:** 40 dB at 60 Hz. **Readings/Second:** 10 nonblinking. **Power:** 115, 230V +15%, −10%, 7 watts, 50-60 Hz. **Weight:** 3 lbs.

MODEL 1250 DIGITAL DISPLAY FREQUENCY COUNTER



- Reads to 32 MHz with High Accuracy
- Low-Cost Portable Instrument
- Solid State LED Readouts

Model 1250. Designed for both general and special applications. Has full range coverage of DC to 32 MHz in four ranges and offers many features not found in larger bench models. Has solid state LED readouts, storage circuitry for non-blinking readout, automatic decimal positioning, thermoplastic glass-filled case, and may be panel mounted.

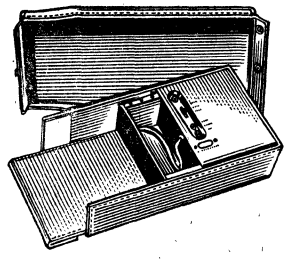
Has a switch position which allows use of an external time standard instead of the self-contained crystal. Features 1 MHz output frequency that can be used as a source frequency.

Unit is all solid-state including readouts, has automatic trigger lever for wide range input without adjustment. Crystal time base oscillation is temperature compensated. Shpg. wt. 6 lbs.

986-1250. Ea. 494.95 4-Up...395.00

SPECIFICATIONS

Frequency: DC to 25 MHz. **Ranges:** 9999.9 Hz (10 KHz) 10 second gate; 99999 Hz (1100 KHz) 1 second gate; 9999.9 KHz (10 MHz) 10 msec gate; 32000 KHz (32 MHz) 1 msec gate. **Accuracy:** ±1 count ± time base stability. **Time Base Stability:** 2 ppm/°C (16° to 32°C); after 30 minutes 1 ppm/month. **Temp. Range:** 0-50°C. **Input Imp.:** 1 meg shunted by 30 pF. **Input Sens.:** 250 mV RMS. (100 mV RMS or better at 10 MHz-32 MHz) **Power:** 115V, 230V; 50, 60 Hz. **Size:** 7x3x7.9". **Wt.:** 4 lbs.



BATTERY SUPPLY PACK POWERS MODELS 1240 AND 1241

Model 9740. Rechargeable self-contained battery-powered supply operates Models 1240 or 1241 up to 6 hours. Three-way selector switch: Battery, supplies energy to attached multimeter; Line, bypasses unit so multimeter operates directly from 115 or 230-volt AC line; Charge, recharges the 12-volt battery in 16 hours from 115 or 230-volt AC. Two test jacks check battery voltage, allow connection of external 12-volt supply. 7⅛x3⅜x17" leather case. Accessory connector cable. Wt. 7 lbs. See Battery, at right.

986X8302. Each 124.50 4-Up.....Each 99.60

12-Volt Battery. Standard Globe "Gel/Cell" rechargeable 12-volt battery is sealed and maintenance-free. Good for 100-400 or more recharge cycle. Size, 6x2x4". Shpg. wt. 5 lbs.

986-8301. Each 37.50 4-Up.....Each 30.00

LATE RELEASE

Model 4440 Portable 3½-Digit Digital Multimeter. Shpg. wt. 2 lbs.

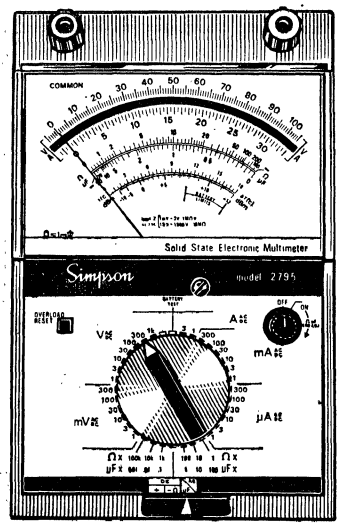
986-2440. Each 345.00 3-5.....Each 310.00

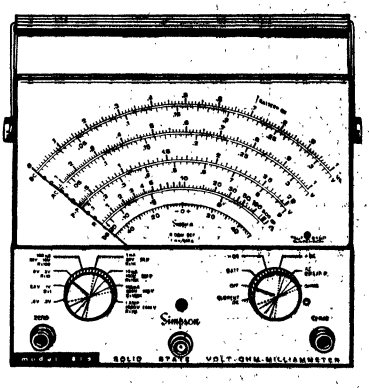
6-9....Each 285.00 10-Up.....Each 242.95

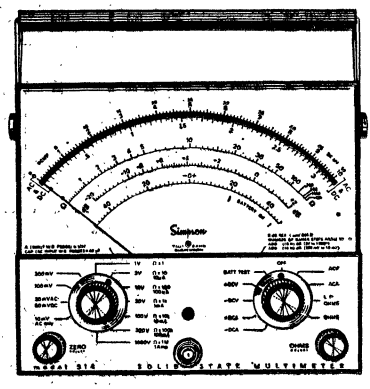
Assorted Test Equipment, 477, 478, 480-482, 489, 492, 497, 500-502, 510-516

Simpson Solid-State VOMs

FET VOM'S FOR REDUCED CIRCUIT LOADING







SOLID-STATE VOM WITH LABORATORY ACCURACY

MODEL 2795. Ultra-precision FET VOM features 68 switch-selected ranges, plus complete overload portection on all ranges through a front-panel, push-button-controlled circuit breaker. Has excellent 10-megohm input impedance on all AC and DC ranges above 10 volts; reduces circuit loading for highly accurate voltage measurements in high-resistance circuits. Operates from internal battery for complete portability.

Taut-band meter with mirrored scale. Temperature compensated for superior 1% accuracy on both AC and DC scales. Ideal for transistor applications.

Ranges: AC-DC Voltages: 0-1-3-10-30-100-300 mV, 0-1-3-10-30-100-300-1000 volts; AC-DC Current: 0-1-3-10-30-100-300 μA, 0-1-3-10-30 ma, 0-0.1-0.3-1-3 amps; Resistance: Rx1 (10 ohms at center scale), Rx10, Rx100, Rx1000, Rx10,000, Rx100,000; Capacitance: (mid-scale values) 100, 10, 0 μF; 100, 10, 1 nF; Temperature: 18°C from ambient, 180°C from ambient (IC thermocouple-type input. Requires only 1 mV for full-scale deflection on voltage ranges; only 1 μA for full-scale deflection on current ranges. 8⅝x5⅜x4 15/16". With batteries, test leads, manual. 4¼ lbs.

919-2795. Ea. 288.00 4-Up. Ea. 230.00
919-5123. Type 22923 18°C Probe.
Ea. .....30.40 4-Up... Ea. 26.00
919-5124. Type 22924 180°C Probe.
Ea. .....30.40 4-Up... Ea. 26.00
919-5127. Type 22927 Case... Ea. 23.35
4-Up..... Ea. 20.00

SOLID-STATE VOM WITH 11-MEGOHM DC IMPEDANCE

MODEL 313. Battery-portable FET VOM ideal for servicemen, technicians, engineers. Gives FET accuracy and low circuit loading for voltage measurements in high-resistance circuits. Has large 7" meter with easy-to-read scale that reduces reading errors. Multi-position range and function-selector knobs reduce setup error. Other controls include zero adjust, ohms adjust, and on-off indicator.

Input impedance is an excellent 11 megohms on DC, with 1 megohm contained in probe; 10 megohms on AC. Has 8 DC voltage ranges, 0.3 through 1000 full scale; 8 AC voltage ranges, 0.3 through 1000 full scale; 5 DC current ranges, 0.1 mA through 1 amp full scale; 7 resistance ranges, 0 through 20 megohms full scale. Accuracy: DC, ±3% of full-scale on all ranges; AC ±3% of full scale on all ranges at 100 Hz. Temperature accuracy: 25°C ±10°C for zero shift of 1° of arc. Overall frequency response: ±0.5 dB from 20 Hz to 20 kHz for 10, 30, and 100 volt ranges.

Operates from one 9-volt battery—life expectancy is approximately 300 hours. Mechanical power on-off indicator. Battery check position on function switch. Resistance ranges are protected against overload—field-effect transistors will not be damaged should line voltage be accidentally applied. 6¾x7¾x3¾". With batteries, probe, manual. 5 lbs.

919-0313. Ea. 141.00 4-Up. Ea. 125.00

SOLID-STATE VOM WITH LOW-POWER OHMS RANGES

MODEL 314. Has low AC and DC voltage ranges plus 7 low-power ohmmeter ranges for accurate readings in solid-state circuits without damage to transistors and integrated circuits. Also measures AC and DC current down to 10 μA. Has 10-megohm input impedance on all voltage ranges for negligible circuit loading and highly accurate voltage readings in high-resistance circuits.

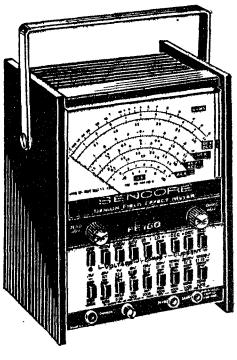
Large 7" meter with big easy-to-read dial reduces reading errors to further increase test accuracy. Convenient battery compartment allows replacement of battery without opening VOM case. Has on-off indicator that prevents accidental drain on battery for longer life. Ranges: DC Volts, 0-0.15-0.1-0.3-1-3-10-30-100-300-1000; AC Volts, 0-0.01-0.03-0.1-0.3-1-3-10-30-100-300-1000; AC-DC Current, 0-0.01-0.1-1-10-100-1000 mA; Resistance, Rx1 (10-ohm center), Rx10, Rx100, Rx1k, Rx10k, Rx100k, Rx1meg; dB, −40 to +60. Accuracy: DC, ±2%; AC, ±3%. AC frequency response, 30 Hz to 100 kHz. X10 switch position transforms input impedance to 100 megohms.

Although VOM is ideal for testing semiconductor circuits, it can also be used in vacuum tube circuits. Tests TV, FM, AM circuits, makes wide-range voltage, current, resistance, decibel measurements. 6¾x7¾x3¾". With batteries, leads, manual. 5 lbs.

919-0314. Ea. 187.50 4-Up. Ea. 150.00

NEW SENCORE MODEL FE-160 HI-LO FIELD EFFECT MULTIMETER

- Covers 112 Ranges
- Pushbutton Operation
- Measures High and Low Ohms
- Measures 0.1 V. Full Scale on Both AC and DC Volts
- FET Circuit; Minimum Loading



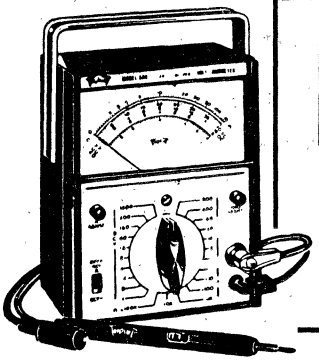
New deluxe multimeter loaded with convenience features. Fast, pushbutton operation—press two buttons to make any test. Full scale sensitivity of 0.1 volt, both AC and DC, for servicing new solid-state circuits. Measures 30 microamps to 3 amps on both AC and DC. Accuracy: ±1.5% DC, ±2.5% AC. Accurately measures high and low-power resistors in-circuit. Meter movement and components protected to 1000 times overload. Fully calibrated zero center ranges for both DC voltage and current for fast and easy transistor servicing. Meter has 7" mirrored scale; 500 microamp, ±2%. Employs ½% deposited carbon, multiplier resistors.

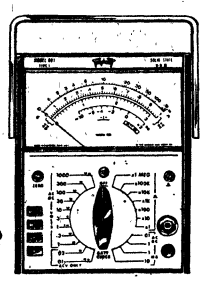
Ranges: DC Volts, 10 pos. and 10 neg.: 0-.1-.3-1-3-10-30-100-300-1000-3000. 10 zero-center Ranges. AC Volts. 9 RMS Ranges: 0-.1, .3, 1, 3, 10, 30, 100, 300 and 1000 volts. 9 P-P Ranges: 0-.28, .84, 2.8, 8.4, 28, 84, 280, 840 and 2800. Response: 10 Hz to 150 KHz. DC Current: 10 pos. and 10 neg. Ranges. 10 pos. zero center Ranges. AC Current: 10 RMS ranges. Ohmmeter: 8 hi-power, 7 lo-power ranges. 9 DB ranges. Size, 9x7½x6". For 110-130 VAC, 50-60 Hz. Wt. 6 lbs.

941-0160..... Ea. 211.00 4-Up..... Ea. 190.00
Model 39A30 High-Voltage Probe. 8 oz.
941-1160..... Ea. 14.10 4-Up..... Ea. 12.00

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

Triplett Solid-State VOMs





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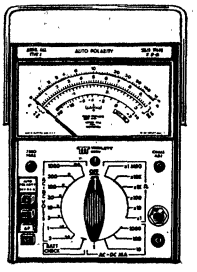

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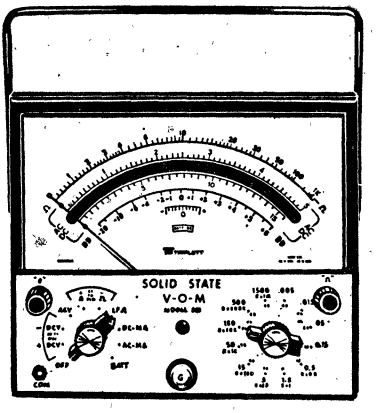


MODEL 600 TVO VOM

- VTVM Performance—VOM Portability
- Field-Effect Transistors for Stability

Five-inch meter provides accurate readings. Accuracy, ±3% of full scale. Input impedance, 11 megohms, except on 0.4 and 0.8 volts, 2.75 and 3.5 megohms respectively; AC volts, 0.75 megohm, minimum. Frequency range, 15 Hz to 2 MHz. Ranges: DC volts, 0-0.4-0.8-1.6-4-8-16-40-160-400-1600; AC volts, 0-4-8-16-40-160-400-800; 0-1000-10,000-100,000-1 meg-10 megs-100 megs (10 ohms center scale at X1 range). The 50 μA meter movement is self-shielded.

Has DC polarity reversing switch Powered by one "D," two "AA" and one 9-volt transistor battery. Includes battery test provision. Molded black case, 3 3/16x5 1/8x6 1/2". Rigid aluminum handle serves as stand, supporting tester at 25° angle. With batteries and test leads. 4 lbs.

956-0600...Ea. 98.00 4-Up....Ea. 91.00

RF Probe T79-264. For freq. to 250 MHz.
956-3788. 4 lbs...**Ea. 10.30 4-Up...Ea. 9.50**

Leather Carrying Case. Shpg. wt. 1 1/2 lbs.
956-0730...Ea. 17.30 4-Up....Ea. 16.10

MODEL 601 TYPE 1 VOM

- Provides 11 Megohm Input Impedance
- Pushbutton Function Switches

Offers the portability of a VOM with the high input impedance of a VTVM. FET circuit gives 11 megohm input impedance on all AC and DC ranges, plus stability over battery life and temperature variations. Has low power ohms switch for measurement of integrated circuits without damage. Single rotary switch selects from 52 ranges. Accuracy: ±2% on DC ranges, ±3% on AC. Frequency response on AC, 50 Hz to 50 kHz. Simplified color-coded dial insures fast measurements, with AC and DC ranges using the same arc. 5" meter has an uncluttered scale and excellent range overlap for accurate readings.

Ranges: DC volts: 0-0.1-0.3-1-3-10-30-100-300-1000. AC volts: 0-0.01-0.03-0.1-0.3-1-3-10-30-100-300-1000. Ohms: 0-1-10-100-1000-10k-100k; 0-1 megohms. 10 ohm center scale. AC and DC current: 0-10-100-1000-10,000 μA. Decibels: −40 to +60 dB. High-impact molded case with brushed aluminum front panel, carrying handle/supporting stand for convenient portability. Size: 3 3/16x5 1/8x6 1/2". Complete with batteries and pencil-thin probe. Shpg. wt. 5 lbs.

956-0601...Ea. 179.00 4-Up..Ea. 166.00

MODEL 801 7½-INCH SOLID-STATE VOM

- VTVM Accuracy in a Portable Unit
- Frequency-Compensated Readings
- Single Probe for All Functions

Solid-state VOM offering high input impedance and wide frequency response; ideal for lab and service use. Colored ranges and combined AC/DC voltage scales ensure easy reading. A single compact probe is used for all functions; built-in slide switch places a 1-meg resistor in series on DC voltage readings. Frequency compensated from 50 Hz to 50 kHz. Temp. range, 0° to 120° F. Accuracy: ±2% DC, ±3% AC.

Ranges: DC Volts: 0.0.05-0.15-0.5-1.5-5-15-50-150-500-1500 volts, accuracy, ±2% full-scale except 1500 V, ±3%; 11 meg input impedance. AC Volts: 0-0.005-0.015-0.15-0.5-1.5-5-15-50-150-500-1500 volts; accuracy, ±3%; input, 10 megs. AC/DC Current: 0-5-15-50-150-500 μA, 0-1.5-5-15-50-150-500-1500 mA; accuracy, ±3% DC, ±4% AC. Resistance: Two circuits, conventional using 1½-volt power (X1, X10, X100, X1k, X10k, X100k, X1 meg) and low power, 35 mA (X0.1, X1, X10, X100, X1k, X10k, X100k, X1 meg); 10 ohms center on X0.1. Decibels: −50 to −66 dB.

Overvoltage protected and fused. Uses three 4.2 V, 1 "D" battery. 8x7x5". Wt. 7 lbs.

956-0801...Ea. 226.00 4-Up..Ea. 210.00

956-3890. 10-2467 **Leather Carrying Case.** Wt. 3 lbs.....**Ea. 35.00 4-Up...Ea. 32.50**

956-3797. 79-292 **High Voltage Probe.** Shpg. wt. 1 lb.....**Ea. 28.50 4-Up....Ea. 26.50**

956-3798. 79-289 **RF Detector Probe.** Shpg. wt. 4 lbs.....**Ea. 11.00 4-Up...Ea. 10.00**

956-0013. 91-620 **Shunt Adapter.** 5/15 amp readings. 0 lbs. **Ea. 11.30 4-Up..Ea. 10.50**

MODEL 602 TYPE 1 AUTO-POLARITY 4½" VOM

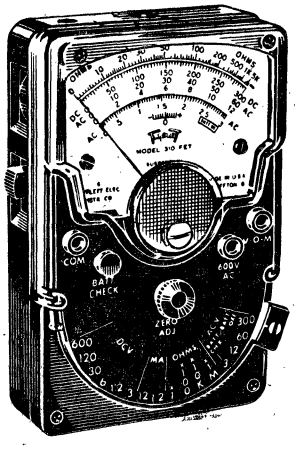
Auto-polarity cuts set-up time where polarity is unknown or not significant; eliminates need for continually switching leads. Indicator is adjusted for zero, zero null; therefore, pointer parallax can be neglected. Only two voltage scales for all AC/DC current and voltage ranges. Sensitivity of 0.3 V full-scale on AC and DC. 11 megohms DC input resistance, 10 megohms AC. Ranges: DC Volts: 0-0.3-1-3-10-30-100-300-1000 volts with ±3% accuracy; pushbutton for polarity determination. AC Volts: 0-0.3-1-3-10-30-100-300-1000 volts with ±3% accuracy; frequency compensation on all ranges except 300 and 1000 V; frequency range,, 50 Hz to 50 kHz. Resistance: X1, X10 X100, X1k, X10k, X1 meg; measurement range, 0.2 ohm to 1000 mA. 9 lbs.

956-0602...Ea. 113.00 4-Up..Ea. 105.00

956-0370. 101-793 **Leather Carrying Case.** Wt. 3 lbs...**Ea. 17.30 4-Up.....Ea. 16.20**

956-3795. 79-270 **High Voltage Probe.** Shpg. wt. 4 lbs.....**27.80**

956-3788. 79-264 **RF Probe.** Shpg. wt. 4 lbs.....**Ea. 11.00 4-Up.....Ea. 10.00**



MODEL 310-FET SOLID-STATE VOM

- All FET Solid-State with 10-Megohm Input Resistance • Battery Operation
- 300-mV DC Full-Scale Sensitivity for Transistor Bias Measurements to 5000 Megohms
- Handsize with Single Selector Switch
- Takes Optional AC Clamp-on Ammeter

Handsize FET VOM is compact, yet gives a full range of operating features and an input impedance that equals that of many large line cord operated VTVM's. Transistorized amplifier uses field effect transistor circuit to provide high input impedance and greater stability on all DC ranges. Accurately reads resistance up to 1 megohm; AC and DC volts to 600 V.

Designed for convenience of use, with all controls and jacks easily accessible on the face of the unit. Single selector switch for all functions and ranges minimizes chance of incorrect setting and possible burnout. Large, easy-to-read meter has suspension meter movement to eliminate pivots, bearings, hairsprings and rolling friction for top sensitivity and better repeatability. Meter also features uncluttered scale and excellent range overlap for accurate readings. Shatterproof plastic meter window.

Ten megohms/volt input impedance on DC gives maximum accuracy in measuring in high resistance circuits. Has 300 mV DC full-scale sensitivity for transistor bias measurement. Ohms to 5000 megohms. Provision for plugging in AC clamp-on adapter to check line loads instantly without opening the circuit. DC volts: .3-1.2-6-30-120-600V, ±3% full scale accuracy. AC volts: 3-12-60-300-600V at 5000 ohms/volt, ±4% accuracy. Resistance: 1-100-10k-1 meg with 50-ohm center scale. DC milliamps: .12-1.2-mA. Diode overload protection.

Powered by batteries, has built-in battery check provision. Molded black plastic case measures 4 1/4x2 3/4x1 5/16". With test leads, alligator clips, battery. Shpg. wt. 2 lbs.

956-5311....Ea. 84.00 4-Up.....Ea. 78.00

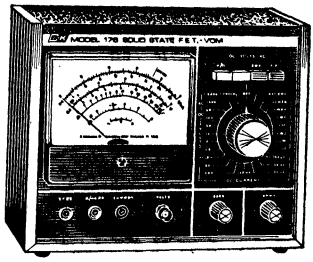
LEATHER CASE. For 310, 310C, 310 FET. 1 lb.
956-5370...Ea. 11.90 4-Up.....Ea. 11.00

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

Solid-State VOM's and VTVM's

B&K SOLID-STATE VOLTAGE-REGULATED FET/VOM

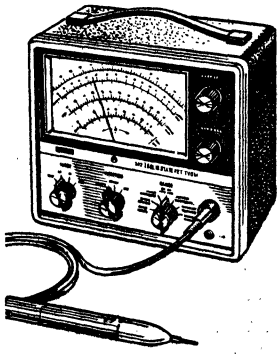
- 4½" Meter With Convenient Zero-Center Scale
- Complementary Symmetry Circuit Protects FET's



MODEL 176. Designed especially for the radio-TV specialist, but does any kind of electronic testing with greater ease and accuracy. Its outstanding reliability and stability makes it a deluxe instrument in every respect. Has many design features for long-term accuracy. Completely symmetrical circuit permits identical calibration of plus and minus voltages. Voltage regulation maintains constant voltage for life of batteries. Has 8 DC voltage ranges with accuracy of ±2% of full scale; 8 AC voltage ranges with accuracy of ±3% of full scale (rms and p-p voltages read on same scale); 7 resistance ranges with accuracy of 3° of scale arc; 6 DC current ranges with accuracy of ±2% of full scale; decibels, −10 to +66. Circuit is fused and diode protected against accidental overloads. Special complementary-symmetry circuit protects FET's from overvoltage transients and provides balanced temperature compensation. Big 4½" high-sensitivity meter. DC input impedance, 11 megs; AC, 10 megs. BNC connector. Shockproof carrying case with tilt handle mounted on back. Size, 7x9x3½". Comes complete with manual. Wt. 5 lbs.
731-0176...Ea. 118.50 4-Up...Ea. 109.95

EICO VERSATILE FET SOLID-STATE VOM'S

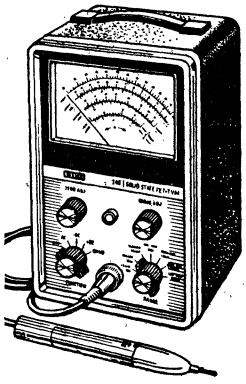
DELUXE MODEL 242W WITH 6½" SCALE



Model 242W—
6½" Scale

Versatile FET VOM tests both vacuum-tube and semiconductor circuits. Big 6½" meter and accurate milliameter scales let you measure AC and DC current from 10 μA to 1 amp. Accurate voltage readings down to 0.05 volt, useful readings to 0.01 volt. Ohmmeter allows testing circuit-semiconductors without risking damage to these delicate components. Includes DC/AC/Ohms/Milliamperes Uniprobe. Input Impedance: DC, 11 megs; AC, 1 meg. Response 25 Hz to 2 MHz. Balanced transistor meter circuit, regulated power supply, 1% multiplier resistors for high accuracy and stability. Ranges: p-p AC Volts and Milliamperes, 0-2.8-8.5-28-85-280-850-2800; AC rms and DC Volts and Milliamperes, 0-1-3-10-30-100-300-1000; Resistance, 0.2 ohm to 1000 megs in 7 ranges. 117 VAC or 3 NEDA #1603 9-V batteries and "D" cell. Shpg. wt. 5¾ lbs.
775-0245.....Each 101.00 4-Up.....Each 94.50

MODEL 240W FOR GENERAL-PURPOSE WORK

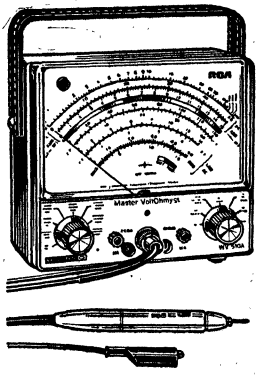


Model 240W—
4½" Scale

General-purpose FET VOM, ideally suited for semiconductor as well as vacuum-tube circuit testing. Operates from AC line or self-contained batteries. Big 4½" scale. Reads accurately down to 0.05 volt, useful readings to 0.01 volt. Includes single DC/AC/Ohms Uniprobe. Input impedance: DC, 11 megohms; AC, 1 megohm. Balanced transistor meter circuit, stable regulated power supply, and 1% multiplier resistors. Response 25 Hz to 1 MHz. Input FET is protected against damage. Seven nonskip ranges in 10-dB steps. Ranges: p-p AC Volts, 0-2.8-8.5-28-85-280-850-2800; AC rms and DC Volts, 0-1-3-10-30-100-300-1000; Resistance, 0.2 ohm to 1000 megohms in 7 ranges. 7½x8½x5". 105-132 VAC or 3 NEDA #1604 (or equiv.) 9V batteries and a "D" cell. Shpg. wt. 6 lbs.
775-0241.....Each 85.50 4-Up.....Each 79.95

RCA VOLTOHMYSTS FOR SERVICING AND INDUSTRY

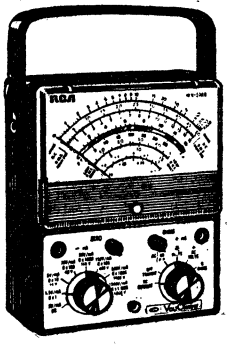
MODEL WV-510A MASTER VOLTOHMYST



Model WV-510A
Master Voltohmyst

This high-quality instrument provides excellent stability and linearity for service, industrial and laboratory work. Easy-to-read, two-color mirror scale eliminates parallax. Measures DC voltage, 0.01-1500 volts, in 8 ranges; AC voltage, 0.2-1500 volts; Direct Current from 0.01 mA to 1.5 A; AC p-p voltage of complex waveforms from 0.5 to 4200 volts; resistance values from 0.2 ohm to 1000 megohms. Seven overlapping ranges for AC, resistance and current. Accuracy: ±3% of full scale reading. With WG-401A probe and cable, alligator clip, current leads, instructions. 110-135 V, 50-60 Hz AC. 6⅞x5¼x3⅛". Shpg. wt. 3½ lbs.
901-4710.....Each 131.00 4-Up.....Each 128.00
901-2411. WG-411A High-Voltage Probe to 50,000 VDC. Wt. 6 oz. Ea. 15.55
4-Up.....Each 13.50
901-2436. WG-436A Multiplier Resistor. 4 oz...Ea. 3.85 4-Up..Ea. 3.75

MODEL WV-500B SOLID-STATE VOLTOHMYST



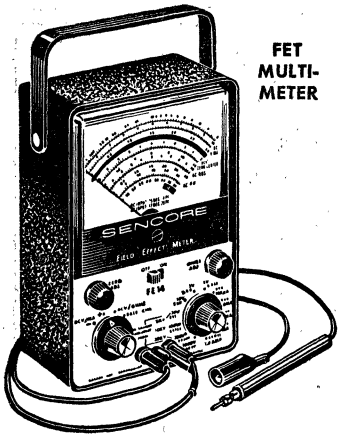
Model WV-500B
Voltohmyst

Versatile battery-operated instrument is ideal for audio, radio, TV and industrial servicing and testing. Offers stable, drift-free operation. Burnout-protected meter. 11 megohm input resistance on all DC input ranges. Has 10-millivolt DC range for accurate transistor work. Ranges: DC volts, 0-0.01-0.5-1.5-5-15-50-150-500-1500. AC volts (rms), 0-0.2-1.5-5-15-50-500-1500. AC volts (p-p), 0-0.5-14-42-140-420-1400-4200. DC current in eight ranges from 0.01 mA to 1.5 A. Seven overlapping resistance ranges from 0.2 ohms to 1000 megohms. AC frequency response (on 1.5 and 5 VAC ranges), ±1 dB, 30 Hz to 3 MHz.

Sensitive 100 μA meter movement, color-coded scales. Accuracy for all voltage and current functions is ±3% of full-scale reading. Front panel ohms and zero-adjust. Single AC-ohms/DC test probe for fast multiple measurements. Rugged case, 6⅞x5¼x3⅛". Convenient carrying handle. With probe, batteries. Shpg. wt. 3½ lbs.
901-4700.....Each 90.00 4-Up.....Each 88.00

Assorted Test Equipment, 477, 478, 480-482, 489, 492, 497, 500-502, 510-516

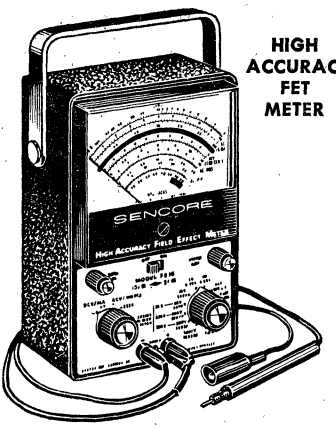
SENCORE Quality Test Instruments



FET MULTI-METER

- Instant stability—zero warm-up time
- Full protection—100 times AC overload
- Shielded input leads prevent RF pickup

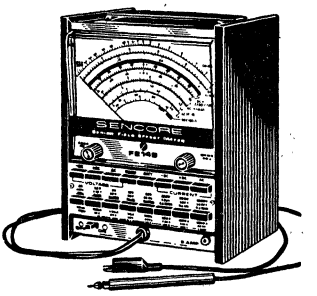
MODEL FE14. Combines the precision and accuracy of a VTVM with the compactness and portability of a VOM due to superior FET loading characteristics. Less circuit-loading than with a VTVM—15-meg input on DC, 10 meg on AC. FET's in differential circuit for zero warmup time, high stability. Accurate to within ±2.5% on DC ranges, to within ±4.5% over AC ranges. Mirrored, ½-V zero center scale. DCV/ACV rms: 0-1-3-10-30-100-300-1000. ACV p-p: 0-2.8-8.4-28-84-280-840-2800. Ohms: 0-1000-10k-100k, 0-100 meg. DC current, 0-100 μA, 0-1-10-100 mA, 1 A. 4½" meter. Built-in battery check. Leads, vinyl-clad steel case. Needs one 9V and "C" battery (not included). 7¼x5x3". Shpg. wt. 4 lbs.
949-2314.....Ea. 77.50 4-Up...69.95



HIGH ACCURACY FET METER

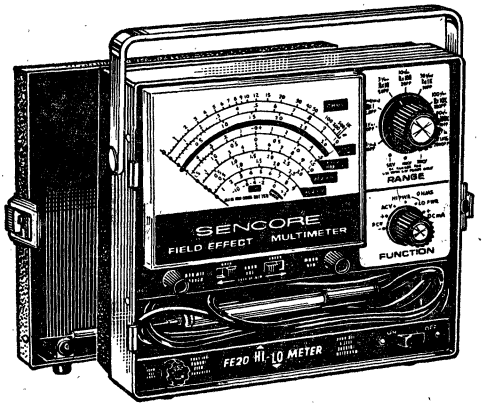
- Tests In or Out of Circuit
- Extremely Fine Accuracy
- VOM Portability, VTVM Precision

MODEL FE16. Accurately tests FET's in or out of circuit. Perfect for servicing black-and-white or color TV, hi-fi, etc., where many FET's are being used. Tests transistors, diodes, and rectifiers in their circuits without disconnecting a lead. Tests them just as reliably out of circuit. Accuracy over DC ranges to within ±1.5%, to ±3% on AC. 7 DC and AC voltage ranges from 1 to 1000 volts, AC peak-to-peak readings of 2800-volt maximum, with response of ±3 dB from 10 Hz to 10 MHz. 5 resistance ranges to 100 meg; 5 DC current ranges, 100 mA-1 A. 3 high voltage ranges: 3kV, 10kV, 30kV. 4½" high styled meter, special tilting metal handle. Steel case. Overall size, 5x7 3/16x3 1/16". Shpg. wt. 4 lbs.
949-2316.....Ea. 94.00 4-Up...84.50



SENIOR FIELD-EFFECT MULTIMETER

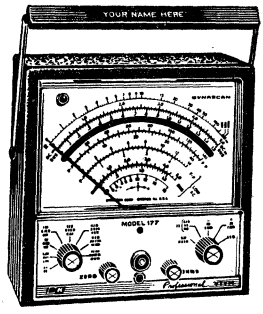
MODEL FE149. 99-range FEM produces negligible circuit loading—15 megohms on both AC and DC. Meter and circuit protection. Ohms scale of 6 ohms center. .25-volt zero center for transistor servicing and shielded input lead. Meter has 7" mirrored scale, built-in battery charging circuit, and battery checker. Eight DC ranges to 1500 volts. Eight AC ranges to 1500 volts rms, 4500 volts p-p. Eight resistance ranges to 6000 megohms. Nine AC/DC current ranges to 5 amps. Vinyl-clad case. 9x7½x6". Operates on rechargeable batteries or 105-130 VAC. Less batteries. High voltage probe increases 50, 150, and 500-volt DC ranges by a factor of 100. Increases DC input impedance to 1500 meg on all DC ranges. **Probe below.**
949U2325. Shpg. wt. 7 lbs..**Ea. 183.00**
4-Up.....Ea. 169.50
949-2326. Hi-Voltage Probe.Ea. 16.60
4-Up.....Ea. 14.95



HI-LO FIELD EFFECT MULTIMETER

- Minimum Loading, 15 meg Input Impedance on DC; 10 Meg on AC
- Great Versatility Use It Anywhere, Anytime
- Laboratory Accurate 1.5% on DC—3% on AC
- Probe to Extend Voltage Ranges to 3kV, 10kV, 30kV
- 30° Tilt Handle for Bench or Back-of-TV Work

MODEL FE20. A must for accurate measurements in solid-state circuits. You can use the versatile, readily portable unit any time of day, anywhere. Low voltage of .08 volts prevents transistors from conducting and misreading circuit . . resistor will read properly. Also prevents transistor damage. High voltage of 1.5 volts causes semiconductors to conduct to read correct front-to-back ratio or conductivity of transistors. High-ohms reading essential for finding open circuits. Precision lab accuracy, ±1.5% on DC, ±3% on AC ranges. Input impedance: 15 meg on DC, 10 meg on AC. 9 DC voltage ranges from a tenth of a volt full scale to 1000 volts. 3 hi-voltage ranges of 3kV, 10kV, and 30kV. 9 DC zero center ranges from .05 volts to 500 volts . . for delicate transistor bias measurements. 9 AC rms ranges from a tenth of a volt full scale to 1000 volts. 7 resistance ranges from 1000 ohms full scale to 1000 meg. 9 DC current ranges from 100 μA to 1 A. Complete battery test for long-life "C" cells and for the 1.5-volt ohms battery. Never worry about rundown batteries—push the switches under the meter and read. Protective cover automatically turns off the unit when shut so batteries do not run down when tester is not in use. Front panel ⅛ amp fuse protects ohms scale and milliamps scale if voltage or overload is accidentally applied. No factory repairs necessary . . just replace the fuse. High-voltage probe with 120% isolation resistor prevents AC pickup or circuit loading. Leave in normal position for most tests. 10x9¾x3½". 4 lbs.
949-2320.....Ea. 143.00 4-Up..129.50



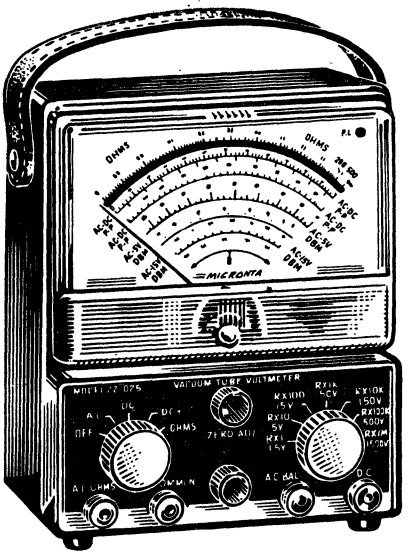
B&K VACUUM-TUBE VOLTMETER

MODEL 177. Precision instrument with the durability to take rugged use. Ideal for transistor applications, checking relay circuits, etc. Ranges: DC Volts, 0-0.5-1.5-15-50-150-500-1500; AC Volts, (rms), 0-1.5-5-15-50-150-1500; AC Volts (p-p), 0-4-14-40-140-400-1400-4000 (AC response, ±1 dB, 40 Hz to 3 MHz; 600 ohm source, 5-volt range); Resistance, 0-1000-10k-100k ohms, 0-1-10-100-1000 megs (mid-scale; 10, 100, 1000, 10k, 100k ohms; 1, 10 megs). Input impedance, 11 megs (1 meg in probe). Accuracy: DC, ±3% of full scale; AC, ±5% of full scale. Easy-to-read meter with fully-protected 100 μA movement. Sturdy metal case with carrying handle for easy portability. 7⅛x7¼x3⅝". Cycolac® single AC/ohms/DC test probe designed for hard usage on the service bench or in the field. A truly professional unit! AC.
731-0177. Shpg. wt. 8 lbs...**Ea. 99.95**
4-Up.....Ea. 89.95

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's, 480-499—Scopes, 503-505

Vacuum Tube Voltmeter Values

MULTIMETERS, VOM's, VTVM's



MICRONTA® PRECISION 6½-INCH VACUUM TUBE VOLTMETER

44.50

- Mirrored Scale Eliminates Error-Causing Parallax
- Zero-Center Scale for Alignment of FM Circuits
- Meter Movement Diode-Protected Against Burnout
- 1% Multiplier Resistors Used Throughout for Accuracy

MODEL 20-025. Outstanding reliability and stability make this VTVM a deluxe instrument in every respect. An ideal choice for the radio-TV specialist, but does most electronic testing with ease and accuracy. High input impedance allows exacting measurements in critical circuits without loading. Ranges: DC Volts, 0.1 to 1500 in 7 ranges; AC Volts (rms), 0.1 to 1500 in 7 ranges, (peak-to-peak), 4-4000 volts in 7 ranges; Resistance, 0.2 ohms to 1000 megohms in 7 ranges; Decibels, −20 to +65 in 7 ranges. You get direct reading measurements on all scales. 200 μamp meter movement is diode-protected against burnout. 1% multiplier resistors are used throughout for precision readings. Mirrored scale provides quick, sure measurements at a glance—eliminating error-causing parallax. Zero-adjust control assures accurate readings for all scales. Zero-center scale for quick, convenient alignment of FM circuits. Smart, professional styling blends well with other instruments. Easy-grip carrying handle and high-impact case. Supplied complete with leads and instructions. For 117 volts, 60 Hz AC.
910-4525 Shpg. wt. 7 lbs... **Each 44.50**

EICO SEPARATE-SCALE PEAK-TO-PEAK READING VTVM'S

[A] MODEL 249W 7½-INCH VTVM

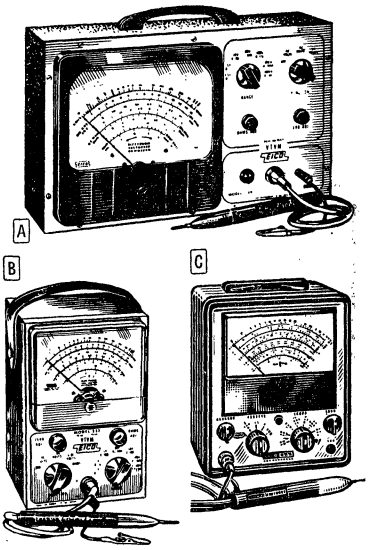
- With Single DC/AC/Ohms Uniprobe
- Electronically Protected Movement
- Separate Scales for p-p AC Volts

Highly efficient deluxe VTVM for bench or field use. Versatile, easy to use, accurate. Gives true peak-to-peak measurements on separate scales. Includes single DC/AC/Ohms Uniprobe. Electronically protected 7½" meter, balanced bridge circuit. Zero center scale and 1% precision ceramic multiplier resistors. Ranges: p-p AC Volts, 0-4-14-42-140-420-1400-4200; AC rms and DC Volts, 0-1.5-5-15-50-150-500-1500; Resistance, 0-1000 megs in 7 ranges. Frequency Response, flat from 30 Hz to 3 MHz. 8½x13x5". 105-125 volts, 50-60 Hz AC. 9 lbs.
775-0250...Ea. 64.50 4-Up....Ea. 59.95

[B] MODEL 232W 4½-INCH VTVM

- For Color TV and Service Work
- With Single DC/AC/Ohms Uniprobe
- Separate Scales for p-p AC Volts

Ideal for color TV and all general service. Gives true peak-to-peak measurements on separate scales. Includes all the deluxe features of Model 249W below, but has 4½" meter. With "Uni-Probe"—a great time saver—a half-turn of probe tip selects DC or AC/Ohms ranges. Ranges: p-p volts, 0-4-14-42-140-420-1400-4200 volts; DC/rms volts, 0-1.5-5-15-50-150-500-1500 volts; resistance, 0-1000 megohms in 7 ranges. Frequency Response, 30 Hz to 3 MHz. Size, 8½x5x5". For 105-125 volts, 50-60 Hz AC. Shpg. wt. 5 lbs.
775-0233...Ea. 53.75 4-Up....Ea. 49.95



[C] MODEL 235W 6-INCH PROFESSIONAL VTVM

- ½-Volt Full-Scale DC Transistor Servicing Range
- Ceramic Switches
- With Single DC/AC/Ohms Uniprobe
- Separate Scales for p-p AC Volts

Good enough to meet the rigid requirements in testing modern electronic equipment. True peak-to-peak measurements on separate scales. Has 1% precision multiplier resistors. Features unique, time saving, dual-purpose "Uni-Probe"—one probe performs all functions—a half-turn of probe tip selects DC or AC/Ohms. Ranges: p-p volts, 0-4-14-42-140-1400-4200; AC rms and DC volts, 0-1.5-5-15-50-150-1500, plus 0-0.5 on DC; resistance, 0-1000 megohms in 7 ranges. Frequency Response, 3 Hz to 3 MHz. With batteries and leads. Size, 8½x7½x5". For use on 117 volts, 50-60 Hz AC. Shpg. wt. 10 lbs.
775-0237...Ea. 91.50 4-Up....Ea. 84.95

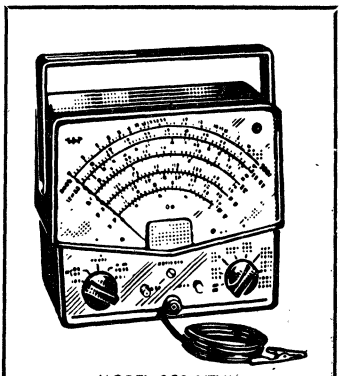
TRIPLETT MODEL 850 7-INCH VACUUM TUBE VOLTMETER

- High Stability—12AU7 Cathode Circuit
- Easy-to-Read 7" Scale
- 0-5-Volt DC Range for Transistor Circuits
- Built-In Burnout Protection

Extremely versatile VTVM combines superior voltage measuring capability with 115-volt operation. Ideal for benchwork in phe electronics workshop, quality control stations, R&D laboratory work, etc. Provides seven peak-to-peak voltage ranges, eight DC voltage ranges, seven AC rms volts ranges, seven resistance ranges, plus a frequency range from 15 Hz to 3 MHz to provide a wide-range measurement capability.

Wide 7" meter has easy-to-read scale, electrical protection to prevent burnout and 12AU7 cathode circuit to produce top stability. Separate scale on meter for peak-to-peak readings. Spring-backed jewels for added ruggedness. Single-unit probe has built-in switch for AC/DC/Ohms. 11 megohm input resistance on all DC voltage ranges. Accuracy ±3% on AC and DC. Ohms accurate within ±3% full scale based on DC scale. DC voltage ranges: 0-.5-1.5-5: 15-50-150-500-1500. AC rms voltage ranges-0-1.5-5-15-50-150-500-1500. Peak-to-peak voltage ranges: 0-4-14-40-140-400-1400-4000. Resistance ranges: 0-1000-10,000-100,000-1 meg-10 megs-100 megs-1000 megs. Frequency range 15 Hz to 3 MHz (up to 250 MHz with auxiliary diode probe listed below). Input resistance: 11 megs on DC volts, AC volts min. of .83 meg.

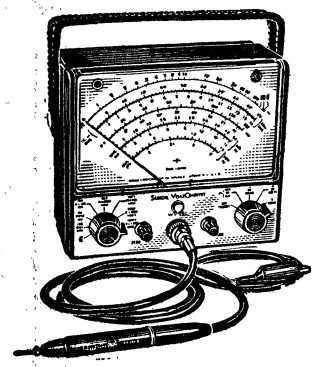
Molded black case 7⅝x6⁷⁄₁₆x3¾". Carrying handle also supports tester at 25° angle for easy reading. With test leads and battery. For 115 VAC. Shpg. wt. 7 lbs.
956-0850..Ea. 111.00 4-Up...Ea. 103.00
T-79-196 PROBE. For VDC to 50 kV. 4 lbs.
956-3746...Ea. 30.00 4-Up....Ea. 27.80
T-79-215 RF PROBE. For up to 20 volts with frequencies to 250 MHz. Shpg. wt. 1 lb.
919-0190...Ea. 10.75 4-Up....Ea. 10.00



MODEL 850 VTVM

VTVM's and Accessories

LAB AND SPECIAL-PURPOSE SERVICE INSTRUMENTS



MODEL WV-98C SENIOR VOLTOHMYST

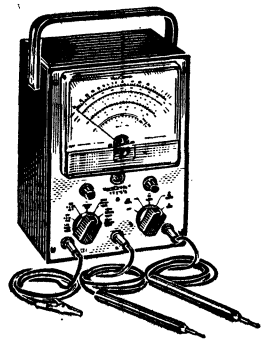
- Burn-Out Protected Meter for Dependable Operation
- Rugged 200μA Meter Movement
- 7 AC Voltage Ranges and 8 DC Voltage Ranges
- Deluxe Mirrored Scale
- Single AC-Ohms/DC Probe
- 11-Meg DC Input Resistance
- 1% Precision Resistors

Deluxe multi-function tester offers a full array of features. Has electronic burnout protection, rugged 200 μA meter movement and 1% precision resistors for highest accuracy on all measurements.

Compact 6½-in. meter has mirrored scale—delivers 3% accuracy. Has seven voltage ranges for AC p-p and rms volts; eight ranges for DC volts. Seven resistance ranges. Reads AC rms and DC volts to 1500; AC p-p volts to 4200. Features 0.5 VDC scale for accurate transistor work. Reads resistance from 0.2 ohm to 1000 megs.

DC input resistance is 11 megohms for negligible circuit loading. AC input impedance from 830k ohms and 70 pF to 1.5 megs and 60 pF. Rugged die-cast aluminum case offers good looks and durability. Measures 6½x7x3¾-in. Includes convenient carrying handle. With test probe, shielded cable and operating instructions. For 110-130 V, 50-60 Hz AC. Shpg. wt. 8 lbs.

901-4598. 1-3.....Each 112.00 4-Up.....Each 99.00



MODEL WV-77E ECONOMY VOLTOHMYST

- Ideal All-Purpose Tester
- 11 Megohm Input Impedance on All DC Ranges
- 0-1500 Volts DC Range and 0-4000 Volts AC Range
- Electronically Protected Meter
- Easy-Read Color-Coded Scales
- Scales for 1½-V rms and 4-V p-p
- Fuse-Protected Ohms Network

Top-value test instrument that is the ideal service aid for a wide range of applications in the laboratory, service shop or at the hobby bench. Features electronically protected meter movement and easy-to-read scales. 11-megohm input impedance on all DC ranges minimizes circuit loading.

Ranges: AC rms and DC volts: 0-1.5-5-15-50-150-500-1500; AC p-p volts, 0-4-14-40-140-400-1400-4000; resistance. 0-1000-10k-100k ohms; 0-1-10-100-1000 megohms. AC frequency response: 5% from 40 Hz to 5 MHz on 1.5, 5 and 15 Vrms and 4, 14 and 40 V peak-to-peak ranges. Accuracy: DC, 3% of full scale; AC, 5% of full scale.

Has individual scales for 1½-V rms and 4-V p-p. Rugged metal case. Measures 7¾x5⅝x4¾-in. With ultra-slim probes and extra-flexible test-lead cables, detailed operating instructions. For 105-125 V, 50-60 Hz AC. Shpg. wt. 5 lbs.

901-4577. 1-3.....Each 71.50 4 Up.....Each 66.00

ACCESSORIES FOR VTVM'S/VOM'S

901-1297. WG-297 HV Probe. For WV-77E, WV-38A. Extends DC range to 50,000 V. 1 lb. 1-3..Ea. 16.40 4-Up...Ea. 15.00

901-1289. WG-289 HV Probe. For WV-980. Extends DC range to 50,000 V. 1 lb. 1-3....Ea. 16.40 4-Up.....Ea. 15.00

901-1206. WG-206 Multiplier. For WG-289. 1090 meg. mult. for matching 11-meg input. 2 oz. 1-3..Ea. 4.10 4-Up.Ea. 3.75

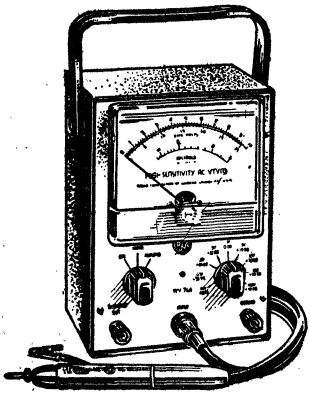
901-1210. WG-210 Multiplier. 900-meg. Multiplies 5000 VDC range of 20k ohms/V. VOM by factor of 10. Wt. 2 oz. 1-3.....Each 4.10 4-Up.....Each 3.75

901-1211. WG-211 Multiplier. 495-meg. Multiplies 250 VDC range of 20k ohms/V by factor of 100. Shpg. wt. 2 oz. 1-3.....Each 4.10 4-Up.....Each 3.75

901-1355. WG-301A Crystal Diode Probe. "Slip-on" with WG-299D. To 250 MHz. 8 oz. 1-3..Ea. 8.95 4-Up...Ea. 8.25

901-1460. WG-351A Crystal Diode Probe. For WV-77C, WV-77E. To over 100 MHz. 4 oz. 1-3....Ea. 5.70 4-Up.....Ea. 5.25

901-1299. WG-299E DC/AC-Ohms Probe. Includes cable. Wt. 1 lb. 1-3.....Each 10.60 4-Up.....Each 9.75



MODEL WV-76A PRECISION AUDIO AC VTVM

- Measures 0.0002-500 AC Volts Over a 10 Hz to 1.5 MHz Range
- 9 Overlapping AC Volt Ranges
- Amplifier Provides 38 dB Gain for Use as a Preamp
- Measures dB from −40 to +40

High sensitivity AC VTVM for hi-fi and other audio applications. Designed for measuring AC voltages from 0.0002 volt to 500 volts over the frequency range of 10 Hz to 1.5 MHz. Offers nine overlapping AC voltage ranges—from 10 millivolts to 100 volts full scale. Incorporates a decibel scale for measurements of levels from −40 to +40 dB.

Features a built-in amplifier which may be used separately as a preamplifier. Provides approximately 38 dB gain throughout the frequency range from 10 Hz to 500 kHz with probe in "low-cap" position; 10 Hz to 1.5 MHz with probe in "direct" position.

With WG-300B Direct/Low Capacitance Probe. Switch in probe housing provides for switching from direct to low-capacitance input. In "direct" position, probe measures up to 100 volts; in "low-cap" position, probe can be used to measure up to 500 volts or +56 dB. 7⅜x5⅜x4¾". With probe, leads, connector. 110-120 V, 60 Hz AC. Shpg. wt. 5 lbs.

901-4576. 1-3.....Each 112.00 4-Up.....Each 99.00

Replaces Ohmmeter Battery in Most VTVM's

LECTROTECH VTVM POWER SUPPLY

Brings new convenience and economy to test equipment users. Here is a true miniature 1½-volt DC power supply that replaces ohmmeter batteries in most VTVM's. Takes only a few minutes to mount and wire. Eliminates the need for replacement batteries.

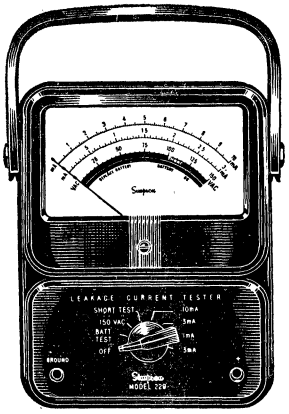
Eliminates dangerous "battery mess" caused by battery bleeding and corrosion. Occupies the same space as any standard "D" cell. Fits virtually any VTVM using standard "D" cell for ohmmeter. Shpg. wt. 4 oz.

849-4004. 1-3.....Each 4.55 4-Up.....Each 4.16

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

Simpson

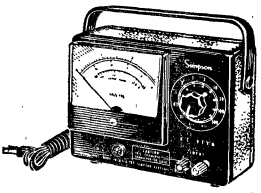
VTVM'S AND CURRENT LEAKAGE TESTER



AC CURRENT LEAKAGE TESTER

MODEL 229. Designed to test 120-volt AC appliances and electrical equipment for leakage. All ranges are protected from line voltage damage. Simply connect ground lead to water or gas pipe, powerline ground, etc. for quick, accurate testing wherever needed. Ranges: AC Current, 0-0.3-10 mA; AC Voltage, 0-150 volts; Battery test, Replace-Good. Resolution, 5 μA on 0-0.3 mA range. Accuracy, ±2% at 60 Hz. Frequency: approximates normal perception curve within ±1 dB. Input impedance: 1.5k ohms. Overload protection up to 150 VAC on all ranges. Black case, 7½x5⅝x4½". With leads, batteries. Shpg. wt. 5 lbs.

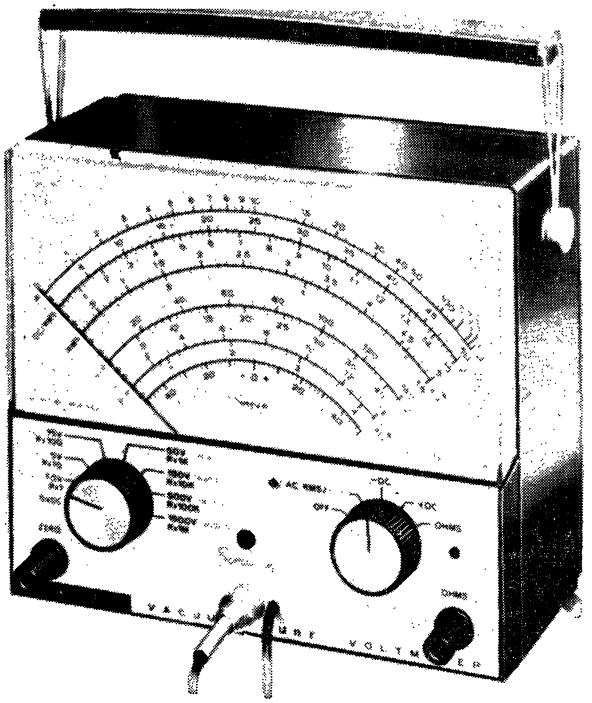
919-0229. 1-3. Ea. 98.00 4-Up... Ea. 90.00
919-0805. Leather Carrying Case. 2 lbs.
1-3.....Each 15.20 4-Up.....Each 14.00



GENERAL-PURPOSE AC VTVM

MODEL 715. Outstanding reliability and high stability—plug multivoltage ranges and wide frequency response make this versatile VTVM ideal for general-purpose applications. Especially suitable for hi-fi, low-level audio work such as hum and ripple measurements, IF gain and vibration analyzing, other shop or lab uses. Specially designed meter scale provides dB markings on both the voltage range positions and the meter scale. Ranges: AC Volts, 0-0.01-0.03-0.1-0.3-1-3-10-30-100-300 rms; dB, −52 to +52 dBm (zero dBm 1 mW in 600 ohms). Accuracy, ±5%. Measures 5½x 7½x3". With test leads, instructions. 117 VAC.

919-0715. Shpg. wt. 5 lbs. **1-3..Each 91.00**
4-Up.....Each 84.00



HIGHLY-ACCURATE 16-MEGOHM INPUT VTVM

- **Features a Tracking Error of Less Than 1%**
- **40% Less Circuit Loading Than Many VTVM's**

MODEL 312. Produces 40% less circuit loading than most conventional VTVM's. Let's you do faster, more accurate work. Tracking error or less than 1% plus accuracies of ±3% on all AC and DC ranges. Its ½-volt DC range meets today's solid-state testing requirements. Large 7" meter for more precise readings. Controls include multiposition range selector, function selector, zero adjust and ohms adjust. Special circuit protects meter against burnout. Large 7-inch meter.

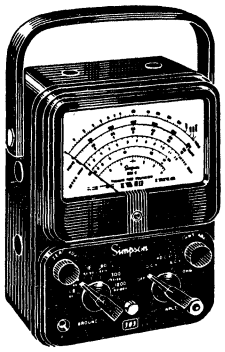
Ranges: AC-DC Volts, 0-0.5-1.5-15-50-150-500-1500; AC p-p Volts, 0-14-40-140-400-1400-4000; Resistance, X1, X10, X100, X1000, X10k, X100k (all with 10 ohms center). Response: ±3% 15 Hx to 3 MHz. Accuracy: ±3% of full scale on all voltage ranges; 3° of arc on all resistance ranges. 6¾x7¾x3¾". 117 VAC. 5 lbs.

919-0312. 1-3.....Each 112.00 4-Up.....Each 95.00
Model 0152 RF Probe. 10kHz-250MHz range. Usable to 40 volts rms. 1 lb.
919-0152. 1-3.....Each 12.30 4-Up.....Each 11.75
Model 0155 High Voltage Probe. Shpg. wt. 1 lb.
919-0155. 1-3.....Each 18.50 4-Up.....Each 17.00
Model 0577 Vinyl Case. Room for lead storage. Shpg. wt. 2 lbs.
919-0577. 1-3.....Each 18.50 4-Up.....Each 17.00

AC-DC VTVM WITH 6V RANGE

MODEL 303-2. Solves virtually any servicing problem. Excellent 10-megohm input impedance on all ranges for measuring voltage in high-resistance circuits without overloading. Ranges: AC rms, DC, 0-1.2-6-12-60-300-1200; AF Volts, 0-1.2-6-12-60; Resistance, 0-1k (10 ohm center), 10k, 100k ohms, 1 meg, 10 megs, 1000 megs; dB −20 to +63. Accuracy: DC, ±3%; AC, ±5%. 7x5¼x3⅛". Probe. 117 VAC.

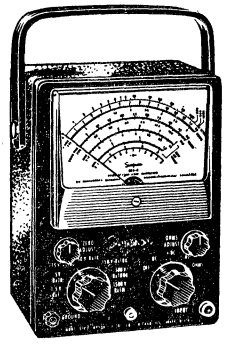
919-0303. Shpg. wt. 6½ lbs.
1-3. Each 99.50 4-Up...Each 92.00
919-0306. With roll-top case.
1-3. Each 105.00 4-Up...Each 97.00
919-0074. Hi-V Probe. Sh. wt. 1 lb.
1-3. Each 18.50 4-Up...Each 17.00
919-0073. RF Probe. Shpg. wt. 1 lb.
1-3. Each 12.30 4-Up...Each 11.75



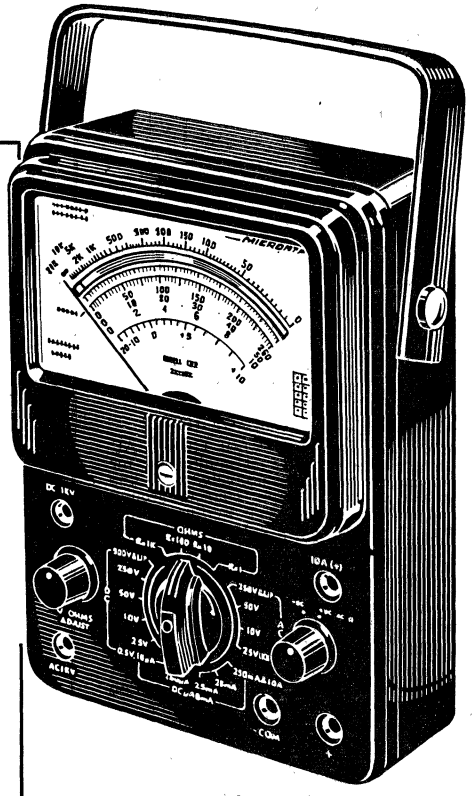
22-MEG INPUT AC-DC VTVM

MODEL 311-3. DC input impedance of 22 megs assures high-accuracy voltage measurements for a wide variety of applications. Direct rms, p-p readout. Ranges: AC-DC V, 0-1.5-5-15-50-150-500-1500. ±5%, 30 Hz-110 khz, p-p, 0-4-14-40-140-400-1400-4000 V, DC V, ±3% of full scale; AC V, ±5%. DC res., ±3° of linear arc. 4½" meter. DC-AC-ohms probe. 7½x5⅝x4½". 117 VAC. Shpg. wt. 8 lbs.

919-0311. 1-3.....Each 99.00
4-Up.....Each 91.00
919-0732. 0732 High-V Probe. Extends DC to 30 kV. Shpg. wt. 1 lb.
1-3. Each 18.50 4-Up.....Each 17.00
919-0731. 0714 High-Frequency Probe. To 250 MHz. Shpg. wt. 1 lb.
1-3. Each 17.40 4-Up.....Each 16.00



Micronta® Precision-Crafted Multitesters For Accuracy



100,000 OHMS-PER-VOLT SENSITIVITY MULTITESTER FEATURES 27 RANGES AND MIRRORED SCALE

- 100,000 Ohms-Per-Volt Sensitivity
- Boasts 27 Ranges For All Types of Tests
- Mirrored Scale For Accurate Readings

29.95

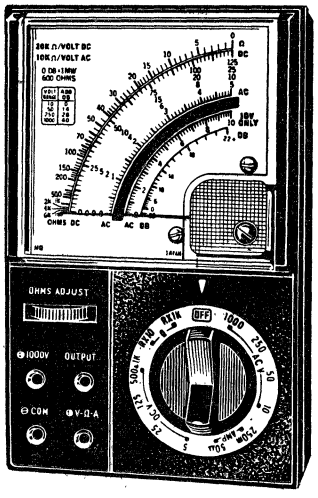
MODEL 22-152. Here is one of the finest portable as well as bench multimeters available today at this low, low price. Designed for any shop or field application, this compact, precision engineered instrument enables you to do quicker and more accurate testing in a wide variety of current, voltage and resistance ranges. Boasts double-jeweled 4" D'Arsonval movement meter with ±2% accuracy. Overload protection is provided by a matched pair of silicon diodes in a specially designed circuit to prevent accidental burnout. Sensitive 100,000 ohms-per-volt DC scale for professional accuracy. Use indoors on test bench with built-in AC power supply, or flip switch and use in the field with self contained batteries. Large, easy-to-read mirrored scale assures error-free measurements.

Ranges: DC Volts, 0-500 mV, 0-2.5-10-50-250-500-1000 volts at 100,000 ohms per volt sensitivity; AC Volts, 0-2.5-10-50-250-1000 volts at 12,500 ohms per volt sensitivity; DC Current, 0-10-25 μA, 0-2.5-25-250 mA, 0-10 A; Resistance, 0-20k, 200k ohms, 0-2-20 megohms; Decibels, −20 to +62 in 5 ranges. Zero-adjust control calibrates for any scale quickly and accurately—also compensates for changes in battery condition. Large, easy-to-read selector switch instantly lets you choose proper function and scale.

Folding easy-carry handle provides excellent grip for portable uses, folds back out of sight for use in the shop. Convenient battery storage compartment assures you of always having a fresh power supply on hand. Precision crafted to give years of reliable service. Unit comes complete with test leads, batteries and instructions. Size, 7x5¼x3¼". Order optional leather carrying case below.

910-4651. Shpg. wt. 6 lbs. **29.95**
910-4652. Model 22-151 Leather Carrying Case. Shpg. wt. 8 oz. **3.95**

PRECISION ECONOMY MULTITESTERS BY MICRONTA



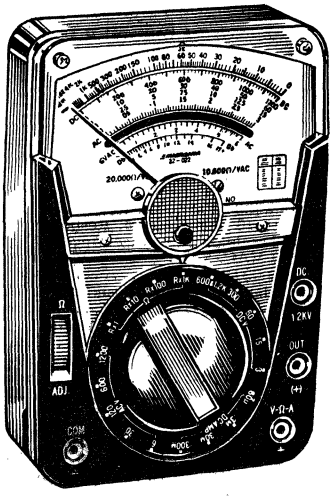
20,000 OHMS/VOLT MULTITESTER HAS 17 MEASURING RANGES

9.95

- Complete with Leads
- Zero Adjust Control
- Off Position in Switch

MODEL 22-046. Quality engineered meter at a low low price. Ranges: DC Volts, 0-5-25-125-500-1000; AC Volts, 0-10-50-250-1000; DC Current, 0-50 uA, 0-250 mA; Ohms, 0-60k, 0-6 megs; Decibels (4 ranges) −20 to +62. DC/AC Accuracy, 3% except 500 and 1000 V, 4%. 4x3x1". Battery, instruc.

910-4546. Shpg. wt. 2 lbs. **9.95**
910-4545. Model 22-045 Leather Case for Above. Shpg. wt. 6 oz. **1.95**



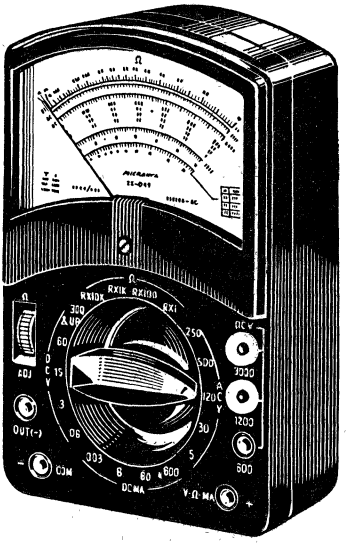
20,000 OHMS/VOLT MULTITESTER WITH SINGLE-KNOB RANGE SWITCH

14.95

- Boasts 28 Ranges
- Zero Adjust Control
- Complete with Leads

MODEL 22-022. Precision multitester boasts 28 ranges. DC Volts, 0-5-15-60-300-600-1200; AC Volts, 0-6-30-120-600-1200 at 10k ohms/volt; DC Current, 0-60 μA, 0-3-30-300 mA; Resistance, 0-12k-120k ohms, 0-1.2-12 megs (CS, 60, 600, 6k, 60k); dB, −20 to +63. 3¾x5 3/16x1¼". Complete with batteries, leads, instructions.

910-4522. Shpg. wt. 2 lbs. **14.95**
910-4521. Model 22-021 Case. 6 oz. ... **1.95**



30,000 OHMS/VOLT MULTITESTER WITH SINGLE-KNOB SELECTOR

18.95

- Easy-To-Read 3½" Scale
- Zero Adjust Control
- Complete with Leads

MODEL 22-049. Boasts large 3½" meter. Ranges: DC Volts, 0-0.6-3-15-60-300-600-1200; AC Volts, 0-6-30-120-600-1200; Resistance, X1, X100, X1000, X10k; Current, 0-0.03-6-60-600 mA; dB, −20 to +63 in 5 ranges. Comes complete with batteries, leads and instructions. Size, 5⅜x4x2".

910-4549. Shpg. wt. 2 lbs. **18.95**
910-4550. Model 22-050 Leather case. Shpg. wt. 6 oz. **2.49**

World Famous 260® Family of VOM's

CHOOSE AN INDIVIDUAL 260 INSTRUMENT WITH FEATURES AND ACCURACIES TO MEET YOUR EXACT ELECTRONIC NEEDS

Simpson

REVISED 260-6 SETS NEW STANDARDS

- New Range Offerings Provide Increased Operating Versatility
- New Precision Taut-Band Movement Is Fully Shock-Resistant
- Meter Movement Is Varistor-Protected Against Overloads
- Sensitivity 20,000 Ohms per Volt DC, 5000 Ohms per Volt AC

260-6. Battery-operated portable VOM is ideal for use where quick, accurate electrical checks must be made. Engineered for accuracy and operating ease in a wide variety of applications. Ruggedly constructed and known for its reliability.

Excellent linearity, stability. Modified full-wave bridge rectifier gives accurate AC measurements. Precision movement is of shock-resistant taut band construction for longer life. Varistor-protected against meter overloads. Self-shielded movement cannot be affected by magnetic fields—a famous Simpson feature.

Easy-to-read two-color scales. Polarity-reversing switch for ease of making DC measurements.

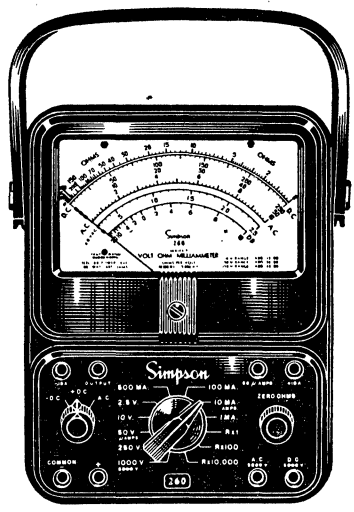
Handle also serves as convenient stand. See complete specifications below. Takes optional "Add-A-Testers" below. With batteries, leads, and operating manual. Size, 7x 5¼x3⅛". Shpg. wt. 5 lbs.

260-6. As described above.
919-0253...Ea. 76.00 4-Up...Ea. 65.00

260-6RT. Same features as above but with roll top protective case.
919-0257...Ea. 82.50 4-Up...Ea. 71.00

260-6M. Same features as 260-6 but with mirrored dial to eliminate parallax errors in reading.
919-0254...Ea. 78.00 4-Up...Ea. 67.00

260-6MRT. Same features as 260-6 but with roll top case and mirrored dial.
919-0255...Ea. 85.00 4-Up...Ea. 73.00



FAMOUS 260-6 VOM

New External Access Fuse and Battery Compartment
Functional Controls for Operating Convenience
Easy-to-Read 2-color Scales
Polarity Reversing Switch

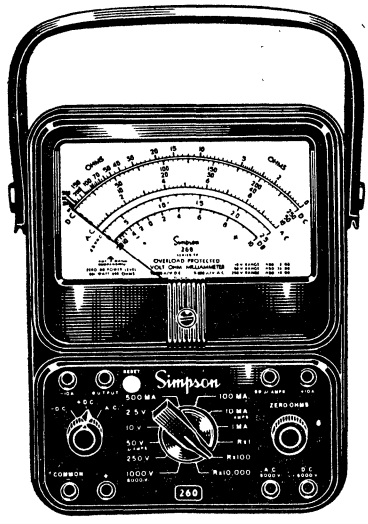
BURNOUTPROOF *MODEL 260-6P*

- Circuit Breaker Reset Button Pops Out to Indicate Overload
- Taut-Band Movement
- Self-Shielding
- Polarity Switch

260-6P. A highly versatile meter that is virtually "burnoutproof." Can be of particular value in situations where the instrument may be used by inexperienced students or new trainees. Also ideal for exploring unfamiliar equipment. Reset button on built-in circuit breaker pops out to indicate overload and protect circuits. Button cannot be reset while overload is present. All ranges protected except those not feasible in a portable instrument—1,000 volts DC and AC; 10 amp. DC. Has many deluxe quality features including taut band meter construction, polarity reversal, and self-shielded movement. See complete specifications below. Size, 7x5¼x3⅛". Shpg. wt. 5 lbs.
919-0256...Ea. 113.00 4-Up...Ea. 97.00

260/270 SERIES SPECIFICATIONS

Sensitivity: 20,000 ohms/volt DC, 5,000 ohms/volt AC. **Frequency Response:** Essentially flat through 50 kHz. **Scale Length:** 4.2". **DC Voltage Ranges:** 0-0.25, 0-1, 0-2.5, 0-10, 0-50, 0-250, 0-500, 0-1000V; accurate to ±2% of full scale. **AC Voltage Ranges:** 0-2.5, 0-10, 0-50, 0-250, 0-500, 0-1,000V; ±3% F.S. **DC Current Ranges:** 0-50 μA (250 mv drop), ±1½% F.S. 0-1, 0-10, 0-100, 0-500 mA, ±2% F.S. 0-10 A (250 mv drop), ±2% F.S. **Decibel Ranges** (1 mW-600 ohms): −20 to +10, −8 to +22, +6 to +36, +20 to +50. **Resistance Ranges:** R x 1: 0-2000 (12 ohm center), ±2.5° of arc. R x 100: 0-200 k (1200 ohm center), ±2.0°. R x 10,000: 0-20 meg (120 kilohms center), ±2.0°.



"GOOF-PROOF" 260-6P

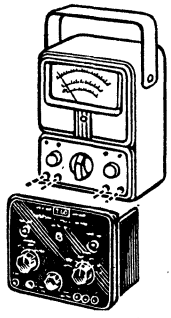
Ideal for Use by Inexperienced Trainees and Students
Button Cannot be Reset While Overload Is Present
Takes Optional Add-A-Testers for Complete Versatility

ACCESSORIES FOR SIMPSON VOM'S

VERSATILE PLUG-IN "ADD-A-TESTER" ADAPTERS

Eliminates the need for separate testers. Simply plug into any 260, 261, 270, 250, or 255 VOM on this and next page. (except those with roll top cases). 4⅜x5 1/16x3 7/16". Av. wt. 2 lbs.

919-0650. 650 Transistor Tester. I_{co} range, 0-100 μA.....Ea. 47.50
4-Up.....44.00
919-0651. 651 DC VTVM. 0-.5, 1.0, 2.5, 10, 25, 50, 100, 500 V ranges. Impedance, 10 megohms...Ea. 56.00 4-Up..Ea. 52.00
919-0652. 652 Temp. Tester. −50 to +250 F 2 ranges....Ea. 52.90
4-Up.....49.00
919-0653. 653 Ammeter. 0.25 to 25A; 50 Hz-3 kHz.....Ea. 32.40
4-Up.....Ea. 30.00
919-0654. 654 Audio Wattmeter. 17 microwatts to 100 watts. Load ranges, 4, 8, 16, and 600 ohms....Ea. 36.60 4-Up....Ea. 34.00
919-0655. 655 Attenuator. 2.5-250,000 μV decade steps...Ea. 32.40
4-Up.....30.00
919-0656. 656 Battery Tester.....Ea. 32.40 4-Up....Ea. 30.00



PROBES/LEADS

Use with any VOM shown on this and the next page.
919-0508. Type 00508. 25 kV DC probe. Wt. ½ lb.....Ea. 18.30
4-Up.....Ea. 17.00
919-0509. Type 00509. 50 kV DC probe. Wt. ½ lb.....Ea. 18.30
4-Up.....Ea. 17.00
919-7500. *Type 07500.* Banana plugs, alligator clip leads, color-coded pair. Shpg. wt. 1 lb.....Ea. 2.97 4-Up.....Ea. 2.75

CARRYING CASES

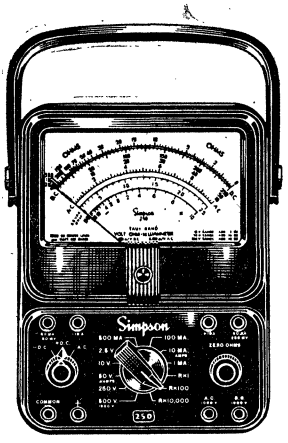
Fit any VOM on this and the next page. Shpg. wt. 2 lbs.
919-0805. *Type 00805.* Vinyl.....Ea. 15.10 4-Up.....Ea. 14.00
919-1818. *Type 01818.* Leather...Ea. 12.90 4-Up.....Ea. 11.00
Type 00549. Vinyl, with space for tools, leads, or accessories
919-0549.....Ea. 21.55 4-Up.....Ea. 20.00

MULTIMETERS, VOM's VTVM's

Simpson

VOM's, Temp. Tester, Amp-Clamp

SIMPSON FINE QUALITY SPECIALTY VOM'S FOR EXTRA-DEPENDABLE PERFORMANCE



250 FOR SOLID-STATE USE

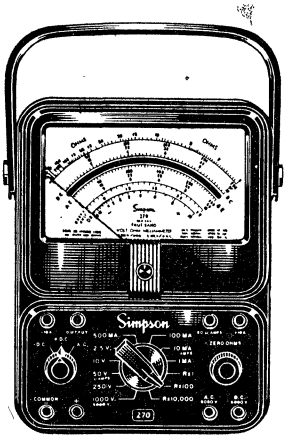
- Low Loading on Current Ranges
- Special 0-50 mV DC Range
- Precision Taut-Band Movement

Precision instrument is designed specifically for use in testing solid-state circuitry and other low-voltage, low-current applications. Compact and rugged, this VOM is designed to provide quick and accurate electrical checks with operating case. A fine choice for service, lab or industry workbench.

Voltage drop on current ranges is just 50 mV; results in less circuit loading for testing conditions closer to actual operating conditions. Has added 0-50 DC millivolt range for greater convenience and low-voltage accuracy required on today's complex solid-state equipment.

Includes self-shielded taut band meter movement that's varistor-protected to 200,000% overloads. Complete with batteries, test leads, and operator's manual. Size, 7x5¼x3⅛". Shpg. wt. 4 lbs.

919-0250..Ea. 75.50 4-Up.....Ea. 70.00



270-4 EXTRA-ACCURATE VOM

- Protected Taut-Band Movement
- Special Calibration Circuit
- Anti-Parallax Mirror Scale

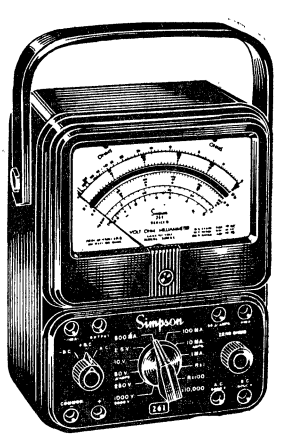
In addition to all the fine features and ranges of the 260-6M, this instrument includes enough more to make it the most accurate VOM in the 260® series. Has top-rated components to give the highest accuracy and special calibration circuits to maintain it.

Accuracy is to ±1.25% DC, ±2% AC, ±1.5° of arc on R x 1, ±1° of arc on Rx 100 and R x 10k. Complete specifications on previous page except as noted here.

Mirror scale and knife edge pointer. Protected taut band movement. Varistor-protected against meter overloads. Polarity-reversing switch for DC. With batteries, test leads, and manual. 7x5¼x3⅛".

919-0270. Shpg. wt. 5 lbs.....Ea. 84.00
4-Up.....Ea. 78.00

919-0271. *270-4RT.* Above with roll top protective case. Ea. 90.50 4-UP..Ea. 84.00



261-2 HIGH-ACCURACY VOM

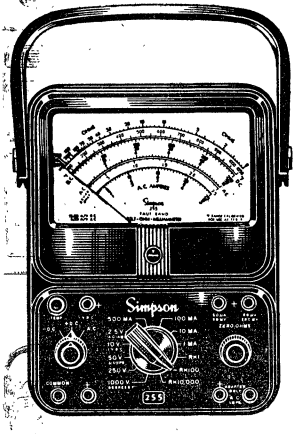
- Special Calibration Circuit
- Easy-to-Read Mirror Scale
- Varistor-Protected Movement

This instrument has features and ranges specifically designed for applications requiring higher accuracies. Special calibration circuit for maintaining increased accuracy. Easy-to-read mirror scale and knife-edge pointer reading end effectively errors caused by parallax.

Accuracy achieved is ±1.5% DC, ±3% AC, ±2° of arc on R x 1, ±1.5° of arc on R x 100 and R x 10k. Complete specifications are listed on previous page except as noted here.

Self-shielded annular meter movement that is varistor-protected to 200,000% overload. Supplied complete with batteries, test leads, and operator's manual. Size, 7x5¼x3⅛". Shpg. wt. 5 lbs.

919-0260. Ea. 78.70 4 Up.....Ea. 73.00
919-0261. 261-2RT. Above with roll top protective case. Ea. 85.00 4-Up....Ea. 79.00



255 VOM AND TEMPERATURE TESTER

- Thermocouple Temperature Range 100° to 1050°F.
- Plus Full VOM Functions

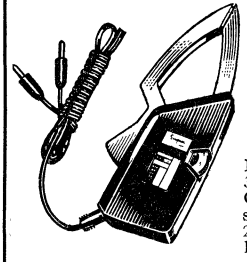
Designed specifically for the serviceman in fields such as gas appliance servicing and installation, electrical utilities, and heating service and in-installation.

Has thermocouple lead and temperature scale for determining temperatures over a range of +100° to +1050°F. Also has 0-50 mV DC range and low 50 mV drop on current measurements to aid solid-state circuit testing.

Has other VOM features except does not have decibel scale and 0-10 A AC current range. Varistor-protected, self-shielded, taut band movement. Modified full-wave bridge rectifier, easy-to-read two-color scales, convenient handle/stand. Complete with batteries, leads, prods, 5-ft. thermocouple lead, and operator's manual. Size, 7x5¼x3⅛". Shpg. wt. 4 lbs.

919-0251.....Each 97.00 4-Up.....Each 90.00

AMP-CLAMP 150 CLAMP-ON AC AMMETER FOR MEASUREMENTS ON CLOSED CIRCUITS



- Measures AC Current to 300 A
- Attaches Easily to Most VOMs
- Voltage Limiter to Protect Meter Movements

Permits measuring AC currents up to 300 amps without opening the circuit. Greatly increases the range and versatility of the 250, 255, 260, and 270 series VOM's and any other VOM having a 2.5 or 3-volt scale.

Offers AC current measurement in six ranges—5, 10, 25, 50, 100, 250 A—on a 2.5-volt scale; 6, 12, 30, 60, 120, 220, 300 A on a 3.0-volt scale; on VOM's having 5,000 ohms/volt sensitivity. Accuracy is ±3% of full scale.

All metal parts except the tip of the split core are insulated with lexan polycarbonate housing. Has voltage-limiting zener diodes across the output to guard against shocks and meter movement overloading. Thumb-wheel selector switch. Conversion chart built into handle to prevent miscalculation. Easy to handle and use, entire unit weighs just 12 oz. Rugged high-impact plastic case. Complete with detachable 4-ft. meter leads and plugs. Size, 7¾x3x1 1/16". Shpg. wt. 1 lb.

919-0150.....Each 32.30 4-Up.....Each 30.00

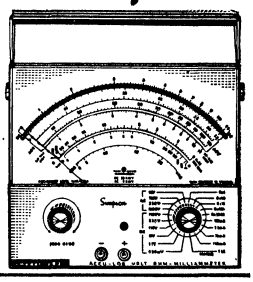
Assorted Test Equipment, 477, 478, 480-482, 489, 492, 497, 500-502, 510-516

Accu-Log® and Pocket-Size VOMs

MODEL 202 ACCU-LOG VOM

Simpson

- Consistently High Accuracy
- Taut Band Suspension for Long Life
- Two Low-Power Ohmmeter Ranges



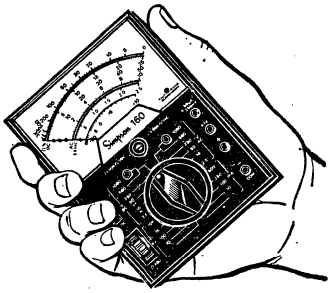
Precision VOM gives consistent high accuracy anywhere on the scale. The special quasi-logarithmic scale provides percent-of-reading accuracy of ±2% DC and ±3% AC at every point on the readout scale yet permits easy zero adjustment with linear portion at low end. Two-way overload protection ensured by employing both varistor diodes and fuse. Has 20 overlapping ranges for convenient operation, including two low-power ohmmeter ranges. Rugged taut-band suspension movement is shock resistant and self-shielding; cannot develop error-causing friction. Mirror scale for easy reading. External access to battery compartment. Sensitivity: 20,000 ohms/volt DC; 5kΩ/V AC; maximum DC current insertion drop, 0.3 volts. RANGES: DC volts: 30-330 mV, 0.1-1.1 V, 1-11 V, 10-110 V, 30-330 V, and 100-1100 V. AC Volts: 1-11 V, 10-110 V, 30-330 V, 100-1100 V. DC Current: 10-110 μA, 0.1-1-1.1 mA, 1-11 mA, 10-110 mA, 0.1-1.1 A. Resistance: Rx1, 10, 1k, 10k, 100k. Decibels: 0 to +23 dB. Size: 6¾x7¾x 3¾". Includes batteries. Shpg. wt. 5 lbs.

919-0202. 1-3..**Ea. 118.00** 4-Up....**Ea. 100.00**

919-0577. Type 00577 Vinyl Carrying Case. Compartment provision for storage and test leads. 1 lb.
1-3.....**Ea. 20.00** 4-Up.....**Ea. 17.00**

POCKET-SIZE MODEL 160 HANDI-VOM

- Self-Shielding Taut Band Movement, Varistor Protected.
- Accuracy ±2% DC, ±3% AC
- 0.25 DC Voltage Range for Accurate Measurements in Solid-State Circuits



Has the same top-quality feature of the famous Model 260 VOM, plus extended range coverage for accurate transistor servicing measurements—all in a rugged compact case only 3⁵⁄₁₆" wide.

Self-shielded taut-band movement is varistor protected and assures high repeatability and freedom from external magnetic fields. 1-volt plug-in jack permits fast, easy transistor measurements. Diode overload protection is most effective. Also has recessed range selector switch; separate battery compartment.

250-millivolt drop at 50 amperes. RANGES: 0 to 0.25, 1.0, 2.5, 10, 50, 250, 500, 1000 VDC at 20,000 ohms per volt sensitivity. 0 to 2.5, 10, 50, 250, 500, 1000 VAC at 5000 ohms per volt. Current Ranges: 0 to 50 μA, 0 to 1, 10, 100, 250, 500 milliamperes. Ohmmeter Ranges: 1, 10, 100, 1k, 10k ohms (30 ohms center scale). Accuracy: AC, ±3% of full scale; DC, ±2% of full scale.

Overall size, 2¼x3⁵⁄₁₆x5⁵⁄₁₆". Complete with test leads, batteries, and operating manual. Shpg. wt. 6 lbs.

919-0610. 1-3..**Ea. 64.50** 4-Up....**Ea. 55.00**

919-2055. Type 2055 Probe-Tip Test Leads. Wt. 1 lb. 1-3..**Ea. 3.26** 4-Up.....**Ea. 3.00**

Type 2929 Carrying Case. Plastic. Space for VOM, test leads, probes. Shpg. wt. 2 lbs.
919-2929. 1-3..**Ea. 14.10** 4-Up...**Ea. 11.00**

Type 2225 Carrying Case. Leather. Space for VOM, leads, probes. Shpg. wt. 2 lbs.
919-2225. 1-3..**Ea. 14.10** 4-Up...**Ea. 11.00**

GENERAL PURPOSE "MICROTESTERS" (All sizes 5⅞x3x2½" except as indicated)

Model 372-2 Ohmmeter. 3", 85 μA. 0-500-5k-50k-500kΩ; 0-5-50 megs. Batts., leads. 3 lbs.
919-0372. 1-3....**Ea. 45.80** 4-Up.....**Ea. 39.00**

Model 362-2 Low Ohmmeter. 0-5-25Ω. 3 lbs.
919-0362. 1-3....**Ea. 45.80** 4-Up.....**Ea. 39.00**

Model 373 DC Milliammeter. 0-1-5-10-25-50-100-250-1000 mA. ±3% accuracy, full scale. 3 lbs.
919-0373. 1-3....**Ea. 45.80** 4-Up.....**Ea. 39.00**

Model 374 DC Microammeter. 0-50-100-250-500-1000 μA. Also used as 20kΩ/V meter. 3 lbs.
919-0374. 1-3....**Ea. 45.80** 4-Up.....**Ea. 39.00**

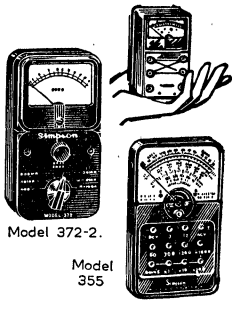
375 DC Ammeter. 0-1-2.5-5-10-25 A. 3 lbs.
919-0375. 1-3....**Ea. 45.80** 4-Up.....**Ea. 39.00**

Model 370 AC Ammeter. 0-1-2.5-5-10-25 A. Current transformer. 60 Hz only. Less leads. 3 lbs.
919-0370. 1-3....**Ea. 45.80** 4-Up.....**Ea. 39.00**

355 VOM Midgetester. 10kΩ/V AC-DC sens. 100 μA meter. Ranges: AC-DC V, 0-3-12-60-300-1200; 0-10k-100kΩ. 0-1-10 megs. ±3% DC, ±5% AC accuracy. 4½x2¾x1". With batts. and leads. 2 lbs.
919-0355. 1-3....**Ea. 58.80** 4-Up.....**Ea. 50.00**
919-6355. Case. 8 oz. 1-3. **Ea. 3.26** 4-Up. **Ea. 6.00**
919-8600. Leads. 6 oz. 1-3 **Ea. 3.26** 4-Up. **Ea. 3.00**

240-4 "Hammeter" VOM. 1kΩ/V. AC-DC. VDC, 0-15-75-300-750-3000. VAC, 0-15-150-750-3000. 0-3k-300k ohms. DC Current: 0-15-150-750 mA. ±3% DC, 4% AC accuracy. Batts., leads. 3 lbs.
919-0240. 1-3....**Ea. 52.90** 4-Up.....**Ea. 45.00**

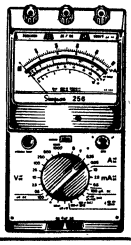
390 Volt-Amp-Wattmeter. For 60 Hz AC units. VAC, 0-150-300; amps, 0-3-15; watts, 0-300-600-1500-3000. ±3% accuracy. 3" meter. With break-in plug and leads. Wt. 4 lbs.
919-0390. 1-3....**Ea. 82.25** 4-Up.....**Ea. 70.00**



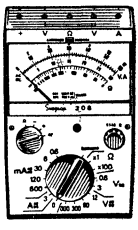
Model 372-2.

Model 355

Multi-Range Volt-Ohm-Milliammeters. Features linear scale, current transformer, continuity test, illuminated. 6x3⅝x11¹⁄₁₆". 2 lbs.
Model 208. 10kΩ/V sensitivity. DCV: 0-0.6-3-12-60-300-600. ACV: 0-12-60-300-600. AC/DC I: 0-0.6-6-30-120-600 mA, 0-3 AΩx1, X100, 115Ω center.
919-0208. 1-3....**Ea. 85.25** 4-Up.....**Ea. 72.50**
Model 209. 1.6kΩ/V sens. DCV: 0-0.6-12-60-300-600. ACV: 0-12-60-300-600. Current: DC, 0-120-600 mA, 0-3-12 A; AC, 0-6-30-120-600 mA, 0-3-12 A. Ohms: xk, x100; both with 43 ohm center.
919-0209. 1-3....**Ea. 80.00** 4-Up.....**Ea. 68.00**
919-0578. Case. 8 oz. 1-3 **Ea. 13.00** 4-Up **Ea. 11.00**



Model 256 Multi-Tester. Protected movement. 0-0.1-0.5-2.5-10-25-100-250-500-1k-5k VDC. 0-0.5-2.5-10-25-100-250-500-1k-5k VAC. DC μA, 0-100; AC/DC mA, 0-0.5-2.5-10-50; AC/DC A, 0-0.25-1-5. Ohms, x1, x1k, x10k, x1 meg. Cap., 100 pF, 2000 pF-5μF. 7 DB, −34 to +56. 25kΩ/VDC; 2kΩ/VAC. 8½x4⅜x3⅜".
919-0256. 5 lbs. 1-3 **Ea. 123.50** 4-Up. **Ea. 105.00**
Model 257 Multi-Tester. 0-0.1-0.5-2.5-10-25-100-250-1k-5k VDC. 0-10-50-250-1k VAC. IDC, 0-10-50-250 μA; 0-1-5-25-100 mA; 0-1 A. x1, x1k, x100k, x10 meg. Cap., 2000 pF −5μF. 3dB, −8 to +50. 100kΩ/VDC; 20kΩ/VDC. 8½x4⅜x3⅜".
919-0252. 5 lbs. 1-3 **Ea. 104.00** 4-Up...**Ea. 95.00**



7" SCALE MICROAMMETER VOMs

Model 269-3. Sensitivity of 100k ohms/volt DC, 5k ohms/volt AC. Shielded, sensitive taut-band movement. 7" mirror scale reduces parallax error. Offers 33 ranges: DC, 0-16-160 μA, 0-1.6-16-160 mA, 0-1.6-8 A; DCV 0-1.6-8-40-160-400-800-1600-4000. VAC: 0-3-8-40-160-400-800. Ohms: 0-2-200-20k-200k-2 meg-20 meg-200 meg. AF V: 0-3-8-40-160. Decibel (1mW—600 ohms): −12 to +45.5 in 4 ranges. DC accuracy: ±2%; AC: ±3% FS. 6x8x3". Leads, 4000-volt DC probe, batteries. Shpg. wt. 6 lbs.
919-0264. 1-3.....**Ea. 115.20** 4-Up.....**Ea. 98.00**
Model 262-3 DC/AC VOM. Overload protected, 33 ranges. 20kΩ/VDC, 5kΩ/VAC. 7 DC ranges, 0-4k V; 6 AC ranges, 0-800 V. 2 μA ranges; 2 amp ranges; 4 dB ranges, −12 to +45.5; 6 resistance ranges, 0-50 megs. Accuracy ±4% max error. Ohms 2.5° of arc. 6x7¼x4".
919-0262. 1-3 6 lbs.....**Ea. 90.25** 4-Up **Ea. 83.00**

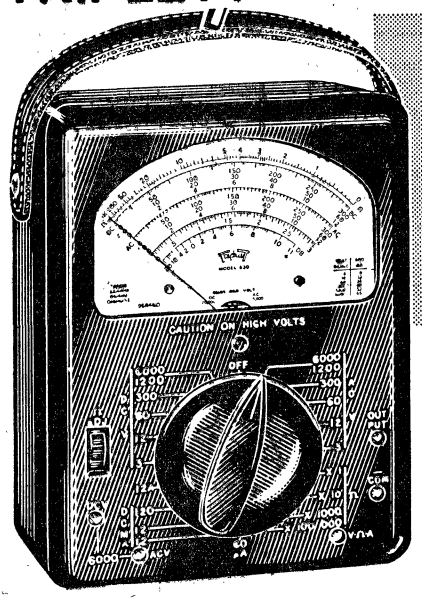
Model 263 Dual-Sensitivity DC/AC VOM. 64 ranges. Dual-sensitivity: 20k/10kΩ/VDC; 10k/5kΩ/VAC. Diode protection, external battery compartment. Accuracy: DC, ±1½% FS; AC, ±3%. Test leads, battery. 6x 7¼x4". 4 lbs.
919-0263. 1-3.....**Ea. 114.00** 4-Up.....**Ea. 97.00**

High-Voltage Probes for 7-Inch Scale VOMs. Extend range and versatility. For Model 269-3: 0119 extends range to 16k volts; 0157 extends to 40k volts. For Model 263: 0158 extends to 30k volts. Shpg. wt. 2 lbs.
919-0119. 0119. 1-3..**Ea. 20.00** 4-Up.....**Ea. 17.00**
919-0157. 0157. 1-3..**Ea. 20.00** 4-Up.....**Ea. 17.00**
919-0158. 0158. 1-3..**Ea. 20.00** 4-Up.....**Ea. 17.00**

Model 5262 Vinyl Carrying Case for 7-Inch Scale VOMs. "Ever-redy" case for Models 269-3 or 262-3. Wt. 2 lbs.
919-5262. 1-3.....**Ea. 16.50** 4-Up.....**Ea. 14.00**

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

Portable VOM's and Accessories



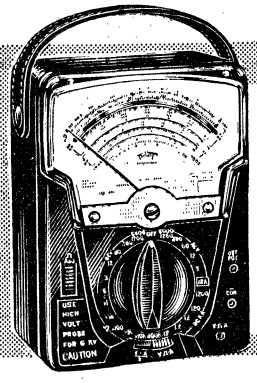
MODEL 630 VOM

- Single Selector Minimizes Chance of Incorrect Settings and Burnouts
- 5000 Ohms per Volt AC Sensitivity and 20,000 Ohms per Volt DC
- 4 Resistance Ranges from 0.1 Ohm to 100 Megs

Popular streamlined tester with long meter scales for easy reading. Features 20,000 DC, 5000 AC ohms/volt sensitivity. Single 20-position switch selects both circuit and range—minimizes chance of incorrect settings and burnouts. Fuse-protected ohmmeter circuit prevents burnout. Spring-backed instrument jewels for extra ruggedness and accuracy.

DC accuracy is ±2% on all ranges. AC response, 5 Hz to 50 kHz. Ranges: DC and AC volts; 0-3-12-60-300-1200-6000; DC current, 0-60 μA, 0-1.2-12-120 mA, 0-12 amps. Resistance, 0-1000-10,000 ohms and 0-1-100 megs. dB, —20 to +77 in 6 ranges; output volts, 0-3-13-60-300-1200. Jack with condenser in series with AC ranges. Sizes, 7½x5½x3¾". Supplied complete with batteries, alligator clips, and test leads. Shpg. wt., 2 lbs.
956-5656..Each 78.25 4-Up.....Each 67.00

MODEL 630A-2 VOM. As above, but with ½% precision multiplier resistors for ±1½% accuracy on DC readings; ±3% accuracy on AC readings. 4½" mirrored scale. With leads, clips, and batteries. Shpg. wt., 5 lbs.
956-5630..Each 92.25 4-Up.....Each 79.00



200,000 Ohms/Volt DC Sensitivity

5-Microamp Suspension Meter

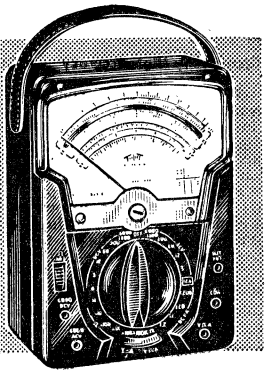
62 Ranges

MODEL 630NS PRECISION VOM

- 200,000 Ohms/Volt DC Sensitivity
- Rugged Construction with High Sensitivity and Repeatability
- No Rolling Friction in Movement
- Temperature/Freq. Compensated
- 62 Ranges, Usable to 100 kHz

Suspension meter movement has no pivots, bearings, hairsprings, etc. Extremely rugged. Special precision resistors are rigidly mounted. 20,000 ohms per volt for greater sensitivity on high resistance circuits. Input impedance is higher than on most VTVM's at 55 volts, DC and above. Accuracy is ±1½% DC, and ±3% AC.

Temperature compensated to 100 kHz. 20,000 ohms/volt AC sensitivity. Ranges: DC volts: 0-0.6-3-12-60-300-1200 at 100k ohms/volt. 0-0.3-1.5-6-30-150-600 at 200k ohms/volt, 0-0.150 at 60 μA. AC volts; 0-3-12-60-300-1200 at 10k per volt: 0-1.5-6-30-150-600 at 20k per volt. dB, —20 to +63 in 10 ranges. DC current: 0-5-60-120-600 μA, and 0-1.2-6-12-60-120-600-1200 mA, plus 0-6-12 amps. Ohms: 0-1000-10k-100k-1 meg-10 meg-100 meg. (4.4-44-440, etc. at center scale). Shipped complete with leads, clips, and batteries. 7½x5½x3 11/32". 5 lbs.
956-5648. Each 142.50 4-Up, Each 122.00



MODEL 630NA DELUXE VOM

- Single Selector Switch
- 70 Ranges • 1½% DC Accuracy
- Handy Mirror Scale and Diode Overload Protection
- Compensated for Temperature and Frequency Response

Single selector switch reduces chances of error in setting. Temperature and frequency compensation, usable with frequencies through 500 kHz. 5½" easy-to-read mirror scale with unbreakable window. Special diode protected meter, and fuse protection in ohmmeter circuit prevents overloading and burnouts. Rugged new suspension meter movement.

Accuracy: ±1½% DC, ±3% AC. Ranges: DC volts: 7 ranges to 6000 (10k per volt); 7 ranges to 3000 (20k/volt); 1 range to 0.1260 μA). (AC volts: 6 ranges to 6000 (5000 ohms/volt); 6 ranges to 3000 10k per volt). dB, —20 to +77 in 12 ranges. DC μamps, 1 range to 120 (240 mV); 2 ranges to 600 (120 mV). DC mA: 4 ranges to 1200 (240 mV); 3 ranges to 600 (120 mV). DC amps, 1 range to 12 (240 mV); 1 range to 6 (120 mV). Ohms, 3 ranges to 100k, 3 ranges to 100 megs. Leads, clips, batteries. 5 lbs.
956-5645. Each 120.00 4-Up, Each 103.00

VOM ACCESSORIES

PROBES. Fully insulated 11¾" probe with 48" leads. *Indicates use with 630, 630A-2, 631. †Use with 630-PL, 630-APL, 630-L, 630-PLK. ‡for 631 only. Wt., 4 lbs.

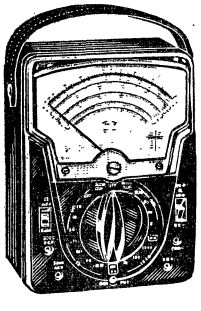
Stock No.	Type	DC Volts	EACH 1-3	EACH 4-Up
956-3700	*T-79-70	0-30,000	23.20	19.70
956-3713	†T-79-130	0-25,000	23.20	19.70
956-3721	‡T-79-145	RF Probe	12.40	10.50

TYPE 611 LEADS. For Model 10 AC-Ammeter Adapter (page 495) when used with 630 Series (or with any VOM having a 3 volt AC scale at 5000 ohms per volt). Long lead attachment. Shpg. wt. 10 oz.
956-0611. Ea. 4.25 4-Up.....Ea. 3.40

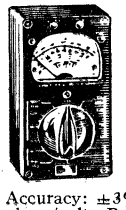
CASES AND STAND. *Black cowhide case. †Black leather case. Shpg. wt., 1½ lbs. Mfr's type T255A35 is a stand. Average shpg. wt., 3 lbs.

Stock No.	Mfr's Type	For Testers	EACH 1-3	EACH 4-Up
956-5662	*639-N	630 Series	16.45	13.90
956-5665	*639-P	630 Series	23.70	19.70
956-5670	†669-OS	666R	11.20	9.50
956-3955	T255A35	630 Series	2.70	2.30

MODEL 630-L VOLT-OHM-MILLIAMMETER



Low milliwatt ohmmeter circuit (only 140 mV on the x1 and x10 ranges)—will not damage semiconductor circuits. Mercury battery reduces rezeroing. 5½", 2-color meter scale. Usable up to 500 kHz. Accuracy ±2% on DC range, ±3% on AC. Exclusive shielded "Bar-Ring" movement. Sensitivity: 20,000 ohms/volt DC; 5000 ohms per volt AC. Ranges: DC volts, 0-2.5-10-50-250-1000-5000. AC volts, 0-3-10-50-250-1000-5000. Decibels, —20 to +75 in 6 ranges. DC current, 0-100 μA; 0-10-100-1000 mA; 0-10 amps. Resistance, 0-1000-10,000 ohms (13-130 at center scale). AC output V, 0-3-10-50-250-1000. 7½x5½x3 11/32". Leads, batt. 5 lbs.
956-5639. Each 84.00 4-Up, Each 72.00



MODEL 666R POCKET VOM

- Five AC and DC Voltage Ranges
- Three Resistance Ranges to 3 Meg
- Accurate, Easy-to-Read Scales

Handy tester for pocket or tool kit has single, recessed selector switch. AC rectifier is precalibrated for easy replacement. Accuracy: ±3% DC; ±4% AC. AC/DC Sensitivity: 1000 ohms/volt. Ranges: DC and AC volts: 0-10-50-250-1000-5000. DC current: 0-10-100 mA; 0.1 amp. Ohms: 0-3000-300,000; 0-3 megs. Output volts: 0-10-50-250-1000. 5⅞x 3 1/16x2 9/16". With test leads, alligator clips, batteries. 3 lbs.
956-5666.....Each 56.50 4-Up.....Each 48.00

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's, 480-499—Scopes, 503-505

Miniature and Standard VOMs

MULTIMETERS, VOM's, VTVM's

TRIPLETT

MODEL 100 5-PIECE VOM AND AC AMMETER OUTFIT

- 310 VOM • Model 10 Ammeter
- Line Separator, Leads, Case

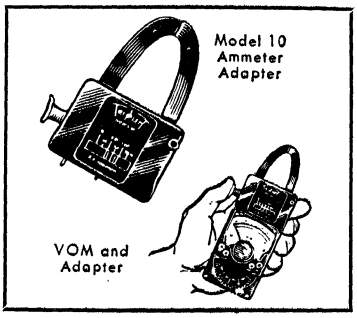
Save $6.25 on this packaged miniature VOM outfit. Cost of items purchased separately is $102.75. Outfit consists of: Model 310 pocket-size VOM; Model 10 clamp-on AC Ammeter Adapter; Model 101 Line Separator; Model 379 Leather Carrying Case; Model 311 Lead Attachment for separating VOM and Adapter. VOM has 20,000 ohms/volt AC sensitivity, 5000 ohms/volt AC sensitivity. DC voltage ranges to 1200 volts in five ranges; current to 600 mA in four ranges; ohms to 20 megs in four ranges.

Clamp-on adapter converts 310 to ammeter. Reads current in 6 steps. 101 separator increases ammeter sensitivity. Case holds 310 and 10 with pocket for 101 Line Separator. Descriptions at right. Wt. 7 lbs.
956-5101..Each 96.50 4-Up..Each 82.00

MODEL 100-C OUTFIT

As above, but with Model 310-C VOM. 15,000 ohms/volt AC sensitivity, 20,000 ohms/volt DC. AC and DC voltage ranges to 600 volts. Polarity reversing switch. Includes Model 10-C clamp-on AC Ammeter Adapter; Model 101 Line Separator; Model 379 Leather Carrying Case; Model 311 Lead Attachment for separating VOM and Adapter. 7 lbs.
956-5100.Each 108.20 4-Up..Each 92.00

POPULAR MINIATURE VOMS



MODEL 310-C MINIATURE VOM

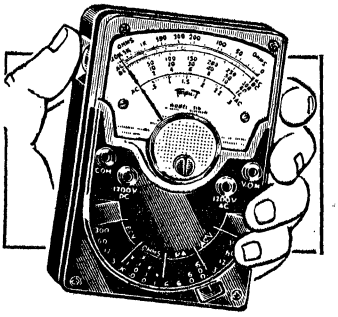
Similar to Model 310 at right, but with 600-volt ranges instead of 1200. Hand-size, with provision for attaching Model 10C clamp-on AC ammeter, below. Single, fully enclosed lever range switch plus DC polarity reversing switch. Sensitivity: 15,000 ohms/volt on AC; 20,000 ohms/volt DC. Accuracy: ±3% DC, ±4% AC. DC volts: 0-3-12-60-300-600 (20,000 ohms/volt). AC volts: 0-3-12-60-300-600 (15,000 ohms/volt). Ohms: 0-20k-200k. 0-2-20 megs. DC current: 0-600 μA; 0-6-60-600 mA. 4¼x2¾x1⅙". With leads, battery. Wt. 2 lbs.
956-5310..Each 69.40 4-Up..Each 59.00

MODEL 10 AMMETER ADAPTER

Plugs into Model 310 or 310-FET to make a clamp-on AC ammeter. Can be used with any VOM with a 3-V AC scale at 5000 ohms/volt. Checks all line loads without breaking circuit. Six AC ranges: 0-6-12-30-60-120-300 amps. Clips around single wire for direct reading. 4¼x1¼x3¼". 1 lb.
956-5011..Each 25.30 4-Up..Each 21.00
Model 10-C. As above, but for Model 310-C VOM. 1 lb.
956-5010..Each 25.30 4-Up..Each 21.00

MODEL 10 LINE SEPARATOR

Plugs into AC outlet to divide two-conductor cord. Increases Model 10 sensitivity 10X and 20X, 0.3 to 30 amps, AC in 9 ranges. Shpg. wt. 1 lb.
956-5102...Each 9.90 4-Up...Each 8.40



MODEL 310 MINIATURE VOM

Miniature VOM is self-shielded, has spring-backed jewels for ruggedness. High-torque, bar-ring movement. Test prod fits into top for use as common probe, leaving one hand free. Accuracy: ±3% DC, ±4% AC. DC volts: 0-3-12-60-300-1200 (20,000 ohms/volt). AC volts: 0-3-12-60-300-1200 (5000 ohms/volt). Ohms: 0-20,000-200,000; 0-2-20 megs. DC current: 0-600 μA; 0-6-60-600 mA. Molded black case, 4¼x2¾x1⅙". With test leads, battery, manual. See Model 10 clamp-on AC ammeter adapter, left. Shpg. wt. 2 lbs.
956-5312..Each 53.40 4-Up..Each 46.00

MODEL 369 LEATHER CASE

Black case for 310, 310-C and 310 FET meters. Trouser belt slips through loop on back of case. 1 lb.
956-5369...Each 5.20 4-Up...Each 4.60

MODEL 379 LEATHER CASE

For 310 and Model 10 clamp-on ammeter combination. Has pocket for Model 101 line separator. Black leather, with strap. 1 lb.
956-5379...Each 9.90 4-Up...Each 8.80

REPLACEMENT LEADS

TYPE 79-153. For 310 and 310-C. Shpg. wt. 10 oz.
956-3727...Each 4.25 4-Up...Each 3.60
TYPE 311 LEAD. Allows separate use of Model 10 AC-Ammeter with Series 310 test equipment. Shpg. wt. 10 oz.
956-0311...Each 4.25 4-Up...Each 3.60

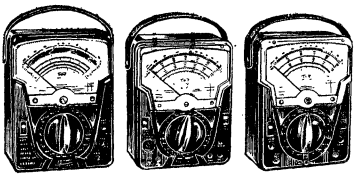
A 630-M PROFESSIONAL VOM

- 61 Ranges for Full Coverage
- Very High Input Impedance
- 1,000,000 Ohms/Volt DC, 20,000 Ohms/Volt AC
- For Frequencies to 100 kHz
- Suspension Meter Movement

Combines the high input impedance of a VTVM, with the convenience of a VOM. Sensitivity: 1,000,000 ohms/volt DC; 20,000 ohms/volt AC. Special diode-protected 1-μA suspension meter movement has no pivots, bearings or rolling friction. Large, 5½" scale. Reads low as 20 nanoamperes. Accuracy: DC, ±1½%; AC, ±3%. 61 ranges, for use with frequencies to 100 kHz. Component mounted on glass epoxy circuit board.

DC volts: 0-0.6-12-60-300 at 500,000 ohms/volt; 0-0.3-1.5-6-30-150 at 1,000,000 ohms/volt; 0-1200 at 125,000 ohms/volt; 0-600 at 250,000 ohms/volt. ACV. 0-3-12-60-300-1200 at 10,000 ohms/volt; 0-1.5-6-30-150-600 at 20,000 ohms/volt. DC current: 0-1-60-120-600 μA; 0-1.2-6-12-60-120-600-1200 mA; 0-6-12 amps.

Resistance: 0-1k-10k-100,000 ohms; 0-1-10-100 megohms; Decibels: −20 to +63 in 10 ranges. Rugged black molded case, 7x5½x3 11/32". With leads. Shpg. wt. 5 lbs.
956-5642.Each 286.00 4-Up.Each 243.00

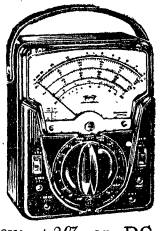


B 630-PL TYPE 2 VOM

Big 5½" meter with instant-vision, wide-spread scales, spring-backed jewels, and polarity reversing switch. Frequency response to 500 kHz. Fuse gives extra protection to ohmmeter circuit. Sensitivity: 20,000 ohms/volt DC; 5000 ohms/volt AC. Accuracy: ±2% DC and ±3% AC. DC volts: 0-2.5-10-50-250-1000-5000 at 20,000 ohms/volt; 0-0.25 at 100 μA. AC volts: 0-3-10-50-250-1000-5000 at 5000 ohms/volt. DC current: 0-100 μA; 0-10-100-1000 mA; 0-10 amps. Resistance: 0-1k-10k, plus 0-1-100 megs. dB: −20 to +75 in 6 ranges. Output volts: 0-3-10-50-250-1000 at 5000 ohms/volt. 7½x5½x3 11/32". With leads, alligator clips, rubber feet, batteries, instr.
956-5651. Shpg. wt. 5 lbs.....**64.00**

C 630-APL TYPE 3 VOM

As above, but ½% resistors for ±1½% accuracy DC, ±3% AC. Mirror scale.
956-5633..Each 93.00 4-Up..Each 79.00



630-PLK TYPE 3 VOM

Virtually burnout-proof. Transistorized switching circuit protects meter movement and all components from overload damage. Sensitivity: 20,000 ohms/volt DC, 5000 ohms/volt AC. Accuracy: ±2% on DC, ±3% on AC. DC volts: 0-2.5-10-50-250-1000-5000 (20,000 ohms/volt). AC volts: 0-3-10-50-250-1000-5000 (5000 ohms/volt). dB: −20 to +75 in 7 ranges. DC current: 0-100 μA (250 mV); 0-10-100-1000 mA (250 mV); 0-10 amps (250 mV). Ohms: 0-1000-10,000 (4.4-44 at center scale); 0-1-100 megs (4400-440k at center scale). Output volts: 0-3-10-50-250-1000 (5000 ohms/volt). 7½x5½x3 11/32". Complete with 50" test leads, removable alligator clips, and batteries. Shpg. wt. 5 lbs.
956-5653.Each 121.00 4-Up.Each 103.00

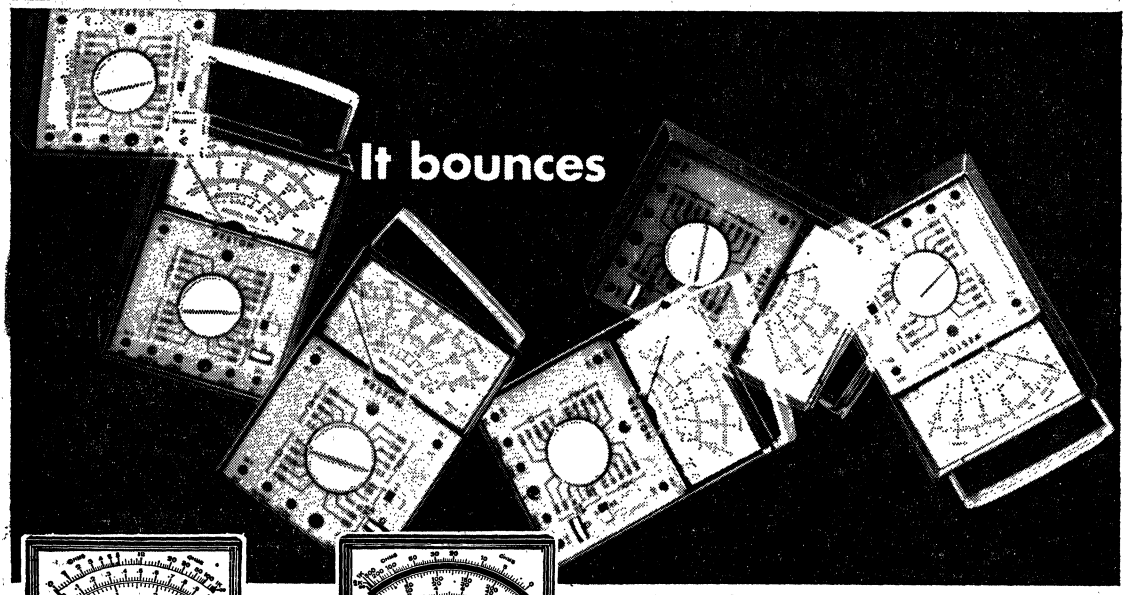
630-APLK LAB-TYPE VOM

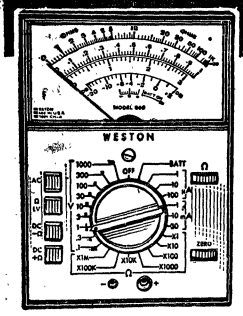
Same fine features, sensitivity, and overload protection as the 630-PLK Type 3, with ½% resistors for greater accuracy, and 4½" mirror scale. Accuracy is ±1½% DC, ±3% AC. With leads, alligator clips, batteries. Shpg. wt. 5 lbs.
956-5636.Each 136.50 4-Up.Each 116.00

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

Drop-Proofed VOM's

NEW DROP-PROOFED PROTECTED





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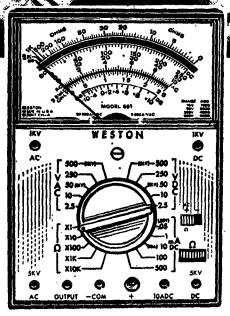


660
661
662
663

- Drop-proofed Protected
- Warranted in writing to work after accidentally being dropped five feet.
- Custom ruggedized self-shielded taut band mechanism
- Temperature compensated
- Diode-protected meter movement
- Polarity reversal switch
- Special calibrated scales for dB measurement
- Externally replaceable fuse
- Smallest precision multitester on the market
- Input terminals spaced for use with double banana jack

MODEL 666—SOLID STATE CIRCUIT TESTER—VOM

SPECIFICATIONS

Accuracy	2% DC volts, 3% AC volts 3% DC current, 4% AC current
Sensitivity	10 megohm DC, 10 megohm (47 pfd) AC Current circuit 100 millivolt drop
Ranges	
DC Millivolts	0-100-300
DC Volts	0-1-3-10-30-100-300-1000
AC Millivolts	0-100-300
AC Volts	0-1-3-10-30-100-300-1000
DC Microamps	0-1-10-100
DC Milliamps	0-1-10-30
AC Microamps	0-1-10-100
AC Milliamps	0-1-10-30
Ohms	(7 normal and 7 low power ranges) RX1-RX10-RX100-RX1K-RX10K-RX100K-RX1Meg
dB Scales	(−40 to −18)—(−30 to −8)—(−20 to +2) (−10 to +12)—(0 to +22)—(+10 to +32) (+30 to +42)—(+40 to +62)

Designed for semiconductor trouble shooting and rugged enough for any field servicing need. Drop-proofed. Warranted in writing to work after accidentally being dropped five feet. Offers all the features of Series 600 meters plus an input impedance of 10 megohms; special ohms ranges with low voltage drops required for semiconductor testing; will withstand 220 volts AC or DC on any range without permanent damage; differential pair FET input to high gain integrated circuit operational amplifier; input reversal switch; and is frequency compensated. Supplied with test leads and batteries. Size: 7″ high x 5″ wide x 2¼″ deep. Shpg. wt. 3 lbs.
986-5666.....**147.96**

ACCESSORIES

PROTECTIVE COVER. Not available for Model 666.
986-0668. Shpg. wt. 10 oz.....**4.50**
986-0669. LEATHER CASE. Shpg. wt. 12 oz.....**16.00**

SPECIFICATIONS

Sensitivity	20,000 ohms/volt DC 5,000 ohms/volt AC
Ranges	
DC Millivolts	0-250
DC Volts	0-2.5-10-50-250-500-1000-5000
AC Volts	0-2.5-10-50-250-500-1000-5000
VAC Output	0-2.5-10-50-250
DC Microamps	0-50
DC Milliamps	0-1-10-100-500
DC Amps	0-10
Ohms	RX1 (0-2K) 20 center—RX10 (0-20K) 200 center—RX100 (0-200K) 200 center—RX1000 (0-2Meg) 20k center—RX10K (0-20Meg) 200K center
dB Scales	(1 mw on 600 ohm line) (−10 to +10)—(+2 to +22)—(+16 to +36) (+30 to +50)—(+36 to +56)

MODEL 660 VOM

General purpose VOM. Uses 1% precision resistors in all critical circuits. Accuracy: DC: 2% (1.5% on 50 μa range)—AC: 3%. Supplied with test leads and batteries. Size: 7″ high x 5″ wide x 2¼″ deep. Shpg. wt. 3 lbs.
986-5660.....**75.95**

MODEL 661 HIGH ACCURACY VOM

Same as Model 660 but with the addition of a mirror scale and improved basic accuracy to 1% on DC and 2% on AC measurements. Uses ½% precision resistors in all critical circuits. 3 lbs.
986-5661.....**85.45**

MODEL 662—FULLY OVERLOAD PROTECTED VOM

Same as Model 660 but fully overload protected. Overload any circuit to 220 volts AC or DC (except 10 amp DC range) or to 1000 volts on higher ranges. Has externally resettable overload relay.
986-5662. Wt., 3 lbs.....**113.35**

MODEL 663—HIGH ACCURACY—OVERLOADED PROTECTED

Same as Model 662 with the addition of a mirror scale and improved basic accuracy to 1% on DC and 2% on AC measurements. Uses ½% precision resistors in all critical circuits. 3 lbs.
986-5663.....**122.85**

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's, 480-499—Scopes, 503-505

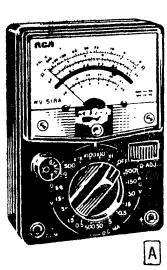
Service and Lab Test Instruments

"BLUE LINE" VOLT-OHM-MILLIAMMETERS FOR SERVICEMAN, TECHNICIAN OR HOBBYIST

RCA

- Zener Diode Meter Protection
- Precision Resistors for All Ranges
- Attractive Dark Blue Cases

Line of quality VOMs offers models to fill the needs of everyone from hobbyist to serviceman or technician.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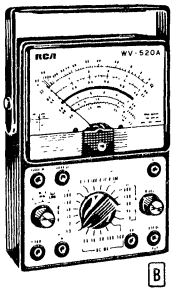
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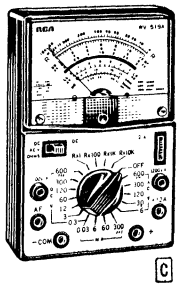
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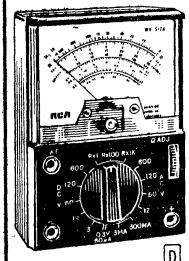
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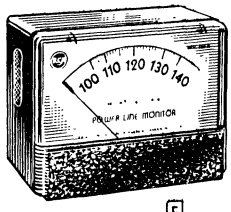


F

A WV-518A 20,000 OHMS/VOLT VOM

Excellent general-purpose VOM. Two-color meter with mirror scale. Panel-mounted fuse protects ohms-divider resistors. Measures DC voltages from .01 to 500 V in four ranges, AC voltages (rms) from .05 to 500 V in four ranges; DC current from 10 μA to 500 mA in four ranges; resistance from 1 ohm to 2 megohms. Accuracy: DC, ±3%; AC, ±4%. Sensitivity: DC, 20k ohms/V; AC, 10k ohms/V. Test leads, batteries. 5⅛x3½x1⅞". Shpg. wt. 1½ lbs.
901-4718. 1-3.....Each 31.00 4-Up.....Each 28.50

B WV-520A HIGH SENSITIVITY VOM

High sensitivity of 100k ohms/V DC, 10k ohms/V AC. Three-color meter, mirror scale, aluminum panel. Ranges: DC Voltage; 10 mV to 1500 V in 8 ranges; AC rms Voltage: .01 to 1500 V in 6 ranges. DC current: .05 mA to 5 A in 6 ranges. Resistance: .5 to 20 megohms in 4 ranges. Decibels: −20 to +55.5 dB in 5 ranges. Accuracy: DC, ±3%; AC, ±4%. Test leads. 3¼x7½x2⅜". Shpg. wt. 3 lbs.
901-4720. 1-3.....Each 52.00 4-Up.....Each 48.00

C WV-519A 50,000 OHMS/VOLT VOM

Three-color aluminum panel. Three-color meter with mirror scale. DC polarity switch. Sensitivity: DC, 50K ohms/V; AC, 10K ohms/V. Ranges: DC Voltage: 5 mV to 1200 V in 8 ranges. AC rms Voltage: .01 to 1200 V in 6 ranges. DC Current: 5 μA to 12 A in 5 ranges. Resistance: 1 ohm to 1 megohm in 4 ranges. Decibels: −20 to +57 dB in 5 ranges. With 22.5 and 1.5 V batteries, leads. Accuracy: DC, ±3%; AC, ±4%. 4¼x6⅜x1⅞". Shpg. wt. 2 lbs.
909-4719. 1-3.....Each 38.50 4-Up.....Each 36.00

D WV-517A COMPACT 20,000 OHMS/VOLT VOM

Two-color scales. Sensitivity: DC, 20k ohms/V; AC, 10k ohms/V. Ranges: DC Voltage: .01 to 600 V in 4 ranges. AC rms Voltage: 0.2 to 660 V in 4 ranges. DC Current: 10 uA to 300 mA in 3 ranges. Resistance: 1 ohm to 5 megohms in 3 ranges. dB: −20 to +37. Accuracy: DC, ±3%; AC, ±4%. With two 1.4 V batteries, leads. 4¾x3¼x1⅛". Shpg. wt. 1 lb.
909-4717. 1-3.....Each 19.20 4-Up.....Each 18.00

E WV-516A COMPACT LOW-COST VOM

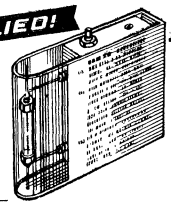
Sensitivity: 2000 ohms/V AC-DC. Ranges: DC or AC rms Voltage: 0.1 to 1000 V in 4 ranges. DC Current: 10 mA to 250 mA in 3 ranges. Resistance: 2 ohms to 200k in two ranges. Accuracy: DC, ±3%, AC, ±4%. Separate pin jack for each function and range. With leads, battery. 2½x4¹⁵⁄₁₆x1⅜". Wt. 1 lb.
901-4716. 1-3.....Each 10.85 4-Up.....Each 9.95

F WV-120A POWER LINE MONITOR

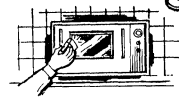
Provides continuous line voltage monitoring without need for interrupting work to check. Plugs into AC outlet. Ideal for factory, repair shops. Can be used with isolation transformer for selecting line voltages for accurate equipment checks. Voltage range: 100-140 V. Frequency range: 25-400 Hz. Accuracy: ±2% at 120 volts. Moving vane type meter provides accurate readings. Metal case, 3¹⁵⁄₁₆x5x3¹⁄₁₆". Shpg. wt. 1½ lbs.
909-4620. 1-3.....Each 21.70 4-Up.....Each 19.50

WV-503A. As above, 200-240 volts. Ideal for industrial applications.
901-4703. 1-3.....Each 21.70 4-Up.....Each 19.50

NEW AT ALLIED!



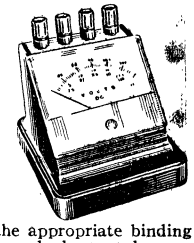
MICROWAVE HEATING SYSTEM LEAKAGE DETECTOR



REEVELEC

For all users of microwave heating systems including vending and domestic table top units. Self-contained and compact. Simple operation with just a button to press. Detects leakage energy below the one mW per sq. cm. required by the HEW for heating equipment at time of manufacture. For installed equipment the unit will detect leakage at the maximum allowed level of 5 mW per sq. cm. Frequency: 2450 MHz. Uses 9V battery. 2⅝x3⅝x1³⁄₁₆". 4 oz.
567-0114...Ea. 72.50 4-Up.....Ea. 69.50

WESTON



HIGH ACCURACY "BENCH TESTERS"

MODEL 2931, 2932 AND 2936. Designed primarily for use in laboratories of schools, colleges and industrial firms to measure electrical values. Accuracy, ±2% of full scale. Ranges on multi-range models are selected by connecting to the appropriate binding posts, which accept pin tips, spade lugs or banana plugs. Spring-backed jewels for rugged long-term stability. Damping is designed for fast response time. Av. shpg. wt. 1½ lbs.

2931 DC VOLTMETERS SENSITIVITY 1000 OHMS/VOLT

Stock No.	Ranges—Volts DC	Scale Divisions	EACH 1-3	EACH 4-Up
986-8010	0-1.5-3-30	60	56.36	45.00
986-8013	0-3-15-30	60	56.36	45.00
986-8011	0-1.5-15-150	75	56.36	45.00

2931 DC AMMETER

Stock No.	Ranges—Amps DC	Scale Divisions	EACH 1-3	EACH 4-Up
986-8003	0-1.5-3-30	60	83.91	67.00

2931/2936 DC GALVANOMETERS ZERO-CENTER NULL INDICATORS

Stock No.	Range—VDC	Scale	EACH 1-3	EACH 4-Up
986-8015	30-0-30	Standard—2μA/div.	38.82	31.00
986-8025	30-0-30	Linear—1μA/div.	53.85	43.00

MODEL 2932 1000 OHMS/VOLT AC VOLTMETERS (RECTIFIER TYPE)

Stock No.	Ranges—Volts AC	Scale Divisions	EACH 1-3	EACH 4-Up
986-8021	0-30-150-300	60	63.87	51.00
986-8020	0-3-15-150	75	63.87	51.00

MODEL 2931 TWO-RANGE DC MILLIVOLTMETER (CONVERTIBLE TO AMMETER)

Range: 0-50 millivolts. Two scales of 50 and 75 are provided with divisions of 100 and 150, respectively. Use with external shunts and leads below to measure direct current.
986-8004.....Ea. 38.82 4-Up.....Ea. 31.00

NO. 9858-131442 LEADS. 5-foot leads with resistance of 0.065 ohm to match DC Millivoltmeter. Shpg. wt. 4 oz.
986-8458.....Ea. 2.50 4-Up.....Ea. 2.00

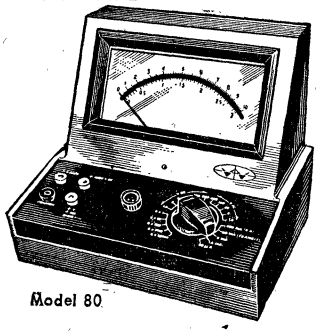
MODEL 9992 50-mV SHUNT

Converts Model 2931 DC Millivoltmeter into DC ammeter with ranges as shown. Shpg. wt. 5 oz.

Stock No.	Mfr's Type	Range—Amps DC	EACH 1-3	EACH 4-Up
986-8914	41214	0-25	18.78	15.00
986-8918	41218	0-50	18.78	15.00
986-8923	41223	0-100	20.67	16.50

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

Weston Lab-Type Instruments



Model 80

SERIES 80, 81, AND 82 AC AND DC TEST INSTRUMENTS

Model 80. Bench Multimeter. Fingertip controls. 5½" meter is diode protected. Entire meter is fuse protected. Ranges: AC, 0-2.5-10-50-250-500-1000-5000 volts @ 5k ohms/volt; DC voltage; 0-0.25-1-2.5-10-25-50-100-250-1000-5000, @ 20k ohms/volt. DC current 0-50 μA, 0-1-10-100 mA, 0-1-10 A; 5 resistance ranges from 2k to 20 megs full scale, 20 to 200k center scale, dB, −10 to +10. 1% accuracy, 1½% on AC. Anti-parallax scale. Size: 9¼x9¾x9¼". High-impact case.
986-0080. 5 lbs. Ea. 143.50 4-Up Ea. 105.00

Model 81. DC Milliameter/Ammeter. Includes features of 80 above. DC mA, 0-10-30-100-300; DC A, 0-1-3-10. Has 5-way binding post. Less leads. Shpg. wt. 4 lbs.
986-0081. Ea. 109.00 4-Up.....Ea. 87.00

Model 81. DC Microammeter/Milliammeter. Same as Model 81 above. Has different ranges: 0-0.1-0.3-1-3-10-30-100 mA; 0-2500-1390-475-164-50-16.6-5 ohms. ±1% toler. 4 lbs.
986-0086. Ea. 109.00 4-Up.....Ea. 87.00

Model 81. DC Voltmeter. DC V; 0-0.25-1-2.5-5-10-25-50-100-250-1000. Sens: 20k/volt. Accur.; ±1%, except 2.0% on 1k volt scale.
986-0089. 4 lbs. Ea. 109.00 4-Up Ea. 87.00

MODEL 82. AC MILLIAMMETER/AMMETER. Ranges: 0-50-100-200-500 milliamps; 0-1-2-5 amps. Accuracy: 2%, 60 to 400 Hz; from 25 to 1000 Hz frequency error is 1.5%, usable to 5 kHz. Transformer-rectifier type.
986-0092. 4 lbs. Ea. 112.50 4-Up Ea. 90.00

MODEL 82. AC VOLTMETER. Ranges: 0-2.5-10-50-250-500-1000 AC volts. Ranges below 250 volts are usable to 15 kHz. Sensitivity: 5000 ohms/volt. Accuracy ±1.5%; Scale: 50 divisions. Rectifier type.
986-0095. 4 lbs. Ea. 112.50 4-Up Ea. 90.00

911 SERIES

DC VOLTMETER. Converts to panel or switchboard mounting without adapters. 7.2" mirrored scale; knife-edge pointer; self-shielded. Range: 0-1-3-10-30-100 V, ±1%; 0-300-1000 V, ±2%. 20,000 ohms/volt. Less leads. With panel-conversion hardware. 7½x6½x2⅜". 6 lbs.
986-7372. Ea. 122.50 4-Up.....Ea. 98.00

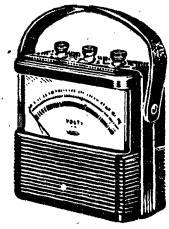
986-7370. DC Ammeter. Amps, 0-1-3-10; mA, 0-10-30-100-300. ±1%. Physically as above. **Ea. 122.50 4-Up.....Ea. 98.00**

986-7371. DC Milliammeter. 0-0.1-0.3-1-3-10-30-100 mA. ±1%. Physically same as above. **Ea. 122.50 4-Up.....Ea. 98.00**

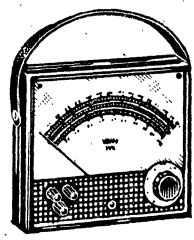
912 SERIES

AC VOLTMETER. Matches 911 series above. Ranges: 0-10-30-100-300 V, ±2%; 0-3 and 0-1000 V, ±3%. 5000 ohms/volt. 7½x6½x2⅜". Shpg. wt. 6 lbs.
986-7276. Ea. 140.00 4-Up...Ea. 112.00

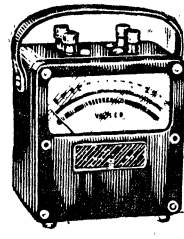
986-7375. AC Ammeter. Similar to above. Ranges: 0-50-100-200-500 mA; 0-1-2-5 AC amps. Accuracy: ±2% full-scale in all ranges. For 60-4000 Hz sine wave. **Ea. 140.00 4-Up.....Ea. 112.00**



901
904
905
Series



911
912
Series



432
433
931
Series

901 SERIES—ACCURACY ±1%

DC AMMETER. Has 5½" calibrated, mirror scale with knife-edge pointer. Ranges: 0-2-5-20 amps, with 50 mV movement. Permanent magnet moving coil design. Less leads. 7½x7¼x3⅝". Shpg. wt. 5¾ lbs.
986-7026. Each 319.00 4-Up. Each 255.00

986-7026. DC Milliammeter. Above, but ranges are 0-10-20-50-100-200-500-1000 mA.
Ea.....332.00 4-Up.....Ea. 265.00

986-7040. DC Voltmeter. Above, but 0-3-15-30-75-150-300-750 V. 5000 ohms/V.
Ea.....352.00 4-Up.....Ea. 281.00

904 SERIES—ACCURACY ±½%

AC VOLTMETER. Accurate enough to check other meters. Movable-iron-vane. 0.3-7.5-15-30-75-150-300-750 V. 50-125 Hz with ½% accuracy, 125-450 Hz within 1%. 5½" scale. 7½x7¼x3⅝". Less leads. Wt. 5¾ lbs.
986-7320. Ea. 476.00 4-Up...Ea. 381.00

986-7303. AC Ammeter. Above, but 0-2-5-10-20-50-100-200 amps. ½% accuracy. 50-450 Hz. **Ea. 427.00 4-Up.....Ea. 342.00**

986-7302. AC Ammeter. 0-1-2-5-10-20-50 amps. **Ea. 415.00 4-Up.....Ea. 332.00**

905 SERIES—ACCURACY ±½%

AC-DC SINGLE-PHASE WATTMETER. AC coverage from 25-60 Hz. Dynamometer movement. Volts: Nor. 200/100; Max., 300/150. Amps: Nor., 10/5; Max., 20/10. Watts: High range, 2/1 kW; Low Range, 1/0.5 kW. Less leads. 7½x7¼x3⅝". Shpg. wt. 5¾ lbs.
986-7149. Ea. 409.00 4-Up...Ea. 327.00

TYPE 48532 LEATHER CARRY CASE. For Series 931, 432, 433 (except 986CT4094). 1 lb.
986-8975. Ea. 32.50 4-Up.....Ea. 26.00

931 SERIES

MATCHED DC VOLTMETERS, AMMETERS, MILLIAMMETERS. All types are carefully matched portable instruments of very high accuracy for industrial DC testing . . . within ½ of 1%. Moderately priced and designed for the requirements of most industrial test situations. For highest readability all instruments have knife-edge pointers and long, 4.04" mirror scale to eliminate parallax reading error.

931 SERIES (Cont'd)

Movement is the self shielded permanent magnet moving coil type. Less leads (takes any type). Size, 5½x5x3½". Av. shpg. wt. 4 lbs.

5000 OHMS/VOLT DC VOLTMETERS

Stock No.	Ranges DC V	EA.	4-Up, EA.
986-7594	0-150-300-750	213.00	174.00
986-7590	0-3-15-150	213.00	174.00
986-7589	0-7.5-30-75	213.00	174.00

DC AMMETERS

Stock No.	Ranges DC A	EA.	4-Up, EA.
986-7522	0-5-20-50	196.00	157.00
986-7515	0-1.5-3-15	196.00	157.00
986-7513	0-0.1-1-10	196.00	157.00

DC MILLIAMMETER

Stock No.	Rng. DC mA	EA.	4-Up, EA.
986-7558	0-30-300-3000	191.00	153.00

433 SERIES—ACCURACY ±¾%

Movable iron vane type. 4.04" mirror scales. Less leads. 5¼x5x3¼". Av. wt. 4 lbs.

AC VOLTMETERS (25-125 Hz, except* 25-1000)

Stock No.	Ranges AC V	EA.	4-Up, EA.
986-4085	0-150-300-600	213.00	174.00
986-4082	0-75-150	184.00	147.00
986-4081	0-30-60	184.00	147.00
986-4094	0-150-300-750*	213.00	174.00

AC AMMETERS (25-500 Hz, except* 25-1000)

Stock No.	Ranges Amps	EA.	4-Up, EA.
986-4017	0-5-20-50	270.00	216.00
986-4016	0-3-7.5-30	270.00	216.00
986-4015	0-1.5-7.5-15	270.00	216.00
986-4012	0-1-5-10	270.00	216.00
986-4008	0-5-10	196.00	157.00
986-4025	0-1-2.5-5*	280.00	223.00

AC MILLIAMMETERS (25-1000 Hz)

Stock No.	Rng. AC mA	EA.	4-Up, EA.
986-4061	0-250-500	204.00	163.00

432 SERIES—DC OR SINGLE-PHASE AC WATTMETERS

• Accuracy ±½% • 4.04" Mirror Scale • Electrodynamometer Type

For measuring DC or AC wattage. AC coverage from 25 to 125 Hz with power factors above 50%. Each unit has two ranges selected by binding posts and each range may be doubled. Power consumption: potential circuit @ 115 V, 60 Hz—1.2 watts, 1.2 volt-amperes. Current circuit @ 5 amps, 60 Hz—0.65 watt, 0.68 volt-ampere. *High range/low range. 3¼x5x5¼". Av. shpg. wt., 4½ lbs.

Stock No.	Volts* Normal	Volts* Max.	Amperes* Normal	Amperes* Max.	Watts High Range	Watts Low Range	Scale Div.	EACH 1-3	EACH 4-Up
986-3887	150/ 75	200/ 100	1/ .5	1.5/ .75	0-75-150	0-37.5-5-75	75	370.00	296.00
986-3888	200/ 100	260/ 130	5/ 2.5	7.5/ 3.75	0-500-1000	0-250-500	100	370.00	296.00
986-3890	300/ 150	400/ 200	5/ 2.5	7.5/ 3.75	0-750-1500	0-375-750	75	370.00	296.00
986-3891	Same as 986-3890, for 25-1000 Hz Coverage							402.00	321.00
	300/ 150	400/ 200	10/ 5	15/ 7.5	0-1.5-3.0kW	0-0.75-1.5kW	75	370.00	296.00

LOW POWER FACTOR WATTMETER

986-3930	.....	300/ 150	.....	5/ 2.5	300/150	150/75	.....	427.00	341.00

Assorted Test Equipment, 477, 478, 480-482, 489, 492, 497, 500-502, 510-516

Test Meters and Chart Recorders

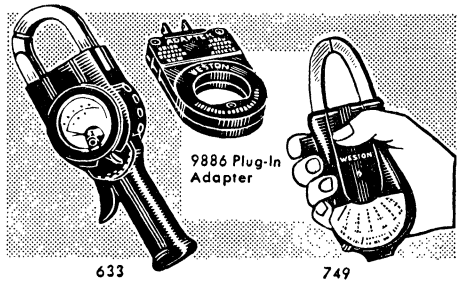
WESTON 633 AC CLAMP VOLT-AMMETER

TYPE VA-1. For AC testing without breaking circuits. Clamps around conductors (to 2" dia.) to measure AC amps; test leads measure AC volts. Safety trigger for bare-hand use. AC amps: 0-10-25-100-250-1000. AC volts; 0-175-350-700. Accuracy: ±3%, 50-70 Hz, adjustable 0-400 Hz, 2.36" scale length. Bakelite case; shatterproof glass. 750 V insulation. 13⅝x4⅜x2½". Shpg. wt. 4½ lbs.
986-6033.....Ea. 209.00 4-Up.....Ea. 167.00

WESTON 749 AC CLAMP POCKET VOLT-AMMETER

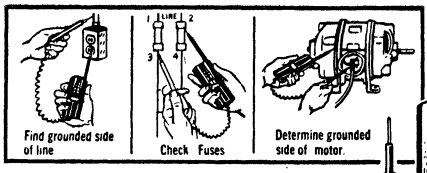
Pocket-size version of meter above. Takes conductors to 1" in dia. AC amps, 0-6-15-30-60-150-300. AC volts, 0-150-300-600. 2.36" scale. With case, voltage test leads, insulated clips, 3 accessory probes. 7½x3x1¼". Shpg. wt. 1 lb.
986-6080.....Ea. 64.00 4-Up.....Ea. 57.75

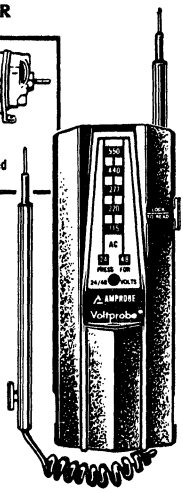
MODEL 9886 PLUG-IN ADAPTER. Aids in current readings of double-conductor leads. Has 10-1 current divider. Shpg. wt. 7 oz.
986-6081.....Ea. 8.90 4-Up.....Ea. 7.00



AMPROBE VOLTAGE TESTERS

AC VOLTAGE TESTER





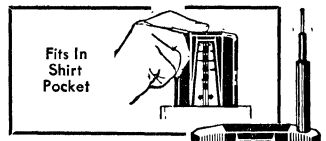
MODEL VT-124 VOLTPROBE. Lightweight, space-saving low-AC voltage tester is extra-handy and so convenient that you can conduct tests while holding the entire unit in your hands. Like the VT-100, this model is compact and affords pocket-portability to allow use everywhere—anytime.

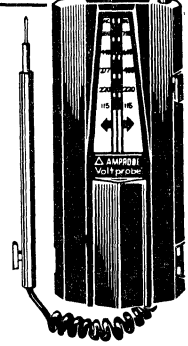
Checks AC circuits in climate control equipment, switching systems, electric garage door operators, industrial equipment controls. Also checks fuses and determines the grounded side of lines and motors. Retractable probe prevents tool-tangling "spaghetti"; measures points 3 feet apart.

Take easy, accurate voltage checks on the unique "thermometer style" illuminated readout bar even in the dark. Voltage levels shown: 24-48-115-220-227-440-450 AC. Operates over a frequency range of 25 to 800 Hz. Overall size with probes retracted is 6x2¼x¾". Shpg. wt. 8 oz.
715-4675.....Ea. 17.60 4-Up.....Ea. 14.95

MULTI-PURPOSE VOLTAGE TESTER

- 24/48 VAC Indication
- Indicates Correct DC Polarity
- Both Sliding and Retractable Probes
- Can Measure Points Over 3 Feet Apart





MODEL VT-100 VOLTPROBE. Compact, multi-purpose voltage tester fits in a shirt pocket, for use anywhere. Provides fast, easy-to-see AC and DC voltage readings, also shows DC polarity.

For fast and accurate testing residential and commercial electrical circuits. Nominal voltage levels are shown "thermometer style" by a series of two windows corresponding to each voltage level. Voltage ranges: 115-220-227-440-550 volts AC; 115-220-400-600-750 volts DC.

On AC measurements, both windows light. Operates over a frequency range of 25 to 800 Hz. On DC measurements only one window of the pair lights, indicating the positive side of the line. Unit has a sliding probe that pushes up through the body, and a retractable probe with a 3-ft. coil cord. Permits two-hand operation; unit can be held in the hand while testing, for easy reading. Weighs only 5 oz. High-impact case takes plenty of rough use. Overall size only 6x2¼x¾" with probes retracted. Shpg. wt., 8 oz.
715-4670.....Ea. 11.25 4-Up.....Ea. 9.95

AMPROBE CHART RECORDERS FOR PERMANENT, ACCURATE RECORDS

CHART RECORDERS

- Inkless Stylus for Smudge-Free Impressions
- Up to 30 Hours Recording Per Roll of Paper
- Provides One Impression Every 5 Seconds

Provides permanent records of any variable than can be converted into an electrical signal. Records voltage, current, temperature, flow, pressure and other conditions. Uses pressure-sensitive paper marked with an inkless stylus. This means smudgeless charts and clean hands for the operator. One roll of paper runs for 30 full hours at a chart speed of 12 inches per hour. Easy drop-in paper loading. Gives highly accurate recording of ±3% on full scale. Provides one impression every 5 seconds.

Type LAV8600 has sensitivity of 1380 ohms/volt. Type LAA81 Meter includes clamp-on transducer. For 115 volts, 60 Hz AC. Size, 7x5 7/16x2⅛". Each model includes portable case. Uses 2½" x 30-ft. long paper charts (order Strip Charts from table below). Av. shpg. wt., 4 lbs.

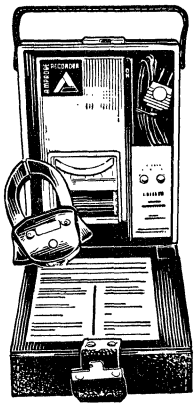
Stock No.	Mfr's Type	Description	Range	EACH	4-Up, EACH
715-2550	LAV8600	Voltmeter	0-150-300-600VAC	135.12	114.85
715-2000	LAA81	Ammeter	0-10-50-250-500 Amps AC	142.18	120.85

STRIP CHARTS FOR CHART RECORDERS

Perforated and printed in one color. Individually boxed rolls, chart size, 2½" wide x 30' long. Marked volts or amps appropriate to recorder indicated. Package of six rolls.

Stock No.	Mfr's Type	For use with These Recorders	Records	Six Rolls
715-5565	835X3A	LAVA81, 82, 83, 84	Volts	12.00
715-5530	830AV600	LAV8600	Volts	12.00
715-5575	850A	LAA81; LAVA81, 82, 83, 84	Amps	12.00

DUAL SCALE RECORDER-INDICATORS



Can be used as standard indicating voltmeter, indicating ammeter, recording voltmeter or recording ammeter. Provides visual, accurate, permanent and objective record. Simple to operate and maintain. Paper-loading is especially easy with no rollers or drums to thread. Pressure-sensitive paper takes inkless stylus for clean hands, smudgeless operation. Can be used to monitor line-voltage, balance circuits on 24-hour basis, check motor loading, machine cycling or operating time.

Chart speed of 12 inches per hour for 30 hours on one roll of paper. Chart size: 2½" wide x 30' long. Chart speed of 1 inch per hour available on Special Order. Accuracy, ±3% full scale, except expanded scales; ±1% (or one division with 60 Hz sine wave input). Meter sensitivity, 260 μA with 375 ohms resistance. Requires 115 volts, 60 Hz AC. With snap-around current transducer, portable case. 7x 5 7/16x3⅝". Shpg. wt., 4 lbs.

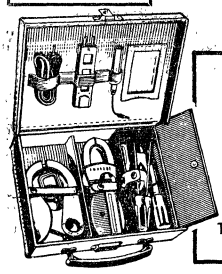
Stock No.	Mfr's Type	Range (AC) Volts	Range (AC) Amps	EACH	4-Up, EACH
715-2581	LAVA81	95-130 190-260	0-10-50-250-500	193.95	164.85
715-2582	LAVA82	95-130, 190-260	0-5-25-100-250	188.05	159.85
715-2583	LAVA83	95-130 190-260 380-250	0-10-50-250 500	212.77	180.85
715-2584	LAVA84	95-130 190-160 380-520	0-5-25-100-250	206.89	175.85

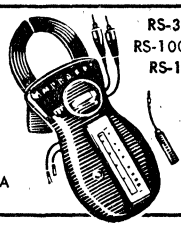
Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

ASSORTED TEST GEAR

Amprobe Testers

SNAP-AROUND AC VOLTAGE/CURRENT TESTERS

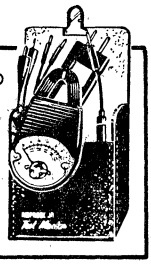

TM33A Kit


RS-3, RS-1000 RS-1

Y, YT and ALP Series

A-50-1 Deca-Tran

A-45L Energizer


TM-YO

MODEL TM-33A TEST-MASTER KIT

A complete trouble-shooting and test kit for electrical maintenance. Consists of Amprobe RS-3 AC Voltmeter-Ammeter-Ohmmeter with 3 ranges to 600 volts, 5 ranges to 300 amps and 25-ohm (midscale) range. A-50-1 Deca-Tran to multiply amps ranges 10X; and A-45L Energizer to increase current sensitivity; VLK-311 Extendo Leads. Portable case with snap-lock and space for small tools. 11¾x8x3″. Wt., 3 lbs.
715-4333..Ea. 126.50 4-Up..Ea. 109.50

ROTARY-SCALE TESTERS

Rotary-scale testers provide greater accuracy—only one scale, appropriate to the range selected, shows behind magnified unbreakable window. Pointer-lock freezes readings; measure in dark, read in light.

MODEL RS-3. Insulated jaws clamp around conductor (up to 1 1/16″ dia.) for current. Test leads plug-in for voltage and resistance checks. Reads 0-150-300-600 V, AC; 0-6-15-40-100-300 amps. AC; 25 ohms mid-scale. Accurate ±3%, full scale. With portable case, leads. 7 3/32x2⅝x1 11/32″. Wt., 2 lbs.
715-3003....Ea. 71.50 4-Up....Ea. 62.85

MODEL RS-1000. As RS-3, but reads 0-15-40-100-300-1000 amps. AC. 2″ dia. cond.
715-3010....Ea. 95.00 4-Up....Ea. 82.85

MODEL RS-1. Reads 0-6-15-40-100 amps; AC; 0-150-600 V, AC. No resistance range.
715-3001....Ea. 56.10 4-Up....Ea. 49.50

MODEL VLK-311 EXTENDO LEAD KIT. (Not illus.) Simplifies use of RS-1, RS-3. 12 oz.
715-4611.....Ea. 5.50 4-Up.....Ea. 4.95

AMPROBE JUNIOR

Snap-around testers measure voltage, amperage. For conductors to ½″ in dia. Measure amps shown and AC volts, 0-125-250 except *0-150-600; YT Models 0-150 and 0-300. ALP series has conductor tracer, 10 station markers, two station holders, voltage and ground leads, fused battery attachment, portable case. Y series with leads, less case. Shpg. wt., 1 lb.

Stock No.	Model	Amps	EACH	4-Up EACH
715-4825	Y25	0-25	31.10	27.50
715-4875	Y550*	0-50	31.10	27.50
715-4865	Y500*	0-100	31.10	27.50
715-5025	YT1025	0-10		
		0-25	37.10	32.40
715-5050	YT25100	0-25		
		0-100	37.10	32.40
715-0570	ALP550*	0-50	54.50	47.95

715-2300. Case for Y Series, Each 4.25.....4-Up.....Each 3.75

AMPROBE JR. TEST MASTER KITS

Consists of a YO Amprobe Jr., A-45L Energizer, and carrying case. Measure voltage, current, and resistance instantly and accurately on calibrated scale (not just an indication). The Energizer increases the versatility of the instrument by increasing the sensitivity 5 or 10 times for precise readings on fractional horsepower motors and appliances; permits direct readings at any convenience outlet. Voltage range, 0-150/600. Current Ranges: Model TM-YO-525, 0-2.5-5-25 Amps; Model TM-YO-550, 0-5-10-50 Amps; Model TM-YO-500, 0-10-100 Amps. Also measures resistance. Ohmmeter range: 25 ohms midscale. 4¾x2½x1⅜″. With battery attachment and test leads. Shpg. wt. 1½ lbs.

Stock No.	Model	EACH	4-Up EACH
715-4525	TM-YO-525	49.95	42.65
715-4550	TM-YO-550	49.95	42.65
715-4500	TM-YO-500	49.95	42.65

TYPE VLK355 EXTENDO-LEAD KIT FOR JUNIOR MODELS (Not Illus.)

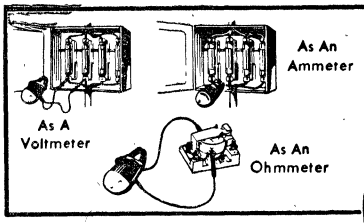
Simplifies taking voltage readings. One lead attaches to jaw with adapter, other reaches to other test point. Shpg. wt., 12 oz.
715-4655.....Ea. 5.65 4-Up.....Ea. 4.85

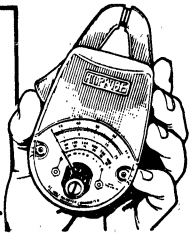
AMPROBE RANGE-EXTENDING ACCESSORIES

MODEL A-50-1 DECA-TRAN. Use with any model Amprobe to extend amperage ranges 10 times—up to 1200 amps. Includes case and 2′ cord for remote reading. 1 lb.
715-0550....Ea. 41.95 4-Up....Ea. 36.85

MODEL A-45L ENERGIZER. Increases sensitivity of most Amprobes by 5 or 10 times. Permits current readings on permanently wired low-current equipment. 5 oz.
715-0500....Ea. 10.10 4-Up.....Ea. 8.25

PORTABLE AC VOLTAGE CURRENT TESTERS AND TEST-MASTER KITS





MODEL YT0525/100 JUNIOR TESTER

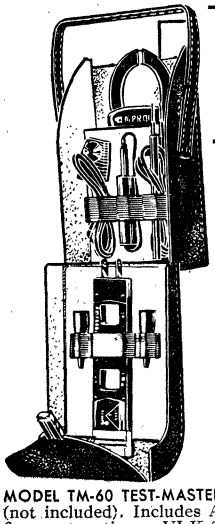
- Two Voltage and Two Current Scales, Plus Ohmmeter Scale
- Compact and Lightweight, Yet Handles Big Trouble-Shooting Jobs

Latest Junior Model from Amprobe. Snap-around tester measures voltage, amperes, and ohms. Compact, lightweight model is a handy five range instrument that fits in a pocket. Features two voltage and two current scales, plus ohmmeter scale for testing a broad range of electrical equipment. Accurate, one hand operation ends guesswork. Perfect as a first test instrument or as a spare unit. Measures 0-150 and 0-600 volts AC; 0-25 and 0-100 amps AC; 25 ohm midscale ohmmeter. Model YT525/100 without ohmmeter scale. Supplied with set of voltage test leads. Accuracy, ±3% full scale. Weighs less than one pound. Carrying case sold below. Compatible with all Amprobe accessories. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Range Volts (AC)	Range Amps (AC)	EACH	4-Up EACH
715-5095	YTO525/100	0-150/600	0-25/100	42.45	37.50
715-5015	YT525/100	0-150/600	0-25/100	36.85	32.45

715-1000. Model B Carrying Case....Ea. 5.95 4-Up....Ea. 5.25

TEST-MASTER SNAP-AROUND VOLT-AMP-OHMMETER KIT



- Rotary Scale Reveals Only One Range At a Time—Eliminates Guesswork
- Convenient Two-Hand Operation
- Everything at Your Fingertips for Easy Trouble-Shooting

MODEL TM-63. Versatile test kit is a must for electrical trouble-shooting. Includes the RS-3 Rotary-Scale Snap-Around Volt-Amp-Ohmmeter. Insulated jaws clamp around conductor (up to 1 1/16″ dia.) for current; test leads plug in for voltage and resistance tests. Ranges: 0-150/300/600 VAC; 0-6/15/40/100/300 amps AC; 25 ohms mid-scale. ±3% accuracy, full scale. Pointer lock. With VLK-311 "Extendo-Leads" that eliminate the need for a "third hand"; plus A-45L Energizer for increasing the sensitivity of the RS-3 five or ten times. Permits current readings on permanently wired low current equipment. Compact "A" Case has hinged cover, snap lock, carrying handle. 12x4¼x3″. 3 lbs.
715-4363.Ea. 84.95 4-Up.Ea. 72.75

MODEL TM-60 TEST-MASTER KIT. Adds versatility to RS-1 or RS-3 (not included). Includes A-45L Energizer that extends sensitivity five or ten times; VLK-311 "Extendo-Leads" for two-hand operation; compact "A" case with hinged cover for easy access.
715-4360. Wt. 2 lbs.....Ea. 20.75 4-Up.....Ea. 17.95

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's, 480-499—Scopes, 503-505

Temperature Measuring Instruments

AMPROBE

FASTEMP DUAL RANGE INDUSTRIAL THERMOMETERS

MODELS T-150 AND T-150C. Get virtually simultaneous temperature readings from up to three locations simply by turning selector switch. Activate any one of the probes instantly. Zero in on hot and cold spots in seconds . . . a real boon to air-conditioning servicemen. Compare inlet and outlet temps. of cooling and heating units, set refrigerator and freezer thermostats, measure heat-transfer equipment, check ambient temps. accurately to within ±2°F or ±1°C.; use for bearing in rotating equipment, non-corrosive plating baths, and heating plates. Range overlap permits monitoring of changing temp. without frequent range switching. "Press-to-read" button extends battery life, also locks in for continuous readings. Compact, weighs only 10 oz. Includes universal probe.

MODEL T-150. Measures +40°F to +150°F and −50°F to +50°F. Shpg. wt. 14 oz.
715-4001...Ea. 52.77 4-Up...Ea. 46.50

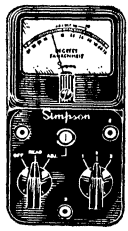
MODEL T-150C. Measures −45°C to +10°C and +6°C to +65°C. Shpg. wt. 14 oz.
715-4002...Ea. 52.77 4-Up...Ea. 46.50

RBT-11. IMMERSION PROBE. Wt. 7 oz.
715-2811...Ea. 10.53 4-Up....Ea. 9.45

RBT-13. AIR PROBE. Wt. 7 oz.
715-2813...Ea. 10.53 4-Up.....Ea. 9.45

FTC. CARRYING CASE. Wt. 14 oz.
715-1100...Ea. 11.49 4-Up...Ea. 10.20

Requires Size "AA" Batteries.

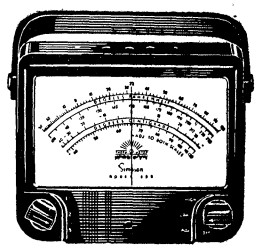


SIMPSON

ACCURATE TEMPERATURE MEASURING INSTRUMENTS

MODEL 385-3L TEMPERATURE METER

MODEL 389-3L TEMPERATURE METER



- Scale Is Calibrated In Both Fahrenheit and Centigrade
- Gives Virtually Simultaneous Readings From Three Locations
- Accuracy 1°F.
- Reads Up To 15 Ft. Away.

MODEL 385-3L TEMPERATURE METER

Provides accurate readings from −50° to +70°F. Reliable thermistor sensing element. Scale is calibrated in Fahrenheit and Centigrade. Reads up to 15 ft. away with lead supplied. Accuracy, ±1°F, center scale. Accommodates 3 leads. This permits 2 or 3 readings (for comparison) by rotating a switch. 5⅞x3x2½". 2 lbs.
919-0385...Ea. 53.10 4-Up...Ea. 45.00

0789. FREE AIR TEMPERATURE PROBE. 1 lb.
919-0789...Ea. 14.10 4-Up...Ea. 12.00

8073. VINYL CARRYING CASE. Shpg. wt. 1 lb.
919-8073...Ea. 14.10 4-Up...Ea. 12.00

THERMISTOR LEADS

Designed for use with Simpson Model 385-3L and Model 389-3L temperature testers.

0010. 15 FEET. Wt. ½ lb.
919-0008...Ea. 10.50 4-Up....Ea. 9.00

0216. 30 FEET. Wt. 1 lb.
919-0216...Ea. 11.60...4-Up...Ea. 10.00

0415. 50 FEET. Wt. 1½ lbs.
919-0415...Ea. 12.90 4-Up...Ea. 11.00

0417. 150 FEET. 4½ lbs.
919-0417...Ea. 21.00 4-Up...Ea. 18.00

MODEL 388-3L THERM-O-METER

Takes accurate readings from −50° to +1000°F on 7" scale. Measures the temperature of practically anything. Can be used with gases, liquids and solids. Iron-constantan thermocouple. Compensation circuit corrects for room temperature. Has 7½-ft. probe (Type 0190). Provision for 3 probes. Permits readings in 3 different areas by rotating switch. Accuracy, ±1½ scale divisions. Size, 6x7 15/16x2 15/16". With battery. Shpg. wt. 6 lbs.
919-0388...Ea. 98.00 4-Up...Ea. 84.00

0187 SURFACE TEMPERATURE PROBE. Wt. 1 lb.
919-0187...Ea. 14.10 4-Up...Ea. 12.00

0190. GENERAL PURPOSE PROBE. Wt. 1 lb.
919-0190....Ea. 8.80 4-Up....Ea. 7.50

5262. VINYL CARRYING CASE. Shpg. wt. 1 lb.
919-5262...Ea. 16.50 4-Up...Ea. 14.00

MODEL 389-3L TEMPERATURE METER

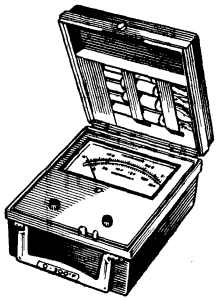
Similar to 388-3L, except uses thermistor sensing element and has dual ranges for measuring temperatures between −50°F and +100°F, and between +100°F and +250°F. Accuracy, ±2°F. Employs thermistor principle. Shpg. wt. 6 lbs.
919-0389...Ea. 93.00 4-Up...Ea. 79.00

0790. SURFACE TEMPERATURE PROBE. 1 lb.
919-0790...Ea. 10.50 4-Up....Ea. 9.00

5262. VINYL CARRYING CASE. Shpg. wt. 1 lb.
919-5262...Ea. 16.50 4-Up...Ea. 14.00

API HIGH-ACCURACY PORTABLE PYROMETERS

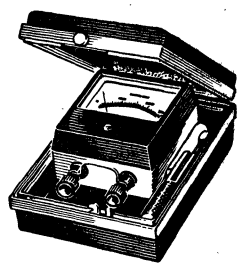
MODEL 6020



Precision, thermocouple-actuated portable pyrometer for general-purpose industrial uses. Can be applied to temperature checks of laboratory ovens, furnaces, refrigeration equipment, solder pots, oil baths, many other applications. Sensitive taut-band meter with ±1% accuracy. Temperature is indicated on mirrored scales which feature both Fahrenheit and Centigrade degrees. Fully compensated for ambient and copper error with bimetal and thermister for greater reliability. Calibrated for rustproof Chromel-Constantan (Cr/C) thermocouple probes (order below). Interchangeable probes fit into the compartment in the lid of meter case for convenience. Calibrations on the meter scale are a full 5.5" for easy reading. Handle for easy carrying. Aluminum trimmed ABS plastic case for protection and better handling. Size, 7.3x8x3.3". Shpg. wt. 1½ lbs.

Stock No.	RANGES °F	RANGES °C	EACH 1-3	EACH 4-Up
716-1041	−100 to +1100	.....	99.50	85.00
716-1040	−100 to +600	−70 to +310	99.50	85.00
716-1042	0 to +300	0 to +150	99.50	85.00
716-1043	0 to +500	0 to +260	99.50	85.00
716-1044	0 to +750	0 to +400	99.50	85.00
716-1045	0 to +1000	0 to +500	99.50	85.00
716-1046	0 to +1500	0 to +800	99.50	85.00

MODEL 3030



Thermocouple-actuated portable pyrometer provides accurate measurements of temperature. Some applications are: temperature checks of lab ovens, furnaces, refrigeration equipment. Handy portable feature plus pocket size make it great for quick checks in the field. Taut-band meter movement provides precise ±1% accuracy. Frictionless movement offers near perfect repeatability and high shock resistance. Fully compensated for ambient and copper error with bimetal and thermistor. Calibrated for rustproof Chromel-Constantan thermocouple probe. Compartment in the meter case stores interchangeable probes (listed below). Meter calibrations in both Fahrenheit and Centigrade degrees. Aluminum trimmed ABS plastic case for easy carrying. Clear 3" meter scale for easy reading. Case size: 5.5x8x2.3". Shpg. wt. 1 lb.

Stock No.	RANGES °F	RANGES °C	EACH 1-3	EACH 4-Up
716-1031	−100 to +1100	.....	79.50	68.80
716-1030	−100 to +600	−70 to +310	79.50	68.80
716-1032	0 to +300	0 to +150	79.50	68.80
716-1033	0 to +500	0 to +260	79.50	68.80
716-1034	0 to +750	0 to +400	79.50	68.80
716-1035	0 to +1000	0 to +500	79.50	68.80
716-1036	0 to +1500	0 to +800	79.50	68.80

THERMOCOUPLE PROBES FOR 6020 AND 3030 PYROMETERS ABOVE

716-1335. Straight Surface Probe. 4 oz..Ea. 35.00 4-Up..Ea. 31.60
716-1331. Angle-Surface Probe. 4 oz....Ea. 41.00 4-Up..Ea. 36.85
716-1333. Needle Probe. 4 oz.....Ea. 35.00 4-Up..Ea. 31.60
716-1332. General-Purpose Probe. 4 oz..Ea. 35.00 4-Up..Ea. 31.60
716-1336. Wire. 4 oz.....Ea. 7.00 4-Up..Ea. 6.32
716-1334. Probe Handle. 4 oz.....Ea. 8.75 4-Up..Ea. 7.90

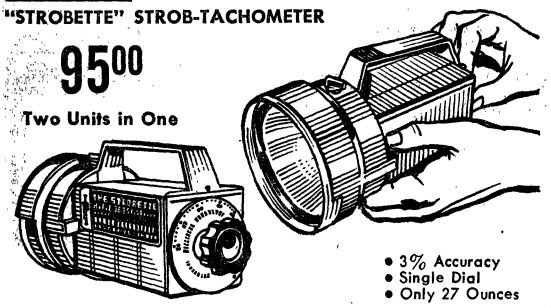
Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

Power Instruments Tachometers and Strobes

"STROBETTE" STROB-TACHOMETER

95.00

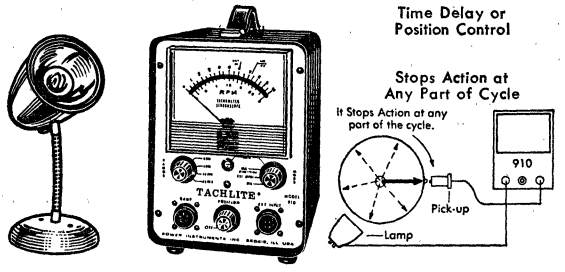
Two Units in One



- 3% Accuracy
- Single Dial
- Only 27 Ounces

MODEL 964. Believ d to be the smallest and lowest priced Strobe-Tachometer on the market. Makes moving parts stand still; reads speed within 3%. Ideal for engineers, electricians, maintenance men, and for teaching stroboscopy in school physics labs. Molded unbreakable plastic case is only 3x3x7" with 4" dia. reflector. Weighs only 27 oz.; can be carried easily in a tool box. Easy to use, with on-off switch and one dial. Xenon white light (6500°K) delivers flash energy of 0.40 watts-second (Joules). Stroboscope flashes at 200 to 6000 flashes per minute with duration of approximately 10-25 μsec. Tachometer speed rate: 200 to 6000 rpm. Field calibration at 3600 fpm. Beam angle: 80°. Accuracy: 3% or better. 100% solid state circuitry. Has ¼"-20 tripod socket (standard camera thread). For 117 V, 50/60 Hz AC (40 watts max.).
894-0964. Shpg. wt. 4 lbs.....95.00

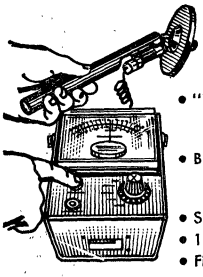
"TACHLITE" STROBOSCOPE-TACHOMETER



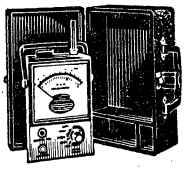
MODEL 910. Professional solid state stroboscope and 4-range tachometer is the only model on the market with a phase (position) control as a standard feature, permitting viewing a repetitive cycle through about 300°. Model 897-120-SXT Magnetic Pickup or 836-SXB Photo Pickup (listed at right, below) is used on "input" to establish a reference point. This feature is also used to analyze vibration. Excellent for troubleshooting and adjusting complex machines. Strobe has a taut-band meter readout for speed with mirrored scales; reads speed with 1½% accuracy on ranges of 0-1000/3000/10,000/30,000 rpm. Minimum speed with meter is about 100 rpm; with strobe, about 300. Field calibration from line on all ranges. Xenon white flash (6500°K color); approx. 10 msec wide at ⅓ amplitude. Rate controlled by manual oscillator on back of lamp, magnetic or photo pickup, or switch. 6½x8x8½" high.
894-0910. Shpg. wt. 12 lbs.....375.00

PORTABLE PHOTO TACHOMETER

Case Optional

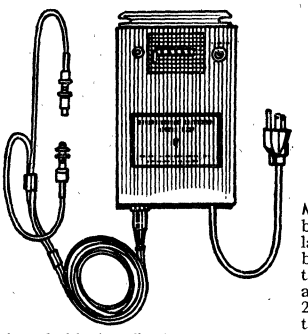


- "Touchless"—No Contact to Shaft Needed
- Battery Operated (AC Model Available)
- Solid State
- 1½% Accuracy
- Field Calibration



MODEL 891. Reads speed of motors, engines, grinders, drills, SCR controls without contacting shaft. Just direct light from probe on a mark on the shaft. Marking materials furnished. Probe has 24" coiled cable. Four ranges: 0-1000/3000/10,000/30,000 rpm. Accuracy: 1½%. Mirror back scale, taut-band meter. Field calibration against any fluorescent light. Aluminum case, 7½x5½x2½".
894-0891. Shpg. wt. 4 lbs.....145.00
894-1912. Model 912. For 115 V operation. Wt. 4 lbs.....195.00
894-1891. Model 891-32 Carrying Case. Shpg. wt. 3 lbs.....16.00
894-0917. Model 917 Surface Wheel. Reads speed in feet/minute of paper or cloth webs, surface speeds of pulleys and drums. Ball bearing mounted. Use with 891 or 912. 1-ft. circ. 3 lbs.....25.00

PLUG-IN "TOUCHLESS" COUNTERS

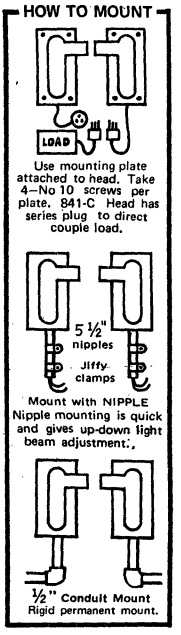


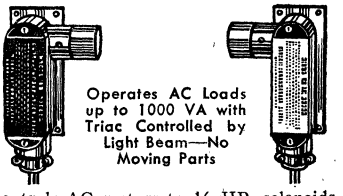
- Model 953-P Counts to 1500 per Minute
- Model 954-P Counts to 15,000 per Minute
- Sensitivity Control

MODEL 953-P. Counts cans, bottles, small parts, folders, labels, life test cycles, etc. by breaking a light beam up to 48" long. Circuit accepts any shape signal and applies 24 V DC to the electric counter for 20 msec to register, then holds it off 20 msec to reset. Standard counter is 6-digit manual reset. All solid state. Sensitivity control provides best signal for all light conditions. Counts to 1500 per minute. Double head pickup; 8-ft. cables. Neon power indicator shows "On and Ready to Count." Case is 18-gauge steel with gray baked enamel finish, 8½x4½x3" high. #10 screw slots spaced 4x7⅝". For 115 V, 50/60 Hz AC (20 watts). Complete with lamp and cell heads.
894-0953. Shpg. wt. 6 lbs.....155.00

MODEL 954-P. Same as above, but has divide-by-10 stage on input which divides the input count by 10; totalizes up to 15,000 per minute. Avoids need for electronic digital counters costing several hundred dollars more. Complete with lamp and cell heads.
894-0954. Shpg. wt. 6 lbs.....195.00

BILLION-CYCLE PHOTOELECTRIC SWITCH

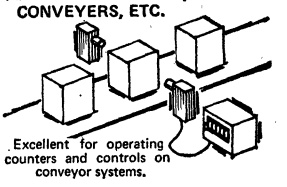




Operates AC Loads up to 1000 VA with Triac Controlled by Light Beam—No Moving Parts

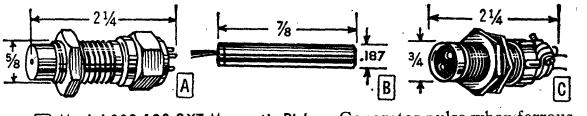
Controls AC motors to ¼ HP, solenoids, counters, lamps, etc. Heads are ¾" conduits, mounted on conduit or with mtg. plates attached. Surge capacity: 80 amps. 1 cycle. Oper. voltage: 5-120 V AC. Max. load: 7 amps cont., 8 amps intermittent. 6-ft. 3-wire cords with series plug.
Model 841-C Receiver. 18-gauge cord.
894-0841. Shpg. wt. 5 lbs.....69.00
Model 842-C Lamp. 18-gauge cord.
894-0842. Shpg. wt. 5 lbs.....69.00
Model 841-NC Receiver. No cord.
894-1841. Shpg. wt. 3 lbs.....64.00
Model 842-NC Lamp. No cord.
894-1842. Shpg. wt. 3 lbs.....64.00

A.C. COUNTER DRIVE, CONVEYERS, ETC.



Excellent for operating counters and controls on conveyor systems.

MAGNETIC AND PHOTO PICKUPS



A Model 892-120-SXT Magnetic Pickup. Generates pulse when ferrous object moves past center probe; the faster, the higher the voltage. Epoxy potted brass case. 120-ohm coil. Output with .005" gap is about 40 V p-p at 1000"/second into 100k load.
894-0892. Includes 10-32 pin. Shpg. wt. 1 lb.....14.00
894-1892. 892-1800-SXT. 1800-ohm. 90 V p-p. Wt. 1 lb.....14.00

B Model 923-200-SXC-6 Magnetic Pickup. Delivers 12 V p-p at 1000"/sec. .187" dia. x ⅞" stainless steel; two 6" leads.
894-2923. Shpg. wt. 3 oz.....6.00

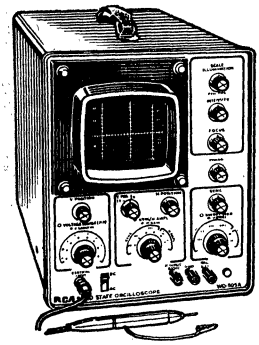
C Model 836-SXB Photo Pickup. Silicon cell with solid state amplifier, 8" shielded cable. Senses up to 500,000 events/minute. Output to 8 V p-p. Requires 5.5 V DC at 200 mA, 25 V at 2 mA.
894-2836. Shpg. wt. 2 lbs.....45.00

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

Famous-Name, Top-Quality Oscilloscopes

GENERAL PURPOSE OSCILLOSCOPES

RCA

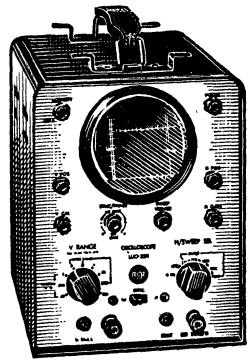


5″ SOLID-STATE OSCILLOSCOPE

- All Solid-State Circuit
- Flat-Face 5″ CRT
- Camera Mounting Studs
- Usable Response to 8 MHz
- Illuminated Graph Screen Calibrated in Volts
- Built-in Square Wave Signal
- Direct/Low Capacitance Shielded Probe and Cable

SUPER PORTABLE 3″ OSCILLOSCOPE

- Voltage-Calibrated 3-to-1 Step Attenuator
- Scaled Graph Screen and Calibrating Voltage Source
- "Plus-Minus" Internal Sync —Held to 4.5 MHz
- Shielded Input Cable with Low Capacitance Probe
- Compact 6½x8¾x10¼″



MODEL WO-505A. High-performance oscilloscope for general purpose use. Rugged, solid-state construction; lightweight and easily portable. Peak-to-peak voltage measurement. Has a 5″ flat-face CRT; return-trace blanking; illuminated graph screen calibrated directly in volts; provision for connection to vertical deflection plates of the CRT; usable response up to 8 MHz.

Regulated power supply prevents trace bounce, assures excellent stability. DC vertical amplifier has DC/AC input, for measurement of both AC and DC signals. High frequency horizontal sweep; solid lock-in on 5 MHz. Pre-set TV "Vertical" and "Horizontal" frequencies for instant lock-in. Built-in square wave signals for voltage calibrating peak-to-peak measurements. Offers high sensitivity, including 0.5-volt range. Has phase control; trace polarity reversal switch; BNC vertical input connector. With Model WG-400A Direct/Low Capacitance shielded probe and cable. Size, 11⅜x 15½x9″. Wt. 25 lbs.

901X2250.....Each 325.00 4-Up.....Each 299.00

WG302B RF/IF/VF Signal Tracing Probe. 4 oz.

901-1360.....Each 13.35 4-Up.....Each 12.00

WG354A Capacitance Type Slip-on Voltage Divider Probe. 1 lb.

901-1470.....Each 12.50 4-Up.....Each 11.00

MODEL WO-33A. The "all-purpose" oscilloscope, with all the bandwidth needed for servicing color TV, video broadcast monitors and cameras, and square-wave testing of audio and ultrasonic equipment. Has all the gain needed for low-level audio work; servicing pickups, mikes and preamps; signal-tracing radios and amplifiers and ham and hi-fi gear, etc.

With vertical amplifier in narrow-band position, sensitivity is 3 rms mV/inch; bandwidth within −3 dB, 20 Hz to 150 kHz. In wide-band position, sensitivity is 100 rms mV/inch; bandwidth within −3 dB, 5.5 Hz to 5.5 MHz. Sweep circuit has sawtooth range from 15 Hz to 75 kHz. Sync: external, ±internal; range to 4.5 MHz. Line sweep, 160° adjustable phase. High accuracy with voltage-calibrated, frequency compensated, 3-to-1 step attenuator. Scaled graph screen and calibrating voltage source allows direct reading of p-p voltages. Low capacitance probe. 6½x8¾x10¼″. 16 lbs.

901U2533.....Each 195.00 4-Up.....Each 180.00

901-1450. WG-350A Demod. Probe. 4 oz...Ea. 5.85 4-Up..Ea. 5.25

WG-300B Direct Low Capacity Probe. 1 lb.

901-1350.....Each 13.35 4-Up.....Each 12.00

WG-271A Adapter. Required when WG-300B is used with WO-33A.

901-1280. Wt. 4 oz.....Each 2.95 4-Up.....Each 2.50

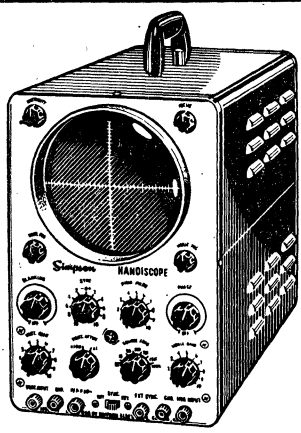
SIMPSON

15 Hz to 100 kHz Vertical Response

30 mV rms/ Inch Vertical Sensitivity

Push-Pull Amplification on X, Y Axis

Weighs only 19 Pounds



ALL-PURPOSE 5″ "HANDISCOPE"

MODEL 466. Ideal for general-purpose applications in FM and AM radio and TV servicing, plus a wide variety of industrial uses. Compact, portable and so lightweight (only 19 pounds) that it can be used for any shop of field applications. A deluxe instrument in every respect, with outstanding reliability, high stability, and rugged durability.

Has horizontal push-pull amplification for the X axis, vertical push-pull amplification for Y axis, and an intensity modulation input for the Z axis. Response of vertical amplifier: 15 Hz to 100 kHz, flat within ±1 dB; 6 dB down at 250 kHz; usable to 1 MHz. Vertical sensitivity: 30 mV rms/inch. Horiz. response: 15 Hz to 20 kHz; flat within ±1 dB; 6 dB down at 100 kHz. Horiz. sensitivity: 0.7 V rms/inch. Input: 0.1 meg. Sweep range: 15 Hz to 80 kHz. Max. imput: 400 V. Z-axis sensitivity: 20 V rms. 1 V p-p calibrating; 7⅞x12¼x 16⅛″. With input cable, manual. 117 V, 50-60 Hz AC. Wt. 29 lbs.

919U0466....Each 249.50 4-Up....Each 190.00

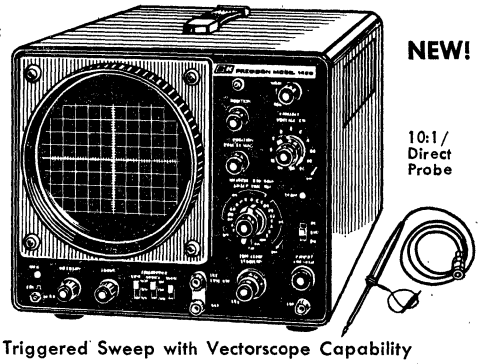
B & K TRIGGERED SWEEP OSCILLOSCOPE

DC to 10 MHz Bandwidth, 10 mV/cm Sensitivity

All Solid State with Drift-Free FET Input

Flat-Face 5″ Screen

Shows Complex Waveforms—with Automatic Sync



NEW!

10:1/ Direct Probe

- Combines Triggered Sweep with Vectorscope Capability
- 19 Positions, plus TV-H and TV-V Positions for 1-Knob Selection of Horizontal or Vertical Signal—Automatically Synchronized

MODEL 1460. Fully automatic triggered sweep lets you view the entire complex TV signal, or any portion, including VITS and "back porch" of the horizontal sync pulse with color burst information—all automatically synchronized and "locked in." Switch one knob back and forth to see rock-steady patterns of horizontal and vertical signals—without any other adjustments. Requires only 10 mV signal for perfect sync. Extremely wide bandwidth and very high sensitivity give front-panel vectorscope capability. Vertical amplifier goes from DC to 10 MHz at 10 mV/cm sensitivity; horizontal from DC to beyond 800 kHz. Calibrated vertical attenuator has 1, 2 and 5 steps so the trace will have an amplitude more than half the height of the screen. Optimized, high accelerating anode voltage for sharp, high-intensity patterns at ultra-fast writing speeds up to 0.1 μsec/cm (with 5X magnification).

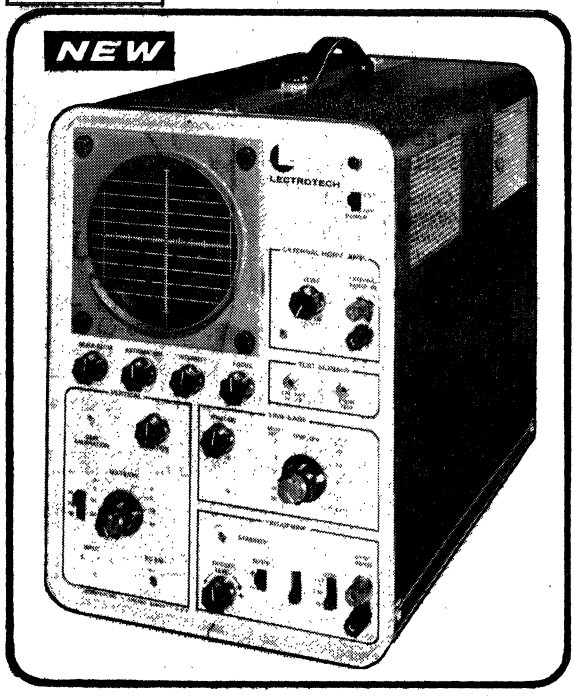
Vertical Sensitivity: 10 mV/cm to 20 V/cm, ±5%, divided into 10 calibrated ranges, each with fine adjustment. Vertical Rise Time: 35 ns. Vert. Imped.: 1 meg. Horizontal Sensitivity: 300 mV/cm. Horizontal Imped.: 100,000 ohms. Triggering: Internal, line and external; 20 Hz to 10 MHz. Max. Input: 600 V p-p. Calibration Voltage: 5 V p-p, 1 kHz square wave. With 10:1/direct probe. 9x10x17″. 105-125 V, 60 Hz AC.

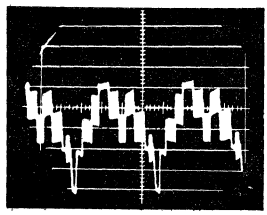
731-1460. Wt. 27 lbs....Each 436.00 4-Up.....Each 389.95

Assorted Test Equipment, 477, 478, 480-482, 489, 492, 497, 500-502, 510-516

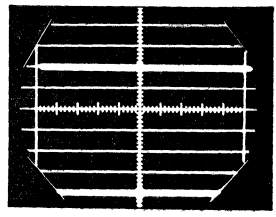
Lectrotech 5″ Oscilloscope/Vectorscope

MODEL TO-50 TRIGGERED SWEEP OSCILLOSCOPE





Measuring AC p-p Voltage of Composite Video Signal



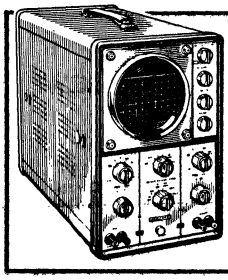
Measuring Positive DC Voltage, Up to 600 Volts

High performance, wide band, triggered-sweep oscilloscope offers features normally found only in lab-quality instruments . . . at a surprisingly low price. All solid state circuit (tube protected input) with wide bandwidth (10 MHz minimum). Has 5″ CRT with 8x 10 cm display area, DC coupled vertical amplifiers, calibrated vertical attenuator, calibrated horizontal time base. Automatic sync mode; TV sync selector (normal, vertical or horizontal provides positive sync on composite video signal). Vectorscope input for color TV servicing; edge lit calibrated scale. Miller Integrator horizontal sweep (60 Hz sine wave) with phasing control; compatible with all sweep generators. External horizontal amplifier.

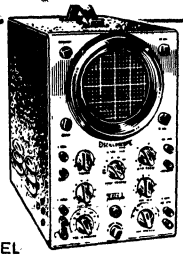
Vertical bandwidth: 3 dB, DC to 10 MHz min.; rise time, 35 nsec; sensitivity, .02 V/div. to 50 V/div. in 2-5 step sequence, plus continuously variable control; input impedance, 1 megohm ±1% shunted by 30 pF. Horizontal sweep speed: .02 second/div. to 1 μsec/div. in 1-2 step sequence plus continuously variable control; 5X magnifier increases speed to 0.2 μsec/div. Triggering: Internal, external or line; automatic or amplitude selection with preset stability; + or − slope. External horizontal amplifier: bandwidth, DC to 0.5 MHz; sensitivity, 0.5 V/div. Test signals: Calibrate, 1 V p-p line frequency square wave; probe, 20 V fast rise square wave. Size, 10¼x16½x14⅛″. 105-125 V, 60 Hz AC.
841-0050. Shpg. wt. 25 lbs.....**339.50**

Factory Assembled Test Equipment

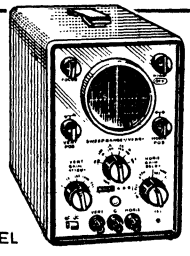
EICO



MODEL 465

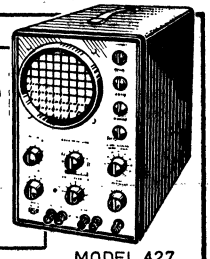


MODEL 460



MODEL 435

- Sensitivity of 3.5 mV rms/cm
- Zener Diode Calibration
- Direct Voltage Connections
- Automatic Sync



MODEL 427

MODEL 465W WIDEBAND 5″ OSCILLOSCOPE/VECTORSCOPE

Professional-quality scope offers vertical response of DC to 8 MHz (+1, −5 dB), usable to 10 MHz; horizontal, DC to 1 MHz (+1, −3 dB). Push-pull amplification throughout minimizes distortion; direct-coupling eliminates low-frequency phase shift. Internal, external and line-frequency sync of internal sweep oscillator: external or line input to horizontal amplifier. Horiz. and vert. calibration Voltages: 4-step attenuators. Vert. Sensitivity: 12 mV/cm rms. Horiz. Sensitivity: 17 mV/cm rms. Sweep Ranges: 10-100-1K-100K Hz, plus 30 Hz TV-VERT position and 7875 Hz TV-HOR position. 12¼x8½x17½″. 117 VAC. Shpg. wt. 27 lbs.
775U0465.....Each 276.00 4-Up.....Each 249.95

MODEL 460W WIDEBAND 5″ OSCILLOSCOPE

Vertical sensitivity: 25 mV p-p/cm. DC to 10 MHz vertical response, flat to 4.5 MHz. Easily reproduces 3.58 MHz color sync burst. 4-step attenuator. Sweep: 10 Hz to 100 kHz. Plus, minus, internal, external and line-frequency sync. Edge-lit grating with dimmer. Full screen DC positioning. 13x8½x16″. 105-125 V, 50-60 Hz AC.
775U0460. Shpg. wt. 28 lbs.....Ea. 160.00 4-Up....Ea. 149.95

PROBES. Shielded. For all oscilloscopes on this page.

Stock No.	Mfr's Type	Description	Wt.	EACH 1-3	EACH 4-Up
775-2200	PSD	Demodulator Probe	8 oz.	7.72	6.95
775-2100	PD	Direct Probe	8 oz.	5.50	4.95
775-2150	PLC	Low-Capacity Probe	8 oz.	7.72	6.95

MODEL 435W 3″ WIDEBAND OSCILLOSCOPE

Portable 3″ scope features push-pull 3-stage amplifier; zener diode calibration (200 mV p-p); 4-position attenuator. Reads DC or p-p AC from 50 mV to 500 volts. Response, DC to 4.5 MHz, usable to 10 MHz. Vertical sensitivity, 18 mV rms/cm. Full retrace blanking. Sweep: 10 Hz to 100 kHz plus 30 Hz TV vertical and 7875 Hz TV horizontal. Horizontal response: 1 Hz to 500 kHz; sensitivity, 0.7 V rms/cm. Distortion-free positioning and trace expansion edge-lighted screen. Overall size, 8½x5¾x12⅝″. For 105-125 volts, 50-60 Hz AC. Shpg. wt. 18 lbs.
775U0435.....Each 188.95 4-Up.....Each 169.95

MODEL 427 DIRECT-COUPLED 5″ OSCILLOSCOPE

Highly sensitive, general-purpose scope offers 3-stage push-pull amplification, with direct-coupling throughout the vertical amplifier. Makes DC or p-p AC (or combination) measurements from 10 mV to 500 V. Trace is sharp and clean, free of "blooming"; can be expanded to 30 cm vertically and 20 cm horizontally. Instant drift-free positioning permits centering any part of the expanded trace. Has zener diode calibration, 4-position frequency-compensated decade attenuator. Fully automatic sync; automatic sync limiter and amplifier. Intensity, focus, astigmatism.

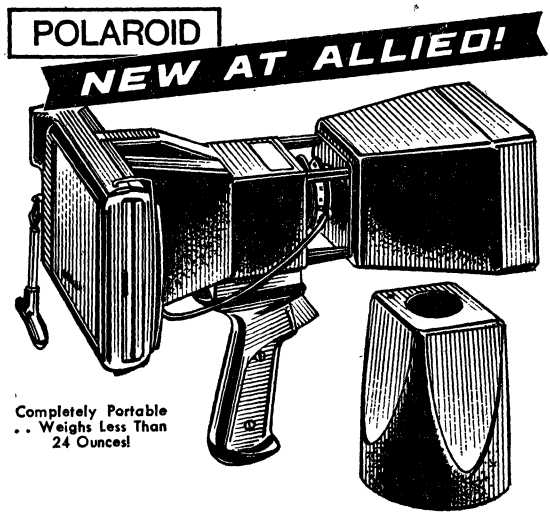
DC balance controls and sawtooth sweep output on front panel. Positive or negative sync (internal, external or line-frequency). Vertical response: DC to 500 kHz (+1, −3 dB). Vert. sensitivity: 3.5 mV rms/cm (10 mV p-p/cm). Horizontal response: 2 Hz to 450 kHz (+1, −3 dB); sensitivity. 0.18 V rms/cm. Sweep Ranges: 10-100, 100-1K, 1K-10K, 10K-100K Hz. Input impedance: vertical. 1 meg/30 pF; horizontal. 10 meg/40 pF. 12½x8½x16 7/16″. For 117 VAC. Shpg. wt. 23 lbs.
775X0426.....Each 155.00 4-Up.....Each 139.95

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

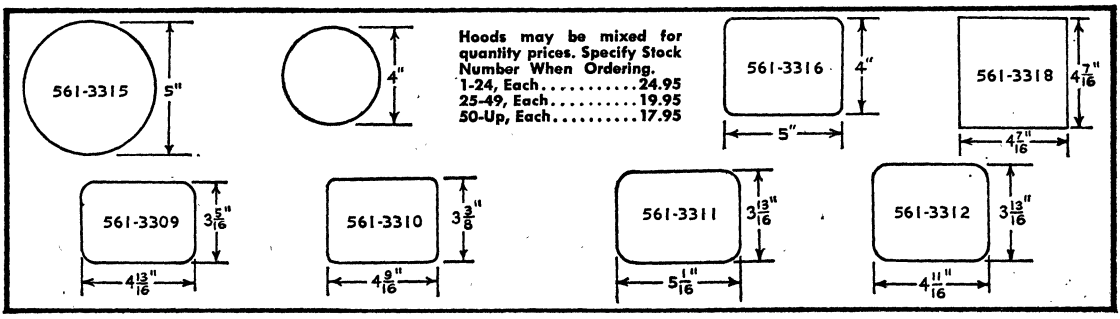
Polaroid® Oscilloscope & Microscope Photography

POLAROID® LAND OSCILLOSCOPE CAMERA FOR CATHODE RAY TRACE RECORDINGS

- Get Instant Oscilloscope Display Copies
- Lowest Cost Oscilloscope Camera on the Market
- Accepts Any One of 8 Interchangeable Hoods
- Produces Sharp, Distortion-Free Pictures
- Withstands Continuous Laboratory Use
- No Special Training Needed to Operate



Model CR-9. New, low-cost and truly versatile Polaroid Land Camera specifically designed for oscilloscope trace recordings. Portable and simple to operate, the CR-9 is ideal for use in lab or classroom by scientists, engineers, designers, technicians, students, etc. Almost anyone can turn out a high-contrast picture of an oscilloscope display in 15 seconds, after only a few minutes familiarization. Prints provide a permanent record for test evaluation, documentation of reports, reproduction, or file. You see the finished print immediately—you are always sure of the final result at each step. Eight interchangeable, light-tight hoods are available (see below), to fit almost any oscilloscope with 6x8, 6x10 and 8x10cm graticules. Hood attaches easily to the front of the lens, permitting only light from the cathode ray screen to reach the film. Lens: f/5.6 oscilloscope recording lens, stops down to f/45. High-impact molded plastic. Camera includes one hood—*specify hood stock number from table below.* Uses Polaroid Type 107 Land film, black and white; eight 3¼x4¼" prints. Shpg. wt. 2¼ lbs.
561-3301. 1-24..Ea. 179.95 25-49..Ea. 169.95 50-Up. 159.95

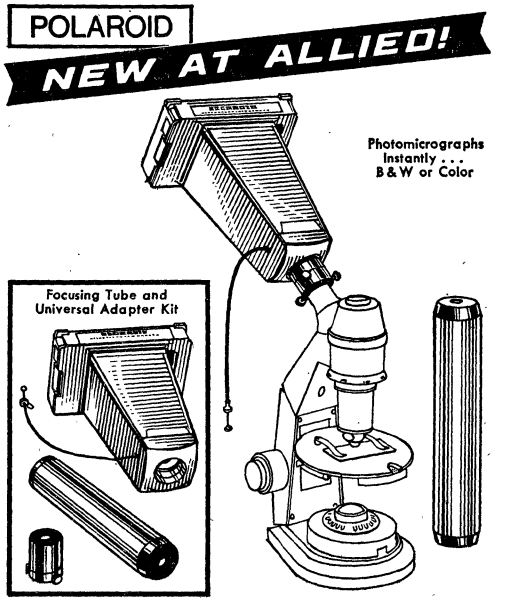


POLAROID® LAND FILM AND TIMER ACCESSORY FOR MODELS ED-10 AND CR-9

561-3107. Polaroid Type 107 Land Film. 5-Pack Starter Set.....17.45 1-49.....Ea. 3.49 50-Up.....Ea. 3.10
561-3108. Polaroid Type 108 Land Film. For EDIO only. 5-Pack Starter Set 29.95 1-49.....Ea. 5.99 50-Up.....Ea. 5.49
561-3126. Polaroid Land Development Timer. Audible tone. 4 oz.....5.95

POLAROID® LAND MICROSCOPE CAMERA . . . LETS YOU MAKE PHOTOMICROGRAPHS ON THE SPOT . . . IN SECONDS

- Lowest Priced Instant Microscope Camera Available
- Delivers Finished Pictures on the Spot
- No Darkroom Needed . . . No Chemicals, Either
- No Delicate Parts—Unlike Other Cameras—to Break
- Black and White Prints Develop in Seconds
- Full Color Pictures Develop in a Minute



Model ED-10. A unique, new camera . . . specially priced and carefully designed! Lets you view a microscopic subject one instant and hold a quality picture of it in your hand the next . . . color pictures develop in a minute, black and white prints in seconds. Pictures can become a permanent notebook record. Ideal for students, doctors, dentists, engineers and researchers alike—anyone who uses a microscope in his work. Fits all standard microscopes: monocular, binocular or trinocular. A universal adapter attaches to the microscope and the camera slides on over the adapter. And anyone can learn to turn out perfect pictures within minutes . . . you don't even need to know photography. You simply follow a few easy steps: frame the subject in the scope, slip on the focusing tube and focus, replace the tube with the camera and make the picture (exposure guide included in instruction book). Process film by withdrawing it from camera back, peel off finished picture—it's that easy. In addition, the camera is ruggedly built to withstand day-to-day handling. Constructed of high-impact, injection molded ABS material. No delicate camera parts. Film packs allow quick, easy loading in seconds, with minimum fuss. Available as a complete kit, including camera, universal adapter, focusing tube and carrying carton. Uses regular Polaroid Land pack color film Type 108 or black and white Type 107 3000 speed film. Shpg. wt. 2½ lbs.
561-1010.....Each 69.95

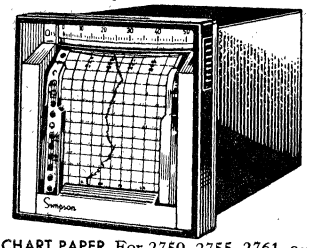
Assorted Test Equipment, 477, 478, 480-482, 489, 492, 497, 500-502, 510-516

CHART RECORDERS

Simpson

Strip-Chart Recorders

MINIATURE STRIP-CHART RECORDERS



Easy Panel Mounting in only 3¾x3¾" of Panel Space. Records up to full 30 Days—unattended. Dependable Inkless Recording System. Taut-Band Meter Movement.

CHART PAPER. For 2750, 2755, 2761, and 2762. *10-channel marking for Model 2755. In pkgs. of 10 rolls. Shpg. wt. 2 lbs.

Stock No.	Type	For Model	Time	10 ROLLS PER PKG. 1-4 Pkgs., EA.	5-Up Pkgs., EA.
919-5010	22310	2750	30 div.; 20mm/hr.	22.50	18.00
919-5011	22311	2750	50 div.; 20mm/hr.	22.50	18.00
919-5012	22312	2750	30 div.; 30mm/hr.	22.50	18.00
919-5013	22313	2750	50 div.; 30mm/hr.	22.50	18.00
919-5014	22314	2750	30 div.; 60mm/hr.	22.50	18.00
919-5015	22315	2750	50 div.; 60mm/hr.	22.50	18.00
919-5016	22316	2750	30 div.; 100mm/hr.	22.50	18.00
919-5017	22317	2750	50 div.; 100mm/hr.	22.50	18.00
919-5080	22380	2755	*20mm/hr.	22.50	18.00
919-5081	22381	2755	*30mm/hr.	22.50	18.00
919-5082	22382	2755	*60mm/hr.	22.50	18.00
919-5083	22383	2755	*100mm/hr.	22.50	18.00
919-5037	23237	2761	20mm/hr.	22.50	18.00
919-5238	23238	2761	30mm/hr.	22.50	18.00
919-5239	23239	2761	60mm/hr.	22.50	18.00
919-5240	23240	2761	100mm/hr.	22.50	18.00
919-5241	23241	2762	20mm/hr.	22.50	18.00
919-5242	23242	2762	30mm/hr.	22.50	18.00
919-5243	23243	2762	60mm/hr.	22.50	18.00
919-5244	23244	2762	100mm/hr.	22.50	18.00

MICROAMP—MILLIAMP—MILLIVOLT—VOLT RECORDERS

MODEL 2750. Continuous readout on edgewise scale. Taut band movement. Recording accuracy: 1.5% of full scale. Switch selection of 20 or 120mm per hour chart speed. Gear boxes are easily interchangeable for other dual speed combinations. Snap off glass window provides easy access to chart paper and gearboxes. 2.2 VA synchronous motor. 115V, 60 Hz. Av. shpg. wt. 4 lbs.

919-2746. 0-10 DC μA.....Ea. 209.00 4-Up.....Ea. 167.00
919-2747. 0-50 DC μA.....Ea. 191.00 4-Up.....Ea. 153.00
919-2748. 0-100 DC μA.....Ea. 183.50 4-Up.....Ea. 147.50
919-2749. 0-500 DC μA.....Ea. 177.50 4-Up.....Ea. 142.00
919-2744. 0-1 DC mA.....Ea. 175.00 4-Up.....Ea. 140.00
919-2745. 0-1/0-1 DC mA. Dual Channel.....Ea. 206.00
4-Up.....Ea. 165.00
919-2750. 0-50 DC mV.....Ea. 177.50 4-Up.....Ea. 142.00
919-2752. 0-150 AC Volts.....Ea. 185.00 4-Up.....Ea. 148.00

10-CHANNEL EVENT RECORDER

MODEL 2755. 10-CHANNEL. Simultaneously records ON/OFF status of 10 separate events on inkless, pressure sensitive paper. Response time of event recorders is 10 milliseconds. Charts indicate precisely when an event occurs and duration of that event. Motor driver permits continuous unattended operation for a month. Two speeds, 20/120mm/hour; optional gear trains listed below. Mounts in 3.60" square panel hole. 115 VAC 60 Hz 2.2 VA. Wt. 4 lbs.

919-2755. 110 VAC Channels.....Ea. 220.00 4-Up.....Ea. 175.00
919-2756. 24 VDC Channels.....Ea. 220.00 4-Up.....Ea. 175.00

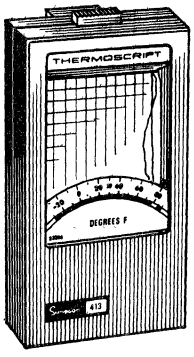
SPECIAL GEAR UNITS. For Model 2750 or 2755. Av. wt. 8 oz.

919-5001. 22301. 30/180mm/hour.....Ea. 9.40 4-Up...Ea. 7.50
919-5002. 22302. 64/360mm/hour.....Ea. 9.40 4-Up...Ea. 7.50
919-5003. 22303. 100/600mm/hour....Ea. 9.40 4-Up...Ea. 7.50

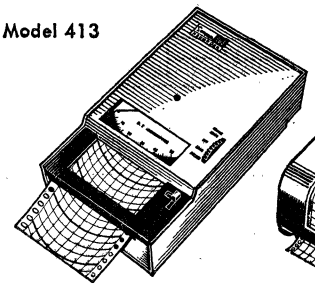
TEMPERATURE RECORDERS

919-2761. Model 2761 Temperature Recorder. −50°F to +250°F in 3 ranges. Shpg. wt. 4 lbs.....Ea. 237.50 4-Up.....Ea. 190.00
919-2762. Model 2762 Temperature Recorder. Dual Channel. −40°F to +60°F or +50° to +250°F on both channels. Wt. 4 lbs. Ea. 263.00.....4-Up.....Ea. 210.00

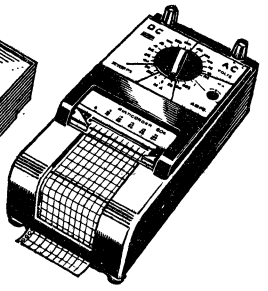
MULTICORDER CHART RECORDERS



Model 413



Model 603



Model 604 Model 605

VOLT—AMP—MILLIAMP MICROVOLT RECORDER

MODEL 604. Records on pressure sensitive paper. Chart speeds: 1/3/12 inches per hr. Recording accuracy: ±2.5%. Ranges: DC 0-0.1, 0.5, 2.5, 10, 25, 100, 250, 500 V.; 0-50-250 μA; 0-1, 5, 25 mA; 0-0.1, 0.25, 1 amp. AC, 0-0.2 mA; 0-10, 25, 100, 250, 500 V. 8½x9¼x17⅞". Self-starting, synchronous motor for 115 V, 60 Hz AC. 6 lbs.

919U0615..Ea. 250.00 4-Up..Ea. 200.00

Type 0682 VOM Special Gear Unit. Above, with 30/60/90 in./hr. chart speed. Wt., 4 oz.

919-0682....Ea. 37.50 4-Up....Ea. 30.00
919-2611. Carrying Case. 1½ lbs. Ea. 33.80
4-up.....Ea. 27.00
919-2612. Chart Paper. Box of 10 rolls. Wt. 2 lbs.....Ea. 24.40 4-Up.....Ea. 19.50

TEMPERATURE RECORDERS

MODEL 413. Inkless recording on pressure sensitive paper. Register indicators provide visual reading of max. and min. temperatures. Resistant to shock and vibration. Accuracy: ±1% of full scale. Chart speeds: 4/2/1 mm per hour. Width of chart paper: 2.55". Recording time: 8 to 32 days. Spring driven clock motor, no outside power supply needed. With 2 rolls of chart paper. 6.5x3.6x1.8".

RECORDERS. Shpg. wt. 5½ lbs 23310. Range: +30° to +150° F.
919-3310..Ea. 151.70 4-Up..Ea. 121.50
23312. Range: 0° to +120° F.
919-3312..Ea. 151.70 4-Up..Ea. 121.50
23314. Range: −30° to +90° F.
919-3314..Ea. 151.70 4-Up..Ea. 121.50

CHART PAPER. 10 roll box. 2 lbs.
23300. Paper for 23310 Recorder.
919-3300...Ea. 22.50 4-Up...Ea. 18.00
23302. Paper for 23312 Recorder.
919-3302...Ea. 22.50 4-Up....Ea. 18.00
23304. Paper for 23314 Recorder.
919-3304...Ea. 22.50 4-Up...Ea. 18.00
23305 STAINLESS STEEL WALL BRACKET.
919-3305. 1¼ lbs. Ea. 9.35 4-Up.Ea. 7.50
23306 LEATHER CARRYING CASE.
919-3306. 1½ lbs. Ea. 11.70 4-Up. Ea. 10.00

FOUR-SPEED CHART RECORDERS

MODEL 603. Speeds: 1½, 6, 12 or 18 in. per hour. Accurate taut-band meter movement with pointer visible at all times. 2 25/32x4¾x 7½". For 115 V, 60 Hz AC.

0-50 DC Microammeter. Wt. 2½ lbs.
919-0602..Ea 125.00 4-Up..Ea. 107.00
0-100 DC Microammeter. Wt. 2½ lbs.
919-0603..Ea. 119.00 4-Up..Ea. 102.00
0-250 DC Microammeter. Wt. 2½ lbs.
919-0604..Ea. 114.50 4-Up...Ea. 98.00
0-15 DC Voltmeter. Wt. 2½ lbs.
919-0607..Ea. 113.20 4-Up...Ea. 97.00
0-150 DC Voltmeter. Wt. 2½ lbs.
919-0608..Ea. 112.00 4-Up...Ea. 96.00
0-1 DC Milliammeter. Wt. 2½ lbs.
919-0601..Ea. 105.00 4-Up...Ea. 90.00
0-5 AC Voltmeter. Wt. 2½ lbs.
919-0600..Ea. 140.00 4-Up..Ea. 120.00
0-150 AC Voltmeter. Wt. 2½ lbs.
919-0605..Ea. 119.00 4-Up..Ea. 102.00
0-300 AC Voltmeter. Wt. 2½ lbs.
919-0606..Ea. 121.50 4-Up..Ea. 104.00
919-0013. Takeup Reel. Wt. 4 oz. Ea. 17.50
4-Up.....Ea. 15.00
919-0014. Carrying Case. 1½ lbs. Ea. 23.35
4-Up.....Ea. 20.00
Chart Paper. Wt. 1 lb. Box of 6 Rolls.
919-0012....Ea. 17.95 4-Up....Ea. 13.55

MULTICORDER

MODEL 605. Inkless recording on pressure sensitive paper. Chart speeds: 1/3/12 inch per hr. Recording accuracy: ±2.5%. Sensitivity: 666 ohms/volt. Ranges: DC: 0-12-30 60 mV; 0-3-15-60-300-600 V; 0-1.5-3-6-30 mA; 0-.15-1.2-6 amps. AC: 0-6-30-15-300-600 V; 0-3-15-60-300 mA; 0-1.2-6 A. 9¾x 4¾x4" 115V, 60 Hz. AC. With test leads, two rolls of chart paper. Shpg. wt. 5½ lbs.

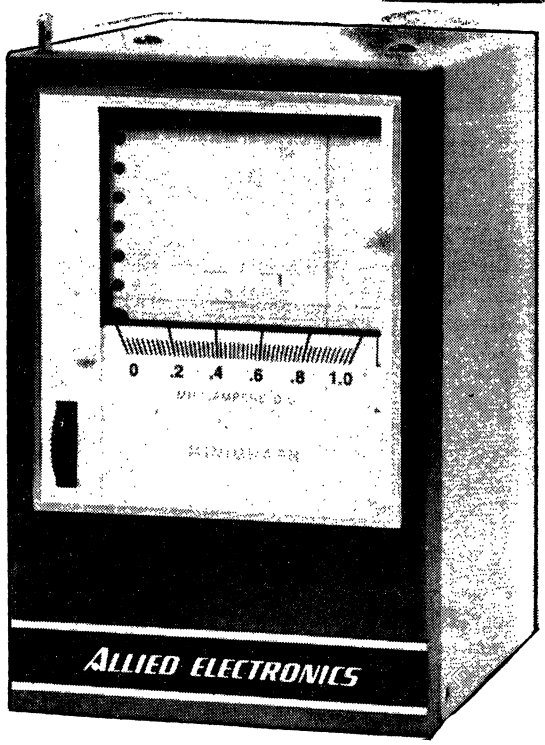
919-0620..Ea. 269.00 4-Up..Ea. 215.00
Type 0682 Gear Unit. 30/60/90 inch/hour.
919-0682. 5 oz...Ea. 37.50 4-Up.Ea. 30.00
Type 02611. Ever-Ready Vinyl Carrying Case.
919-2611. 2 lbs..Ea. 37.50 4-Up.Ea. 33.80
Type 02614 Chart Paper. 2.3"x50'. Box of 10.
919-2614. 2 lbs..Ea. 24.40 4-Up.Ea. 19.50
Type 06529 DC Shunt. 120-300-600 amps; 0.5%.
919-6529. 2 lbs..Ea. 25.00 4-Up.Ea. 20.00
Type 06531 DC Shunt. 12-30-60 amps; 0.5%.
919-6531. 1 lb...Ea. 17.50 4-Up.Ea. 15.00
Type 02461 AC Clip-On Current Transformer. 30-120-600 amps. Turn ratio, 2000:1.
919-2461. 2 lbs..Ea. 32.00 4-Up.Ea. 25.55
Type 02462 AC Clip-On Current Transformer. 30-150-600 amps. Turn ratio, 10,000:1.
919-2462. 2 lbs..Ea. 51.00 4-Up.Ea. 40.70

Assorted Test Equipment, 447, 480-482, 489, 492, 497, 500-502, 510-516

ALLIED Minigraph Chart Recorders

THE GO EVERYWHERE DO EVERYTHING RECORDER

- Unsurpassed Durability and Versatility
- Taut Band Measuring Element
- Inkless Recording
- Compact Diecast Aluminum Case
- 9 Chart Speeds Available
- Temperature Recorder
- 4 and 8 Channel Event Recorders
- Portable Or Wall Mount



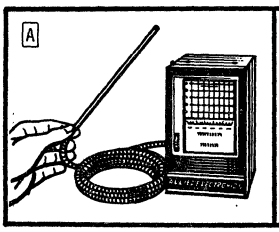
Miniature chart recorder of unsurpassed durability and versatility. Designed for use in laboratory, industry, aerospace or education. Its special features include: Taut band measuring element, inkless recording and compact diecast aluminum case with 3M Nextel blue body and charcoal door in a suede-like finish which is almost impervious to damage. Size: 3⅝″ W x 4⅜″ D x 5⅝″ H. Weight approx. 5 lbs.

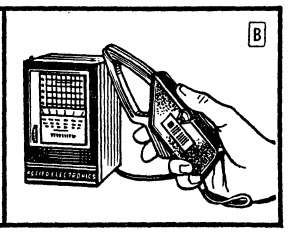
TAUT BAND MEASURING ELEMENT

There are no diamonds or other jewels to wear in the Minigraph. A taut band movement, which is much more resistant to shock and vibration than pivot or spring movements, is used instead. The movement is friction-free because there are no parts to wear. This prolongs the life of the movement indefinitely. Accuracy: ±2%. Response: 1 sec. full scale. Sensitivity: 10μa full scale.

INKLESS RECORDING

Employs a special stylus which gives inkless recording in the form of dots. The stylus is firmly positioned against pressure sensitive paper by an impact plate. A cammed assembly on the 2 rpm drive motor activates the impact plate, which in turn, causes the stylus to write a record consisting of dots. Dotting speed is one dot every two seconds. 9 different speeds can be chosen from the gear trains chart. Speeds vary from ⅛″ to 10″ per hour depending on the gear train used. The chart can be manually advanced by turning a thumbwheel knob on the front of the minigraph. Charting the recorder is also simple: slip the chart in place thread it and tape it to the reroll. Chart can also be threaded through the top of the case. There are no screws to loosen and no drive rings to lose. Just move two captive rings from their storage position in the center of the reroll roller to two slots. The chart then feeds out of the top of recorder for easy tear-off. All charts have 2⅛″ width with space for an event marker to record in the right margin. An access window exposes the chart for writing notations. The 2 rpm standard drive motor is rated 3 watts, 120 VAC, 60 Hz.





THERMOCOUPLE PROBES

Minigraphs will record temperature ranges of 0-500°F, 0-800°F, 0-1000°F and 0-2000°F through the use of a simple thermocouple probe. The probe has a six foot long armored sheath and a six inch stainless steel tip measuring 3/16″ O.D.

Stock No.	Type	Probe Type	EACH
599-2011	69201-1	Type J—Iron—Constantan	20.00
599-2012	69201-2	Type K—Chromel—Alumel	25.00

MINIGRAPH CHART RECORDERS

Chart speed is one inch per hour. **For other chart speeds, order additional Gear Trains from listing at right.** Chart duration is 744 hours. Dotting speed is one dot every two seconds. Dot density per inch is 1800. Two-rpm motor is rated 3 watts, 120 VAC, 60 Hz. Supplied with portable feet and flush mounting hardware. Size, 3⅝″ wide by 5⅝″ high x 4⅜″ deep. Stock Number 599-1514 includes hook-on transformer with built-in switch for measurements of 60 Hz AC current from 5 to 250 amps up to a maximum of 750 volts. Stock Number 599-8814 and 599-8414 Event Recorders furnished with 24 VDC input channels. 6-12-48 VDC available; 117 VAC inputs available at $12.00 additional cost per channel. Shpg. wt. 5 lbs.

Stock No.	Range Values	EACH
599-0114	0-10 Microamperes DC, 5700 Ω Armature Res.	130.50
599-0214	0-50 Microamperes DC, 5400 Ω Armature Res.	114.50
599-0314	0-100 Microamperes, 1000 Ω Armature Res.	109.50
599-2714	0.5-0-0.5 MA DC, 100 Ω Armature Res.	104.50
599-0414	0-1 MA DC, 100 Ω Armature Res.	99.50
599-1514	0-5-25-50-100-250 Amps, 60 Hz. Includes Hook-on Transformer	160.00
599-1614	0-150 VAC	110.00
599-3114	0-500°F—Includes Type J Probe	150.00
599-3314	0-800°F—Includes Type J Probe	150.00
599-3614	0-1000°F—Includes Type K Probe	150.00
599-3914	0-2000°F—Includes Type K Probe	150.00
599-0224	2 CH 0-50 Microamperes DC	167.50
599-8814	8 CH Event Recorder	155.00
599-8414	4 CH Event Recorder	109.00

GEAR TRAINS

Stock No.	Chart Speed Inches/Hour	Dots/Inch Of Chart	EACH
599-1001	⅛	14,400	5.00
599-1002	¼	7,200	5.00
599-1003	½	3,600	5.00
599-1005	2	900	5.00
599-1006	3	600	5.00
599-1007	4	450	5.00
599-1008	6	300	5.00
599-1009	10	180	5.00

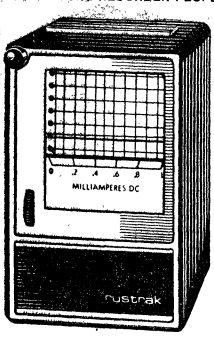
CHARTS

2⁹⁄₁₆″w., 2⅛″ active, 63′ long. *For use with hook-on ammeter.

Stock No.	No. of Major and Minor Divisions	Box Of 6 Charts Price Per Box			
		1-2	3-5	6-15	16-Up
599-9176	U-10-50	13.50	12.90	12.00	11.40
599-9177	U-15-75	13.50	12.90	12.00	11.40
599-9195	10-47*	13.50	12.90	12.00	11.40
599-9180	4 or 8-Event	13.50	12.90	12.00	11.40

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

Miniature Strip Chart Recorders



MINIATURE ANALOG RECORDERS

Low As **99.50** For 4 and Up

- ±2% Full Scale Accuracy
- 1" Per Hour Chart Speed
- Internal Chart Review
- Chart Access Window
- Time Setting Thumbwheel
- Panel Mounting Hardware

Miniature graphic recorders print on pressure-sensitive chart paper, have wide applications in industry. Accuracy, ±2% of full scale (1% on special order). Chart speed, 1" per hour (easily changed with gear box, listed on opposite page). 63-foot roll of chart paper lasts one month at 1" per hour speed. Response time, 1 second for most units. Tear-off or re-roll chart operation; easily interchanged. Scale width: single channel, 2 5/16"; dual channel, 1". Furnished with one roll of chart paper, manual, panel mounting hardware. Charcoal gray suede finish. 5⅝x3⅝x4 5/16". For 115 volts, 60 Hz AC. Shpg. wt. 5 lbs.

SINGLE CHANNEL DC RANGE RECORDERS

Stock No.	Model	RANGE	Ohms	EACH	4-Up EACH
908-0234	288	0-10 μA	5700	164.50	130.50
908-0326	288	0-50 μA	4700	144.50	114.50
908-0328	288	0-100 μA	4600	132.00	109.50
908-0333	288	0-1 mA	100	124.50	99.50
908-0350	288	0-100 mV	100	124.50	99.50

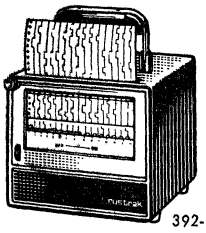
SINGLE RANGE DC VOLTAGE RECORDERS

908-0804	288	0-1 volt DC		131.00	104.50
908-0808	288	0-3 volts DC	1000	131.00	104.50
908-0812	288	0-5 volts DC	Ohms/	131.00	104.50
908-0820	288	0-10 volts DC	Volt	131.00	104.50
908-0826	288	0-50 volts DC	Sensi-	131.00	104.50
908-0834	288	0-100 volts DC	tivity	131.00	104.50

DUAL CHANNEL DC RANGE RECORDERS

Stock No.	Model	RANGE (Each Channel)	Ohms	EACH	4-Up, EACH
908-0862	291	0-1 mA	100	179.50	143.50
908-0868	291	0-100 μA	4600	198.50	158.50
908-0875	291	0-50 μA	5400	209.50	167.50

Write for Brochure with Other Ranges and Models



392-16

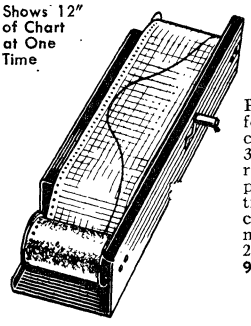
4, 8 AND 16-CHANNEL EVENT RECORDERS

- Simultaneously Record 4, 8 or 16 On-Off Events
- Response Time, 10 msec
- Thumbwheel Chart Advance
- Chart Access Window

Simultaneous recording of 4, 8 or 16 on-off events on the same chart. Actuator response time, 10 msec. Slide-down chart access window; thumbwheel chart advance on front panel. **Specify chart speed when ordering** (¼, ½, 1, 2, 3, 6, 10, 12, 15, 30 or 60 inches per hour). Other chart speeds are easily obtainable by using interchangeable gear box, listed on opposite page. Standard motor speed, 2 rpm; other motor speeds for chart speeds up to 3000" per hour available on special order. Requires 24 VDC at 70 mA per channel (order Model 921-8 power supply, below). Tear-off or re-roll operation; easily interchanged. Charcoal gray suede finish. Includes on roll of chart paper and manual. Size: 4- or 8-channel model, 3⅝x5⅝x4 5/16"; 16-channel model, 6⅝x5⅝x6".

908-0391. Model 292-4. 4 chan. 5 lbs.... Ea. 136.50 4-Up Ea. 109.00
908-0397. Model 292-8. 8 chan. 5 lbs.... Ea. 194.00 4-Up Ea. 155.00
908-0492. Model 392-16. 16 chan. 8 lbs.. Ea. 457.00 4-Up Ea. 362.00
MODEL 921-8 POWER SUPPLY. Supplies 24 VDC from 115 V, 60 Hz AC line. Two needed for Model 392-16. Wt. 5 lbs.
908-0432.....Each 31.25 4-Up.....Each 25.00

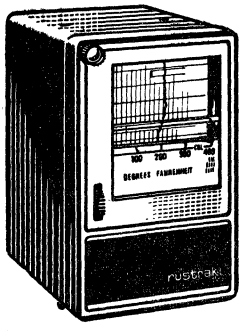
Shows 12" of Chart at One Time



MODEL 168 CHART VIEWER

- Easy to Set Up and Operate
- Paper is Positioned in Seconds

Provides rapid review of complete 63-foot roll in less than a minute. Accepts chart paper rolls from 1⅞" to 3" wide with ⅝" I.D. core. Maximum roll capacity, 2" O.D. Precision clutch permits clockwise cranking for chart travel in either direction. Weighted construction with non-skid pads—will not mar polished surfaces. 14x3½x2⅝". Shpg. wt. 3½ lbs.
908-0304. Ea. 68.80 4-Up. Ea. 55.00



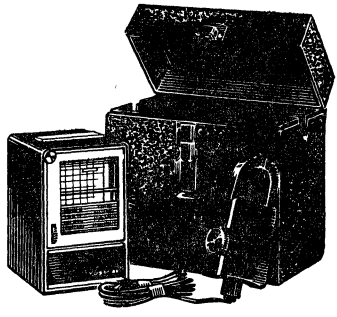
SINGLE CHANNEL RECORDING PYROMETER

Low as **190.00** For 4 and Up

- Four Switchable Ranges: 0-400° F, 0-800° F, 0-1200° F and 0-2400° F
- Accuracy, ±2% of Span
- Available with Fahrenheit or Centigrade Calibration

MODEL 2122. Single channel thermocouple recorder has four switchable temperature ranges: 0-400°, 0-800°, 0-1200° and 0-2400° F, or Centigrade equivalents. Taut-band galvanometer assures accuracy of 2% of span. Maximum writing speed: 1 strike per second. Maximum chart speed: 24 inches per hour. Standard motor operates at 2 rpm. Chart access window. Supplied with both I/C and C/A thermocouples. **Specify °F or °C calibration in ranges above.** For 115 volts, 60 Hz AC. 3⅝x5⅝x6". Shpg. wt. 7 lbs.
908-0508.....Each 238.00 4-Up.....Each 190.00

Thermistor and Resistance Element Temperature Recorders Available. Write for Complete Information.



MODEL 230 VOLT/AMP AC RECORDER

- 3 Voltage and 3 Current Ranges
- Includes Clamp-on Transducer

Low as **159.00** For 4 and Up

Industrial and commercial AC voltage and current recorder, housed in portable leather case. Three switchable voltage ranges: 0-150 V, 0-300 V and 0-600 V at ±3% accuracy. Three switchable current ranges: 0-25 amps, 0-100 amps and 0-300 amps at ±4% accuracy. Chart speed, 1" per hour standard; other speeds available. Uses Style Q and R paper. For 115 volts, 60 Hz AC. Supplied with two rolls of chart paper, clamp-on transducer and test leads.
908-0882. 10 lbs.... Ea. 199.00 4-Up..... Ea. 159.00

OTHER AC CHART RECORDERS

AC VOLTMETER RECORDERS

Stock No.	Model	RANGE	EACH	4-Up EACH
908-0368	288R	0-150 V	137.50	110.00
908-0401	293	70-135 V	144.00	115.00
908-0411	293B	70-135/140-270/and 280-540V	162.50	130.00
908-0406	293A	70-135/140-270 V	150.00	120.00
908-0679	2186	105-135/210-250 V	187.50	150.00
908-0682	2186A	105-125/210-250/and 420-500 V	199.50	160.00

AC AMMETER RECORDERS

908-0497	2118	0-1 and 0-5 amps	168.50	135.00
908-0468	2107	0-500 amps; clamp-on transducer	181.50	145.00

Panel Meters, 464-476, 479—Digital Test Equipment 464-466, 480-482

Potentiometric Recorders & Accessories

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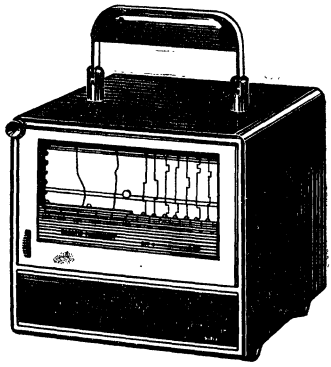
THE MINIATURE RECORDER PEOPLE

300 SERIES MINIATURE ANALOG RECORDERS



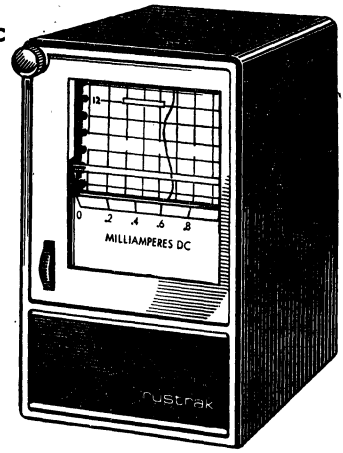
- Two or Four-Channel Models
- 5½" Wide Chart
- Access Window
- Chart Speed of 1 inch per hour (can be changed with optional gear boxes)

Miniature analog recorders are available in two-channel (Model 388) or four-channel (Model 391) models, for measuring current or voltage. 5½" wide chart has 2 5/16" scale width on two-channel models, 1" per channel on four-channel models. Chart speed, 1" per hour standard (easily changed with gear box listed at right, below). 63-foot roll of chart paper lasts one month at 1" per hour. Has chart access window, time setting thumbwheels, carrying handle. Charcoal gray suede finish. Supplied with one roll of chart paper and operating manual. 6⅝x5⅝x6". Shpg. wt. 8 lbs.

Stock No.	Model	Channels	RANGE (Each Channel)	Ohms (Each Channel)	EACH	4-Up EACH
908-0924	388	2	0-10 μA	5700	408.00	326.00
908-0929	388	2	0-50 μA	4700	367.00	294.00
908-0934	388	2	0-100 μA	4600	355.00	284.00
908-0938	388	2	0-1 mA	100	330.00	264.00
908-0944	388	2	0-100 mV	100	330.00	264.00
908-0949	391	4	0-1 mA	100	440.00	352.00
908-0953	391	4	0-100 μA	4600	488.00	390.00
908-0957	391	4	0-50 μA	5400	493.00	394.00

300 Series Recorders Available in Other Ranges. Write for Information.

MODEL 400 POTENTIOMETRIC RECORDER



- For Use With a Variety of Parameters
- Sensitivity of 100 mV
- Accuracy ±0.5% full-scale
- Chart Speed, 1" per Hour Standard
- Scale Width, 2 5/16"

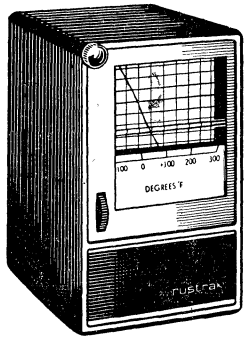
Low as 239.00
For 4 and up

Continuous writing potentiometric recorder keeps a continuous record on pressure-sensitive paper. Features inkless writing and floating input; for use with a variety of measurable parameters. Sensitivity of 100 mV with full-scale accuracy of ±0.5%. Input resistance, 1 megohm minimum. 60 Hz rejection; 100 dB minimum. Scale width, 2 5/16". Can be used with tear-off or re-roll chart mode, easily interchanged. Standard chart speed 1" per hour (changeable from ½" to 240" per hour by using optonal gear train, listed below). Sturdy case is finished in charcoal gray suede coating. 3⅝x5⅝x6". Furnished with one roll of chart paper. Replacement chart paper listed below (specify "W" prefix when ordering paper). Shpg. wt. 5 lbs.
908-0964.....Each 299.00 4-Up.....Each 239.00

MODEL 3400 DUAL-CHANNEL RECORDER

As above, but two-channel operation. Scale width, 2 5/16" per channel. 6⅝x5⅝x6". Shpg. wt. 10 lbs.
908-0969.....Each 679.50 4-Up.....Each 543.00

MODEL 2144 TEMPERATURE RECORDER



- Range −100°F to +600°F
- Span of 100° to 600°

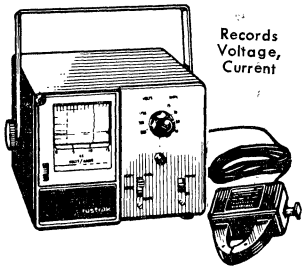
Self-contained temperature recorder utilizing a nickel wire sensor for accurate, high resolution recordings from −100° F. to +600° F. No reference point required, no cold junction compensation or monitoring needed. Span: 100° F minimum; 600° F maximum. Accuracy, +2.5% of span, ±0.5% full-scale. Supplied with probe and 15-ft. extension cable. Specify temperature span within range. 5⅜x3⅝x5⅞". For 105-130 V, 60 Hz AC. Shpg. wt. 7 lbs.
909T0568. 0 to 300° F.....Ea. 244.00 4-Up.....Ea. 195.00
908T0571. 0 to 500° F.....Ea. 244.00 4-Up.....Ea. 195.00
908T0442. Model 304 SST Tubular Probe. Shpg. wt. ½ lb. Ea. 50.50
4-Up.....Ea. 40.50
908-0443. Surface Probe. 3 oz.....Ea. 20.65 4-Up.....Ea. 16.50

ACCESSORY GEAR BOXES

Speeds based on 2 rpm motor. For Model 400 recorder, chart speed equals number indicated multiplied by four. For models with motor speed other than 2 rpm, chart speed equals one-half motor speed (rpm) multiplied by the standard chart speed number shown below.
Each.....6.25

Stock No.	Inches per Hour	Stock No.	Inches per Hour
908-0700	½	908-0725	10
908-0705	1	908-0730	12
908-0710	2	908-0735	15
908-0715	3	908-0740	30
908-0720	6	908-0745	60

MODEL 2113 AC POWER RECORDER



Records Voltage, Current

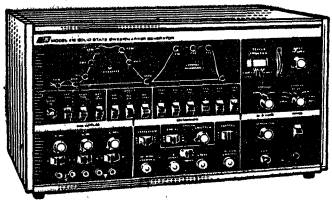
Simultaneously records both current and voltage, with synchronous input switching for one solid and one broken trace. Available with 1 rpm motor only, for a writing speed of alternate strokes every 4 seconds. Two-point recording permits usable chart width of 2 5/16" for each parameter. Voltage ranges: 0-150, 0-300 and 0-600 V. Current ranges: 0-15, 0-30, 0-60 and 0-150 A. Recording accuracy, 3%. Overall, 7¼x5⅝x7½". Clip leads for voltage and clamp-on transducer for current are attached. Includes chart access window and all features of 200 Series chart recorders. For 105-130 V, 60 Hz AC. Shpg. wt. 8 lbs.
908T0496.....Each 269.00 4-Up.....Each 214.00

CHART PAPER—63-FOOT ROLLS

Stock No.	Description	Box of 10
908-0001	Style A, 50 divisions	22.50
908-0002	Style B, 75 divisions	22.50
908-0003	Style C, 65 divisions	22.50
908-0004	Style D, 20-20 div. dual channel	22.50
908-0005	Style EE, 4-8 events	22.50
908-0008	Style H, 40 divisions	22.50
908-0009	Style I, 30 divisions	22.50
908-0010	Style K, 60 divisions	22.50
908-0011	Style N, 50 div. and 1 event	22.50
908-0012	Style Q, for Model 230 current	22.50
908-0013	Style R, for Model 230 voltage	37.50
908-0014	Style A-A, 50-50 divisions	37.50
908-0015	Style A-E, 50 div. and 8 events	37.50
908-0016	Style D-D, 20/20-20/20 (4 channel)	37.50
908-0017	Style 16E, 16 channels event	37.50

Assorted Test Equipment, 477, 478 480-482, 489, 492, 497, 500-502, 510-516

RF Sweep and Marker Generators

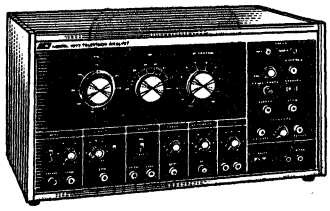


B&K MODEL 415 MARKER GENERATOR

- 11 Crystal-Controlled Markers
- All Solid-State with Dual Gate FET's
- Marker Tilt for Easy Marker Identification

Marker generator features all-solid-state circuitry with dual gate MOS FET's plus 11 crystal-controlled markers that utilize post injection, one additional marker space. Markers may be used simultaneously as four sets of markers on video, RF 4, RF 10, and IF. Modulator marker for trap alignment. Built-in marker tilt shifts marker horizontally or vertically to permit easy identification of markers regardless of slope of the curve. External marker capability. May be aligned from antenna terminals. Pattern sweep and direction can be reversed by switches on the unit.

Also features built-in Zener reference, transistor regulator, and power supply for maximum stability with no drift. Overload protected over bias supplies minimize chance of burnout. Three complete bias supplies designed for both transistors and tubes. Has RF attenuator, RF output of 72 ohms, 300 ohms. 10.7 MHz provides continuous change of markers, 4.5 MHz for TV audio. 15 kHz filter. 9¾x18x12". Direct probe, demodulator probe, leads. AC.
731U0415. Wt. 26 lbs. 1-3...Each 430.00 4-Up...Each 399.95



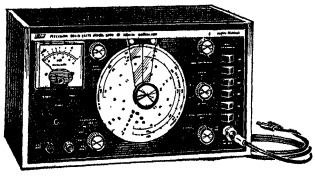
B&K MODEL 1077B TV ANALYST

- Checks Every Stage of TV Receivers
- Provides All Standard TV Test Signals
- Cuts Troubleshooting Time to Minimum

Pinpoint any TV trouble in minutes with this complete analyzer and signal generator. Combines a miniature TV transmitter with a circuit analyzer. Directly injects RF, IF, video or audio signals into any stage of black-and-white or color TV sets. You view result on set's screen—no external scope or waveform interpretation needed. Repair tough dogs, intermittents, and general troubles with this simplified technique. Injects horizontal and vertical sync, plus solid-state and vacuum tube sync and sweep checks.

Outputs: 9 VHF channels, all UHF and video frequencies; 4.5 MHz with 1000 Hz audio for TV sound; sync, video, chroma (low Z for transistor TV sets). Also has outputs for completely analyzing sweep section (horizontal and vertical), output for checking horizontal output transformers and yokes. Generates IF signals of 20-48 MHz for testing IF amplifier stages. Checks for B+ boost and provides high voltage indicator, high level keying pulse and low Z calibrated bias supply. 9¾x18x12". For 105-125 VAC.
731U1077. Wt. 31 lbs. 1-3...Each 420.00 4-Up...Each 389.95

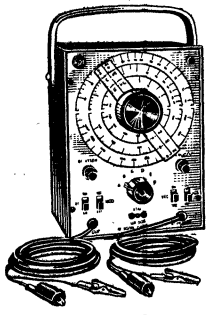
B&K RF SIGNAL GENERATOR



MODEL E200D. Versatile solid-state RF generator features all-silicon-transistor design and zener-regulated power supply for stable, long-life performance. Covers 100 kHz to 54 MHz in 5 fundamental bands, 32 MHz to 216 MHz in 2 harmonic bands. Accuracy, ±1.5% of highest frequency on any range; better than 0.1% with crystal calibrator. 100,000 μv max. output into 50-ohm load. Output accuracy ±1 dB of nominal 54 MHz.

Six shielded step-attenuators, plus a variable fine output-level control with calibrated meter; −96 dB total capability. 400-Hz internal modulation; external modulation sensitivity, 1-V rms for 50% modulation. 100 kHz and 1 MHz crystal calibrator; accuracy, ±0.05%. Detector, amplifier and speaker for calibration. 12¾x7¼x8". AC.
731-0200. 1-3. Ea 172.00 4-Up Ea. 159.95

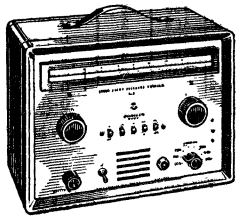
RCA SWEEP AND MARKER GENERATORS



SIGNAL GENERATOR WITH SWEEP

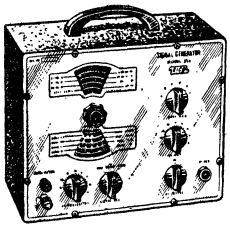
Fundamental Output from 85 kHz to 40 MHz in Six Ranges

MODEL WR-50B. For alignment and signal tracing of AM, FM, hi-fi, TV and CB receivers. Provides fundamental frequencies from 85 kHz to 40 MHz in six overlapping ranges; sweep output at 455 kHz and 10.7 MHz, and 400-Hz audio output. Sweep output permits a continuous oscilloscope display of IF bandpass characteristics. Vernier tuning for precise frequency setting. Dial accuracy, ±2%. RF output can be modulated with internal 400-Hz signal or with external audio signal. Two-step RF attenuator switch plus variable attenuator control. Modulation level control. RF output on all ranges, 0.05 V rms min. Crystal calibrator, front-panel crystal socket and attenuator switch. 7¾x5⅜x4¾". AC.
901-4050. Wt. 10 lbs. 1-3.....Each 76.00
4-Up.....Each 72.00



CRYSTAL-CALIBRATED MARKER GENERATOR

MODEL WR-99A. Combines functions of multiple marker generator, heterodyne frequency meter, and crystal calibrator in one instrument. Supplies fundamental RF carrier of crystal accuracy for aligning and troubleshooting TV and FM receivers. Continuously tunes 19 to 260 MHz in 8 expanded ranges. Built-in 4.5-MHz crystal for accurate alignment of intercarrier IF amplifiers and discriminators. Gives calibrating beats at 1 MHz or 10 MHz intervals throughout tuning range. Precision matched L/R pad attenuator, 0-60 dB in 5 dB steps. Triple markers for sound-IF alignment, bandwidth checks. At least 0.1-V output in VFO range; 0.05-V crystal. Metal case, 13½x10x7"; handle. AC.
901U4099. Wt. 21 lbs. 1-3....Each 277.00
4-Up.....Each 256.50

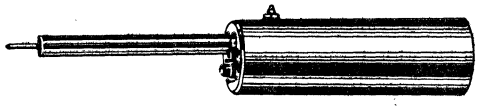


EICO MODEL 324W RF SIGNAL GENERATOR

- 150 kHz to 435 MHz in 7 Bands
- Variable Internal or External Modulation—RF Attenuators

Expanded frequency range, covering 150 kHz to 145 MHz in six fundamental bands. One harmonic band covers 111 to 435 MHz. Has 400-Hz sine wave output, variable 0-50%; also takes external modulation sources. Single control for internal or external modulation. Coarse and fine RF attenuators provide smooth control of RF output signal. Accuracy: ±1.5%. Has 6:1 vernier tuning dial for exact frequency settings. 8x10x4¾". 115 VAC. Shpg. wt. 8 lbs.
775-0324. 1-3.....Each 52.00 4-Up.....Each 47.95

MICRONTA HAND-HELD SOLID-STATE SIGNAL GENERATOR/PROBE/INJECTOR



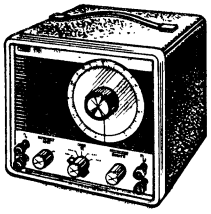
MODEL 22-4032. Handiest little tester you may ever own; perfect for signal tracing in the field. It's an all-purpose signal generator with built-in signal-injection probe for quick and easy tube or transistor-circuit troubleshooting. Produces signals for tracing in AF, IF and RF circuits. Simple pushbutton operation. Has battery-strength indicator lamp. Size, 5" long x 1⅝" diameter (less probe). Complete with batteries.
910-4382. Shpg. wt. ½ lb.....Each 3.49

Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

Sine and Square Wave Audio Generators

ASSORTED TEST GEAR

EICO AUDIO GENERATORS



Model 379W

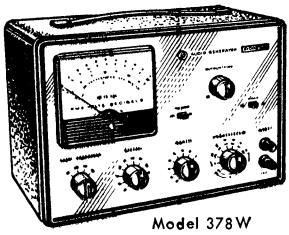
SOLID-STATE AUDIO GENERATOR

- Covers 20 Hz to 2 MHz in 5 Bands
- Square Wave Output, 20 Hz to 200 kHz
- 0 to 7½ Volt Variable Sinusoid Output

MODEL 379W. Precision-made, dependable solid-state audio generator produces simultaneous sine and square wave outputs; ideal for checking hi-fi amplifiers and transducers, and for testing sonar apparatus. Sinusoidal output is variable from 0 to 7.5 volts into a high-impedance load; output of 6.5 volts into 600-ohm load. An excellent choice for the demanding audio technician, where testing reliability is essential.

Covers frequency range of 20 Hz to 2 MHz in 5 bands; output level of ±1 dB, except ±2 dB on the highest band. Square wave output from 20 Hz to 200 kHz, 0-10 volts p-p; rise time less than 0.1 μsec at 20 kHz. Offers excellent accuracy: ±3% from 100 Hz to 1 MHz. Size, 7½x8½x8½". For 105-132 V, 50/60 Hz AC. Shpg. wt. 9 lbs.

775-0380. 1-3.....Each 108.00
4-Up.....Each 99.95



Model 378W

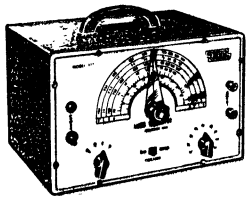
DELUXE AUDIO GENERATOR

- Switch Selectable Frequency
- Output from 1 Hz to 110 kHz
- No Dial Settings to Interpret

MODEL 378W. Provides low-distortion sine wave output from 1 Hz to 110 kHz. Detent switches select 1 Hz, 10 Hz, 100 Hz and 1 kHz steps. Offers very low distortion (less than 0.1% from 20 Hz to 20 kHz) and excellent frequency accuracy of ±5%. The positive-setting detent switches select combinations of 1% resistors and 2% capacitors for precise metered output, controlled by 8-position decade and fine attenuators. Excellent repeatability; no settings to interpret.

Output level can be set with great precision from 0 to 10 volts rms (or between −70 and +22 dB) on the easy-to-read 4½", 2% full-scale accuracy meter. Below 1-V rms output, switch-selected internal 600-ohm load can be disconnected as desired. Size, 8½x12x9". For 117 VAC. Shpg. wt. 16 lbs.

775X0378. 1-3.....Each 108.00
4-Up.....Each 99.95



Model 377W

SINE/SQUARE WAVE GENERATOR

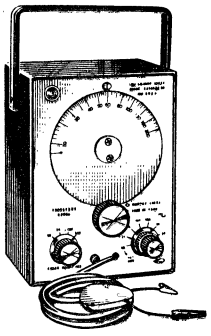
- R-C (Wien Bridge) Oscillator Circuit Using 1% Precision Resistors
- Excellent Calibration Accuracy

MODEL 377W. Offers pure waveform and excellent stability, with choke filtering in the power supply to minimize hum level, high power output over a wide range of loads, constant output over a wide frequency range. Sine-wave range: 60-30,000 Hz in 4 bands. Square-wave range: 60-30,000 Hz in 4 bands (5% tilt at 60 Hz, 5% rounding at 30,000 Hz). Response: ±1½ dB, 60 Hz to 150 kHz. Output: 10 volts across 1000 ohms rated (100 mW); drops to 8 volts across 500 ohms, rises to 14 volts across 10K ohms or higher.

Wien Bridge oscillator with 1% resistors. Calibration accuracy: ±3% or 1 Hz, whichever is greater. Hum: under 0.4% of rated output. Distortion: less than 1%. 6½" dial. Aluminum panel; gray wrinkle steel case. 7⅛x11⅛x7⅝". 117 VAC. Shpg. wt. 14 lbs.

775X0376. 1-3.....Each 68.00
4-Up.....Each 64.95

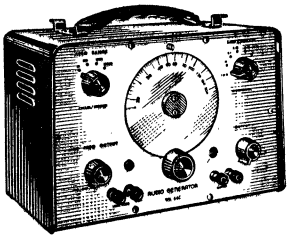
RCA SINE/SQUARE WAVE GENERATORS



SINE/SQUARE WAVE GENERATOR

MODEL WA-504A. Precisely designed for use in audio, high-fidelity, and general-electronics applications as well as in electronics training, demonstrations, and laboratory work. Generates sine/square waves from 20 Hz to 200 kHz in four ranges. Stable, solid-state circuit including MOS FET oscillator. Essentially flat output voltage—±1.5 dB, 30 Hz to 100 kHz. Sine wave output voltage. 10 volts rms or more into rated load. Distortion: 0.25% or less over entire audio frequency range. Has front panel switch-selection of sine or square wave output; 10-1 step attenuator with continuously adjustable output control. Easy-to-read single scale dial. Square wave output voltage: 10 volts p-p. Rise Time, less than 1.0 μsec. Tilt, less than 5.0%. Rugged metal case, 7¾x5⅜x4⅜". AC.

901-1504. Wt. 4 lbs. **1-3.....Each 102.00**
4-Up.....Each 95.00

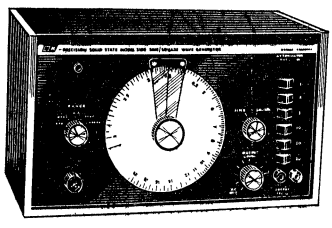


SINE/SQUARE WAVE GENERATOR

MODEL WA-44C. A precision laboratory instrument meeting today's rigid requirements for testing modern electronic equipment. Provides low-distortion waves for measuring frequency response, finding L-C combinations and impedance of loudspeaker enclosures, many other uses. Covers a range of from 20 Hz to 200 kHz, making it also useful for testing supersonic equipment. Accurately factory calibrated in four ranges of either sine or square waves. Produces a highly stable signal with an amplitude variation of not more than ±1.5 dB for 30 Hz to 100 kHz. Total harmonic distortion is less than 0.5% for the entire audio frequency range. Output is 8 volts rms maximum with rated load. Square waves have less than 5% tilt. Has separate 60-Hz output for intermodulation distortion measurements. Stable bridged "T" oscillator with cathode follower outputs. 10:1 step attenuators plus continuously variable level control. Steel cabinet, 7x10¹¹⁄₁₆x6⅛". AC.

901U1044. Wt. 12 lbs. **1-3....Each 106.00**
4-Up.....Each 98.50

B&K SINE/SQUARE WAVE GENERATOR



- FET Oscillator, Silicon Transistors
- Zener Regulated for Utmost Stability
- 20 Hz to 2 MHz in 5 Decade Ranges

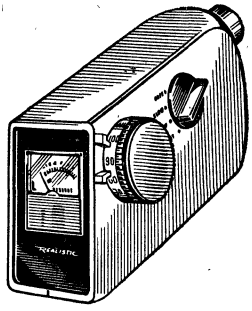
MODEL E310B. All-solid-state generator provides 0-8 volts rms output into hi-Z load; 0-7 volts rms into 600 ohms (±1 dB to 1 MHz, ±2 dB to 2 MHz). Distortion: 0.1% typical, with maximum of 0.25%. Rise time: less than 100 nsec at 20 kHz. Symmetry, balanced within 5% or less. Frequency calibration accuracy, ±2% from 100 Hz to 2 MHz; ±2% or 1 Hz, below 100 Hz. Step attenuators have total capability of −56 dB; accuracy, ±5% into 600 ohms. Continuously variable output control adjusts output down to less than .025 mV in conjunction with attenuators. Fully shielded. Easy-to-read 5" dial with 12:1 gear ratio. 12¾x7¼x8". 3-wire cord. AC. Shpg. wt. 12 lbs.

731-0310. 1-3.....Each 129.00
4-Up.....Each 119.95

Chart Recorders, 499, 506-509—Multimeters, VOM'S, VTVM's, 480-499—Scopes, 503-505

Sound Level Meters, Signal Tracers, Test Equipment

REALISTIC LOW-COST MUSIC/SOUND LEVEL METER



39.95

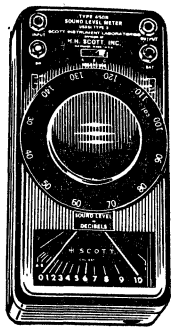
- Adjusts for Perfect Stereo Balance
- Protects Your Ears From Damage
- Designed for All-Purpose General Use
- Lowest Priced Meter in its Class

Now, for the first time, at the lowest price ever offered, you can protect your ears and see how loud today's modern "rock" music really is with this precision-made Realistic Music/Sound level meter. Lets you measure music or intensity-of-noise levels, easily and accurately. Perfect for use in the home, office or factory—indoors or out. Its operation resembles voltmeter tests, but the readings are industry-wide standard decibel form.

Test range is from 60 to 116 dB, or from quiet room level to ear-damaging noise level. Each instrument is individually calibrated to ±2 dB at a 74 dB level. Frequency response is ±2 dB over 40 to 14,000 Hz, and the meter can provide a high-fidelity output voltage at 1-volt minimum from a miniature phone jack. Its meter ballistics are ASA Standard fast; or slow for average readings. Exclusive all-silicon solid-state circuit uses a 2U6 standard transistor battery (order below). Rugged case is precision shaped to minimize sound reflections. Size: 7¼x2¾x2½".

910-4028. Shpg. wt. 3 lbs. **39.95**
910-5112. 9-Volt Battery. Shpg. wt. 3 oz. ..... **Each .35**

SCOTT MODEL 450B BATTERY-POWERED SOLID-STATE SOUND LEVEL METER



Approved—ANSI Standard S1.4—1971 for Type 3 Sound Level Meter

Pocket-size transistorized sound-level-meter, has a wide variety of applications. Can be used to survey noise areas for possible ear damage (in compliance with Walsh-Healy and Federal Safety and Health Regulations), to estimate frequency response characteristics of speakers and rooms, to measure level and dispersion patterns of PA and theater sound systems, meaningful test results in various fields of music, industry, automobiles, home machinery and noise nuisance problems, classrooms, acoustics experiments, many more.

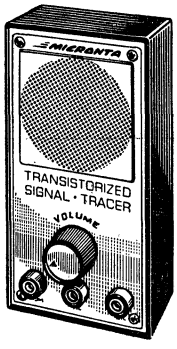
Compact, silicon solid-state design allows thousands of readings from one 30-volt battery. Has extremely wide operating range: from 26 to 141 dB sound level. Standard A, B, C weighting. Rugged, heavy-gauge aluminum case, perfect for field use. Has direct-reading scale with step-type attenuator for extra convenience, built-in microphone with input jack for extension mic or vibration pickup, monitoring output jack, and 2½" 2-speed taut-band meter for the most accurate readings.

Completely non-microphonic—no spurious readings. Calibrates on 110-120 volt AC. Convenient battery check button. Uses Burgess U-20, Eveready 413, or equivalent 30-volt battery. Measures 6x3x2". Accessories include leather carrying case and safety wrist strap. Order Vibration Measuring Accessory (optional) below. Shpg. wt. 4 lbs.

949-1150 ..... **Each 250.00 4-Up** **237.50**
949-1130. Model 450X3 Vibration Measuring Accessory.
Each ..... **27.50 4-Up** **25.00**

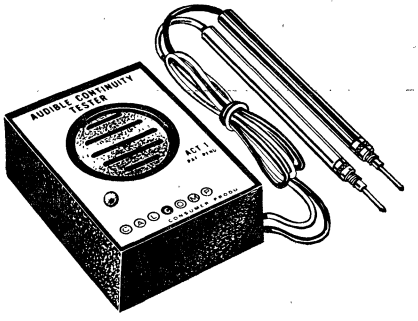
MICRONTA SOLID-STATE SIGNAL TRACER... SPOTS TROUBLES QUICKLY

8.95 Finds Trouble by Checking Signal Stage by Stage



MODEL 220010. Signal tracer, determines how signal passing through radio receiver, amplifier, other equipment handled by various circuits; any stage or circuit mishandling signal creates distortion. Easy to use. Complete with adjustable volume control, 9-V battery, leads, instructions. Measures 11½x5⅝x2".
910-4510. Shpg. wt. 1 lb. **8.95**

CALCOMP MODEL ACT-1 AUDIBLE CONTINUITY TESTER

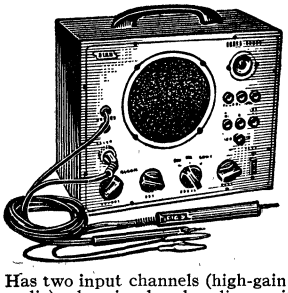


- Eliminates Visual Check
- Safe for Semiconductors, Delicate Circuits
- Draws Only Six Milliamperes at Test Probes
- Low Voltage—No Danger of Destructive Inductive Kickback

Fully self-contained and portable audible continuity tester ideal for servicing radio, TV, hi-fi, other electronic equipment. Excellent for use on production lines, intercom systems. Indicates circuit continuity with clear audible tone—eliminates the need for visual checks. Pitch varies with resistance (0 to 50 ohms). Unique short-circuit measurement draws just 6 mA at probes. Safe for use, even with semiconductors, other delicate circuits. 30" test probe leads. Uses 9-volt battery. 3¾x2¾x1⅜". 8½ oz.

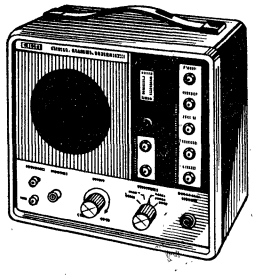
759-0801. 1-9 ... Ea. 9.95 10-24 ... Ea. 8.25
25-99 ..... Ea. 6.95 100-Up . Ea. 5.97

EICO PROFESSIONAL-QUALITY TEST EQUIPMENT



DELUXE 147W SIGNAL TRACER

Has two input channels (high-gain RF and audio); also visual and audio monitors (eye tube and 5" speaker). Noise locator, wattmeter. VTVM/Scope output. Measures 9x10x5". For 117 VAC.
775-0147. Shpg. wt. 10 lbs. .... **Each 64.00**
4-Up **59.95**



MODEL 150W SIGNAL TRACER

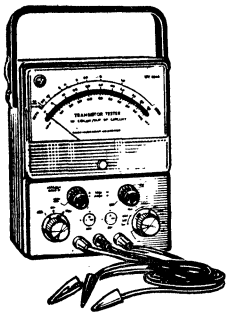
RF and audio inputs with probe, 400 mw continuous power output. Speaker and calibrated meter output indicators. Substitution amp, output transformer, speaker. 105-132 VAC. 7½x8½x5".
775-0150. Shpg. wt. 6 lbs. ..... **Each 75.00**
4-Up **69.95**

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's 480-499—Scopes, 503-505

Transistor and FET Testers

ASSORTED TEST GEAR

RCA

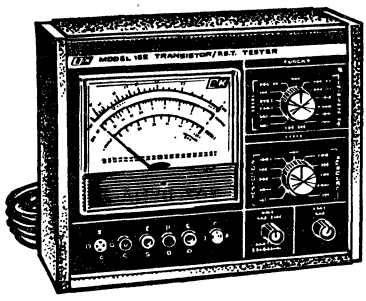


IN-CIRCUIT TRANSISTOR TESTER

MODEL WT-501A. Compact, lightweight, completely portable. Tests high and low-power transistors both in and out of circuit. Checks DC Beta from 1 to 1000, collector-to-base leakage (I_{CBO}) down to 2 μA, collector-to-emitter leakage (I_{CEO}) from 2 μA to 1 amp. Collector current adjusts from 20 μA to 1 amp (in 4 ranges) to allow testing most transistors at their rated current level. Special low-impedance circuit assures reliable in-circuit testing of transistor current gain. Front-panel NPN and PNP sockets for convenient matching in complementary symmetry applications. Tests relative front-to-back ratio of diodes at appropriate current levels. Three color-coded test-leads facilitate in-circuit testing. 100-μA movement. Size, 6⅞x5¼x3⅛". With batteries, leads. Shpg. wt. 4 lbs.

901-4501...Ea. 73.00 4-Up...Ea. 68.00

B & K

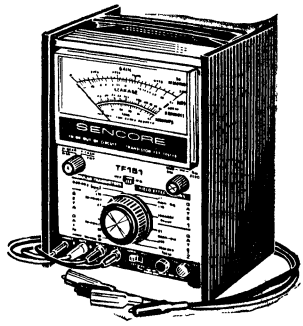


NEW TRANSISTOR AND FET TESTER

MODEL 162. Test diodes, unijunctions, SCR's and Triacs. Extremely easy to operate. Go-no-go test instantly tells if device is cause of defect. Unique DC injection provides more accurate in-circuit tests. Three transistor leakage tests: I_{CBO}, I_{CEO}, I_{CES}. Special circuit permits balancing out as low as 6 ohms circuit imp. for incircuit Beta test. Up to 1 amp current capability for testing power transistors and power FET's. Correct Beta reading from 1-5000. Front panel sockets for conventional and FET transistors. Separate checks for Gate 1 and Gate 2 of dual gate FET's. Provides instruction on Go-no-Go conditions for Beta and leakage. Eliminates need for bulky transistor reference manuals. 4¾" meter. Steel case with hidden handle and storage space for leads. Batteries. Shpg. wt. 9 lbs.

731-0162..Ea. 112.50 4-Up.....Ea. 99.95

SENCORE



TRANSISTOR AND FET TESTER

MODEL FT151. In-or-out circuit transistor and FET tester employs the proven signal injection method on transistors as on earlier models, but also test all field effect transistors with a simple flip of the large function control. Checks transistors with high accuracy. Special test for critical RF transistors (GE9s, etc.) plus a true Gm mutual conductance test for all FET's. Also checks FET's out-of-circuit for I_{GSS} leakage. Provides special I_{DSS}. (zero bias) current checks for matching or "culling"; positive bias test. Includes reference book with all necessary testing information. Has large 6" meter for easy reading and accuracy. Size: 9½x7½x6". Batteries. Shpg. wt. 9 lbs.

949X2341..Ea. 139.00 4-Up..Ea. 129.50

MICRONTA

- Go/No Go Test
- Quick, Reliable
- Test In Circuit

DYNAMIC TRANSISTOR CHECKER

MODEL 22-024. Handy test instrument shows open and short circuits, current gain. Test all low, medium and high power transistor types in or out of circuit. Quick-check front panel allows fast, sure testing. Tests both PNP and NPN transistor types, also diode. Ideal for experimenters, hobbyists, do-it-yourselfers and radio-TV servicemen. Supplied with clip leads. Size: 6¼x3x2½". Shpg. wt. 2 lbs.

910-4524.....9.95

EICO

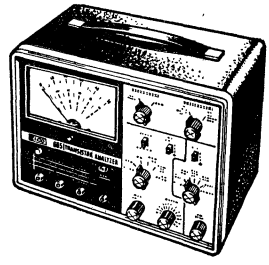
- Accuracy ±2%
- 3½" Meter Scale
- Test In Circuit

TRANSISTOR CHECKER AND VOM

MODEL 680W. Transistor/circuit tester and VOM measures basic transistor and diode characteristics. Ranges: DC volts: 0-5-50. DC current: 0-50-500 μA—0-5-50-500 mA. Resistance: 0-2-200k ohms, 0-20 megs—center scale at 12, 1200, and 120K ohms. 20,000 ohms/volt DC sensitivity; 50 μA movement. 3½" scale. Accuracy: ±2%. Size: 3x5¼x6¾". Uses 1—C and 4—AA batteries. Less batteries. Shpg. wt. 3 lbs.

775-0608.....Ea. 59.00 4-Up....Ea. 54.95

EICO



SEMI AND CIRCUIT ANALYZER

MODEL 685. Test can be made on Unijunction transistors, silicon-controlled rectifiers, power rectifiers, signal diodes, Zener diodes, FET and Bipolar Transistors. Taut Band meter for accurate readings and sensitivity to make proper leakage measurements. AC Beta (in- and out-of circuit) 2-100 and 2-1000 at I_C 20 ma for power devices. I_{CBO} 0-5 ma (30 μa center scale); Size: 12½x8½x6". 115 VAC, 60 Hz. Shpg. wt. 4 lbs.

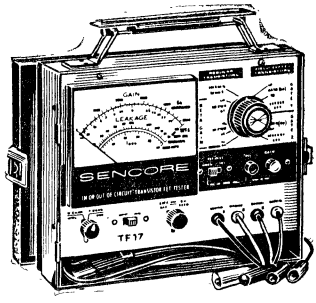
775X0685..Ea. 161.00 4-Up..Ea. 149.95

SENCORE COMPACT IN-OR-OUT-OF-CIRCUIT TRANSISTOR AND FET TESTER

- **Tests Regular and Field-Effect Transistors Easily, Quickly, Accurately**
- **Rugged Construction and an All-Steel Case Let You Take Tester Anywhere**

MODEL TF17. Versatile tester is compact, lightweight, and reliable—makes servicing of solid-state equipment a breeze. Tests regular and field-effect transistors completely and accurately. Built for long, rugged service and the rigid requirements for servicing today's solid-state equipment. Makes all tests for thoroughly determining transistor condition. Tests FET's for true Gm gain in micromhos. Tests regular transistors for AC current gain in Beta. Checks leakage of FET's I_{GSS} and regular transistor's I_{CBO} in actual microamps. Has separate test for high-power transistors to pick out those troublesome output transistors requiring a heavy-duty test. Separate test for special RF transistors that may have been missed before. Special I_{DSS} current check for industrial culling and absolute matching of all FET's. Big 4½" meter. Vinyl-clad steel case, 9½x7¾x3¾". With manual. 115 VAC 60 Hz. Shpg. wt. 7 lbs.

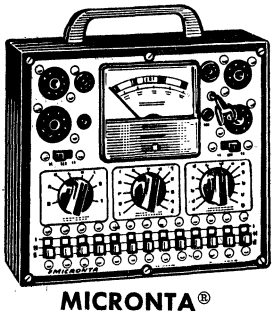
949X2450..Ea. 118.00 4-Up..Ea. 109.50



Panel Meters, 464-476, 479—Digital Test Equipment, 464-466, 480-482

ASSORTED TEST GEAR

Famous-Make Tube Testers for Industry

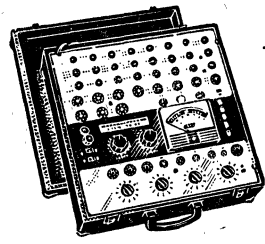


MICRONTA®
COMPACT 22-012
GENERAL-PURPOSE TUBE TESTER FOR PORTABLE OR BENCH USE

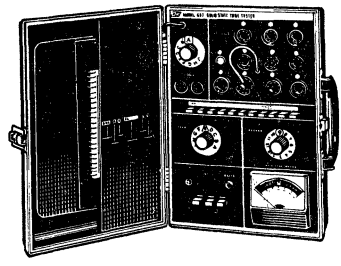
39.95
- Tests Over 1500 Types
- Color-Scale Meter
- D'Arsonval Movement

Indispensible for the serviceman or technician. Compact, highly reliable unit tests more than 1500 tube types for emission, shorts, leakage, filament continuity. Checks seven and nine-pin miniature, octals, loctals, standard 10-pin, compactrons, nuvistors and novars. Precision D'Arsonval movement, double-jeweled meter shows tube condition on two-color scale. Excellent for portable or bench operation. Large tube data chart included. Overall dimensions, 8⅜x 7¼x8⅜". For 105-125 volts, 50-60 Hz AC.

910-4512. Wt. 4 lbs.....Ea. 39.95



Accurate, Fast Tube Testing . . Easy to Use and Especially Designed for Long Life



B&K 707 DYNA-JET
MUTUAL CONDUCTANCE TUBE TESTER

- Checks Radio, TV, Industrial Tubes
- Obsolescent-Proof Switching Section

High-accuracy tube tester for a wide variety of commercial and industrial applications. Features multiple-socket plug-in and check section, plus obsolescent-proof switching section for accommodation of new tube types. Tests radio and black-and-white and color TV tubes, voltage regulator, thyratrons, auto-radio hybrids. European hi-fi and industrial tubes, nuvistor, novars, both types of 10-pin tubes, 12-pin compactrons and more.

Checks each section of multi-section tubes individually. Single-button makes complete test for inter-element shorts automatically. Adjustable grid emission, gas and grid-cathode leakage are tested at sensitivity of over 100 megohms.

Life test predicts probable future tube failures. Large 4½" meter has "Replace-?-Good" scale. Portable carrying case measures 16⅛x15¾x5⅞". Operates on standard AC. Shpg. wt. 16 lbs.

731U0707..Ea. 219.95 4-Up..Ea. 209.95

B&K 607 DYNA-JET
HIGH-SPEED TUBE TESTER

- Indicates Shorts for Any Tube Tested
- Does Exclusive Grid Leakage, Gas Tests

Brings new economy and operating convenience to shop or test lab. The only tube tester in its price class that gives positive "shorts" indication in any tube being tested. Positively detects all shorts regardless of pin connections while it eliminates all false shorts.

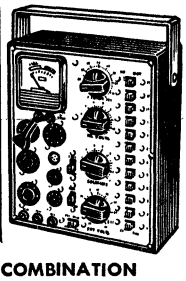
Provides ten lockout pushbuttons that can open any and all multiple-connected pins in any tube under test. Reset button clears all lockouts. Testing is fast and easy due to convenient shape-coded symbols that match controls to chart and a minimum number of settings—only three or four.

Tests newest tube types plus all older types used in TV and radio. Also tests thyratrons, auto radio hybrids, imported hi-fi tubes and many industrials and specials. Solid-state. Sets up quickly and easily. "Computer styled" attache-type case, 13½x9½x4". With special chart and holder. AC. Shpg. wt. 8 lbs.

731-0607...Ea. 123.00 4-Up..Ea. 119.95

POPULAR EICO FACTORY-ASSEMBLED TEST EQUIPMENT

Compact
Portable
3-in-1
Tester
Checks Tubes,
Batteries
and Continuity



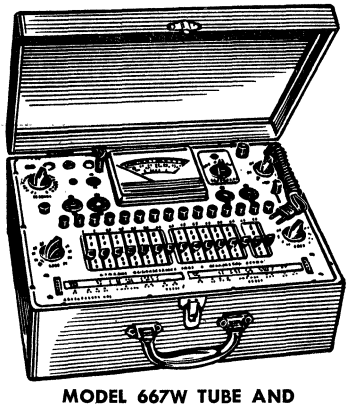
MODEL 636W COMBINATION TUBE/BATTERY/CONTINUITY TESTER

Advanced design, highly versatile portable 3-in-1 combination tester checks tubes, batteries and continuity to make it extremely useful as a general-purpose instrumony for the technician or hobbyist. Quick-tests over 800 modern TV, radio and Hi-Fi tubes for cathode emission, leakage, shorts, opens and intermittents. Built-in sockets for octals, loctals, 7 and 9-pin miniatures, novars, nuvistors and compactrons.

Has 3-color Good/Replace scales; "Good/No-Good" continuity test; neon-lamp short indicator. Also tests, under load, commonly used batteries from 1.5 to 90 volts in 11 ranges. Front panel has simplified control system and is arranged for best efficiency and quick, easy tests. Has many deluxe features not expected at this moderate price—performance surpasses many testers priced much higher. You'll get dependable service from this quality instrument.

Handsome, bakelite case is really durable. Convenient compact size, measures only 8⅝x7½x3⅛". Metal carrying handle. Tube-data manual and operating instructions included. AC. Shpg. wt. 4 lbs.

775-0636....Ea. 48.00 4-Up...Ea. 44.95



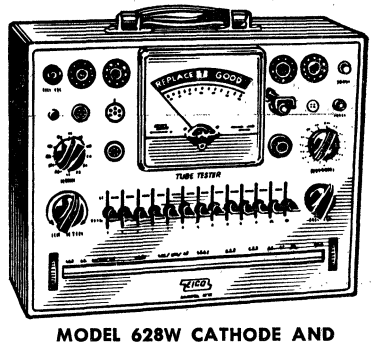
MODEL 667W TUBE AND TRANSISTOR TESTER

Combines mutual conductance (Gm) and plate conductance (Gp) tests into dynamic and peak emission tests to give single reading of tube quality. Spots bad transistors by gain and leakage tests. Checks nuvistors, novars, compactrons, miniatures, subminiatures, octals, loctals. Also special purpose tubes, VR's, cold cathode regulators, and electron-ray indicators. Has multicircuit lever switch, 12 tube-element switches. Easy-to-read 4½" D'Arsonval meter with 200 μA sensitivity. Roll-chart for fast, easy test setups. Dimensions, 4½x15x12". Latching cover on attache-type case with carrying handle. For 105-135, 50-60 Hz AC operation. Shpg. wt. 23 lbs.

775U0667..Ea. 161.50 4-Up..Ea. 149.95

Model CRU CRT Adapter. For cathode ray tube test. For Models 667W, 628W testers. Shpg. wt. 1 lb.

775-1701....Ea. 10.60 4-Up.....Ea. 9.95



MODEL 628W CATHODE AND CONDUCTANCE TUBE TESTER

- Tests Latest Tube Types
- Easy-to-Read 3-Color Scales
- Roll-Chart for Quick Setups

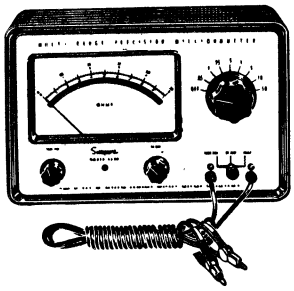
A high-quality cathode conductance tube checker with 12 individual-element lever switches for independent settings for all tube pins. Tests 5-pin nuvistors, 7-pin nuvistors, 7-pin miniatures, octals, loctals, combination 8 and 10-pin miniatures, combination novar and pilot light, compactrons. Big 4½" meter has numerical and 3-color scales. "Speed-roll" 3-column roll chart gives settings, simplifies findings and reading test data.

Each active tube element can be connected by 3-position lever switches to plate, screen, grid, filament voltage, ground. Makes inter-element short and continuity tests. Has line voltage adjuster; pin straighteners for 7 and 9-pin miniatures; circuit overload lamp. Overall dimensions, 9½x12½x4¼". For 105-135 VAC. Shpg. wt. 11 lbs.

775-0628....Ea. 86.00 4-Up...Ea. 79.95

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's 480-499—Scopes, 503-505

Resistance and Capacitance Testers



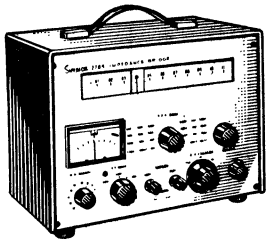
SIMPSON MULTI-RANGE PRECISION MILLIOHMMETER

MODEL 1699. Designed for precise measurement of low resistance values. Checks contact resistance of relays, switches, and other electrical components during inspection and production. Makes resistance measurements of motor commutators, slip rings, coils, automobile cables, connectors, and starting motor leads.

Battery-operated for portability. Temperature-compensated. Shielded meter has spring-load sapphire jewels. Sensitivity: 0.001 ohm (smallest scale division). Accuracy: ±1% for full scale on all ranges. Ranges: 0.05-0.1-0.25-0.5-1-5-10-50 ohms.

Readout: 7" analog meter, single arc, 90° dial; mirrored, 100-division linear scale, knife-edge pointer. Transistors: two 2N2716. Complete with Kelvin-type clip test leads, manual, and batteries. Size, 11⅜x7⅜x 3¼". Shpg. wt. 9 lbs.

919T1699..Ea. 189.00 4-Up..Ea. 175.00



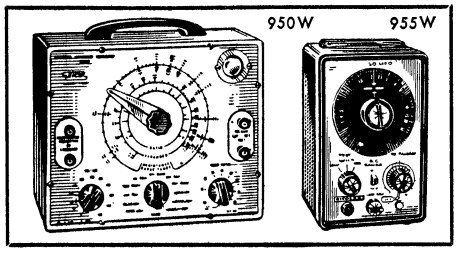
SIMPSON IMPEDANCE BRIDGE

MODEL 2785. Precision multi-purpose bridge for accurate measurements of capacitance, inductance, resistance and "Q." For development labs, incoming inspection of components, production line testing and adjustment, classroom demonstrations. Long slide rule dial permits fast and easy measurements with high accuracy.

Built-in oscillator operates at standard 1 kHz test frequency. Frequencies from 50 Hz to 20 kHz may be used with external oscillator. Coverage: resistance, 0.05 ohms to 11 meg. Accuracy, ±1.0%, ±2.5% on lowest and highest ranges. Inductance, 0.5 μH to 110 H. Accuracy, ±1.5%, ±2.5% on lowest and highest ranges. Capacitance, 5 pF to 1100 μF. Accuracy, ±1%, ±2.5% on highest range. Tan d and Q measurements: Q x 1, tan d x 0.01, tan d x 1. Accuracy, ±5% full scale. Front panel controls for all tests.

Test voltages: DC on resistance ranges, 1 kHz (with internal generator) for inductance and capacitance. Uses two 9V batteries. Metal case, 11¹³⁄₁₆x8⅝x6¹¹⁄₁₆". With batteries, leads, detailed manual. 12 lbs.

919T2785..Ea. 377.00 4-Up..Ea. 350.00



EICO R-C BRIDGE

MODEL 950W. R-C Bridge/R-C-L Comparator reads 0.5 ohm to 500 meg and 10 pF to 5000 μF (in 4 ranges). Has .05-20 comparator range. Variable 0-500 VDC source tests capacitors for shorts and leakage. Also measures power factor of electrolytics. Less leads. 8x10x4¾". 115 VAC. 10 lbs.

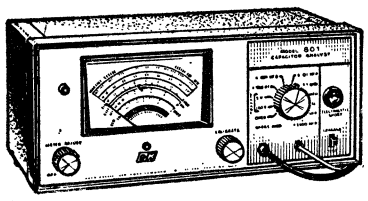
775X095Q...Ea. 48.50 4-Up...Ea. 44.95

EICO BRIDGE-TYPE CAPACITOR TESTER

MODEL 955W. Tests capacitors for shorts, opens and value, in or out of circuit. Short test: up to 2000 μF, with shunt resistance as low as 1 ohm; maximum test voltage, 6.3 VAC (open leads), decreasing with decreasing impedance. Won't damage low voltage electrolytics. Open test made on capacitors as low as 15 pF. Capacity measurement: from 0.1 to 50 μF in or out of circuit, with Wien bridge circuit; shunt resistance as low as 35 ohms. Uses one coax lead for all tests; mike connector coupling. 8½x5¾x6". Less leads. 115 VAC. Shpg. wt. 6 lbs.

775-0955....Ea. 48.50 4-Up...Ea. 44.95

B & K CAPACITOR ANALYST

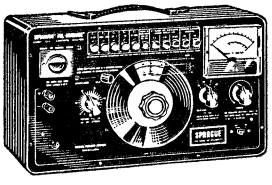


- Out-of-Circuit Test for Energy & Capacitance
- Tests In-Circuit or Out for Leakage, Shorts, Opens

MODEL 801. Designed for quick and accurate testing of foil, mica, ceramic and electrolytic capacitors. Tests electrolytics out-of-circuit for energy storage and effective capacitance, up to 2000 μF. Measures capacitance from 25 pF to 100 μF; values read on scale. Tests in-circuit or out-of-circuit for leakage, with direct reading up to 50 megohms; shorts, 10 pF to 2000 μF (low as 25-ohm shunt); opens (low as 50-ohm shunt) down to 25 pF. Polarity protected circuitry guards against reverse voltages. Line isolated power supply; overload protected meter movement. Attractive gray metal case. 5½x12¾x6¾". 117 VAC. Shpg. wt. 11 lbs.

731 U 0801.....Each 127.95 4-Up.....Each 119.95

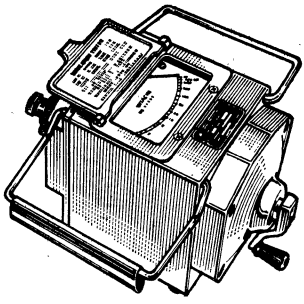
SPRAGUE TEL-OHMIKE CAPACITOR ANALYZER



- Low Bridge Voltage
- Low 1 pF-100 pF Range
- Tests Leakage up to 600V
- Checks Power Factor
- Checks Insulation Resistance of Paper, Micas, Ceramics

MODEL TO-6. For lab accurate checks of all capacitors. Five overlapping ranges of Wien bridge measure up to 2000 μF, with low-capacity 1 pF to 100 pF range. Low bridge voltage, 1.35 for electrolytics; 2.85 for others. Checks insulation resistance of paper, micas and ceramics in 2 ranges, 10k meg and 50k meg. Tests leakage at up to 600V, with leakage current in 4 ranges: 0-0.06-0.6-6-60 mA. Checks power factor to 50%. Also: overload protected meter; magic eye tube for bridge balancing; pushbutton range selectors. Rugged metal case with convenient carrying handle. 8⅞x14⅝x6⅛". For 110-120 V, 50-60 Hz AC. Wt. 16¾ lbs.

926 U 9000.....Each 160.00 4-Up.....Each 149.50



HITACHI INSULATION TESTERS

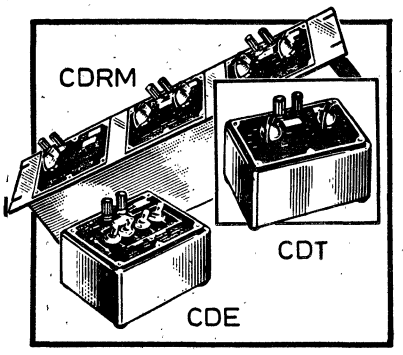
- Choice of Models with Voltages to 2500, Megohms to 10,000
- Construction Conforms to JISC-1301
- For Bench and Field

TYPE E17. Precision testers for measuring insulation resistance accurately and easily. Quickly locate intermittent shorts, bad electrical connections, insulation breakdown, conductor failures due to wear, moisture, corrosion, etc. Insulation resistance is hand calibrated directly in megohms. Readout of insulation leakage from 5 ohms to 10,000 megohms. Cross-coil ohmmeter provides accurate readings, with automatic compensation for voltage and current variations. DC voltage outputs from 100 VDC to 2500 VDC. Rigid construction conforms with JISC-1301. Made of light alloy castings and special seals, protecting instrument against dust, moisture, vibration, shock, impact, and external magnetic fields. The design of this tester makes it an indispensable tool for the electrician and electronics technician for checking insulation and conductance, locating short circuits, etc. Shpg. wt. 6 lbs.

Stock No.	Mfr's Type	Voltage	Resistance	EACH 1-3	EACH 4-Up
808-0502	E-17-02	100V	20 Megs	178.00	165.00
808-0504	E-17-04	250V	50 Megs	188.00	175.00
808-0506	E-17-06	500V	100 Megs	232.00	220.00
808-0507	E-17-07	500V	1000 Megs	242.00	225.00
808-0508	E-17-08	1000V	2000 Megs	296.00	275.00
808-0509	E-17-09	1000V	2000 Megs	296.00	275.00
808-0511	E-17-11	2000V	5000 Megs	377.00	350.00
808-0512	E-17-12	2500V	10,000 Megs	485.00	450.00
808-0513	E-17-13	500V/ 250V	100 Megs/ 50 Megs	323.00	300.00
808-0514	E-17-14	250V	50/10 Megs	323.00	300.00
808-0515	E-17-17	Leather Carrying Case/ 12-ft. Connector Leads		32.50	30.00

Resistor-Capacitor Substitution Boxes, Decades

CDE CAPACITOR AND RESISTOR DECADES



CAPACITOR DECADES

Rated at 600 volts DC, and 220 volts AC. Provide a reliable and accurate source of selected, precision values for breadboarding and substitution. Three different boxes, CDA-2, CDB-3 and CDC-3, can be easily paralleled to provide capacitances of 0 to 1.111 in 0.0001-μF steps. CDA-2 has a mica dielectric; others are oil-impregnated. CDT-5/10 is polarized tantalum foil, provides an extended range of values. Last figure in Mfr's Type No. indicates ±% tol. Each has chart giving exact value for all scale markings. *Indicates Aluminum Electrolytic Capacitor substitution box. 3 13/16x5x3 5/8". 2 lbs.

Stock No.	Mfr's Type	Range μF	μF/ Step	EACH	EACH 4-Up
755-0601	CDA-2	.0001-.011	.0001	18.70	17.50
755-0604	CDB-3	01-1.1	.01	21.30	19.75
755-0608	CDC-3	1.0-10	1.0	35.00	32.45
755-0613	CDE*	10-150	10.0	21.00	19.46
755-0618	CDT-5/10	10-1100	10.0	115.00	107.09

CDRM RACK-PANEL CAPACITOR DECADES

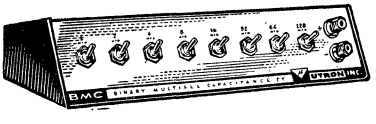
A combination capacitor decade unit consisting of CDA-2, CDB-3, and CDC-3 (described above) mounted on durable 3½x19x4" rack panel. Shpg. wt., 7¼ lbs.
755X0616..Ea. 97.50 4-Up...Ea. 90.50

RESISTOR DECADES

Each permits selection of 110 values. Units of resistance may be selected from the direct-reading panel switch scale. Series connected, they cover from 1 to 1,111,110 ohms in 1-ohm steps. Have 2 rotary switches with 11 positions. RDA and RDB use wire-wound resistors; RDC uses carbon resistors. Size, 3 13/16x5x3 5/8". Shpg. wt., 1¾ lbs.

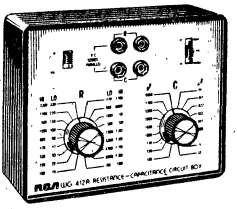
Stock No.	Mfr's Type	Range Ohms	Ohms/ Step	EACH	EACH 4-Up
755-3630	RDA	1-110	1	24.50	22.70
755-3633	RDB	100-11,000	100	27.00	25.03
755-3636	RDC	10,000-1,100,000	10,000	24.30	22.49

MUTRON INC. CAPACITANCE SUBSTITUTION BOX



MODEL BMC. Binary Multiple Capacitance Box uses binary switching for greater range. High-grade electrolytics, 1 to 255 μf in 1 μF steps. For transistor circuitry. Rated 50 WVDC. Tolerance, −10 to +30%; to 2% with lab values supplied. Anodized case is permanently marked. 9¾x3x3". 1¾ lbs.
895-9605...Ea. 41.50 4-Up...Ea. 38.70

RCA R-C SUB BOX



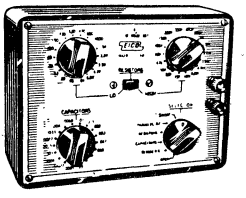
MODEL WG-412A. Use separately, in series, or in parallel R-C combinations. Compact unit includes 36 one-watt resistors rated from 15 ohms to 10 megohms, plus eighteen 600-volt capacitors from 100 pF to 0.22 μF. Both resistors and capacitors have 10% tolerance. Two rotary switches select values. Slide switches select series/parallel/separate direct output connections. Alligator clip leads. 6⅞x5⅜x2⅜". 1¾ lbs.
901-2415...Ea. 32.50 4-Up...Ea. 30.00

SENCORE COMPONENT SUB BOX

MODEL RC146. Great time saver for substitution testing. Contains twelve 1-watt resistors from 10-5.6k ohms, twelve ½-watt resistors from 10k ohms to 5.6 megohms, 20-watt power resistors from 2.5 to 15k ohms, ten 600-volt capacitors from 100 pF to 0.5 μF, ten electrolytics (surge protected) 2-250 μF, universal 0.5 amp silicon and selenium rectifiers. Leads. 10¼x4¾x4¾". 3½ lbs.
949X2400..Ea. 75.00 4-Up...Ea. 69.95

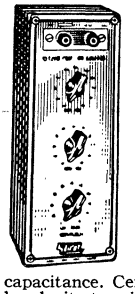
MICRONTA R-C SUB BOX

MODEL 22-001. 33 switch-selected ranges. Resistance values in two ranges (12 steps each): Low, 15 to 10k ohms; High, 15k to 10 megs. Capacitance ranges: .0001, .001, .0022, .0047, .01, .002, .047, .1 and .22 μF. With leads. 5⅛x2¾x1¾". Wt. 1 lb.
910-4501.....Each 4.95



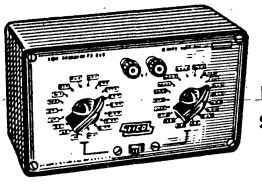
EICO R-C SUB BOX

MODEL 1140W. Essentially 1100W Resistance Box and 1120W Capacitance Box with additional switching facilities that permit selection of resistance alone, capacitance alone, or any combination of resistance or capacitance in either series or parallel. Resistance values are decade multiples of 15, 22, 33, 47, 68 and 100 ohms from 15 ohms to 10 megs. Capacitance values, .0001 to .22 μF in 18 steps. Open, short-circuit positions. Less leads. 5 5/16x6⅞x2 5/16". 3 lbs.
775-1140...Ea. 32.30 4-Up...Ea. 29.95



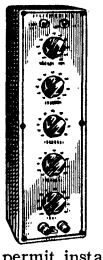
EICO CAPACITANCE DECADE BOX

MODEL 1180W. Used for determining proper capacitance values in circuit design applications. Range: 100 pF to 0.111 μF in 100 pF steps. Rated 350 WVDC continuous, 500 WVDC intermittent. Precision silver-mica capacitors throughout with ±1% accuracy. 7 pF zero capacitance. Ceramic wafer switches; low-loss lucite terminal board; 5-way jack-type binding posts for all popular lead terminals. Gray wrinkle steel case, 9x3½x5½". Less leads. Shpg. wt. 3 lbs.
775-1180...Ea. 37.60 4-Up...Ea. 34.95



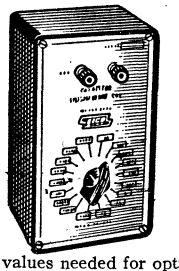
EICO RESISTOR SUB BOX

MODEL 1100W. Ideal choice for design or repair. Rapidly substitutes all resistance values that are decade multiples of 15, 22, 33, 47, 68, 100 ohms. Overall range, 15 ohms to 10 megohms. Uses standard 1-watt 10% tolerance EIA resistors throughout. Continuous duty rating of 500 volts. Convenient 5-way binding posts. Less leads. Case, 3¾x6½x3½". Shpg. wt. 2 lbs.
775-1101...Ea. 21.50 4-Up....Ea. 19.95



EICO RESISTANCE DECADE BOX

MODEL 1171W. Invaluable in the design, development and adjustment of electrical and electronic equipment. Resistance range: 0-99,999 ohms in 1-ohm steps with 5 decades. ½% accuracy; 1-watt resistors. Comparator position and binding posts permit instant substitution of accurate resistance values into test circuit. Current: 350 mA (0-9 ohms) to 2.5 mA (10k-100k). Ruggedly constructed gray wrinkle heavy-gauge steel cabinet, 12x3½x3". Deeply etched aluminum front panel. Less leads. Shpg. wt. 3 lbs.
775-1171...Ea. 43.00 4-Up...Ea. 39.95



EICO CAPACITOR SUB BOX

MODEL 1120W. Offers fast, accurate substitution of any one of eighteen values from 0.0001 to 0.22 μF. For the serviceman, experimenter or hobbyist. Useful in checking for open capacitors, and in determining values needed for optimum performance in equipment. Capacitors used are mica and molded plastic rated at 400 and 600 WVDC. Accuracy, ±10%. Convenient 5-way binding posts for all popular styles of lead terminals. Size, 3¾x6½x3½". Less leads. 2 lbs.
775-1120...Ea. 19.35 4-Up....Ea. 16.95

Chart Recorders, 499, 506-509—Multimeters, VOM's, VTVM's, 480-499—Scopes, 503-505

Rotron Fans and Accessories

FOR EFFICIENT ELECTRONIC COOLING

QUICK INDEX LISTING OF ROTRON FANS AND ACCESSORIES AND PAGE

ROTRON INCORPORATED

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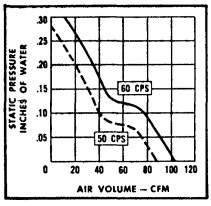
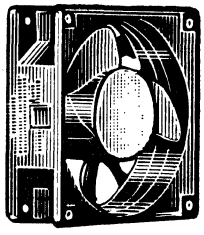
Sentinel® FAN

Compact .. Measures Just 4 11/16" Square by 1½" Deep





Meets MIL-E-4970A

- Provides 100 cfm Free Delivery
- Dimensionally Interchangeable with Muffin Fan
- For Ambient Temperatures to 100° C
- Meets MIL-E-4970A • U.L. Recognized

Lightweight fan with heavyweight stamina and power. For ultra-rugged applications where heat and the avoidance of maintenance are major factors. Weighs only 1 pound and measures only 4 11/16" square by 1½" deep, yet delivers 100 cfm at ambient temperatures up to 100° C. Every feature for cool operation at high ambient temperatures and long life. Aluminum heat sink draws heat from the winding for a cooler running motor. Lifetime-lubricated stainless-steel ball bearings. Venturi is high-impact glass-filled phenolic for maximum durability and insulation. Stator is completely encapsulated for protection from moisture and humidity. Meets requirements of MIL-E-4970A. ■U.L. Recognized motor. For 115 V, 50-60 Hz AC. Skeleton fan for use where only fan and motor are required. See Accessories listed on Pg. 522. Shpg. wt. 1 lb.

Stock No.	Description	EACH				
		1-9	10-24	25-49	50-99	100-Up
907-6814	Skeleton Fan	24.75	23.45	21.25	18.55	17.85
907-6816	Venturi Fan	25.00	23.70	21.50	18.80	18.10

CENTAUR® CT3A2 FAN

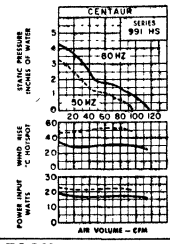
- High Air Performance
- Impedance Protected Motor
- Interchangeable with Muffin Fan

New aerodynamic principles provide maximum air performance of 115 cfm free delivery on 60 Hz and operation up to .43" of water at zero delivery. Only 4 11/16" square by 1½" deep. Interchangeable with Muffin Fan. Ideal for flushing electronic control equipment, office copying machines, telephone equipment, and other industrial applications.

Equipped with 5-blade, high impact polycarbonate propeller that is flame retardant. Phenolic venturi block. Die-cast aluminum alloy mounting spiders. Sleeve bearings suitable for operation over range of −40° to +72° C. Impedance protected, ■U.L. Recognized motor.

Tinned brass terminals or Plug and Cord assembly (#16415). Exceptionally low noise level of 41 dB. Reversible airflow. Venturi Model CT3A2 only. Draws 15 watts, 115 VAC. Net wt., 1.2 lb. Shpg wt., 1.5 lb.

AIR VOLUME—CFM

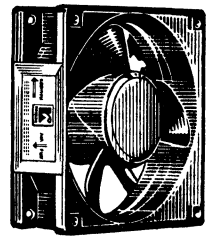


Stock No.	Description	EACH					
		1-9	10-24	25-49	50-99	100-249	250-Up
907-5230	CT3A2 Fan	16.80	15.20	13.70	12.25	11.45	10.00

SEE PAGE 522 FOR ACCESSORIES

On Sentinel, Muffin, Centaur and Whisper Fans Use Assembly Kits Added to Venturi Fan to Create Filter and Grille Fans.

MARK 4 "MUFFIN"® FAN



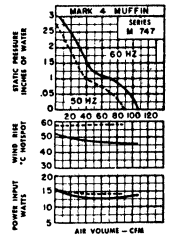
Small size and high air performance make this economical fan ideal for flushing computers, power supplies, office machinery, instruments, and electronic control equipment. This efficient fan minimizes component derating, increases life expectancy and assures reliable performance of instruments. Weighs only 1 pound and measures only 4 11/16" square. Extremely thin for mounting in tight space requirements. Only 1½" deep.

Though small in size, this fan delivers 100 cubic feet per minute free delivery at a scarcely audible noise level of 42 dB. No lubrication. Air flow is reversible by turning fan end-to-end.

Ambient temperature: 0 to 160°F. Long operating life of up to 10 years at normal room temperature. Aluminum heatsink at base of bearing. Encapsulated winding resists moisture and humidity. Impedance-protected, ■U.L. Recognized motor. Electrical connection to tinned terminals or by using plug and cord assembly #16415.

*Skeleton fan for use where only fan and motor are required. Wt. 1 lb.

AIR VOLUME—CFM



SERIES M747 FOR 115VAC 50/60 HZ

Stock No.	Description	EACH				
		1-9	10-24	25-49	50-99	100-Up
907-6010	Skeleton Fan*	11.80	10.70	9.60	8.70	8.30
907-6015	Venturi Fan	12.05	10.95	9.85	8.95	8.55

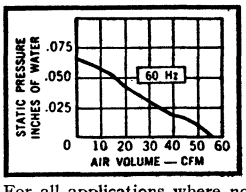
SERIES M756 FOR 220VAC 50/60 HZ

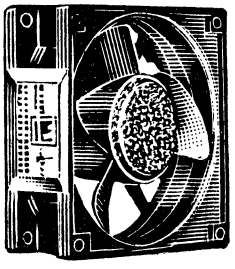
907-6020	Skeleton Fan*	11.80	10.70	9.60	8.70	8.30
907-6023	Venturi Fan	12.05	10.95	9.85	8.95	8.55

DELIVERS 65-CFM

Whisper Fan®

SUPER-QUIET





- Only 4 11/16" Square x 1½" Deep
- 65 cfm Free Delivery
- Ambient Temperature to 160°F

For all applications where noise must be minimized. Low 18 dB noise level makes it perfect for offices, laboratories, systems. Extends component life and improves performance by delivering a substantial quantity of cooling air. Advanced bearing system and relative slow speed (1800 rpm nominal) assure long life. Interchangeable with the Muffin Fan (shown above). High-impact, flame-retardant, polycarbonate frame. Encapsulated bus-bar leads with solder terminals provide maximum resistance to humidity. Draws only 6 watts. U.L. approved. 115 V. 50-60 Hz AC. Net wt. 1 lb. Av. shpg. wt. 1 lb. *Skeleton Fan for use where only fan and motor are required. See Accessories listed below. Shpg. wt. 1 lb.

Stock No.	Description	EACH				
		1-9	10-24	25-49	50-99	100-Up
907-7120	Skeleton Fan*	11.80	10.70	9.60	8.70	8.30
907-7125	Venturi Fan	12.05	10.95	9.85	8.95	8.55

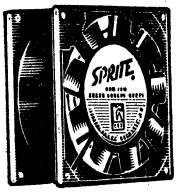
FILTER AND GRILLE ASSEMBLY KITS

907-7940. Type 15449 Filter Assembly Kit.....Each 3.00
907-8400. Type 25678 Grille Assembly Kit.....Each 3.00

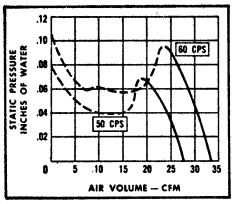
Rotron Military and Commercial Fans

ROTRON INCORPORATED

ROTRON FLUSHING FANS FOR GREATER DEPENDABILITY



33-CFM SPRITE AXIAL FAN



- Very Small, Only 3⅛" Square, 1⅝" Deep
- Provides 33 cfm Free Delivery
- Ambient Temperatures from −20°F to +140°F
- Very Quiet 35 dB Noise Level

Ideal for applications where space is at a premium. Size only 3⅛" square by 1.635" deep. Specially designed to fit 3½" panel height in relay racks. Delivers 33 cubic feet per minute (free delivery) with aerodynamic performance. Tailored to produce high pressure in the range approaching free delivery. In many applications, the Sprite will outperform larger, conventionally designed fans. Typical commercial uses include: office copying machines, power supplies, transmitters and receivers, counters, core memory equipment, paper-tape equipment, printers, digital voltmeters, etc.

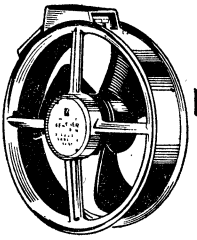
Mounts easily with holes in flanges. Extremely quiet operation: only 35 dB noise level. Wide temperature range: −20°F to +140°F. Venturi, spiders, and motor mounting are aluminum. Nine-blade propeller is molded of high-impact, flame-retarding polycarbonate. Airflow is reversible by turning fan end-for-end. Life expectancy is 5 years. Plug and cord available as accessory. Brass solder terminals. For 115 volts, 50-60 Hz AC; 11 watts. Motor is impedance-protected to U.L. requirements. Accessories listed on Page 522. Net wt. 12 oz. Shpg. wt. 14 oz.

907-6850. Model SP2A2 Sprite Fan. 1-9.....Each 14.95
10-24.....Each 13.65 25-49.....Each 12.60
50-99.....Each 11.30 100-Up.....Each 10.50

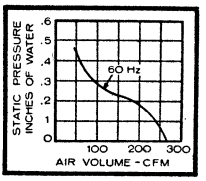
SPRITE ACCESSORIES

Guard No. 20049
Oiler Kit No. 22509
Plug and Cord No. 20787
Lubricant No. 22509-4

FOR THE SPRITE FAN ACCESSORIES LISTED ABOVE REFER TO PAGE 522



EXTRA-LIGHT 270-CFM FEATHER® FAN



- Compact, 7" Diameter, 2 7/16" Deep
- 270 cfm Free Delivery
- For Ambients to 65° C

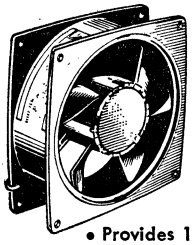
TYPE 103
WITHOUT THERMAL PROTECTOR

TYPE 113
WITH THERMAL PROTECTOR FOR U.L. REQUIREMENTS

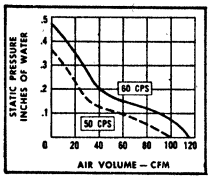
Delivers or exhausts large volume of air in limited spaces requiring a shallow fan (only 2 7/16" deep). Excellent for computer consoles, relay racks, power supplies, heat exchangers, and other systems. Powered by multi-slot induction motor with pre-lubricated stainless steel ball bearings. Ambient temperature range, −55° C to −65° C. Easy clamping-rim mounting provides reversible airflow. Tinned brass terminals. High-impact, fungusproof, 2-tone gray polycarbonate plastic. Includes capacitor mounted on fan venturi. Permanent, non-loading washable Filter Box, cord, plug below. Aerodynamically and mechanically interchangeable with Rotron Saucer Fan. 20 watts. 115 V, 50-60 Hz AC, single-phase. ■U.L. Recog. Net. wt. 1.5 lbs. Shpg. wt. 2 lbs.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-49	50-Up
907-7603	103	Feather Fan	33.00	31.70	28.10	25.40
907-7610	113	Feather Fan	36.65	34.70	31.25	28.30
907-7990	17785	Filter Box	10.15	9.20	8.60	8.10
907-7920	14559	Rim-Mount Guard	3.65	3.25	2.90	2.70
907-7930	14651	Panel-Mount Guard	3.65	3.25	2.90	2.70

907-8240. Type 24947 Mounting Clamp. Uses 3.....Each .15
907-7925. Type 14611 Panel-Mount Clip. For Type 14651 Panel-Mount Guard. 3 required per Guard.....Each .15
907-7950. Type 16398 Plug and Cord.....Each .90
907-8000. Type 18440 Filtercoat. 1-99.....Each 1.25



SPARTAN FAN



Military Type Fan for Ground or Shipboard Use

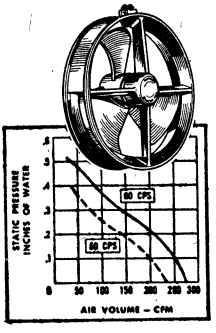
- Provides 110 cfm Free Delivery
- Size is Only 4 11/16" Square x 1½" Deep
- For Ambient Temperatures to 100° C
- Meets Applicable Military Specifications

Military version of famous Muffin Fan, but with higher pressure-to-volume characteristics. Has all the utility of vane-axial and tube-axial fans. Only 4 11/16" sq. x 1½" deep. 5-blade propeller; double-shielded, stainless-steel, lifetime-lubricated ball bearings for 100° C max. ambient. Reversible by turning fan end-for-end. Venturi ring, mtg. spider and hub are black-enameled, integral aluminum casting. Through-hole mtg. Meets MIL specs for ground, shipboard. For 115 V, 50-60 Hz AC, *400 Hz., single-phase. With terminal block (Types ST682YS and ST810DS) or 12" leads (Types SL682YS and SL810DS). Actual, 1 lb. Shpg. wt., 1¼ lbs.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-Up
907-6840	SL682YS	45.50	38.20	35.00	33.90
907-6870	ST682YS	48.55	40.70	38.10	36.05
907-6845	SL810DS*	68.25	57.30	53.70	50.75
907-6875	ST810DS*	71.30	59.80	56.05	53.00

Capacitor. 1.0 μF, 220 VAC, required for SL682YS and ST682YS.
Capacitor. 0.39 μF, 220 VAC required for SL810DS and ST810DS.

SAUCER® FAN



THE FAN WHERE HIGH PERFORMANCE AND MINIMAL SPACE IS AN ABSOLUTE NECESSITY

- 280 cfm Free Delivery
- Very Thin 7" Diameter x 2½" Deep
- For Ambients to 72° C
- Meets Applicable MIL Specs

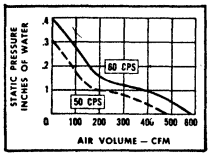
TYPE 340ZS. Specially designed for flushing tightly packaged electronic equipment cabinets and consoles where high air performance is required and space limited to where depth of fan is critical. Provides an air delivery of 280 cubic feet per minute. Powered by a multi-slot induction motor which incorporates stainless-steel ball bearings that are prelubricated for life. Ambient temperature range of −55° C to +72° C. Airflow is reversible by turning the fan end-for-end. Electrical connections are made to a compact terminal block. *Requires a 2.0 μF capacitor for proper motor operation. Dimensionally interchangeable with Feather Fan on facing page. Clamping rims are located at each end of the venturi for easy mounting. A filter box is available with a permanent, non-loading washable filter (below). Meets MIL specs for ground, shipboard. 115 VAC, 50-60 Hz. Actual wt. 1.6 lbs. Shpg. wt. 2 lbs.
907-7640. 1-9.....Each 70.40 10-24.....Each 58.30
25-49.....Each 54.70 50-Up.....Each 51.95
*Requires 2.0 μF@ 220 VAC, oil impreg., paper dielectric.

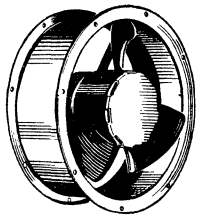
SEE PAGE 522 FOR ACCESSORIES FOR THE SAUCER FAN

Rotron Flushing Fans and Blowers

Caravel® HIGH-CAPACITY 575 CFM

The Thin Fan for High-Efficiency Cooling





- 10" Diameter, Only 3½" Deep
- 575 cfm Free Delivery
- Sealed Stainless Steel Ball-Bearings

Smartly styled, high-capacity thin fan for cooling large cabinets, relay racks, transmitter cubicles, computers, and other large equipment. Its thinness (only 3½" deep), low noise level (49 dB), reliable performance and low cost make the Caravel an ideal fan for any cabinet. Mounts directly on panel, bottom, side wall, or top of cabinet, using holes around circumference of venturi. Airflow may be reversed by turning fan end-for-end. Ambient temperature range, −20° to +140°F. Die-cast aluminum venturi and spider; polycarbonate propeller and terminal block. Sealed ball-bearing motor assures long, quiet life with no maintenance. Choice of connections: terminal block, Type CL2T2. 24" lead wires, Type CL2L2. Both units contain thermal protectors to meet U.L. requirements. 1650 rpm. 115 volts, 50-60 Hz AC, single-phase. Net wt., 4.3 lbs. Shpg. wt. 5¾ lbs.

Model	Volts	Hz	Phase	Nominal RPM.	Full Load Watts	Line Amps	Max. CFM
CL2T2	115	50-60	1	1,600	52	0.76	575
CL2L2	115	50-60	1	1,600	52	0.76	575

907X5222. Type CL2T2. Terminal block connection. 1-9 . Each 29.70
10-24 . . . . . Each 25.50
25-49 . . . . . Each 22.45 50-Up . . . . . Each 22.00

907X5212. Type CL2L2. With 24" leads. 1-9 . . . . . Each 29.20
10-24 . . . . . Each 25.95
25-49 . . . . . Each 22.95 50-Up . . . . . Each 22.50

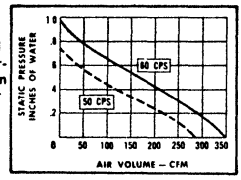
ACCESSORIES
Screen Guard No. 19694-2 Plug and Cord No. 17555

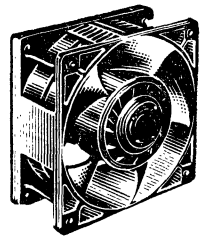
SEE PAGE 522 FOR ACCESSORIES FOR MODELS CL2T2 AND CL2L2

TARZAN® COMPACT YET DELIVERS 350 CFM

ROTRON® INCORPORATED

Centrifugal Blower Performance in a compact Axial-Fan





- Compact, 6²³⁄₃₂" Square, 4¹¹⁄₃₂" Deep
- 350 cfm Free Delivery
- Life is 4 Years at 120°F

Unique axial fan designed for cooling tightly-packed electronic cabinets and chassis. Large-area air distribution eliminates space-consuming discharge diffusers, and shallow axial-depth (4¹¹⁄₃₂") dramatically reduces the amount of space needed. Radical departure in fan design provides centrifugal blower performance in a compact axial-flow fan. Ideal for compact air-to-liquid heat exchangers, printed-circuit-card chassis for solid-state components, densely packaged relay-rack communications equipment, and other applications where impedance to airflow is higher than normal. Circulates air at 350 cfm (free delivery) and up to 0.9 of water at cutoff. Airflow is reversible by turning fan end-for-end. Life to 4 years when operated at 120°F. Has phenolic venturi, diecast aluminum spiders. High-impact, flame-retarding, polycarbonate 5-blade propeller. Double-shielded ball bearings are lubricated for life to allow continuous-duty operation without maintenance. Fan is easily mounted by through-holes at corners of flanges, at opposite end of barrel. Size, only 6²³⁄₃₂" square and 4¹¹⁄₃₂" deep. Two models give choice of electrical connections: Model TN3A2 has solder terminals: Model TN3C2 has 12" leads. For 115 Volts, 50-60 Hz AC, single-phase. Net wt., 5 lbs. Shpg. wt. 5 lbs.

Model No.	Volts	Hz	Phase	Watts	Line Amps.	Max. CFM
TN3A2	115	50-60	1	85	1.2	350
TN3C2	115	50-60	1	85	1.2	350

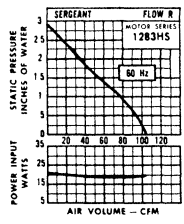
Stock No.	Mfr's Type	Connector Type	EACH 1-9	10-24	25-49	50-Up
907-7002	TN3A2	Terminals	46.65	40.65	37.70	34.65
907-7012	TN3C2	12" leads	45.95	39.95	37.00	33.95
907-8125	21196-2	Guard	1.60	1.50	1.40	1.30
907-8120	20990	Filter Box	10.00	9.50	8.90	8.25

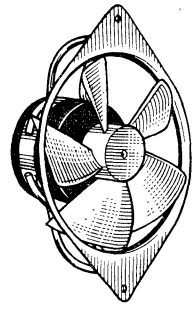
907-7975. Type 17555. Plug and Cord Set . . . . . Each .70
907-8000. Type 18440. Filtercoat. 1-99 . . . . . Each 1.25

SERGEANT® FAN FOR EXTREME RELIABILITY

Extremely reliable, perfect for cooling electrical equipment. Measures only 4¹¹⁄₁₆x 2¾". For applications in power supplies, office copiers, computer terminals, mini-computers, etc. Available for either direction of airflow. Quickly mounted using two mounting holes fitting industry standard of 4.125" square-hole layout. Choice of flush or skeleton mount design. For ambients up to 130°F (55°C). 5-year design life at 75°F (25°C) without maintenance. Meets U.L. requirements. Sound interference 43 dB at free delivery. Draws 20 watts with electrical connections made of 12"-long 18-gauge leads. Concentric motor employs Class A insulation. Two sintered bronze bearings lubricated for life, include wide-supplied reservoirs. Mounting spiders are bright zinc-plated formed steel wire. For 115 VAC, 50-60 Hz. Shpg. wt. 1½ lbs.
Order from table below.

100 CFM

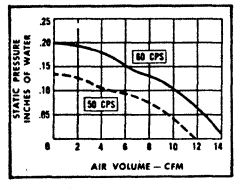


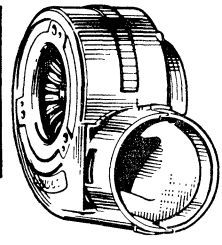


Stock No.	Mfr's. Type	Flow	Mounting	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-749	750-Up
907-6860	ST2A-1	L	Flush	8.50	7.85	7.30	6.90	6.55	6.20	5.95	5.65
907-6861	ST2A-2	L	Skeleton	8.35	7.70	7.15	6.75	6.45	6.10	5.85	5.55
907-6864	ST2A-4	R	Flush	8.50	7.85	7.30	6.90	6.55	6.20	5.95	5.65
907-6865	ST2A-5	R	Skeleton	8.35	7.70	7.15	6.75	6.45	6.10	5.85	5.55

SPOT-COOLING 14-CFM nugget® BLOWER

Provides stable cooling for specific component or hot spot in electronic equipment. For test instruments, transmitters, TV cameras, office machinery, tape recorders. Newly designed with a centraxial wheel for greater efficiency and volume-to-pressure characteristics. Rugged plastic housing rotates to three positive locking positions. May be mounted from inlet, end of motor, or outlet using optional flange, below. Ducting to inlet or from outlet. 3200-rpm induction motor draws 7 watts; weighs 0.6 lb. *Type NTP2 without housing. Size: 3¹⁹⁄₃₂x4¹⁄₃₂x2¼". Accessories below. ■U.L. Recognized. For 115 VAC, 50-60 Hz AC. Single phase. Shpg. wt. 14 oz.





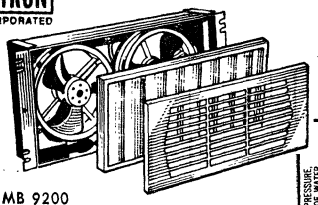
- Compact
- 14 cfm Free Delivery

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-Up
907-6110	NTH2	19.95	18.05	16.20	15.15	14.35
907-6120	NTP2*	18.85	16.95	15.10	14.05	13.25

SEE PAGE 522 FOR ACCESSORIES TO ROTRON PRODUCTS LISTED ABOVE

Rotron Panel Fans and Accessories

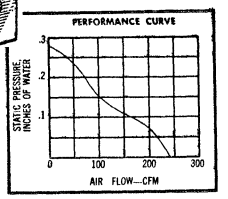
ROTRON INCORPORATED



Built with Quality Parts for Low Noise, Better Overall Cooling, and Low Maintenance

MB 9200

Easy Mounting—No Sheet-Metal Work Required



MODULAIR® 400-cfm COOLING PANEL

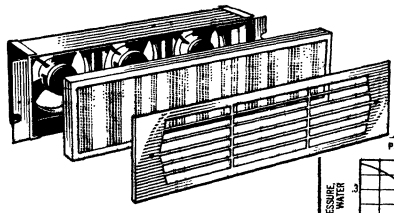
- Two Type 103 Feather Fans in Parallel for Reliability
- Latest Advances in Fan Design for Better Performance
- For Use with Washable Porous Scott Foam Filter

MODEL MB 9200, TYPE 100. High-performance cooling panel for use in a variety of applications. Specially designed for flushing standard 19" EIA relay racks where component density and airflow resistance are low. For easy mounting, the unit is built so that no sheet-metal operations are required. Incorporates two powerful Type 103 Feather Fans in parallel which turn at 3380 rpm. This pair together provides 400 cubic feet per minute free delivery. Includes the latest advances in fan design for low noise and better overall cooling. Very quiet noise level of only 56.6 dB. Power consumption is only 40 watts. Quality construction throughout to virtually eliminate maintenance for years. Designed for use with a low-impedance, washable porous Scott foam filter enclosed in a rigid aluminum frame. Size, 8¾" high, 3½" deep. 115 volts, 50-60 Hz AC. Order filter, finger guards and mounting clips on page 522.

Stock No.	Wt., Lbs.	EACH 1-4	5-9	10-24	25-49	50-Up
907 X 6050	19	79.10	75.60	72.10	70.00	67.20

ACCESSORIES

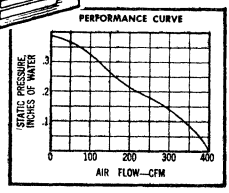
Type 14651 Filter Guard (2 required) Type 24361-3 Dust Filter Type 14611 Mounting Clips (6 required)	Order from page 522



MB 9100

Requires No Sheet-Metal in Mounting

Quality Constructed Panel Has Life Expectancy of 10 Years



MODULAIR® 240-cfm COOLING PANEL

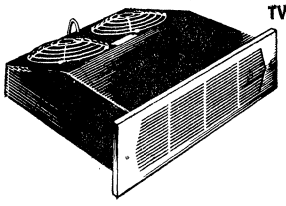
- Three 3200-rpm Mark IV Muffin Venturi Fans
- Flushes Standard 19" EIA Relay Racks
- For Use with Porous Scott Foam Filter

MODEL MB 9100, TYPE 100. Sturdy construction and quality fans make this a reliable cooling panel for use in a variety of commercial and industrial applications. Flushes standard 19" EIA relay racks where component density and air flow resistance are low. Built so that no sheet-metal operations are required in mounting. Incorporates three powerful 3200-rpm Mark IV Muffin Venturi Fans in parallel to provide 240 cubic feet per minute free delivery of clean, filtered air. Designed for high efficiency, low noise and generally fine performance. Noise level is a low 52.6 dB. Engineered to have a long life expectancy of 10 years at ambient temperature of 70°F. Low power consumption of just 42 watts. For use with low-impedance, washable porous Scott foam filter in a rigid aluminum frame. Size: 5¼" high, 3½" deep. For 115 volts, 50-50 Hz AC. For filter, finger guards, see page 522.

Stock No.	Wt., Lbs.	EACH 1-4	5-9	10-24	25-49	50-Up
907 X 6040	19	61.10	58.50	55.60	54.10	52.00

ACCESSORIES

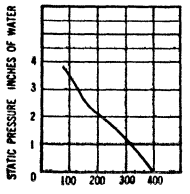
Type 24361-1 Dust Filter Type 20132-2 Finger Guard (3 required)	Order from page 522



TWINPAX® MB5100, Type 100 400-cfm COOLING PANEL FOR 19" EIA-NOTCHED RELAY RACKS

- With Washable Aluminum Filter
- Equipped with Two Feather Fans
- Only 5¼" Panel Height Required for mounting
- Pre-Lubricated Motor

New engineering designs went into this cooling panel to provide it with maximum effectiveness. At the heart of the panel are twin Rotron Feather Fans which deliver up to 400 cubic feet of filtered air per minute. The special parallel position of the fans direct the air to minimize dead-spots or eddying to assure cooling effectiveness. Built to provide easy mounting to any standard 19" EIA notched rack with no special sheet metal modifications.

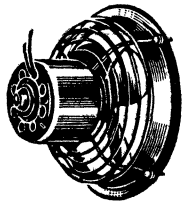


The motors have features that assure long and reliable service. The two single-phase multi-slot induction motors are pre-lubricated and use precision ball bearings to provide years of maintenance-free operation. Equipped with a permanent aluminum washable filter. Wide ambient temperature range from −55°C to +65°C.

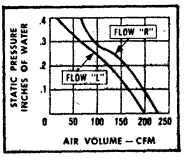
Shell of black steel; chrome-plated grill; zinc-plated fan guards. Very quiet operation, 55 dB. Dissipates 1.9 kW of heat at 15°F rise. Capacitor, cord. 5¼x19 1/64x13 23/32". 115 V, 50-60 Hz AC. Actual wt. 13 lbs. Shpg. wt. 17 lbs.

907 X 6030. 1-9..... Each 96.90 10-24..... Each 87.85
25-49..... Each 79.75 50-Up..... Each 71.80

ACCESSORIES		
	Type 18440 Filtercoat Type 19699 Guard	Order from page 522



COMPACT 220-CFM PF PROPELLER FAN



- Only 8⅛" Diameter, 4½" Deep
- 220 cfm Free Delivery
- Sleeve-Bearing, Shaded-Pole Motor

Compact fan for flushing instrument cabinets, transmitter cubicles, relay racks, and similar enclosures. Inexpensive and highly reliable for mild ambient and non-military cooling requirements. Moves 220 cfm of air, optimum, or 100 cfm at 0.2" water gauge, at an ambient temperature of up to 125° F. Can be mounted directly against enclosure wall without spacers, venturi rings, standoffs or brackets. May be used with dust filter. Has aluminum propeller, anodized aluminum mounting ring, lustre zinc-plated steel wire guard. Motor is shaded-pole type with sleeve bearings. Motor case is drawn steel, finished in green baked enamel. Designed for continuous duty, with choice of airflow direction: Model PF-L is push type, Model PF-R is pull type. Size, 8⅛-inches diameter and 4 13/32-inches deep. For 110-115 volts, 50-60 Hz AC, single-phase. Net wt., 2.8 lbs. Shpg. wt., 3¼ lbs.

Stock No.	Mfr's Type	Air-Flow	EACH 1-9	10-24	25-49	50-Up
907-6510	PF-L	Push	16.85	14.30	13.75	13.45
907-6515	PF-R	Pull	16.85	14.30	13.75	13.45

ATTENTION BUYERS—Allied Electronics makes immediate shipment on all models of Rotron fans. Make Allied your headquarters for Rotron fans and all electronic components at quantity prices.

Depend on Allied Electronics for Reliable Nationwide Service

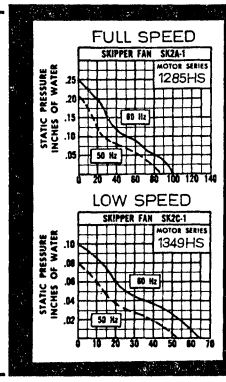
Rotron Military Cooling Fans

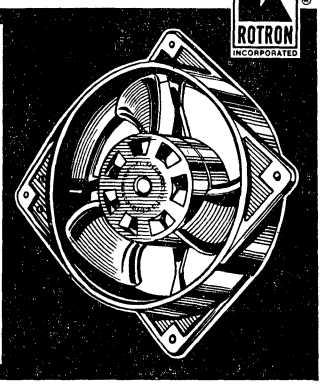
NEW SKIPPER® 100-CFM COMPACT FAN

- Less Than 4¾" Dia., 2" Deep
- 100 CFM Free Delivery
- Prelubricated Sleeve Bearing Never Needs Lubrication

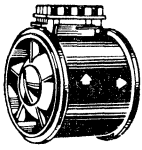
Handsome, economical fan delivers 100 cfm of cooling air (free delivery) at ambient temp. to 122°F. Quiet—only 35.8 dB noise level. For ultra-quiet operation, low speed models yield only 25.2 dB. Easily reversible airflow. Mount easily on any panel thickness. Venturi molded from impact-resistant, fire-retardant ABS resins; fan blades are self-extinguishing thermoplastic. Motor and mtg. spiders are die-cast zinc. 115 V, 50-60 Hz AC. UL Recognized. 12" leads. Skeleton models include only fan and motor. Wt. 1 lb.

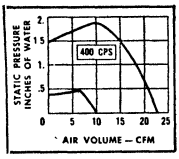
Stock No.	Mfr's Type	Fan Type	Speed	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
907-6820	SK2A-1	Venturi	Full	9.75	9.15	8.75	8.00	7.45	7.05
907-6822	SK2A-2	Skeleton	Full	9.30	8.70	8.35	7.70	7.10	6.75
907-6824	SK2C-1	Venturi	Low	9.75	9.15	8.75	8.00	7.45	7.05
907-6826	SK2C-2	Skeleton	Low	9.30	8.70	8.35	7.70	7.10	6.75



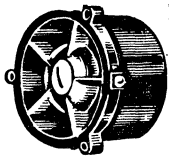


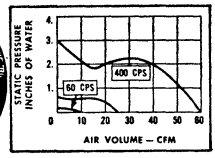
AXIMAX® MINIATURE FANS FOR AIRBORNE COOLING



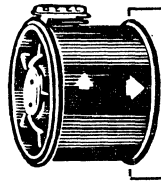


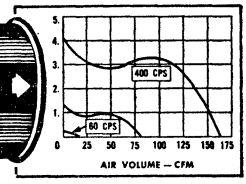
AXIMAX 1





AXIMAX 2





AXIMAX 3

AXIMAX 1 (1½x1½" diameter)

Stock No.	Mfr's Type	Volts	Phase	rpm	cfm	EACH 1-9	10-24	25-49	50-Up
907-5003	464YS	115	1	11,500	11	60.45	54.65	48.05	45.35
907-5006	623YS	115	1	22,750	23	60.45	54.65	48.05	45.35
907-5000	367JS	200	3	22,500	23	60.45	54.65	48.05	45.35

AXIMAX 2 (1½x2" diameter)

907-5020	367JS	200	3	20,500	59	51.30	46.35	40.80	38.45
907-5023	368YS	115	1	20,000	58	51.30	46.35	40.80	38.45
907-5029	*415YS	115	1	11,000	32	51.30	46.35	40.80	38.45
907-5026	*395JS	200	3	11,000	32	51.30	46.35	40.80	38.45
907-5032	464YS	115	1	11,000	30	51.30	46.35	40.80	38.45
907-5035	†606NS	115	1	3,150	8	54.30	49.35	43.80	41.45

AXIMAX 3 (2 5/16x3" diameter)

907-5050	341JS	200	3	22,000	157	70.00	63.30	55.65	52.50
907-5062	528YS	115	1	22,500	157	70.00	63.30	55.65	52.50
907-5053	*387JS	200	3	13,900	95	70.00	63.30	55.65	52.50
907-5056	*400YS	115	1	11,000	76	70.00	63.30	55.65	52.50
907-5059	422DS	115	1	11,300	78	70.00	63.30	55.65	52.50
907-5065	†599HS	115	1	3,500	23	73.00	66.30	58.65	55.50

Vane-axial fans for airborne and missile cooling where fan size and weight are critical. Recommended for use where space is too limited to permit the use of a propeller-type fan. Choice of 115 or 200 VAC, 60 or 400 Hz, 1 or 3-phase. Contant-speed motor or *Altivar® design that increases shaft speed inversely with density, for constant cooling at all altitudes. Lubricated for maximum ambient temperature fo 125°C. Running life, 10,000 hours at 72°C ambient at 14.7 psi, at 20,000 rpm. Airflow is parallel to motor shafts; can be reversed by turning fan end-for-end (Aximax 1 and 3 only). Meet applicable MIL specifications. †60 Hz only; all others for 400 Hz. Single-phase fans require capacitors (order appropriate type beow). Av. shpg. wt. 1 lb.

AXIMAX 1. Clamping rims at end of venturi for easy mounting (use Synclamps below). Terminal block connections. Actual wt. 4 oz.

AXIMAX 2. Three mtg. lugs, solder terminals. Wt. 4½ oz.

AXIMAX 3. Clamping rims at end of venturi for mounting with Synclamps; terminal block connections. Wt. 14 oz.

SYNCLAMPS FOR MOUNTING AXIMAX 1 AND AXIMAX 3

Type 24254 Synclamp or Type 14015 Reverse Synclamp (3 required per fan). Order either type from page 522.

CAPACITOR REQUIREMENTS FOR SINGLE-PHASE AXIMAX FANS

Requires oil-impregnated paper dielectric. 220 VAC for 115-volt fans; 330 VAC for 200-volt fans. See index for capacitors.
Fan Types 464YS and 415YS require 0.15 μF capacitor.
Fan Type 623YS requires 0.25 μF capacitor.
Fan Types 368YS, 400YS and 599NS require 0.5 μF capacitor.
Fan Types 606NS and 422DS require 1.0 μF; Types 528YS, 2.0 μF.

PROPIMAX® MINIATURE HIGH-AIR-PERFORMANCE TUBE-AXIAL FANS

Offer high air performance for their size and weight. Excellent for cooling small airborne equipment in limited-space area. *Altivar® types provide constant cooling at all altitudes. Max. ambient temp.: 125° C. Life: 10,000 hours at 72° C, 14.7 psi. Clamping rims (use Synclamps, page 522). Terminal block connections. Meet applicable MIL specs. †60 Hz; others 400 Hz. Av. wt., 1 lb.

PROPIMAX 2 (1½x3¼" diameter; actual wt., 6½ oz.)

Stock No.	Mfr's Type	Volts	Phase	rpm	cfm	EACH 1-9	10-24	25-49	50-Up
907-6530	366ZS	115	1	21,000	120	66.80	56.45	52.65	50.10
907-6533	367JS	200	3	20,500	118	66.80	56.45	52.65	50.10
907-6536	*395JS	200	3	12,500	67	66.80	56.45	52.65	50.10
907-6539	*415ZS	115	1	12,300	68	66.80	56.45	52.65	50.10
907-6542	464ZS	115	1	11,000	62	66.80	56.45	52.65	50.10
907-6545	†606NS	115	1	3,100	18	69.80	59.45	55.65	53.10

PROPIMAX 3 AND 3B (2x3¾" diameter; actual wt., 16 oz.)

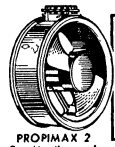
Propimax 3 has 2 blades, 3B has 4 blades. All are 3B except 341JS, 409ZS.

907-6550	341JS	200	3	22,500	220	71.25	59.00	55.25	52.55
907-6555	409ZS	115	1	22,500	220	71.25	59.00	55.25	52.55
907-6566	473JS	200	3	11,000	190	71.25	59.00	55.25	52.55
907-6563	*400ZS	115	1	6,000	117	71.25	59.00	55.25	52.55
907-6560	*387JS	200	3	8,200	140	71.25	59.00	55.25	52.55
907-6569	754DS	115	1	11,000	190	71.25	59.00	55.25	52.55
907-6572	†763ZS	115	1	3,450	58	74.25	62.00	58.25	55.55

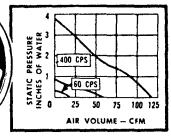
CAPACITOR REQUIREMENTS FOR SINGLE-PHASE PROPIMAX FANS

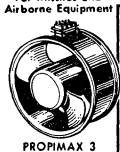
Require oil-impregnated paper dielectric. 220 VAC for 115-volt fans; 330 VAC for 200-volt.

Fan Types 415ZS and 464ZS require 0.15 μF.
Fan Types 400ZS and 763ZS require 0.5 μF.
Fan Type 366ZS requires 0.75 μF capacitor.
Fan Type 606NS requires 1.0 μF capacitor.
Fan Type 754DS requires 2.0 μF capacitor.
Fan Type 409ZS requires 2.5 μF capacitor.

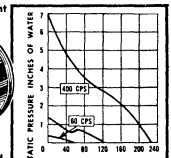


PROPIMAX 2
For Missiles and Airborne Equipment



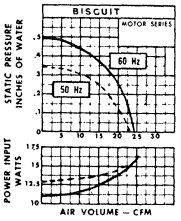


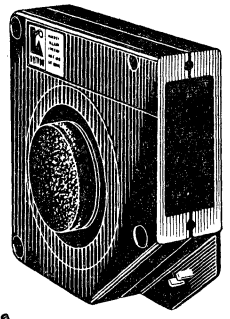
PROPIMAX 3
For Tightly-Packed Airborne Equipment



Rotron® Blower, Switches and Accessories

ROTRON® INCORPORATED

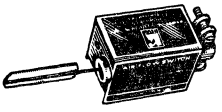




BISCUIT BLOWER

The only air-moving device that can be packaged in a 1¾" rack panel mounted instrument. Depth is only 1⁹⁄₁₆" and free delivery performance is 25 cfm. Pressure building capability drives air through tightly packed units, permits temperature decrease even in high packaging densities. Ideal in struments, projector lamps, power supplies, computer terminals, other commercial and industrial applications. Full 10-year life expectancy without maintenance. Maximum ambient if 160°F. Low 44 dB noise level. Impedance meets U.L. requirements. Draws 16 watts. Mounts easily to the back of blower inlet or outlet. Tinned brass solder terminals or plug/cord connection. Blower housing and impeller are high strength glass-filled compression-molded phenolic, bearing single-piece sintered bronze impregnated with high temperature silicone oil. For 115 VAC, 50-60 Hz. Shpg. wt. 1½ lbs.

Stock No.	Description	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
907-5100	BT2A-1	16.55	15.30	14.20	13.45	12.75	12.15
907-5102	BT2A-2 w/Inlet Rim	17.15	15.85	14.70	13.90	13.20	12.55



AIRFLOW INTERLOCK SWITCHES

TYPE 2A WITH VANE. SPDT air-velocity-actuated switch protects your equipment against fan failure. Low velocity in fan air-duct opens switch and turns off equipment; correct velocity turns equipment on. Single screw mounting. Supplied with any one of 8 different vanes. Rating: 5 amps at 250 VAC. ‡Type indicates maximum feet-per-minute airflow increase that will actuate vane. Av. shpg. wt. 14 oz.

Velocities in ft./minute. 10% tolerance, except *±15%; †±20%.

Vane Type No.	Vertical Airstream: Up-Airstream Actuate	Up-Airstream De-actuate	Down-Airstream Actuate	Down-Airstream De-actuate	Horizontal Airstream: Arm Horizontal Actuate	Arm Horizontal De-actuate	Arm Vert. Vane Down Actuate	Arm Vert. Vane Down De-actuate
1000	785	700	Unusable	Unusable	735	630	750	615*
1350	1125	1030	720†	685†	1025	970	1000	890
1600	1340	1212	1040*	865†	1215	1095	1225	1130
1800	1550	1450	1280	1115*	1460	1335	1500	1375
2000	1800	1675	1595*	1425*	1790	1580	1760	1580
2450	2340	2120	2125	1950	2120	1867	2270	2035
3000	2925	2700	2780	2395	2690	2420	2880	2570
4000	4000	3680	3760	3565	3720	3485	3870	3520

Stock No.	Mfr's 2A-‡	Vane Lgth.	EACH 1-9	10-24	25-49	50-Up
907-7510	1000	2²⁷⁄₃₂"	8.90	8.50	8.20	8.00
907-7513	1350	2⁷⁄₃₂"	8.90	8.50	8.20	8.00
907-7516	1600	1¹⁵⁄₁₆"	8.90	8.50	8.20	8.00
907-7518	1800	1²¹⁄₃₂"	8.90	8.50	8.20	8.00
907-7520	2000	1⁷⁄₁₆"	8.90	8.50	8.20	8.00
907-7524	2450	1⅛"	8.90	8.50	8.20	8.00
907-7530	3000	1⁵⁄₁₆"	8.90	8.50	8.20	8.00
907-7540	4000	¾"	8.90	8.50	8.20	8.00

ADDITIONAL VANES

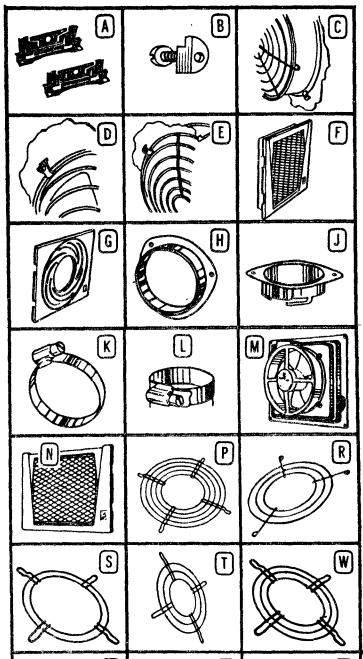
Stock No.	Vane Type*	Vane Lgth.	Stock No.	Vane Type*	Vane Lgth.	EACH
907-7700	1000	2²⁷⁄₃₂"	907-7815	2000	1⁷⁄₁₆"	1.25
907-7800	1350	2⁷⁄₃₂"	907-7820	2450	1⅛"	1.25
907-7805	1600	1¹⁵⁄₁₆"	907-7825	3000	1⁵⁄₁₆"	1.25
907-7810	1800	1²¹⁄₃₂"	907-7830	4000	¾"	1.25

INTERLOCK SWITCH DETERMINATOR KIT

Contains everything needed to determine which Type 2A Switch has the correct size vane for a given application. With Type 2A switch and set of 8 vanes (listed in table at left). Shpg. wt. ½ lb.

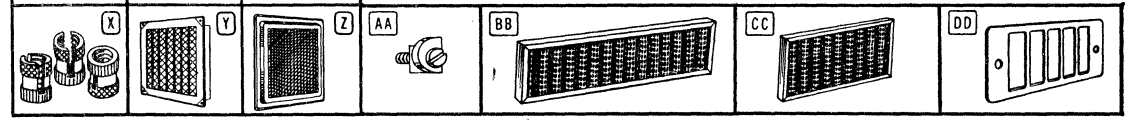
907-5300. 1-9.....Each 21.00 10-24.....Each 18.25
25-49.....Each 17.50 50-Up.....Each 16.25

ACCESSORIES FOR ROTRON FANS



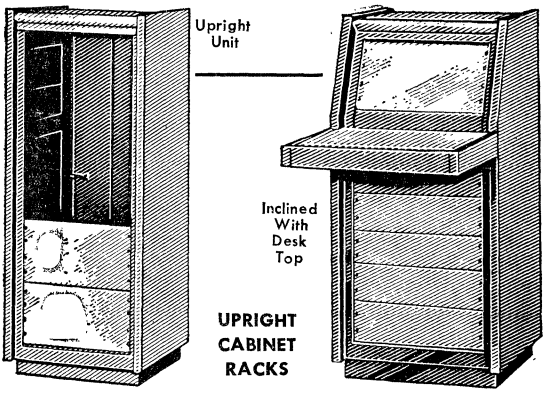
Stock No.	Mfr's Type	Fig.	Description	For Use With	EACH
907-7501	001-048	.....	Clamp	Biscuit	.70
907-7905	13967	.....	Filter Frame	*	1.00
907-7910	13996	A	Mounting Clips	*	.30
907-7915	14015	B	Reverse Synclamp	‡	.60
907-7920	14559	C	Rim Mount Guard	‡	3.65
907-7925	14611	D	Panel Mtg. Clips	‡	.15
907-7930	14651	E	Panel Mtg. Guard	‡	3.65
907-7935	15448	.....	Filter Cartridge	*	2.25
907-7940	15449	F	Filter Assembly	*	3.00
907-7945	16238	G	Grille, Spiral	*	1.00
907-7950	16398	.....	Plug and Cord	Feather	.90
907-7955	16415	.....	Plug and Cord	*	.70
907-7965	17469	H	Rim (Inlet)	Nugget	.70
907-7970	17471	J	Flange Outlet	Nugget	1.00
907-7975	17555	.....	Plug and Cord	§	.70
907-7980	17597	K	Inlet Clamp	Nugget	.70
907-7985	17597-1	L	Outlet Clamp	Nugget	.70
907-7990	17785	M	Filter Box	Feather	10.15
907-7995	17826	N	Metal Grille	*	1.00
907-8000	18440	.....	Filtercoat	All	1.25
907-8030	19694-2	P	Screen Guard	Caravel	2.15
907-8035	19699	R	Finger Guard	MB5100	3.30
907-8040	19803	X	Brass Inserts	Nugget	.25
907-8045	19869	Z	Filter Box	Saucer	21.40
907-8050	20049	S	Guard	Sprite	.75
907-8055	20132-2	T	Finger Guard	*	.70
907-8115	20787	.....	Plug and Cord	Sprite	.95
907-8120	20990	Y	Filter Box	Tarzan	10.00
907-8125	21196-2	W	Finger Guard	Tarzan	1.60
907-8210	24254	AA	Syn Clamp	†	.60
907-8215	24326-1	.....	Clip	*	.06
907-8220	24326-2	.....	Clip	*	.06
907X8225	24361-1	BB	Dust Filter	MB9100	5.00
907X8230	24361-3	CC	Dust Filter	MB9200	6.00
907-8235	24540	DD	Guard	Biscuit	.55
907-8240	24947	.....	Clamp	Feather	.15
907-8400	25678	.....	Grille Assembly	*	3.00

*Muffin, Sentinel, Whisper, Centaur †Saucer, Propimax, Aximax ‡Feather, Saucer §Caravel, Tarzan, Nugget, Biscuit



Allied Electronics Can Supply the Entire Rotron Line

BUD Series 2000 Cabinet Racks and Accessories



Frame is all-welded construction with 14-gauge steel members. 18 gauge steel door, sides and top. "U" braces are welded to sides of frame for extra strength and act as mounting for vertical rails, which may be horizontally adjusted. Front panel mounting rails are tapped 10-32. Rear rails are pierced 9-23. Bracket in base drilled for casters. Completely assembled. *Panel space. **NOTE: locate Mfr's Type wanted; read across line to color desired to find complete Stock No. For example, Type E-2000 GD is Stock No. 736F3947.**

Mfr's Type	Stock No. RB	GT	GD	Ht. In.	P.S.* In.	Wt., Lbs.	EACH 1-3	4-6	7-9
E-2000	736 3949	3948	3947	20¼	21	115	135.10	121.60	108.10
E-2001	736 3954	3953	3952	40¾	31½	152	167.10	150.40	133.70
E-2002	736 3959	3958	3957	44¼	35	160	176.35	158.70	141.10
E-2003	736 3964	3963	3962	51¼	42	167	185.65	167.70	148.50
E-2004	736 3969	3968	3967	61¾	52½	186	206.40	185.75	165.10
E-2005	736 3974	3973	3972	70½	61¼	210	229.10	206.20	183.30
E-2006	736 3979	3978	3977	79¼	70	225	254.55	229.10	206.65
E-2007	736 3984	3983	3982	88	78¾	255	277.95	250.15	222.35
E-2008	736 4000	3999	3998	30¼	21	150	159.55	143.60	127.65
E-2009	736 4007	4004	4003	40¾	31½	170	185.30	166.75	148.25
E-2010	736 4010	4009	4008	44¼	35	180	195.55	176.00	156.45
E-2011	736 4017	4014	4013	51¼	42	185	205.90	185.30	164.70
E-2012	736 4020	4019	4018	61¾	52½	200	228.55	205.70	182.85
E-2013	736 4027	4024	4023	70½	61¼	230	254.00	228.60	203.20
E-2014	736 4030	4029	4028	79¼	70	245	282.15	253.95	225.70
E-2015	736 4040	4039	4038	88	78¾	257	308.00	277.20	246.40

UPRIGHT CABINET RACKS WITH LOUVERED SIDES AND DOOR

E-2016	736 4047	4044	4043	30¼	21	115	140.80	126.70	112.65
E-2017	736 4050	4049	4048	40¾	31½	152	174.25	156.85	139.40
E-2018	736 4057	4054	4053	44¼	35	160	184.75	166.30	147.80
E-2019	736 4060	4059	4058	51¼	42	168	195.25	175.75	156.20
E-2020	736 4067	4064	4063	61¾	52½	186	223.15	200.85	178.50
E-2021	736 4070	4069	4068	70½	61¼	210	242.95	218.65	194.35
E-2022	736 4077	4074	4073	79¼	70	225	269.80	242.80	215.85
E-2023	736 4080	4079	4078	88	78¾	255	293.05	263.75	234.45
E-2024	736 4087	4084	4083	30¼	21	150	165.35	148.80	132.30
E-2025	736 4090	4089	4088	40¾	31½	170	119.80	179.80	159.85
E-2026	736 4097	4094	4093	44¼	35	180	211.15	190.05	168.90
E-2027	736 4100	4099	4098	51¼	42	185	222.45	200.20	177.95
E-2028	736 4107	4104	4103	61¾	52½	200	247.25	222.55	197.80
E-2029	736 4110	4109	4108	70½	61¼	230	274.85	247.35	219.90
E-2030	736 4117	4114	4113	79¼	70	245	305.20	274.70	244.15
E-2031	736 4120	4119	4118	88	78¾	257	332.65	299.40	266.15

INCLINED PANEL RACKS WITH SOLID SIDES AND DOOR

Positioned 20 degrees off vertical for extra viewing comfort. Front vertical and inclined panel section, as well as rear are adjustable from front to rear. All models have same following specifications: Height, 51¼"; width, 24³⁄₁₆"; outside depth, 23⅞"; clear inside depth, 20½"; weight, 160 lbs. *Inclined panel space. †Vertical panel space. See note below for ordering information.

Mfr's Type	Stock No. RB	GT	GD	* In.	† In.	EACH 1-3	4-6	7-9
SE-2064	736F7102	7102	7100	10½	29¾	184.05	165.65	147.25
SE-2065	736F7112	7111	7110	15¾	24½	195.10	175.60	156.10
SE-2066	736F7122	7121	7120	17½	22¾	195.10	175.60	156.10

INCLINED PANEL RACKS WITH LOUVERED SIDES AND DOOR

SE-2067	736F7132	7131	7130	10½	29¾	197.70	177.95	158.15
SE-2068	736F7142	7141	7140	15¾	24½	209.30	188.35	167.45
SE-2069	736F7152	7151	7150	17½	22¾	209.30	188.35	167.45

ADD-A-RACK ENCLOSURES FOR INCLINED CABINETS

Each assembly consists of a frame, top, bottom, rear door and cowlings. Any number of racks may be combined for optimum width. Locate Mfr's Type wanted; read across to color desired to find Stk. No. RB, GT and GD stand for Royal Blue, Gray, and Gold Textured respectively.

Mfr's Type	Stock No. RB	GT	GD	For Cabinet	Wt., Lbs.	EACH 1-3	4-6	7-9
ASE-2084	736F0953	0950	0949	SE-2064	115	155.75	140.20	124.60
ASE-2085	736F0958	0957	0954	SE-2065	115	166.15	149.55	132.90
ASE-2086	736F0963	0960	0959	SE-2066	120	166.15	149.55	132.90
ASE-2087	736F0968	0967	0964	SE-2067	115	157.55	141.80	126.05
ASE-2088	736F0973	0970	0969	SE-2068	115	170.20	153.20	136.15
ASE-2089	736F0978	0977	0974	SE-2069	120	170.20	153.20	136.15

DOORS FOR UPRIGHT CABINETS

See note below for ordering information. P.S.: Panel Space.

Mfr's # (Plain)	Stock No. RB	GT	GD	P.S. In.	Wt., Lbs.	EACH 1-3	4-6	7-9
E-9000	736F4150	4149	4148	21	8	20.20	18.20	16.15
E-9001	736F4157	4154	4153	31½	11	24.95	22.45	19.95
E-9002	736F4160	4159	4158	35	12	26.30	23.70	21.05
E-9003	736F4167	4164	4163	42	16	27.65	24.90	22.10
E-9004	736F4170	4169	4168	52½	20	30.85	27.75	24.70
E-9005	736F4177	4174	4173	61¼	22	34.05	30.65	27.25
E-9006	736F4180	4179	4178	70	24	39.85	35.90	31.90
E-9007	736F4187	4184	4183	78¾	26	41.25	37.15	33.00

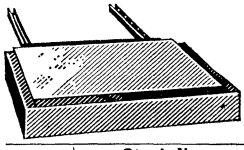
DOORS FOR INCLINED PANEL CABINETS

See note below for ordering information. V.S.: Vertical Space.

Mfr's # (Plain)	Stock No. RB	GT	GD	V.S. In.	Wt., Lbs.	EACH 1-3	4-9	7-9
E-9008	736F4190	4189	4188	29¾	11	25.05	22.55	20.05
E-9009	736F4199	4196	4193	24½	10½	23.30	21.00	18.65
E-9010	736F4202	4201	4200	22¾	9	22.80	20.50	18.25

ADD-A-RACK ENCLOSURES FOR UPRIGHT CABINETS

Mfr's Type	Stock No. RB	GT	GD	For Use With	Wt., Lbs.	EACH 1-3	4-6	7-9
AE-2032	736F0406	0405	0404	E-2000	90	114.95	103.45	91.95
AE-2033	736F0409	0408	0407	E-2001	110	134.65	121.20	107.75
AE-2034	736F0412	0411	0410	E-2002	113	141.10	127.00	112.90
AE-2035	736F0415	0414	0413	E-2003	115	147.55	132.80	118.05
AE-2036	736F0418	0417	0416	E-2004	145	161.25	145.15	129.00
AE-2037	736F0421	0420	0419	E-2005	148	180.00	162.00	144.00
AE-2038	736F0424	0423	0422	E-2006	152	200.50	180.45	160.40
AE-2039	736F0427	0426	0425	E-2007	158	215.35	193.80	172.30
AE-2040	736F0430	0429	0428	E-2008	120	128.55	115.70	102.85
AE-2041	736F0433	0432	0431	E-2009	130	150.65	135.60	120.50
AE-2042	736F0436	0435	0434	E-2010	135	157.65	141.90	126.10
AE-2043	736F0439	0438	0437	E-2011	138	164.55	148.10	131.65
AE-2044	736F0442	0441	0440	E-2012	142	179.65	161.70	143.70
AE-2045	736F0445	0444	0443	E-2013	164	200.80	180.70	160.65
AE-2046	736F0448	0447	0446	E-2014	168	223.65	201.30	179.90
AE-2047	736F0451	0450	0449	E-2015	172	247.50	222.75	198.00
AE-2048	736F0454	0453	0452	E-2016	90	119.55	107.60	95.65
AE-2049	736F0457	0456	0455	E-2017	110	138.50	124.65	110.80
AE-2050	736F0460	0459	0458	E-2018	113	145.10	130.60	116.10
AE-2051	736F0463	0462	0461	E-2019	115	151.70	136.55	121.35
AE-2052	736F0466	0465	0464	E-2020	145	165.75	149.20	132.60
AE-2053	736F0469	0468	0467	E-2021	148	185.10	166.60	148.10
AE-2054	736F0472	0471	0470	E-2022	152	205.75	185.20	164.60
AE-2055	736F0475	0474	0473	E-2023	158	221.40	199.25	177.10
AE-2056	736F0478	0477	0476	E-2024	120	130.20	117.20	104.15
AE-2057	736F0481	0480	0479	E-2025	130	152.95	137.65	122.35
AE-2058	736F0484	0483	0482	E-2026	135	160.85	144.75	128.95
AE-2059	736F0487	0486	0485	E-2027	138	168.70	151.85	134.95
AE-2060	736F0490	0489	0488	E-2028	142	184.10	165.70	147.30
AE-2061	736F0493	0492	0491	E-2029	164	205.75	185.20	164.60
AE-2062	736F0496	0495	0494	E-2030	168	229.45	206.50	183.55
AE-2063	736F0499	0498	0497	E-2031	172	253.70	228.35	202.95



SERIES 2000 DESK TOPS

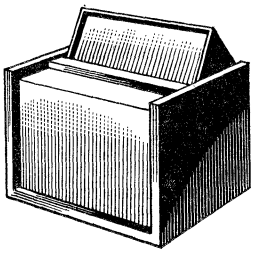
May be installed on any Series 2000 cabinet rack. White Formica top. 24³⁄₁₆x19½x3⅛". *Fits Series 2000 unit. †Supporting channel. See note below for order info.

Mfr's Type	Stock No. RB	GT	GD	*Depth In.	† In.	Wt., Lbs.	EACH 1-3	4-6	7-9
DT-2960	736F3700	3699	3698	22	21⁹⁄₁₆	22	43.75	39.40	35.00
DT-2962	736F3703	3702	3701	25½	2x¾	23	45.10	40.60	36.10

ORDERING NOTE: In tables above, RB, GT and GD stand for Royal Blue, Gray, and Gold Textured. See pgs. 524 and 526 for complete color information.

BUD Quality Metal Cabinets and Blowers

FLIP-TOP CABINETS FOR NEW DESIGN FLEXIBILITY



- New in Concept, Design and Operating Features
- Retractable Viewing Surface for Added "Readoff" Space
- Allows Separate Mounting of Components on Retractable Top and Main Panel of Unit

Offer special operating features for extra design freedom. Special retractable viewing surface provides additional component "readoff" space. Available in four sizes all ruggedly constructed of 18-gauge steel. Types FT-110, FT-112 and FT-117 have a welded body and a permanently welded rear panel. Three rear knockouts are provided for easy access to cable, switch operations, etc. Type FT-120 features a removable 16 gauge rear panel; also has three knockouts in the lower portion. The fliptop feature on all types is activated by applying a slight pressure to the front edge of the hood. This permits the top to be extended to its open position. Normal pressure will close and secure it. An adjustable coil spring is provided to modify tension pressure. Retractable top permits mounting of switches, control knobs, other components on the top's recessed panel. Four rubber feet attached to bottom of unit. NOTE: find Type No. desired, read across line to color wanted to find complete Allied Stock No.

Mfr's Type	Stock No. Royal Blue	Stock No. Gray Textured	Wt., Lbs.	EACH 1-2	EACH 3-5	EACH 6-9
FT-110	736-4211	736-4210	6½	31.55	28.40	25.25
FT-112	736-4216	736-4215	7¼	35.40	31.85	28.35
FT-117	736-4221	736-4220	11¾	41.80	37.60	33.45
FT-120	736-4226	736-4225	26	51.30	46.20	41.05

DIMENSIONS TABLE

Mfr's Type	Outside HxWxD	Inside HxWxD	Flip-Top Panel	Lower Panel
FT-110	8x10x10½"	7½x8½x10"	3¼x8 5/32"	6¾x8 7/16"
FT-112	8x12x10"	7½x10½x9½"	3¼x10 7/32"	6¾x8 7/16"
FT-117	9½x17x11"	9x10½x15½"	3¼x15 5/32"	8¼x15 7/16"
FT-120	12x20 9/16x22"	11½x19 1/16x21"	4¼x18¾"	10¾x19"

BUD METAL COLOR DESIGNATIONS

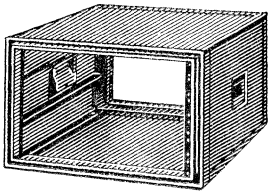
Previously used color-code letters were:

B—Black Wrinkle
G—Gray Wrinkle
HG—Gray Hammertone
SG—Smooth Dark Gray
SB—Smooth Dark Blue
LG—Silver Gray
LB—Smooth Light Blue
S—Textured Sand
CG—Textured Charcoal Gray

New color-code letters are:

BR—Black Rinkletex
GR—Gray Rinkletex
HG—Gray Hammertone
GG—Dark Gray Textured
BB—Dark Blue Textured
GY—Light Gray Textured
BY—Light Blue Textured
S—Sand Textured
GT—Gray Textured
RB—Royal Blue Textured
GD—Gold Textured
WH—White Textured
EBL—Flat Black Enamel
PO—Primer

CLASSIC II CABINETS



Combine rectilinear outlines with innovative features to meet critical engineering demands. Double rim 6063-T5 aluminum frame around front of cabinet. Sides, top and bottom are .060 aluminum. Front and rear mounting rails tapped 10-32 with W.E. spacing. Accept 19" panels. Clear inside depth of 17". Heavy-duty aluminum handle at each end. Vinyl texture finish. ORDERING NOTE: find Type No. desired in table, read across line to color wanted to find complete Stock No. For example, Type AGC-266 in Gray is Allied Stock No. 736U0000. *Panel space.

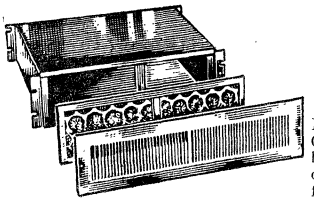
Type AGC-	Stock No. GD	Stock No. GT	Stock No. RB	Size, In. Ht.	Size, In. PS*	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-14
266	736U0500	0501	0502	4⅞	3½	17	94.70	85.25	75.75
267	736U0503	0504	0505	6⅝	5¼	19	97.00	87.30	77.60
268	736U0506	0507	0508	8⅜	7	20	102.30	92.50	81.85
269	736U0509	0510	0511	10⅛	8¾	22	104.80	93.40	83.85
270	736U0512	0513	0514	11⅞	10½	23	108.30	97.45	86.65
271	736U0515	0516	0517	13⅝	12¼	15	112.60	101.35	90.10
272	736U0579	0580	0581	15⅜	14	26	116.10	104.50	92.90
273	736U0582	0583	0584	17⅛	15¾	28	120.50	108.45	96.40
274	736U0585	0586	0587	18⅞	17½	29	124.00	111.60	99.20
275	736U0588	0589	0590	20⅝	19¼	31	126.80	114.10	101.45
276	736U0591	0592	0593	22⅜	21	32	104.70	117.80	104.70
277	736U0594	0595	0596	24⅛	22¾	34	107.50	120.95	107.50
278	736U0597	0598	0599	25⅞	24½	35	110.55	124.40	110.55
279	736U0600	0601	0602	27⅝	26¼	37	113.35	127.55	113.35
280	736U0603	0604	0605	29⅜	28	38	115.70	130.15	115.70

DOORS FOR CLASSIC II CABINETS

For use on Classic II cabinets, but will fit any rack or cabinet with 19" panel space by attaching to panel mounting rails. Made of ⅛" 505-H36 aluminum alloy. Equipped with plated flush type latch. Stop fits on one mounting rail, hinged door fits on the other rail. White or Sand textured enamel. NOTE: find Type desired, then Stock No. shown under color wanted.

Type AGD-	Stock No. S	Stock No. WH	Ht., In.	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-14
366	736U0622	0623	3½	1¼	7.30	6.55	5.85
367	736U0626	0627	5¼	1¾	8.90	8.00	7.10
368	736U0630	0631	7	2¼	10.40	9.35	8.30
369	736U0634	0635	8¾	3	11.40	10.25	9.10
370	736U0638	9639	10½	3¼	12.50	11.25	10.00
371	736U0642	0643	12¼	3¾	13.40	12.05	10.70
372	736U0646	0647	14	4¼	13.70	12.35	10.95
373	736U0650	0651	15¾	4¾	15.50	13.95	12.40
374	736U0654	0655	17½	5¼	16.80	15.10	13.45
375	736U0658	0659	19¼	5¾	18.00	16.20	14.40
376	736U0662	0663	21	6¼	19.10	17.20	15.30
377	736U0666	0667	22¾	6¾	20.00	18.00	16.00
378	736U0670	0671	14½	7¼	21.00	18.90	16.80
379	736U0674	0675	26¼	7¾	22.20	20.00	17.75
380	736U0678	0679	28	8¼	23.70	21.35	18.95

HIGHLY EFFICIENT "TRANS-AIRE" BLOWERS



- Protect Costly Electrical Equipment from Heat Damage
- Fiberglass Filter Included with Each Model
- A Size and Style Available for Every Requirement

Manufactures type with suffix, "A" operate both as an intake or exhaust fan for equipment cooling. Other models exhaust only. All models have low noise levels of operation. Permanently lubricated bearings for long life and dependability. Each model has standard EIA notching for mounting to racks or cabinets. *Indicates highest air displacement at 0° static pressure. All models are complete with fiberglass filter. 18" 3-wire cord. 110-120 V, 60 Hz AC. 35¼ lbs. Replacement filters sold below.

B-50 BLOWER

Engineered to give efficient cooling. Specially designed to blow air through 12½" slats on top of the unit. The air velocity and pressure make it ideal for cooling densely packed electronic equipment. *Air displacement at 0°. 3150 RPM shaded pole motor. 80 watts. Provided with disposable filter. Shpg. wt. 11½ lbs.

B-52 BLOWER

Designed for applications requiring higher back pressure. Equipped with two extra wide small diameter centrifugal blower wheels that supply a large volume of air. Permanently lubricated from 20° F to 250° F. 3150 RPM shaded pole motor. 80 watts. *Air displacement at 0° static pressure. With filter. Shpg. wt. 14¼ lbs.

B-54 BLOWER

Provides the ultimate in quiet and efficient operation. Features dual slow speed, low velocity centrifugal blower wheels. Audible noise level below the average dB found in offices. Motor is fan-cooled, rubber mounted and shaded pole. 1550 RPM. 60 watts, 115 V., 50/60 Hz AC. *Air displacement at 0° static pressure. With filter. Wt. 19 lbs.

BLOWERS

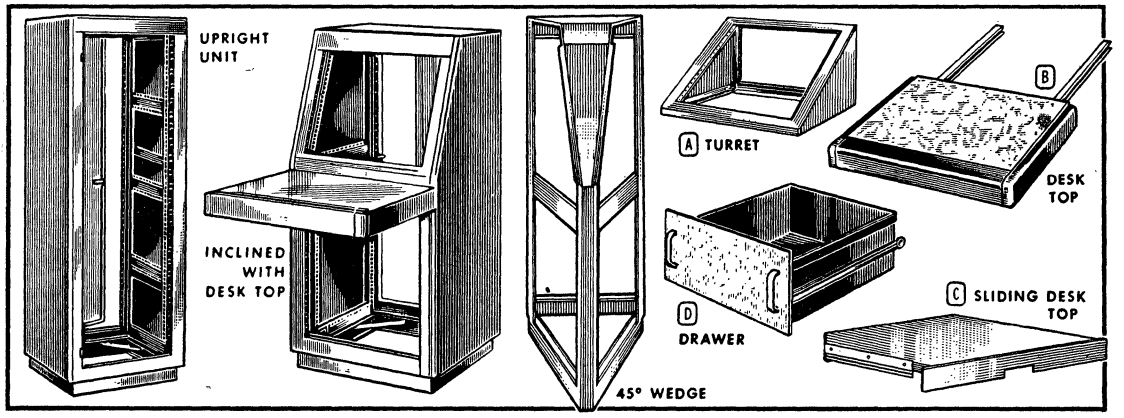
Stock No.	Mfr's Type	Size HxD	cfm* High	cfm* Low	Wt., Lbs.	EACH 1-9	EACH 10-14	EACH 15-19
736X1204	B-23A	3½x12"	180	130	15	83.35	76.80	68.30
736X1206	B-25A	5¼x14½"	350	160	28	97.50	87.75	78.00
736X1208	B-27A	7x14½"	500	280	30½	109.60	98.65	87.70
736X1210	B-50	3½x6 13/16"	150	000	11½	83.05	74.75	66.45
736X1212	B-52	5¼x7 11/16"	150	000	14¼	85.75	77.20	68.60
736X1214	B-54	7x10 3/16"	30	000	19	109.80	98.85	87.85

DISPOSABLE FILTERS

Stock No.	Mfr's Type	Use With	EACH 1-24	EACH 25-49	EACH 50-99
736-1300	BF-24	B-23A	1.90	1.70	1.50
736-1301	BF-26	B-25A	2.10	1.90	1.70
736-1303	BF-28	B-27A	2.40	2.15	1.90
736-1305	BF-51	B-50	2.40	2.15	1.90
736-1307	BF-53	B-52	2.10	1.90	1.70
736-1309	BF-55	B-54	2.40	2.15	1.90

Metal Racks, Accessories and Wedges

SERIES 60 CABINET RACKS AND ACCESSORIES



SERIES 60 UPRIGHT CABINET RACKS

Welded frame is 14-gauge steel. Sides and rear door are 16-gauge steel. Adjustable vertical panel mounting rails. Front rails are drilled and tapped 3-32, W.E. spacing. Rear rails are drilled with universal spacing. Standard 19" panels fit. 24 1/16" wide, 23 3/4" deep inside except †20 1/4". Top opening 18 1/2x17" deep on types having 22" outside depth, 20 1/2" on others. *Panel space. Depth, 25 1/2, except §22". ORDERING NOTE: select Type No. desired, read across to color wanted to find complete Stock No.

Type 60-	Stock No. BB	Stock No. GG	Ht. In.	P.S.* In.	Wt., Lbs.	EACH 1-3	EACH 4-8	EACH 7-9
2300†	736F8900	8901	29 5/8§	21	118	128.95	116.05	103.15
2301†	736F8905	8906	40 1/8§	31 1/2	156	159.60	143.65	127.70
2302†	736F8910	8911	50 5/8§	42	173	177.25	159.55	141.80
2303†	736F8915	8916	61 1/8§	52 1/2	197	196.90	177.20	157.50
2304†	736F8920	8921	69 7/8§	61 1/4	220	218.70	196.85	174.95
2305	736F8925	8926	78 5/8§	70	235	243.10	218.80	194.50
2307	736F8935	8936	29 5/8	21	156	152.25	137.05	121.80
2308	736F8940	8941	40 1/8	31 1/2	176	176.95	159.25	141.55
2309	736F8945	8946	50 5/8	42	185	196.55	176.90	157.25
2310	736F8950	8951	61 1/8	52 1/2	211	218.20	196.40	174.55
2311	736F8955	8956	69 7/8	61 1/4	240	242.55	218.30	194.05
2312	736F8960	8961	78 5/8	70	256	269.45	242.50	215.55
2313	736F8965	8966	87 3/8	78 3/4	267	210.10	189.10	168.10

PERFORATED TOPS Av. Shpg. wt. 18 lbs.

Type 60-	Stock No. BB	Stock No. GG	WxD	Fits Rack with overall depth of	EACH 1-3	EACH 4-6	EACH 7-9
2370	736F9241	9242	21 15/16x17"	22"	7.90	7.10	6.30
2371	736F9251	9252	21 15/16x20 1/2"	25 1/2"	8.30	7.45	6.65

SERIES 60 INCLINED PANEL RACKS

Accept 19" panel. Fully assembled. Front rails drilled and tapped at 10-32 W.E. spacing. welded frame of 14-gauge steel; sides and door of 16-gauge steel. Inclined panel slanted 20°. 50 5/8" high, 24 1/16" wide, 22" deep outside, 20 1/4" deep inside. *Inclined top panel height; †Vertical panel height. See color table, p. 524. 165 lbs.

Type 60-	Stock No. BB	Stock No. GG	I.P.* In.	VP.† In.	EACH 1-3	EACH 4-6	EACH 7-9
2330	736F8975	8976	10 1/2	29 3/4	193.30	173.95	154.65
2331	736F8980	8981	15 3/4	24 1/2	204.85	184.35	163.90
2332	736F8985	8986	17 1/2	22 3/4	204.85	184.35	163.90

SERIES 60, 45° WEDGES

Designed to create custom consoles or any configuration with any Series 60 Cabinet Racks. Av. shpg. wt. 125 lbs. ORDERING NOTE: find Type desired, read across to color wanted to locate Stock No.

45° WEDGES FOR SERIES 60 UPRIGHT RACKS

Type 60-	Stock No. BB	Stock No. GG	Panel Space	Depth	Wedge Width	EACH 1-3	EACH 4-6	EACH 7-9
8400	736F9501	9502	21"	22"	18 9/32"	88.80	79.90	71.05
8401	736F9511	9512	31 1/2"	22"	18 9/32"	102.80	92.50	82.25
8402	736F9521	9522	42"	22"	18 9/32"	112.00	100.80	89.60
8403	736F9531	9532	52 1/2"	22"	18 9/32"	121.20	109.10	96.95
8404	736F9541	9542	61 1/4"	22"	18 9/32"	137.40	123.65	109.90
8405	736F9551	9552	70"	22"	18 9/32"	150.40	135.35	120.30
8406	736F9561	9562	78 3/4"	22"	18 9/32"	162.80	146.50	130.25
8407	736F9571	9572	21"	25 1/2"	20 61/64"	97.40	87.65	77.90
8408	736F9581	9582	31 1/2"	25 1/2"	20 61/64"	113.60	102.25	90.90
8409	736F9591	9592	42"	25 1/2"	20 61/64"	126.60	113.95	101.30
8410	736F9601	9602	52 1/2"	25 1/2"	20 61/64"	137.40	123.65	109.90
8411	736F9611	9612	61 1/4"	25 1/2"	20 61/64"	152.10	136.90	121.70
8412	736F9621	9622	70"	25 1/2"	20 61/64"	169.90	152.90	135.90
8413	736F9631	9632	78 3/4"	25 1/2"	20 61/64"	188.30	169.45	150.65

45° WEDGES FOR SERIES 60 INCLINED PANEL RACKS Av. 125 lbs.

Type 60-	Stock No. BB	Stock No. GG	Panel Space	Wedge Width	EACH 1-3	EACH 4-6	EACH 7-9
8430	736F9641	9642	29 3/4"	18 9/32"	130.40	117.35	104.30
8431	736F9651	9652	24 1/2"	18 9/32"	139.60	125.65	111.70
8432	736F9661	9662	22 3/4"	18 9/32"	139.60	125.65	111.70

SERIES 60 ACCESSORIES

A STEEL TURRETS. Fit 19" rack panels. 16-gauge steel. Mounting rails have universal hole spacing. Panel space (front, bottom, rear): Type 2364—17 1/2", 14", 8 3/4"; Type 2363—12 1/4", 10 1/2", 7"; Type 2366—21", 17 1/2", 10 1/2". Panel spaces recessed 3/8". Type 2364, 17 lbs.; Type 2365, 14 1/2 lbs.; Type 2366, 20 lbs. NOTE: find Type desired, read across chart to color wanted to locate Stock No.

Type 60-	Stock No. BB	Stock No. GG	Outside Size H	Outside Size W	Outside Size D	EACH 1-3	EACH 4-6	EACH 7-9
2364	736F9031	9032	12 5/16"	22 1/16"	17 7/8"	41.05	36.95	32.85
2365	736F9041	9042	10 3/16"	22 1/16"	14 3/8"	34.25	30.85	27.40
2366	736F9051	9052	14 3/8"	22 1/16"	20 13/16"	43.15	38.85	34.50

B DESK TOPS. Fit all Series 60 Cabinet Racks. Antique white Formica top. Metal sides and cowl. Support over 200 lbs. 24 1/8" wide x 19 1/2" deep x 3 1/16" high. See color table on previous page. Shpg. wt. 22 lbs.

Mfr's Type	Stock No. BB	Stock No. GG	Depth	EACH 1-3	EACH 4-6	EACH 7-9
60-2360	736F9001	9002	22"	41.70	37.55	33.35
60-2362	736F9011	9012	25 1/2"	43.05	38.75	34.45

All colors (except gray hammertone) in units below, have new textured finish.

C SLIDING DESK TOPS. Formica surface. Support 50 lbs. Occupy 1 3/4" panel space. WxDxPanel: 16 7/8x15 1/8x19x1 3/4". For front panel. 8 lbs.

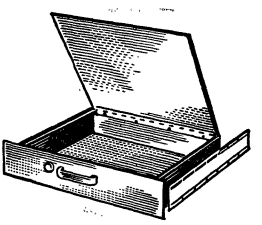
Color:	Lt. Gray	Lt. Blue	White	Sand	Gray Ham'tone	EACH
Stk. No.	736F9007	9006	9010	9009	9008	22.45

D TYPE 60-2368 DRAWER. Slides out 16" on nylon rollers. 16-gauge steel with 11-guage panel and brackets. Safety drawer stops. Shipped assembled. Silver-anodized cast aluminum handles. Inside dimensions: 16 19/32x6 11/32x19 13/64". Occupies 8 3/4" panel space. 28 lbs.

Color:	Lt. Gray	Lt. Blue	White	Sand	Gray Ham'tone	EACH
Stk. No.	736F9060	9059	9065	9062	9061	35.70

DESK TOP DRAWER

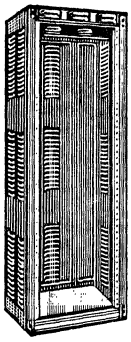
TYPE 60-2363. Designed for use with Bud Series 2000 or Series 60 cabinet racks. Hinged top is Formica bonded to aluminum; has piano-type hinge. Latch locks and releases drawer and top. Smooth nylon rollers. Front panel is 3 1/2x19". Inside dimensions: 16 9/16x2 31/32x14 7/8". For front panel. Shpg. wt. 19 lbs. See table on previous page for colors explanation.



Color: BY	GY	HG	S	WH
Stk. No. 736F9019	736F 9020	736F 9021	736F 9022	736F 9025

1-3..61.30 4-6..55.20 7-9..49.00

Relay Racks and Rack Cabinets



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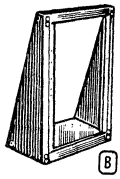

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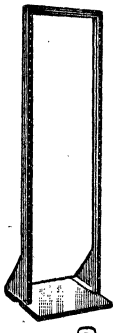

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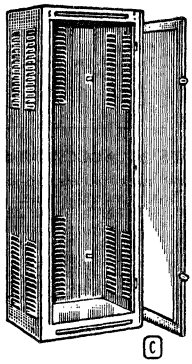


C

A DELUXE ENCLOSED RELAY RACKS

Doors have two snap-action catches. 16-gauge steel with" 7/64 panel supports. Casters can can be mounted on base. For 19" panels.

BLACK RINKLETEX (BR), GRAY RINKLETEX (GR), OR GRAY HAMMERTONE (HG) FINISH

Mfr's Type	Stock No. BR	GR	HG	Overall Size	Panel Ht.	Wt., Lbs.	EACH 1-9	10-14	15-19
CR-1774	736L2F3210	3211	3212	42 1/16x22x17 1/8"	36 3/4"	82	65.80	59.20	52.65
CR-1771	736L2F3180	3181	3182	47 5/16x22x17 1/8"	42"	92	74.60	67.15	59.70
CR-1772	736L2F3190	3191	3192	66 9/16x22x17 1/8"	61 1/4"	115	93.30	83.05	74.65
CR-1780	736L3F3220	3221	3222	75 5/16x22x17 1/8"	70"	125	95.65	86.10	76.50
CR-1773	736L2F3200	3201	3202	82 5/16x22x17 1/8"	77"	135	107.45	96.70	85.95
CR-2072	736L2F3230	3231	3232	66 9/16x22x22 1/8"	61 1/4"	137	112.05	100.85	89.65
CR-2075	736L2F3260	3261	3262	75 5/16x22x22 1/8"	70"	148	114.15	102.75	91.30
CR-2073	736L2F3240	3241	3242	82 5/16x22x22 1/8"	77"	159	133.05	119.75	106.45

ADD-A-RACK SERIES FOR ABOVE AVAILABLE

B DESK-TYPE RELAY RACKS

Chassis-type base. Supporting angles assure steadiness.

Gray Hammertone	Black Rinkletex	Mfr's Type	Overall Size	Panel Ht.	Wt., Lbs.	EACH 1-14	15-24	25-34	35-Up
736U6200	736X6301	RR-1248	24x20 3/8x12"	21"	15	12.80	11.50	10.25	9.60
736X6203	736X6311	RR-1249	31x20 3/8x12"	28"	18	15.10	13.60	12.10	11.35

C SUPER-DELUXE ENCLOSED 2-DOOR CABINET RACKS

Like deluxe racks (Fig. A), but panel supports adjustable 1-6" at 1" intervals. Takes casters. 16-gauge steel. For 19" panels.

BLACK RINKLETEX (BR), GRAY RINKLETEX (GR), OR GRAY HAMMERTONE (HG) FINISH

Mfr's Type	Stock No. BR	GR	HG	Overall Size	Panel Ht.	Wt., Lbs.	EACH 1-9	10-14	15-19
CR-2174	736L2F3310	3311	3312	42 1/16x22x17 1/8"	36 3/4"	102	86.55	77.90	69.25
CR-2171	736L2F3280	3279	3281	47 5/16x22x17 1/8"	42"	104	93.65	84.30	74.90
CR-2172	736L2F3290	3291	3292	66 9/16x22x17 1/8"	61 1/4"	138	120.85	108.85	96.70
CR-2175	736L2F3320	3321	3322	75 5/16x22x17 1/8"	70"	150	129.90	116.90	103.90
CR-2173	736L2F3300	3301	3302	82 5/16x22x17 1/8"	77"	163	145.00	130.50	116.00

D OPEN-TYPE RELAY RACKS

Chassis-type base, except * has base of 1/4" iron angles and brackets. For 19" panels. Black Rinkletex (BR) or Gray Hammertone (HG) finish. RR-1265 in Black Rinkletex only.

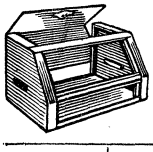
Mfr's Type	Stock No. BR	HG	Overall Size	Panel Ht.	Wt., Lbs.	EACH 1-9	10-14	15-19
RR-1263	736L2F6320	6322	35 39/64x19 3/4x22"	31 1/2"	35	29.80	26.80	23.85
RR-1363	736L2F6350	6352	40 55/64x19 3/4x22"	36 3/4"	37	28.80	25.90	23.05
RR-1264	736L2F6330	6332	70 39/64x19 3/4x22"	66 1/2"	46	34.20	30.80	27.35
*RR-1265	736L2F6340	.....	72 1/4x20 3/8x13"	66 1/2"	68	79.40	71.45	63.50
RR-1364	736L2F6360	6362	75 55/64x19 3/4x22"	71 3/4"	48	36.85	32.25	28.70
RR-1366	736L2F6370	6372	81 7/64x20x22"	77"	50	39.25	35.25	31.40
RR-1369	736L2F6380	6382	80 3/8x20 7/8x26"	77"	105	68.00	61.20	54.40

DELUXE CABINET RACKS

Truly the work-horse of economy type housings. Recommended for use as an enclosure for instrumentation, this attractive welded steel cabinet rack has contoured front uprights. A 12-gauge 19" steel panel is included at no extra charge. Five larger sizes have hinged rear door. All models have hinged top with flush life handle. Clear inside depth, 14 3/16". Black Rinkletex (BR), Gray Rinkletex (GR), or Gray Hammertone (HG) finish.

Type CR-	Stock No. BR	GR	HG	Height	Panel Space	Wt., Lbs.	EACH 1-14	15-24
1726	736U3053	3054	3052	8 25/32"	7"	24	20.70	18.65
1741	736U3133	3134	3132	10 9/16"	8 3/4"	28 1/4	22.05	19.85
1740	736U3123	3124	3122	12 5/16"	10 1/2"	31	25.85	23.25
1742	736U3143	3144	3142	14 1/16"	12 1/4"	32	26.65	24.00
1739	736U3113	3114	3112	15 13/16"	14"	35	36.10	32.50
1743	736U3153	3154	3152	19 5/16"	17 1/2"	40	35.40	31.85
1728	736U3073	3074	3072	33 5/16"	31 1/2"	58	43.35	39.00
1744	736U3163	3164	3162	28 1/16"	26 1/4"	51	40.85	36.75
1727	736U3063	3064	3062	22 13/16"	21"	43	38.00	34.20
1745	736U3173	3174	3172	36 13/16"	35"	63	45.55	41.00

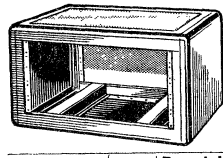
SLOPING PANEL PRESTIGE CABINETS



A very practical and attractively designed enclosure with a perforated top that opens completely. Panel trim bar is removable to permit removal of panels to which chassis have been attached. Uses standard 19" panels. Safety shielded panel slots are used as carrying handles. Gray Hammertone finish.

Stock No.	Mfr's Type	Height x Depth	Panel Space	EACH 1-14	15-24	25-34	35-Up
736U1813	C-1555	11 7/8x14 3/8"	* 7"	48.20	43.40	38.55	36.15
736U1814	C-1556	13 1/4x15 1/8"	* 8 3/4"	51.80	46.60	41.45	38.85
736U1815	C-1557	14 3/4x16 1/8"	*10 1/2"	55.55	50.00	44.45	41.65

PRESTIGE BALL-CORNERED VERSA-CABINETS



Has frame, two ball-cornered sides, perforated metal back, solid bottom plate, two supporting channels. 1 3/4x 19" opening in back for cables, controls, or knobs. Front, back, top, and bottom take standard 19" panels. Inside width, 22 1/4"; overall, 23 3/16". Inside depth, 15"; overall, 15 25/32". With 4 rubber feet. Gray Hammertone finish.

Stock No.	Type PC-	Panel Ht. F	R	Overall Height	Wt., Lbs.	EACH 1-14	15-24	25-34	35-Up
736U5400	1700	5 1/4"	3 1/2"	8 3/4"	28	38.00	34.20	30.40	28.50
736U5401	1701	7"	5 1/4"	10 1/2"	29	40.20	36.20	32.15	30.15
736U5402	1702	8 3/4"	7"	12 1/4"	31	41.25	37.15	33.00	30.95
736U5403	1703	10 1/2"	8 3/4"	14"	34	46.55	41.90	37.25	34.90
736U5404	1704	12 1/4"	10 1/2"	15 3/4"	35	49.05	44.15	39.25	36.80

PERFORATED STEEL TOP PANEL

Stock No.	Type PC-	Size	Wt. Lbs.	EACH 1-14	15-24	25-34	35-Up
736U5405	1710	12 1/4x19"	2 1/2	4.20	3.80	3.35	3.15

BUD METAL COLOR DESIGNATIONS

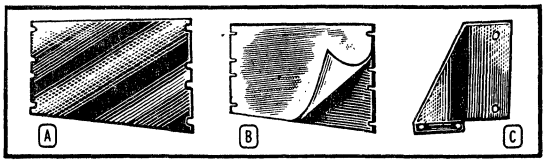
Previously used color-code letters were:

B—Black Wrinkle
G—Gray Wrinkle
HG—Gray Hammertone
SG—Smooth Dark Gray
SB—Smooth Dark Blue
LG—Silver Gray
LB—Smooth Light Blue
S—Textured Sand
CG—Textured Charcoal Gray

New color-code letters are:

BR—Black Rinkletex
GR—Gray Rinkletex
HG—Gray Hammertone
GG—Dark Gray Textured
BB—Dark Blue Textured
GY—Light Gray Textured
BY—Light Blue Textured
S—Sand Textured
GT—Gray Textured
RB—Royal Blue Textured
GD—Gold Textured
WH—White Textured
EBL—Flat Black Enamel
PO—Primer

Rack Panels, Accessories and Boxes



STANDARD ALUMINUM RACK PANELS

A 1/8x19" aluminum panels have notched edges to match standard W.E. spacing on racks or cabinets. 1/8" steel, 3/16" aluminum, hard aluminum (2024-T-3) and 24" panels also available, contact Allied Electronics. Available in 7 finishes. When ordering, add the following digits in place of suffix "N" in Stock No. to specify color: 1 for Black Rinkletex; 3 for Gray Rinkletex; 5 for Gray Hammertone; 2 for Light Blue Textured; 4 for Light Gray Textured; 7 for White; 6 for Sand.

Stock No.	Mfr's Type	Ht.	Wt., Lbs.	EACH 1-49	50-99	100-149	150-Up
736X511N	PA-1101	1¾"	¼	1.60	1.45	1.30	1.20
736X512N	PA-1102	3½"	¾	2.30	2.05	1.85	1.75
736X513N	PA-1103	5¼"	1	3.00	2.70	2.40	2.25
736X514N	PA-1104	7"	1¾	3.80	3.40	3.05	2.85
736X515N	PA-1105	8¾"	2	4.35	3.90	3.50	3.25
736X516N	PA-1106	10½"	2½	5.50	4.95	4.40	4.15
736X517N	PA-1107	12¼"	2¾	6.55	5.90	5.25	4.90
736X518N	PA-1108	14"	4	7.35	6.60	5.90	5.50
736X519N	PA-1109	15¾"	3½	8.30	7.45	6.65	6.25
736X520N	PA-1110	17½"	4	9.00	8.10	7.20	6.75
736X521N	PA-1111	19¼"	4¼	9.90	8.90	7.90	7.45
736X534N	PA-1112	21"	5	10.95	9.85	8.75	8.20

SURFACE-SHIELD RACK PANELS

B 1/8" thick bright aluminum alloy rack panels in blemish-free mill finish. Each panel is covered on both sides with sturdy pressure sensitive white paper for protection. 19" wide.

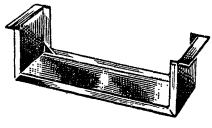
Stock No.	Mfr's Type	Ht.	Wt., Lbs.	EACH 1-49	50-99	100-149	150-Up
736X7200	SFA-1831	1¾"	¼	1.50	1.35	1.20	1.15
736X7201	SFA-1832	3½"	¾	2.30	2.05	1.85	1.75
736X7202	SFA-1833	5¼"	1	3.00	2.70	2.40	2.25
736X7203	SFA-1834	7"	1¾	3.80	3.40	3.05	2.85
736X7204	SFA-1835	8¾"	2	4.35	3.90	3.50	3.25
736X7205	SFA-1836	10½"	2½	5.50	4.95	4.40	4.15
736X7206	SFA-1837	12¼"	2¾	6.55	5.90	5.25	4.90
736X7207	SFA-1838	14"	3	7.35	6.60	5.90	5.50
736X7208	SFA-1839	15¾"	3½	8.30	7.45	6.65	6.25
736X7209	SFA-1840	17½"	4	9.00	8.10	7.20	6.75
736X7210	SFA-1841	19¼"	4¼	9.90	8.90	7.90	7.45
736X7211	SFA-1842	21"	5	10.95	9.85	8.75	8.20

CHASSIS MOUNTING BRACKETS

C Insure proper support of heavily loaded chassis. Heavy-gauge steel brackets cut away to accommodate chassis 3" high, except *4" chassis. Black enamel. Sold only in pairs.

Stock No.	Mfr's Type	Ht.	Depth	Wt., Lbs.	PER PAIR 1-49	50-99	100-149	150-Up
736-4503	MB-458	6½"	8"	1¼	1.75	1.60	1.40	1.30
736-4500	MB-448	6½"	10"	1¾	1.75	1.60	1.40	1.30
736-4504	MB-459	6½"	11"	2	2.00	1.80	1.60	1.50
736-4501	MB-449	6½"	12"	2	2.30	2.05	1.85	1.75
736-4505	MB-460	6½"	13"	2½	2.20	2.00	1.75	1.65
736-4502	MB-451	*8½"	13"	3	2.75	2.50	2.20	2.05

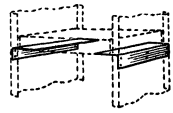
PANEL-MOUNTING CHASSIS



Durable .060" aluminum panel-mounting chassis for vertical installation where depth is limited or access from front of chassis is desired. Fit on channel mounting rails in rack. Reinforced corners and flanges on front and sides for extra strength. Natural finish.

Stock No.	Mfr's Type	Ht.	Wt., Lbs.	EACH 1-24	25-49	50-99	100-Up
736-2277	CB-1370	1¾"	¾	3.30	2.95	2.65	2.50
736-2278	CB-1371	3½"	1¼	3.65	3.30	2.90	2.75
736-2279	CB-1372	5¼"	1½	4.20	3.80	3.35	3.15
736-2280	CB-1373	7"	2	4.75	4.30	3.80	3.55
736-2281	CB-1374	8¾"	2¼	5.60	5.05	4.50	4.20
736-2282	CB-1375	10½"	2¾	6.50	5.85	5.20	4.90
736X2283	CB-1376	12¼"	3	7.25	6.55	5.80	5.45
736X2284	CB-1377	14"	3¼	7.90	7.10	6.30	5.95

CHASSIS SUPPORTING ANGLES



Where heavy weights occur in chassis construction, these supporting angles distribute the weight to the sides of the rack to relieve the panel. Relay-rack runners of 7/64" steel for heavy chassis shelves. Rugged long-wearing construction for years of service. Black enamel finish.

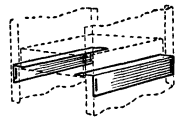
Stock No.	Mfr's Type	HxWxD	Wt., Lbs.	PER PAIR 1-24	25-49	50-99	100-Up
736-6600	SA-1349	1⅜x3x14½"	4	3.20	2.90	2.55	2.40
736-6601	SA-1350	1⅜x3x12"	3	3.20	2.90	2.55	2.40

TRIANGULAR MOUNTING BRACKETS

Performance-tested triangular mounting brackets designed and made for durability. Will give long, dependable service. Quality-constructed of heavy-gauge steel to provide rigid support for panel and chassis assemblies and for shelves where heavy weights are involved. Black enamel finish.

Stock No.	Mfr's Type	Ht.	Depth	Wt., Lbs.	PER PAIR 1-49	50-99	100-149	150-Up
736-4506	MB-1266	5"	5"	1	1.45	1.30	1.15	1.10
736-4507	MB-1267	7"	7"	1	1.55	1.40	1.25	1.15
736-4508	MB-1268	9"	9"	1½	1.90	1.70	1.50	1.45

PRESTIGE SUPPORTING ANGLES



CE-2219. Constructed of heavy-duty steel. Designed for attaching to rails of Prestige Relay Racks. Slotted to provide infinite vertical adjustment. Extend entirely from front to rear to accept full-depth chassis. 21x3x2¾". Black enamel finish. Shpg. wt. 7½ lbs.

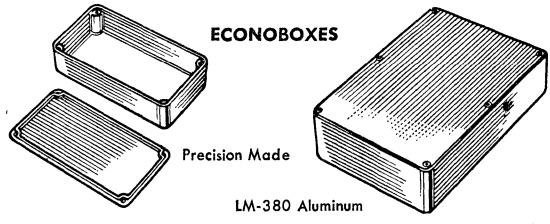
736 U 2800. 1-24.....Per Pair 4.45 25-49.....Per Pair 4.00
50-99.....Per Pair 3.55 100-Up.....Per Pair 3.35

UNIVERSAL METER CASES

Sloping-front meter housings. Panel cut for 2" meters; knockout ring enlarges hole for 3" meters. Case top has two 3/8" knockouts for mounting terminal posts or feed-through insulators. Type CMA1930 accepts small components as well as meter. Type CM1935 is steel; Types CMA1930 and CMA1936 are aluminum. To minimize magnetic effect on meter, use aluminum case. In light-gray hammertone. 4¼x4x4", except CMA1930, which is 4¼x6x4". Shpg. wts., CM1935, 1 lb.; CMA1936, ¾ lb.; CMA1930, 1 lb.

Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-149	150-Up
736-2901	CM1935	2.04	1.85	1.65	1.50	1.40
736-2903	CMA1936	2.31	2.10	1.90	1.70	1.60
736-2902	CMA1930	4.02	3.65	3.30	2.90	2.75

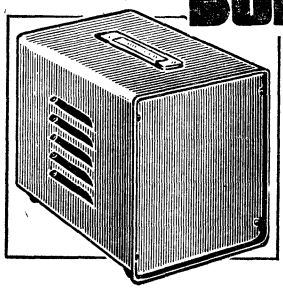
ECONOBOXES



Exceptionally versatile die-cast utility boxes for applications requiring a sturdier structure than a sheet-metal cabinet. These high-quality boxes are ideal for instrument and meter cases, filter networks, junction boxes, switch boxes, audio and radio-frequency distributors, plus many other purposes where a small box is needed. They are especially desirable for concealed or other interior use where safety enclosure is required. Feature close-fitting flanged lids fastened to bosses in the body. The close fit of the lids and the thickness of the aluminum alloy combine to provide excellent screening properties. Cast of LM-380 aluminum, these boxes are lightweight and easy to machine.

Stock No.	Mfr's Type	Thickness	Wt., Lbs.	LxWxH	EACH 1-9	10-24	25-49	50-Up
736-3600	CU-124	1/16"	½	4⅜x2⅜x1 1/16"	1.71	1.55	1.40	1.25
736-3601	CU-234	3/32"	¾	4 11/16x3 11/16x2 1/16"	2.75	2.50	2.25	2.00
736-3602	CU-247	3/32"	1¼	7⅜x4 11/16x2 1/16"	4.51	4.10	3.70	3.30
736-3604	CU-347	3/32"	1½	7⅜x4 11/16x3 1/16"	4.84	4.40	3.95	3.50

BUD Metal Cabinets and Foundations

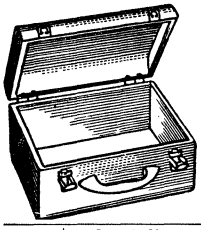


PORTACAB CABINETS

For equipment requiring maximum portability. Sturdy one-piece body is .050″ aluminum with contoured corners. Cabinet is louvered for adequate ventilation. Louvers point inward for side-to-side placement of cabinets without loss of space. Welded back has opening (table below) for access to interior. .062″ aluminum front panel is recessed ½″ to protect controls. Front panel mtg. flanges ½″ wide. With 4 rubber feet. "Use With" column in table below indicates recommended Bud chassis (listed on page 527). **Available in Dark Blue (BB) or Dark Gray (GG) textured finish.**

Mfr's Type	Stock No. BB	Stock No. GG	Depth	Width	Ht.	Opening	Louvers Per side	Wt., Lbs.	Use With	EACH 1-24	EACH 25-49	EACH 50-99
WA-1541	736-8215	8216	12″	8⅛″	9″	2x6½″	2 Sets	3	AC-407	16.15	14.55	12.90
WA-1540	736-8210	8211	8″	6⅛″	8″	2x4½″	1 Set	2½	AC-402	12.45	11.20	9.95
WA-1542	736-8220	8221	8″	10⅛″	8″	2x8½″	1 Set	3½	AC-406	14.40	12.95	11.50
WA-1543	736X8225	8226	18″	11⅛″	11″	2x9½″	3 Sets	6½	AC-416	20.00	18.00	16.00
WA-1544	736X8230	8231	18″	14⅛″	12″	2x12½″	3 Sets	7¾	AC-420	23.10	20.80	18.50

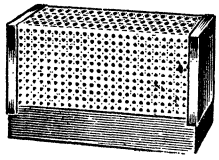
"TRANSICASE" INSTRUMENT CASES



Handsome portable instrument cases with unlimited applications. Smart contoured design made of .040″ thick alum. Flush-fitting aluminum panel; lid on 2 slide-off hinges—fastened by toggle catches (chromium plated). 1 15/32″ clearance from panel top. Rubber feet on base and back. TC-300 and TC-301 have 4 13/32″ clearance below panel; wt. 4½ lbs. TC-302 and TC-303 have 5 29/32″; 8 lbs. TC-304 has 7 11/32″; 10 lbs. **Specify Dark Blue (BB) or Dark Gray (GG) textured finish.**

Type TC-	Stock No. BB	Stock No. GG	Size HxWxD	Panel Size	EACH 1-9	EACH 10-14	EACH 15-19
300	736-7601	7602	6x10 1/16x7″	8 15/16x5 15/16″	29.20	26.30	23.35
301	736-7611	7612	6x11½x8¼″	10⅜x7¼″	29.95	26.95	23.95
302	736-7621	7622	7½x13x9″	11⅞x7 15/16″	32.00	28.80	25.60
303	736-7631	7632	7½x16½x9″	15⅜x7 15/16″	32.55	29.30	26.05
304	736X7641	7642	9x20⅛x8″	19x7″	34.30	30.85	27.45

STANDARD AMPLIFIER FOUNDATIONS



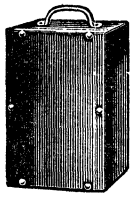
Each foundation consists of a sturdy 20-gauge steel chassis with a removable steel cover.

18-gauge steel angles are used on ends of each cover to provide firm bracing and allow a snug fit to chassis. Entire side and top area between ends are enclosed by 20-gauge metal screening which provides excellent ventilation and protection for components. Metal handles are attached to the chassis for increased portability.

All types have a 2½″ high chassis, except Type CA-1128 has a 3″ high chassis. Attractive black Rinkletex finish. Shpg. wt.: CA-699, 3 lbs.; CA-1125, 4¾ lbs.; CA-1126, 6 lbs.; CA-1128, 7 lbs.

Stock No.	Type CA-	Size H x W x D	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
736-1990	699	8 5/16x9 5/8x5⅛″	8.35	7.50	6.70	6.25
736-1992	1125	8 5/16x13⅝x5⅛″	8.70	7.85	6.95	6.55
736-1994	1126	8 5/16x17⅛x7⅛″	9.80	8.80	7.85	7.35
736-1996	1128	8 13/16x12⅛x10⅛″	10.10	9.10	8.10	7.60

PORTABLE ALUMINUM AND STEEL CARRYING CASES



Ideal housings for portable transceivers, test instruments, power supplies, radio-control units, field-strength meters, phono oscillators, etc. Handle on top for portability. Panels are removable to provide access to interior. Available in either welded steel for maximum strength, or in aluminum for light weight. Rigid construction assures proper support for components. **Steel cabinets available in Black Rinkletex (BR) or Gray Hammertone (HG).** Aluminum cabinets weigh less than 2 lbs.; available in Gray Hammertone or Natural finish. Av. shpg. wt. 3 lbs.

STEEL CASES

Stock No. BR	Stock No. HG	Type CC-	Size HxWxD	Wt., Lbs.	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
736-2504	736-2505	1095	9x6x5″	3¼	4.50	4.05	3.60	3.40
736-2500	736-2501	1092	7x12x6″	4	6.25	5.65	5.00	4.70
736-2506	736-2507	1097	15x7¾x7″	5	6.95	6.25	5.55	5.20
736-2502	736-2503	1093	9x15x7″	5	8.70	7.85	6.95	6.55

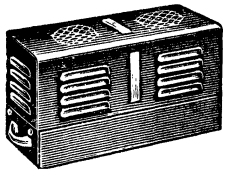
NATURAL FINISH ALUMINUM CASES

Stock No.	Type ACC-	Size HxWxD	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
736-0304	2095	9x6x5″	4.60	4.15	3.70	3.45
736-0300	2091	6x9x5″	4.60	4.15	3.70	3.45
736-0306	2096	12x7x6″	6.95	6.25	5.55	5.20
736-0302	2092	7x12x6″	6.95	6.25	5.55	5.20

GRAY HAMMERTONE ALUMINUM CASES

Stock No.	Type ACC-	Size HxWxD	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
736-0305	2095	9x6x5″	5.30	4.75	4.25	4.00
736-0301	2091	6x9x5″	5.30	4.75	4.25	4.00
736-0307	2096	12x7x6″	8.05	7.25	6.45	6.05
736-0303	2092	7x12x6″	8.05	7.25	6.45	6.05

STREAMLINED FOUNDATIONS



Modern styling and chrome trim make these deluxe foundations ideal for applications requiring attractive appearance. Feature rigid construction and durability for long, hard service. Unit consists of a removable cover mounted on the chassis. Covers have louvered sides and perforated tops to provide proper ventilation. Aluminum handles are fitted to each end of chassis for easy portability. All chassis are 3″ high. **Specify Black Rinkletex (BR) or Gray Rinkletex (GR) finish.**

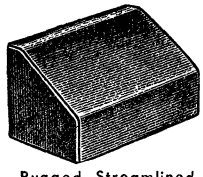
Type CA-	Stock No. BR	Stock No. GR	Size HxWxD	Wt., Lbs.	EACH 1-24	EACH 25-49	EACH 50-99
1750	736-2011	2016	9x10 1/16x5″	4¾	10.00	9.00	8.00
1751	736-2021	2026	9x12 1/16x7″	5	11.90	10.70	9.50
1752	736-2031	2036	9x17 1/16x7″	8	12.65	11.40	10.10
1753	736-2041	2046	9x17 1/16x10″	9	13.65	12.30	10.90

MINIATURE AMPLIFIER FOUNDATION

Type CA-1754. An extremely compact, sturdily-built amplifier foundation. Ideal for portable PA amplifiers, recording preamplifiers, and much more. The chassis is 2″ high, 7″ wide and 5″ deep. With the foundation cover fastened in place, the entire unit stands only 6″ high. Rigid steel construction for component protection; give years of dependable service. Removable cover includes a carrying handle. Cover is heavily perforated to allow full circulation of air for efficient cooling. Cover attached to the sides of the chassis with four self-tapping screws. Black Rinkletex finish. Shpg. wt. 1½ lbs.

736-2051. 1-24.....Each 5.95 25-49.....Each 5.35
50-99.....Each 4.75 100-Up.....Each 4.45

UNIVERSAL SLOPING-PANEL CABINETS



Rugged, Streamlined Sloping-Panel Design

Ideal for control boxes, mike mixers, etc. Have one-piece detachable back and side attached with 4 screws. Accommodate most small chassis. All are 4¼″ high, 4″ deep. Have gray hammertone finish. Shpg. wts.: 4″ and 5″ wide cabinets, aluminum, ½ lb., steel, ¾ lb. 6″ and 7″ cabinets, aluminum, ¾ lb., steel, 1⅛ lbs.

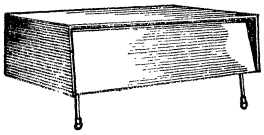
Width	ALUMINUM Stock No.	ALUMINUM Mfr's Type	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up	STEEL Stock No.	STEEL Mfr's Type	EACH 1-49	EACH 50-99	EACH 100-149	EACH 150-Up
4″	736-0260	AC-1610	2.65	2.40	2.10	2.00	736-1906	C-1606	2.10	1.90	1.70	1.60
5″	736-0261	AC-1611	2.55	2.30	2.05	1.90	736-1907	C-1607	2.20	2.00	1.75	1.65
6″	736-0262	AC-1612	2.75	2.50	2.20	2.05	736-1908	C-1608	2.40	2.15	1.90	1.80
7″	736-0263	AC-1613	3.10	2.80	2.50	2.35	736-1909	C-1609	2.75	2.50	2.20	2.05

Write, Wire or Phone for Prices on OEM Quantities

Metal Cabinets and Chassis Bases

BUD

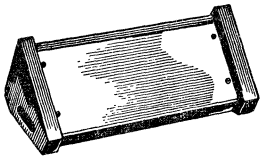
TILT-A-VIEW CABINETS



Designed to present selective angles of viewing for accurate reading of meters, dials, and recorders. These viewpoints are obtained with the slanted front face and the vertical rear face. The 2" detachable legs allow changing the position of the cabinet to a desired angle. Unit can be placed on desks, cabinets of various heights, or mounted on wall. Two-piece 16-gauge steel construction allows easy access for installation and service. Lower and upper portions of cabinet are fastened with sheet metal screws. Gray textured body with Sand front and rear panels.

Stock No.	Mfr's Type	Size H x W x D	Wt., Lbs.	EACH 1-14	15-24	25-34	35-Up
736X7700	TV-2155	4½x15x10"	7	8.90	8.00	7.10	6.70
736X7701	TV-2156	6½x16x12"	12½	10.45	9.40	8.35	7.85
736X7702	TV-2157	8½x17x14"	17	15.20	13.70	12.15	11.40

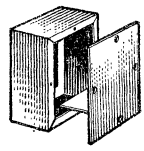
MARK-T CABINETS



Attractive, functional design with wide application in the realm of enclosures for controls. Angle of panel and door allow comfortable viewing of meters, dials, switches, lights, etc. All welded 16-gauge steel construction. Removable front panel and hinged door. Cam-action, self-adjusting spring latch holds door securely against frame. Recessed safety-shielded carrying handles. Four rubber feet prevent marring of surfaces. Gray textured body with Light Gray panel and door.

Stock No.	Mfr's Type	Width	Panel Size	Wt., Lbs.	EACH 1-14	15-24	25-34	35-Up
736X5100	MT-214	16"	5¾x14"	9	31.90	28.70	25.50	23.95
736X5101	MT-219	21"	5¾x19"	12	34.95	31.45	27.95	26.20
736X5102	MT-224	26"	5¾x24"	14½	41.15	37.05	32.90	30.85

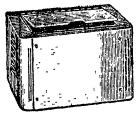
MINIATURE UTILITY CABINETS WITH ATTACHED CHASSIS



Sturdy steel cabinets with built-in chassis attached to front panel. For frequency meters, decade boxes, standing-wave bridges, etc. Removable front and rear panels fasten with self-tapping screws. Panels fit case flanges snugly; assure low RF leakage; protect components from dust and damage. Heavy-duty Black Rinkletex finish. Shpg. wts.: Mfr's Type C-1794 and C-1795, 1 lb.; C-1796 and C-1797, 1¾ lbs.; C-1798, 2¾ lbs.

Stock No.	Mfr's Type	Cabinet HxWxD	Chassis HxWxD	EACH 1-49	50-99	100-149	150-Up
736-1919	C-1794	4x5x3"	1x4⅛x2⅞"	2.10	1.90	1.70	1.60
736-1920	C-1795	5x4x3"	1¼x3⅛x2⅞"	2.30	2.05	1.85	1.75
736-1921	C-1796	6x5x4"	1¾x4⅛x3⅞"	2.40	2.15	1.90	1.80
736-1922	C-1797	5x6x4"	1¼x5⅛x3⅞"	2.75	2.50	2.20	2.05
736-1923	C-1798	6x6x6"	1¾x4⅞x5⅞"	3.30	2.95	2.65	2.50

STREAMLINED CABINETS

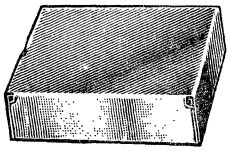


Ruggedly built units have recessed hinge cover with convenient finger-lift for easy opening. Front panels fit flush with embossed, rounded front corners and are removable for chassis installation or cutouts. 3½" high opening in rear for cables or controls. Louvers on sides. 8" high x 8¼" deep except *12x12".

SPECIFY BLACK RINKLETEX (BR), GRAY RINKLETEX (GR), OR GRAY HAMMERTONE (HG) FINISH

Type CD-	Stock Number BR	GR	HG	Width	Panel Space	Wt., Lbs.	EACH 1-24	25-49
1480	736-2706	2707	2710	10½"	8x8"	5¾	8.35	7.50
1481	736-2716	2717	2720	12½"	8x10"	6	8.45	7.60
1482	736X2726	2727	2730	14½"	8x12"	6½	9.00	8.10
1483	736X2736	2737	2740	16½"	8x14"	7	9.70	8.75
1484	736X2746	2747	2750	18½"	8x16"	7¾	10.35	9.30
1485*	736X2756	2757	2760	20⅝"	12x18"	15	20.15	18.15

ALUMINUM CHASSIS BASES



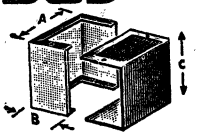
Each made from one piece of sheet metal. Bases are welded on Government-approved spot-welders specially developed for aluminum. All the sides are folded in at the bottom for additional support. Assures strength and long lasting quality. Natural finish aluminum alloy 5005 H-14. All are 18 gauge except †16 ga. and *14 ga. ‡Punched for chassis mounting brackets.

Stock No.	Mfr's Type	Size DxWxH	Wt., Lbs.	EACH 1-24	25-49	50-99	100-Up
736-0031	AC-431	4x6x2"	½	1.75	1.60	1.40	1.30
736-0030	AC-430	4x6x3"	½	2.00	1.80	1.60	1.50
736-0032	AC-432†	4x17x3"	1¼	3.40	3.05	2.70	2.55
736-0002	AC-402	5x7x2"	½	1.90	1.79	1.50	1.45
736-0029	AC-429	5x7x3"	¾	2.10	1.90	1.70	1.60
736-0003	AC-403	5x9½x2"	½	2.00	1.80	1.60	1.50
736-0021	AC-421	5x9½x3"	¾	2.40	2.15	1.90	1.80
736-0004	AC-404	5x10x3"	¾	2.40	2.15	1.90	1.80
736-0022	AC-422	5x13x3"	¾	2.75	2.50	2.20	2.05
736-0033	AC-433†	6x17x3"	1¼	4.10	3.70	3.30	3.10
736-0005	AC-405	7x7x2"	½	2.00	1.80	1.60	1.50
736-0006	AC-406	7x9x2"	½	2.10	1.90	1.70	1.60
736-0007	AC-407	7x11x2"	¾	2.40	2.15	1.90	1.80
736-0008	AC-408	7x12x3"	1	2.95	2.65	2.35	2.20
736-0009	AC-409	7x13x2"	¾	2.55	2.30	2.05	1.90
736-0011	AC-411†	7x15x3"	1½	4.05	3.65	3.25	3.05
736-0023	AC-423†	7x17x3"	1¾	4.10	3.70	3.30	3.10
736-0024	AC-424†	8x12x3"	1½	3.50	3.15	2.80	2.65
736-0025	AC-425†	8x17x2"	1½	3.65	3.30	2.90	2.75
736-0012	AC-412†‡	8x17x3"	1¾	4.15	3.75	3.30	3.10
736-0013	AC-413†	10x12x3"	1½	4.15	3.75	3.30	3.10
736-0014	AC-414†	10x14x3"	1¾	4.20	3.80	3.35	3.15
736-0015	AC-415†‡	10x17x2"	1¼	4.10	3.70	3.30	3.10
736-0016	AC-416†‡	10x17x3"	2	4.75	4.30	3.80	3.55
736-0027	AC-427*‡	10x17x4"	3½	6.60	5.95	5.30	4.95
736-0026	AC-426*‡	11x17x2"	2¼	5.05	4.55	4.05	3.80
736-0017	AC-417*‡	11x17x3"	2¾	5.85	5.25	4.70	4.40
736-0018	AC-418*‡	12x17x3"	2¾	5.95	5.35	4.75	4.45
736-0019	AC-419*‡	13x17x2"	2½	5.30	4.75	4.25	4.00
736-0020	AC-420*‡	13x17x3"	2¾	6.25	5.65	5.00	4.70
736-0028	AC-428*‡	13x17x4"	3¾	7.70	6.95	6.15	5.80
736-0202	AC-1402	3½x4½x1"	⅛	1.45	1.30	1.15	1.10
736-0203	AC-1403	3½x5½x1"	¼	1.45	1.30	1.15	1.10
736-0204	AC-1404	4x5x2"	¼	1.75	1.60	1.40	1.30
736-0205	AC-1405	4x6x1½"	¼	1.55	1.40	1.25	1.15
736-0206	AC-1406	4x8x2"	⅜	2.00	1.80	1.60	1.50
736-0208	AC-1408	5x9x1½"	⅜	1.75	1.60	1.40	1.30
736-0001	AC-401	5x9½x2½"	1¾	1.75	1.60	1.40	1.30
736-0213	AC-1413	6x8x2"	½	2.00	1.80	1.60	1.50
736-0214	AC-1414†	6x14x3"	1¼	3.65	3.30	2.90	2.75
736-0215	AC-1415†	7x15x2"	1	3.20	2.90	2.55	2.40
736-0216	AC-1416†	7x17x2"	1	3.65	3.30	2.90	2.75
736-0217	AC-1417†	7x17x2½"	1½	3.75	3.40	3.00	2.80
736-0218	AC-1418	8x10x2½"	1	3.10	2.80	2.50	2.35
736-0219	AC-1419†	8x12x2½"	1	3.65	3.30	2.90	2.75
736-0220	AC-1420†	8½x15x3"	1½	3.85	3.45	3.10	2.90
736-0221	AC-1421†	9x15x3"	1½	4.40	3.95	3.50	3.30
736X0222	AC-1422†	10x17x5"	2½	9.55	8.60	7.65	7.15
736X0223	AC-1423*	10x23x3"	3	6.95	6.25	5.55	5.20
736X0225	AC-1425†	12x17x2"	1½	4.20	3.80	3.35	3.15
736X0226	AC-1426*	13x17x5"	3½	5.30	4.75	4.25	4.00
736X0227	AC-1427*	14x17x3"	3	10.45	9.40	8.35	7.85
736X0228	AC-1428*	15x17x4"	3½	10.45	9.40	8.35	7.85
736X0229	AC-1429*	15x17x6"	3¾	14.30	12.85	11.45	10.75
736X0230	AC-1430*	17x17x3"	3¼	8.80	7.90	7.05	6.60
736X0231	AC-1431*	17x17x4"	4	12.45	11.20	9.95	9.35

ALUMINUM BOTTOM PLATES AVAILABLE FROM STOCK TO FIT EACH OF THE ABOVE CHASSIS. STEEL CHASSIS AND BOTTOM ALSO AVAILABLE ON SPECIAL ORDER:

Allied Electronics maintains complete stocks of Bud products. For information and pricing on types not listed, simply contact the Allied facility nearest you. Depend on Allied Electronics for prompt service, fast shipment and OEM prices on all your electronic needs.

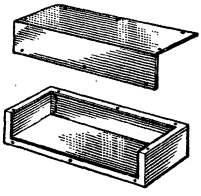
Mini Boxes and Utility Cabinets



ALUMINUM TWO-PIECE MINIBOXES

Self-contained units for use where shielding as well as protection from dust and dirt is desired. May be used for phono amplifiers, VHF and UHF converters, low-pass TVI filters, test and measurement units, etc. Valuable for experimenters, industrial and laboratory use. Two-piece construction permits installation of components or wiring modifications. Flanges assure low RF leakage and provide high rigidity. User has choice of snap-lock fastening or screw fastening; all hardware supplied. Made of high-quality aluminum, gray hammertone or natural finish; strong, yet easy to cut, punch and drill.

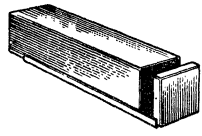
Size AxCxB	Wt., Lbs.	Gray Hammertone	Mfr's Type	EACH 1-49	50-99	100-149	150-Up	Natural Aluminum	Mfr's Type	EACH 1-49	50-99	100-149	150-Up
2¾x2⅛x1⅝"	¼	736-3633	CU-2100-A	1.00	.90	.80	.75	736-3651	CU-3000-A	.90	.80	.70	.68
3¼x2⅛x1⅝"	¼	736-3634	CU-2101-A	1.00	.90	.80	.75	736-3652	CU-3001-A	.90	.80	.70	.68
4x2⅛x1⅝"	¼	736-3635	CU-2102-A	1.10	1.00	.90	.85	736-3653	CU-3002-A	.90	.80	.70	.68
4x2¼x2¼"	¼	736-3636	CU-2103-A	1.20	1.10	.95	.90	736-3654	CU-3003-A	1.10	1.00	.90	.85
5x2¼x2¼"	¼	736-3637	CU-2104-A	1.30	1.15	1.05	1.00	736-3655	CU-3004-A	1.20	1.10	.95	.90
5x4x3"	½	736-3638	CU-2105-A	1.65	1.50	1.30	1.25	736-3656	CU-3005-A	1.20	1.10	.95	.90
5¼x3x2⅛"	¼	736-3639	CU-2106-A	1.45	1.30	1.15	1.10	736-3657	CU-3006-A	1.20	1.10	.95	.90
6x5x4"	¾	736-3640	CU-2107-A	2.10	1.90	1.70	1.60	736-3658	CU-3007-A	1.55	1.40	1.25	1.15
7x5x3"	¾	736-3641	CU-2108-A	2.40	2.15	1.90	1.80	736-3659	CU-3008-A	2.00	1.80	1.60	1.50
8x6x3½"	1	736-3642	CU-2109-A	3.10	2.80	2.50	2.35	736-3660	CU-3009-A	2.55	2.30	2.05	1.90
10x6x3½"	1¼	736-3643	CU-2110-A	3.40	3.05	2.70	2.55	736-3661	CU-3010-A	2.75	2.50	2.20	2.05
12x7x4"	1¾	736-3644	CU-2111-A	4.60	4.15	3.70	3.45	736-3662	CU-3011-A	3.85	3.45	3.10	2.90
17x5x4"	2¼	736-3645	CU-2112-A	4.60	4.15	3.70	3.45	736-3663	CU-3012-A	3.85	3.45	3.10	2.90
10x2x1⅝"	½	736-3646	CU-2113-A	1.75	1.60	1.40	1.30	736-3664	CU-3013-A	1.45	1.30	1.15	1.10
12x2½x2¼"	¾	736-3647	CU-2114-A	2.30	2.05	1.85	1.75	736-3665	CU-3014-A	2.00	1.80	1.60	1.50
4x2x2¾"	¼	736-3648	CU-2115-A	1.20	1.10	.95	.90	736-3666	CU-3015-A	1.10	1.00	.90	.85
4¼x2¼x1½"	¼	736-3649	CU-2116-A	1.20	1.10	.95	.90	736-3667	CU-3016-A	1.10	1.00	.90	.85
3¼x2⅛x1⅛"	¼	736-3650	CU-2117-A	1.20	1.10	.95	.90	736-3668	CU-3017-A	.90	.80	.70	.68



CONVERTA BOXES

Sturdy steel construction with welded base and two-sided cover. Specially designed to afford maximum protection to delicate electronic components. Components and controls can be mounted to any surface of these enclosures for complete versatility. Made of 20-gauge steel for durability, internal protection. Cadmium plated. Hardware is furnished with this versatile enclosure.

Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH 1-24	25-49	50-99	100-Up
736-3603	CU-341	1½x4x3"	½	2.65	2.40	2.10	2.00
736-3605	CU-452	2x5x4"	1	2.55	2.30	2.05	1.90
736-3608	CU-482	2x8x4"	1¼	2.75	2.50	2.20	2.05
736-3611	CU-592	2½x9½x5"	1¾	2.95	2.65	2.35	2.20
736-3612	CU-622	2½x12x6"	2¾	3.20	2.90	2.55	2.40
736-3613	CU-712	2½x15x7"	3½	4.30	3.85	3.45	3.25



MINISLIDES

Highly suitable for housing components where easy access to interior is important. Base may be mounted in any position in rack cabinet. Fabrication of .050 aluminum. Assembly by means of 4 self-tapping screws. Specify Natural Aluminum or Gray Hammertone finish.

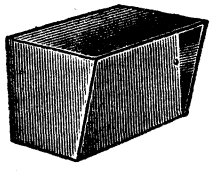
GRAY HAMMERTONE

Stock No.	Mfr's Type	Size LxWxD	Wt., Lbs.	EACH 1-49	50-99	100-149
736-5000	MS-2150	13x3⅛x2⅝"	1	5.15	4.65	4.10
736-5001	MS-2151	13x5⅛x2⅝"	1½	5.85	5.25	4.70
736-5002	MS-2152	17x3⅛x2⅝"	1¼	5.70	5.15	4.55

NATURAL ALUMINUM

Stock No.	Mfr's Type	Size LxWxD	Wt., Lbs.	EACH 1-49	50-99	100-149
736-5004	MS-3050	13x3⅛x2⅝"	1	3.85	3.45	3.10
736-5005	MS-3051	13x5⅛x2⅝"	1½	4.75	4.30	3.80
736-5006	MS-3052	17x3⅛x2⅝"	1¼	4.50	4.05	3.60

COWL-TYPE MINIBOXES



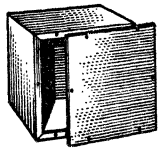
Projecting cover on this enclosure reduces glare on front panel from overhead light source. It also supplies protection for controls and dials. Cover has two braces to which bottom is attached with sheet metal screws. Thus, the assembly is sturdy and rigid. Made of .040 aluminum alloy. Finish is Natural Aluminum or Gray Hammertone. Average shpg. wt. 1¼ lbs., except Type SC-3031, 2 lbs.

GRAY HAMMERTONE

Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH 1-49	50-99
736-6900	SC-2130	6x10x7"	1¼	8.05	7.25
736-6901	SC-2131	7x12x8"	1½	8.80	7.90
736-6902	SC-2132	3x8x5"	1	4.75	4.30
736-6903	SC-2133	5x5x5"	1	4.75	4.30

NATURAL ALUMINUM

Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH 1-49	50-99
736-6904	SC-3030	6x10x7"	1¼	5.85	5.25
736-6905	SC-3031	7x12x8"	1½	6.40	5.75
736-6906	SC-3032	3x8x5"	1	3.30	2.95
736-6907	SC-3033	5x5x5"	1	3.50	3.15



METAL UTILITY CABINETS

Large selection of general-purpose cabinets. Sturdy and economical for small area housings. Two removable panels, both front and back, provide easy access to inside of cabinets. Steel cabinets are offered in Black Rinkletex or Gray Hammertone finish. Aluminum cabinets have natural aluminum or Gray Hammertone finish; all have shpg. wts. of 1 lb.

STEEL

Size HxWxD	Black Rinkletex	Gray Ham'rtone	Mfr's Type	Wt., Lbs.	EACH 1-49	50-99	100-149	150-Up
4x4x2"	736-3626	736-3625	CU 883	¾	1.45	1.30	1.15	1.10
4x5x3"	736-3615	736-3614	CU 728	⅞	1.75	1.60	1.40	1.30
6x5x4"	736-3617	736-3616	CU 729	1¼	2.00	1.80	1.60	1.50
6x6x6"	736-3628	736-3627	CU 1098	2½	3.10	2.80	2.50	2.35
9x6x5"	736-3629	736-3629	CU 1099	3	3.30	2.95	2.65	2.50
10x8x7"	736-3619	736-3618	CU 879	5	4.50	4.05	3.60	3.40
10x10x8"	736-3621	736-3620	CU 880	5½	5.45	4.90	4.35	4.10
12x7x6"	736-3632	736-3631	CU 1124	4	4.40	3.95	3.50	3.30
12x11x8"	736-3623	736-3622	CU 881	6	6.00	5.40	4.80	4.50
15x9x7"	.....	736-3624	CU 882	7½	6.10	5.50	4.90	5.60

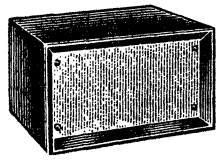
ALUMINUM

Size HxWxD	Mfr's Type	Natural Finish	EACH 1-49	50-99	100-149	150-Up	Gray Hammertone	EACH 1-49	50-99	100-149	150-Up
4x4x2"	AU-1083	736-1008	2.00	1.80	1.60	1.50	736-1009	2.20	2.00	1.75	1.65
4x5x3"	AU-1028	736-1000	2.00	1.80	1.60	1.50	736-1001	2.55	2.30	2.05	1.90
6x5x4"	AU-1029	736-1002	2.20	2.00	1.75	1.65	736-1003	2.20	2.00	1.75	1.65
6x6x6"	AU-1039	736-1004	3.10	2.80	2.50	2.35	736-1005	3.10	2.80	2.50	2.35
9x6x5"	AU-1040	736-1006	3.65	3.30	2.90	2.75	736-1007	3.65	3.30	2.90	2.75

Make Allied Electronics your headquarters for Bud Products. Prompt service, in-depth stocks, OEM prices and one-of-order handling are just a few of the many benefits you receive. Just remember to always use the services of the Allied Electronics facility nearest you for all of your needs.

Shadow, Utility Cabinets and Utility Handles

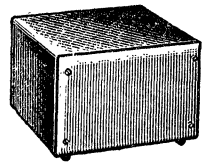
SHADOW CABINETS



All-steel equipment cabinets, these units are ruggedly constructed. Feature front panels recessed one inch, which not only improve appearance, but also protects equipment knobs, controls and switches from being moved accidentally. Sturdy, two-piece bodies are made of 18-gauge steel and front and rear panels are of 16-gauge steel. Bottom, front and rear panels are each attached by four self-tapping screws. All are equipped with four rubber feet. SB-2140 (11½ lbs.) accepts Bud chassis AC-424; SB-2141 (9¾ lbs.) accepts chassis AC-408; SB-2142 (15¼ lbs.) accepts CB-666; SB-2143 (9½ lbs.) accepts AC-409. Finish is gray hammertone.

Stock No.	Mfr's Type	Size HxWxD	EACH 1-24	25-49	50-99	100-Up
736-6700	SB 2140	8x14¼x10"	9.80	8.80	7.85	7.35
736-6701	SB 2141	7½x13¼x9"	7.80	7.00	6.25	5.85
736X6702	SB 2142	9½x17x11"	13.10	11.80	10.50	9.85
736-6703	SB 2143	6x15½x9"	7.50	6.75	6.00	5.65

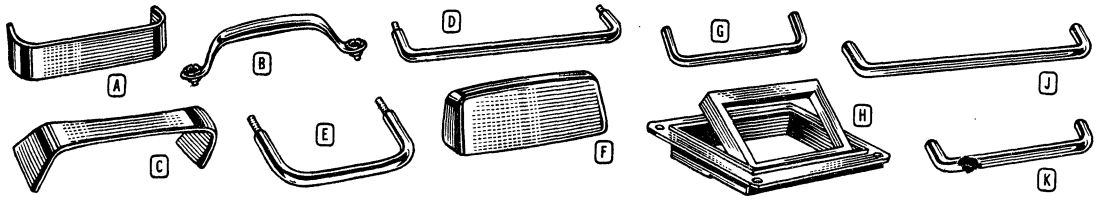
UTILITY CABINETS



Made of 20-gauge steel. Rounded contoured corners; flanged panels have rounded corners. Rear panel is louvered. Unit has solid front panel. Both front and rear panels are attached with four four 6-32 screws each. Body in Dark Gray textured; panels are Light Gray textured. Shpg. wts.: Type CU-463, 1½ lbs.; CU-465, 2 lbs.; CU-585, 3 lbs.; CU-587, 3½ lbs.; CU-7125, 5 lbs.; CU-7127, 5¾ lbs.

Stock No.	Mfr's Type	Size HxWxD	EACH 1-24	25-49	50-99	100-Up
736-3606	CU463	4 7/32x6 7/32x3¾"	6.50	5.85	5.20	4.90
736-3607	CU465	4 7/32x6 7/32x5¾"	7.45	6.70	5.90	5.60
736-3609	CU585	5 7/32x8 7/32x5¾"	9.55	8.60	7.65	7.15
736-3610	CU587	5 7/32x8 7/32x7¾"	10.50	9.45	8.40	7.90

Stock No.	Mfr's Type	Size HxWxD	EACH 1-49	50-99	100-149	150-Up
736-3669	CU7125	7 7/32x12 7/32x5¾"	9.65	8.70	7.70	7.25
736-3670	CU7127	7 7/32x12 7/32x7¾"	10.20	9.20	8.15	7.65



UTILITY HANDLES

All Bud handles are made to the most rigid specifications and highest production standards from steel, brass, or die-cast, silver-anodized aluminum. They have virtually unlimited applications in the electronic and electrical industries. They are designed for rugged, long-lasting applications, and are superior to handles of similar appearance. With necessary mounting hardware and accessories.

A TYPE H-9100. All models of this type have 1" hand clearance. All are made from solid brass and are Chrome plated. H-9100 and H-9101 are 1" x ¼". H-9102 and H-9103 are ⅝x¼". Hardware is supplied on all models, consists of: two 6-32 by ½" screws.

Stock No.	Mfr's Type	Mtg. Ctrs.	PER PAIR 1-49	50-99	100-149	150-199
736-4300	H-9100	4"	7.50	6.75	6.00	5.65
736-4301	H-9101	8"	11.45	10.30	9.15	8.60
736-4302	H-9102	4"	5.85	5.25	4.70	4.40
736-4303	H-9103	6"	6.80	6.10	5.45	5.10

B TYPE UH-70A. Useful for attaching to any small housing or speaker enclosure to achieve portability. Durable handle is made from aluminum and given an etched finish. Overall length is 5⅛". Mounting centers measure 4⅝". Average shpg. wt. 3 oz.

736-7870	UH-70A	4⅝"	.65	.60	.55	.50

C TYPE H-9151. Made from die cast aluminum. Silver anodized. 1⅜" hand clearance. Hardware: four 10-32x½" screws. Type H-9152 is similar to H-9151. Has 1⅛" hand clearance. Also silver anodized. Hardware: two 10-32x½" screws Av. shpg. wt. 3 oz.

736-4351	H-9151	5 3/32"	8.80	7.90	7.05	6.60
736-4352	H-9152	3⅞"	7.15	6.45	5.70	5.35

D TYPES H-9115 AND H-9116. These handles made of ⅜" steel rod, chrome plate finish. Have hand cearance of 15/16". Ideal for use where a thin, durable handle is necessary or desirable. Hardware provided: two ¼-28 nuts. Average shpg. wt. 3 oz.

736-4315	H-9115	4"	4.20	3.80	3.35	3.15
736-4316	H-9116	6"	4.75	4.30	3.80	3.55

E TYPE H-9140. This handle is made of die cast aluminum with a silver anodized finish. Has a hand clearance of ¾". This solid design handle provides a modern look to your cabinets or racks. Hardware provided for this model is two 10-32x½" screws. Average shpg. wt. 6 oz.

736-4340	H-9140	3½"	3.85	3.45	3.10	2.80

F TYPES H-9160, H-9161, H-9162, H-9163, H-9164, H-9165. All have chrome plated finish and are made of ⅜" diameter steel. All have 1 11/16" hand clearance. All are provided with two ½-28 hex nuts as hardware. Types differ in mounting centers only, which are listed below.

Stock No.	Mfr's Type	Mtg. Ctrs.	PER PAIR 1-49	50-99	100-149	150-199
736-4360	H-9160	3½"	4.75	4.30	3.80	3.55
736-4361	H-9161	5¼"	5.30	4.75	4.25	4.00
736-4362	H-9162	7"	5.40	4.85	4.30	4.05
736-4363	H-9163	8¾"	5.60	5.05	4.50	4.20
736-4364	H-9164	10½"	6.40	5.75	5.10	4.80
736-4365	H-9165	12¼"	6.95	6.25	5.55	5.20

G TYPES H-9166, H-9168. Both are made of ¼" diameter brass and both have a chrome plated finish. These handles each have a one-inch hand clearance and are provided with the same hardware: two 6-32x½" screws. They differ only in mounting centers which are listed below.

736-4366	H-9166	1 29/32"	2.20	2.00	1.75	1.65
736-4368	H-9168	3"	2.30	2.05	1.85	1.75

H TYPE H-9149. Recessed anodized aluminum handle fit flush into die cast receptacle. Makes lifting and carrying easier. Handle is 2¼" x 4¼". Hand clearance is 1⅝". Standard on Bud Classic II Cabinets. Hardware provided: (4) 8-32 x 5/16 flat head screws and nuts. Average shpg. wt. 1¼ lb.

736-4349	H-9149	4"	12.55	11.30	10.05	9.40

J TYPE H-9110B. Made of ⅜" dia. steel chrome plated steel. Hand clearance 1¼". With two 10-32x½" screws. 3 oz.

736-4310	H-9110	6"	1.90	1.70	1.50	1.45

K TYPES H-9111, H-9112, H-9113, H-9114. ⅜" dia. steel chrome-plated except H-9114, ½" dia. All except H-9114 which has two ¼-28x½" screws, have two 10-32x½" screws. Hand clearance 1" except H-9114, 1½". Wt. 3 oz.

736-4311	H-9111	4"	2.65	2.40	2.10	2.00
736-4312	H-9112	6"	3.10	2.80	2.50	2.35
736-4313	H-9113	8"	3.40	3.05	2.70	2.55
736-4314	H-9114	8"	5.60	5.05	4.50	4.20

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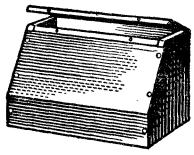
Make Allied your "One-Stop" Headquarters for all your industrial needs. Pay OEM factory prices, slash handling expenses and reduce paperwork in purchasing and receiving. You place one order, receive one shipment, and make one disbursement. Allied Electronics has the best order-filling record in the electronics industry.

BUD Attractive Quality-Built Metal Products

SLOPING-PANEL CABINETS

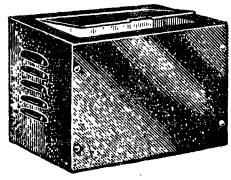
Have hinged tops for easy access. Removable front panel. Fit following size chassis: C-1584, 7x6x2"; C-1585, 7x8x2"; C-1586, 7x10x2"; C-1587, 7x7x2"; C-1588, 7x9x2"; C-1892, 8x12x2½"; C-1893, 10x17x3"; C-1894, 7x13x2"; C-1896; 7x17x3". BR: Black Rinkletex; GH: Gray Hammertone.



Mfr's Type	Stock No. BR	Stock No. GH	Size HxWxD	Wt., Lbs.	EACH 1-24	25-49	50-99
C-1584	736-1847	736-1855	6½x7 1/16x7 7/32"	2½	4.65	4.20	3.70
C-1585	736-1857	736-1865	6½x9 1/16x7 7/32"	3	5.10	4.60	4.10
C-1586	736-1867	736-1875	6½x11 1/16x7 7/32"	3½	5.85	5.25	4.70
C-1892	736-1927	736-1935	8x13 1/16x8 13/32"	5¼	8.00	7.20	6.40
C-1893	736X1937	736X1945	10x18 1/16x10 13/32"	8½	10.60	9.55	8.50
C-1587	736-1877	736-1885	8x8 1/16x7 15/16"	2¾	6.15	5.55	4.90
C-1588	736-1887	736-1895	8x10 1/16x7 15/16"	3¼	6.80	6.10	5.45
C-1894	736-1947	736-1955	8x14 1/16x7 15/16"	4	7.25	6.55	5.80
C-1586	736X1957	736X1965	9x18 1/16x8 1/16"	7	10.15	9.15	6.10

INSTRUMENT AND RECEIVER CABINETS

Ruggedly constructed, moderately priced steel cabinets. Front panel is held securely in place with self-tapping screws. Panel extends full width of cabinet—provides maximum space for installation of controls. Louvers on each side of cabinet assure ample ventilation. Body of cabinet is constructed of 20-gauge steel; panels are all 18-gauge steel, except *; 16-gauge steel. Black Rinkletex finish.



Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH 1-24	25-49	50-99	100-Up
736-1800	C-973	7x8x8"	5	6.25	5.65	5.00	4.70
736-1802	C-993	7x10x8"	5½	7.15	6.45	5.70	5.35
736-1803	C-994	7x12x8"	5¾	7.35	6.60	5.90	5.50
736-1804	C-995	7x14x8"	6	2.90	2.70	2.30	2.20
736X1806	*C-1190	8x16x8"	8	11.20	10.10	8.95	8.40
736X1801	*C-975	9x15x11"	15	13.65	12.30	10.90	10.25
736X1805	*C-999	12x18x12"	17½	14.75	13.30	11.80	11.05

SWIVEL TRUCK CASTERS FOR RELAY RACKS AND CABINETS

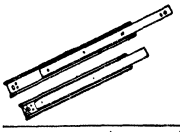
TYPE RC-7756. Heavy-duty ball-bearing swivel truck casters especially designed for use on Bud deluxe relay racks. Also fit other popular models of racks and cabinets. Makes light work of moving heavy loads. Supports up to 400 pounds distributed on four casters. Rugged, long-wearing wheels are carefully crafted from high-grade rubber. Self-lubricating for long term durability. Overall height, 2⅝". Pkg. of Four. Wt. 1¾ lbs.

736-6000. 1-4 Pkgs.....Per Pkg. 1.20
5-9 Pkgs.....Per Pkg. 1.15 10-24 Pkgs....Per Pkg. 1.05

TYPE RC-7758. Especially designed for use with Bud Series 60 cabinets. Accept other popular models of racks and cabinets as well. Feature heavy-duty swivel casters of very sturdy construction for easy portability of extra heavy equipment. Ball bearings are hard tread composition for longer wear. Wheels are self-lubricating for convenience and durability. Wheel diameter 2½-in. Height, 3¼-in. Pkg. of Four. Wt. 6 lbs.

736-6001. 1-4 Pkgs.....Per Pkg. 3.20
5-9 Pkgs.....Per Pkg. 2.90 10-24 Pkgs....Per Pkg. 2.55

BALL-BEARING CHASSIS SLIDES



Precision-designed linear-motion chassis slides engineered to provide smooth, non-sticking movement. Suitable for a wide range of applications. Featherlight telescoping motion is tested for hundreds of thousands of cycles without wear.

Each main member is press-formed to a constant and precise tolerance from high-tensile cold rolled steel to reduce breakdowns. Chrome-carbon-steel ball bearings are set in special retainers for smoothness of movement. Self-cleaning bridged ball retainers for efficient operation and long wear. Bright electro-zinc finish. All slide mounting holes are .180x.210".

Stock No.	Mfr's Type	Lgth.	Travel	Load Rating	Wt., Lbs.	PER PAIR 1-4	5-9	10-Up
736-0900	AS-5000	12"	9"	135	1¾	9.50	8.55	7.60
736-0901	AS-5001	16"	12"	104	2	11.00	9.90	8.80
736X0922	AS-5002	20"	15"	73	2½	11.80	10.60	9.45
736-0923	AS-5020	12"	12⅞"	175	3¼	22.40	20.15	17.90
736-0925	AS-5021	16"	16⅞"	160	4¼	24.90	22.40	19.90
736X0926	AS-5022	20"	20"	140	5¼	26.90	24.20	21.50
736-0940	AS-5040	12"	11⅞"	100	3¼	29.80	26.80	23.85
736-0941	AS-5041	16"	15⅞"	100	4¼	32.30	29.05	25.85

Stock No.	Mfr's Type	Lgth.	Travel	Load Rating	Wt., Lbs.	PER PAIR 1-4	5-9	10-Up
736X0942	AS-5042	20"	19⅞"	94	5¼	34.40	30.95	27.50
736-0943	AS-5060	12"	9"	135	1¾	8.70	7.85	6.95
736-0944	AS-5061	16"	12"	104	2	9.30	8.35	7.45
736X0945	AS-5062	20"	15"	73	2½	9.80	8.80	7.85
736-0946	AS-5080	12"	12"	100	3½	27.30	24.55	21.85
736-0947	AS-5081	16"	16"	93	4½	27.90	25.10	22.38
736X0948	AS-5082	20"	20"	87	5½	30.75	27.70	24.60

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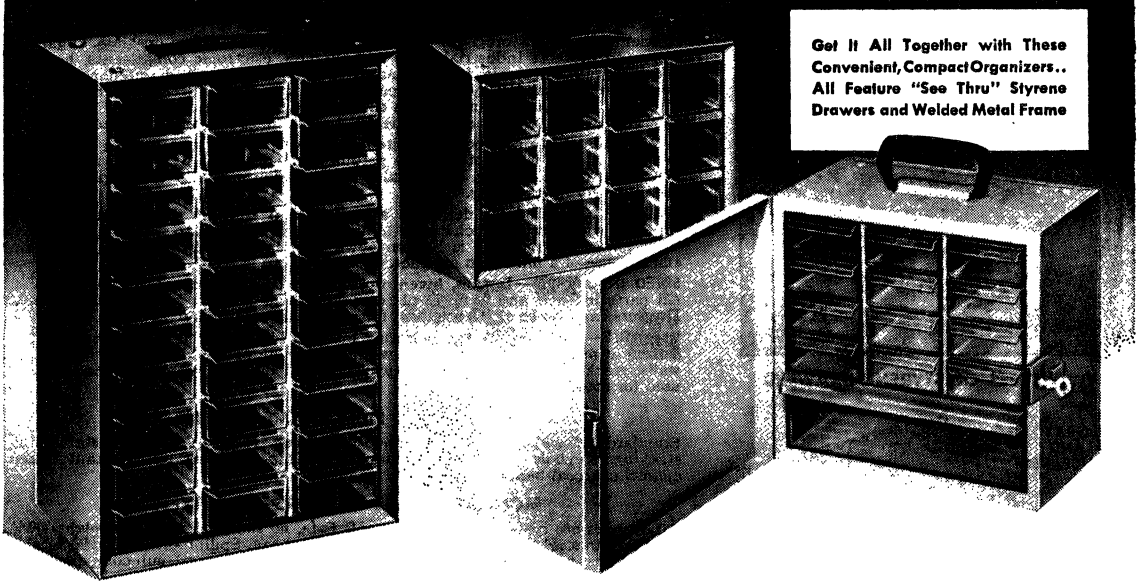
Allied Electronics Can Supply the Entire Bud Products Line

ALLIED ELECTRONICS UTILITY CABINETS



30-DRAWER PORTABLE CABINET

3009. Has 30 compact drawers—each 1¼x2¼x5¾". Sturdy welded steel frame measures 9¾x17x6". Durable and attractive baked enamel charcoal hammertone finish that cannot chip, peel or rub-off. Tote-handle gives mobility. Spillproof "See-Thru" drawers have adjustable lock-tight dividers for smaller sectioning.
707X3030. Shpg. wt. 9 lbs.....**7.20**

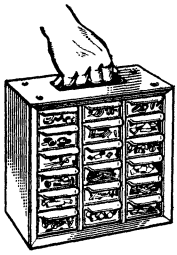
12-DRAWER PORTABLE CABINET

3012. Twelve double deep drawers allow storage of large items such as hardware, over-sized parts, photoslides. Each "See-Thru" drawer, 2½x2¾x5¾". Unitized steel frame is stackable, measures 9½x13x6½". Rugged baked enamel finish is blue. Heavy-duty carrying handle. Dividable drawer. Keyholes allow wall mounting.
707X3012. Shpg. wt. 7 lbs.....**6.40**

13-DRAWER PORTABLE CABINET

3013. Features 12 compact drawers measuring 2¾x1¼x5¾" and 1 super-large 8¾x2½x5¾" drawer. Perfect for hobby bench, workshop or household. Welded steel frame has gray finish, measures, 10x9x6½". Handy tote handle and locking door. Drawers are "See-Thru." Unit can be stacked or wall mounted.
707X3013. Shpg. wt. 5¾ lbs.....**7.50**

STEEL FRAME UTILITY CABINETS FOR SHOP OR HOME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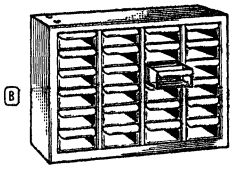
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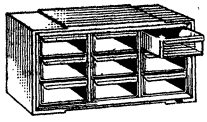
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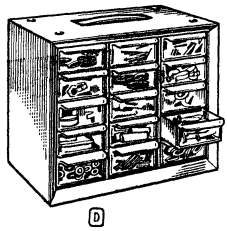
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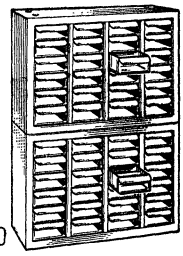

E

A 18-DRAWER PORTABLE CABINET

3018. Eighteen "See-Thru" drawers, each 2¾x5¾x1¼", in a heavy-duty 10x9½x6½" steel frame. Metallic blue baked enamel finish. With unbreakable carrying handle.
707X3018. Shpg. wt. 4 lbs.....**5.10**

B 24-DRAWER INDEX CABINET

3024. Contains 24 "See-Thru" styrene drawers measuring 1¼x2¼x5¾" each. Hammertone finish welded steel frame, 9x10x6". One divider, label per drawer.
707X3024. Shpg. wt. 7 lbs.....**6.30**

C 9-DRAWER ORGANIZER CABINET

3009. "Unitized" steel frame cabinet has nine "See-Thru" 2¾x1¼x5¾" drawers. Baked enamel finish. Adjustable drawer dividers and labels. Overall, 10x9½x6½".
707X3009. Shpg. wt. 4 lbs.....**2.89**

D 15-DRAWER PORTABLE CABINET

3015. Has 15 "See-Thru" 2¾x1¼x5¾" drawers. Tote handle for portability. "Unitized" 8x6" frame. With adjustable dividers. Baked enamel finish.
707X3015. Shpg. wt. 4 lbs.....**4.24**

E COMPACT 48-DRAWER CABINET

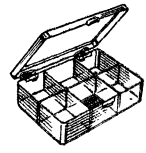
- Contains Forty-Eight Crystal-Clear Drawers With Labels and Dividers
- Long-Lasting Baked Enamel Finish

3048. Ideal for storage, protection, organization of shop or office small parts. Each "See-Thru" drawer measures 1¼x2¼x5¾". Easy indexing with labels and one divider per drawer area included. Welded steel frame is 18x13x6". Attractive baked enamel hammertone finish is extra durable.
707X3048. Shpg. wt. 13 lbs.....**12.76**

SUPER-STRENGTH "SEE-THRU" PLASTIC BOXES

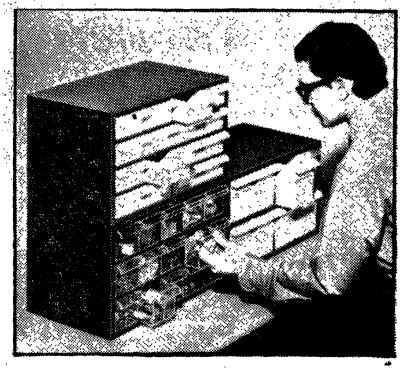
Perfect for keeping small items safe and neat. Lightweight yet durable. All have hinged cover. Constructed of clear styrene; compartmented for sorting screws, washers. *Partitions form up to 15 compartments. Av. wt. 1 lb.

Stock No.	Type No.	Size, Inches	Number of Compartments	EACH 1-9	EACH 10-Up
707-3070	05-201	4¾x2⅝x1"	1	.36	.29
707-3075	05-206	4¾x2⅝x1"	6 Equal	.36	.29
707-3080	05-401	8 1/16x4⅛x1½"	1	.66	.55
707-3085	05-412	8 1/16x4⅛x1½"	12 Assorted	.66	.55
707-3090	05-505	10 7/16x5⅞x2"	5 Fixed; 2 Adj.*	1.42	1.19



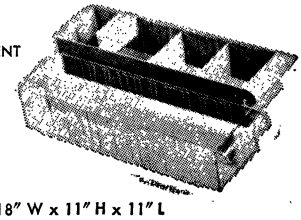
Akro-Mils Parts Storage Cabinets

HEAVY-DUTY STEEL FRAME AND MOLDED STYRENE DRAWERS



TWO TYPES OF STYRENE DRAWERS

GRAY AND TRANSPARENT



Frame Size: 18" W x 11" H x 11" L

COMPACT MODULAR CABINET—10 DRAWER SIZES

Efficient organized storage for anywhere small item storage is a problem. Organize, store and protect: Industrial parts and supplies, electronic components, hospital and drug items, resale items, audio-visual material, and maintenance items. Save time and money by having parts at your fingertips when you need them. There are thousands of small items that must be stored and organized for instant location, Modular Cabinets provide an efficient method for systemized storage.

SAVES TIME—Instantly locate any item. No more wasted time looking for lost or misplaced items. Compact cabinets permit storage of parts where you need them, at the work area, service, or central storage. Assign a drawer or compartment to each item for quick access.

SAVES SPACE—Modular design is attractive and efficient. All cabinets have a standard width frame which can be hung from walls, fitted into shelving or stacked. Your entire storage area is broken down into cubic storage, making maximum efficient use of a minimum of space.

SPEED INVENTORY—Instant inventory. Visual, complete count or any method. All parts indexed and in their place. Transparent drawers allow a quick check. Drawers can also be easily removed for an actual count or weight check.

VERSATILE—Each cabinet is a uniform "building block" which can be added to the system at any time. Start with a few and add more as needed. Can be hung from walls, stacked horizontally or vertically, placed on shelves, stacked on carts or used for rotary storage.

HEAVY-DUTY STEEL FRAME CABINET

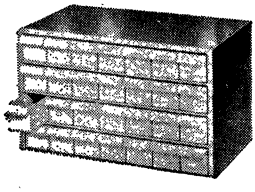
Standard 18" width to fit into standard shelving. Nesting "feet" for stability in stacking. Keyhole slots for wall mounting. Chip-proof, scratch resistant baked enamel charcoal hammertone finish.

MOLDED STYRENE DRAWERS—TWO TYPES

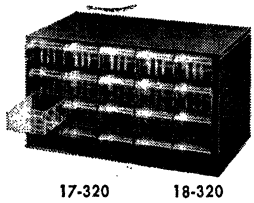
All drawers are rust and corrosion proof. Safe, no sharp edges. Lightweight, 60% lighter than steel. Non-spreading, won't bulge or sag. Spillproof, safety tab retains open drawers. All drawers can be partitioned into several sub-compartments. Dovetail dividers lock in place, won't creep or slip.

GRAY HEAVY DUTY. Virtually unbreakable hi-impact styrene, ideal for most requirements. Guaranteed for life, won't crack.

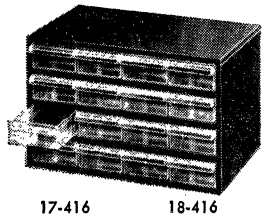
TRANSPARENT. Where frequent visual inventories are required.



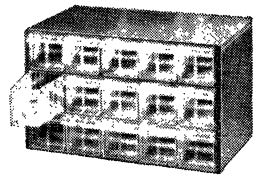
18-228



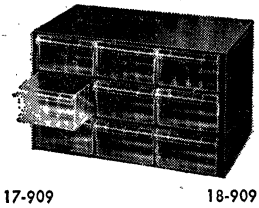
17-320 18-320



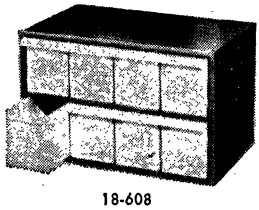
17-416 18-416



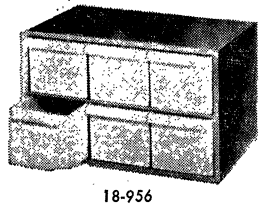
17-715 18-715



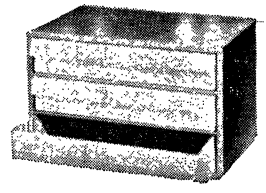
17-909 18-909



18-608

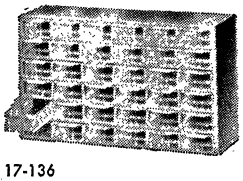


18-956



18-803

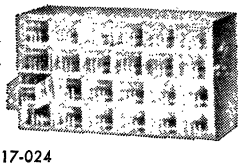
Frame Size: 18" W x 6" L



17-136

Cabinets With Transparent Drawers		Cabinets With Heavy-Duty Drawers		Drawers Per Cabinet	Drawer Size Inches			Shpg. wt., Lbs.	EACH
Stock No.	Mfr's Type	Stock No.	Mfr's Type		W	H	D		
723X1713	17-136	.....	.....	36	2¾	1 7/16	5⅞	13	17.84
.....	.....	723X1822	18-228	28	2⅛	2⅛	11	22	30.58
723X1702	17-024	.....	.....	24	2¾	2	5⅞	11	17.84
723X1732	17-320	723X1832	18-320	20	3⅛	2⅛	11	21	27.36
723X1741	17-416	723X1841	18-416	16	4	2⅛	11	20	27.36
723X1771	17-715	723X1871	18-715	15	3⅛	3 1/32	11	20	27.36
723X1790	17-909	723X1890	18-909	9	5¼	3 1/32	11	18	27.36
.....	.....	723X1860	18-608	8	4	4¾	11	22	27.36
.....	.....	723X1895	18-956	6	5¼	4¾	11	22	27.36
.....	.....	723-1880	18-803	3	16¾	3 1/32	1	18	23.80

One cross divider furnished per drawer except 18-803.



17-024

CROSS DIVIDERS

Stock No.	Mfr's Type	Fits Cabinet	Pkg. Qty.	EACH Pkg.
723-4040	40-401	17-024	25	1.44
723-4210	42-101	17-136	50	1.80
723-4220	42-201	18-228	25	2.70
723-4230	42-301	17-320, 18-320	25	1.44
723-4240	42-401	17-416, 18-416	25	1.80
723-4310	43-101	17-715, 18-715	25	2.50
723-4330	43-301	17-909, 18-909	25	2.80
723-4440	44-401	18-608	25	3.00

CROSS DIVIDERS

Stock No.	Mfr's Type	Fits Cabinet	Pkg. Qty.	EACH Pkg.
723-4450	44-501	18-956	25	3.70

LONG DIVIDERS

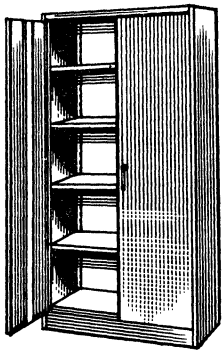
Stock No.	Mfr's Type	Fits Cabinet	Pkg. Qty.	EACH Pkg.
723-4212	42-121	17-136	25	1.80
723-4243	42-431	17-320, 18-320, 17-416, 18-416	10	1.60
723-4333	43-331	17-715, 18-715, 17-909, 18-909	10	2.50

EDSAL Shelving, Cabinets, Workbench, Carts

HEAVY DUTY STEEL STORAGE CABINETS

Full 72" Height

Adjustable Shelves

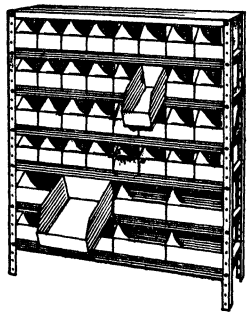


MODEL 7000. Attractive, sturdy construction. Use where strength and height is needed. It's full 72" of height provides maximum storage space. All parts are phosphatized prior to gray enamel baking for maximum durability. Four shelves adjust on 1½" increments to meet specific storage needs and accommodate even large size office supplies. Two swing out doors with locking handles discourage pilferage. Easily assembled. Built of lifetime steel and finished in mist gray for lasting good looks. 36" wide x 18" deep x 72" high. Wt. 110 lbs.
548F4000.....**Each 62.12**

COMPLETE 40-BIN RACK

Rear Stop Tab Prevents Spilling

40 Drawers In All

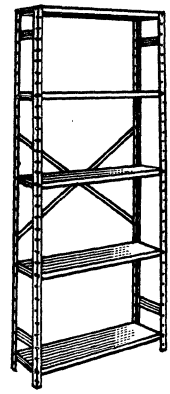


MODEL CC40. Ideal for keeping all kinds of small parts, tools, and hardware in one central location. Bins cannot accidently be removed from front or back, eliminating drawers from being pushed in too far or pulled out until drawer spills. Bins are "C" flute corrugated board, 125-lb. test and set up easily. Total of 40 drawers—thirty two-4" wide x 11½" deep x 4½" high and eight-8" wide x 11½" deep x 4½" high. Seven shelf steel rack is 12" deep x 36" wide x 40" high and may be stacked. Wt. 35 lbs.
548Z0240.....**Each 22.20**

HEAVY DUTY STEEL STORAGE SHELVES

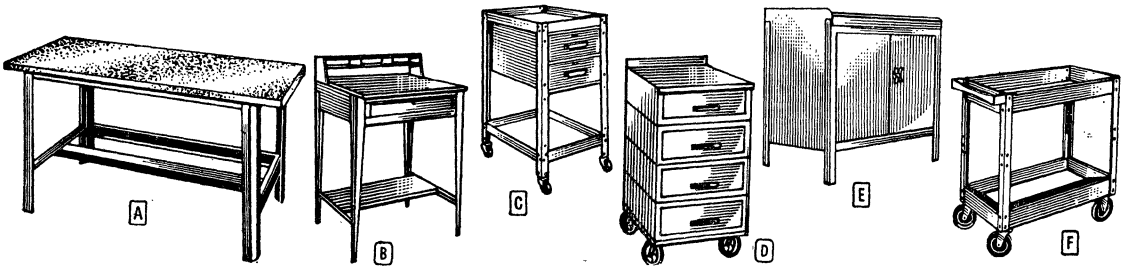
Kwik-Klip No Bolts Or Nuts

Adjustable 22 Gauge Shelves



Each unit is complete in itself and can be used independently. Each of the 5 shelves hold 450 lbs. and can be adjusted on 1" centers, without disturbing shelves in adjoining units. Kwik-Klip, no bolts, nuts or special tools required to set shelves in place. Bonderized gray baked enamel finish.
TYPE 2912-5. With 12" deep shelves. 47 lbs.
548U2912.....**Each 16.39**
TYPE 2918-5. With 18" deep shelves. 60 lbs.
548U2918.....**Each 20.92**
TYPE S-12. 12" extra shelf. 24 lbs.
548U0312.....**Carton of 4, 7.92**
TYPE S-18. 18" extra shelf. 32 lbs.
548U0318.....**Carton of 4, 10.72**

TOOL TOTER, SHOP DESK, CABINETS, BENCHES AND CART



A STEEL FRAME WORK BENCHES

Built to take it. Cross braced, rigid one piece welded 16-gauge steel legs are self supporting. Long lasting baked on gray enamel finish. Top of bench is hard 1" compressed wood that supports loads of 200 lbs. per sq. foot. Easily assembled. 34" high, 24" depth and 60" long. 76 lbs.

Stock No.	Type	Size	EACH
548F0540	UB400	34x24x48"	24.92
548Z0550	UB500	34x24x60"	30.37
548F0560	UB600	34x24x72"	36.73
548F0570	UB700	34x30x60"	40.41
548F0580	UB800	34x30x72"	45.45

B SHOP DESK

MODEL 620. Ideal for receiving and shipping clerks, watchmen, and checkers. Sloping top with compartments for pencils and paper is 43" high at the front. Large drawer with lock and key. Drawer glides easily on nylon rollers. Heavy-gauge steel construction with gray baked enamel finish. Size: 34½x30x52". Wt. 150 lbs.
548F0620.....**Each 63.36**

C TOOL TOTER

MODEL TT1824-2. Handy tool storage rack on wheels. Built in drawers operate in closed case for extra strength and alignment. Drawers have padlock hasp. Cart rolls smoothly on durable 2½" hard rubber casters. Finished in long lasting gray enamel. Wt. 55 lbs.
548F0518.....**Each 40.79**

D PORTABLE MOBILE WORK STATION

MODEL WS8000. Tools and parts can be brought easily to job site. This compact four drawer unit can be wheeled where ever needed in the plant to supply tools and small parts. Clean and compact, this heavy-duty drawer-type work station provides working space plus storage. Each of the 4 drawers has a padlock hasp for security and opens and closes smoothly on nylon rollers. 16 gauge top has back stop to prevent parts from rolling off and offers a smooth, durable work surface. Size: 20" deep, 17¼" wide x 32" high. Mounted on smooth running 5 inch casters. Finish in durable gray baked on enamel. Shpg. wt. 50 lbs.
548F0600.....**Each 110.91**

E LOCKING DOUBLE DOOR CABINET

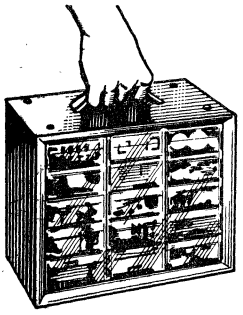
MODEL 59243. Storage cabinet/work table combination serves a wide variety of uses in shops or offices. Provides a handy metal storage cabinet ensuring safe, secure, locked-in storage of valuable tools, materials or papers. Extra-quality chrome-plated door handle features a built-in cylinder lock. Large double doors swing open for easy access to cabinet. Phosphatized to protect and preserve the finish; durable finish prevents rust and protects the appearance. Smooth, sturdy top may be utilized as an all-around work table. Has back and side edge guards to prevent tools and parts from sliding off. Vises, grinders, office machines and small power tools can be easily mounted on top. Constructed of durable, heavy-gauge steel with gray baked-enamel finish. Overall size, 34" high, 36" wide, 24" deep. Cabinet has 18 cu. ft. of storage space. One center shelf, adjustable 1½". Shipped knocked down, assembles easily with ordinary tools. Shpg. wt. 110 lbs.
548F5924.....**Each 63.53**

F SERVICE CART

Two tray service cart saves countless steps. Carries up to 600 lbs. of office and shop necessities. Ideal for shuttling interdepartmental mail, lab supplies, small parts. Has two trays to keep smaller items from falling off as the car rolls. Trays are 20" apart to handle larger goods. Trays reverse to be used as a work surface or allow wider items to be carried. Well built of 14 gauge and 20 gauge steel. Cart rolls easily on heavy duty 5" hard rubber casters, two stationary and two swivel. Finished in gray enamel to deter rusting. 32" high. Shpg. wt. 32 lbs.
548F0424. SC-2024. 2 Trays—16x20x3". 56 lbs.....**Each 36.28**
548F0416. SC-2016. 2 Trays—24x36x3". 32 lbs.....**Each 29.99**

Cabinets, Boxes and Plastic Cases

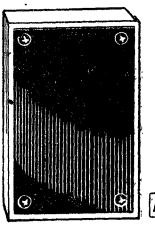
ARCHER® 15-DRAWER PORTABLE CABINET



3.95 • For Home or Shop • The Ideal Way to Store Small Parts

Versatile storage cabinet/organizer has many uses—provides ample space for small parts and components, hardware, or just about anything. Invaluable in shops, labs, schools, parts storage areas and in home hobby corners. Sturdy construction features rigid "unitized" steel frame with attractive and durable baked enamel finish. Has 15 "see-thru" drawers, each measuring 2¾x1¼x5¾". Has adjustable dividers. Unbreakable tote handle enables you to move it any place you want it easily. Overall size, 8x 10x6". Wt. 6 lbs.

910-5927. Type 64-2026.....3.95



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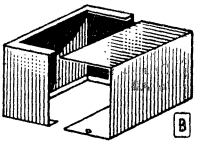


B

A BAKELITE "MINI" UTILITY BOXES

A variety of sizes for builders' projects. Heavy duty construction. Removable aluminum cover. Av. shpg. wt. 5 lbs.

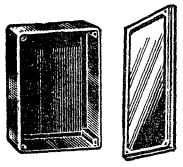
Stock No.	Mfr's Type	Size, Inches	EACH
910-6116	270-230	3¼x2⅛x1⅛	.79
910-6117	270-231	4x2¼x2¼	.89
910-6160	270-627	3¾x6¼x2	1.19
910-6118	270-232	7¾x4⅜x2⅜	1.59

B ALUMINUM "MINI" BOXES

Sturdy yet lightweight. Have punched screw holes for easy assembly. Ideal for practically any project. Av. shpg. wt. 5 lbs.

Stock No.	Type No.	Size, Inches	EACH
910-6121	270-235	2¾x2⅛x1⅝	.99
910-6122	270-236	4x2¼x2¼	1.19
910-6123	270-237	3¾x6¼x2	1.29
910-6124	270-238	7¾x4⅜x2⅜	1.39

HARRY DAVIES PLASTIC CASES

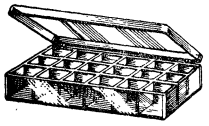


C D

Versatile molded plastic cases (Fig. C) and plastic panels (Fig. D) of reliable quality for mounting a wide variety of test instruments. Meters fit easily into case with flanges designed to take sizes up to 4⅝x4 3/16". Cases have recessed corner bosses to provide flush mounting with the cover. Take ½" No. 6 self-tapping screws except Type 220 which uses 4-36x½" screws. Walls and covers are made of a firm ⅛" thick plastic. Cases, 1½ lbs. Panels, 1 lb.

Stock No.	Mfr's Type	Fig.	Size	EACH 1-24	25-49	50-249	250-499
543-0220	220	C	4x2⅞x1 9/16"	.57	.41	.32	.30
543-0230	230	C	5x4¼x1¾"	.75	.54	.42	.39
543-0231	231	D	4¾x4 1/16"	.34	.24	.19	.18
543-0240	240	C	6¼x3¾x2"	.92	.67	.52	.48
543-0260	260	C	6 13/16x5 9/64x2 5/64"	1.35	.97	.76	.70
543-0221	221	D	3¾x2⅝x 1/16"	.21	.15	.12	.11
543-0241	241	D	6¼x3¾x⅛"	.72	.52	.41	.38
543-0261	261	D	6 51/64x5 17/64x⅛"	1.01	.73	.57	.53

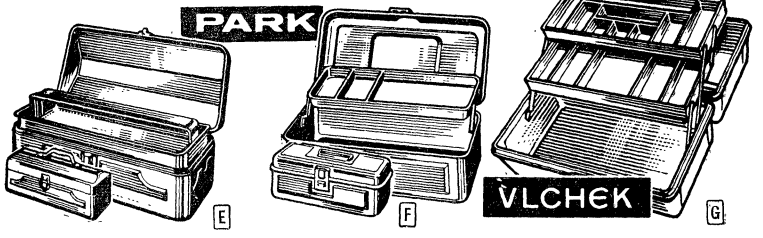
VLCHEK PLASTIC PARTS STORAGE BOXES



Rugged, all-plastic boxes with hinged tops. Lightweight, scratch-resistant, easy to clean. One to 36 compartments. Molded of clear polystyrene—"see-thru" feature lets you find what you're looking for. Strong hinge. P250 has removable cover. *Total compartments.

Stock No.	Type	*No.	Comp. Sizes	Overall Size	Lbs.	EA.
981-1250	P250	1	5⅞x3⅝"	6¼x4x1 11/16"	1	.54
981-1203	P203	6	1¼x3 15/16"	8¼x4½x1⅜"	1½	.70
981-1210	P210	9	8—1⅜x1⅝"; 1—1⅛x3¼"	7x3¾x1¼"	1	.52
981-1812	P812	12	2x4 3/16x2 1/16"	13⅛x9x2 5/16"	1	2.62
981-1201	P201	12	6—1¼x1¼"; 4—1¼x2"; 2—1½x3 5/16"	8¼x4½x1⅜"	1½	.70
981-1612	P612	12	6—1⅝x1 15/16"; 6—1⅝x4"	11x6¾x1¾"	2½	1.62
981-1200	P200	18	1¼x1¼"	8¼x4½x1⅜"	1½	.70
981-1618	P618	18	1⅝x1 15/16"	11x6¾x1¾"	2½	1.62
981-1818	P818	18	12—2x2"; 6—2x4 3/16"	13⅛x9x2 5/16"	3	2.66
981-1824	P824	24	2x2"	13⅛x9x2 5/16"	3½	2.76
981-1166	P166	36	1½x1 1/16x1 9/16"	10x7x1 13/16"	3½	1.78

TOOL AND PARTS STORAGE BOXES



E F G

E PARK 15" STEEL UTILITY BOX

MODEL 151T. Handy case for small hand tools. Has lift-out tote-tray. Full-length, electrically welded hinges. Deep drawn seamless construction. Rust-fighting enamel finish. 5⅜x15x6½". Shpg. wt., 5 lbs.

890X0151.....5.44

F PARK 132 TWO-TRAY TOOL BOX

General-purpose steel utility box with rugged nickel-plated hardware. Trays have full cantilever action. 13½x5¾x6½".

890X0132. Wt., 5 lbs.....4.89

890X0131. Model 131 Single Tray Tool Box. As above, but with single tray. Size, 13½x4½x6½". Shpg. wt., 3 lbs.....3.22

G VLCHEK PLASTIC BOXES

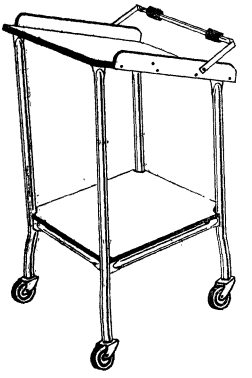
MODEL 1212 TWO-TRAY PARTS BOX. Lightweight, all-purpose small-parts caddy. Boxes and trays are almost indestructible, won't shatter or crack. Impervious to gasoline, oil and salt water. Box opens flat, can't tip. Full-length trays have full cantilever action. Top tray has 9 compartments, bottom has 6. Features retractable handle. Heavy-duty "snap ease" latch. Green case, 12⅜x7x6". Shpg. wt., 2½ lbs.

981X2212.....4.88

MODEL 1211 SINGLE-TRAY PARTS BOX. Similar to above, but with single 9-compartment tray. 12⅜x7x4⅝".

981X2211. Wt., 2¼ lbs.....3.92

ALLIED MODEL 8000 MOBILE TEST TABLE



- Specially Designed
- Rugged and Lightweight
- Attractively Low Priced

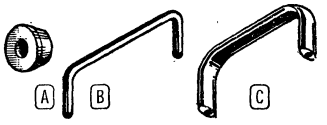
Ideal in applications with oscilloscopes and other meters. Slanted top supports instrument at convenient viewing angle. Casters provide mobility. Support arm adjusts to accommodate instruments of various sizes. 17x19" top. Overall height 34". Insulated top to prevent shorts. Armor board (phenolic plastic coated) ⅝" plywood top.

Top is strong, solid, non-marring, heat-resistant. Edges protected by resiffent plastic molding. Designed in collaboration with professional electronic technicians, to introduce a higher degree of efficiency in laboratory and shop testing operations. Tubular steel arms (1" dia.). Partially assembled. Goes together in 5 minutes.

707U8000. Wt. 23 lbs....Each 35.95

Handles and Assorted Hardware

USECO NICKEL-PLATED BRASS HANDLES

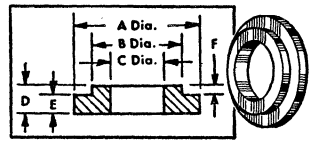


Sturdy handles for instrument panels, rack panels, portable equipment, etc. Each handle is made of brass, and is heavily nickel-plated. Rugged construction makes them stand up to even the most frequent and hard usage. 1015-12, 1017-12, 1033-12, and 1034-12 are oval handles that have 10-32 threaded mounting holes. Type 900-12 is a nickel-plated, brass mounting feerrule that fits Types 1005-12, 1010-12, 1012-12, 1013-12, 1015-12, and 1017-12 handles. A must for hobbyists, builders, and professionals. Av. shpg. wt. 6 oz.

Stock No.	Mfr's Type	Fig.	Mtg. Ctrs.	Hand Clearance	EACH 1-9	10-24	25-49	50-199	200-Up
971-0161	1005-12	B	6.44″	1¾″	1.23	.95	.86	.77	.72
971-0170	1010-12	B	4.25″	1½″	1.19	.87	.79	.70	.66
971-0173	*1012-12*	*B*	*4.00″*	*1½″*	1.19	.87	.79	.70	.66
971-0176	*1013-12*	*B*	*4.56″*	*1½″*	1.22	.88	.80	.72	.68
971-0179	1015-12	B	3″	1½″	1.18	.85	.77	.69	.65
971-0185	1017-12	B	2″	1½″	1.22	.90	.83	.73	.68
971-0218	*1033-12*	*C*	*3″*	*1 9/32″*	2.28	1.65	1.51	1.34	1.20
971-0221	*1034-12*	*C*	*4.56″*	*1½″*	2.55	1.86	1.69	1.51	1.35

Stock No.	Mfr's Type	Fig.	Description	PKG. OF 2 1-5	6-12	13-38	39-Up
971-0139	*900-12*	*A*	*1.50″ Brass Ferrule*	.21	.18	.16	.13

GRAYHILL MOLDED INSULATING WASHERS

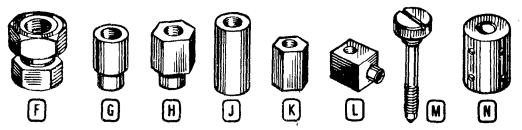


Molded insulating washers carefully manufactured to high specifications from rugged, black electrical-grade phenolic. Highly resistant to moisture absorption and do not support fungus growth. All have high dielectric strength and are ideally suited for any equipment destined for humid environmental conditions and other demanding applications. Available in a variety of commonly used sizes. Hole diameter is shown under "Dia. C" Heading in table below; shoulder diameter is shown under "Dia .B"; Dimension D is .094″ thick, Dimension E, .063″. Dimension F, .031″. Average Shipping wt. 3 oz. **Sold In Packages of 10.**

Stock No.	Mfr's Types	Screw Size	Dia. A	Dia. B	Dia. C	PER PKG. 1-49	50-Up
801-0421	21B1001-2	#6	.500″	.375″	.145″	1.00	.80
801-0422	21B1002-2	#8	.500″	.375″	.171″	1.00	.80
801-0423	21B1003-2	#10	.500″	.375″	.198″	1.00	.80
801-0424	21B1004-2	¼″	.500′	.375″	.258″	1.00	80
801-0425	21B1005-2	5/16″	.500″	.375″	.319″	1.00	.80
801-0426	21B1006-2	⅜″	.625″	.500″	.384″	1.00	.80
801-0427	21B1021-2	#6	.375″	.250″	.145″	1.00	.80
801-0428	21B1022-2	#4	.375″	.250″	.117″	1.00	.80

USECO INSTRUMENT PANEL HARDWARE

Stock No.	Mfr's Type	Fig.	T	X	PRICE PER PKG. OF 10 1-5	6-9	10-49	50-Up
971-0451	1510	F	⅜-32	.250″*	2.10	1.70	1.60	1.40
971-0458	1530C	G	.094″	.135″	1.00	.90	.80	.60
971-0459	1530D	G	.125″	.165″	1.00	.90	.80	.60
971-0462	1531B	H	.062″	.105″	1.00	.90	.80	.60
971-0457	1530B	G	.062″	.105″	1.44	1.30	1.20	1.00
971-0470	1550D	J	6-32	.375″†	1.88	1.50	1.40	1.20
971-0471	1550F	J	6-32	.625″†	1.88	1.50	1.40	1.20
971-0472	1550G	J	6-32	.750″†	1.88	1.50	1.40	1.20
971-0475	1551C	K	6-32	.250″†	1.88	1.50	1.40	1.20
971-0476	1551E	K	6-32	.500″†	1.88	1.50	1.40	1.20
971-0477	1551G	K	6-32	.750″†	1.88	1.50	1.40	1.20
971-0480	1590B	L	.062″	.105″	3.44	2.70	2.50	2.10
971-0481	1590C	L	.094″	.135″	3.44	2.70	2.50	2.10
971-0517	3200-6	M	6-32	.800″†	2.10	1.70	1.60	1.40
971-0521	3316A	N	.250″*	.750″†	6.88	4.70	4.40	4.10
971-0522	3316B	N	.125″*	.750″†	6.88	4.70	4.40	4.10

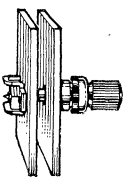


Shaft lock is illustrated in Figure F; swage-type standoffs in Figures G and H; threaded standoffs in Figures J and K; chassis fastens in Figure L; captive panel screw in Figure M, shaft coupling in Figure N. In the heading of the table at left, "T" indicates either the type of thread or the recommended board thickness. "X" in the table head indicates the hardware shank length, except *maximum shaft diameter, and †overall length. Stand-off types illustrated by Figure G have ¼″ standoff, except Type 1530B which has a ⅜″ standoff. All are brass with cadmium plating, except Type 1510, Type 3200-6 and Series 3316 which are brass with nickel plating. All are specially designed for high reliability performance and low cost. These low prices let you buy in quantity and save. Av. shpg. wt. per 10, 6 oz.

RAYTHEON CAPTIVE HARDWARE

Stock No.	Mfr's Type	Description	Screw Size	EACH 1-24	25-499	500-999	1000-Up
904-0011	CS 101	¾″ Thumbscrew	8-32 NC-2	.95	.55	.47	.44
904-0010	CS 100	⅝″ Thumbscrew	8-32 NE-2	.95	.55	.47	.44
904-0015	CS 111	⅛″ Thumbscrew	10-24 NC-2	1.05	.60	.52	.49
904-0022	CS 121	⅞″ Thumbscrew	10-32 NF-2	1.05	.60	.52	.49
904-0025	CS 122	1″ Thumbscrew	10-32 NF-2	1.05	.60	.52	.49
904-0608	PIN 101	.074-.109 Pl. Ins.	8-32 NC-2	.37	.22	.19	.18
904-0611	PIN-102	.119-.156 Pl. Ins.	8-32 NC-2	.37	.22	.19	.18
904-0620	PIN-122	.119-.156 Pl. Ins.	10-32	.45	.25	.21	.20
904-0576	NB 100	Nut Bracket	8-32 NC-2	.16	.10	.09	.08
904-0403	GS 103	Gasket	10-32, 8-32	.04	.02	.017	.016
904-0407	GSR118	Gasket Retainer	8-32	.11	.07	.06	.05

Stainless steel corrosion-free fastening hardware meets **MIL-E-16400** (Ships) specs, and will meet the requirements of **MIL-E-5400** and **MIL-P-11268** (Sig C) when painted or dulled in accordance with these specifications.



Available in a variety of sizes to handle almost any requirement, the complete captive assembly consists of a slotted head thumb screw, an insert bushing for securing the thumb screw to the panel, a captive floating nut assembly which is fastened to the chassis member of rack, and a gasket retainer and rubber gasket for use where a dustproof, splash proof seal is required. Av. shpg. wt. 2 oz.

RUSSELL INDUSTRIES RUBBER HARDWARE

RECESSED BUMPERS. Molded of a rubber and synthetic. *Indicates with washer insert. **Pkgs. of 100.** Eliminate scratching. 8 oz.

Stock No.	Type REC-	Fig	Max. Dia.	Hgt	Head Depth	Shaft Depth	Base Opening	Shaft Width	Per PKG. 1-9	10-Up
566-1415	2062	P	⅜″	¼″	3/16″	1/16″	¼″	5/32″	2.82	1.74
566-1420	2082	P	⅝″	½″	¼″	¼″	5/16″	5/32″	3.32	2.02
566-1421	2082S	*P	⅝″	½″	¼″	¼″	5/16″	5/32″	5.65	3.48
566-1433	2090	P	⅝″	⅝″	7/16″	3/16″	5/16″	.147″	5.37	3.17
566-1424	2084S	*P	¾″	⅜″	3/16″	3/16″	7/16″	3/16″	9.65	5.87
566-1439	2096S	*P	15/16″	⅝″	7/16″	3/16″	7/16″	7/32″	15.05	9.22
566-1404	206	R	⅜″	3/16″	3/32″	3/32″	3/16″	5/64″	1.40	.87
566-1406	207	R	½″	¼″	⅛″	⅛″	¼″	⅛″	2.35	1.44
566-1407	207S	*R	½″	¼″	⅛″	⅛″	¼″	⅛″	4.00	2.45
566-1418	2081S	*R	⅝″	5/16″	3/16″	⅛″	¼″	3/16″	6.75	3.29
566-1430	2088	R	⅝″	5/16″	3/16	⅛″	¼″	⅛″	3.05	1.87
566-1426	2085	R	¾″	⅜″	3/16″	3/16″	5/16″	5/32″	4.70	2.88
566-1427	2085S	*R	¾″	⅜″	7/16″	3/16″	5/16″	5/32″	7.52	4.61
566-1411	2095	*R	1 3/16″	½″	¼″	¼″	5/16″	5/32″	9.65	3.60
566-1442	2097	R	1″	1″	⅜″	⅜″	5/16″	5/32″	12.00	7.33
566-1443	2097S	*R	1″	1″	⅝″	⅜″	5/16″	5/32″	15.50	9.51
566-1447	2099S	*R	1″	1½″	⅝″	⅞″	5/16″	5/32″	23.12	14.11

RUBBER GROMMETS Pkgs. of 100. Wt., 8 oz.

Stock No.	Mfr's Type	O. D.	I. D.	Groove W.	Dia.	PER PKG. 1-9	10-Up
566-1249	GOB-2104	11/32″	7/64″	1/16″	13/64″	2.12	1.30
566-1250	GOB-2105	11/32″	⅛″	1/16″	3/16″	2.35	1.44
566-1229	GOB-210	11/32″	⅛″	3/16″	¼″	4.22	2.59
566-1230	GOB-215	7/16″	3/16″	1/16″	5/16″	2.82	1.73
566-1261	GOB-2173	½″	3/16″	1/16″	5/16″	3.52	2.16
566-1260	GOB-2721	½″	¼″	1/32″	5/16″	3.52	2.16
566-1233	GOB-220	9/16″	¼″	1/16″	¾″	3.77	2.31
566-1264	GOB-2211	9/16″	9/32″	1/16″	13/32″	4.45	2.74
566-1276	GOB-3251	⅝″	¼″	⅛″	⅜″	7.05	4.32
566-1266	GOB-2252	⅝″	5/16″	1/16″	7/16″	5.65	3.46
566-1268	GOB-2258	⅝″	⅜″	1/16″	17/32″	4.45	2.74
566-1270	GOB-2261	¾″	¼″	1/16″	9/16″	6.10	3.75
566-1242	GOB-1101-1	¾″	⅜″	⅛″	17/32″	7.75	4.75
566-1241	GOB-1101	¾″	7/16″	1/16″	9/16″	6.35	3.89
566-1237	GOB-230	13/16″	½″	1/16″	⅝″	7.52	4.61
566-1243	GOB-1102	1 1/16″	½″	1/16″	13/16″	11.05	6.73
566-1244	GOB-1102-2	1 1/16″	½″	⅛″	13/16″	11.05	6.73
566-1245	GOB-1103	1⅛″	⅝″	1/16″	⅞″	16.45	10.08
566-1246	GOB-1104	2⅛″	1½″	1/16″	1¾″	34.30	21.03
566-1247	GOB-1105	1⅛″	13/16″	3/64″	15/16″	16.45	10.08

Allied's Hardware for the Electronics Industry

SELF-TAPPING SCREWS

Steel, cadmium plated. Available in round and slotted hex heads. 3 oz. per package of 100.

(A) ROUND HEAD A—SHARP POINT

Stock No.	Mfr's Type	Size	PER PKG./100 1-9	10-Up
706-1801	*1801*	*4x½"*	1.31	.86
706-1802	*1802*	*6x¼"*	1.37	.87
706-1803	1803	6x⅜"	1.50	.94
706-1804	*1904*	*6x½"*	1.56	.99
706-1805	1805	8x⅜"	1.75	1.10
706-1806	1806	8x½"	1.87	1.19

(B) ROUND HEAD Z—BLUNT POINT

706-1807	1807	4x½"	1.31	.86
706-1808	1808	6x¼"	1.37	.87
706-1809	1809	6x⅜"	1.50	.94
706-1810	1810	6x½"	1.56	.99
706-1811	1811	8x⅜"	1.75	1.10
706-1812	1812	8x½"	1.87	1.19

(C) SLOTTED HEX HEAD Z—BLUNT POINT

706-1830	1830	6x¼"	1.50	.97
706-1831	1831	6x⅜"	1.62	1.05
706-1832	1832	6x½"	1.75	1.11
706-1833	1833	8x⅜"	1.94	1.23
706-1834	1834	8x½"	2.06	1.33

ROUND HEAD MACHINE SCREWS

Steel, cadmium plated. 3 oz.

706-1173	*1173*	*2-56x¼"*	1.25	.78
706-1174	1174	2-56x½"	1.31	.84
706-1175	1175	2-56x¾"	1.56	.90
706-1177	1177	4-36x¼"	1.31	.85
706-1183	*1183*	*4-36x½"*	1.43	.91
706-1350	*1350*	*4-40x¼"*	1.31	.85
706-1352	*1352*	*4-40x½"*	1.43	.91
706-1354	*1354*	*4-40x¾"*	1.56	1.00
706-1000	*1000*	*6-32x¼"*	1.18	.75
706-1001	1001	6-32x⅜"	1.25	.78
706-1002	*1002*	*6-32x½"*	1.31	.82
706-1355	1355	6-32x⅝"	1.37	.88
706-1356	*1356*	*6-32x¾"*	1.43	.93
706-1357	*1357*	*6-32x1"*	1.68	1.08
706-1358	*1358*	*6-32x2"*	3.56	2.28
706-1006	1006	8-32x¼"	1.50	.98
706-1007	1007	8-32x⅜"	1.43	.93
706-1008	1008	8-32x½"	1.62	1.02
706-1010	1010	8-32x⅝"	1.68	1.08
706-1359	*1359*	*8-32x¾"*	1.87	1.22
706-1360	*1360*	*10-32x½"*	1.94	1.25
706-1361	1361	10-32x¾"	2.00	1.28
706-1362	*1362*	*10-32x1"*	2.68	1.72

ROUND HEAD MACHINE SCREWS

Brass, nickel plated. 3 oz.

706-1044	1044	4-36x¼"	2.00	1.28
706-1045	1045	4-36x⅜"	2.06	1.32
706-1046	1046	4-36x½"	2.50	1.61
706-1047	1047	4-40x½"	2.00	1.28
706-1048	1048	4-40x⅜"	2.06	1.32
706-1049	1049	4-40x½"	2.50	1.61
706-1050	1050	6-32x¼"	2.50	1.61
706-1051	1051	6-32x⅜"	2.62	1.71
706-1052	1052	6-32x½"	3.00	1.94
706-1056	1056	8-32x¼"	3.74	2.40
706-1057	1057	8-32x⅜"	4.00	2.54
706-1058	1058	8-32x½"	4.50	2.90

BINDING HEAD MACHINE SCREWS

Steel, cadmium plated. 3 oz.

706-1369	*1369*	*2-56x¼"*	1.25	.78
706-1370	*1370*	*2-56x½"*	1.31	.84
706-1372	*1372*	*4-40x¼"*	1.31	.85
706-1373	*1373*	*4-40x½"*	1.43	.91
706-1374	*1374*	*4-40x¾"*	1.56	1.00
706-1375	*1375*	*6-32x3/16"*	1.25	.79
706-1425	*1425*	*6-32x¼"*	1.18	.75
706-1426	*1426*	*6-32x⅜"*	1.25	.78
706-1427	*1427*	*6-32x½"*	1.31	.82
706-1377	*1377*	*6-32x¾"*	1.43	.93
706-1378	*1378*	*8-32x5/16"*	1.43	.91
706-1429	1429	8-32x⅜"	1.43	.93
706-1430	*1430*	*8-32x½"*	1.62	1.02
706-1380	*1380*	*10-32x½"*	1.93	1.25

CABINET SCREWS

Oval head. Steel, nickel plated. 1 lb.

Stock No.	Mfr's Type	Size	PER PKG./100 1-9	10-Up
706-1382	1382	6-32x¾"	1.43	.93
706-1383	1383	8-32x¾"	1.87	1.22
706-1111	1111	10-32x½"	1.93	1.25
706-1112	1112	10-32x¾"	2.31	1.48
706-1113	1113	10-32x⅝"	2.50	1.61

NYLON SCREWS

Round Head. Screws will not rust tight so they can be easily undone. Natural coloring. 8 oz.

706-2520	2520	4-40x¼"	3.50	2.98
706-2522	*2522*	*4-40x½"*	3.50	2.98
706-2523	2523	6-32x¼"	3.50	2.98
706-2526	2526	6-32x⅝"	3.50	2.98
706-2527	*2527*	*6-32x¾"*	3.50	2.98
706-2530	2530	8-32x⅜"	3.50	2.98
706-2531	2531	8-32x½"	3.50	2.98

Binding Head. Shpg. wt. 8 oz.

706-2500	2500	4-40x¼"	3.50	2.98
706-2502	2502	4-40x½"	3.50	2.98
706-2503	2503	6-32x¼"	3.50	2.98
706-2504	2504	6-32x⅜"	3.50	2.98
706-2505	2505	6-32x½"	3.50	2.98
706-2507	2507	6-32x¾"	3.50	2.98
706-2510	2510	8-32x⅜"	3.50	2.98
706-2511	2511	8-32x½"	3.50	2.98

STEEL HEX NUTS

Carefully made of steel and cadmium-plated except types 1196 and 1199 which are nickel plated. 4 oz.

706-1363	*1363*	*2-56x3/16"*	1.37	.89
706-1364	1364	3-48x3/16"	1.37	.89
706-1365	*1365*	*4-40x¼"*	1.18	.74
706-1179	*1179*	*6-32x¼"*	1.18	.74
706-1180	*1180*	*6-32x5/16"*	1.25	.81
706-1366	*1366*	*8-32x¼"*	1.18	.74
706-1181	*1181*	*8-32x5/16"*	1.25	.81
706-1367	*1367*	*10-32x⅜"*	1.56	1.00
706-1368	1368	¼-20x7/16"	1.82	1.15
706-1398	*1398*	*4-36x¼"*	1.18	.74
706-1199	*1199*	*⅜-32x½x3/32"*	3.12	2.22
706-1196	*1196*	*15/32x9/16x5/64"*	2.50	1.80

BRASS HEX NUTS

Nickel plated. 8 oz.

706-1168	1168	4-40x¼"	1.37	.89
706-1169	1189	6-32x¼"	1.37	.89
706-1190	*1190*	*6-32x5/16"*	1.93	1.23
705-1192	*1192*	*8-32x5/16"*	1.93	1.23
706-1193	1193	10-32x5/16"	1.93	1.23
706-1187	1187	¼-32x7/16"	2.38	1.50

NYLON HEX NUTS (4 oz.)

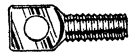
706-2554	2554	4-40x¼"	7.00	5.60
706-2555	*2555*	*6-32x5/16"*	7.00	5.60
706-2556	*2556*	*8-32x11/32"*	7.00	5.60
706-2557	2557	10-32x⅜"	7.00	5.60

INTERNAL LOCKWASHERS

Steel, cadmium plated. *Narrow rim. 2 oz.

706-1118	1118	#2	.68	.45
706-1119	1119	#3	.68	.45
706-1127	*1127*	*#4*	.75	.49
706-1128	*1128*	*#6*	.75	.49
706-1129	*1129*	*#8*	1.00	.65
706-1130	1130	#10	1.87	1.22
706-1132	1132	¼"	2.36	1.50
706-1131	1131	⅜"	2.50	1.60
706-1145	1145	⅜"*	1.12	.72
706-1146	1146	15/32"*	1.00	.64

SPADE BOLTS



Steel cadmium plated. Av. shpg. wt. 8 oz.

706-1500	1500	6-32x5/16"	3.88	2.80

EXTERNAL LOCKWASHERS

Steel, cadmium plated.

Stock No.	Mfr's Type	Size	PER PKG./100 1-9	10-Up
706-1139	1139	#4	.68	.45
706-1140	*1140*	*#6*	.68	.45
706-1141	1141	#8	.75	.49
706-1142	1142	#10	.75	.49
706-1144	1144	¼"	1.00	.65
706-1143	1143	⅜"	1.87	1.22

FLAT WASHERS

Steel, nickel plated.

706-1149	1149	#4	.81	.55
706-1150	*1150*	*#6*	.75	.50
706-1151	1151	#8	.87	.58
706-1152	1152	#10	.93	.60
706-1147	1147	¼"	1.06	.68
706-1148	1148	⅜"	1.18	.75

COUNTER SUNK WASHERS

Brass, nickel plated. 2 oz.

706-1115	1115	#6	1.25	.78
706-1116	1116	#8	1.56	.99
706-1117	*1117*	*#10*	1.75	1.12

SHOULDER WASHERS

Fiber. Per MIL-F-1148A. Grade CH. Shoulder height, .031. Size reads inside X outside diameter. 3 oz.

706-2150	*2150*	*.140x.375*	1.00	.70
706-2151	2151	.110x.250	.90	.60
706-2152	2152	.136x.250	.95	.65
706-2153	*2153*	*.136x.312*	1.05	.73
706-2154	*2154*	*.250x.500*	1.10	.78
706-2155	2155	.172x.375	1.05	.73
706-2156	2156	.196x.375	1.05	.73
706-2159	2159	.265x.500	1.10	.80
706-2157	*2157*	*.375x.750*	1.40	1.11
706-2158	2158	.385x.625	1.35	1.02

Natural Nylon. Per MIL-P-20693A. Height .031. Size, inside X outside dia. 4 oz.

706-2560	2660	.140x.375	2.50	2.00
706-2561	2661	.110x.250	2.20	1.70
706-2562	2662	.136x.250	2.20	1.70
706-2563	2663	.136x.312	2.30	1.80
706-2564	2664	.250x.500	2.40	1.90
706-2565	2665	.172x.375	2.50	2.00
706-2566	2666	.196x.375	2.50	2.00
706-2569	2669	.265x.500	3.30	2.60
706-2567	2667	.375x.750	6.50	5.00
706-2568	2668	.385x.625	4.00	3.30

FLAT WASHERS

Fibre. MIL-F-1148A. Grade CH 1/16" thick except 2166, 3/32". 2 oz.

706-2160	*2160*	*.136x.250*	.95	.63
706-2161	2161	.110x.250	.95	.63
706-2162	*2162*	*.140x.375*	.90	.60
706-2163	*2163*	*.172x.375*	.90	.60
706-2164	2164	.196x.375	.90	.60
706-2165	*2165*	*.250x.500*	.90	.60
706-2166	2166	.250x.500	.95	.63
706-2167	2167	.312x.500	.95	.63
706-2168	2168	.385x.625	1.05	.72
706-2169	*2169*	*.375x.750*	1.25	.92

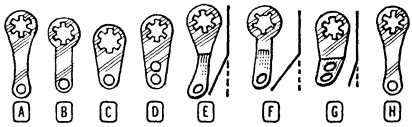
Nylon. MIL-P-20693A. 1/16". 2514, 15: .047". 2516, 17, 18: .062". 2676: 3/32". 2 oz.

706-2414	2514	.115x.281	1.90	1.50
706-2570	2670	.136x.250	1.90	1.50
706-2571	2671	.110x.250	1.90	1.50
706-2572	2672	.140x.375	2.30	1.80
706-2515	2515	.140x.312	2.00	1.60
706-2573	2673	.172x.375	2.50	2.00
706-2416	2516	.170x.375	2.20	1.80
706-2574	2674	.196x.375	2.50	2.00
706-2417	2517	.200x.437	2.30	1.90
706-2575	2675	.250x.500	2.50	2.00
706-2576	2676	.250x.500	3.10	2.50
706-2418	2518	.260x.562	2.50	2.00
706-2577	2677	.312x.500	2.50	2.00
706-2578	2678	.385x.625	2.80	2.20
706-2579	2679	.375x.750	3.40	2.70

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

ALLIED Hardware for Industry

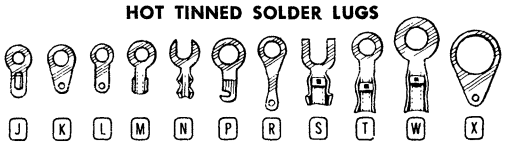
LOCKING TERMINAL LUGS



A wide selection of the most widely used locking terminal lug styles, with hole sizes from #4 through #10. Designed for broad usage in military, industrial and commercial applications. Sold in packages of 100. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	LxD (Inches)	Hole	Fig.	Price Per Pkg. 1-9	Price Per Pkg. 10-Up
706-1400	1410-4	7/8x.018	#4	A	1.32	1.10
706-1401	*1410-6*	*7/8x.018*	*#6*	*A*	1.32	1.10
706-1402	1410-8	7/8x.018	#8	A	1.32	1.10
706-1403	1410-10	57/64x.018	#10	A	1.44	1.20
706-1404	*1410-14*	*13/16x.018*	1/4"	*A*	1.44	1.20
706-1405	1411-4	47/64x.020	#4	B	1.32	1.10
706-1406	1411-6	47/64x.020	#4	B	1.32	1.10
706-1407	1411-8	47/64x.020	#8	B	1.32	1.10
706-1408	1412-4	5/8x.018	#4	C	1.20	1.00
706-1409	*1412-6*	*5/8x.018*	*#6*	*C*	1.20	1.00
706-1410	*1412-8*	*5/8x.018*	*#8*	*C*	1.20	1.00
706-1411	1413-4	23/32x.018	#4	D	1.32	1.10
706-1412	*1413-6*	*25/32x.018*	*#6*	*D*	1.32	1.10
706-1413	1413-8	23/32x.018	#8	D	1.32	1.10
706-1414	1414-4	13/16x.018	#4	E	1.32	1.10
706-1415	*1414-6*	*13/16x.018*	*#6*	*E*	1.32	1.10
706-1416	1414-8	13/16x.018	#8	E	1.32	1.10
706-1417	1414-10	53/64x.018	#10	E	1.44	1.20
706-1418	1415-4	41/64x.018	#4	F	1.32	1.10
706-1419	1415-6	41/64x.018	#6	F	1.32	1.10
706-1420	1415-8	41/64x.018	#8	F	1.32	1.10
706-1421	*1416-6*	*11/16x.020*	*#6*	*G*	1.32	1.10
706-1466	1466	47/64x.020	#6	H	1.44	1.20
706-1467	1467	7/8x.020	#8	H	1.44	1.20

HOT TINNED SOLDER LUGS



*Ph. Br. †Brass. ‡Copper. Av. wt. per 100, 2 oz.

706-1475	1484*	5/8x.020	#6	J	1.50	1.20
706-1476	*1485-4**	*17/32x.012*	*#4*	*K*	1.20	1.00
706-1477	*1485-6**	*17/32x.012*	*#6*	*K*	1.20	1.00
706-1478	1485-8*	17/32x.012	#8	K	1.20	1.00
706-1479	1485-10*	17/32x.012	#10	K	1.20	1.00
706-1480	1486-4*	13/16x.012	#4	R	1.20	1.00
706-1481	*1486-6**	*13/16x.012*	*#6*	*R*	1.20	1.00
706-1482	1486-8*	13/16x.012	#8	R	1.20	1.00
706-1483	1486-10*	13/16x.012	#10	R	1.20	1.00
706-1484	1488-4*	9/16x.012	#4	L	1.20	1.00
706-1485	*1488-6**	*9/16x.012*	*#6*	*L*	1.20	1.00
706-1486	1488-8*	9/16x.012	#8	L	1.20	1.00
706-1487	*1490†*	*3/4x.020*	*#10*	*S*	1.44	1.20
706-1488	1491‡	15/16x.020	#10	T	2.40	2.00
706-1489	1493†	1 1/8x.027	1/4"	W	3.00	2.50
706-1490	1494-6†	5/8x.020	#6	M	1.32	1.10
706-1491	1494-8†	5/8x.020	#8	M	1.32	1.10
706-1495	*1495†*	*5/8x.020*	*#8*	*N*	1.44	1.20
706-1496	*1496†*	*3/4x.020*	*1/4"*	*P*	1.44	1.20
706-1497	*1497†*	*7/8x.017*	3/8"	*X*	1.80	1.50

SNAP BUTTON HOLE PLUGS

Steel prongs, nickel plated. 656, vented. Pkg. of 100. 8 oz.

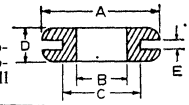
Stock No.	Mfr's Type	Hole	IDxODxDepth	Price Per Pkg. 1-4	Price Per Pkg. 5-9	Price Per Pkg. 10-Up
706-0650	650	1/4"	13/32x15/64x1/16	3.40	2.75	2.20
706-0651	651	5/16"	7/16x1/4x1/16	3.40	2.75	2.20
706-0652	652	3/8"	1/2x15/64x1/16	3.40	2.75	2.20
706-0653	653	1/2"	21/32x9/32x5/64	3.60	3.00	2.40
706-0654	654	5/8"	13/16x19/64x5/64	4.80	4.00	3.20
706-0655	655	3/4"	59/64x19/64x5/64	4.80	4.00	3.20
706-0608	608	7/8"	1 1/16x19/64x1/16	5.40	4.50	3.60
706-0612	612	1"	1 9/64x21/64x3/32	6.30	5.25	4.21
706-0656	656	1"	1 5/32x19/64x5/64	26.40	22.00	17.60

CABLE CLAMP HOLDERS

Steel cadmium plated. No. 8 mounting hole. 8 oz.

Stock No.	Mfr's Type	Cable Dia.	Price Per Pkg. Of 100 1-9	Price Per Pkg. Of 100 10-49	Price Per Pkg. Of 100 50-Up
706-1471	*1471*	3/16"	1.10	.90	.76
706-1470	*1470*	3/16"	1.04	.81	.69
706-1472	*1472*	5/16"	1.23	1.00	.85

GROMMETS



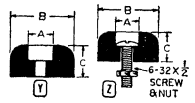
RUBBER. High-quality grommets with exceptional aging qualities. High dielectric properties and oil resistant. "E" is 1/16" for all except 2189, 1/32". Pkg. of 100. 8 oz.

Stock No.	Mfr's Type	A	B	C	D	Price Per Pkg. 1-4	Price Per Pkg. 5-9	Price Per Pkg. 10-Up
706-2185	*2185*	5/16"	1/8"	3/16"	3/16"	2.95	2.40	2.04
706-2172	*2172*	7/16"	3/16"	5/16"	3/16"	2.70	2.20	1.87
706-2170	*2170*	5/8"	1/4"	3/8"	1/4"	3.10	2.50	2.13
706-2174	*2174*	5/8"	5/16"	7/16"	1/4"	3.00	2.40	2.04
706-2175	*2175*	21/32"	3/8"	1/2"	1/4"	3.10	2.50	2.13
706-2177	*2177*	3/4"	7/16"	9/16"	1/4"	3.10	2.50	2.13
706-2186	*2186*	1 1/16"	1/2"	3/4"	5/16"	6.50	5.30	5.01
706-2187	*2187*	1 1/8"	5/8"	7/8"	5/16"	6.60	5.40	4.90
706-2188	2188	1 1/16"	9/16"	13/16"	5/16"	6.50	5.30	5.01
706-2189	2189	1"	3/4"	7/8"	5/32"	6.40	5.20	4.42

VINYL. Durometer hardness, 45 to 85. Completely oil resistant. "E" is 1/16" for all. Av. shpg. wt. per 100, 8 oz.

706-2145	2145	11/32"	1/8"	1/4"	3/16"	1.40	1.10	.94
706-2146	2146	7/16"	3/16"	5/16"	7/32"	1.75	1.35	1.15
706-2147	2147	9/16"	1/4"	3/8"	1/4"	2.10	1.65	1.40
706-2148	2148	5/8"	3/8"	1/2"	1/4"	2.20	1.75	1.49
706-2149	2149	13/16"	1/2"	5/8"	9/32"	3.40	2.65	2.25

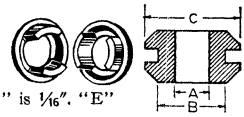
RECESS RUBBER BUMPERS



Wide selection of recess rubber bumpers designed for military, industrial and commercial applications. *With molded-in metal washer. †With 1/2" screw. Pkg. of 100. Wt. per 100, 8 oz.

Stock No.	Mfr's Type	Fig.	A	B	C	Price Per Pkg. Of 100 1-4	Price Per Pkg. Of 100 5-9	Price Per Pkg. Of 100 10-49	Price Per Pkg. Of 100 50-Up
706-2192	*2192*	*Y*	7/32"	17/32"	1/4"	2.20	1.70	1.46	1.30
706-2193	*2193*	*Y*	1/4"	5/8"	5/16"	2.90	2.20	1.87	1.68
706-2194	2194	Y	9/32"	3/4"	3/8"	4.40	3.30	2.81	2.63
706-2184	2184	Y	9/32"	5/8"	9/32"	4.40	3.30	2.81	2.63
706-2135	2135	Y*	3/8"	31/32"	3/8"	6.60	5.00	4.25	3.83
706-2196	2196	Z†	7/32"	17/32"	1/4"	8.80	6.70	5.70	5.13
706-2197	2197	Z†	1/4"	5/8"	5/16"	9.50	7.20	6.12	5.51
706-2198	2198	Z†	9/32"	3/4"	3/8"	11.00	8.30	7.06	6.35
706-2199	2199	Z†	1/4"	5/8"	9/32"	11.00	8.30	7.06	6.35
706-2195	2195	Z†*	3/8"	31/32"	3/8"	13.50	10.00	8.50	7.65

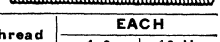
SNAP-LOCK PLASTIC GROMMETS



Halves snap tight for greater dielectric, extreme chemical and wear resistance, rigid bearing surface. "D" is 1/16". "E" is 1/4". Pkg. of 100. Av. wt. 4 oz.

Stock No.	Mfr's Type	A	B	C	Price Per Pkg. Of 100 1-4	Price Per Pkg. Of 100 5-9	Price Per Pkg. Of 100 10-49	Price Per Pkg. Of 100 50-Up
706-2178	2178	3/16"	5/16"	7/16"	4.40	3.30	2.81	2.53
706-2179	*2179*	1/4"	3/8"	1/2"	4.60	3.50	2.98	2.68
706-2180	*2180*	3/8"	1/2"	5/8"	4.80	3.65	3.10	2.79

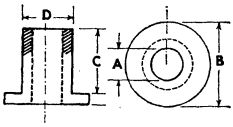
H. H. SMITH BRASS AND NYLON RODS



Variety of applications as spacers. Weather-proofed. One-ft. lengths. 9 oz.

Stock No.	Mfr's Type	Des.	Thread	Each 1-9	Each 10-Up
920-1400	1400-1	Brass	6-32	.67	.50
920-1401	1401-1	Brass	8-32	.67	.50
920-1402	1402-1	Brass	10-32	.67	.50
920-1403	1403-1	Brass	1/4-20	.74	.55
920-1432	1420-1	Nylon	6-32	1.45	1.10
920-1434	1421-1	Nylon	8-32	1.60	1.20
920-1436	1422-1	Nylon	10-32	2.00	1.50
920-1437	1423-1	Nylon	1/4-20	2.40	1.80

H.H. SMITH NYLON SPACER BUSHINGS



Molded of corrosive-resistant Nylon. Non-conductive. Meet MIL-P-20683A. Pkg. of 100. Av. wt. 8 oz.

Stock No.	Mfr's Type	I.D. (A)	B	C	D	Price Per Pkg./100 1-4	Price Per Pkg./100 5-9	Price Per Pkg./100 10-Up
920-2534	2534	#4 (.115)	.235	1/4	.147	3.00	2.30	1.95
920-2535	2535	#6 (.140)	.290	1/4	.170	3.10	2.40	2.04
920-2536	2536	#8 (.170)	.344	3/8	.205	3.30	2.50	2.12
920-2537	2537	#10 (.200)	.399	3/8	.260	3.60	2.70	2.30
920-2538	2538	1/4 (.260)	.513	3/8	.312	4.00	3.00	2.55

H. H. Smith Spacers, Posts and Handles

BRASS SPACERS

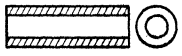
Round spacers for raising sub panels, chassis, condensers, etc. Durable cadmium-plated brass. Precision machined; lengths and outer diameters accurate to ±1/32". Tapped bushings for threads indicated in tables. **Sold in packages of 10.** Av. shpg. wt. for 10 6-oz.

ROUND—NON-THREADED 1/4" O.D.

Stock No.	Mfr's Type	Screw Size	Length	PRICE PER PKG. 1-9	10-24	25-Up
920-8500	8700	4	1/8"	.50	.37	.30
920-8503	8703	4	3/16"	.50	.39	.30
920-2340	*2340*	*4*	1/4"	.50	.42	.33
920-8506	8706	4	5/16"	.60	.47	.36
920-2341	*2341*	*4*	3/8"	.70	.49	.39
920-2342	2342	4	1/2"	.70	.57	.44
920-2343	2343	4	3/4"	1.00	.82	.64
920-2344	2344	4	*1"*	1.30	.97	.75
920-8501	*8701*	*6*	1/8"	.50	.37	.30
920-8504	*8704*	*6*	3/16"	.50	.39	.30
920-2100	*2100*	*6*	1/4"	.50	.42	.33
920-8507	8707	6	5/16"	.60	.47	.36
920-2101	*2101*	*6*	3/8"	.60	.49	.39
920-2102	*2102*	*6*	1/2"	.70	.57	.44
920-2103	*2103*	*6*	3/4"	1.10	.82	.63
920-2104	*2104*	*6*	*1"*	1.30	.97	.75
920-8505	8705	8	3/16"	.50	.39	.32
920-2105	*2105*	*8*	1/4"	.50	.42	.33
920-2106	2106	8	3/8"	.60	.49	.39
920-2107	2107	8	1/2"	.70	.57	.44
920-2108	*2108*	*8*	3/4"	1.10	.82	.63
920-2109	2109	8	1"	1.30	.97	.75

ROUND—THREADED 1/4" O.D.

Stock No.	Mfr's Type	Tap	Length	PRICE PER PKG. 1-9	10-24	25-Up
920-2370	*2370*	*4-40*	1/4"	.60	.48	.37
920-8566	8766	4-40	5/16"	.70	.53	.42
920-2371	*2371*	*4-40*	3/8"	.70	.56	.45
920-2372	*2372*	*4-40*	1/2"	.90	.67	.52
920-8575	8775	4-40	5/8"	1.00	.79	.62
920-2373	*2373*	*4-40*	3/4"	1.30	1.02	.79
920-2374	*2374*	*4-40*	*1"*	1.50	1.14	.89
920-2120	*2120*	*6-32*	1/4"	.60	.48	.37
920-8567	8767	6-32	5/16"	.70	.53	.42
920-2121	*2121*	*6-32*	3/8"	.70	.56	.45
920-2122	*2122*	*6-32*	1/2"	.90	.67	.52
920-8573	8773	6-32	9/16"	.90	.72	.57
920-2123	*2123*	*6-32*	3/4"	1.30	1.02	.79
920-2124	*2124*	*6-32*	*1"*	1.50	1.14	.89
920-2126	2126	8-32	3/8"	.70	.56	.45
920-2127	2127	8-32	1/2"	.90	.67	.52
920-2128	2128	8-32	3/4"	1.30	1.02	.79
920-2129	*2129*	*8-32*	*1"*	1.50	1.14	.89



ALUMINUM SPACERS

1/4" O.D. tubular spacers with precision machined ends, lengths accurate to ±.005". Aluminum with iridite finish (meet MIL-C-5541 specifications). Inside diameter for #4 screws is .113"; for #6 screws, .140"; for #8, .169". **Sold in packages of 10 only.** Av. shpg. wt. 6 oz.

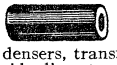
Stock No.	Mfr's Type	Screw Size	Length Inches	PRICE PER PKG. 1-9	10-24	25-Up
920-8281	8481	4	1/4	1.30	1.05	.95
920-8283	8483	4	1/2	1.40	1.18	1.06
920-8301	*8501*	*6*	1/4	1.30	1.05	.95
920-8303	8503	6	1/2	1.40	1.18	1.06
920-8305	8505	6	3/4	1.70	1.43	1.28
920-8307	8507	6	1	1.80	1.50	1.35

ALUMINUM POSTS

Round .250" O.D. metallic rods tapped through, or at each end. Support and separate components or structural members without need for long screws or machine nuts. Aluminum with iridite finish. Length and O.D. within ±.005" tolerance. *Minimum full-thread depth. **Sold in packages of 10 only.** Av. wt. 3 oz.

Stock No.	Mfr's Type	T	Length Inches	*d	PRICE PER PKG. 1-9	10-24	25-Up
920-8123	8323	4-40	1/2	Thru	1.60	1.30	1.17
920-8127	8327	4-40	1	1/4	2.20	1.80	1.62
920-8129	8329	4-40	1 1/2	1/4	2.40	2.00	1.82
920-8143	8343	6-32	1/2	Thru	1.60	1.30	1.17
920-8145	8345	6-32	3/4	Thru	1.90	1.55	1.40
930-8147	*8347*	*6-32*	*1*	3/8	2.20	1.80	1.62
920-8149	8349	6-32	1 1/2	3/8	2.40	2.00	1.82
920-8151	8351	6-32	2	3/8	2.60	2.18	1.96
920-8152	8352	6-32	2 1/2	3/8	2.90	2.40	2.16
920-8153	8353	6-32	3	3/8	3.10	2.55	2.30
920-8155	8355	6-32	4	3/8	3.80	3.20	2.88

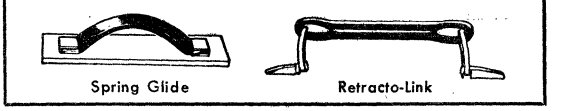
FIBER SPACERS



Round fiber bushings for screw sizes indicated in table. Meet MIL-F-1148A, Grade CH specifications. Ideal for use in raising sub panels, chassis, condensers, transformers, etc. in electronic assemblies. Have 1/4" outside diameter. **Sold in packages of 10 only.** Av. wt. 2 oz.

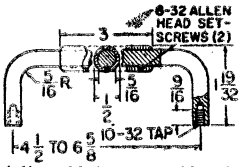
Stock No.	Mfr's Type	Screw Size	Length	PRICE PER PKG. 1-9	10-24	25-Up
920-8680	8880	4	1/8"	.40	.33	.30
920-8683	8883	4	3/16"	.50	.38	.34
920-2335	*2335*	*4*	1/4"	.50	.43	.39
920-8686	8886	4	5/16"	.60	.49	.44
920-2336	2336	4	3/8"	.70	.55	.50
920-2337	*2337*	*4*	1/2"	.80	.65	.59
920-2338	2338	4	3/4"	1.00	.85	.77
920-2339	2339	4	1"	1.20	1.00	.90
920-8681	*8881*	*6*	1/8"	.40	.33	.30
920-2130	2130	6	1/4"	.50	.43	.39
920-8687	8887	6	5/16"	.60	.49	.44
920-2131	*2131*	*6*	3/8"	.70	.55	.50
920-2132	*2132*	*6*	1/2"	.80	.65	.59
920-8696	*8896*	*6*	5/8"	.90	.75	.68
920-2133	*2133*	*6*	3/4"	1.00	.85	.77
920-2134	*2134*	*6*	*1"*	1.20	1.00	.90
920-2140	*2140*	*8*	1/4"	.50	.43	.39
920-2142	*2142*	*8*	1/2"	.80	.65	.59
920-2143	2143	8	3/4"	1.00	.85	.77
920-2144	*2144*	*8*	*1"*	1.20	1.00	.90

LEATHER EQUIPMENT HANDLES



Black leather with matching stitching. **Spring Glide** contoured handle moves up for carrying, down when not in use. Will not rattle under extreme sound conditions. Chrome plated caps. **Retracto-Link** handle attaches with rivets or screws, drops down when not in use. Nickel plated steel hardware. Av. shpg. wt., 3 oz.

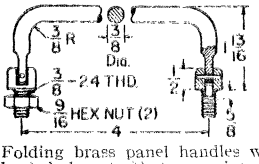
Stock No.	Mfr's Type	Description	Lgth.	EACH 1-9	10-49	50-Up
920-2089	2089	Spring Glide	6"	3.70	2.75	2.48
920-2093	2093	Retracto-Link	4 1/2"	3.37	2.50	2.25
920-2094	2094	Retracto-Link	5 1/2"	3.37	2.50	2.25
920-2095	2095	Retracto-Link	6 3/4"	3.37	2.50	2.25



ADJUSTABLE HANDLES

Adjustable brass panel handles with mounting center range from 4 1/2" to 6 5/8". Internal 10-32 thread with Allen-Head locking screws. Av. shpg. wt., 6 oz.

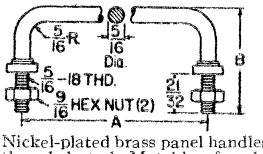
Stock No.	Mfr's Type	Finish	EACH 1-9	10-Up
920-1759	1659	Nickel Plate	6.00	4.50
920-1761	1661	Black Oxide	6.00	4.50



FOLDING HANDLES

Folding brass panel handles with spring-loaded detents that snap into upright or left-or-right folded position. With brass, nickel plated hex nuts. Mount in 3/8" panel holes. Av. shpg. wt. 6 oz.

Stock No.	Mfr's Type	Finish	EACH 1-9	10-Up
920-1762	1662	Nickel Plate	6.50	5.00
920-1763	1663	Black Oxide	6.50	5.00



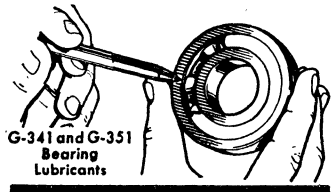
PANEL HANDLES

Nickel-plated brass panel handles with male threaded stud. Matching ferrules and hex nuts. Av. shpg. wt. 6 oz.

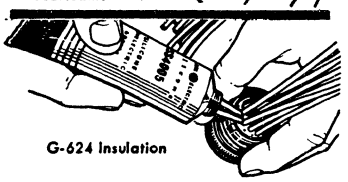
Stock No.	Mfr's Type	Diam. AxB	EACH 1-9	10-Up
920-1707	1607	2x2 1/8"	2.00	1.55
920-1709	1609	3x2 1/8"	2.10	1.60
920-1711	1611	4x2 1/8"	2.20	1.70
920-2053	2053	4 1/4x2 1/8"	2.30	1.75
920-1714	1614	6x2 11/16"	2.50	1.90

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Silicones and Epoxy Compounds



G-341 and G-351 Bearing Lubricants



G-624 Insulation

SILICONE GREASES AND COMPOUNDS

Wide selection of silicone greases and compounds for applications ranging from special service lubricants to high-thermal conducting compounds for electronic components. Silicone greases and compounds withstand temperatures from −100° to +450°F; won't smoke, melt or char; are odorless and colorless; can be easily applied direct from the tube. Non-corrosive, water repellent. Won't solidify; not subject to oxidation, evaporation and excessive bleed losses.

G-623—Water repellent coating/seal.

G-624—Excellent component insulator.

G-322—Lubricant for slow oscillating or rotary motion applications.

G-341—Bearing lubricant for use in adverse environments.

G-351—Bearing lubricant for −40° to +400°F.

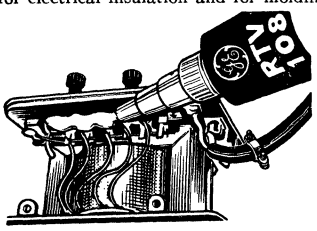
2-Oz. Tube		EACH		
Stock No.	Type	1-11	12-47	48-Up
798-0107	G-623	2.00	1.33	1.12
798-0109	G-624	2.00	1.33	1.12
798-0100	G-322	3.00	2.00	1.42
798-0103	G-341	2.00	1.33	1.12
798-0105	G-351	2.00	1.33	1.12

8-Oz. Tube		EACH		
Stock No.	Type	1-11	12-47	48-Up
798-0108	G-623	5.20	3.47	2.70
798-0110	G-624	5.52	3.69	2.85
798-0102	G-322	8.37	5.59	4.20
798-0104	G-341	6.05	4.04	3.10
798-0106	G-351	6.37	4.25	3.25

RTV-630 SILICONE RUBBER COMPOUND (Not Illus.)

Blue silicone, pourable compound cures within minutes with addition of curing agent (catalyst) to a high-strength, tough solid. Ideal for electrical insulation and for molding of prototype parts. High dielectric strength. Consists of compound and curing agent. 1-lb. can. Shpg. wt., 1 lb.

798-0618. 1-11.....Each 15.17 12-Up.....Each 10.13



RTV-108. Translucent For See-Through Uses

SILICONE RUBBER SEALANTS

Ready-to-use silicone rubber adhesive/sealants for industrial applications. In squeeze tubes, they are easily applied and air cure to form a durable, flexible silicone rubber. Needs no catalyst. Applied at room temperature, adheres without priming. For use as insulation, bonding silicone rubber parts to metal surfaces, encapsulating. Withstand −75° F to +300° F. Never harden, crack or dry out. Resist moisture, weathering and aging. Contain no solvent and cure with minimum of shrinkage. Excellent electrical properties.

RTV-102. Excellent for shock mounting. White in color.

RTV-103. For rubber repair, other uses. Black in color.

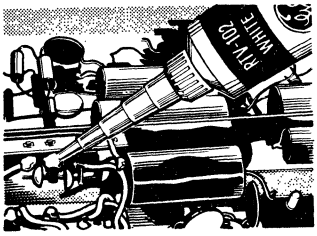
RTV-106. For long term use at temperatures up to 600° F. Red.

RTV-108. Where "see-through" is required. Translucent.

RTV-112. For brushing or spraying on production line. White.

PHYSICAL PROPERTIES OF PRESSED SHEETS CURED 1 WEEK AT 77°F: Hardness, Shore A: 30. Tensile Strength: 350 psi. Tear Resistance: 45 lb/in.

ELECTRICAL PROPERTIES OF PRESSED SHEETS CURED 10 DAYS AT 77°F: Dielectric strength, vpm: 550 for .058″ thickness. Volume Resistivity, ohm-cm: $3x10^{15}$.



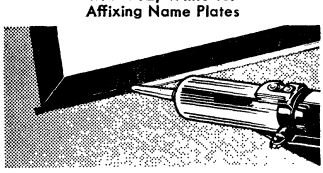
RTV-102, White for Affixing Name Plates

Type RTV-	3-Oz. Tube Stock No.	EACH 1-11	12-47	48-Up	12-Oz. Tube Stock No.	EACH 1-11	12-47	48-Up
102	798-0203	2.52	1.68	1.50	798-0204	9.77	6.53	5.10
103	798-0206	2.52	1.68	1.50	798-0208	9.77	6.53	5.10
108	798-0212	2.52	1.68	1.50	798-0213	9.77	6.53	5.10
106	798-0210	3.22	2.15	1.90	798-0211	12.55	8.38	6.55
112	798-0216	3.22	2.15	1.90	798-0217	12.55	8.38	6.55

RTV CARTRIDGE PACK

Speeds up production-line sealing. Type RTV 102 white silicone rubber, excellent for shock-mounting. Type 108 translucent silicone rubber, for use where "see-through" is required. Need no catalyst. Apply at room temp. Use with any standard caulking gun, or automatic dispenser.

Stock No.	RTV Type	Oz. per Unit	Color	EACH 1-11	12-47	48-Up
798-0205	102	12	White	5.50	3.67	3.09
798-0214	108	12	Trans.	5.50	3.67	3.09



RTV-103, Black For Rubber Repairs

RTV-615 POTTING COMPOUND

(Not illus.) Clear silicone, low-viscosity liquid that cures at room temperature, after addition of curing agent, to form a rubber-like, tough, transparent solid. Offers improved physical properties—can be cured within 15-30 minutes at 150° C. Cures in absence of air. Withstands temperatures within the range of −65° C to +200° C. High dielectric strength. Consists of compound and curing agent. 1-lb. can. Wt., 1 lb.

798-0218. 1-11.....Each 16.25

12-Up.....Each 10.85

RTV-616 POTTING COMPOUND

(Not illus.) Black silicone, low-viscosity liquid cures within 15-30 minutes at room temperature, without air, with the addition of a curing agent. Forms a tough, transparent solid. Withstands temperatures between −65° C to +200° C. High dielectric strength. Consists of compound and curing agent. One-pound can. Wt., 1 lb.

798-0604. 1-11.....Each 14.12 12-Up.....Each 9.44

RTV-9950 CATALYST (fast cure)

Paste-consistency catalyst for RTV encapsulants above. Light tan. 1½ lbs.

798-0625. 1-11.Ea. 16.00 12-Up.Ea. 10.68

RTV-9930 CATALYST (standard cure)

Blue paste-consistency catalyst for RTV encapsulants. Cures in 5 to 12 hours. 1¼ lbs.

798-0623. 1-11.Ea. 16.00 12-Up.Ea. 10.68

RTV-9910 CATALYST (heat cure)

Light yellow. Paste-consistency catalyst for curing RTV encapsulants at room temperature or with added heat. Wt., 1½ lbs.

798-0620. 1-11.Ea. 16.00 12-Up.Ea. 10.68

RTV-910 DILUENT

For wipe-on treatment of rubber molds.

798-0619. 1-lb. Package..... Each 5.75

Type G-640 HEAT SINK COMPOUND

Greaselike silicone material heavily filled with heat-conductive metal oxides. Combination of base and fillers produces a material with higher thermal conductivity than previously available silicon heat sink compounds. Applies to base or mountng studs of components. Properties of the compound are such that it will not dry out, harden or melt under virtually any atmospheric condition. Withstands long term exposure to temperatures up to 200° C. Compound maintains a positive heat seal that improves heat transfer from the device to heat sink or chassis. Actually increases life expectancy and overall efficiency of circuit component. Evaporation, 1% after period of 24 hours at temperature of 200° C. Sold in 4-oz. container. Shpg. wt., 4 oz.

798-0111. 1-11..Ea. 4.25 12-Up.Ea. 2.83

TYPE RTV-11 ENCAPSULANT

White, low viscosity silicone rubber base with excellent deep section curing characteristics. Wt., 1 lb.

798-0200. 1-11.Ea. 12.62 12-Up.Ea. 8.43

TYPE RTV 41 ENCAPSULANT

A white, medium viscosity silicone rubber base that cures readily in deep sections to high durometer, high strength rubber. 16 oz.

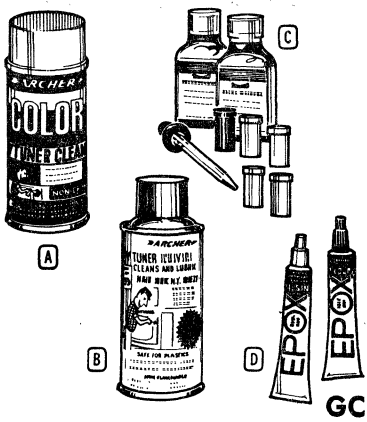
798-0201. 1-11.Ea. 10.07 12-Up.Ea. 6.73

TYPE RTV-60 ENCAPSULANT

Red, medium viscosity silicone rubber base that cures readily in deep sections to a high durometer, high strength rubber. Has excellent high temperature resistance being usable for short periods to 600°F. 16 oz.

798-0202. 1-11.Ea. 10.07 12-Up.Ea. 6.73

Chemicals & Service Aids at Low Cost



CLEANERS, REPAIR KIT AND GLUE

A **Tuner Cleaner & Lubricant.** Cleans and lubricates radio and television tuners. Stops noise in volume controls. Remove knobs and spray. Keep your tuner in top operating condition with this handy cleaner. No mess with the handy spray can. Clears away dust which causes costly repairs. Specially engineered to clean without damaging circuit parts.
910-5820. Type 64-2315. 1 lb.....**.99**

B **Color-TV Tuner Cleaner.** Helps improve color television reception and protects expensive moving parts. Simple to use—just remove knob and spray into your color set's tuner. No mess, with this convenient spray can. Keep your television in good condition with the color TV tuner cleaner. Save money on expensive television repair bills.
910-5827. Type 64-2320. 8 oz.....**1.39**

C **Plastic Repair Kit.** Mends all kinds of plastic items in just minutes. Fix damaged plastic knobs, utensils, toys, etc. Shape like putty and just pour into a mold. Includes color powders for good match-ups. Glues and completely waterproofs. Save money on costly repairs and buying new items. Very easy to clean and use. Repairs made quickly and safely.
910-5836. Type 64-6427. 6 oz.....**1.95**

D **Super Epoxy Glue.** Drys quickly at normal room temperature. Bond strength of over 3000 lbs. per sq. in. Very easy to mix and apply. No mess involved. Cements nonporous items. Bonds anything to anything. Good for the hobbyist and repairman. Perfect for repairing furniture, upholstery, toys, articles of all kinds. Many applications in jewelry-making and other crafts.
910-5835. Type 64-2426. ½ lb.....**.99**

GC CLEANERS AND SERVICING AIDS

ELECTRICAL CONTACT CLEANER

8666. Conditions, lubricates and cleans electrical contacts, relays, etc. 6-oz. spray can. 5" pushbutton assembly. Spray onto contacts, cleaner does the rest. No need to take apart chassis.
796-8666. Wt. 10 oz.....**.99**

"FREEZE-MIST" COOLER

8668. Pinpoint bad capacitors and transistors, oxidized joints, by cooling components. Leaves no residue. 6-oz. can. Plastic spray extension is included. Cools circuit three times faster than others.
796-8668. Wt. 10 oz.....**1.26**

"JIFF" CONTACT CLEANER

8670. Cleans, lubricates contacts, controls, switches. Contains silicone. No harsh solvents. Non-flammable. 6-oz. spray can. Gives long-lasting protection. Won't harm plastic.
796-8670. Wt. 10 oz.....**1.79**

HI-VOLTAGE INSULATOR

50-12. Over 20,000-volt dielectric strength. Stops troublesome corona shorts. Prevents costly repairs. Keeps electrical and electronic wiring safe. Uses include: preventing leakage, insulating, etc.
796-3645. Wt. 1 lb.....**2.18**

STRIP-X

26-2. A liquid chemical which quickly removes enamel, Formvar, etc., from magnet wire. Just dip wire in, wait 30 secs., and wipe insulation off.
796-3620. Wt. 2 oz.....**.69**

CHLORO-KLEEN

213-16. An amazing, new powerful solvent for all-purpose cleaning of any component. Non-toxic, safe and potent cleaner.
796-3680. Wt. 16 oz.....**1.99**

RED INSULATING VARNISH

90-2. An alkyd base compound which dries to a glossy hard film which is moisture, oil, chemical resistant. 2 oz. bottle.
796-3670. Wt. 2 oz.....**.75**

TRANSISTOR Z5 COMPOUND

8101. Silicone compound for better heat transfer away from transistors and diodes. Apply when mounting or remounting. Protects components and makes circuits generally more stable due to the heat transfer.
796-8101. Wt. 2 oz.....**2.38**

"RELAY KLEEN" CLEANER

8682. For cleaning relays, contacts. Leaves no residue. Excellent solvent for electrical and mechanical items. Non-flammable. 6-oz. can. Plastic spray extension included. Excellent de-greaser.
796-8682. Wt. 10 oz.....**1.89**

16-OZ. "RELAY-KLEEN"

8682-16. Same as above but 16 ounce spray can. Also excellent for cleaning relays and contacts in switchboard, automatic pinball or bowling games, rocket and satellite circuitry.
796-8683. Wt. 1½ lbs.....**3.49**

ALL-PURPOSE LUBE OIL

10-916. For reaching into the smallest areas and for any equipment—ball bearings, gears, etc. High-grade, light machine oil ideal for thorough lubrication—no spilling or waste.
796-3615. Wt. 1 lb.....**.89**

PLASTIC CEMENT

32-2A. A quick-drying cement for plastic articles. Produces excellent bond on thermoplastics, e.g. acetate, butyrates, etc., and a good bond on vinyls, phenolics, etc.
796-3630. Wt. 2 oz.....**.69**

MAGNETIC RECORDING HEAD CLEANER

53-2. A powerful, quick-drying solvent to remove oxide and dirt from recording and playback heads of tape recorders.
796-3650. Wt. 2 oz.....**1.19**

SUPER FREEZE MIST

10-702. Instant cooling action at its best. Non-toxic, non-flammable. Dry cooler, no liquid residue. 6-oz. aerosol.
796-3610. Wt. 15 oz.....**2.50**

"ZERO MIST" COOLER

8667. Cools components instantly, helping to pinpoint bad capacitors, transistors, oxidized connections. Spray extension included. Comes in 16-oz. spray can. A great aid to radio-TV servicing.
796-8667. Wt. 1¼ lbs.....**2.39**

MOISTURE REMOVER

10-700. This amazing new high quality lubricant is formulated to penetrate rust and free frozen parts. Removes moisture, does not trap it. This anti-moisture, protective shield prevents further oxidation.
796-3605. Wt. 1 lb.....**1.95**

TV/RADIO SERVICE CEMENT

30-2. Cement parts to chassis, repair plastic cabinets. Fast-setting, clear-drying, firm bond. For speaker and general repair. A must for the home or shop. A necessity for repair shops.
796-3625. Wt. 1 lb.....**.69**

ALL-PURPOSE GLUE

43-2. Use for joining plastics, wood, rubber, glass. 2 oz. Strong and fast drying. Instructions for making permanent invisible bond. Good for all kinds of jobs in the home or shop.
796-3640. Wt. ¼ lbs.....**.69**

MAGNETIC HEAD CLEANER

10-620. Removes dirt and oxide build-up. Won't harm tape, tape coating, or paint finish. 16 oz. aerosol. Keep your heads in perfect shape.
796-3600. Wt. 16 oz.....**2.35**

EPOXY GLUE

347. Used by NASA in space program. High electrical resistance. Will not shrink or expand. Chemically stable. 2 tubes.
796-3690. Wt. 4 oz.....**2.99**

KOLOID CLEAR ACRYLIC

8665. A clear acrylic ester resin base for insulation and protection. Used also as ornamental finish for metal. 16 oz. aero.
796-8665. Wt. 16 oz.....**1.75**

SPRAY-ON METAL PROTECTORS

LPS organic liquid compound forms a film that displaces moisture, protects metals from rust and corrosion. Safe for delicate mechanism at temperatures from −100 to 600°F. Can be sprayed, dipped, brushed or swabbed. Penetrates hard-to-reach places.

E **LPS Regular No. 1.** Forms fine .0001" non-greasy, non-stick transparent film. 16 oz. spray can.
843-2501. Shpg. wt. 1½ lbs.....**2.35**

F **LPS No. 2.** For heavy-duty rust protection. Forms .0002" transparent, oily film. Good for medium size rust problems. 16 oz. Spray can.
843-2502. Shpg. wt. 1½ lbs.....**2.75**

G **LPS No. 3.** For toughest rust protection. 16 oz.
843-2503. Shpg. wt. 1½ lbs.....**2.75**

RAPID ELECTROPLATING KITS

- Powered by 1½-V Batteries
- Complete Kit For Easy Plating

For easy electroplating of small metal objects. Each kit includes: 1-oz. metal cleaner; 1-oz. metal polishing plating compound; ⅝" brush; wire and clips; polishing stick. Order batteries pg. 396—uses two No. 6-1½-volt. Shpg. wt. 1 lb.

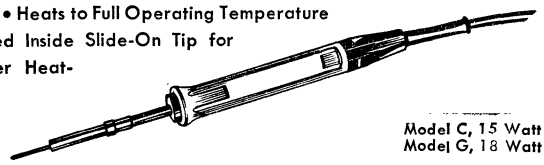
Stock No.	Type	Compound	1-2	3-Up
896-1200	200	Nickel	3.75	2.49
896-1202	202	Cadmium	3.75	2.49
896-1204	204	Copper	3.75	2.49
896-1205	205	Brass	3.75	2.49
896-1206	206	Silver	4.75	3.19
896-1207	207	24K Gold	8.27	5.29

Items in ITALICS Are Fast-Moving Types—Extra Quantities on Hand

Precision Industrial Soldering Equipment

ANTEX SOLDERING IRONS FOR MICRO-ELECTRONIC CIRCUITS

• Precision Miniature Production-Line Irons • Constant 720° F Heat • Heats to Full Operating Temperature in 45 Seconds • NASA Approved • Heating Element Is Located Inside Slide-On Tip for Greatest Efficiency • Safe for Delicate Transistors and Other Heat-Sensitive Components • Choice of 2- or 3-Prong AC Plug Terminations in Both Models



Model C, 15 Watt
Model G, 18 Watt

Antex is vastly superior in design. The iron gives you more efficient use of power because the tips slide *over* the heating element; all the heat paid for is delivered at the tip. Heats up in just 45 seconds. The handle always stays cool and the iron weighs just one ounce. The iron is only 6½" long and shaped like a pen, so there is no visual obstruction of the work.

Elements are the longest lasting in the industry, under either intermittent or constant use. The irons are ruggedly built for production lines. The slide-on tips can be changed in seconds, even while the iron is hot. Antex offers the ideal tip for any miniature soldering job. There are tips ranging from .012" (needle) to 3/16", and fit the Model C or G iron. Antex is safe on the most delicate transistor and other heat and voltage-sensitive components.

The electrical resistance between the element and the tip is essentially infinite. Maintains constant tip temperatures, even during production speed operations. The small amount of metal in the tip assures very fast recovery time. Depending on the tip used, the temperature of Model C is between 650° and 750° F; the temperature of Model G is between 750° and 850° F. Model C has yellow handle, Model G, red. The plastic handles will not char on contact with other irons. Flexible cord for easy handling. For 110-120V, 50-60 Hz AC. Less tip. Wt. 3 oz.

728-0210. Model C, 2-prong Plug. 1-5...Ea. 6.71 6-Up...Ea. 5.80
728-0220. Model C, 3-prong Plug. 1-5...Ea. 7.13 6-Up...Ea. 6.10
728-0310. Model G, 2-prong Plug. 1-5...Ea. 7.38 6-Up...Ea. 6.30
728-0320. Model G, 3-prong Plug. 1-5...Ea. 7.79 6-Up...Ea. 6.60

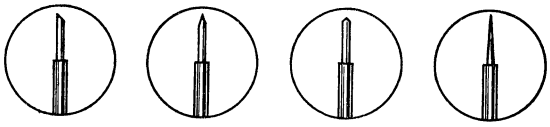
MODEL ST-1 IRON STAND

Holds Antex soldering iron and solder spool. 8¼" high.
728-0400. Shpg. wt., 2 lbs.....4.09

REPLACEMENT ELEMENTS

For Antex soldering irons, above. Shpg. wt. 2 oz.
728-0200. For Model C.....Each 3.34
728-0300. For Model G.....Each 3.44

VARIETY OF TIP SHAPES



A Spade B Chisel C Pyramid D Needle

IRON-PLATED TIPS

Size In.	Stock No.	Fig.	Type	Stock No.	Fig.	Type	EACH 1-24	EACH 25-49
3/64	728-1602	A	Spade 6-IS	728-1600	B	Chisel 6-IC	1.37	1.20
1/16	728-4605	A	Spade 46-IS	728-4600	B	Chisel 46-IC	1.37	1.20
3/32	728-1202	A	Spade 2-IS	728-1200	B	Chisel 2-IC	1.37	1.20
1/8	728-8605	A	Spade 86-IS	728-8600	B	Chisel 86-IC	1.37	1.20
5/32	728-1302	A	Spade 3-IS	728-1300	B	Chisel 3-IC	1.37	1.20
...	.....	...	.....	728-1400	B	Chisel 4-IC	1.37	1.20
012	728-1800	D	Needle 8-I	.....	...	.....	1.87	1.65

NICKEL-PLATED TIPS

3/64	728-1606	A	Spade 6-NS	728-1604	B	Chisel 6-NC	.64	.55
1/16	728-4615	A	Spade 46-NS	728-4610	B	Chisel 46-NC	.55	.50
5/64	728-5605	A	Spade 56-NS	728-5600	B	Chisel 56-NC	.55	.50
3/32	728-1208	A	Spade 2-NS	728-1204	B	Chisel 2-NC	.55	.50
1/8	728-8615	A	Spade 86-NS	728-8610	B	Chisel 86-NC	.55	.50
5/32	728-1306	A	Spade 3-NS	728-1304	B	Chisel 3-NC	.55	.50
3/16	728-1404	A	Spade 4-NS	728-1402	B	Chisel 4-NC	.55	.50
3/32	728-1206	C	Pyramid2-NP	.....	..	.....	.55	.50

AMERICAN BEAUTY SOLDERING IRONS FOR INDUSTRY

REPLACEMENT ELEMENTS

Stock No.	Mfr's Type	For Iron	EACH
709-0074	9270	3114	5.30
709-0077	9272	3128	5.50
709-0080	9273	3138	6.40
709-0083	9275	3158	9.00
709-0086	9277	3178	11.90

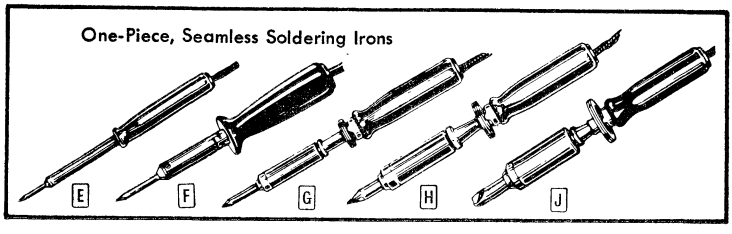
COPPER-NICKEL PLATED TIPS

*Diamond; †Chisel; ‡Screwdriver. 3 oz.

Stock No.	Mfr's Type	Shape	For Iron	EACH
709-0057	3728	*	3114, −25, −28	.60
709-0055	3728S	†	3114, −25, −28	.60
709-0058	3738	*	3138	.84
709-0056	3738S	‡	3138	.84
709-0059	3758	*	3158	2.60
709-0053	3758C	†	3158	2.60
709-0054	3778D	*	3178	4.80
709-0060	3778	†	3178	4.80

"PARAGON" IRON-CLAD TIPS

709-0021	67D	*	3114, −25, −28	2.30
709-0024	67S	†	3114, −25, −28	2.30
709-0003	43D	*	3138	2.90
709-0018	56	‡	3138	3.00
709-0009	44D	*	3158	4.40
709-0006	44C	†	3158	4.40
709-0015	45D	*	3178	7.60
709-0012	45C	†	3178	7.60



Designed for any soldering applications. Special iron-plated tips, available for all models greatly reduce pitting. Casing and body are of one-piece seamless steel. Rubberoid-coated handles remain cool after hours of use. With 6-ft. cords. U.L. Listed.

E MODEL 3128—60 WATTS

For light work. ¼" copper tip. With stand. Length, 12¼". For 110-120 volts. AC-DC. Shpg. wt. 1 lb.
709-0042. 1-5.....Each 11.20
6-Up.....Each 9.35

F MODEL 3114—60 WATTS

For light-medium work. ¼" copper tip. With stand. Chrome-plated metal parts. 9" long. For 110-120 V, AC-DC, 1 lb.
709-0039. 1-5.....Each 12.40
6-Up.....Each 10.35

G MODEL 3138—100 WATTS

General-purpose ⅜" dia. copper tip. Chrome plated. Cooling baffle; stand. 12⅞" long. For 110-120V, AC-DC. 2¼ lbs.
709-0045. 1-5.....Each 16.00
6-Up.....Each 13.36

H MODEL 3158—200 WATTS

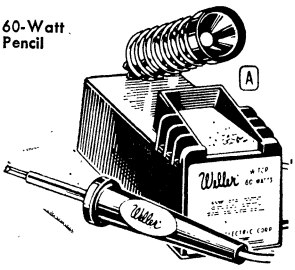
For medium-heavy work. ⅝" copper tip. With stand. Overall length, 13⅝". For 110-120 V AC-DC. Wt. 3 lbs.
709-0048. 1-5.....Each 19.80
6-Up.....Each 16.53

J MODEL 3178—300 WATTS

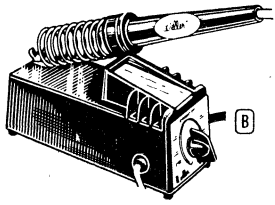
Designed to handle special production-line applications. Has ⅞" copper tip. 14⅜" long. With stand. For 110-120 volts, AC-DC. Shpg. wt. 4 lbs.
709-0051. 1-5.....Each 26.00
6-Up.....Each 21.71

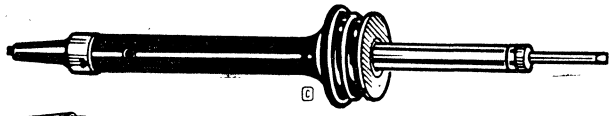
Low-Voltage, Temp.-Controlled Irons

60-Watt Pencil

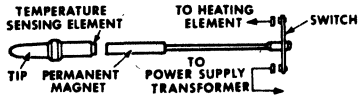


Magnet-Type Switch Senses Thermal Energy Needed





SOLDERING IRONS WITH "TEMPERATURE SENSING" TIPS



A 60-WATT CONTROLLED-TEMPERATURE PENCIL

MODEL W-TCP 60-WATT UNIT. Features accurate, automatic temperature control plus low-voltage power unit (24-volts). 7½" pencil-size length; weighs only 1¾ oz. Power unit, 2x3x6". With 3/16" 700° tip; tip-cleaning sponge attached to power unit. Other tips below. Especially designed for the production line and research lab where precision soldering and accurate control of tip temperatures are a must to meet rigid soldering specifications. Also designed to meet today's and tomorrow's "State of the Art" and to insure reliability and quality control. Extremely small and light weight. Packed with plenty of reserve power. High efficiency and recovery. Suitable for miniature and general soldering. For 110-120 volts, 50-60 Hz. AC. Shpg. wt. 4 lbs.

984-2505. 1-5..Each 25.74 4-11..Each 19.60 12-23..Each 17.30

B 20-WATT CONTROLLED-TEMPERATURE PENCIL

MODEL W-TCP2. Similar to W-TCP above, but has silicon-controlled rectifier and thermistor control circuit. Adjusts temperature range continuously from 200°F to 450°F. For use only with solder that has melting point lower than 300°F. For 110-130 volts, 50-60 Hz AC. Shpg. wt. 3 lbs.

984-2510. 1-3..Each 65.34 4-5...Each 54.45 6-11...Each 49.75

PREMIUM-PLATED REPLACEMENT TIPS FOR W-TCP SERIES

Stock No.	Mfr's Type	Description	Temp.	EACH 1-4	5-14	15-49
984-1505	PTA5	1/16" Screwdriver	500°F	1.26	.95	.85
984-1905	PTC5	1/8" Screwdriver	500°F	1.26	.95	.85
984-2105	PTH5	1/32" Screwdriver	500°F	1.26	.95	.85
984-2305	PTL5	5/64" Long Screwdriver	500°F	1.26	.95	.85
984-1605	PTBB5	3/32" Spade	500°F	1.26	.95	.86
984-1705	PTCC5	1/8" Spade	500°F	1.26	.95	.86
984-1506	PTA6	1/16" Screwdriver	600°F	1.26	.95	.86
984-1906	PTC6	1/8" Screwdriver	600°F	1.26	.95	.86
984-2106	PTH6	1/32" Screwdriver	600°F	1.26	.95	.86
984-2306	PTL6	5/64" Long Screwdriver	600°F	1.26	.95	.86
984-1606	PTBB6	3/32" Spade	600°F	1.26	.95	.86
984-1706	PTCC6	1/8" Spade	600°F	1.26	.95	.86
984-1507	PTA7	1/16" Screwdriver	700°F	1.26	.95	.85
984-1600	PTB7	3/32" Screwdriver	700°F	1.26	.95	.85
984-1907	PTC7	1/8" Screwdriver	700°F	1.26	.95	.85
984-2010	PTD7	3/16" Screwdriver	700°F	1.26	.95	.85
984-2107	PTH7	1/32" Screwdriver	700°F	1.26	.95	.85
984-2020	PTE7	15/64" Screwdriver	700°F	1.26	.95	.85
984-2307	PTL7	5/64" Long Screwdriver	700°F	1.26	.95	.85
984-2350	PTM7	1/8" Long Screwdriver	700°F	1.26	.95	.85
984-1500	PTAA7	1/16" Spade	700°F	1.26	.95	.85
984-1607	PTBB7	3/32" Spade	700°F	1.26	.95	.85
984-1707	PTCC7	1/8" Spade	700°F	1.26	.95	.85
984-2000	PTDD7	3/16" Spade	700°F	1.26	.95	.85
984-2370	PTP7	1/32" Conical	700°F	1.26	.95	.85
984-2030	PTF7	1/32" Conical Flat	700°F	1.26	.95	.85
984-1508	PTA8	1/16" Screwdriver	800°F	1.26	.95	.85
984-1908	PTC8	1/8" Screwdriver	800°F	1.26	.95	.85
984-2108	PTH8	1/32" Screwdriver	800°F	1.26	.95	.85
984-2308	PTL8	5/64" Long Screwdriver	800°F	1.26	.95	.85
984-1608	PTBB8	3/32" Spade	800°F	1.26	.95	.85
984-1708	PTCC8	1/8" Spade	800°F	1.26	.95	.85

C TEMPERATURE CONTROLLED IRONS

MODEL W-60 60-WATT SOLDERING IRON. Temperature-sensing device in tip automatically maintains correct soldering temperature. Does work of conventional 15 to 100-watt irons. Never overheats; saves current when idling. Reaches full heat quickly, gives rapid heat transfer. Much less tip redressing is required. Tips are easily removed and replaced by loosening tip nut. Only 2½ oz. Length, 7¼". 700° F ¼" screwdriver tip. 120 VAC.

984-2515. Shpg. wt. 10 oz.....11.88

MODEL W-100-WATT IRON. As above, 100 watts. Does the work of 75 to 150-watt irons. Length, 8¼"; weighs only 3½ oz. With 700° F, 3/8" screwdriver tip. For 120 volts, 60 Hz AC.

984-2520. Shpg. wt. 12 oz.....14.86

MODEL W-200 200-WATT IRON. Weighs 10 oz., replaces most irons in 130-250 watt range. Excellent operator control and maneuverability. 9½". With 700°F, ½" chisel tip.

984-2525. Shpg. wt. 1 lb.....19.80

PREMIUM-PLATED REPLACEMENT TIPS FOR ABOVE IRONS

Series 5 is for Model W-60 iron; series 6 for Model W-100 iron; series 12 for Model W-200 iron.

Stock No.	Mfr's Type	Description	Temp.	EACH 1-4	5-14	15-49
984-2706	5A1N6	1/16" Screwdriver	600°F	1.26	.95	.85
984-2707	5A1N7	1/16" Screwdriver	700°F	1.26	.95	.85
984-2708	5A1N8	1/16" Screwdriver	800°F	1.26	.95	.85
984-2806	5B1N6	3/32" Screwdriver	600°F	1.26	.95	.85
984-2807	5B1N7	3/32" Screwdriver	700°F	1.26	.95	.85
984-2808	5B1N8	3/32" Screwdriver	800°F	1.26	.95	.85
984-3006	5C1N6	1/8" Screwdriver	600°F	1.26	.95	.85
984-3007	5C1N7	1/8" Screwdriver	700°F	1.26	.95	.85
984-3008	5C1N8	1/8" Screwdriver	800°F	1.26	.95	.85
984-3209	5D1N5	3/16" Screwdriver	500°F	1.26	.95	.85
984-3206	5D1N6	3/16" Screwdriver	600°F	1.26	.95	.85
984-3207	5D1N7	3/16" Screwdriver	700°F	1.26	.95	.85
984-3307	6C1N7	1/8" Screwdriver	700°F	1.98	1.50	1.35
984-3308	6C1N8	1/8" Screwdriver	800°F	1.98	1.50	1.35
984-3407	6D1N7	3/16" Screwdriver	700°F	1.98	1.50	1.35
984-3408	6D1N8	3/16" Screwdriver	800°F	1.98	1.80	1.35
984-3507	6E1N7	1/4" Screwdriver	700°F	1.98	1.50	1.35
984-3508	6E1N8	1/4" Screwdriver	800°F	1.98	1.50	1.35
984-3907	12E1L7	1/4" Screwdriver	700°F	2.98	2.25	2.00
984-3908	12E1L8	1/4" Screwdriver	800°F	2.98	2.25	2.00
984-4007	12F4N7	3/8" Chisel	700°F	2.98	2.25	2.00
984-4008	12F4N8	3/8" Chisel	800°F	2.98	2.25	2.00
984-4107	12G4N7	7/16" Chisel	700°F	2.98	2.25	2.00
984-4108	12G4N8	7/16" Chisel	800°F	2.98	2.25	2.00
984-2805	5BCL5	Stripping	500°F	1.62	1.25	1.10
984-3205	5DTS5	Wire Stripping	500°F	1.62	1.25	1.10

REPLACEMENT HEATING ELEMENTS

Stock No.	Type	Description	Wt.	EACH
984-1060	HE-W60	For W-60 iron	2 oz.	6.48
984-1100	HE-W100	For W-100 iron	3 oz.	7.56
984-1200	HE-W200	For W-200 iron	6 oz.	10.90
984-0960	HE-60	For W-TCP pencil	2 oz.	3.34

SOLDERING IRON STANDS

MODEL PH60. For Model W-60. Includes tip cleaning sponge. Shpg. wt., 2 lbs.

984-1306. 1-5.....Each 5.50
6-11.....Each 4.20 12-47.....Each 3.70

MODEL PH100. For Model W-100. 2 lbs.

984-1310. 1-5.....Each 6.58
6-11.....Each 5.00 12-47.....Each 4.40

"MARKSMAN" SOLDERING IRON BY WELLER

MODEL SP-23 FEATHERWEIGHT 25-WATT PENCIL IRON. Features long-reach stainless steel barrel. Thin, nickel-plated removable tip. Excellent for detailed work. Develops 750°F. For 115 VAC.

984-2423. Shpg. wt. 8 oz.....2.96

Heavy-Duty Soldering Guns and Parts

Weller

TEMPMATIC® SOLDERING GUN

MODEL GT-7A. Combines the benefits of temperature-controlled operation with the ease, speed and convenience of a pistol-shaped, trigger-operated gun with small-frame pencil iron. Quick heating, patented powerhead gives control of maximum temperature for damage-free soldering of delicate IC's and sensitive FET's. With #7A long-life 700°F, 3/16" chisel point powerhead. Optional #6B, 600°F, 1/8" conical powerhead (below). Powerhead ejection button. 110-120 V, 60 Hz AC.

984-0707. Shpg. wt. 1 lb. 1-2...**Each 13.95**
3-11.....**Each 9.95** 12-Up.....**Each 8.95**
984-0706. Tool with 600°F Powerhead.
1-2.....**Each 13.95**
3-11.....**Each 9.95** 12-Up.....**Each 8.95**
984-0700. Tool, less powerhead....Ea. 4.30
984-3700. 700°F Powerhead.....Each 8.36
984-3346. 600°F Powerhead.....Each 8.36

REPLACEMENT PARTS

For maintaining Weller soldering guns. *Tip nut; †switch. Av. shpg. wt. 3 oz.

Stock No.	Type	Use With Models	EACH
984-7325	7325*	D-440, S-440, 8100, 8200, 8100B	.18
984-7417	7417*	D-550, S-500, 8250A	.18
984-7323	7323†	All Single-heat type Soldering Guns	1.12
984-7324	7324†	All Dual-heat type Soldering Guns	1.12

DUAL-HEAT SOLDERING GUNS

MODEL D-550PK. Outfit includes Weller D-550 heavy-duty 240/325-watt soldering gun with copper soldering tip, one smoothing tip and one cutting tip; tip changing wrench, coil of solder, instructions, unbreakable plastic case. Prefocused twin spotlights. For 115 VAC. U.L. Listed. Shpg. wt. 5 lbs.

984-0551. 1-2..Ea. 16.95 3-Up. Ea. 12.75
D550. Soldering Gun Alone. Wt. 3½ lbs.
984-0550. 1 2..Ea. 13.90 3-Up..Ea. 10.45

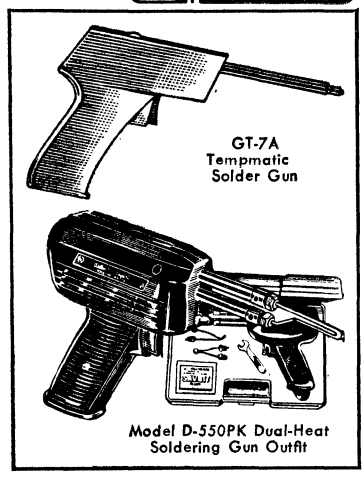
MODEL 8200PK. Same outfit as above, but with Model 8200 100/140 watt gun. Wt. 3½ lbs.

984-8200. 1-2..Ea. 11.50 3-Up...Ea. 9.60
8200. Soldering Gun Alone. Wt. 3½ lbs.
984-8201. 1-2...Ea. 9.40 3-Up...Ea. 7.85

CHISEL-POINT AND ACCESORY TIPS

Chisel-point tips (7135 thru 8125) have 2 per pkg. Accessory tips (*cutting; †smoothing) have 1 per pkg. Av. shpg. wt. 3 oz.

Stock No.	Type	Use With Models	PKG.
984-7135	7135	WS-100, WD-135, S-400, D-440, 8200	.79
984-7250	7250	WS-200, WD-250, S-500, D-550, 8250A	.79
984-7300	7300	S-107, D-207	.79
984-8125	8125	8100B, 8200	.79
984-6110	6110*	WS-100, WD-135, S-400, D-440	.79
984-6120	6120†	8100 (B), 8200	.79
984-6130	6130*	WS-200, S-500	.79
984-6140	6140†	D-550, 8250A	.79



Model D-550PK Dual-Heat Soldering Gun Outfit

ALLIED REPLACEMENT TIPS

Stock No.	For Model	PKG. OF 2
910-5902	8200, D440	.50
910-5901	D550	.50

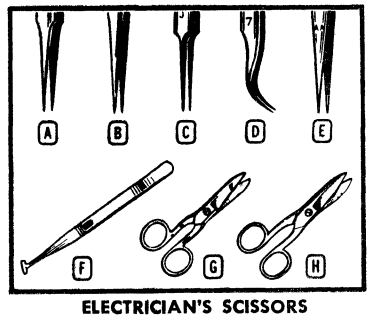
CLAUSS PRECISION ELECTRONIC TOOLS

PRECISION ASSEMBLY TWEEZERS

Especially designed for electronics assembly of miniature and micro-fine scale. Constructed of the finest quality steel—precision workmanship assures freedom from misalignment in heavy use. Hand-ground; points are ground flat on the inside. Precise sharp and shaped points, tension spring action. In various styles (see illustration right).

In table right: Carbon Steel denoted by (C); Stainless Steel, (SS). After figure letters right: *bevelled sharp tips; †bevelled medium tips. All others are round sharp. Av. shpg. wt. ½ oz.

Stock No.	Fig.	Style	Type Steel	EACH 1-11	EACH 12-Up
536-2001	B*	1	C	2.54	2.25
536-2002	B*	1	SS	2.81	2.40
536-2227	A†	227	C	2.54	2.25
536-2055	A†	55	SS	2.81	2.40
536-2003	B	3C	C	4.21	3.75
536-2005	C	5	SS	2.81	2.40
536-2007	D	7	C	3.93	3.50
536-2008	D	7	SS	4.18	3.75
536-1100	E*	MM	C	2.54	2.25



F MODEL AW ANTI-WICKING TOOLS

Overall length, 5". *American Wire Gauge. Shpg. wt. 2 oz.

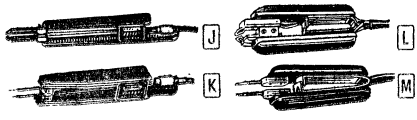
Stock No.	Size*	EACH	Stock No.	Size*	EACH
536-1018	18	10.97	536-1026	26	10.97
536-1020	20	10.97	536-1028	28	10.97
536-1022	22	10.97	536-1030	30	10.97
536-1024	24	10.97			

ELECTRICIAN'S SCISSORS

G **TYPE 925.** Quality electrician's scissors, 5" long. 1¾" cut length.
536-2925. Shpg. wt. 3 oz.....**4.77**

H **TYPE 925C.** As above, but with wire-stripping notches on back of blade.
536-2926. Shpg. wt. 3 oz.....**4.77**

WASSCO CONTROLLED-TEMPERATURE SOLDERING DEVICES



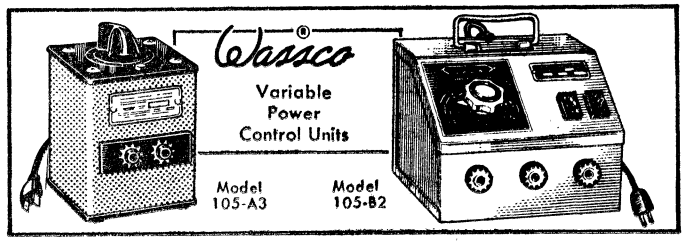
J 105131 **WIRE STRIPPER.** 15-100 W. For 24-gauge wire or finer. 6½" long. Heatproof cord.
993-2325. Shpg. wt., ½ lb.....**19.29**

K 105133 **MICRO-TWEEZER.** Solders wires 22-gauge or finer. 15-100 W. 6½" long. .040" electrode.
993-2328. Shpg. wt., ½ lb.....**19.29**

L 10541 **TWEEZERS.** Resistance soldering. .078" electrode dia. 0-3/8" space. 5" long, 4' lead.
993-2313. Shpg. wt., 1 lb.....**22.04**

M 10544 **TWEEZER-TYPE WIRESTRIPPER.** Wires to 18-gauge. 15-100 W. 4½" long. Adj. stop.
993-2319. Shpg. wt., 1 lb.....**22.04**

993-2322. 10545 **Element.** For 10544 Wirestripper above. Shpg. wt., 1 oz.....**Pkg. of 2 for .64**
993-2316. 10542 **Electrode.** For 10541 Tweezers above. Shpg. wt., 2 oz.....**3.20**
993-2310. 10519 **Footswitch.** For 105-A3 and 105-B2 Power Units at right. Shpg. wt., 12 oz...**11.02**



MODEL 105-A3 POWER UNIT

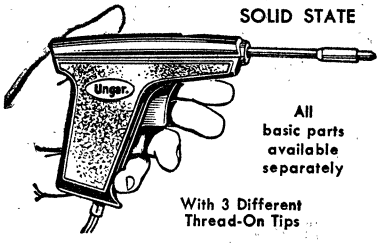
Infinitely variable power control unit provides single power control for most thermal wire-stripping and resistance soldering uses. Gives accurate control of soldering tool heat. Isolates soldering tool from line voltage for additional safety. Use with hand pieces, at left. Has adjustable 0-100 watt output, 0-3 volt output. Fuse protected. Size, 4x5x 5". 110-120 V, 60 Hz AC. Wt., 7½ lbs.
993-2303.....**50.51**

MODEL 105-B2 POWER UNIT

Precision power unit offers 22 outputs for all types of soldering applications. Select power from 80-500 watts, voltage from 0.8 to 2.8 volts. Use with hand pieces and thermal wire stripper listed at left. Pilot light, power switch. Gray steel hammerloid case, 6½x7½x 8½". With 2-wire, 6-ft. power leads and attachment plug caps. For 110-120 V, 60 Hz AC. Shpg. wt., 24 lbs.
993 X 2305.....**91.85**

"Standard Line" Soldering Equipment

DUAL-HEAT SOLDERING GUN WITH 3 INTERCHANGEABLE TIPS

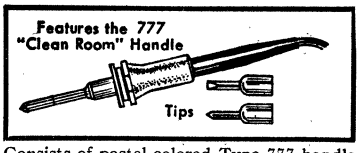


Model 6760. Solid state soldering gun offers protection against damaging sensitive integrated circuits and delicate field effect transistors while soldering connections, because the soldering tip is electrically isolated from the heating element providing an electrically inert tip. Features neon "on" indicator light; Hi/Lo switch for selecting 900°F or 500°F temperatures; fast 11-second trigger-activated warmup time. With 3 different thread-on tips. 110-120 V, 60 Hz AC. Shpg. wt. 1 lb.
972-6760. 1-3.....Each 17.38
4-11.....Ea. 14.95 12-Up.....Ea. 9.95

Separate Solder Gun Components

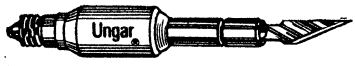
972-6763. 6763 Handle/Cord Set.
1-3.....Ea. 11.48
4-11.....Ea. 8.95 12-Up.....Ea. 6.12
972-6751. 6751 Heat Cartridge. 1-3 Ea. 8.23
4-11.....Ea. 5.99 12-Up.....Ea. 4.89
972-6753. 6753 Short Chisel Tip. 1-3 Ea. .65
4-11.....Ea. .49 12-Up.....Ea. .39
972-6754. 6754 Pyramid Tip. 1-3 Ea. .65
4-11.....Ea. .49 12-Up.....Ea. .39
972-6755. 6755 Long Chisel Tip. 1-3 Ea. .65
4-11.....Ea. .49 12-Up.....Ea. .39

707 GENERAL PURPOSE "TECHNICIANS" SOLDERING KIT



Consists of pastel-colored Type 777 handle and cord; Type 1237 high-heating element (37½ watts—750° to 800° F); three interchangeable, thread-on copper tips (pencil, chisel, and pyramid) for high-speed repeat soldering. Handle is durable and lightweight to reduce fatigue. Made of polypropylene that will not crumble or "dust." Cork grip for comfortable handling. Heat deflector keeps handle cool. Octagon washer prevents rolling, acts as stand. U.L. Listed. For 115 V, AC-DC. Shpg. wt. 1 lb.
972-7070. 1-5.....Each 8.98
6-11.....Each 5.95 12-Up....Each 4.92

HOT KNIFE

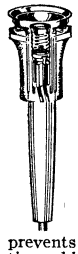


Model 4025. Fits both Standard #776 handle, and #777 "Clean Room" handle. Cuts thin film epoxy coating, plastic film; trims flash from rubber or plastic moldings. 500° F blade temperature. Includes 47½ watt heating unit with collet closure, and one replaceable stainless steel blade. U.L. Listed. 3 oz.
972-4025. 1-9.....Each 6.33
10-49.....Each 4.22 50-Up....Each 3.47

SOLDERING IRON HOLDER

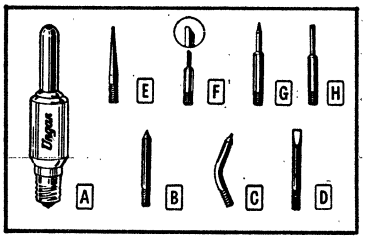
MODEL 8000. For use with Ungar "Standard Line" of soldering irons. Keeps iron handily convenient on the workbench. Shpg. wt. 8 oz.
972-8000. 1-9.....Each 3.45
10-49.....Each 2.30 50-Up....Each 1.86

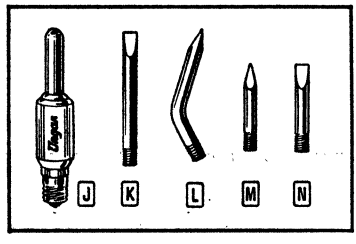
TYPE 776 AND 777 LIGHTWEIGHT, HEAVY DUTY HANDLES AND CORDS

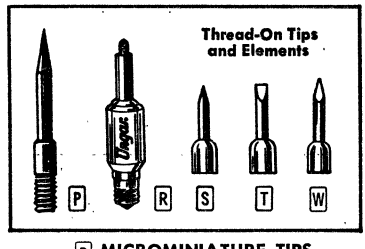


777. Assemble the iron you need using this handle and any element/tip combination or separate element and tip on this page. Pastel color "Clean-Room" grip design. Ideal for printed circuits and subminiature systems. Durable, but lightweight to reduce fatigue. Stainless steel heat deflector reflects heat away from operator's hand. In addition, internal ceramic and glass insulator resists tip heat. Octagon washer prevents handle roll. Spring socket prevents tip wobble. Convection-cooled. Vinyl-covered cord. Handle 5" long. Order element and tip below. U.L. Listed. Shpg. wt. 4 oz.
972-0777. 1-9.....Each 3.03
10-49.....Each 2.02 50-Up....Each 1.66
776. As above, but red with cork grip.
972-0776. 1-9.....Each 3.03
10-49.....Each 2.02 50-Up....Each 1.66

THREAD-IN ELEMENTS AND TIPLETS FOR UNGAR IRONS







THREAD-IN ELEMENTS AND ⅛" TIPLETS FOR SUBMINIATURE WORK

A ELEMENTS. Fit Types 776 and 777 handles, above. U.L. Listed. 2 oz.

Stock No.	Mfr's Type	Watts	EACH 1-9	10-49	50-Up
972-4035	4035	47½	5.50	3.67	3.01
972-1235	1235	37½	3.80	2.53	2.08
972-0535	535	23½	2.63	1.75	1.44

⅛" TIPLETS. For subminiature work. 1" long, except *1¼", †⅝". §1/16" point; #3/64" point. Av. shpg. wt., 2 oz.

IRON-CLAD SILVER-PLATED COPPER ALLOY

Stock No.	Mfr's Type	Fig.	Description	EACH 1-3	4-9	10-49
972-0031	PL331	B	Pencil	1.08	.72	.59
972-0032	*PL332	C	Pencil	1.08	.72	.59
972-0035	PL333	D	Chisel	1.08	.72	.59
972-0038	§PL338	E	Needle	1.08	.72	.59
972-0040	†#PL340	F	Spade	1.08	.72	.59
972-7154	7154	G	Pencil	1.08	.72	.59
972-7155	7155	H	Chisel	1.08	.72	.59

UNPLATED COPPER ALLOY

972-0331	331	B	Pencil	.45	.30	.24
972-0332	332	C	Pencil	.45	.30	.24
972-0333	333	D	Chisel	.45	.30	.24

THREAD-IN ELEMENT AND 3/16" TIPLETS FOR GREATER HEAT TRANSFER

4045 ELEMENT

J 800-850°F, 56½ WATTS. Fits 776 and 777 handles, above. For 110-120 V, AC or DC. U.L. Listed. Shpg. wt. 2 oz.
972-4045. 1-9.....Each 5.50
10-49.....Each 3.67

3/16" TIPLETS

For extra-high heat transfer. Lengths given for unthreaded portions only. Wt. 2 oz.

IRON-CLAD SILVER PLATED COPPER ALLOY

1⅝" Long. Chisel tip, long taper. Wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-3	4-9	10-49
972-0060	PL833	K	Std.	1.75	1.17	.96
972-0070	PL834	L	Offset	1.75	1.17	.96

1" Long. Chisel tip has long taper. 2 oz.

972-0050	PL823	M	Pyramid	1.23	.82	.67
972-0055	PL824	N	Chisel	1.23	.82	.67

UNPLATED COPPER ALLOY

1" Long. Chisel tip has long taper. 2 oz.

972-0823	823	M	Pyramid	.53	.35	.29
972-0824	824	N	Chisel	.53	.35	.29

P MICROMINIATURE TIPS FOR ⅛" ELEMENTS

Type 7012 Copper .005" Precision Tip. 1 oz.
972-7012. 1-3...Ea. 1.08 4-9....Ea. .72
Type 7062 Iron-Clad Silver Plated Copper .010" Tip. For delicate work. Wt. 1 oz.
972-7062. 1-3...Ea. 1.98 4-9...Ea. 1.32

THREAD-IN ELEMENTS, ¼" THREAD-ON TIPS FOR HI-SPEED WORK

R ELEMENTS. Fit 776 and 777 handles above. Nickel-plated copper alloy. U.L. Listed. For 115V, AC-DC. 2 oz.

Stock No.	Mfr's Type	Watts	EACH 1-3	4-9	10-49
972-4037	4037	47½	5.50	3.67	3.01
972-1237	1237	37½	3.80	2.53	2.08
972-0537	537	23½	3.08	2.05	1.69

TIPS. Iron-clad silver-plated copper, except †Unplated copper. ¾x⅛". 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-3	4-9	10-49
972-0010	PL111	S	Pencil	1.40	.93	.77
972-0015	PL113	T	Chisel	1.40	.93	.77
972-0020	PL114	F	Spade	1.40	.93	.77
972-0025	PL116	W	Pyramid	1.40	.93	.77
972-0111	†111	S	Pencil	.73	.48	.40
972-0113	†113	T	Chisel	.73	.48	.40
972-0116	†116	W	Pyramid	.73	.48	.40

Look to Allied Electronics for Everything in Soldering Components

IMPERIAL Soldering Components

INTERCHANGEABLE MINI-TIP® SOLDERING TIPS

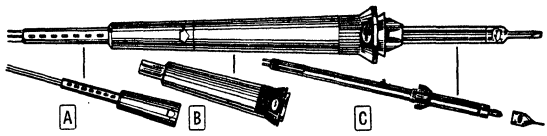
Interchangeable thread-on tips eliminate the expense of using several irons for every job. Tips have high thermal conductivity. *In Description column indicates a 24-kt. gold-plated, iron-clad tip; †tellurium copper composition. All may be used with 25, 30, 40, or 60-watt "Long-Life" cartridges, except 6500 and 6520, which are for use with 100-watt cartridge. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Description	Size	EACH 1-3	4-9	10-49
972-6304	6304	*Micro-chisel	3/64x1/2"	1.95	1.30	1.05
972-6305	6305	*Micro-spade	3/64x1/2"	1.95	1.30	1.05
972-6312	6312	†Pencil	1/8x3/4"	.88	.58	.47
972-6313	6313	*Pencil	1/8x3/4"	1.95	1.30	1.05
972-6316	6316	*Pencil, offset	1/8x3/4"	1.95	1.30	1.05
972-6318	6318	†Long taper chisel	1/8x3/4"	.88	.58	.47
972-6319	6319	*Long taper chisel	1/8x3/4"	1.95	1.30	1.05
972-6324	6324	†Long taper pyramid	1/8x3/4"	.88	.58	.47
972-6325	6325	*Long taper pyramid	1/8x3/4"	1.95	1.30	1.05
972-6331	6331	*Screwdriver	1/8x3/4"	1.95	1.30	1.05
972-6333	6333	*Needle	1/8x3/4"	1.95	1.30	1.05
972-6336	6336	*Spade	1/8x3/4"	1.95	1.30	1.05
972-6366	6366	*Long taper chisel	3/16x3/4"	2.30	1.53	1.24
972-6372	6372	*Screwdriver	3/16x3/4"	2.30	1.53	1.24
972-6390	6390	*Screwdriver	3/16x1 1/2"	2.35	1.57	1.27
972-6424	6424	*Long taper chisel	1/4x3/4"	2.35	1.57	1.27
972-6474	6474	*Long taper chisel	3/8x3/4"	2.70	1.80	1.46
972-6481	6481	*Tapered screwdriver	3/4x3/32"	1.95	1.30	1.05
972-6482	6482	Micro-spade	3/64x1 1/16"	1.95	1.30	1.05
972-6520	6520	†100-W. Cart. Chisel	1/2x1 1/2"	2.35	1.57	1.27
972-6368	6368	†Long taper pyramid	1/8x3/4"	1.08	.72	.58
972-6473	6473	†Long taper chisel	1/4x3/4"	1.08	.72	.58
972-6500	6500	*100-W. Cart. Chisel	1 1/2x1/2"	4.60	3.07	2.49
972-6391	6391	*Precision Mini-Tip	.010"	1.40	.93	.76
972-6392	6392	†Precision Mini-Tip	.005"	2.70	1.80	1.46

6010 40-WATT "IMPERIAL" SOLDERING OUTFIT

Features six of the most popular "Imperial" components. Ideal for printed circuit and solid-state devices. Kit includes: #6100 Perma-Cool Handle; #6200 stainless-steel, double-insulated 40-watt heat cartridge; #6102 two-wire cord; and three multi-purpose Mini-Tip® thread-on soldering tips. Delivers a tip temperature of 750° to 950°F. For 110-120 volts AC or DC. Shpg. wt. 8 oz.

972-6010. 1-3 ..... Each 14.88
4-9 ..... Each 9.95 10-99 ..... Each 7.95



INTERCHANGEABLE "IMPERIAL" COMPONENTS

A TYPE 6100 "PERMA-COOL" HANDLE. Made of polycarbonate resin, with die-cast aluminum heat sink. 4.7" long; 0.8" diameter at grip. Turquoise color. Shpg. wt. 2 oz.

972-6101. 1-3 ..... Each 2.80
4-9 ..... Each 1.87 10-99 ..... Each 1.51

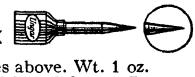
B PLUG-IN POWER CORDS. Vinyl covered 2 or 3-wire power cords for Imperial handles. Molded-on female connector, positive slip-on action, and snap-lock. Polyvinylchloride insulation on both wire and plug. 18-gauge wire; each conductor 65 strands .005" wire. U.L. Listed. For 115 V, AC or DC. Turquoise color. 3 oz.

972-6111. Type 6102 Two-wire Cord. 1-3 ..... Each 4.05
4-9 ..... Each 2.70 10-99 ..... Each 2.19
972-6121. Type 6103 Three-wire Cord. 1-3 ..... Each 5.95
4-9 ..... Each 3.97 10-99 ..... Each 3.22

C "LONG LIFE" HEAT CARTRIDGES. Stainless-steel cartridges for "Mini-Tips" at left. 7 1/2" long except *8" long. 6203, 950-1050°F; 6200, 750-950°F; 6201, 650-850°F; 6202, 600-800°F. U.L. Listed. Shpg. wt. 2 oz.

Stock No.	Type	Watts	1-3, EA.	4-9, EA.	10-49, EA.
972-6203	*6203	60	8.63	5.75	4.66
972-6200	6200	40	7.50	5.02	4.07
972-6201	6201	30	7.50	5.02	4.07
972-6202	6202	25	7.50	5.02	4.07

MICROMINIATURE TIP FOR PRODUCTION-ASSEMBLY WORK



Ultra-fine point for Heat Cartridges above. Wt. 1 oz.

972-6392. 6392 .010" Iron-Clad Gold-Plated Copper Tip.
1-3 ..... Each 2.70
4-9 ..... Each 1.80 10-49 ..... Each 1.46

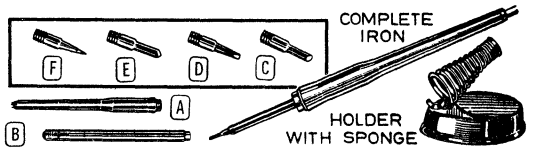
UNGAR "PRINCESS" SOLDERING TOOLS

MODEL 6900 SOLDERING STATION. Ten-watt soldering iron and holder with special sponge for cleaning nibs. With 3 copper nibs: pencil, screwdriver, spade. Tip temp., 550-650°. 120V, AC-DC.

972-6900. Type 6900. Shpg. wt. 10 oz. 19.38
972-6975. Type 6975. Iron Less Holder. U.L. Listed. 6 oz. 13.75
972-6990. Type 6990. Iron Holder Sponge. Wt. 4 oz. 5.90
972-6991. Type 6991. Sponge Refill. For holder. 1 oz. ..... .90

SOLDERING NIBS. (*Iron-Clad Gold-Plated Copper. †Plain Copper).

Stock No.	Mfr's Type	Fig.	Description	LxDia.xTip	EACH 1-3	4-9	10-49
972-6952	6952	C	†Spade	.61x1/8x.08"	.68	.45	.39
972-6962	6962	C	*Spade	.62x.13x.09"	1.18	.78	.68
972-6951	6951	D	†Screwdriver	.60x1/8x.005"	.68	.45	.39
972-6961	6961	D	*Screwdriver	.62x.13x.06"	1.18	.78	.68
972-6950	6950	E	†Pencil	.61x.125x.015"	.68	.45	.39
972-6960	6960	E	*Pencil	.62x.130x.015"	1.18	.78	.68
972-6953	6953	F	†Precision	.61x1/8x.005"	1.25	.83	.72
972-6963	6963	F	*Precision	.61x1/8x.010"	2.28	1.52	1.32



"PRINCESS" INTERCHANGEABLE COMPONENTS

A CORDS AND HANDLES. Handle, 5x1/2" dia.; vinyl cord. 5 oz.

Stock No.	Type	Description	1-3, EA.	4-9, EA.	10-99, EA.
972-6902	6902	2-wire	5.58	3.72	3.23
972-6903	6903	3-wire	7.40	4.93	4.29

B HEAT CAPSULES. Stainless Steel. Wt., 2 oz.

972-6910	6910	10-watt	6.83	4.55	3.96
972-6915	6915	15-watt	6.83	4.55	3.96
972-6918	6918	18-watt	6.83	4.55	3.96

DESOLDERING EQUIPMENT FOR IC'S AND SEMICONDUCTOR PACKAGES

MODEL 6939 DESOLDERING KIT. 15-watt heat capsule with three desolder tips: 6945, 6947 and 6948. U.L. Listed. 120 VAC. 12 oz.

972-6939. 1-3 ..... Each 24.18
4-9 ..... Each 16.12 10-Up ..... Each 14.01

MODEL 6915 HEAT CAPSULE. Wt. 2 oz.

972-6915. 1-3 ..... Each 6.83
4-19 ..... Each 4.55 10-99 ..... Each 3.96

MODEL 6903 HANDLE REPLACEMENT. Wt. 5 oz.

972-6903. 1-3 ..... Each 7.40
4-9 ..... Each 3.72 10-99 ..... Each 3.23

MODEL 6982 DUAL IN-LINE IC EXTRACTOR. Pushbutton extractor for use with 6948 tip.

972-6982. 1-3 ..... Each 3.25
4-9 ..... Each 2.17 10-99 ..... Each 1.88

MODEL 6947 SLOTTED LEAD STRAIGHTENER.

972-6947. 1-3 ..... Each 2.98
4-9 ..... Each 1.98 10-99 ..... Each 1.72

MODEL 6940 FLAT PACK TIP. 650°F.

972-6940. 1-3 ..... Each 3.75
4-9 ..... Each 2.50 10-99 ..... Each 2.17

MODEL 6945 "TO" DESOLDERING TIP. Nickel-plated. .375" dia. 680° temp. Order below.

MODEL 6943 "TO" PACKAGE TIP. .600" dia. 640°F at 15 watts. Order from table below.

MODEL 6944 "TO" PACKAGE TIP. .500" dia. 670°F at 15 watts. Order from table below.

MODEL 6946 "TO" PACKAGE TIP. .280" dia. 700°F at 15 watts. Order from table below.

MODEL 6948 DUAL IN-LINE TIP. Removes to 16-pin IC's in one pass. 550°. Order below.

MODEL 6941 FLAT PACK TIP. 700°. Order below.

Stock No.	Mfr's Type	EACH 1-3	4-9	10-49
972-6945	6945	3.55	2.37	2.06
972-6943	6943	3.55	2.37	2.06
972-6944	6944	3.55	2.37	2.06
972-6946	6946	3.55	2.37	2.06
972-6948	6948	3.55	2.37	2.06
972-6941	6941	3.55	2.37	2.06

MODEL 7000 PRINCESS SOLDERING CUP. 4 lbs.

972-7000. 1-3 ..... Each 16.88
4-9 ..... Each 11.25 10-Up ..... Each 9.65

MODEL 6983 PRINCESS TO-5 EXTRACTOR.

972-6983. 1-3 ..... Each 3.75
4-9 ..... Each 2.50 10-Up ..... Each 2.25

MODEL 6992 MINIATURE DE-SOLDERETTE.

972-6992. Shpg. wt. 12 oz. 26.63
972-7812. Replacement Tip. 2 oz. 1.90

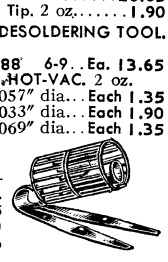
MODEL 7800 HOT-VAC DESOLDERING TOOL. 10 oz.

972-7800. 1-5 Ea. 20.88 6-9 Ea. 13.65

REPLACEMENT TIPS FOR HOT-VAC. 2 oz.

972-7806. Type 7806. .057" dia. ..... Each 1.35
972-7812. Type 7812. .033" dia. ..... Each 1.90
972-7813. Type 7813. .069" dia. ..... Each 1.35

IRON HOLDER

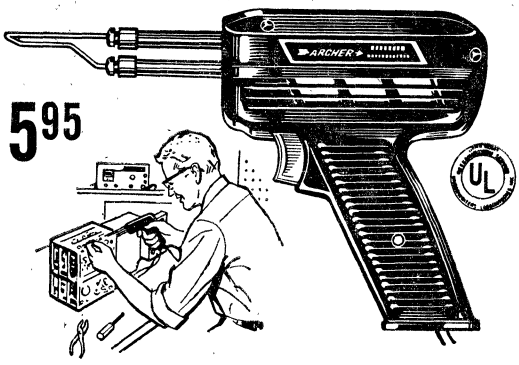


MODEL 6800. For "Imperial" irons. Wt. 8 oz.

972-6800. 1-3 Ea. 3.45
4-9 ..... Each 2.30
10-99 ..... Each 1.86

Soldering Irons, Guns and Accessories

ARCHER® 100/140 WATT "EXPERT" DUAL-HEAT SOLDERING GUN



• "Instant Heat" and Spotlight • Fingertip Selection

Fingertip selection of 140 or 100 watts provides high or low heat as the job requires. Soldering copper tip. Balanced weight.
910-5935. Type 64-2190. Shpg. wt. 1 lb. 5.95

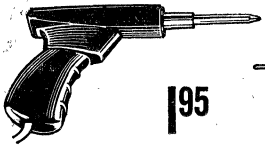
Replacement Soldering Tips (also for Weller guns)

Stock No.	Type No.	For Model	PRICE
910-5902	64-237	8200: D440	2 for .50
910-5901	64-234	D550	2 for .50

ERSIN MULTICORE SPOOL & BAR SOLDER

Type No.	Gauge	Stock No.	Size	PER SPOOL 1-4	PER SPOOL 5-27
SN60-60/40-16	16(.064")	788-1616	1 lb.	5.05	3.74
SN60-60/40-18	18(.048")	788-1618	1 lb.	5.15	3.81
SN60-60/40-20	20(.036")	788-1620	1 lb.	5.55	4.11
SN60-60/40-21	21(.032")	788-1621	1 lb.	5.70	4.24
SN60-60/40-22	22(.028")	788-1622	1 lb.	5.47	4.42
SN60-60/40-24	24(.022")	788-1624	1 lb.	8.55	6.32
SN40-40/60-16	16(.064")	788-1316	1 lb.	3.99	2.99
SN40-40/60-18	18(.048")	788-1318	1 lb.	4.10	3.02
SN63-63/37-16	16	788-2516	1 lb.	5.35	3.96
SN63-63/37-18	18	788-2518	1 lb.	5.43	4.03
SN63-63/37-20	20	788-2520	1 lb.	5.62	4.19
SN63-63/37-22	22	788-2522	1 lb.	5.87	4.36
SN62LMP-16	16	788-2316	1 lb.	7.65	5.67
SN62LMP-18	18	788-2318	1 lb.	8.87	6.56
SN62LMP-22	22	788-2322	1 lb.	10.95	8.12
HMP-16	16	788-0016	1 lb.	6.47	4.78
HMP-18	18	788-0018	1 lb.	6.55	4.85
SAVBIT-16	16(.064")	788-1016	1 lb.	4.87	3.61
SAVBIT-18	18(.048")	788-1018	1 lb.	5.05	3.74
SAVBIT-20	20(.036")	788-1020	1 lb.	5.50	4.07
SAVBIT-22	22(.078")	788-1022	1 lb.	5.90	4.37
SN60XF-24	24(.022")	788-2024	2 lo/pk	16.00	11.84
SN60XF-28	28(.014")	788-2028	2 lb/pk	21.10	15.60
SN60XF-32	32(.0108")	788-2032	2 lb/pk	27.40	20.36
SN60XF-34	34(.009")	788-3034	2 lb/pk	33.40	24.72
SN63XF-22	22(.036")	788-2922	2 lb/pk	12.20	8.22
SN63XF-24	24(.022")	788-2924	2 lb/pk	16.60	12.36
SN63XF-28	28(.014")	788-2928	2 lb/pk	21.40	15.84
SN63XF-32	32(.0108")	788-2932	2 lb/pk	27.70	20.56
HP-60/40	.....	788-1800	2 lb. bar	8.60	6.38
LA-60/40	.....	788-1810	2 lb. bar	7.25	5.38

COOL-GRIP 30-WATT SOLDERING GUN



1.95

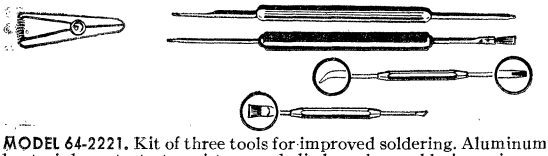
120-volt all-purpose soldering gun with U.L. cord. The easy-grip handle stays cool. Lightweight, heats instantly. Repairs hundreds of home, office, and shop items. Perfect for home electrical repairs on radios, TV, hi-fi. Shpg. wt. ¾ lb.
910-5939. Type 64-2224 ... 1.95

EXPERT PENCIL SOLDERING IRON

1.49 Reaches Tight Wiring Spots

Only Allied Electronics could offer you this 30-watt, 120 volt soldering iron, with U.L. cord at such a low, low price. Lightweight, easy to use. Heats instantly but handle stays cool. Perfect for printed circuits. ½ lb.
910-5940. Type 64-2225 ... 1.49

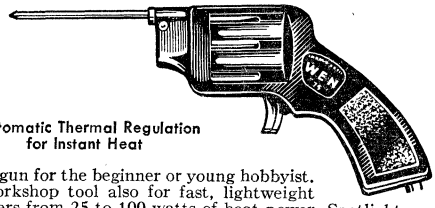
ARCHER 3-PC. "SOLDER EASE" KIT



MODEL 64-2221. Kit of three tools for improved soldering. Aluminum heat sink protects transistors and diodes when soldering, gives a firm grip. Fine-point probe aids soldering on printed circuits. Stainless steel hardened probe, steel brush and scraper helps keep circuit clean as you solder. Shpg. wt. ½ lb.
910-5937 ..... 1.99

QUALITY SOLDERING PISTOL WITH ATR*

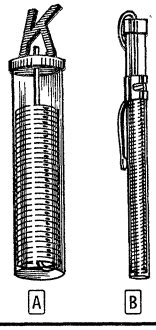
4.49



*Automatic Thermal Regulation for Instant Heat

The perfect gun for the beginner or young hobbyist. An ideal workshop tool also for fast, lightweight work. Delivers from 25 to 100 watts of heat power. Spotlight.
910-5933. Type 64-2180. Shpg. wt. 1¼ lbs. 4.49
910-5934. Type 64-2181. Replacement Tip. Wt. 2 oz. 1.00

SERVI-TUBE SOLDER DISPENSERS

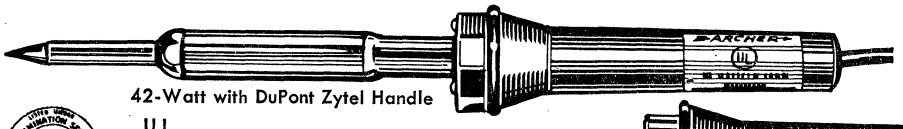


A ALLIED KWIK-DRAW

Allied's new Kwik-Draw package is handy sized yet hefty enough for the serious handyman. The core-flux wire is 14 feet in length and feeds easily from the Servi-Tube convenience dispenser. 60 tin/40 lead alloy.
707-5020. Shpg. wt. ¼ lb. ..... .59

B ALLIED POCKET-PAK

The Pocket-Pak is as easy to handle as a pen or pencil and comes with a pocket clip. Ideal for service or repair, its handy size makes it simple to keep always near at hand. Dispenses a convenient length of wire without risk of unraveling. Contains 60 tin/40 lead solder wire. Shpg. wt. ¼ lb.
707-5030 ..... .59



42-Watt with DuPont Zytel Handle

Both Include Handy Stand

U.L. Listed

25-Watt with DuPont Zytel Handle

ARCHER® PENCIL-TYPE SOLDERING IRONS

MODEL 64-2071 42-WATT SOLDERING IRON. Easy-to-handle iron weighs only 3 ounces. Slim design for hard-to-reach corners—8¼" long overall. Long-life nichrone mica insulated element with ¼" screw-in tip; reaches 600° to 640°F.
910-5958. Shpg. wt. ½ lb. 3.29
910-5959. 64-2072. Replacement Tip. Wt. 2 oz. ..... .79

MODEL 64-2070 25-WATT SOLDERING IRON. Extra-strength, easy to manipulate, trouble-free. All the features as iron at left (64-2071), butwith 5/32" screw-in tip. Heats delicate work gently and evenly after 90 seconds. Ideal for printed circuit work.
910-5957. Shpg. wt. ½ lb. 2.59
910-5960. 64-2073. Replacement Tip. Wt. 2 oz. ..... .59

Soldering Accessories and Solder

ALLIED RESIN CORE SOLDER

Stock No.	Spool Size	Tin/Lead Alloy	Core	Diam.	EACH 1-4	5-10	11-Up
707-5110	1# Spools	60/40	#66	.062"	3.75	3.21	2.87
707-5120	5# Spools	60/40	#66	.062"	18.12	15.60	13.95
707-5100	1# Spools	60/40	#66	.050"	4.20	3.61	3.23
707-5090	1# Spools	60/40	#66	.040"	4.45	3.82	3.42
707-5070	1# Spools	60/40	#66	.031"	4.62	3.97	3.55
707-5080	5# Spools	60/40	#66	.031"	20.87	17.95	16.05
707-5060	1# Spools	60/40	#66	.025"	5.77	4.96	4.44
707-5050	1# Spools	60/40	#66	.015"	7.15	5.72	5.25
707-5040	1# Spools	40/60	#66	.062"	2.82	2.41	2.16
707-5140	1# Spools	63/37	#66	.062"	3.87	3.34	2.99
707-5130	1# Spools	63/37	#66	.032"	4.77	4.10	3.67

ALLIED SOLID WIRE SOLDER

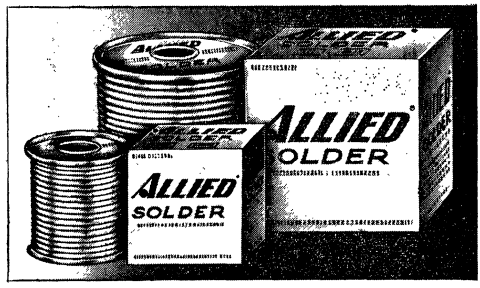
Solid wire for use with external flux is the equal in quality and purity of flux-core solders. Always uniform in diam. and quality.

Stock No.	Solid Wire	Alloy (Tin/Lead)	Diam.	EACH 1-4	5-10	11-Up
707-5160	1# Spools	63/37	.062"	3.72	3.31	2.96
707-5150	1# Spools	60/40	.062"	3.55	3.17	2.84

ALLIED BAR SOLDER

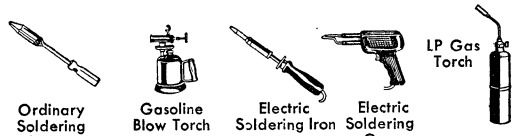
Available in all the tin lead alloys, including those for body work. Uniform distribution of tin-lead alloys in the bar.

Stock No.	Bar Solder	Alloy (Tin/Lead)	EACH 1-4	5-10	11-Up
707-5000	1# Bars	60/40	3.15	2.70	2.41
707-5010	1# Bars	63/37	3.35	2.89	2.58

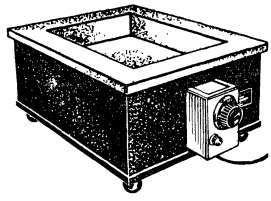


ALLIED'S FINEST RESIN CORE SOLDER

For fast soldering. Features the most active resin flux on the market. Meets all applicable MIL and Federal standards. Flux fungus and oxidation resistant. Used with all Allied soldering products: Allied Electric Soldering Iron, Soldering Gun, LP Gas Torch, Gas Blow Torch, Soldering Copper.



WAAGE SOLDER MELTING POTS AND TANKS



- Adjustable Thermostat
- Replaceable Heating Unit
- Compact, Fully Insulated
- Temperature to 550°F

ROUND SOLDER MELTING POTS

For melting solder, tin, low-temperature alloys. Automatic thermostat provides temperature to 550° F. Heavy insulation reduces heat loss. 6-ft. cord. For 115 VAC.

MP1A. Capacity, 1 lb. Inside dimensions, 1½" dia. x 1½" deep. 200 watts. Shpg. wt. 5 lbs.
991-0200 ..... 31.56

MP4A. Capacity, 4 lbs. Inside dia. 3" x 1½" deep. 300 watts. Shpg. wt. 6 lbs.
991-0203 ..... 36.23

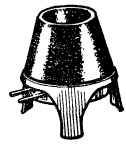
RECTANGULAR MELTING TANKS

For printed circuit fabrication, with wide top area, shallow depth. Automatic thermostat provides temperature from 150° to 550° F. With 6-ft. cord. For 115 VAC.

RSP1. Capacity, 10 lbs. Inside dimensions, 4x4x2" deep. 600 watts. Shpg. wt. 15 lbs.
991X0210 ..... 55.52

RSP2. Capacity, 20 lbs. Inside dimensions, 4x8x2" deep. 1200 watts. Shpg. wt. 23 lbs.
991X0211 ..... 75.98

LECTROHM SOLDER POTS



- For Dip Solder Jobs
- Replaceable Elements
- Production Line Use

Rugged low-cost pots for small dip-soldering jobs. Perfect for tinning wires and component leads. Order replaceable elements below. 200 or 250 watts, up to 2 lb. capacity. Sizes: SP-200, 2¾x2⅜x⅞" deep; SP-250, 3¾x2x1¾" deep. Complete with power cord. Pot capacity: SP-200, 1¾ lbs.; SP-250 2 lbs. AC or DC operation at 110 to 120 volts. Shpg. wt. 3½ lbs.

Stock No.	Mfr's Type	Watts	EACH
840-3505	SP-200	200	9.18
840-3510	SP-250	250	9.18

REPLACEMENT ELEMENTS. Composed of nickel-chrome wire. Wt. 4 oz.
840-3500. Type A. For SP-200 ..... 2.83
840-3502. Type B. For SP-250 ..... 2.83

KESTER RESIN AND SOLID WIRE AND BAR SOLDER

SOLDERING FLUXES

Use on all metals except aluminum. Stable under extreme conditions. An advanced development in practical flux, these efficient formulations meet all of manufacturing techniques including specialized assembly, automation, modular techniques. Available in pint, quart, or gallon container sizes.

Kester Formula No. 1544. Highly activated resin flux is non-corrosive and electrically non-conductive. One of the highest activity non-corrosive fluxes in cored solder.
833-1300. 1 pint. Shpg. wt. 2 lbs. 2.50
833-1305. 1 quart. Shpg. wt. 4 lbs. 4.20
833-1310. 1 Gallon. Wt. 16 lbs. 10.90

Kester Formula No. 1587. Resin-type foaming flux for PC soldering. Non-corrosive, electrically non-conductive and perfectly safe resin formula to military requirements.
833-1400. 1 pint. Wt. 2 lbs. 2.50
833-1405. 1 quart. Wt. 4 lbs. 4.20
833-1410. 1 gallon. Wt. 16 lbs. 10.90

Kester No. 930 Remover. Resin residue remover removes resin residue at room temperature.
833-1100. 1 pint. Wt. 2 lbs. 2.50
833-1105. 1 quart. Wt. 4 lbs. 4.20
833-1110. 1 gallon. Wt. 16 lbs. 10.90

KESTER "44" RESIN CORE SOLDER

Generally considered the most active and efficient of all resin and resin core solders. Non-corrosive, electrically non-conductive, fungus resistant. High melting point type.

Stock No.	Spool Size, lbs.	Silver/Lead/Tin	Core	Dia.	EACH 1-4	5-10	11-24
833-0100	1	3/61½/35½%	#66	.062"	7.65	6.11	5.47
833-0050	1	1.5/97.5/1.0%	#66	.062"	7.80	6.23	5.57

KESTER ACID-CORE SOLDER

Flux core solder for automotive repair-highly active and thermally stable. Has exact tin-and-lead percentage to provide maximum efficiency, greater speed and better soldering.

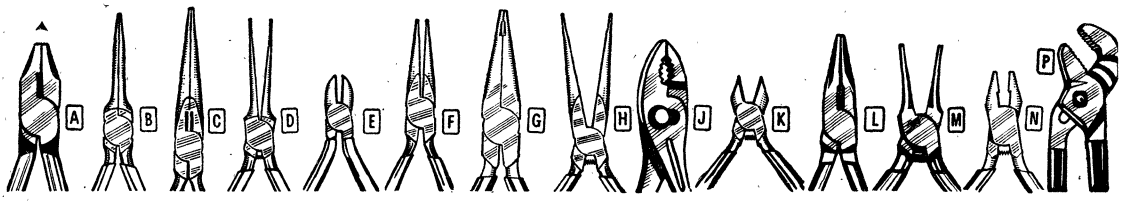
Stock No.	Spool Size	Tin/Lead Alloy	Dia.	EACH 1-4	5-10	11-24
833-1000	1#	40/60%	.125"	2.90	2.38	2.13

SOLID WIRE AND BAR SOLDER

Solid wire for use with external flux. Bar in 1 lb. size (exact weight).

Stock No.	Weight	Tin/Lead Alloy	Type	Dia.	EACH 1-4	5-10	11-24
833-1150	1 lb.	95/5%	Solid Wire	.093"	6.52	5.50	3.67
833-1160	5 lbs.	95/5%	Solid Wire	.093"	37.12	27.10	18.05
833-1020	1 lb.	40/60%	Solid Wire	.062"	2.97	2.41	2.16
833-1040	5 lbs.	40/60%	Solid Wire	.062"	14.37	11.80	10.55
833-1080	1 lb.	50/50%	Bar		2.85	2.28	2.04
833-0950	1 lb.	40/60%	Bar		2.50	2.00	2.79

Allied® Cushion-Grip Pliers and Pliers/Cutters



ALLIED TOOLS PRECISION CRAFTED FOR THE ELECTRONICS INDUSTRY

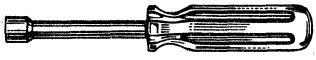
- Forged from Finest Tool Steel
- Bonded Vinyl Cushion Grip for Comfort, Electrical Insulation
- Heat-Treated Cutting Edges

Our own quality electronics tools offer extra value! All have highly polished heads and shoulders. Accurately machined and ground for smooth action. Hammer forged from finest tool steel. Precision heat-treated cutting edges provide optimum temper, fast, easy cutting and long wear. Vinyl cushion grips isolate user from electrical shock. Bonding prevents chipping or peeling.

Comfortable, nonslip grip also resists the effects of chemicals, acid and grease. These tools carry a full one year guarantee. Pliers with * have cross-coil spring. Manufactured in the U.S.A. to Allied's own specifications.

Stock No.	Type No.	Fig.	Lgth.	Description	Wt., Oz.	Asst'd 1-4	EACH 5-Up
704-0238	0238	A	6½"	Electrician's Side Cutting Pliers	8	4.50	3.28
704-0240	0240	A	8"	Electrician's Side Cutting Pliers	16	5.47	3.98
704-0253	0253	B	6"	Long Needle or Snip-Nose Pliers	6	4.27	3.10
704-0236	0236	C	7"	Extra-Long Chain-Nose Cutting Pliers	6	5.60	4.08
704-0256	0256	D	6"	*Long-Nose Pliers	3	5.37	3.91
704-0225	0225	E	4½"	Diagonal "Oblique" Cutting Pliers	2	4.07	2.94
704-0226	0226	E	5"	Diagonal "Oblique" Cutting Pliers	3	3.97	2.90
704-0227	0227	E	6"	Diagonal "Oblique" Cutting Pliers	3	4.50	3.28
704-0247	0247	F	6"	Long Chain Needle-Nose Pliers	3	3.60	2.58
704-0237	0237	F	6"	Long Chain Needle-Nose Pliers, Cutter	3	4.37	3.14
704-0241	0241	G	5"	*Radio, Ignition Long-Nose Cutting Pliers	3	6.17	4.49
704-0249	0249	H	7"	*Extra-Fine Long-Nose Pliers	3	4.20	3.06
704-0206	0206	J	6"	Satin-Finish Combination Pliers	5	1.50	1.09
704-0209	0209	J	8"	Satin-Finish Combination Pliers	9	1.80	1.32
704-0213	0213	J	6"	Satin-Finish Thin-Nose Combination Pliers	5	2.67	1.95
704-0232	0232	K	4½"	*Diagonal Needle-Point Cutting Pliers	2	5.22	3.80
704-0233	0233	K	5"	*Diagonal Needle-Point Cutting Pliers	3	6.75	4.92
704-0234	0234	L	5"	Short Chain Needle-Nose Cutting Pliers	3	4.40	3.15
704-0251	0251	M	5"	*Slim Nose Pliers	3	4.80	3.48
704-0229	0229	N	4½"	*Needle Point Diagonal Flush Cut Pliers	6	5.60	4.08
704-0220	0220	P	10"	Tongue-N-Groove Utility Pliers	16	4.70	3.42

- Feature Shockproof Handles for Maximum Safety
- Tempered Steel Blades
- Forged Hollow Shafts



HOLLOW-SHAFT NUTDRIVER 4 oz.

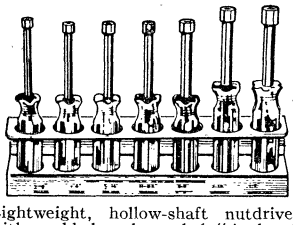
Stock No.	Type No.	Shaft Size	Handle DxL	Hex Size	EA.
704-9832	9832	3"	1x3⅝"	3/16"*	1.25
704-9833	9833	3"	1x3⅝"	7/32"	1.25
704-9834	9834	3"	1x3⅝"	¼"*	1.25
704-9835	9835	3"	1x3⅝"	9/32"	1.25
704-9836	9836	3"	1x3⅝"	5/16"*	1.25
704-9837	9837	3"	1x3⅝"	11/32"*	1.25
704-9838	9838	3"	1x3⅝"	⅜"*	1.25
704-9839	9839	3"	1 1/16x4"	7/16"*	1.52
704-9840	9840	3"	1 1/16x4"	½"*	1.52
704-9841	9841	4"	1 1/16x4"	9/16"	1.95
704-9842	9842	4"	1 1/16x4"	⅝"	2.20

*Included in Nutdriver Set below.

STUBBY NUTDRIVER 7⅜ oz.

704-9844	9844	1¼"	1¼x2⅛"	¼"	1.10

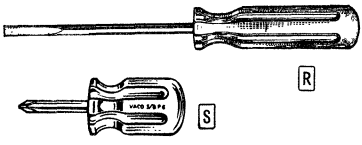
7-PIECE NUTDRIVER SET IN SELF-SUPPORTING RACK



Lightweight, hollow-shaft nutdrivers with molded, color-coded "Amberyl" plastic handles. Nickel-chrome plated drivers. Seven popular sizes for most nut tightening and loosening jobs. Drop-forged and heat-treated for hardness. All-metal stand can be permanently attached to workbench or wall. Shpg. wt. 1¾ lbs.

704-0201. 1-4 Ea. 9.95 5-Up Ea. 7.95

CHOOSE THE RIGHT SCREWDRIVER FOR EVERY JOB AND PURPOSE



- Nickel-Plated Chrome Vanadium Steel
- Shockproof Comfordome Amberyl Handle
- Blades Solidly Fixed in Handles
- Precision Points Fit Screws Properly

R FLAT-BIT SCREWDRIVERS 7 oz.

Stock No.	Mfr's Type	Handle DxL	Shaft Size DxL	EACH
704-9801	9801	⅝x2¾"	⅛x4"	.85
704-9802	9802	⅝x2¾"	⅛x6"	.85
704-9803	9803	⅝x2¾"	⅛x8"	.90
704-9804	9804	⅞x3½"	3/16x4"	1.10
704-9805	9805	⅞x3½"	3/16x6"	1.20
704-9806	9806	1x3⅝"	3/16x8"	1.27
704-9807	9807	1x3⅝"	¼x4"	1.30
704-9808	9808	1x3⅝"	¼x6"	1.40
704-9809	9809	1x3⅝"	¼x8"	1.45

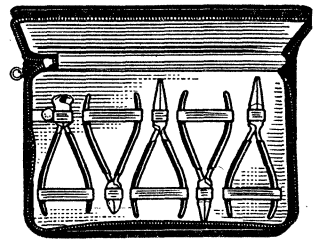
PHILLIPS SCREWDRIVERS (Not illus.) 6 oz.

Stock No.	Mfr's Type	Handle DxL	Shaft Lgth.	Point No.	Point Size	EA.
704-9830	9830	⅝x2¾"	2¼"	0	⅛"	.87
704-9826	9826	⅞x3½"	3"	1	3/16"	1.12
704-9827	9827	1x3⅝"	4"	2	¼"	1.45
704-9824	9824	1 1/16x4"	6"	3	5/16"	1.99
704-9825	9825	1 3/16x4½"	8"	4	⅜"	2.37

S STUBBY PHILLIPS SCREWDRIVERS 5 oz.

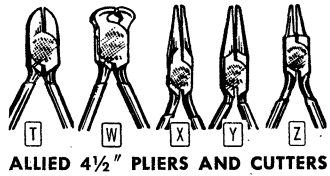
Stock No.	Mfr's Type	Handle DxL	Shaft Lgth.	Point No.	Point Size	EA.
704-9828	9828	1¼x2⅛"	1¾"	2	¼"	1.25
704-9829	9829	1⅛x1¾"	1¼"	1	3/16"	1.15

ALLIED 5-PIECE 4½" PLIERS SET



Set of five most-needed pliers in a handy zippered leatherette case. Tools are made of drop-forged, fine-grain steel. Highly polished heads and shoulders. Heat-treated cutting edges for fast-cutting and long wear. Comfortable vinyl cushion grips provide electrical insulation; are crack and peel-proof. Includes diagonal cutter, end-cut nipper, chain-noise pliers, flat-nose pliers, round-nose pliers. 1¼ lbs.

704-0257. 1-2 Sets.....Ea. 19.95
3-Up.....Ea. 15.95



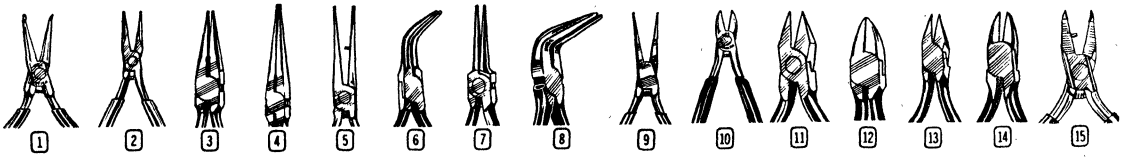
ALLIED 4½" PLIERS AND CUTTERS

Same quality construction as listed in above set. Fig. T is for close cutting; W, end cutting; X, Y and Z, smooth jaws. Each, 5 oz.

Stock No.	Type No.	Fig.	Description	EA.
704-0228	0228	T	Diag. Cutter	3.80
704-0243	0243	W	End-cut Nipper	4.57
704-0246	0246	X	Chain Nose	4.10
704-0250	0250	Y	Flat Nose	3.70
704-0254	0254	Z	Round Nose	3.97

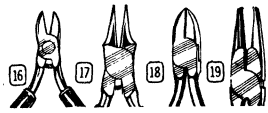
Hand Tools for the Electronics Industry

UTICA



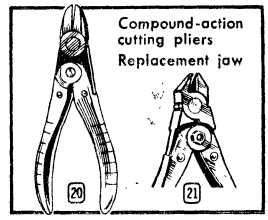
All drop-forged alloy-steel tools. Jaws electronically induction hardened; edges hand-honed. Cross-coil spring holds pliers in open position; reduces operator fatigue and increases efficiency. Handles are primer coated and dipped in heavy Plastisol for smooth grip and positive control.

Heads and handles polished and precision connected. Needle-nose pliers have long reach for picking up small parts; dowel pin holds jaws in alignment. Cutting pliers have angled edge. **See Suffix Code, below right, for explanation of letters in description column.** Av. wt. 6 oz.



NEEDLE-NOSE AND CHAIN-NOSE PLIERS

Stock No.	Fig.	Mfr's Type EDP No.	Mfr's Type Cat. No.	Overall Length	Description	Asstd. Each 1-5	Asstd. Each 6-Up
996-6126	1	16126	23-6	6"	Short Chain Nose (CFHS STD)	7.99	6.41
996-6135	2	16135	25-5	5"	Bent Chain Nose (CFHS STD)	8.99	7.25
996-4226	3	14226-11	254-6½CS	6½"	Long Chain Nose W/Side Cutter	6.45	5.17
996-4215	4	14215-11	654-5½CS	5½"	Long Chain Nose W/Side Cutter	6.20	4.96
996-6585	5	16585	774-5½	5½"	Pickup and Wiring (CFGS STD)	7.75	6.20
996-6526	6	16526-11	776-6CS	6"	Curved Nose Long Needle	6.92	5.54
996-6416	7	16416-11	778-6½CS	6½"	Needle Nose	5.99	4.81
996-6536	8	16536-11	888-6CS	6"	Curved Chain Nose	6.52	5.23
996-7537	9	75317	B-5317-5	5"	Thin Nose Chain (CGRS STD)	6.42	5.15



DIAGONAL CUTTING PLIERS

996-3246	10	13246	34-6CFS	6"	Long Handle Diagonal	9.55	7.65
996-3124	11	13124-11	42-4CS	4"	Diagonal Cutting W/Flush Edges	8.30	6.64
996-3145	12	13145-11	44-5CS	5"	Special Diagonal Cutting	6.20	4.96
996-3234	13	13234-11	47-4CS	4"	Flush Edge Diagonal Cutting	6.82	5.46
996-3235	13	13235-11	47-5CS	5"	Flush Edge Diagonal Cutting	7.12	5.71
966-3126	14	13126-11	49-6CS	6"	Fine Tapered Nose—Semi-Flush	8.75	7.01
996-5165	15	15165-00	66-5CFJS	5"	Long Nose Diagonal W/Flush Edges	9.45	7.56
996-7526	16	75263	B-5263-4	4"	Flush Cut Diagonal (CFJS STD)	6.99	5.68
996-7536	17	75316	B-5316-4	4"	Very Thin Nose Flush Cutting (CJS STD)	8.45	6.75
996-3214	18	13214-11	46-4CS	4"	Midget Diagonal Semi-Flush	5.62	4.50

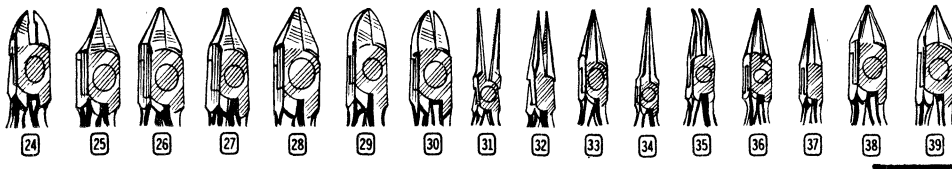
MISCELLANEOUS PLIERS

996-5135	19	15135-10	262-5½C	5½"	Transverse End Cutting	6.95	5.56
996-3825	20	13825-10	441-5½C	5½"	Compound Action Diagonal	9.17	7.34
996-3845	21	13845-10	470-5C	5"	Compound Action Cutter/Crimper	8.90	7.13
996-4536	22	14536-11	896-6CS	6"	Ignition and Cutting	7.57	6.07
996-4537	23	14537-10	897-7C	7"	Special Tip Cutting	8.70	6.96

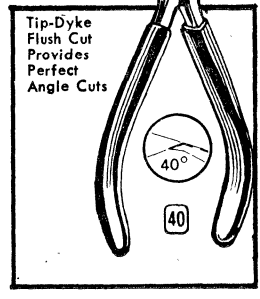
SUFFIX CODE

C-Cushion Grip
D-Polished Plate
F-Full Polished
G-Plain Unscored Jaws
H-Fine Serrated Jaws
J-Flush Edges
K-Semi-Flush Edges
N-Plain Cushion Throat
O-Nickel-Chrome
R-Radius on Jaws
S-Coil Spring
T-Rib Cushion Throat

HUNTER INDUSTRIAL QUALITY ELECTRONIC CUTTING PLIERS



Ultra-durable Hunter cutting pliers constructed of "Moladium"—a rugged combination of Molybdenum and chrome vanadium—that actually outlast cutters made from regular steel. All are hand fitted, beautifully finished and individually inspected to insure perfect quality. Jaw of needle and chain nose pliers are always in exact alignment. Cutting edges precision honed for clean, accurate cutting. Premium steel forgings hardened to the proper Rockwell using finest equipment. 6 oz.



ELECTRONIC CUTTING PLIERS

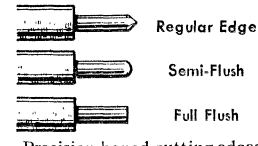
Stock No.	Fig.	Mfr's Type	Overall Length	Description	Use With/For	Asstd. Each 1-5	Asstd. Each 6-Up
814-1080	24	A74MS	4"	Tip Cutting Midget Diagonal	Flat Nickel	9.72	7.78
814-1110	25	A84MS	4¾"	Thin Taper Jaw Dyke	#24 Copper	9.35	7.48
814-1120	26	A86MS	4¾"	Taper Jaw Dyke	20-22 Wire	9.22	7.38
814-1130	40	A90MS	4⅜"	Tip Dyke Flush Cut	Nickel Ribbon	12.45	9.96
814-1140	27	A92MS	4"	Super Fine, Taper Jaw Dyke	#24 Copper	8.35	6.68
814-1150	28	A95MS	4"	Fine Taper Jaw Dyke	#22 Copper	7.97	6.38
814-1160	29	A97MS	4"	Fine Diagonal, Semi Flush Cut	#22 Copper	6.95	5.56
814-1170	30	A99MS	4"	Super Fine Dyke	#24 Copper	7.40	5.92

RADIUS AND SERRATED PLIERS

814-1000	31	A5MS	5½"	Long Narrow Needle Nose	Fine Wire	6.95	5.56
814-1010	32	A11DMS	4¾"	Long Narrow Chain, Serrated Tip	Fine Wire	6.30	5.04
814-1020	33	A11MS	4¾"	Long Narrow Chain, Radius Edges	Fine Wire	6.30	5.04
814-1030	34	A14MS-4	4½"	Extra Long Needle, Radius Edges	Fine Wire	6.95	5.56
814-1040	34	A14MS-6	6"	Extra Long Needle, Radius Edges	Fine Wire	7.20	5.76

MINIATURE PLIERS

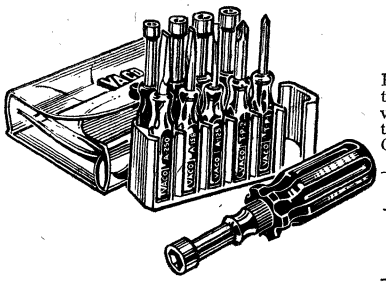
814-1050	35	A29MS	4½"	Extra Fine Curved Radius Edges	Small Wire	8.22	6.58
814-1060	36	A43MS	4½"	Extra Fine Round Nose	Small Wire	7.45	5.96
814-1070	37	A44MS	4½"	Extra Fine Chain Nose	Small Wire	7.45	5.96
814-1090	38	A76MS	4"	Super Fine Midget	#24 Wire	9.47	7.58
814-1100	39	A77MS	4"	Very Fine Midget	#22 Wire	9.47	7.58



Precision honed cutting edges are available in regular, semi-flush or full flush cut. Exact cutting characteristics of each plier is given in description column of table located at left.

Problem Solving Tools For Faster Work

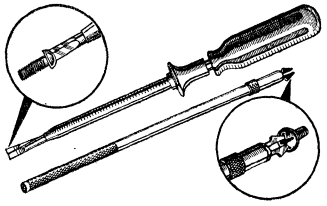
VACO®



TORQUE COMMANDER SETS COMBINE VERSATILITY AND POWER

Each tiny set of drivers performs a multitude of jobs. Precision made, they provide that delicate touch needed on fine tuning or intricate instrumentation work. Or, you can simply insert into Torque Commander handle to provide power for regular jobs. Selections include 8-piece Screw Driver Set, 10-piece Nut Driver Set, 10-piece Allen Type Hex Key Set, or 10-piece Combination Set.

Stock No.	Mfr's Type	Description	EACH
975-9901	70101	8-pc. Screw Driver Set	6.50
975-9903	70103	10-pc. Nut Driver Set	8.95
975-9905	70105	10-pc. Allen Type Hex Key Set	7.75
975-9910	70110	10-pc. Combination Set.	8.95



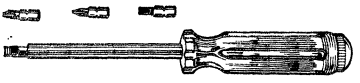
- Perfect for Hard-To-Get-At Places
- Comfordome Amberyl Handle
- Precision Tips Hold Screw Securely

FLAT-BIT SCREW LAUNCHERS

Stock No.	Mfr's Type	Shaft Size Diameter	Shaft Size Length	EACH
975-9818	K-23	1/8"	3"	1.22
975-9819	K-28	1/8"	8"	1.47
975-9820	K-34	3/16"	4"	1.77
975-9821	K-36	3/16"	6"	1.81
975-9822	K-38	3/16"	8"	1.85
975-9823	K-44	1/4"	4"	1.85
975-9824	K-46	1/4"	6"	1.94
975-9825	K-48	1/4"	8"	1.98

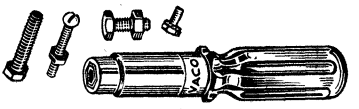
PHILLIPS SCREW LAUNCHERS

Stock No.	Mfr's Type	Shaft Length	EACH
975-9814	K-13	3"	1.66
975-9815	K-15	5"	1.94
975-9816	K-16	7"	2.02
975-9817	K-19	9"	2.11

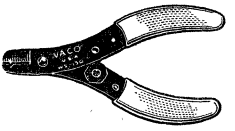


ALL MAGNETIC DRIVERS. 3/16" and 1/4" flat bits and #1 and #2 Phillips bits slip-fit into magnetic shank, store in handle. 2½ lbs.

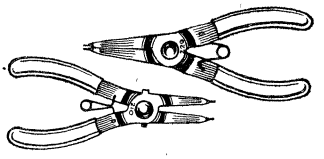
Stock No.	Mfr's Type	Length	Type	EACH
975-9855	70035	9"	Standard	3.00
975-9880	70080	13"	Standard	3.40
975-9881	70081	9¼"	Ratchet	4.75



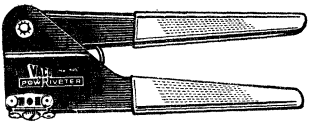
MODEL SA 711 NUTDRIVER. Really versatile driver! Adjusts itself automatically to fit four sizes of hex nuts from 1/4" to 7/16". Requires absolutely no manual adjustment. Shpg. wt. 8 oz.
975-9843.....3.49



MODEL WSC 150 DIAL-A-GAUGE WIRE STRIPPER. For all wire-stripping uses. Removes insulation easily, neatly.
975-9848. Shpg. wt. 4 oz.....1.43

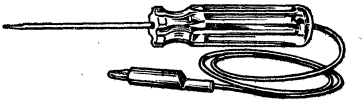


MODELS 210, 220 SNAP RING PLIERS. 210 handles internal rings; 220, external. Spring return and cushion-grip handle.
975-9850. Model 210. 4 oz.....2.61
975-9851. Model 220. 4 oz.....2.61

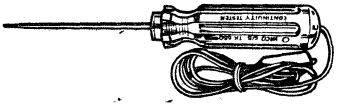


MODEL 495 POW'RIVETER. Features specially constructed three-way head for 1/8", 5/32", and 3/16" rivets. For really easy riveting.
975-9852. Shpg. wt. 1 lb.....4.95

HANDY VOLTAGE TESTERS



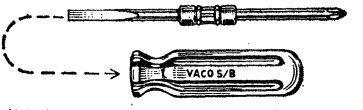
MODEL TK 550 6/12-VOLT TESTER AND PROBE. Handy tester for checking automotive and industrial equipment.
975-9846. Shpg. wt. 2 lbs.....2.31



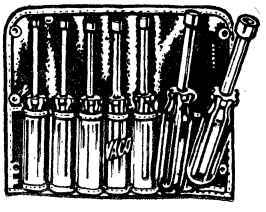
MODEL 70008 CONTINUITY TESTER. Checks for open circuits and broken wires in electrical appliances and other equipment.
975-9854 Shpg. wt. 2 lbs.....2.47

MODEL TK 500 CIRCUIT TESTER. Handy tester is also a pocket screwdriver. Neon tube indicates "hot" side of electric outlet.
975-9845. Shpg. wt. 2 lbs.....93

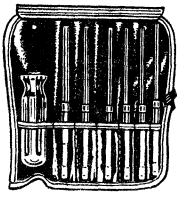
MODEL AN 2 HIGH-VOLTAGE TESTER. Ideal for tracing high voltage in TV sets. Can also be used as pocket screwdriver.
975-9810. Shpg. wt. 2 lbs.....1.10



MODEL DU-2 REVERSING SCREWDRIVER. 3/16" dia. regular and #1 Phillips screwdriver. A convenient tool.
975-9811. Shpg. wt. ½ lb.....1.47

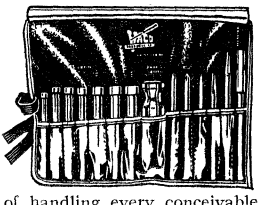


MODEL K 7 STAND-UP-HANG-UP KIT. Has sizes of hollow-shaft nut drivers most often used. Have them handy when you need them. Contains 3/16", 1/4", 5/16", 11/32", 3/8", 7/16", and 1/2" sizes.
975-9813. Shpg. wt. 3 lbs.....9.28



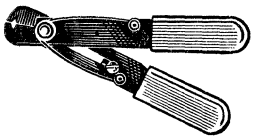
MODEL ZA 70 HEX KEY INTERCHANGEABLE BLADE KIT. Perhaps the handiest tool kit you may ever own. Special clutch handle for keys. Hex sizes: 1/16", 5/64", 3/32", 1/8", 5/32", 3/16".
975-9849. Shpg. wt. 3 lbs.....5.19

MODEL RT 14 COMBINATION KIT. Handy kit at an economical price. Saves you time, too. Screwdrivers and nut drivers in kit form to give you an assortment of drivers that lets you work faster and more efficiently. You can stop using a substitute tool because the correct size isn't available. Capable of handling every conceivable application. Contains 1/8", 3/16", 1/4" regular blades; 3/16", 1/4", 5/16", 11/32", 3/8", 7/16" and 1/2" nutdrivers; also #1 and #2 Phillips screwdrivers; plus a six-inch extension piece. Rugged handle with clutch allows you to merely snap blade in and out.
975-9857. Shpg. wt. 8 lbs.....12.15



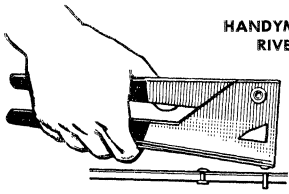
Tools, Templates and Drawing Aids

WIRE STRIPPER AND CUTTER



Spring-loaded, easy operating hand tool for use with all standard wire sizes. Smooth-cutting 5" blades make stripping or cutting quick and clean. Comfortable handle grip reduces fatigue over long periods of use. Ruggedly built for dependable operation and long life. Shpg. wt. ½ lb.
910-5803.....**1.49**

HANDYMAN'S POP RIVET GUN



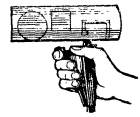
- Replace Metal Screws
- Replace Soldering
- Replace Nuts, Bolts, Glues

Rivets won't strip out or loosen. Use backup plates where hole is too large for rivets, or as reinforcement with soft material.
910-5945. Type 64-2852. Shpg. wt. 1¼ lbs.....**2.99**
910-5946. Type 64-2853. 25 Short Rivets. For work up to ⅛-inch thick.....**.49**
910-5947. Type 64-2854. 20 Medium Rivets. For work up to ¼-inch thick.....**.49**
910-5948. Type 64-2855. 15 Long Rivets. For work up to ½-inch thick.....**.49**
910-5949. Type 64-2856. 40 Backup Plates.....**.49**

ARCHER® HOBBYIST KNIFE KIT

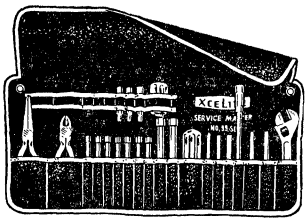
Perform delicate work with precision. Includes left and right hand etchers, stencil cutters, scriber, carver, scraper and 10 precision-ground, all-purpose steel blades.
910-5905. Type 74-1801. Wt. ½ lb....**1.98**

NIBBLING TOOL



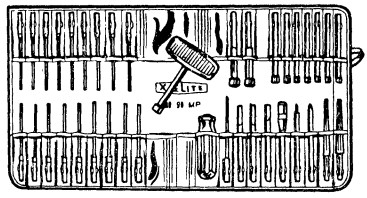
Precision hand nibbling tool is indispensible for home or shop applications. Cuts holes, slots, openings, complex designs in metal, plastic and 8-gauge steel. Quick, easy to use. Leaves edges smooth.
910-5904. Type 64-822. Wt. 1 lb.....**4.99**

FAMOUS XCELITE TOOL KITS



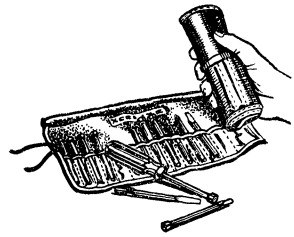
99SM SERVICE MASTER SET

Incl.: 6" long-nose and 5" dia. pliers; 6" adjust. wrench; 9 reg. nutdrivers from 3/16-½" in 1/16" steps; ¼" stubby nutdriver; 5/16" and ⅜" stubby nutdrivers; 3/16" and ¼" slotted screwdrivers; #1 Phillips screwdriver; ⅛-⅜" reamer; ¼-½" reamer: 8" exten. blade; reg. handle; stubby handle.
995-2010. Shpg. wt. 2¾ lbs.....**37.20**



99MP MULTI-PURPOSE TOOL SET

Most-needed tools in canvas case. Regular handle, tee handle, 10 regular nutdrivers 5/32-½"; 9 Allen hex-type screwdrivers .050-3/16"; 9 Bristol multiple-spline screwdrivers .048-.183"; ¼", 5/16", 3/16" slotted screwdrivers; #1 and #2 Phillips; ⅛-⅜" and ¼-½" reamers, awl scriber.
995-2000. Shpg. wt. 4 lbs.....**39.00**



99PR NUT AND SCREWDRIVER SET

13 chrome-plated pieces in a compact, plastic roll-up pouch with pockets. Contains: 9 nutdrivers from 3/16" to ½" in 1/32" steps; 2 single-end screwdrivers, 3/16" and ¼" size regular screw blades; 2 single-end Number 1 and 2 Phillips screwdrivers; plastic handles.
995-2002. Shpg. wt. 2 lbs.....**12.80**

PRECISION-CRAFTED SCREWDRIVER AND NUTDRIVER SETS FOR EVERY APPLICATION

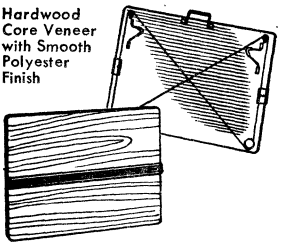
MODEL XL 70. Midget reversible ratchet offset screwdriver set.
995-0670. Shpg. wt. 2 lbs.....**14.60**
MODEL HS 6-18. Hollow shaft nutdriver set. Shpg. wt. 2 lbs.
995-0218.....**15.92**
MODEL PS 88. Compact convertible screwdriver set. Shpg. wt. 1 lb.
995-0388.....**5.96**

MODEL PS 120. Convertible nutdriver set. Shpg. wt. 1 lb.
995-0420.....**8.20**
MODEL 99 PS 40. Allen hex-type screwdriver set. Shpg. wt. 1 lb.
995-2004.....**9.90**
MODEL 99 PS 60. Bristol multiple-spline socket screwdriver set. 1 lb.
995-2006.....**9.90**

MODEL 42 H. Six-inch straight nose Seizer with serrated jaws. Wt. ¼ lb.
995-1000.....**6.20**
MODEL 43 H. Six-inch curve nose Seizer with serrated jaws. Shpg. wt. ¼ lb.
995-1001.....**6.40**
MODEL PS 89. Compact convertible Allen hex-type screwdriver set. Wt. 1 lb.
995-0389.....**5.80**

PROFESSIONAL-QUALITY POST DRAFTING AIDS

Hardwood Core Veneer with Smooth Polyester Finish



"PARALTILT" DRAWING UNIT

For small drafting jobs when the big boards are tied up. Ruling unit consists of maple straight edge with clear plastic edges. Rubber protected retractable legs give proper drawing elevation.

Stock No.	Type No.	Size	EACH
893X0217	E1732-17	12x17"	14.76
893X0224	E1732-24	18x24"	19.10
893X0226	E1732-26	20x26"	21.90
893X0231	E1732-31	23x31"	26.20
893X0236	E1732-36	24x36"	31.30
893X0242	E1732-42	31x42"	39.80

COMPACT "DRAFTSMAN I" DRAFTING OUTFIT

Type E2248. Here are the most wanted drafting tools in a handsome, black molded case. Exclusive foldout pockets for additional tools. Also has protective walls for instruments. Plastic case has textured finish, aluminum trim, automatic latch. Compact size for easy portability.
893-0548. Shpg. wt. 2 lbs.....**28.95**

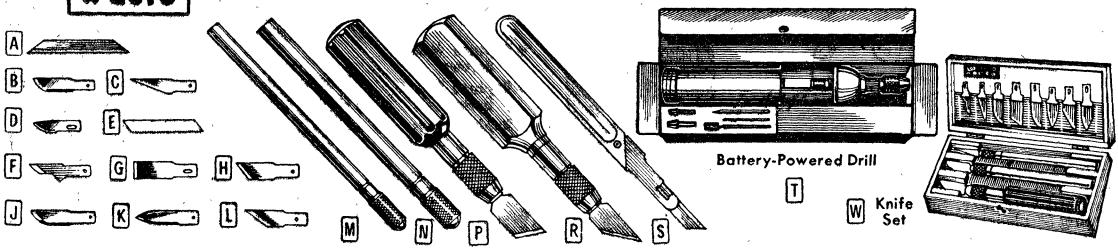
PRECISION CRAFTED SLIDE RULES BY POST

1447 FULL SIZE 10" RULE. For rapid, accurate answers to simple mathematical problems. Front side has A, B, C1, C, D and K scales; reverse side has S, L, and T scales. With instructions, case.
893-1447. Shpg. wt. 7 oz.....**4.80**
1444K POCKET SIZE 5" RULE. As above, but 5" rule. Instr. case.
893-1444. Shpg. wt. 6 oz.....**7.30**
1460M VERSALOG 23 SCALE LOG LOG RULE. For engineers, mathematicians, and anyone using advanced math. Log log scales cover range from 1.001 to 22.000; reciprocal log log scales cover from 0.00005 to 0.999. Reverse side scales carry LL/1, LL/2, LL/3, TT, Sec T St, Cos S, C, D. With case and 120 page instruction book.
893-1460. Shpg. wt., 2 lbs. 8 oz.....**27.82**
2972R ELECTRONIC TEMPLATE. Symbols for dual and single vacuum tubes; 3-phase wiring; control circuit devices, semiconductors, switch. Size, 5x9". Shpg. wt. 6 oz.
893-3000.....**4.86**

2972½D ELECTRONIC SYMBOLS. Most commonly used control wiring, tube, socket, and solid-state wiring circuitry symbols. J.I.C. Standards. Size, 5x7". Shpg. wt. 5 oz.
893-3001.....**3.52**
2972D ELECTRO SYMBOLS. Tubes, circuit components. 2¾x9¾".
893-3002. Shpg. wt., 1 oz.....**2.70**
2974R SINE WAVE CURVES AND VARIABLE WAVE FORM. 6 regular sine curves with printed amplitude-time grid; filtered, nonfiltered DC curves; uniform carrier, modulated carrier wave forms. 8¼x5½".
893-5001. Shpg. wt., 5 oz.....**3.24**
2973D TRANSISTOR OUTLINE. For 18-pin mount, 6 stud mount, 2 flange mount and 1 press fit transistor. 9½x5½".
893-4000. Shpg. wt., 5 oz.....**3.78**
2973R LECTRON Dual, single vacuum tubes, components; control circuit devices, plugs, jacks. Variety of symbols. 9¾x5½". Wt., 6 oz.
893-4001.....**5.70**

Quality Knives, Blades and Tools

x-acto KNIVES, BLADES AND TOOLS DESIGNED FOR ELECTRONICS USE



REPLACEMENT KNIFE BLADES

Nos. 10 to 13, 16 fit No. 1 knife at right; No. 8 fits No. 8 knife; others fit No. 2, 5, and 6. 2 oz.

Stock No. Pkg. of 5	Fig.	No.	Description	Pkg. 5	Stock No. Pkg. of 100	Pkg. 100
994-1203	A	8	Reversible Blade	.30	994-1242	5.20
994-1209	B	10	Eraser Blade	.60	994-1245	10.00
994-1212	C	11	Fine Angle Blade	.60	994-1248	10.00
994-1215	D	12	Correction Blade	.60	994-1251	10.00
994-1218	E	13	Precision Saw	.60	994-1254	10.00
994-1221	F	16	Etching Blade	.60	994-1257	10.00
994-1224	G	18	½" Chisel Blade	.60	994-1260	10.00
994-1227	H	19	Deburring Blade	.60	994-1263	10.00
994-1230	J	22	Trimming Blade	.60	994-1266	10.00
994-1233	K	23X	Double-Edge Blade	.75	994-1269	11.40
994-1239	L	24	Close Corner	.60	994-1272	10.00

INTERCHANGEABLE-BLADE KNIVES

M NO. 1 KNIFE. For light to medium work. 5" long, 5/16" dia. With #11 blade. Shpg. wt., 3 oz.
994-1275.....65

N NO.2 KNIFE. Medium to heavy use. 5" long, 7/16" dia. With #22 blade.
994-1278. Shpg. wt., 3 oz.....80

P NO. 5 KNIFE. For heavy work. 4¾" long. With #19 blade.
994-1281. Shpg. wt., 3 oz.....1.25

R NO. 6 KNIFE. For heavy work. 4¾" long. With #24 blade.
994-1284. Shpg. wt., 3 oz.....2.00

S NO. 8 KNIFE. Reversible blade. 5⅜" long. With #8 blade.
994-1287. Shpg. wt., 3 oz.....30

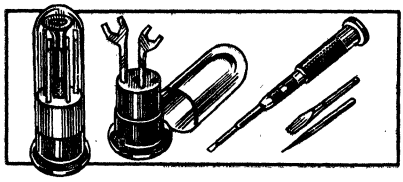
T CORDLESS POWER DRILL SET

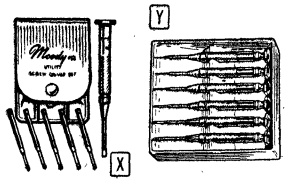
Battery-powered drill for plastic, wood, light metal. Grinds, drills, polishes, deburs, carves. Three collets hold #80 to 3/32" bits. Uses 2 "C" batteries. With case, grinder, bit, punch. Type 376.
994-1293. Shpg. wt., 1 lb.....5.95
910-5172. Batteries. 10 oz....2 for 1.39

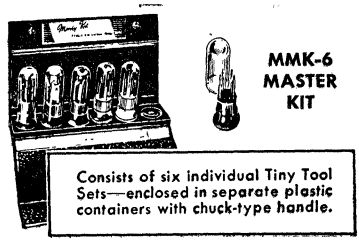
W TYPE 82 KNIFE SET

Includes Nos. 1, 2, and 5 knives plus nine assorted extra blades. For a variety of production-line applications, including wire-stripping, deburring, trimming potting compounds, prototype construction, and engraving. Handy wood chest. Shpg. wt., 12 oz.
994-1290.....4.95

Moody MINIATURE PRECISION HAND TOOL SETS







X #52 UTILITY SCREWDRIVER SET. Consists of a precision screwdriver with six interchangeable blades from .025" to .100".
865-6221. 1½ lbs.....3.25

Y JS-6 JEWELER'S SCREWDRIVER SET. Six jeweler's drivers with precision steel blades (.025", .040", .055", .070", .080", and .1"), knurled handles, grooved chuck. Made to Fed. spec GGG-S-121. Case, ¾x4½x3¾".
865-6206. ½ lb.....Each 5.50
12 Sets or More.....Each 4.96

No. 70. TAP DRILL SET. Tap sizes: 3/64", #53, #50, #47 and #43.
865-6270. Shpg. wt. ½ lb.....Each 5.50
12 sets or more.....Each 4.96

#59 MINI TOOL SET. Handle and interchangeable heads: phillips and flat blade screwdriver heads, taps and awls. In plastic container. Shpg. wt. ½ lb.
865-6259.....Each 4.95
12 sets or more...Each 4.46

BW-5 MAGNETIC SOCKET WRENCH SET. Includes 5 interchangeable steel hex wrenches and a magnetized, swivel-top handle with chuck. Sizes: 5/64", 3/32", 7/64", 1/8", 5/32". 5 oz.
865-6203.....Each 5.50
12 Sets or More.....Each 4.96

SW-5. NONMAGNETIC SKT WRENCH SET. Same as BW-5, handle not magnetized.
865-6214. Shpg. wt. 5 oz.....Each 5.50
12 sets or more.....Each 4.96

OE-5 OPEN-END WRENCH SET. Five off-set open-end steel wrenches, chuck-type handle and plastic case. Wrench sizes: 5/64", 3/32", 7/64", 1/8", and 5/32". Shpg. wt., 5 oz.
865-6209.....Each 3.50
12 Sets or More.....Each 3.16

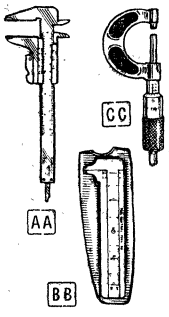
TS-5 TINY TAP SET. Heat-treated 6-piece set in plastic case. 5 steel taps in sizes 0-80, 1-72, 2-56, 3-48, 4-40. Knurled chuck handle, torque hole for leverage.
865-6218. Shpg. wt., 5 oz.....Each 10.00
12 Sets or More.....Each 9.00

MODEL MMK-6. Includes the following sets which are described on this page: SC-5, PA-5, SW-5, OE-5, TS-5 and #70.
865-6207. Shpg. wt. ½ lb.....Each 35.00
12 sets or more.....Each 31.50

SC-5 SCREWDRIVER/AWL SET. Five interchangeable blades that fit universal, swivel-type handle with screw-type chuck. Blades include: 4 screwdriver types in sizes .055", .070", .080", and .100"; plus a 1" awl. Plastic container. Shpg. wt., 5 oz.
865-6212.....Each 2.50
12 Sets or More.....Each 2.26

PA-5. PHILLIPS DRIVER AND ALLEN WRENCH SET. Phillips sizes: #0, #1 and Allen sizes: #4, #6 and #8. With chuck type handle.
865-6210. Shpg. wt. 5 oz.....Each 3.50
12 sets or more.....Each 3.16

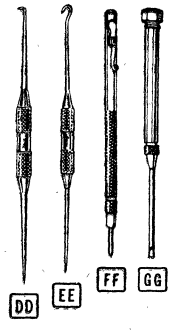
CENTRAL MICROMETERS AND CALIPERS



AA 206A VERNIER CALIPER. Measures inside, outside dimensions and depth. Accurately reads 0-6 inches by thousandths; 0-150mm. With case for protection.
534-1206. Shpg. wt. 1 lb.....18.90

BB 205 SLIDE-RULE CALIPER. Accurately measures by 32nds and 64ths. Brass.
534-1205. Shpg. wt. 8 oz.....4.30

CC 12RL 0-1" MICROMETER. Provides accurate measurement from 0 to 1". Has 0.001" graduations. Positive lock, friction stop, clamp-ring locknut, zero adjustment. Enameled, forged-steel frame. Satin-chrome finish. Meets Federal Specification GGG-C-1 05.
534-1012. Shpg. wt. 8 oz.....19.70
TYPE 22RL. Same as above, but measures 1-2". Frame stamped with decimal equivalents to 1/64ths. Also meets Federal Specifications.
534-1022. Shpg. wt. 8 oz.....23.60



MOODY SCRIBERS AND SCREWDRIVER

DD MS-2 MACHINIST SCRIBER. Tapered hook and straight points, heat-treated and hardened. Knurled aluminum handle.
865-6208. Shpg. wt. 6 oz.....Each 1.10

EE HPS-2 HOOKED-POINT SCRIBER. One end fully hooked, one end straight. Tapered. Shpg. wt. 6 oz.
865-6204.....Each 1.10

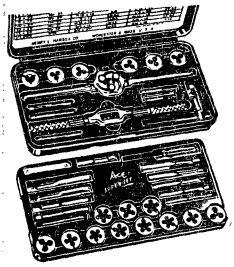
FF #46 CARBIDE POCKET SCRIBER. Features reversible tip, lock nose plus handy pocket clip. Shpg. wt. 6 oz.
865-6219.....Each 2.50

GG #50 POCKET INSULATED DRIVER. Has durable hollow nylon handle. Lock chuck holds reversible blade.
865-6220. Shpg. wt. 1 oz.....Each 2.75

MHS-2 ADJUSTABLE SLEEVE SCRIBER. Not illus. Adjustable; locking sleeve.
865-6205. Shpg. wt. 2 oz.....Each 1.10

Famous Name Taps, Dies, Punches, Vises

HENRY HANSON "ACE" TAPS AND DIES AND SCREW-EXTRACTOR SET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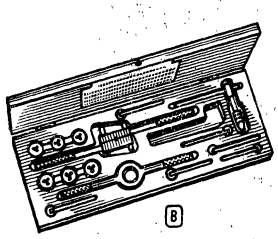
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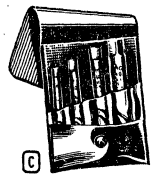
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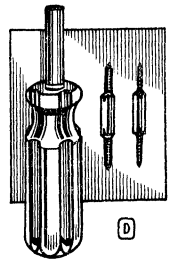
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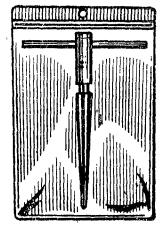

E

A MODEL 614V TAP AND DIE SET. A complete set of taps and dies, plus all essential accessories for shop or industrial applications. This precision-made set consists of one each, tap and die: 4-36, 6-32, 8-32, 10-32, 10-24, and 12-24 (Machine Screw Standard); ¼-20, 5/16-18, 3/8-16, 7/16-14, and ½-13 NC (U.S. Standard); ¼-28, 5/16-24, 3/8-24, 7/16-20, and ½-20 NF (S.A.E. Standard); ⅛" pipe. Also includes die stock, tap and reamer wrench, "T" tap wrench, screwdriver, and pitch gauge. All parts of this precisely crafted set are made of high-tempered, carbon steel. Wt. 4 lbs.
803-9614.....**52.20**

B MODEL 613 TAP AND DIE SET. High-quality 16-piece set made of rugged carbon steel. Consists of one each tap and die: 4-36, 6-32, 8-32, 10-24, 10-32, 12-24. Two tap wrenches and one die wrench. Includes compact plastic carrying case.
803-9613. Shpg. wt. 4 lbs.....**28.75**
MODEL S-21 RADIO TAP AND DIE SET. (Not illustrated.) Essential to the radio serviceman and serious experimenter. This 12-piece set contains one each tap and die: 6-32, 8-32, 10-24, 12-24, ¼-20. Tap and die wrenches. Constructed of durable carbon steel. Mahogany storage box.
803-9221. Shpg. wt. 3 lbs.....**16.50**

C MODEL 35P SCREW-EXTRACTOR SET. 5 extractors remove broken screws ⅜" to ⅝", bolts, studs, ⅛" and ¼" pipe. Alloy steel. Plastic case. 1 lb.
803-9435.....**3.80**

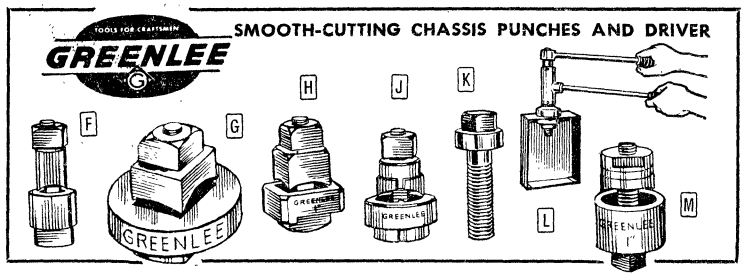
D TAP AWL TOOL. For rethreading, cleaning threads or threading thin gauge metal. Ideal for electrical wiring and electronic assembly. Contains 6-32, 8-32, 10-24, 10-32 tap sizes in one handy tool.
803-9300. Shpg. wt. 1 lb.....**4.95**

E R120 REPAIRMAN'S REAMER. For enlarging holes from ⅛-½" diameter.
803-9120. Shpg. wt. 1 lb.....**2.75**

CHASSIS PUNCHES AND UTILITY BENCH VISES

M TYPE 730 ROUND PUNCHES. Permit easy rapid cutting of round holes in metal chassis for sockets, switches, controls, plugs meters, transformers, panel lights, and other components. Punches cut smooth openings in sheet metal, bakelite, hard rubber and composition. Cut through metals up to 16-gauge thick. Extremely easy to use, just turn cap screw to cut hole—can be operated with only an ordinary wrench. No reaming or filing necessary. *Indicates meter cutout. Av. shpg. wt., 1½ lbs.

Stock No.	Hole Size	Lead Size	EACH 1-2	EACH 3-Up
799-3212	½"	¼"	3.57	3.05
799-3214	⅝"	¼"	3.57	3.05
799-3216	9/16"	¼"	3.57	3.05
799-3218	11/16"	⅜"	3.57	3.05
799-3220	¾"	⅜"	3.57	3.05
799-3222	13/16"	⅜"	3.57	3.05
799-3224	⅞"	⅜"	3.57	3.05
799-3226	15/16"	⅜"	4.04	3.45
799-3228	1"	⅜"*	4.04	3.45
799-3230	1 1/16"	⅜"	4.20	3.60
799-3232	1⅛"	⅜"	4.20	3.60
799-3234	1 5/32"	⅜"	4.20	3.60
799-3236	1 3/16"	⅜"	4.20	3.60
799-3238	1¼"	⅜"	4.20	3.60
799-3240	1⅜"	⅜"	5.21	4.45
799-3242	1½"	⅜"	5.72	4.90
799-3244	1⅝"	¾"	6.96	5.95
799-3246	1¾"	¾"	7.95	6.80
799-3248	2"	¾"	10.52	9.00
799-3250	2¼"	¾"	11.69	10.00
799-3252	2½"	¾"	19.05	16.30
799-3254	2 25/32"*	¾"	17.36	14.85



F TYPE 733 "D" PUNCHES. For cutting "D" shape hole with ordinary wrench in chassis up to 16-gauge. Wt., 2 lbs.
799-3270. For ½" hole.....**7.13**
799-3268. For ⅝" hole.....**7.59**

G 731R MINIATURE RELAY-SOCKET PUNCH. Cuts clean, smooth holes for mounting miniature relay sockets. Needs only an ordinary wrench to do the job. Simply insert punch into a 9/16" drilled hole, and turn it with wrench. Cuts holes in metals with up to 16-gauge thickness. Hole dimensions: .861"x1.018". Shpg. wt., 10 oz.
799-3262.....**28.64**

H TYPE 731 SQUARE PUNCHES. Cut square hole in up to 16-gauge metal with wrench. Drive screw requires ½" hole. Hardened tool steel. Wt., 2 lbs.
799-3256. For ½" hole.....**9.46**
799-3258. For ¾" hole.....**10.28**
799-3260. For 1" hole.....**12.50**

J TYPE 732 "KEYED" PUNCHES. Insert punch in drilled hole, turn with wrench. Require ½" hole except *¼" hole. 1½ lbs.

Stock No.	Size	EA.	Stock No.	Size	EA.
799-3264	*15/32"	8.71	799-3280	11/64"	9.93
799-3266	15/16"	9.18	799-3281	11/64"	11.69

K BALL-BEARING DRIVE SCREWS.
799-3201. AV112-BB. For 1" and 1½" punches. Wt., 1 lb.....**1.70**
799-3203. AV249-BB. For 1 7/16", 1⅝" and 1¾" punches. Wt., 1 lb.....**4.09**

L TYPE 1804 RATCHET KNOCKOUT PUNCH-DRIVER. Anti-friction lead-thread gives 6 to 8 times faster cutting action. For use with standard punches ½ to 3" and Greenlee 730 chassis punches, 11/16" and larger (see list at left). For 10-gauge maximum material. Comes with driver assembly, leverage, ratchet handles, 3 adapter screws. Metal case. Act. wt. 6½ lbs.
799-3272. Shpg. wt. 13 lbs.....**80.37**

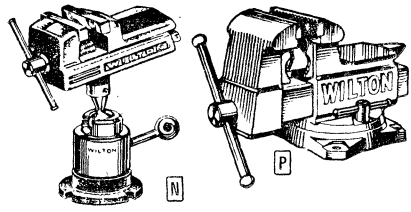
MODEL 364 VISE AND POSITIONER

N Beautifully made utility vise that is mounted on "PowRarm" positioner—makes an extremely useful tool for the professional or hobbyist. Simple one-hand release of positioner level-bar permits rotating or tilting a workpiece; tightening freezes workpiece solidly in place. Positioner is constructed of cadmium-plated steel. Handles work up to 15 lbs. Vise has smooth steel jaws, 2¼" wide, open to 2½".
988-7364. Shpg. wt. 5 lbs.....**26.16**

MODEL 550 LOW-COST BENCH VISE

P Here's a ruggedly built bench vise with quality features at an economical price. Has removable steel-insert 4½" jaws with serrated faces, built-in pipe jaws, and precision screw drive. Swivel base locks firmly. Sturdy anvil has forming horn. Maximum opening 4¼". Handles pipes ½" to 3" diameter.
988X7550. Shpg. wt. 19 lbs.....**13.88**
MODEL 535. Above, but has 3½" jaw. Max. opening, 3". Takes pipes ½" to 3" dia.
988X7535. Shpg. wt. 11 lbs.....**9.52**

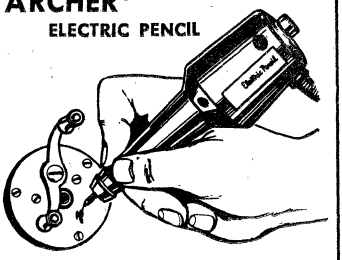
WILTON UTILITY BENCH VISES



N P

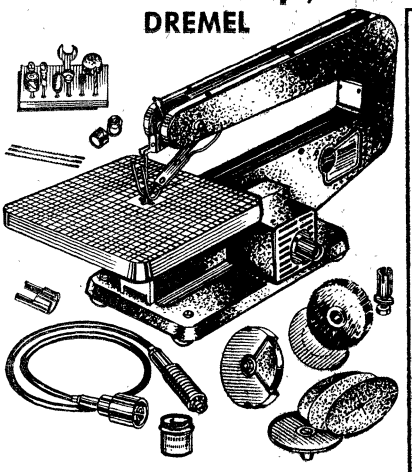
Small Power Tools for Shop, Lab, Hobby Use

ARCHER®
ELECTRIC PENCIL



MODEL 64-2172. Easy to use, writes on metal, wood or plastic. Makes clear, permanent markings for easy identification. Absolutely will not smear or rub off—ever. Includes built-in mercury switch. Pick it up and motor starts, put in down and it shuts off automatically. Convenient adjustment knob changes length of stroke and width of line. Compact size for easy operation. Only 5½" long. Safe to operate. For standard 110 VAC. Shpg. wt. 1 lb.
910-5805 ..... Each 8.95

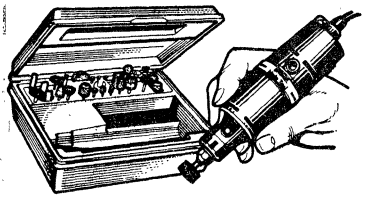
DREMEL



MULTI-PURPOSE DELUXE MOTO-SHOP

MODEL 572. Five tools in one low-cost compact unit. Basically a large capacity 15" Jigsaw onto which attachments can be connected to convert unit to Disc Sander, Buffing Wheel, Bench Grinder or Flexible Shaft Tool. Plastic handpiece has 2½' flexible neoprene covered shaft, instant-action wrenchless chuck and coupling adapter. Allows grinding, drilling, polishing, carving and sharping. Powered by ball bearing 3450-rpm rotary motor. Table tilts for angle cuts. Includes 57-2 Moto-Shop with rubber backing pad and adapter, 4 saw blades, 3 sanding discs, 1 grinding wheel and guard, 1 cloth wheel. 1 wire wheel, 1 adapter, 1 polishing compound stick, 1 flexible shaft with finger grip and 12 piece accessory set. 115 V 60 Hz AC. Shpg. wt. 17 lbs.
772X0572 ..... 57.70

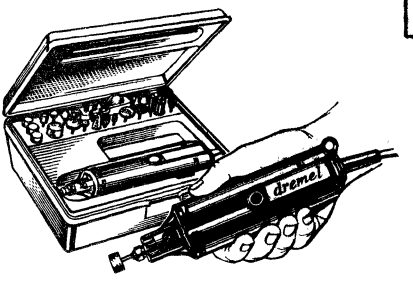
MODEL 571. BASIC MOTO-SHOP. Same as Model 572 but includes only No. 57-2 Moto-shop with rubber backing pad and adapter, 3 sanding disc and 4 saw blades. Shpg. wt. 15 lbs.
772X0571 ..... 39.86



DREMEL MOTO-TOOL SET

MODEL 261. For cutting, grinding, sanding and polishing. Delivers 30,000 rpm, draws 0.5 amp. Nylon housing with hanger hook and finger grip extension. Cooling fan. Includes 34 accessories: steel cutters, grinding wheels, wire and bristle brushes, polishing tips, sanding disc, drum sander, mandrels, dressing stone, wrench, 4 collets and case. U.L. listed. Size: 6½x1½". 115 VAC.
772-0261. Shpg. wt. 3 lbs. 36.70

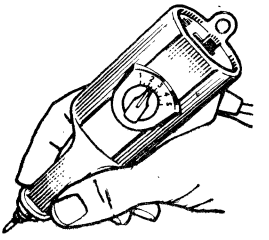
MODEL 260. Moto-Tool only. 2 lbs.
772-0260 ..... 26.20



DREMEL MOTO-TOOL SET

MODEL 271. 0.8 amp motor. 34 accessories: steel cutters, grinding wheels, polishing tips, wire and bristle brushes, sanding disc, drum sander, mandrels, dressing stone, wrench, 4 collets and case. U.L. listed. Size: 7¼x11 11/16". 115 VAC 60 Hz. Shpg. wt. 3 lbs.
772-0271 ..... 41.96
772-0270. Model 270. Tool only 31.46

MODEL 281. As above but with extra rugged ball bearing and 0.9 amp motor.
772-0281. Shpg. wt. 3 lbs. 52.46
772-0280. Model 280. Tool only 41.96

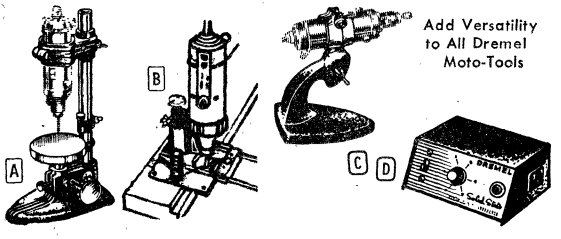


DREMEL ELECTRIC ENGRAVER

MODEL 290. Permanently marks most materials, from hardened steel to glass. Calibrated 5 position stroke adjustment regulates length of stroke and depth of engraving. High speed reciprocating motor delivers 7200 strokes per minute. Solid carbide point is practically wearproof. Nylon housing with hanger ring and pencil grip. 115 VAC 60 Hz. Shpg. wt. 1½ lbs.
772-0290 ..... 14.95

NO. 9929. DIAMOND ENGRAVING POINT. For Model 290 engraver. Shpg. wt. 00 lbs.
772-9929 ..... 7.98

DREMEL MOTO-TOOL ACCESSORIES



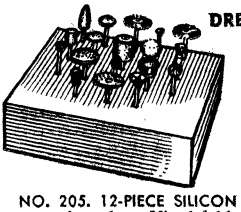
Add Versatility to All Dremel Moto-Tools

A #225 DRILL PRESS. For precision drilling, routing, model making. Table can be raised or lowered; locks in any position for accurate depth adjustment. 12" high, 6¾x4" base.
772-0225. Shpg. wt. 3 lbs. 15.76

B #229 ROUTER ATTACHMENT. Allows fingertip guidance, superior visibility. Integral guide bars provide excellent depth adjustment. Can be used portably or in permanent bench-mounted position.
772-0229 Shpg. wt. 1 lb. 10.46

C #223 UNIVERSAL STAND. Leaves both hands free. Ball and socket assembly can be set at any angle. Quick-action clamp. Heavy cast iron base will not tip. Shpg. wt., 2½ lbs.
772-0223 ..... 8.92

D #219. SPEED CONTROL. Solid state circuitry. Portable. Dial right speed from 0 to full rpm. 115 VAC.
772-0219. Shpg. wt. 1½ lbs. 17.80



DREMEL ACCESSORY SETS

NO. 202. 20-PIECE ACCESSORY SET. Includes one drum sander, one steel saw, three bristle brushes, two silicon wheel points, four emery wheel points, one steel brush, one screw mandrel, one sanding disc, one felt polishing tip, one shoulder mandrel, and four high-speed cutters. Shpg. wt. 1 lb.
772-0202 ..... Each 16.80

NO. 205. 12-PIECE SILICON GRINDING POINT SET. For hard steel, ceramics, glass. Vinyl fold-up pouch. Shpg. wt. 1 lb.
772-0205 ..... Each 7.56

NO. 206. 12-PIECE EMERY WHEEL POINT SET. With six plain shaped wheel points, ¼x¼", ¼x3/8", ¼x½", 3/8x1/8", 3/8x¼", 3/8x3/8" (DxT). Plus six assorted sizes and shapes. Pouch. Shpg. wt. 1 lb.
772-0206 ..... Each 7.56

NO. 220. 12-PIECE CUTTER SET. High-speed steel. Use for cutting, shaping and hollowing most metals, plastics and woods. Vinyl fold-up pouch included. Shpg. wt. 1½ lbs.
772-0220 ..... Each 16.20

NO. 240. 24-PIECE CUTTER SET. Deluxe version of No. 220, above. More shapes and styles for virtually any job. Pouch. Wt. 1½ lbs.
772-0240 ..... Each 32.40

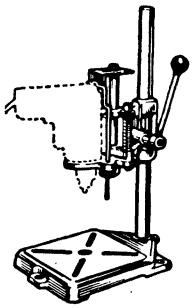
NO. 600. 6-PIECE ROUTER BIT SET. For precision routing, inlaying and mortising in wood, other soft materials. Pouch. Wt. 1½ lbs.
772-0600 ..... Each 19.52

NO. 9900. 12-PIECE TUNGSTEN CARBIDE CUTTER SET. Outlast high-speed steel many times. Maximum cutting head, ⅛". Pouch. Wt. 1½ lbs.
772-9900 ..... Each 49.14

Thor Portable and Bench Electric Tools

THOR

DRILL PRESS STANDS FOR PORTABLE DRILLS



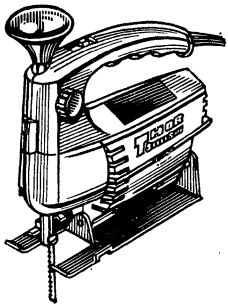
Model 580 for ¼" and ⅜" Drills. Converts most ¼" and ⅜" electric drills to handy lever-operated drill press. Rack and pinion gear feed, heavy duty spring return mechanism, adjustable drilling depth. Overall height, 18". Maximum feed, 3". Chuck to column distance, 4". Base, 6x6". Slotted work surface accepts drill vise or V-block. Base is drilled for easy mounting on bench. Do precision drilling economically. Shpg. wt. 6½ lbs.
958X1050 ..... 19.95

Model 585 for ½" and ⅝" Drills. Converts ½" and ⅝" electric drills with pipe style dead handle to handy lever-operated drill press. Rack and pinion gear feed, heavy-duty spring return mechanism, adjustable drilling depth. Overall height, 20½". Maximum feed, 2¾". Chuck to column distance, 6". Base, 7½x7½". Shpg. wt. 14 lbs.
958X1060 ..... 34.50

- Gear Feed and Spring Return
- Accepts Vise or V-block

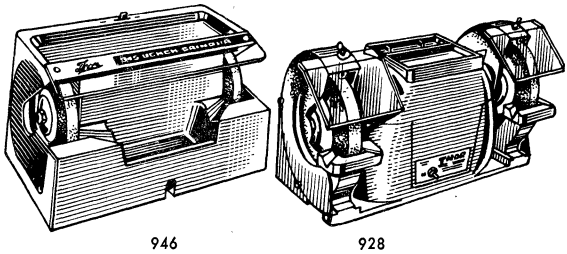
NEW MODEL 911 VERSATILE ROTO-SAW

- Adjustment Knob Turns Blade for Best Angle on Every Job
- Great for Work in Tight Places



The jig saw with the blade that turns . . . a real adventure in precision wood cutting! Turn the knob at the top to steer blade for any kind of intricate cut without turning the tool . . . gets in closer to any corner . . . great for work between studs, joists and other tight places. Two wood cutting blades included (one 14-tooth scrolling blade and one 7-tooth coarse cutting blade). Precision motor. Positive on-off AC slide switch; 3-wire lead cord. 115 V, 50-60 Hz. Shpg. wt. 5 lbs.
958-1065 ..... 44.95

EFFICIENT BENCH GRINDERS

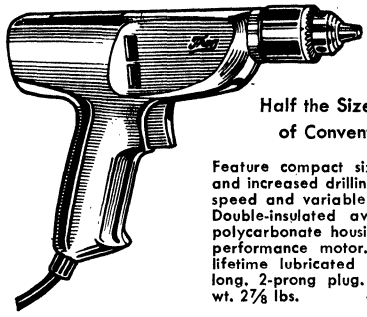


946 928

New Model 946 Fastback 4½" Grinder. For light grinding, polishing. Tool rests, eye shield, 3-wire cord. 115 VAC. With two wheels. Wt. 10½ lbs.
958X1946 ..... 24.95
958X1947. 947. Above, vacuum base, hi-intensity lamp 34.95

928 6" Grinder. For metal removal, wire brushing, buffing. Tool rests, eye shields. ¼-hp. Sleeve bearings. 115 VAC. Wt. 23½ lbs.
958X1928 ..... 39.90
958X1927. 927. ⅓-hp with sleeve bearings 46.05
958X1046. 131B. ¼-hp with ball bearings 44.95
958X1044. 130B. ⅓-hp with ball bearings 49.95

ULTRA-COMPACT AND POWERFUL DRILLS . . . DOUBLE-INSULATED FOR SAFETY



Half the Size and Weight of Conventional Drills

Feature compact size, lightweight, and increased drilling power. Fixed speed and variable speed models. Double-insulated avocado colored polycarbonate housings. New high-performance motor. Diode circuit; lifetime lubricated bearings. 7¾" long. 2-prong plug. 1¾ lb. Shpg. wt. 2⅞ lbs.

REVERSIBLE VARIABLE SPEED DRILL

DI-112R-VSC. ⅜" chuck capacity. Trigger speed control operates drill at any speed between 0-1200 rpm.
958-1040 ..... 42.95

NON-REVERSIBLE VARIABLE SPEED DRILLS

DI-112-VSC. ⅜" chuck capacity. Trigger speed control operates drill at any speed between 0-1200 rpm.
958-1030 ..... 36.95

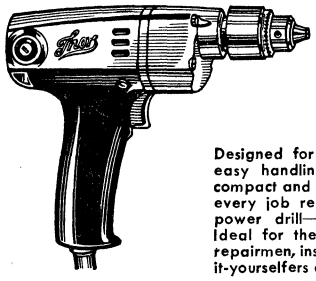
DI-110-VSC. ¼" chuck capacity. 0-2000 rpm.
958-1010 ..... 32.95

NON-REVERSIBLE FIXED SPEED DRILLS

DI-112. ⅜" chuck capacity. Speed, 1200 rpm.
958-1020 ..... 29.95

DI-110. ¼" chuck capacity. Speed, 2000 rpm.
958-1000 ..... 24.95

THE ORIGINAL COMPACT ¼" DRILL— HANDLES EVERY JOB WITH LESS EFFORT



- Perfect Balance
- Easy Handling
- High Efficiency

Designed for perfect balance and easy handling, this powerful, but compact and lightweight drill will do every job required of a portable power drill—but with less effort. Ideal for the shop or tool-box of repairmen, installers, carpenters, do-it-yourselfers and hobbyists.

E-110. This compact drill weighs only 27 ounces. Features solid permanent magnet stator, new diode circuit for most efficient electric drill ever built. Overall length, 6½"; speed, 1250 rpm. Three-jaw geared chuck with key. Three-wire lead cord. 115 VAC. Shpg. wt. 3 lbs.
958-1042 ..... 38.50

POWERFUL SANDERS FOR FAST SANDING AND REFINISHING

4½"x5⅛" ORBITAL SANDER

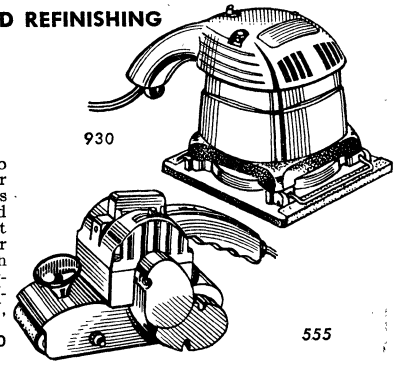
- Fast-Sanding 3/16" Orbital Action
- Quick-Change Sandpaper Clamps
- Smooth Ball-Bearing Operation

930. Easy-handling sander for removing old finishes, rough and finish sanding wood, smoothing dry-wall joints, polishing. Saves hours of tiresome hand work. Convenient quick-change paper clamps require no tools. Fast orbital action powered by 1.8 A motor. Ball bearing on sander drive plate. Trouble-free induction-type motor. 8" overall, weighs 4¾ lbs. 3450 orbits per minute. Paper size is 4½x6½". 3-wire cord. 115 VAC. Shpg. wt. 5½ lbs.
958-1930 ..... 17.95

ADJUSTABLE SPEED BELT SANDER

- Finger-Tip Speed Control Lets You Match Speed to the Job
- Sands Flush to Vertical Surfaces

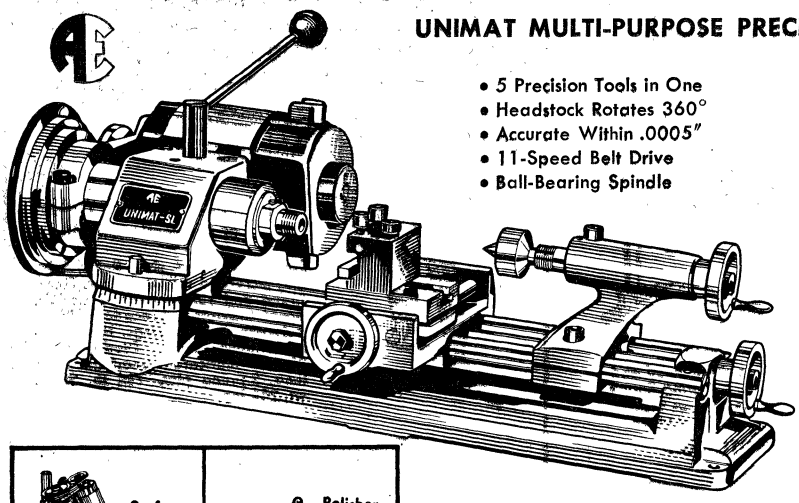
555. Finger-tip speed control allows you to match the sander speed to your job for perfect finishes every time. Use fast speeds with coarse grits to remove paint and varnish (open coat abrasive) . . . run at medium speeds with medium grit belts or switch to slower speeds for finishing with fine grit belts. Sands flush to vertical surfaces. Belt tracking adjustment. Self-lubricating bearings. 3-wire cord. 115 V, 50/60 Hz AC-DC. Shpg. wt. 8 lbs.
958-1048 ..... 42.00



930 555

Precision 5-in-1 Metal-Working Lathe

UNIMAT MULTI-PURPOSE PRECISION 3-INCH LATHE

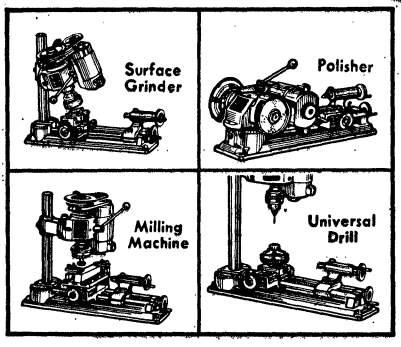


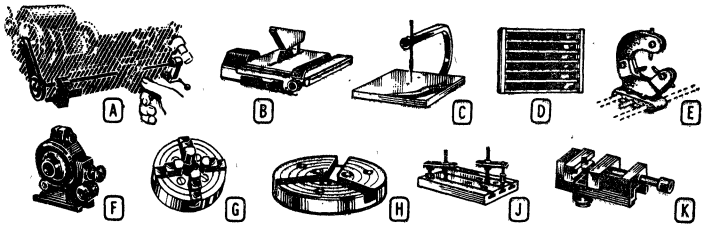
- 5 Precision Tools in One
- Headstock Rotates 360°
- Accurate Within .0005"
- 11-Speed Belt Drive
- Ball-Bearing Spindle

MODEL 1000. Lathe, drill press, milling machine, polisher, grinder—all in one compact, precision unit. Ideal for use in factory model shops. You can turn, face, grind, buff, saw, sand, thread, mill, drill . . . converts from one operation to another in seconds.

Headstock rotates and revolves 360°, locks at any angle, removes from bed for vertical set-ups. Has ball-bearing spindle accurate to .0005". Ball bearing idler assembly provides 11-speed drive system, powered by self-contained 1/10-hp, 115 VAC motor. Lathe takes pieces up to 3" diameter, 6.9" between centers. Drill takes pieces 6¼" high, drills to center of 6¼" circle. Also drills into large panels, plates and chassis by rotating head over end of bed.

Overall size, 14½x5x5". With drill chuck, roughing bit, wood chest, 40-page illustrated handbook. See full accessory listing below. For 115 volts AC. From Austria. Shpg. wt., 37 lbs.
970U1000.....158.79





A TYPE 1290 POWER FEED ATTACHMENT. Feeds carriage automatically for accurate and precision finishing. Wt. 6 lbs.
970-1290.....31.49

B TYPE 1240 CIRCULAR SAW ATTACHMENT. Provides straight, accurate cutting. Includes 6x8" table, rip fence, blade guard, and arbor. Order blades below. Shpg. wt. 4 lbs.
970-1240.....20.97

SLOTTING SAW BLADES FOR USE WITH 1240 SAW ATTACHMENT.

Type 1241 2½" Metal Cutting Blade. Shpg. wt. 5 oz.
970-1241.....Ea. 3.09

Type 1242 2½" Wood Cutting Blade. Shpg. wt. 5 oz.
970-1242.....Ea. 2.62

Type 1243 3⁹⁄₁₆" Wood Cutting Blade. Shpg. wt. 5 oz.
970-1243.....Ea. 2.89

C TYPE 1080 JIG SAW ATTACHMENT. Has 6x8" table. Complete with 12 assorted blades. Shpg. wt. 6 lbs.
970-1080.....26.23

D TYPE 2820 HIGH-SPEED ¼" TOOL BIT SET. Set of six. For turning, facing, boring, and cutting off. Shpg. wt. 8 oz.
970-2820.....Set 13.61

E TYPE 1040 STEADY REST. Supports 1½" bars and tubing for machining and end drilling. Shpg. wt. 1 lb.
970-1040.....11.82

F TYPE 1260 INDEX HEAD. Divides, spaces for making gears, etc. Shpg. wt. 1 lb.
970-1260.....20.92

G TYPE 1002 FOUR-JAW INDEPENDENT LATHE CHUCK. Takes pieces to 2¼". With key and mounting adapter. Wt. 1 lb.
970-1002.....31.49

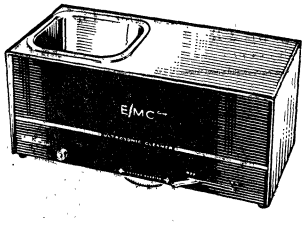
TYPE 1001 THREE-JAW UNIVERSAL CHUCK. (Not illus.) Takes pieces to 2¼". Wt. 1 lb.
970-1001.....31.49

H TYPE 1261 WORK PLATE. Holds work in lathe. Capacity, 2¾". Complete with clamps. Shpg. wt. 1 lb.
970-1261.....10.45

J TYPE 1210 MILLING TABLE. Size, 3x5". Mounts on cross slide, clamps work for milling. Shpg. wt. 2 lbs.
970-1210.....15.71

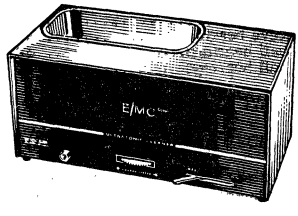
K TYPE 1010 MACHINE VISE. Fits cross slide or mill table. Has 1⅛" V-jaws. Shpg. wt. 13 oz.
970-1010.....12.09

ELECTROMATION COMPONENTS CORPORATION ULTRASONIC CLEANERS



MODEL LP-1HD INDUSTRIAL ULTRASONIC CLEANER

Scrubs all types of intricate articles. Cleaner generates ultrasonic high-frequency waves which separate clinging dirt from surfaces without physical contact which may cause damage to delicate parts. Cleans inaccessible places impossible to clean through any other method. For removing grease, tar, wax and other substances from components, miniature mechanisms, and small instruments. Automatic 5-minute industrial time switch turns unit off when cleaning cycle is over. Compact console, 9½x5x4⅝". Stainless steel top, sides and tank. Tank, 3½x3½x2½". Has 1-pint capacity. Power dial for low and high power. No tuning required. 90 kHz nominal, 40-watt RF input. 115V, 50-60 Hz AC. Shpg. wt. 6 lbs.
550-1050.....65.95



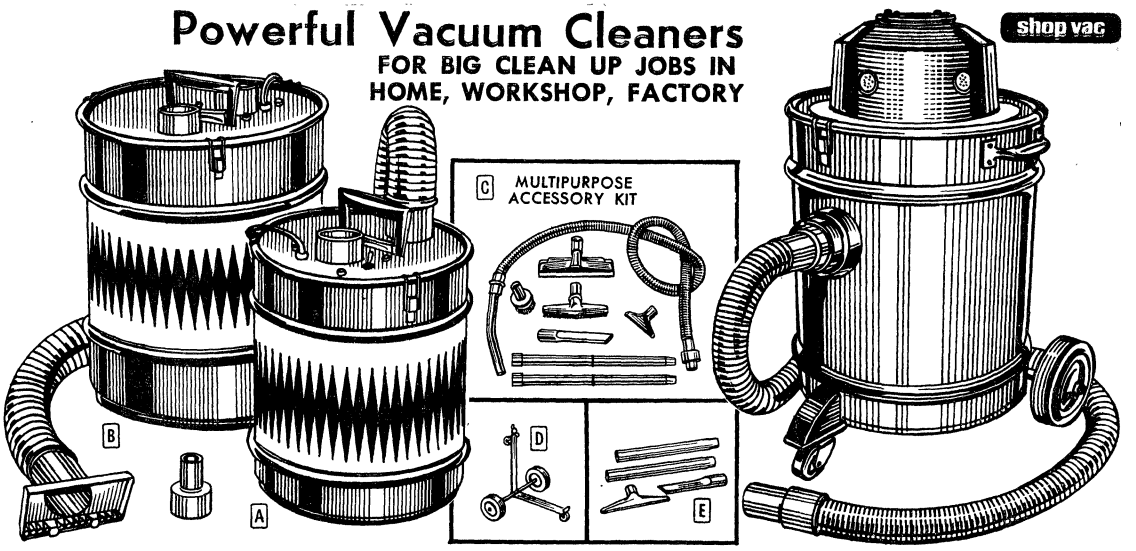
MODEL BP-1 INDUSTRIAL ULTRASONIC CLEANER

Has all the features of the Model LP-1HD at left, plus extra power and larger capacity for thorough, rapid cleaning in a greater range of industrial applications. Big 1-quart tank capacity provides double the volume of smaller model to clean more and larger articles in the same period of time. Ultrasonic principle provides quick and thorough cleaning to articles difficult or impossible to clean through conventional methods. For continuous use in production lines and labs. Automatic 5-minute industrial time switch prevents heat damage to delicate components. Power dial control. Operates at 90 kHz nominal, 30-watts RF input. Console size, 11¾x6½x5". Tank, 8x3½x2½". For 115V, 50-60 Hz AC. Shpg. wt. 7 lbs.
550-1000.....89.95

Powerful Vacuum Cleaners

FOR BIG CLEAN UP JOBS IN HOME, WORKSHOP, FACTORY

shop vac



STANDARD SUPER-VACS

A 22201 5-GALLON, 1-HP. 2½" dia. hose is 6 ft. long. 6" nozzle picks up sawdust, chips, stones. With cloth filter, disposable paper filter, 2½" to 1¼" adapter. 18x12" dia. U.L. 115 VAC.
825X1010. Shpg. wt. 15 lbs.....37.95

B 77701 10-GALLON, 1-HP. 19x15" dia.
825X1030. Shpg. wt. 20 lbs.....42.95

WET AND DRY VAC WITH 3-WHEEL DOLLY

46001 10-GALLON. Picks up liquids and wet shavings as well as dry refuse. For indoors-outdoors—patios, basements, driveways. Dolly lets you trail vac in direction of hose. Uses 1½"-1¼"-2½" hoses without any adapters. With 1½" dia., 7-ft. hose. 115 VAC.
825X1020. Shpg. wt. 30 lbs.....99.50
825X1110. 93301 20-GALLON. Shpg. wt. 35 lbs.....149.50

WET AND DRY ACCESSORIES FOR SHOP-VAC VACUUM CLEANERS

C 80122 1¼" DIA. ACCESSORY KIT. Tools for general cleaning. With 1¼" adapter for 2½" vacuums.
825X1040. Wt. 4 lbs.....19.50

E 80130 2½" DIA. ACCESSORY KIT.
825X1050. Wt. 1½ lbs.....9.95

D SHOP-VAC DOLLIES. With bag that holds extension handles, etc.

825X1090. 90212 For 10-Gallon Vacuum. Shpg. wt. 4 lbs.....6.95

825X1100. 90213 For 5-Gallon Vacuum. Shpg. wt. 4 lbs.....6.95

90133 6'x2½" DIA. FLEXIBLE HOSE.
825X1080. Wt. 2¾ lbs.....6.95

90116 2½" CREVICE NOZZLE.
825-1070. Wt. ½ lb.....3.75

90101 PAPER FILTER BAGS. Pkg. of 5.
825-1060. Wt. ½ lb.....1.00

MICROFLAME® GAS WELDING TORCHES

MODEL 1000. Miniature torch welds, brazes, solders and cuts even rare metals with pinpoint accuracy. Complete with torch, flame tips, torch tube, gaskets, butane and oxygen cylinders and instructions. Size, 5¼x2x1¼".
862-3300. Wt. 16 oz.....20.74

MODEL 4000. Miniature torch set contains torch with six miniature oxygen and three LP cylinders. Cylinders mount in torch housing. Also includes spark igniter, welding tips, brazing rods and bracket.
862-3414. Wt. 2 lbs.....31.00

MODEL 5000 INDUSTRIAL/HOME TORCH. Miniature torch produces 5000° F flame. Handles most welding, brazing, soldering and cutting jobs with ease. Set is complete with three flame tips, oxygen tank (75 liter) and LP tank (26.7 oz.), valve regulators, hoses, bracket assembly. Order accessories at right.
862-3416. Wt. 9 lbs.....107.20

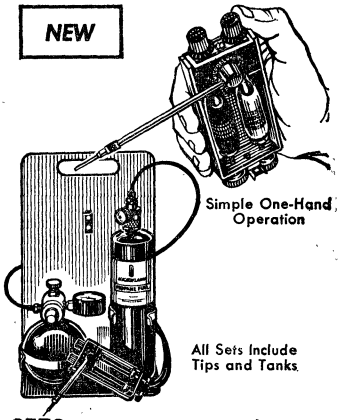
ACCESSORIES FOR MICROFLAME TORCHES

862-3405. Model 3100 Brazing Rod Kit. Contains 18 silver brazing rods, 6 aluminum brazing rods, 2 jars flux, hot block sand paper, brush, instructions.....9.90
862-3404. Type 3000B Gold/Silver Alloy Brazing Rods. Wt. ¾ oz....Pkg. of 12/13.90
862-3406. Type 3101 Silver Solder Brazing Rods. Shpg. wt. 1 oz.....Pkg. of 12/2.60
3102 Aluminum Rods. 1 oz.
862-3408.....Pkg. of 6/1.00
862-3410. 3103 Silver Solder Flux. 1.5 oz. .50
862-3412. 3104 Aluminum Flux. 1.5 oz....50
862-3400. 1001 Oxygen Cylinder. Shpg. wt. 13 oz Each in packs of 10.....78
862-3402. 1002 Butane Cylinder. Shpg. wt. 8 oz. Each in Packs of 6.....52

ACCESSORIES FOR MODEL 5000 ONLY

862-3418. 5006 Oxygen Tank. 2 lbs..22.00
862-3420. 5007 Propane Tank. 2½ lbs. 3.20

NEW

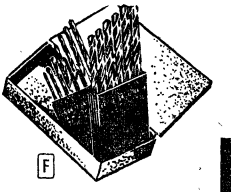


F CONSOLIDATED HIGH-SPEED DRILL BIT SETS

D15 15-DRILL SET. 1/16" to ½" in 32nds. Index.
761-0115. Shpg. wt. 2¼ lbs.....21.32
D29 29-DRILL SET. 1/16" to ½" in 64ths. Index.
761-0129. Shpg. wt. 3¾ lbs.....39.38
D60 60-NUMBER SIZE DRILL SET. 1 to 60. Index.
761-0160. Shpg. wt. 1¼ lbs.....27.22
DC5 HIGH-SPEED 5-DRILL SET. ¼" to ½" in 16ths.
761-0180. Shpg. wt. 5 oz.....10.82
17PC 17-DRILL SET. 1/16" to ¼" in 64ths; 5/16, ⅜, 7/16", ½, ¼" shank. Steel index.
761-0200. Shpg. wt. 2 lbs.....17.12

CJ13P 12-PIECE DRILL SET. Sizes from 1/16" to ¼" in 64ths. Includes center punch. Pouch.
761-0013. Shpg. wt. 9 oz.....7.56
CJ14P 13-PIECE DRILL SET. 1/16" to ½" in 32nds. Drill sizes over ¼" have ¼" shank. With roll-up pouch. Shpg. wt. 3 lbs.
761-0014.....18.20

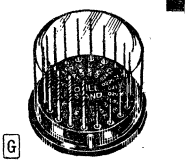
G CJ20B MINIATURE SET. Includes twenty drills from No. 61 (.039") to No. 80 (.0135"). With index. Shpg. wt. 6 oz.
761-0020.....10.96



F

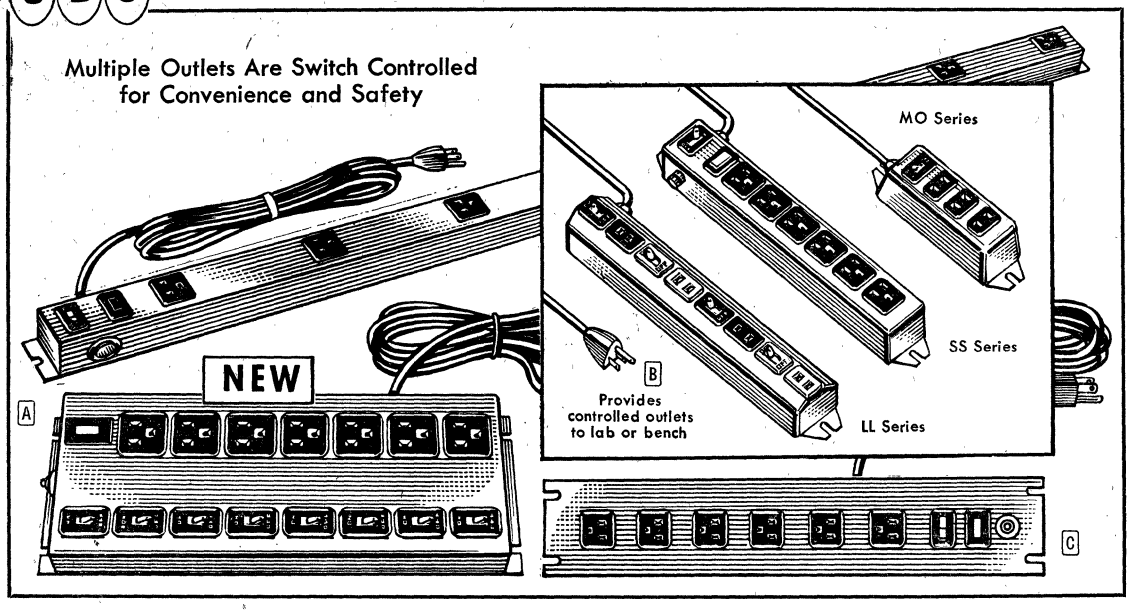
JOBBER'S-LENGTH HIGH-SPEED DRILL BITS FOR ¼" DRILLS

Stk. No.	Type	Size	EA.	Stk. No.	Type	Size	EA.	Stk. No.	Type	Size	EA.	Stk. No.	Type	Size	EA.
761-1003	100-1/16	1/16"	.26	761-1007	100-1/8	1/8"	.38	761-1011	100-3/16	3/16"	.58	761-1019	100-5/16	5/16"	1.42
761-1004	100-5/64	5/64"	.28	761-1008	100-9/64	9/64"	.40	761-1013	100-7/32	7/32"	.72	761-1023	100-3/8	3/8"	2.10
761-1005	100-1/32	1/32"	.30	761-1009	100-5/32	5/32"	.46	761-1014	100-15/64	15/64"	.78	761-1027	100-7/16	7/16"	2.90
761-1006	100-7/64	7/64"	.30	761-1010	100-11/64	11/64"	.48	761-1015	100-¼	¼"	.88	761-1031	100-½	½"	3.60



G

CBC Master Switches, Outlets, Power Controls



A ML-SS-GD SERIES

One master switch controls power to seven color-coded "U" type ground outlets with color-matched sub-switches. Pilot light. Length, 13⅛"; 4¾x1⅝".

533-2000. ML-SS-GD-10. 3 lbs. Fused.
1-2.....Ea. 19.70 3-Up.....Ea. 15.50
533-2010. ML-SS-GD-CB-10. 5 lbs. Ckt. Bkr.
1-2.....Ea. 20.90 3-Up.....Ea. 10.45

B CBC MULTIPLE-OUTLET CONVENIENCE BOXES

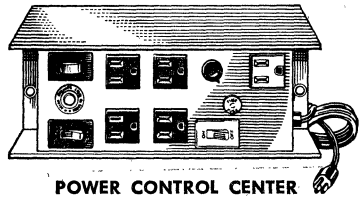
Extend electrical power to lab or bench. Rated 15 A @ 130 V. On/off switches. **Series MO and SS.** MO-3 has one switch for three 2-wire outlets and plug. SS and SS-CB have individually switched color-coded 2-wire outlets. MO-GD and MO-GD-CB have pilot light, switch, 3-wire, "U" ground outlets with 3-wire plug. 13x2x1½", 10-ft. cord, except MO-3, 5x2x1½", 6-ft. cord. **Series LL.** 4-ft. boxes with 3-wire "U" ground outlets, switch and neon pilot light, 10-ft. cord. 8 outlets or 15. LL-SS-GD-CB-8-10 has individually switched outlets. *Individual pilot lights. 49x2x1½". Steel cases.

Stock No.	Mfr's Type	Lgth.	No. of Outlets	Outlets 2-Wire	Outlets 3-Wire	Fused	Circuit Breaker	Wt., Lbs.	EACH 1-2	EACH 3-Up
533-2030	MO-3	5"	3	X		X		1½	5.00	3.75
533-4000	SS	13⅛"	4	X		X		2¼	7.80	6.25
533-2050	MO-GD*	13⅛"	6		X	X		2¾	10.50	7.95
533-2020	MO	13⅛"	6	X		X		2¼	7.80	6.25
533-4050	SS-CB	13⅛"	4	X			X	2¼	9.50	8.57
533-2060	MO-GD-CB*	13⅛"	6		X		X	2¾	13.00	10.29
533-2040	MO-CB	13⅛"	6	X			X	2¼	9.50	8.57
533X1000	LL-GD-8-10	49"	8		X	X		6	18.80	14.95
533X1020	LL-GD-CB-8-10	49"	8		X		X	6	20.10	15.95
533X1010	LL-GD-15-10	49"	15		X	X		6	24.00	18.95
533X1030	LL-GD-CB-15-10	49"	15		X		X	6	25.90	20.95
533X1040	LL-SS-GD-CB-8-10	49"	8		X		X	6	25.00	19.95
533X1050	LL-SS-PL-GD-8-10*	49"	8		X		X	6	26.50	20.95

C RACK MOUNT CONTROL PANEL

Rack mounted control panel has one master switch which controls power to six "U" type grounded outlets. Pilot lights indicates when power is switched on. 10' cord. 3½x9". Shpg. wt. 6 lbs.

533-5000. TR-MO-GD-10. Fuse Type...13.90
533-5010. TR-MO-GD-CB-10. Circuit Breaker Type.....15.10

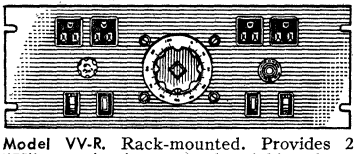


POWER CONTROL CENTER

Speedtrol Type PSC-3000. Variable speed control for any power device or portable tool using AC-DC universal motor not exceeding 7 amps. 3% to 50% of full speed adjustment. Switch selects variable or full speed. Master switch controls power to entire unit including four independent AC "U" ground outlets. 5 amp. fuse protects speed control. 15 amp circuit breaker for entire unit.
533-3000. Shpg. wt. 23 lbs.....25.00

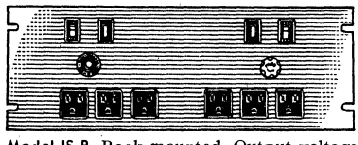
NEW . . . SPECIALIZED POWER CONTROLS

VARIABLE VOLTAGE CONTROL CENTER



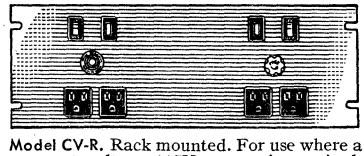
Model VV-R. Rack-mounted. Provides 2 "U" type circuit-protected variable voltage outlets adjustable 0-130V, 10 A max. Provides also 2 "U" type fixed voltage outlets. Separate on-off switch, indicator light and circuit breaker for line voltage output and fuse for variable voltage output. One outlet of each section is installed in the rear. Input: 117 V, 60 Hz nominal. Output: (non-variable): 117 V, 60 Hz nominal, 15 amps maximum. Output (variable): 0-130V, 10 amps max. 7x19x5". Wt.: 23 lbs.
533X5500.....113.30

ISOLATED VOLTAGE CONTROL CENTER



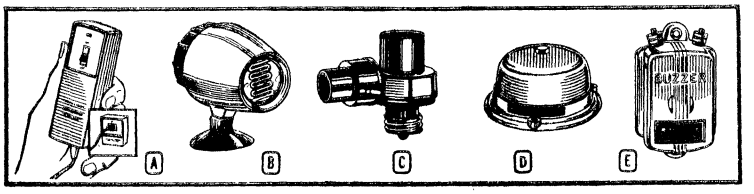
Model IS-R. Rack mounted. Output voltage from isolation section completely isolated from input line to avoid shock-hazards and provide flexible grounding with exposed circuits. Isolated section has separate on-off switch, indicator light, 3 "U" type grounding outlets and fuse for circuit protection. Non-isolated section has circuit breaker, light, swtich and three "U" outlets. Input: 117V, 60 Hz nominal. Isolated output: 117V, 2 amps max. Non-isolated output: 117 V, 15 amps max. 7x19x5". 23 lbs.
533X0950.....97.30

CONSTANT VOLTAGE CONTROL CENTER



Model CV-R. Rack mounted. For use where a constant voltage 117V output is required. Constant voltage section features on-off switch, indicator light, 3 convenience outlets a (2 on front of panel and one in rear) and fuse for circuit protection. Separate section is provided for unregulated line voltage. This section is similarly equipped and has independent circuit protection. Input: 95-130V, 60 Hz. Unregulated output: 95-130V, 15 amps max. Constant voltage output: 117V ±1% at 1.5 amp max. 7x19x5".
533X0900. Shpg. wt. 23 lbs.....119.90

Electronic Warning Devices, Tools, Tape



LIGHT CONTROLS AND WARNING ACCESSORIES FOR YOUR SAFETY

A REALISTIC SERVOSWITCH WIRELESS REMOTE CONTROL. Controls moderate wattage electrical devices through remote transmission. Transmitter and receiver are plugged into regular wall outlets; receiver accepts standard AC plug. Transmitter has on-off switch. Accepts up to 300 watts. For 50-60 Hz AC. Receiver size, 3¼x2⅞x1½". Transmitter, 5¼x1¾x1½". Shpg. wt. 2 lbs.
910-6696. Type 275-696.....14.95

B ARCHER INDOOR LIGHT CONTROL. Helps discourage burglary and vandalism—installation is simplicity itself. Light to be controlled plugs into unit, unit plugs into any standard AC socket. Photo-electric eye turns light on at night, off in the morning. Shpg. wt. 1½ lbs.
910-6330. Type 272-330.....4.95

C ARCHER OUTDOOR LIGHT CONTROL. Photoelectric light control lights up driveways, patios, gardens. Automatically turns lights on at dusk, off at dawn. Takes regular or floodlight bulbs—screws into light socket. Shpg. wt. ½ lb.
910-6305. Type 272-207.....4.95

D ARCHER ELECTRIC ALARM BELL. Emits a loud, clear ring that overcomes high level background noise. Ideally suited for photo-electric alarm systems. Durable chromeplated bell on metal base. Size, 4x2". AC operated. Shpg. wt. 1 lb.
910-6410. Type 273-020.....2.98

E ARCHER ELECTRIC ALARM BUZZER. Produces a clear, distinct warning. Can be used with virtually any alarm system. Sturdy plastic housing with screw terminal connections. Size, 2¼x½x1". Operates on regular AC house current. Shpg. wt. ¼ lb.
910-6415. Type 273-048.....1.98

REALISTIC POWERHORN® SECURITY SYSTEM

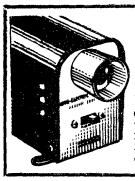
29.95

- Electronically Guards Against Intruders
- Easily Installed
- Fail-Safe Operation

Provides warning and effective protection in office, factory, shop or home against intruders or any unwelcome entry. Electrical failure or disconnection does not disable alarm system—can be used anywhere without dependence on outside power. Alarm is switch-activated when window or door equipped with contact switch is opened, breaking circuit between switch and master unit. Produces loud blast of noise capable of alerting those nearby and scaring off would-be intruder. Unit can be set and location vacated without sounding alarm, using special delay provision. Key-controlled and tamperproof.

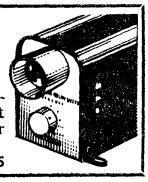
Compact and unobtrusive—can easily be installed in small inaccessible places, out of sight or reach of potential intruder. Mounts on walls with pressure-sensitive tape. Capable of monitoring 50 additional switches. With 30 feet of wire, one magnetic switch, set of keys, instructions. Requires 3 "D" batteries. 3⅜x12x1⅞". Shpg. wt. 1 lb.
910-6690. Type 275-490.....29.95
910-5114. "D" Batteries. 1 lb.....Each .19
910-6959. 100-ft. Extension Wire. 1 lb..2.49
910-6691. Magnetic Switch. 1 oz. Each 2.99

ARCHER PHOTO-ELECTRIC RELAY WARNING SYSTEM



- 50 Foot Range
- Metal Housings

Can be used as intrusion alarm or counter system. Photocell receiver has sensitivity control to adjust for ambient light level to eliminate spurious response. Switch exciter lamp is separately housed. Each, 5½x4x2⅞".
910-6689. Type 275-489. Shpg. wt. 6 lbs.....21.95



MALLORY SONALERT SOLID-STATE AUDIBLE WARNING DEVICE

Solid state miniature audible-signal warning device, emits a discernible signal at minimum current. Eliminates arcing and RF noise. Use with communications control systems; appliances; automotive functions etc. *Type SC628P emits pulsing sound output. Av. shpg. wt. 8 oz.

Ideal Safety Device

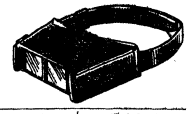
SPECIFICATIONS

Mfr's Type	Freq.	Volts	mA	dB	Temp. F°
SC628	2.5 kHz	6-28DC	3-14	68-80	−40, +120
SC628P*	2.5 kHz	6-28DC	3-14	68-80	−40, +120
SC628H	4.5 kHz	6-28DC	3-14	68-80	−40, +120
SC628A	2.5 kHz	6-28AC/DC	3-14	68-80	−40, +120
SC110	2.5 kHz	110AC/86DC	14	80	−40, +120

ORDERING INFORMATION

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-249	250-499
854-6502	SC628	7.95	5.50	5.40	5.15	4.65	4.15
854-6508	SC628P*	14.27	9.95	9.75	9.30	8.40	7.45
854-6506	SC628H	9.15	6.35	6.25	5.95	5.40	4.80
854-6504	SC628A	12.60	8.75	8.60	8.20	7.40	6.60
854-6500	SC110	12.60	8.75	8.60	8.20	7.40	6.60

"SIGHTMASTER" 3-D MAGNIFIERS



Offer three-dimensional magnification up to 3½ times. Have precision-ground and polished prismatic lens. Adjustable headband. Av. shpg. wt. 1 lb.

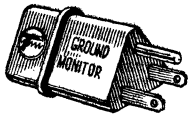
Stock No.	Type	Distance	Magnifies	EACH
950-0003	3	14"	1¾X	7.15
950-0005	5	10"	2¼X	7.15
950-0007	7	8"	2¾X	8.15
950-0010	10	4"	3½X	9.17

MICRONTA FLIP-UP MAGNIFIER

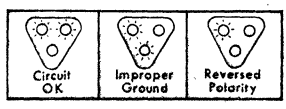
Precision-made glasses magnify objects 2½ times. Flip-up design keeps hands free for crafts and hobby work. Fine ground and polished lenses; virtually unbreakable. Adjusts to any head; comfortable to wear for long periods. Shpg. wt. 1 lb.
910-5745.....3.95

Keeps Hands Free

DEARBORN 3-WIRE CIRCUIT MONITOR TYPE 5012B



Tests whether proper ground is available from three-wire AC outlets. Simply plug into three-wire receptacle. Lights indicate: Circuit Okay; Improper Ground; Improper Neutral; Reverse Polarity; Reversed Ground and Power; Power is Off. Compact, for easy use anywhere.
768-9090. Wt. 6 oz.....5.95



ARCHER ELECTRICAL TAPES

VINYL ELECTRICAL TAPE. For all uses at temperatures up to 80° C. High dielectric strength of 10,000 volts. Thickness, .007".

Stock No.	Type No.	Size	EACH 1-2	3-11	12-Up
910-5828	64-2348	½" x 12½'	.29	.25	.22
910-5829	64-2349	¾" x 20'	.49	.44	.39
910-5830	64-2350	¾" x 66'	1.09	.99	.89

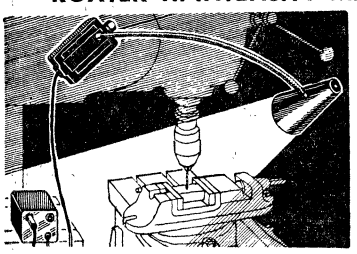
FRICTION TAPE. Heavy-duty cotton base, finest adhesive. Abrasion and moisture-resistant. A full ¾" by 60'.
910-5802. Type 64-1956. Shpg. wt. ½ lb.....59

"SURE-GRIP" MASKING TAPE. Non-marking adhesive cannot mar paint or plastic. Size, ¾" by 60 yards.
910-5800. Type 64-188.....79

JUMBO MASKING TAPE. Non-marking. 2" wide x 60 yards.
910-5801. Type 64-190.....1.89

Great Values in Lamps For All Purposes

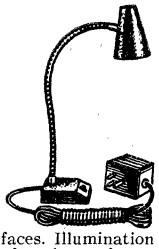
ROXTER HI-INTENSITY MINIATURE LAMPS "AIM" THE LIGHT WHERE YOU NEED IT



MAGNETIC-BASE UTILITY LAMP

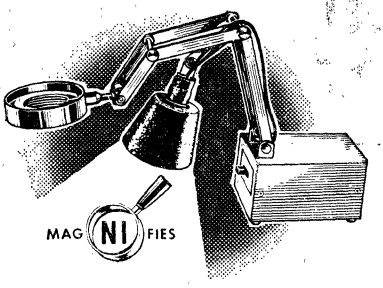
MODEL 6480. Magnetized base mounts directly on machines, etc. 12" chromed gooseneck adjusts to any position. 45 footcandles at 12". All-metal, black finish. Separate step-down transformer has on-off switch, pilot light. 5-ft. cord between lamp, transformer. With #93 bulb. For 115 VAC.
564-6480. Shpg. wt. 3 lbs.....**19.95**

MODEL 6480M. As above, but with base plate and two mounting holes for permanent mounting on machines, etc.
564-6481. Shpg. wt. 3 lbs.....**19.95**



MODEL 6490. Carefully designed for factory, workshop, and field service. Foot-long flexible arm twists and turns to virtually any position. Magnetic base adheres to machines, table, etc. With rear hook for hanging to non-magnetic surfaces. Illumination equals 100 watts. End-of-cord transformer. With #93 bulb.
564-6490. Shpg. wt. 2 lbs.....**19.95**

MODEL 5979. SUBMINIATURE HI-INTENSITY LAMP. Three #55 6-V bulbs. For 105-130 VAC. Shpg. wt. 2 lbs.
564-5979.....**13.95**



HIGH-INTENSITY LAMP/MAGNIFIER

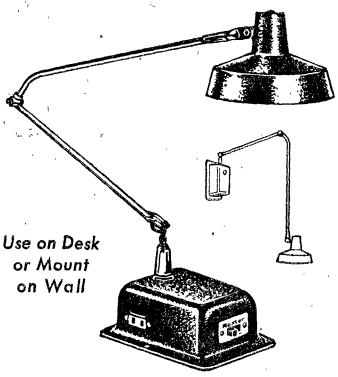
MODEL 7175. Features 2½" magnifier with 7" focal length for close detail work. Magnifier arm swivels vertically and magnifier rotates on its axis. Independent movement of lamp head and magnifier. Hi-Lo switch for 500 or 250 footcandles. Measures 2½x2½x10" when folded. Constructed ruggedly of all metal; nylon feet. Complete with one 6-volt #1133 bulb. Built-in step-down also features transformer. For 110-120 volt, 60 Hz AC. Lens Power: 2X.
564-7175. Shpg. wt. 3 lbs.....**26.95**

MODEL 7174. As above, but with 2½" diameter. Lens Power: 5X.
564-7174. Shpg. wt. 3 lbs.....**29.50**

HIGH-INTENSITY LAMP WITH 4½" MAGNIFIER

MODEL 7176. As above, but with big 4½" diameter lens. Equivalent to 200 watts in high range. With one #1133 6-volt bulb. For 110-120 volts, 60 Hz AC. Wt. 3 lbs.
564-7176.....**29.95**

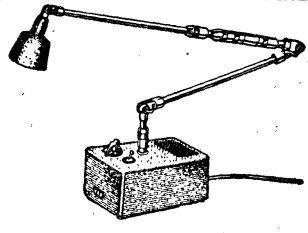
ENGINEER'S LAMP



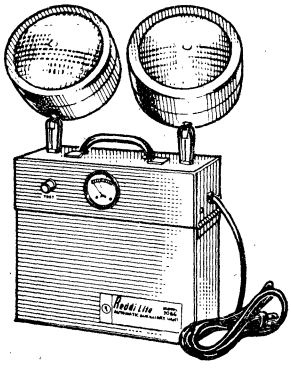
MODEL 7500. The most versatile lamp ever designed for office and industrial use. Has 24" long plug-in arm with a full 4¼"-diameter reflector for extra reach and wide-area illumnation. Built-in H-Lo intensity switch. Has 110-volt AC "convenience" outlet for plugging in other electrical devices. Built-in step-down transformer for efficient 12-volt operation. With bulb. Includes screws for wall mtg. Styled in black. Shpg. wt. 8 lbs.
564-7500.....**26.50**

PROFESSIONAL HI-INTENSITY LAMP

MODEL 5900. Offers the ultimate in intensity, color, temperature and mechanical positioning. Five intensities—up to 7000 foot-candles. Plug-in lamp arm swivels 360° vertically and horizontally. AC convenience outlet on base. All-metal with neutral wrinkle finish; non-scratch nylon feet. Designed for safe, cool low-voltage operation. With one #1133 bulb. Built-in transformer. 110-120 V, 60 Hz AC.
564-5900. Shpg. wt. 3 lbs.....**52.95**

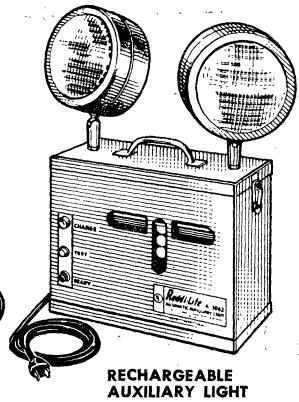


AMERICAN DRYER EMERGENCY LIGHTS FOR OFFICE, SHOP, FACTORY



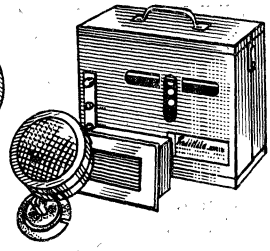
BATTERY-OPERATED POWER FAILURE LIGHT

MODEL 2086. Plugs into any AC outlet. In case of power failure, two 7½-V battery-operated lights operate up to 5 hours each, covering 2500 square feet. Test switch checks 5" lights, battery. Steel cabinet, 10½x5½x10¼, 17⅜" high. Mounting brackets, cord. U.L. Listed. Less battery. Shpg. wt. 10 lbs.
724X2086.....**39.95**
Requires one 4F5H Battery for operation—see page 397.



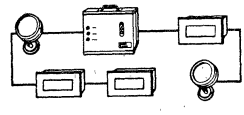
RECHARGEABLE AUXILIARY LIGHT

MODEL 3062. Rechargeable wet cell battery operates at 30 amperes per hour. 5" sealed beam heads illuminate up to 10,000 sq. ft. for 3¾ hours. Equipped with test switch, power supply light, cut-off switch, and tapering rate charger. A-type is portable plug-in; E-type is permanently wired to line. Gray baked enamel. 15½x6¾x17¾" high. 36 lbs.
724X3062. Type A.....**149.95**
724X3063. Type E.....**149.95**



MODEL E-3060. One of the most flexible emergency light systems. Approved for 100 watts total load. The two lighting fixtures available (Model 774 and X-20) with power source unit may be combined in any manner as long as wattage does not exceed 100 watts on any one remote unit. 7x3¼x3½".
724X0005.....**129.95**

LIGHT HEADS AND FIXTURES FOR E-3060



- 774 Flush Mounts on Wall or Ceiling
- Ideal For Emergency or Exit Lights

APPLICATION GUIDE PLAN

Watts Drain	No. & Type of Fixture Recommended With E-3060	Burning Hours
100	(4) #X-20's or (3) #X-20's & (1) #774 or (2) #X-20's & (3) #774's or (1) #X-20 & (5) #774's	1.9
85	(3) #X-20's or (2) #X-20's & (2) #774's or (1) #X-20 & (4) #774's	2.2
60	(2) #X-20's or (1) #X-20 & (2) #774's or (4) #774's	3.2
45	(1) #X-20 & (1) #774 or (3) #774's	4.2
30	(2) #774's	6.3
15	(1) #774	12.7

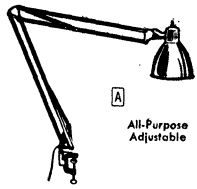
ACCESSORIES

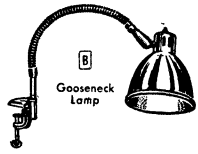
724-0020. Type X-20. Head with base.....**11.50**
724-0021. Type X-21. Head only.....**10.00**
724-0022. Type X-22. Base only.....**1.50**
724-0774. Type 774. Ceiling fixture.....**14.00**
724-0010. Type MP-1. Mounting platform.....**11.50**

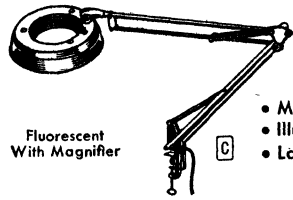
Best Buys in Desk Lamps and Accessories

ALLIED ADJUSTABLE MULTI-PURPOSE LAMPS

[A] **MODEL 1000 ALL-PURPOSE LAMP.** Low-cost lamp, perfect for the service bench, desk or workshop. Raises, lowers and turns at slightest pressure of the hand. Spring-controlled for proper flexibility, steady positioning. Arms extend to 45" for full coverage. Shade is vented for rapid heat dissipation. With "C" mounting clamp. Gray finish. Uses incandescent bulb. U.L. Listed components. 110-120 V, AC/DC. Shpg. wt. 5 lbs.
707-1000X. 1-2....Ea. 18.75 3-Up...Ea. 16.69





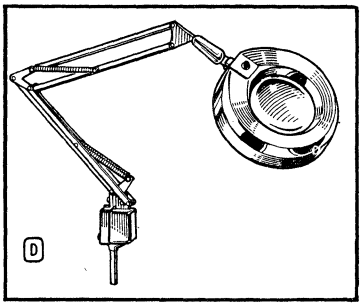


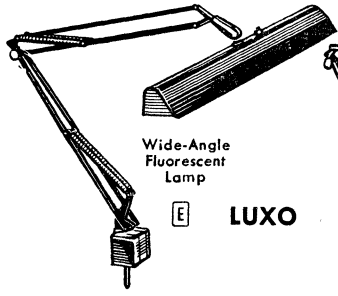
- Magnifies
- Illuminates
- Large 5" Lens 13" Focus

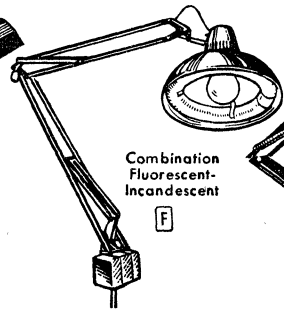
[B] **MODEL 1030 GOOSENECK LAMP.** Extreme flexibility lets you put light where it does the most good. Lamp shade rotates on joint to direct light. Gooseneck extends over 30° circle. Uses 60 to 100-watt bulb. All-metal construction. On-Off switch on top of vented shade. Finished in dove gray baked enamel. With "C" clamp for easy mounting. Uses incandescent bulb. U.L. Listed components. For operation from 110-120 volts, AC/DC. Shpg. wt. 5 lbs.
707-1030X. 1-2....Ea. 12.25 3-Up....Ea. 9.50

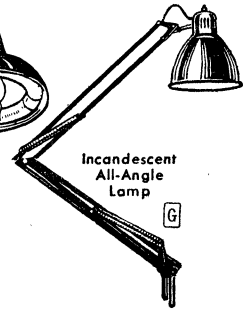
[C] **MODEL 1050 FLUORESCENT MAGNIFIER LAMP.** Provides distortion-free magnification and cool fluorescent light. Large 5" lens with 13" focus. Arms extend to 45" for full coverage. Spring-controlled and counter-balanced for easy positioning. All-metal construction with "C" mounting clamp. Finished in gray. Fluorescent tube included. U.L. Listed components. For 110-120 volts, 60 Hz AC. Shpg. wt. 10 lbs.
707-1050X. 1-2.....Each 44.25
3-Up.....Each 37.29

LUXO LAMPS AND ACCESSORIES









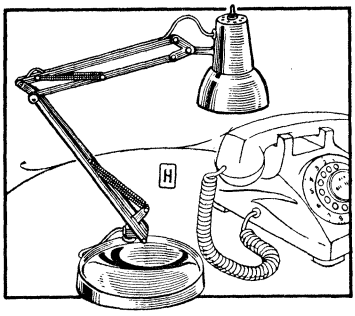
LUXO

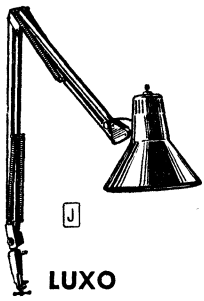
[D] **MODEL LFM-1.** Fluorescent lamp with distortion-free 5" magnifier. For assembly, inspection. Spring-balanced 18" arms—45" reach, sweep 360°. 3-diopter, bi-convex lens. Gray. U.L. Listed. 6-ft. cord, fluorescent tube. Mtg. bracket below, right. AC.
848X9480. Shpg. wt. 8 lbs. **1-2...Each 44.96 3-Up...Each 37.54**

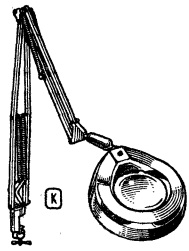
[E] **MODEL FL-1.** 2-tube fluorescent lamp for office, drafting room or home. Spring balanced arms stay put. Full 45" reach. Swivels 360°. Gray. 6-ft. cord. 2 fluorescent tubes. Order mounting brackets below, right. U.L. Listed. AC.
848X9450. Shpg. wt. 8 lbs. **1-2...Each 33.74 3-Up...Each 28.15**

[F] **MODEL LC-1.** Combination lamp features circular fluorescent tube plus incandescent bulb. Lights can be used individually or together. 45" reach; sweeps 360°. Gray. U.L. Listed. With fluorescent tube. Order mounting brackets below. AC.
848X9470. Shpg. wt. 7 lbs. **1-2...Each 31.50 3-Up...Each 26.30**

[G] **MODEL LB-1.** Incandescent lamp adjusts with touch of the hand, then stays put. Has 45" reach; swivels 360°. Vented 4½" shade. Disposable inner reflector. U.L. Listed. Uses standard incandescent bulbs. Order mounting bracket below. AC.
848X9460. Shpg. wt. 5 lbs. **1-2...Each 20.80 3-Up...Each 17.36**

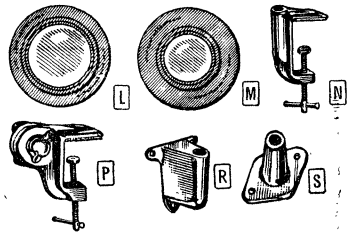






LUXO

ACCESSORIES FOR LUXO LAMPS



[H] "LUXO LIL" DESK LAMP

Petite-sized high-intensity lamp swings, swivels and extends into the exact position you want at the touch of a hand. Once properly set, perfect balancing keeps the lamp where you've placed it. Hundreds of uses at home, school or the office. Directs light *exactly* where it's needed to improve lighting and efficiency. Vented design keeps shade cool even under continuous use. 24" fully extended. 7" base. Pleasant red finish. With 40S11 bulb. AC.
848X9490. Shpg. wt. 5 lbs.....**17.96**
848-9500. Spare "Lil" Bulb. 4 oz.....**.94**

[J] **MODEL CS-1A CROWN LITE.** Fine all-purpose lamp that adjusts with finger touch. Extends a full 40". Vented shade stays cool. Uses standard 60-watt incandescent bulb. Modern styling, attractive stone gray finish. Clamp mounting. AC.
849X9445. Shpg. wt. 5 lbs.....**16.15**

[K] **MODEL CM-1/A ILLUMINATED MAGNIFIER.** Fluorescent light and maneuverability in one package. Spring balanced, 45" extension. 3 diopter 5" ground glass lens. Clamp-on bracket. Grey. With T-9 22W Circline Tube.
848-9443. Shpg. wt. 8 lbs.....**31.04**

AUXILIARY LENSES. For use with HFM-ST or CM-1/A lamps. Clip onto underside of shade for more magnification. Plano-convex lens. With clip. *Diopter. Shpg. wt., 1 lb.

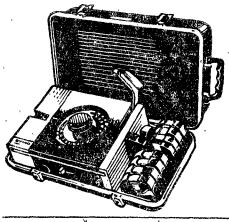
Stock No.	Type	*	Fig.	EACH
848-9520	1	4	L	8.82
848-9521	2	8	M	11.38

LAMP BRACKETS. For mounting Luxo adjustable lamps. Figures (N) and (P) are clamps; (R) and (S) are screw type. *Mounting surface. Shpg. wt. 1½ lbs.

Stock No.	Type	*	Fig.	EACH
848-9410	A	Flat	N	2.26
848-9440	F	Slanted	P	3.16
848-9420	B	Vertical	R	2.26
848-9430	C	Flat	S	2.26

Dymo Vinyl-Tape Labelmakers and Outfits

MODEL 2300 ¾" TAPEWRITER



Bench model "Tapewriter" embosses letters a full ½" high on ¾" vinyl tape. Prints 104 characters (52 horizontally, 52 vertically) with a single wheel. High legibility, greater reading distances provide far more application possibilities than smaller tapes. Fitted in carrying case with nine ¾"x36-ft. tape in assorted colors. Desk and door plates below offer personalized low-cost identification. Shpg. wts.: Tapewriter, 10 lbs.; Signs, 5 lbs.

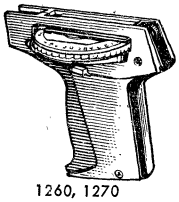
Stock No.	Mfr's Type	Description	EACH ONE	EACH 2-Up
773-2300	2300-01	2300 Tool N' Tape Outfit	208.95	179.95
773-3800	3800-20	40 Door Signs, 10" L black plas.	29.95	25.00
773-3803	3803-20	40 Desk Signs, 10" L, black plas.	29.95	25.00

¾"x36-FT. TAPE FOR MODEL 2300

Stock No.	Mfr's Type	Color	EACH 1-10	EACH 11-50	EACH 51-100
773-5002	5134-02	Red	8.34	6.95	5.99
773-5004	5134-04	Orange	8.34	6.95	5.99
773-5005	5134-05	Green	8.34	6.95	5.99
773-5006	5134-06	Blue	8.34	6.95	5.99
773-5008	5134-08	Brown	8.34	6.95	5.99
773-5009	5134-09	Black	8.34	6.95	6.95
773-5013	5134-13	Gold	8.34	6.95	6.95
773-5060	5134-60	Woodgrain	8.34	6.95	6.95
773-5109	5135-09	Non-glossy black	8.34	6.95	6.95

MODEL 1270 ½" TAPEWRITER

Large 0.2" impression made on ½" vinyl tape. Uses standard, vertical or special character embossing wheels. Includes carrying case, one roll extra-length tape. **Tool N' Tape Outfit.** Tapewriter, 10 rolls extra-length tape, standard horizontal embossing wheel, giant (¼") letter wheel, vertical wheel, special character wheel, carrying case and belt clip key ring. Shpg. wts.: tool, 1 lb.; outfit, 3 lbs.



1260, 1270

MODEL 1260 ⅜" TAPEWRITER

Rugged all-metal tapewriter embosses ⅜" tape with .2" characters. Same design as 1270 above. Includes carrying case, one roll extra-length tape. **Tool N' Tape Outfit.** Includes Model 1260 tapewriter, standard letter horizontal wheel, .180" horizontal wheel, .160" vertical wheel, and special character wheel. With carrying case and belt clip key ring. Shpg. wts., tool, 2 lbs.; outfit, 3 lbs.

Stock No.	Mfr's Type	Description	EACH ONE	EACH 2-Up
773-1270	1270-00	1270 Single Tool	22.95	19.95
773-1271	1270-01	1270 Outfit	34.95	29.95
773-1260	1260-00	1260 Single Tool	21.95	18.95
773-1261	1260-01	1260 Outfit	33.95	28.95

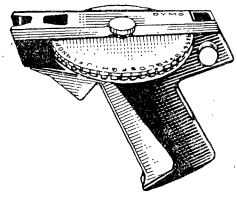
⅜"x200" TAPE FOR MODELS 1200, 1250, 1260

Stock No.	Mfr's Type	Color	EACH 1-10	EACH 11-50	EACH 51-100
773-5701	5209-01	Clear	1.45	1.25	1.05
773-5702	5209-02	Red	1.45	1.25	1.05
773-5704	5209-04	Orange	1.45	1.25	1.05
773-5705	5209-05	Green	1.45	1.25	1.05
773-5706	5209-06	Blue	1.45	1.35	1.05
773-5707	5209-07	Yellow	1.45	1.25	1.05
773-5708	5209-08	Brown	1.45	1.25	1.05
773-5709	5209-09	Black	1.45	1.25	1.05
773-5712	5209-12	Gray	1.45	1.25	1.05
773-5713	5209-13	Gold	1.45	1.25	1.05
773-5715	5209-15	Purple	1.45	1.25	1.05
773-5760	5209-60	Woodgrain	1.45	1.25	1.05

⅜"x12-FT. TAPE FOR MODELS 1200, 1250, 1260

Stock No.	Mfr's Type	Color	EACH 1-10	EACH 11-50	EACH 51-100
773-5501	5201-1	Clear	1.25	1.05	.95
773-5502	5201-2	Red	1.25	1.05	.95
773-5504	5201-4	Orange	1.25	1.05	.95
773-5505	5201-5	Green	1.25	1.05	.95
773-5506	5201-6	Blue	1.25	1.05	.95
773-5508	5201-8	Brown	1.25	1.05	.95
773-5509	5201-9	Black	1.25	1.05	.95
773-5512	5201-12	Gray	1.25	1.05	.95
773-5513	5201-13	Gold	1.25	1.05	.95
773-5560	5201-60	Walnut	1.25	1.05	.95

MODELS 1200 AND 1250 TAPEWRITERS

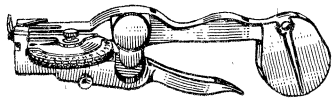


- Prints on Both ½" and ⅜" Tapes
- Choice of Type Size and Format
- Outfits Include Tape, Wheels Case

Print on ½" or ⅜" tape. **Model 1200.** Single wheel makes upper and lower case letters plus regular and subscript numerals. With ½x200" roll of tape. **1200 Tool N' Tape Outfit.** Tapewriter, 5 rolls each ½x200" and ⅜x200" tape, upper and lower case wheel, giant letter (.350") wheel, vertical wheel, carrying case. **Model 1250.** Produces eye-arresting extended letters. One roll ½" tape. **1250 Tool N' Tape Outfit.** 1250 tapewriter, 5 rolls each ½x200" and ⅜x200" tape plus standard letter horizontal wheel, vertical letter wheel, giant letter (.250") wheel, case. Av. shpg. wts.: tool, 2 lbs.; outfit, 3 lbs.

Stock No.	Mfr's Type	Description	EACH ONE	EACH 2-Up
773-1200	1200-00	1200 Tool	39.95	34.95
773-1201	1200-01	1200 Outfit	58.95	49.95
773-1250	1250-00	1250 Tool	34.95	29.95
773-1251	1250-01	1250 Outfit	49.95	44.85

MODEL M-11 TAPEWRITER OUTFIT



- Metal or Vinyl Embossing
- Heavy-Duty Construction
- Horizontal, Vertical Type

Heavy-duty all-metal tapewriter embosses regular vinyl labels or special metal labels and tags for enduring use in locations where extra-tough labels are needed. Prints ½" vinyl or metal tapes with interchangeable steel or plastic embossing wheels. Metal tapes come with or without adhesive for making stick-on labels or free-flying tags. Built-in hole-punching device puts 3/32" hole in tape for bundling labels or attaching tags. Three wheels included: one steel vertical wheel prints vertical type on metal tape; one horizontal-printing steel wheel for metal tape; one standard plastic embossing wheel for horizontal printing on vinyl tape. Package includes tapewriter, three wheels, 5 rolls ½"x16-ft. aluminum tape with adhesive backing, 5 rolls ½"x12-ft. regular vinyl tape, carrying case for loss-free storage and quick transportation right to the job. Shpg. wt. 1½ lbs.

Stock No.	Mfr's Type	Description	EACH ONE	EACH 2-Up
773-7593	7593-00	M-11 Tool N' Tape Outfit	69.95	59.95
773-1110	310-00	Aluminum tape w/o adhesive, ½"x16'	.85	.76
773-1158	358-00	Aluminum tape with adhesive, ½"x12'	1.85	1.65

½"x12-FT. TAPE FOR MODELS 1200, 1250, 1270, M-11

Stock No.	Mfr's Type	Color	EACH 1-10	EACH 11-50	EACH 51-100
773-1001	158-1	Clear	1.65	1.49	1.19
773-1002	158-2	Red	1.65	1.49	1.19
773-1004	158-4	Orange	1.65	1.49	1.19
773-1005	158-5	Green	1.65	1.49	1.19
773-1006	158-6	Blue	1.65	1.49	1.19
773-1008	158-8	Brown	1.65	1.49	1.19
773-1009	158-9	Black	1.65	1.49	1.19
773-1012	158-12	Gray	1.65	1.49	1.19
773-1013	158-13	Gold	1.65	1.49	1.19
773-1043	158-43	Avocado	1.65	1.49	1.19
773-1060	158-60	Walnut	1.65	1.49	1.19

½"x200" TAPE FOR MODELS 1200, 1250, 1270

Stock No.	Mfr's Type	Color	EACH 1-10	EACH 11-50	EACH 51-100
773-5301	5163-01	Clear	1.95	1.75	1.50
773-5502	5163-02	Red	1.95	1.75	1.50
773-5304	5163-04	Orange	1.95	1.75	1.50
773-5305	5163-05	Green	1.95	1.75	1.50
773-5306	5163-06	Blue	1.95	1.75	1.50
773-5507	5163-07	Yellow	1.95	1.75	1.50
773-5308	5163-08	Brown	1.95	1.75	1.50
773-5309	5163-09	Black	1.95	1.75	1.50
773-5312	5163-12	Gray	1.95	1.75	1.50
773-5313	5163-13	Gold	1.95	1.75	1.50
773-5315	5163-15	Purple	1.95	1.75	1.50
773-5360	5163-60	Woodgrain	1.95	1.75	1.50

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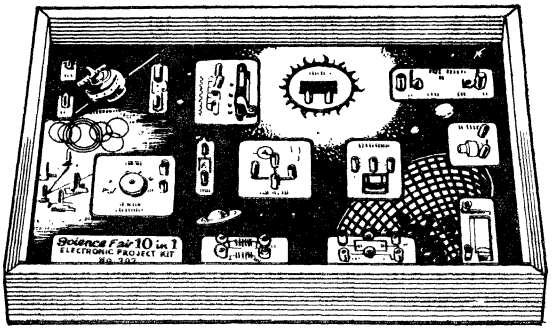
910-5480. Type 28-180. List.....19.95
1-5.....Ea. 14.95 6-11.....Ea. 13.45



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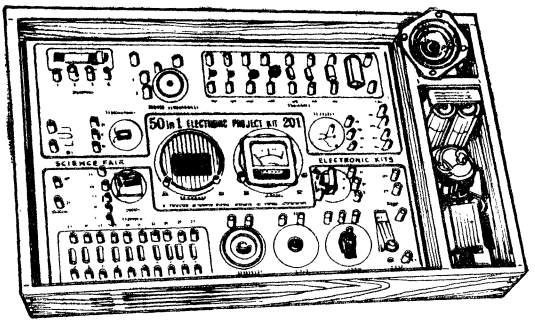
910-5502. Type 28-202. List.....8.95
1-5.....Each 7.95 6-11.....Each 7.15



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910-5501. Type 28-201. List.....19.95
1-5.....Each 17.95 6-11.....Each 16.15

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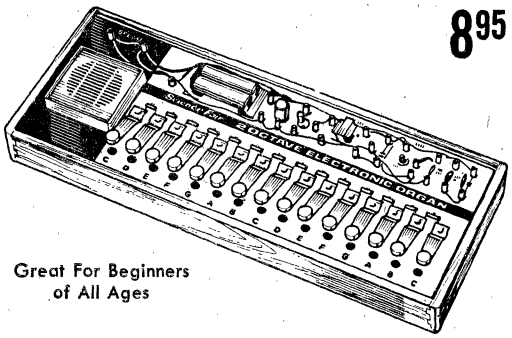

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ELECTRONIC TWO-OCTAVE ORGAN KIT

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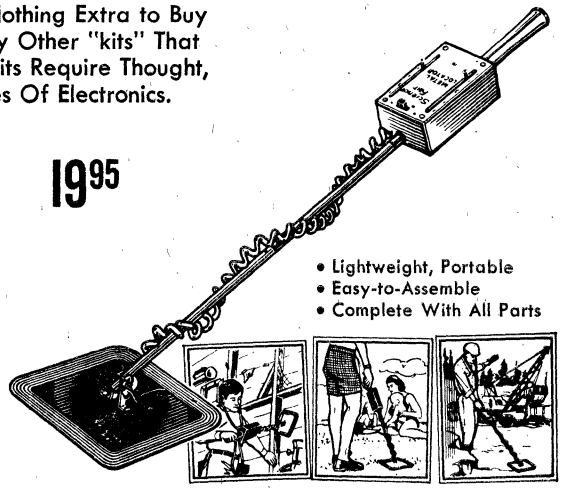
910-5515. Type 28-215. List.....11.95
1-5.....Each 8.95 6-11.....Each 8.05

19.95



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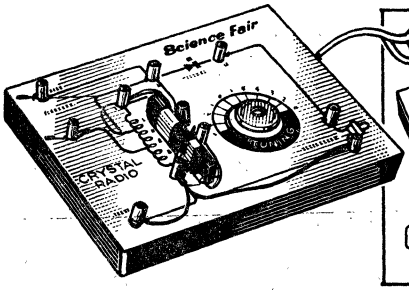
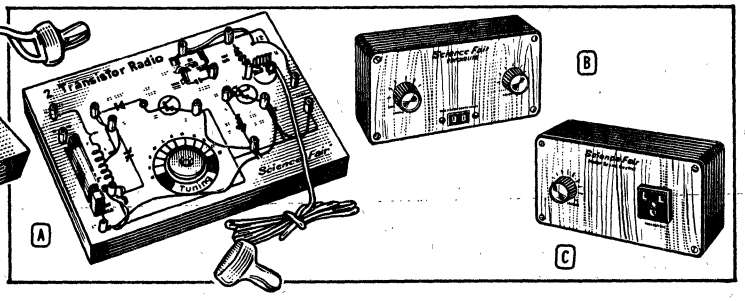
910-5481. Type 28-181. List.....29.95
1-5.....Each 19.95 6-11.....Each 17.95





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- Tunes AM Band
- Crystal Included
- No Tubes or Batteries

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910-5507. Type 28-207.....3.95
1-5.....Ea. 2.95 6-11....Ea. 2.65

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Low cost and genuine utility makes this kit a truly outstanding educational value. Tunes the entire 535-1650 kHz AM broadcast band. Solar cell powers unit using only sunlight or strong amp light. Also operates on conventional 9-volt battery (one required). Utilizes a printed and coded circuit board. Includes earphone, solar cell plus manual. Wt. 2 lbs.

910-5514. Type 28-214.....5.98
1-5.....Ea. 4.95 6-11....Ea. 4.45
910-5112. 9V Battery.....35c

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Connects to incandescent lighting and sound source for vivid light show. Doubles as 600W light dimmer. Wt. 2 lbs.

910-5471. Type 28-171.....21.95
1-5.....Ea. 14.95 6-11...Ea. 13.45

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910-5470. Type 28-170.....14.95
1-5.....Ea. 9.95 6-11....Ea. 8.95

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910-5508. List.....14.95
1-5.....Each 12.95
910-5117. (Batt. 2).....Ea. 10c

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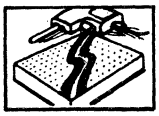

Advanced P-Box material withstands soldering without damage to circuit board.

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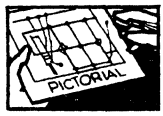

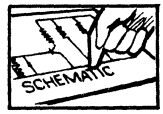

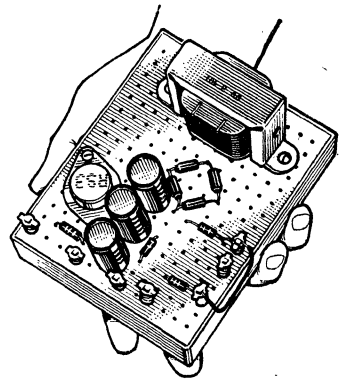

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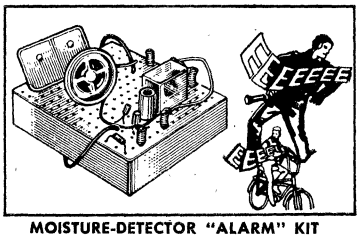
- Each Kit Is a Real Working Project That Actually Teaches Electronics While You Build
- Available to Schools, Camps, Businesses, Labs, More



MOISTURE-DETECTOR "ALARM" KIT

4.95 • All-Purpose Alarm • Moisture-Sensitive

Sounds alarm when moisture touches pick-up. Use as rain detector, burglar alarm, many other uses. Shpg. wt. 1 lb.
910-5432. Type 28-132. List.....5.95
1-5.....Ea. 4.95 6-11.....Ea. 4.45
910-5117. 1½V "AA" Batt. (req'd)..Ea. .10

ELECTRONIC ORGAN KIT

Plays real music on a seven-note scale. Pushbutton switches for scale; variable tuning control. Two-transistor circuit. Requires one 9V battery. Shpg. wt. 1 lb.
910-5401. Type 28-101. List.....6.95
1-5.....Each 5.95 6-11.....Each 5.35

LIGHT-OPERATED ALARM

Produces an alarm when light source is interrupted. Ideal burglar or door alarm day or night. 4 "AA" batt. req'd. 1 lb.
910-5428. Type 28-128. List.....5.95
1-5.....Each 4.95 6-11.....Each 4.45

BELL/BUZZER CODE KEY KIT

Learn theory of electro-magnetism, multi-vibration, current flow. You make a bell, buzzer and a Morse Code practice unit. One 1½V "AA" battery required. Wt. 1 lb.
910-5412. Type 28-112. List.....1.99
1-5.....Each 1.49 6-11.....Each 1.35

STEREO AMPLIFIER KIT

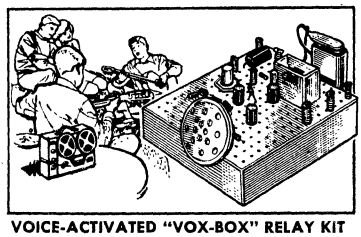
Build your own economical stereo system around this powerful dual OTL amplifier. Connects to tuner, phono or mike. For 8-ohm speaker. Requires one 9V batt. 1 lb.
910-5413. Type 28-113. List.....9.95
1-5.....Ehach 8.95 6-11.....Each 8.05

FM WIRELESS MICROPHONE

"Broadcast" through easy-to-build transmitter and be heard on 88-108 MHz FM band. Mike picks up sounds several feet away. Transmit range, up to 200'. Response. 50-10,000 Hz. Shpg. wt. 1 lb.
910-5409. Type 28-109. List.....7.95
1-5.....Each 6.95 6-11.....Each 6.25

SOLAR-OPERATED AM RADIO

Amazing radio kit lets you hear the entire AM broadcast band using only sunlight or strong lamp power. Battery holder included for night use. Complete with solar cell and earphone. 1½V "AA" battery required. Shpg. wt. 1 lb.
910-5429. Type 28-129. List.....5.95
1-5.....Each 4.95 6-11.....Each 4.45



VOICE-ACTIVATED "VOX-BOX" RELAY KIT

6.95 • Voice-Activated • Many "Remote" Uses

Your voice turns kit "on" or "off". Great for recorders, CB, more. DPST relay, sensitivity control. Shpg. wt. 1 lb.
910-5431. Type 28-131. List.....7.95
1-5.....Ea. 6.95 6-11.....Ea. 6.25
910-5112. 9V Batt. (1 req'd).....Ea. .35

"OTL" AUDIO AMPLIFIER

Hear hi-fidelity sound from tuners, mikes, and phono cartridges. Transformerless output. Powers 3.2-ohm to 8-ohm speakers. Requires four 1½V "AA" batteries. 1 lb.
910-5406. Type 28-106. List.....5.95
1-5.....Each 4.95 6-11.....Each 4.45

PHOTO NITE LITE KIT

Turns on a light automatically when room is in darkness. Self-contained with light, battery holder. Uses 1 "C" batt. Wt. 1 lb.
910-5426. Type 28-126. List.....4.95
1-5.....Each 3.95 6-11.....Each 3.55
910-5116. 1½V "C" Batt. (1 req'd) Each .17

TELEPHONE AMPLIFIER KIT

Lets you hear both sides of a telephone conversation through built-in speaker. Excellent for family or conference calls. Suction cup magnetic pick-up included. Operates on one 9V battery. Wt. 1 lb.
910-5416. Type 28-116. List.....7.95
1-5.....Each 6.95 6-11.....Each 6.25

THREE-WAY CODE OSCILLATOR

Teaches Morse Code the easy way. Can be connected for two-way transmission with a friend. Complete with speaker and code guide. Uses 4 1½V "AA" batteries. 1 lb.
910-5405. Type 28-105. List.....4.95
1-5.....Each 3.95 6-11.....Each 3.55

AC/DC POWER SUPPLY

Eliminates need for batteries. Use with Science Fair kits or any 6V to 9V project. Also recharges old batteries. Completely safe. AC cord included. Shpg. wt. 1 lb.
910-5404. Type 28-104. List.....7.95
1-5.....Each 6.95 6-11.....Each 6.25

WIRELESS AM MIKE KIT

Build your own transmitting station with this easy-to-assemble kit. Broadcast to any AM radio up to 20-ft. away. With mike; introduction to solid-state theory and practice included. One 9-volt battery required. Shpg. wt. 1 lb.
910-5403. Type 28-103. List.....4.95
1-5.....Each 3.95 6-11.....Each 3.55

POWERFUL SIREN KIT

Very loud, automatic "rise-fall" sound. Use as burglar alarm, "panic button" and with external speaker. Four 1½V "AA" batt. req'd for portable use. 1 lb.
910-5407. Type 28-107. List.....6.95
1-5.....Each 5.95 6-11.....Each 5.35

METRONOME BEAT KIT

Produces steady or adjustable musical beat (click). Range from "Largo" to "Presto". Uses one 9V battery. Wt. 1 lb.
910-5418. Type 28-118. List.....4.95
1-5.....Each 3.95 6-11.....Each 3.55

TWO-TRANSISTOR AM RADIO

Assemble solid-state AM radio in only an hour. Can also be used as a tuner. All parts, inst. incl. One 9V battery req'd. 1 lb.
910-5402. Type 28-102. List.....4.95
1-5.....Each 3.95 6-11.....Each 3.55

VOM METER KIT

9-range electronic tester measures AC and DC volts, DC current and resistance. Battery and test leads included. With instruction, operation and theory manual. 1 lb.
910-5422. Type 28-112. List.....7.95
1-5.....Each 6.95 6-11.....Each 6.25

EXTENSION SPEAKER KIT

Works with any 8-ohm audio amplifier. Ideal for use with other Science Fair kits such as intercom and amplifiers. 6-ft. cable incl. P-Box® becomes speaker case. 1 lb.
910-5423. Type 28-123. List.....2.45
1-5.....Each 1.95 6-11.....Each 1.75

FIRE ALARM KIT

Gives alarm if temperature rises above 120°F. Can be heard up to 100 yards. With sensor, test switch. 9V batt. req'd. 1 lb.
910-5417. Type 28-117. List.....5.95
1-5.....Each 4.95 6-11.....Each 4.45

"GOOFYLITE" FLASHER

Fires five lamps either at random or in sequence. Uses 4 "AA" or 6V batt. 1 lb.
910-5430. Type 28-130. List.....6.95
1-5.....Each 5.95 6-11.....Each 5.35

ONE-TUBE DC RADIO KIT

Tunes 540-1600 kHz AM. Operates on low voltage DC. Full theory included. Takes one each: 1½V "AA", 22½V batteries. 1 lb.
910-5400. Type 28-100. List.....5.95
1-5.....Each 4.95 6-11.....Each 4.45

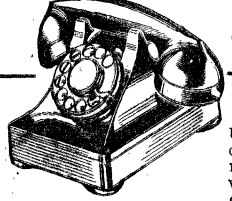
THREE-TRANSISTOR SW RADIO

Tune in London, Moscow, Tokyo—international broadcasts around the world. Power comes from a regenerative high-gain detector with 2 high-gain audio stages. Crystal earphone incl. 9V batt. req'd. 1 lb.
910-5410. Type 28-110. List.....8.95
1-5.....Each 7.95 6-11.....Each 7.15

TWO-WAY INTERCOM AMPLIFIER

Pair-a-phase amplifier for building a two-way intercom. Works over long distances. Just connect to a pair of speakers. Volume control, talk switch incl. One 9V batt. required. Order extension speaker kit above. Shpg. wt. 1 lb.
910-5427. Type 28-127. List.....6.95
1-5.....Each 5.95 6-11.....Each 5.35

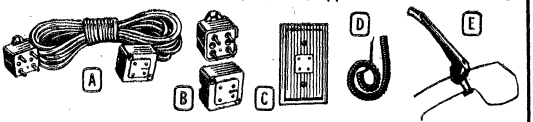
Telephone, Connectors, Modules



STANDARD DIAL TELEPHONE

- Reconditioned
- Ready-to-Install
- Guaranteed

Use for extension phone, intercom, digital accessory. With cords, dial mechanism and bell. Styles may vary from that shown. (Note: Use of telephone equipment not installed by a telephone company may be subject to local tariff.) 4 lbs.
910-7040. Type 279-371.....10.95



A 30' Phone Extension Cord. Standard 4-cond., plug, jack.
910-7065. Type 279-1261. Shpg. wt. 1¼ lbs.....2.98

B Telephone Plug. Four-conductor. Shpg. wt. ¼ lb.
910-7036. Type 279-366.....1.25

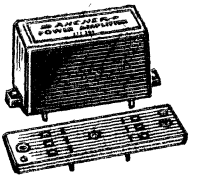
B Telephone Jack. Four-conductor. Shpg. wt. ¼ lb.
910-7037. Type 279-367.....1.40

C Telephone Wall Jack. For 2, 3, 4-wire systems. Wt. ¼ lb.
910-7080. Type 910-7080.....1.99

D 3-Cond. Coiled Phone Cord. Stretches to 6'. Wt. ½ lb.
910-6931. Type 278-361.....1.29

D 4-Cond. Coiled Phone Cord. Stretches to 15'. Wt. ¼ lb.
910-6995. Type 278-1389.....5.95

E Telephone Shoulder Rest. Folds when not in use. Wt. 1 lb.
910-7045. Type 279-606.....1.59



ARCHER® WIRED SOLID-STATE PLUG-IN ELECTRONIC MODULES

The only module that plugs into a socket. Each module is permanently encapsulated. With a few additional, easy-to-wire accessories such as batteries and speakers you can create a practical and enjoyable device. With detailed instructions and a parts list. Size, 1x2 1/16x7/8". Wt. 6 oz.

POWER AMPLIFIER. Produces up to 300 mW. Use with FM tuners, microphone preamp module (277-202) or phono preamp (277-201). 40-12,000 Hz.
910-6814. Type 277-204...2.49

PHONO PREAMPLIFIER. For use with hi-fi amplifiers that do not have enough gain to amplify the output of a magnetic cartridge. 0.5-1 V output.
910-6811. Type 277-201...2.49

WIRELESS CODE OSCILLATOR. When connected to a battery and key produces a 400 Hz tone that can be heard through a nearby AM radio.
910-6817. Type 277-207...2.49

DUAL LAMP FLASHER. Flashes two 6V, 100 mA bulbs alternately. For emergency flasher, store display, etc.
910-6818. Type 277-208...2.49

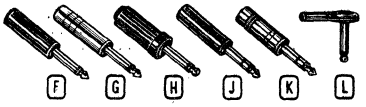
FM WIRELESS GUITAR AMPLIFIER. Amplifies any electrical string instrument and transmits signal for playing through your nearby FM receiver.
910-6813. Type 277-203...2.49

FM WIRELESS MICROPHONE. Connect crystal or ceramic mike and you can transmit your voice to play through your nearby FM receiver.
910-6815. Type 277-205...2.49

MICROPHONE PREAMPLIFIER. Raises a mike's level to .5 to 1 V output, enough to drive many amplifiers or CB and amateur transmitters.
910-6812. Type 277-202...2.49

CODE PRACTICE OSCILLATOR. For practicing Morse Code, or sending two-way messages. Use key and speaker for each unit.
910-6816. Type 277-206...2.49

STANDARD ¼" PHONE PLUGS



F Set of 3. Black bakelite. 2⅞x½".
910-6570. Type 274-1536. 4 oz.....99

G Set of 2. Shielded. 2⅞x½".
910-6584. Type 274-1544. 4 oz.....99

H Set of 2. Barrel type. Takes phone tip.
910-6579. Type 274-1539. 5 oz.....79

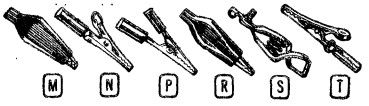
L Set of 2. Right angle. Shielded.
910-6515. Type 274-254. 4 oz.....79

3-CONDUCTOR

J Set of 3. Black bakelite. 2⅞".
910-6505. Type 274-139. 4 oz.....1.39

K Set of 3. Shielded. Solder terminals.
910-6520. Type 274-285. 4 oz.....89

ALLIGATOR CLIPS



M 10 Insulated 1¼" Clips. Assorted.
910-6130. Type 270-378. 3 oz.....79

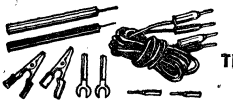
N 10 Insulated 2¼" Clips. Assorted.
910-6135. Type 270-375. 4 oz.....79

P 10 Insulated 2½" Clips. Blk., red. Lugs.
910-6125. Type 270-347. 8 oz.....79

R 12 Insulated 1⅝". Blk., red. Lugs.
910-6180. Type 270-1545. 4 oz.....99

S 10 Uninsulated Claw Type. Screw conn.
910-6140. Type 270-377. 4 oz.....99

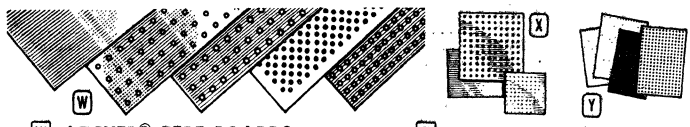
T 16 Uninsulated Clips. Screw conn.
910-6130. Type 270-348. 4 oz.....99



11-PIECE TEST LEAD SET

Two 4½" prods (black and red); two black and red 6' leads with banana plugs; two heavy duty spade lugs; two phone tip plugs; two insulated clips; carrying case. 1 lb.
910-6120. Type 270-332.....1.98

CIRCUIT BOARDS AND PRINTED CIRCUIT COMPONENTS



W ARCHER® PERF BOARDS

Ideal for modular construction by hobbyist or experimenter. Phenolic and copper-clad boards for breadboards or printed circuits. 1/16" thick.

PATTERNS FOR PERF-BOARDS

Pattern	Grid Hole Centers	Hole Size
A	.265x.265	3/32"
B	.187x.187	1/16"
G	.100x.200	1/16"

PREPUNCHED PERF-BOARDS

Stock No.	Mfr's Type	Pattern	Size	Price
910-6732	276-1582	A	3⅝x6⅞"	.59
910-6733	276-1583	A	6⅞x9¾"	1.19
910-6710	276-1390	B	4½x5⅝"	.69
910-6711	276-1391	B	5⅝x9"	.99
910-6712	276-1392*	G	4½x5⅝"	.69
910-6723	276-1393*	G	3⅝x9"	.99

*Alternate Grid

PREPUNCHED COPPER-CLAD

Stock No.	Mfr's Type	Pattern	Size	Price
910-6734	276-1584	A	3⅝x6⅞"	.89
910-6735	276-1585	A	6⅞x9¾"	1.75

SOLID COPPER-CLAD

Stock No.	Mfr's Type	Size	Price
910-6736	276-1586	3⅝x6⅞"	.79
910-6730	276-1587	6⅞x9¾"	1.59

X ASSORTMENT OF 10 COPPER-CLAD PERF-BOARDS

Phenolic copper-clad boards, some solid, some perforated. Make your own printed circuits. Shpg. wt. 11 oz.
910-6730. Type 276-1580.....1.39

Y SET OF 10 PUNCHED BOARDS

Hole sizes are 1/16" and 3/32"; straight and alternate grids. Sizes vary, 1½"—3" square, rectangular. Shpg. wt. ½ lb.
910-6725. Type 276-1575.....1.19

ARCHER® PRINTED CIRCUIT KIT HAS EVERYTHING YOU NEED

This kit contains everything you need to design and make printed circuit boards. Two printed circuit boards, resist ink pen, 6-oz. bottle of etchant, 2-oz. bottle of resist ink solvent, 1/16" drill bit. 7⅛x5⅛x2" plastic box. Shpg. wt. 2 lbs.
910-6726. Type 276-1576.....6.95

SET OF 5 HEAT SINKS

Draws heat away from components while soldering. 2½" aluminum with magnet base; 1⅜" and 2½" straight and bent jaws. Shpg. wt. 4 oz.....1.19
910-6703. Type 276-0011.19

TRANSISTOR REPLACEMENT GUIDE

Cross reference and replacement guide. 8000 substitutions. Comprehensive listing for Archer replacement transistors. 6 oz.
910-5615. Type 62-1015.....49

SET OF TEST LEADS

Set of "Flexiprobe" test leads have molded strain relief on probes to reduce chance of wire breakage. 60" long. 4 oz.
910-6974. Type 278-740...99

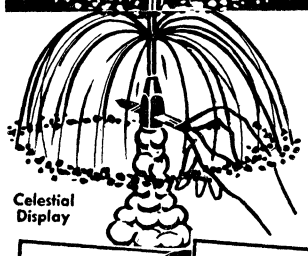
Low-Cost Kits for Fiber Optics Demonstrations

HARNESS AND TRANSMIT LIGHT WITH THIS DELUXE ARCHER FIBER OPTICS KIT

Make fiber optic displays, light pipes, image pipes, or experiment with any of 1000 dazzling uses with this deluxe plastic and glass fiber optic light sensor kit. Light travels by means of multiple reflection through these remarkable fibers. Each optically perfect fiber cuts and bends like wire, guiding or piping light around corners or up walls. Can be used to trigger light sensitive devices. Kit includes: 1400-12″ glass fibers, 200-14″ glass fibers in vinyl jackets, 64-24″ plastic fiber light pipes.

Accessory kit has: 25-ft. 10 mil solid plastic light wire, 2″ image stock with ball magnifier, assorted light pipe jackets, 2 optical adapters, 10-pc. kit of light pipe end fittings, 6-pc. heat shrink kit, tube of optical adhesive, 9 assorted rigid vinyl stems, 4 "O" rings, 5 fiber optic instruction booklets.

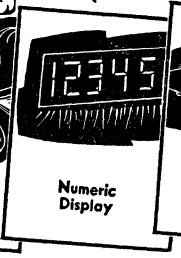
910-6322. Type 272-302. Shpg. wt. 2 lbs.....**9.95**



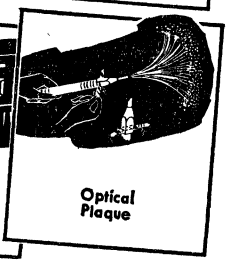
Celestial Display

Plastic/Glass Light Pipe

Magic Fiber Wand

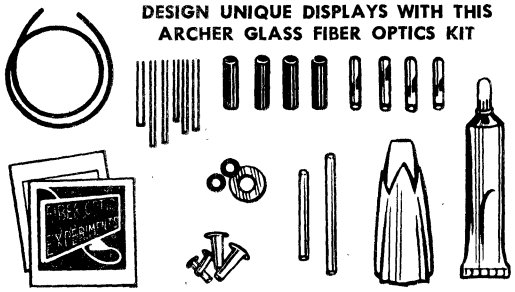


Numeric Display



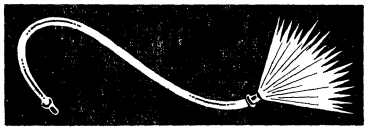
Optical Plaque

DESIGN UNIQUE DISPLAYS WITH THIS ARCHER GLASS FIBER OPTICS KIT



Discover the amazing properties of fiber optics. Light travels from one end to the other by means of multiple reflection through these thin glass fibers. May be cut or bent like wire. You can make light guides, pipes and practically limitless optical displays, create light effects that dazzle the imagination. "Re-Do" process allows you to use fibers over and over again for other projects. You can make the Variable Color Control that allows you to change colors instantly or create a strobe effect. Kit includes: 1400 16″ glass fibers, vinyl sheathing, heat-shrink tubing, optical adapter, glass sensor adhesive, 3 "O" rings, optical stems, end fittings, clear rigid tubing, "Fiber Optic Experiments" booklet.

910-6320. Type 272-301. Shpg. wt. 1 lb.....**5.95**



HOBBYIST FIBER OPTICS KIT

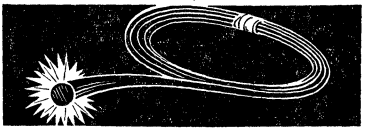
Consists of 200 optically perfect 24″ long glass fibers with vinyl jackets, 6 lengths of 10 mil plastic fibers, an optical adapter and a booklet describing theories and applications of fiber optics. Provides an excellent introduction to the fiber optics field. Shpg. wt. ½ lb.

910-0603. Type 272-303.....**1.98**

14″ MAGIC FIBER WAND

Multi-color wand has up to 1000 micro-lighted colored tips. Includes exclusive variable color control. Can be used as cordless light source for fiber optic experiments. It winks and blinks in color and produces psychedelic strobe effects. With light source. Less batteries. 1 lb.

910-6324. Type 272-304.....**3.98**

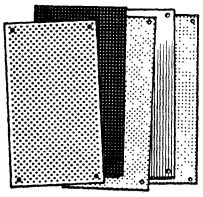


CROFON® PLASTIC LIGHT WIRE

Make lines and ribbons of light, readouts, micro light pipes, optical displays, panel lights and more. Plastic light wire carries 11 times more optical light than glass. Includes one continuous 100-foot length of 10 mil plastic light wire, 3 optical stems, instruction booklet. Wt. ½ lb.

910-6325. Type 272-305.....**2.98**

PERF-BOXES FOR BUILDERS AND HALL-EFFECT EXPERIMENTAL KIT



5-PC. PERF-BOX PANEL SET

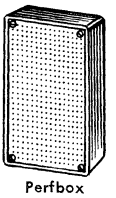
Three Perfboards, 1 aluminum panel, 1 bakelite panel. 1/16″ holes for most components. 1/16″ thick. 3½x6″. Wt. 1½ lbs.

910-6110. Type 270-100.....**1.69**

PERFBOX® WITH PANEL

Removable perfboard front. A ¼″ hole in side serves as outlet for speaker wire, line cord. Rear pre-drilled for 2¼″ speaker. Bakelite case 3¾x 6⅛x2″. Perfboard hole dia. .062″. 1½ lbs.

910-6105. Type 270-097. **1.69**

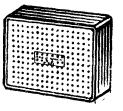


Perfbox

HOBBYISTS' "P-BOX"

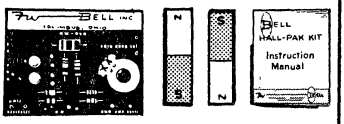
Specially designed and engineered using a new material that withstands normal soldering heat. Gray perforated work base with 3/32″ dia. holes. 4⅘x 3⅝x1½″. ¼ lb.

910-6115. Type 270-105...**.59**



P-Box

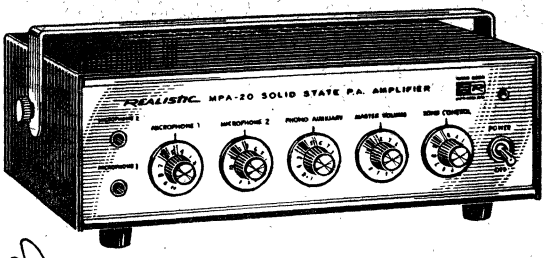
F. W. BELL "HALL PAK" EXPERIMENTAL KIT

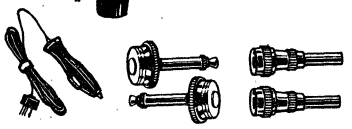


Shows Hall effect—the development of a voltage between two edges of a strip of metal in which electric current is flowing longitudinally. Hall-effect device; circuit board with balancing network and solid-state DC amplifier; magnet; instructions.

527-0001. Shpg. wt. 4 lbs.....**44.00**

PA, Wireless PA and Pocket Paging Systems





12 VDC Power Cord and Plug | 2 Phone Plug to Amphenol Plug Adapters | Two MCIF Connectors

REALISTIC® 20-WATT SOLID-STATE MOBILE/BASE PA AMPLIFIER

59.95

Type 32-2020. Our most unique PA amplifier—the one that can work anywhere! The 32-2020 has a standard 117 VAC line cord, *plus* a 12 VDC power cord that plugs into an auto cigarette lighter. Perfect for sound trucks, outdoor music/PA systems, indoor music/PA systems. Two mixing mike inputs with volume controls, phono/aux and master volume controls and tone control. The solid-state circuit requires no warmup—always ready for instant use. Draws very little current, ideal for mobile operation. Includes adjustable bracket for under-dash mounting in car or truck. Aluminum front panel, black metal case.

910-0011. Shpg. wt. 12 lbs. **59.95**

SPECIFICATIONS

Power Output: 20 watts at 4, 8 and 16 ohms, plus 25 and 70-volt line outputs. **Input Impedance:** 100,000 ohms for mic and phono. **Sensitivity:** Mic, 3 mV; aux and phono, 270 mV. **Frequency Response:** ±1 dB, 20-20,000 Hz (at full power, 200-10,000 Hz). **Size:** 3x10x7½". **Power Requirement:** 110-120 VAC or 12 VDC.

FANON

Selector and Transmitter Have Capacity of Up to 110 Receivers

Lightweight Receiver is Smaller Than a Pack of Cigarettes

RADIO POCKET PAGING SYSTEM FOR SIMPLE, PRIVATE COMMUNICATIONS

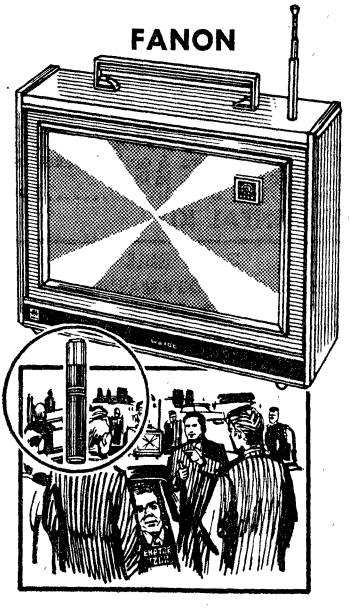
- Signals Select Personnel Up to a Half Mile From Central Location
- Compact Receiver Fits in Pocket or Can be Clipped to Belt
- Two Selector Consoles Available Utilizing From 5 to 110 Receivers

Provides simple, radio controlled communications to selected personnel within your building or up to half a mile away from a central location. Personnel to be contacted simply keep a compact receiver in their pocket or clipped to belt. When any one needs to be contacted, switchboard operator presses a specified button from the central selector console and a beep is emitted by the individual's receiver until it is turned off.

COMPONENTS: Model TR 20 5-watt crystal controlled transmitter using Class C Citizens Band signal on a 27.255 MHz frequency. 117 VAC. Supplied with screw-in antenna. Two selector consoles available: **Model EN-20** offering a capacity of up to 20 pocket paging units; **Model EN 110** can start with as few as 5 units, but has capacity for enlargement up to 110 receivers. Both models finished in black with walnut wood grain end panels. Each **Model PG 101** receiver is constructed of lightweight, high impact tan styrene plastic. Have built-in operations-battery tester, pocket clip, on-off switch, "beep signal" and reset switch. Powered by two mercury batteries that provide up to 500 hours of life.

Stock No.	Model No.	Description	Dimensions, HxWxD	EACH 1	EACH 2-Up
790-2020	TR-20	Radio Transmitter	2¾x8¾x7"	180.00	167.00
790-0520	EN-20	Selector Console	2¾x6¾x8¾"	135.00	125.00
790-0531	EN-110	Selector Console	2¾x11½x8¾"	312.00	295.00
790-1610	PG-101	Paging Receiver	3½x1¾x¾"	112.00	100.00

FANON



PORTABLE FM WIRELESS PA SYSTEM FOR FULL MOBILITY

- Allows Speaker Complete Freedom of Movement Indoors or Out
- Choice of Two FM Microphones for Best Local Reception
- Ideal for Business Meetings, in Schools, Factories

Provides power, performance and complete freedom of movement—actually improves speaker's ability. No microphone wires or cables to limit range. This solid-state portable PA consists of a wireless FM mike (available in two ranges) and a speaker/amplifier. Sets up in minutes anywhere—indoors or out.

Model WA-100 speaker/amplifier operates on 110 VAC or is completely portable using 8 "D" batteries (not included). Can also be connected to external 12 volt battery. Audio output: 8 watts on AC; 4 watts, battery powered. Amplifier operates on either 40.68 MHz or 47.27 MHz. Also features pop-up antenna. May be used to amplify wired mike, record player or tape recorder. Housed in leather-finished wood cabinet with built-in mike storage/charger compartment. 12x14x5".

Model WMH-43A mike offers 40.68 MHz coverage; Model WHM-43B for 47.27 MHz operation. Rechargeable ni-cad battery supplied with each. Can be recharged by built-in charger in Model WA-100 amplifier/speaker.

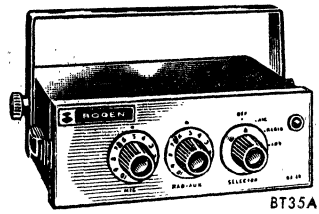
Stock No.	Model No.	Description	EACH 1	EACH 2-Up
790-2310	WA-100	Speaker/Amplifier—Wireless, Solid-State	264.00	240.00
790-2343	WMH-43A	Condenser Mike—Frequency Range of 40.68 MHz with Nicad Battery	77.00	70.00
790-2344	WMH-43B	Condenser Mike—Frequency Range of 47.27 MHz with Nicad Battery	77.00	70.00

Bogen Public Address Amplifiers

BOGEN

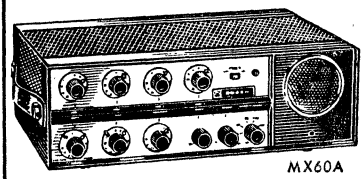
COMPACT SOLID-STATE 40-WATT MOBILE PA AMPLIFIER

Model BT35A. Excellent PA amplifier for police, fire, civil defense and business or industrial use in cars, trucks or boats. Delivers a continuous 40-watt output for enough sound-power to be heard over the noise of traffic or machinery. Solid-state circuit operates instantly—needs no warm-up time. Operates over a temperature range of from —20°C to +65°C. Switch selects either low-impedance mike; or auxiliary (high-level phono, tuner or tape) inputs. Separate controls for mike and auxiliary volume. Built-in RF and line filters; polarity protection. Response: ±3 dB, 150-15,000 Hz. Gain: microphone, 110 dB; auxiliary, 90 dB. Hum and Noise: (below rated output) mike, —90 dB; aux., —95 dB. Output impedance: 4, 8 and 16 ohms. Durable construction can take plenty of rugged use; splashproof gasket seals chassis in sturdy metal cabinet. Compact design allows easy installation under-dash or elsewhere. With adjustable fixed-lock bracket. Size, 3x8x6¼". For 12-15 VDC. Wt. 8 lbs.
733X0004...Ea. 103.20 2-Up.....93.40


BT35A

DELUXE 60-WATT PA AMPLIFIER PROVIDES FIVE MICROPHONE CHANNELS

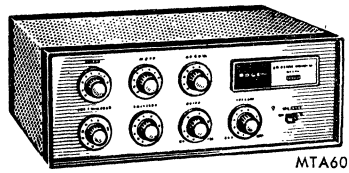
Model MX60A. Versatile amplifier provides five high-impedance mike channels, each with gain control. One channel converts for magnetic phono or tape. Also has two auxiliary inputs with fader; master gain control. Individual speech filters, calibrated low-frequency filter, power stage screen regulation. Exclusive variable level memory markers. Boost-and-cut type bass and treble controls. Identification strips for each channel. Built-in remote gain control circuit. Response: ±1½ dB, 10-38,000 Hz. Gain: mike, 125 dB; aux., 85 dB; magnetic phono, 120 dB. Hum and Noise: —70 dB. Impedance: 4, 8, 16, 83 ohms; 25-, 70-V line. Black and gray metal cabinet with leather carrying handle. 4¾x16½x12". 117 VAC. 35 lbs.
733U0040...Ea. 278.89 2-Up.....253.65
MODEL MX30A. Same as above, but 30 watts and 163 ohm output impedance instead of 83 ohms. 4¾x16½x12". 34 lbs.
733U0039...Ea. 233.80 2-Up.....213.05


MX60A

ALL-SILICON SOLID-STATE 60-WATT PA AMPLIFIER

Model MTA60. Provides three low-impedance unbalanced microphone and two auxiliary inputs. If balanced mike lines are required, use T525U matching transformer.

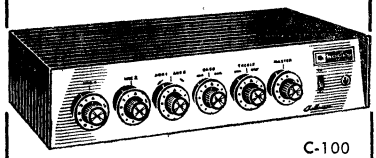
Tape recorder and booster outputs. Chimney-type heat sinks and heat-sensing "thermo-guards" permit safe continuous operation to 158° F. RF capacitor-type filters. Output transistors are protected against open or shorted speaker lines. Memory marker controls. Response: 7-20,000 Hz, ±1 dB. Gain: mike, 125 dB; aux., 110 dB. Impedance: 2.6, 8, 16 ohms; 25-V at 10.4 ohms; 70-V at 82 ohms. 12 transistors, 7 diodes. 4½x12½x9¾". 117 VAC. 23 lbs.
733X0027...Ea. 208.75 2-Up...189.55
MODEL MTA30. As above, but 30 watts: 4, 8 and 16 ohms; 70-V at 163 ohms. Response: 30-20,000 Hz, ±1 dB. For 117 VAC or 24-30 VDC (emergency power). 19 lbs.
733X0025...Ea. 166.83 2-Up.....151.55


MTA60

ALL-SILICON SOLID-STATE 100-WATT PA AMPLIFIER

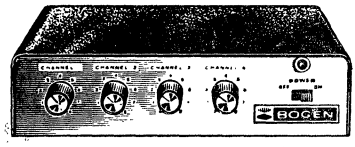
Model C100. Powerful amplifier has solid-state cirucit that assures stable operation even at extremes of temperature. Wide response for maximum clarity. Inputs: two high-impendance mikes and two high impendance, high-level aux. for tuner, recorder or phono; mixes two mikes and one aux. Mike inputs have filters to protect against RF interference. Can be wired for music muting.

Master volume control, two mike gain control, aux. control, separate bass and treble controls. Memory level markers for returning controls to previous level. Output impedance: balanced 4, 16 ohms; balanced 25 and 70-V line, 500/600 ohm zero level line with external WMT-1 transformers. Tape/booster amplifier jack. Two plug-in speaker sockets and screw terminals. Protected against damage from accidental shorting or disconnecting of speaker lines. Hum and noise: microphone, —60 dB; aux. —70 dB. Operating temperature range: —4°F to +122° F. Compact steel cabinet, 3¾x14⅝x13¾". For 117 V, 50-60 Hz. Shpg. wt. 18 lbs.
733-0083...Ea. 165.00 2-Up.....150.10
Model C60. Features same specifications as C100 above, but has power output of 60 watts. Shpg. wt. 16 lbs.
733-0082...Ea. 132.00 2-Up.....119.95
Model C35. Features same specifications as C100 above, but has power output of 35 watts. Shpg. wt. 14 lbs.
733-0081...Ea. 109.00 4-Up.....98.75


C-100

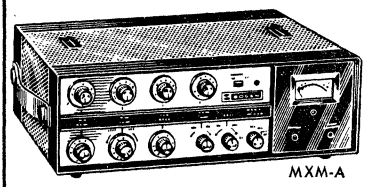
LOW-COST ALL-SILICON SOLID-STATE MIXER-PREAMPLIFIER

Model MX6A-T. Makes it possible to add up to four extra hi- or lo-Z mike channels to amplifiers or tape recorders. Two of the four channels can be used for high-level tuner or phono input. Provides excellent performance with electric guitars. Individual volume controls for each input for complete control in any multi-channel application. Up to three mixer-preamps may be paralleled to provide 12 inputs. Separate high and low-level outputs drive any amplifier through its mike or aux. input; also drives power amplifiers with 5-V or better sensitivity. Response: ±2 dB, 50-20,000 Hz. Inputs: four mikes (hi-Z, 150K; lo-Z, 200 ohms); two aux., 250K. Output impedance: 2000 ohms. 9¼x6x2⅝". 117 VAC. Wt. 6 lbs.
733X0037. Ea. 58.36 2-Up.....53.00


MX6A-T

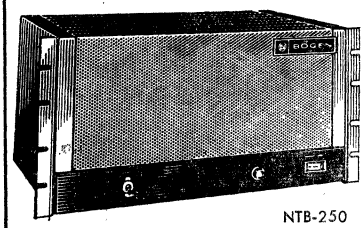
PROFESSIONAL MIXER-PREAMPLIFIER FOR RECORDING AND BROADCAST USE

Model MXM-A. Deluxe mixer-preamp has five hi-Z mike inputs (one for magnetic phono or tape head) plus two auxiliary inputs. Accepts signal from remote preamp or O-level line. Up to three units may be paralleled for a total of 21 inputs. Built-in level meter permits calibrated monitoring of 25 and 70-volt outputs of boosters. Adjustable speech filters for each mike input; adjustable low-frequency filter screens out hum or tunrtable rumble. DC voltage on filaments, silicon rectifiers, high-impedance cathode follower output. Accepts plug-in low impedance TL-600 transformer to match 500/600 ohm line. Feedback-type bass and treble controls. Frequency Response: ±1 dB, 18-38,000 Hz. Output: 20 volts at 1% distortion, high-Z: 4 volts, 600 ohms. 4¾x16½x12". 117 VAC. 23 lbs.
733U0035...Ea. 225.45 2-Up.....204.55


MXM-A

350-WATT SOLID STATE BOOSTER/AMPLIFIER

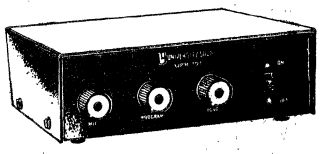
Model NTB250. Delivers maximum power from a small package. Ideal for factories, airports, schools—wherever undistorted power is required. Any number of units may be paralleled to multiply output. The 115-volt output makes the unit adaptable to unique applications. With an audio generator input, it is capable of driving servos, motors, vibration tables, ultrasonic equipment. Power output: 350 W rms at less than 5% distortion from 50-12,000 Hz. Response: ±1 dB, 20-30,000 Hz. Input sensitivity: High-Z, 118 V; lo-Z (with TL600 transformer), 0.35 V. Outputs: 8 ohms; 25 V (250 W output); 70 V (250 or 350 V output). Hum: (below rated output) —85 dB. Size, 9¼x17⅛x11¾"; 19" wide with brackets furnished. For 117 V, 50-60 Hz or 24 VDC. Shpg. wt. 75 lbs.
733-0090. Ea. 609.00 2-Up.....554.25
MO-100-A. (Not illus.) 100-watt tube-type amp. Outputs: 16 ohms; 25, 70, 115 V. 6¾x 8x13". 33 lbs.
733U0010...Ea. 183.70 2-Up.....167.59


NTB-250

PA Equipment, Lecterns, Sound Columns, Megaphones

SOLID-STATE PUBLIC ADDRESS EQUIPMENT

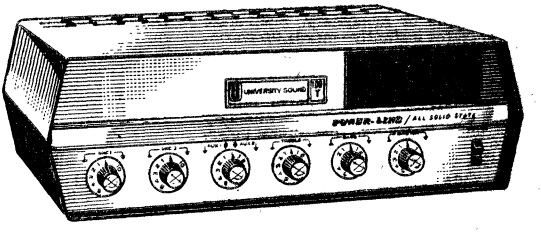
QUALITY UNIVERSITY SOUND® PA EQUIPMENT



Features Both Hi and Lo Z Mike Inputs

10-WATT BACKGROUND MUSIC-PA AMPLIFIER

Model UPB-10T. Designed for offices, small stores, restaurants. Selector switch for Hi and Lo Z microphone inputs. Program input suitable for crystal or ceramic phono, tuner or tape player. Direct 8 to 16 ohm outputs, plus 25 and 70 volt constant voltage outputs. Complete and ready for immediate use—just connect speakers, program source and plug into AC outlet. Controls for mike and program level, tone. Power on/off switch. Response: ±1½ dB, 30-20,000 Hz. Solid-state circuitry. Blue enamel case. 3x9⅛x7⅝". For 95-103V, 50-60 Hz AC.
969-5182. Shpg. wt. 9 lbs.....**Each 79.94** 2-Up.....59.95



"POWERLINE" AMPLIFIERS TO 100 WATTS

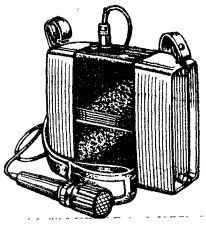
Solid-state circuits reduce need for Constant-Voltage systems in small-to-moderate size installations; Constant-Voltage output provided for service to larger systems. Direct-coupled circuits end insertion losses, boost available power to speakers by 20-25%. Control, mix and amplify three or more input signals, deliver rated power into 4 to 20 ohm loads. X in table denotes factory-installed Output Autoformer to 25-70 V operation for large installations. Hi- or Lo- input selection, switched AC outlet, fused AC line. Power consumption less than 5 W. Response, 15-15,000 Hz ±1½ dB. All units have 5 inputs, master gain control, bass and treble controls. Total Harmonic Distortion less than 5% at rated power and frequency response. Overload protected circuits. For 95-130 V, 60 Hz AC. 5x15¾x10½".

Stock No.	Mfr's Type	Watts	X	Semi-cond.	Wt., Lbs.	EACH 1	EACH 2-Up
969-5195	UPL100T	100	X	32	22	233.20	174.90
969-5192	UPL60	60	....	32	18	172.36	129.27
969-5193	UPL60T	60	X	32	20	189.20	141.90
969-5189	UPL35	35	....	20	15	140.36	105.27
969-5190	UPL35T	35	X	20	17	156.76	117.57

"POWERPAGE" 25-WATT POWER MEGAPHONE OFFERS 3-IN-1 VERSATILITY

- Talk/Listen Switch Converts Megaphone to Listening Device
- Carries Voice up to One Mile
- Voice-Over-Music Feature

Model PP-1T. Transistorized power megaphone for long distance coverage. Provides ultra-sensitive directional listening. Amplifies music with voice-over feature. Input for tuner, tape or phono. Hand-held dynamic mike with press-to-talk switch. Uses 4 lantern-type batteries (not incl.). 10½" dia. bell.
969-5168. Shpg. wt. 13 lbs.....**Each 245.12** 2-Up....204.72



GELOSO "AMPLIBOX" PORTABLE PA SYSTEM

Model 2589. This portable PA system is for indoors or outdoors. Excellent for air terminals, crowd control, tours, product demonstrations. Features cardioid dynamic mike with on/off switch, wind screen, volume control, two ceramic magnet, lavalier clip, speakers, shock-proof nylon case. Bi-directional dispersion. Output: 10 watts. 8x9x3½". With shoulder strap, 8 "C" batts. Wt. 6 lbs.
797U1629. 1-4...82.00 5-Up...77.40

GELOSO GELOSO "ULTRAVOX" INDOOR-OUTDOOR SOUND COLUMN PA SYSTEM

- Built-In 25-Watt Power Amplifier
- Covers An Area Up to 5000 Sq. Ft.
- Can Be Assembled in Seconds

Model 3121. Portable system consists of sound column with 25W amp, dynamic cardioid mike, collapsible floor stands, batteries, carrying case. Offers directional and controlled sound dispersion. Takes up to 20 auxiliary columns. Operates on 8 "D" batteries or single 12-volt battery using external cable incl. Also uses AC with adapter sold below. 4½x5x39". Wt. 42 lbs.
797X1640...Ea. 210.50 2-Up...199.80
Model 3126 Auxiliary Sound Column. 25-watt amp, stand, 34' cable, 8 "D" batts. 20 lbs.
797U1644....Ea. 182.50 2-Up...172.80
Type (2/1) 1489 AC Adapter. For 3121 or 3126. One req'd. for each column. Wt. 6 lbs.
797-1610. 1-4....45.70 5-Up....43.20
Type 80781 Auxiliary Cable. 36-ft. cable for connecting 3121 to 3126. Wt. 2 lbs.
797-1654. 1-4.....7.95 5-Up.....7.50

Argos PRODUCTS COMPANY BATTERY-POWER SOUND COLUMN PA SYSTEM

- Full 25-Watt Power Output
- Completely Portable

MODEL PSD-5060. Amplifier; sound column; microphone with 18-ft. cable, stand and lavalier all in one easy-to-carry case. Amplifier has 25 watts power capacity (40 watts peak). Solid-state design. Mike, auxiliary inputs. Output for sound column.

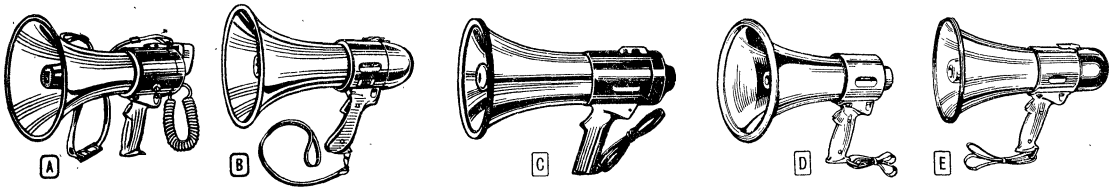
Operates on 10 flashlight batteries or long-life alkaline batteries for up to 400 hours of use. Low impedance dynamic mike. Stand adjusts from 26-64". Sound column contains six specially designed speakers. Response, 200-10,000 Hz. Impedance, 16 ohms. Blue-grey case with handle. 29¾x9¾x6⅞". Less batteries. 31 lbs.
523U2727.....220.00

GELOSO "AMPLIVOICE" MEGAPHONES

MODEL 2583. Weatherproof, solid-state power megaphone featuring detachable dynamic cardioid microphone. Converts to a portable PA system simply by removing microphone module and inserting mike extension cable. Covers more than one-half mile range. Provides 15 watts power output. On-Off trigger in pistol-grip handle. Has external volume control. Bell dia.: 9¾"; length: 16½". With batteries, mike cable and cover, shoulder strap. 6 lbs.
797-1625. 1-4.....**87.50** 5-Up.....**83.10**
MODEL 1/350. Same features as Model 2583 above, but has 10-watt power output. Bell diameter: 7½"; length: 15". Does not include microphone extension cable (sold below). Shpg. wt. 5 lbs.
797-1600. 1-4.....**79.00** 5-Up.....**74.97**
797-1650. Type 80649/5 Mike Exten. Cable. W/on-off switch. **8.10**

Power Megaphones and Our Own REALISTIC® Mikes

FANON BATTERY-OPERATED SOLID-STATE PORTABLE MEGAPHONES



A 1000-YARD SIREN MEGAPHONE

- Powerful 20-Watt Peak Amplifier
- Built-In Siren-Type Alarm

MODEL MV-20S. Covers up to 1000 yards. Has pistol grip handle and trigger talk switch. Full 16-watt amplifier (20 watts peak). Produces siren-type alarm. Detachable mike has talk switch, volume control. Uses eight "C" cells (not incl.). With detachable mike coil cord, hand and shoulder strap. Size, 9x15". Shpg. wt. 9 lbs.
790-0020. Ea. 91.60 2-Up.....86.95

B 800-YARD SIREN MEGA PHONE

- Delivers 16-Watts Peak Power
- Contains Built-In Siren

MODEL MV-16S. Solid-state megaphone has class B amplifier with powerful siren alarm. Covers up to 800 yards for wide-range use. Weatherproof enamel finish on durable spun aluminum. Provides 16-watts peak power (12 watts rated). Trigger switch. Operates on eight "C" cells (not included). Size, 9x14". Shpg. wt. 8½ lbs.
790-0016. Ea. 74.95 2-Up.....70.95

C 600-YARD SIREN MEGAPHONE

- Features 10-Watts Peak Power
- Built-In Siren Signal
- Push-Pull Circuit

MODEL MV-8S. Completely self-contained battery-powered portable megaphone sound system is ideal for police, fire, civil defense and industrial applications. Indispensable for recreational and commercial uses; crowd control, general announcements or any public address function. Just touch the pistol-grip trigger switch for powerful voice projection—carries over a 600 yard range. Includes a built-in siren signal that simulates a real police siren.

Push-pull Class B 5-transistor amplifier circuit provides a rated output of 8 watts (10-watt peak power). Volume control compensates for loss of battery power. Lightweight aluminum construction with durable weatherproof baked enamel finish; built-in waterproof dynamic microphone; carrying strap. 7x14" long; 9" bell diameter. Uses six ordinary "C"-size flashlight batteries—see index for battery pages. Shpg. wt. 5 lbs.
790X0008. Ea. 66.72 2-Up.....63.50

D 300-YARD SIREN MEGAPHONE

- Delivers 6-Watts Peak Power
- With Built-In Siren Alarm

MODEL MV-45. Provides a rated power output of 4 watts (6-watt peak power) for good coverage over a 300 yard range. With built-in siren alarm; waterproof dynamic mike; pistol-grip trigger switch. Spun aluminum with baked enamel finish. Push-pull class B circuit. Volume control. Carrying strap. 7¼x13". Uses 4 "D" batteries. Wt. 4 lbs.
790X0004. Ea. 50.02 2-Up.....46.95

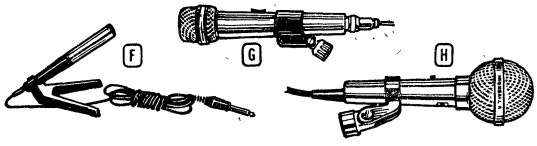
E 200-YARD-RANGE MEGAPHONE

- Has Dual Volume Switches
- Solid-State Circuitry

MODEL MV-3. Ideal for indoor as well as outdoor use. Features two volume switches for high or low power. Carries over a range of 200 yards. Pistol-grip trigger switch. Transistorized circuit. Weatherproof aluminum construction. Built-in dynamic mike. With carrying strap. 8¾x13" long. Uses 4 "D" batteries. Wt. 4 lbs.
790X0003. Ea. 33.32 2-Up.....31.95

REALISTIC® LOW-COST ALL-PURPOSE MICROPHONES

ALL-PURPOSE DUAL IMPEDANCE MICROPHONES



F TYPE 33-990 PENCIL-THIN MICROPHONE

Excellent for desk stand or lavalier cord-type applications. For recording music or speech on cassette-type tape recorders. Also for PA systems or reel-to-reel recorders. Response, 100-10,000 Hz. Impedance, 10,000 ohms. With 6-ft. cable, ¼" phone plug.
910-0014. Shpg. wt. 1 lb.....9.95

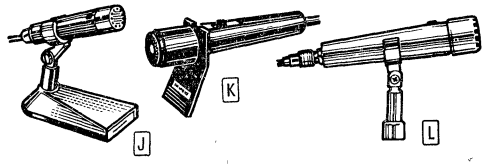
G TYPE 33-992 CARDIOID DYNAMIC MIKE

For general-purpose recording, PA and group use. Features switchable impedances of 600 and 50,000 ohms. Handy on-off switch. 80-12,000 Hz audio response. Wire mesh screen. With slide-on mike stand adapter, 6-ft. cable, molded phone plug. Chromed die-cast case included.
910-0019. Shpg. wt. 3 lbs.....17.95

H TYPE 33-985 "HIGHBALL-2" MIKE

Here's a low-cost, all-purpose dynamic model especially designed to reduce annoying feedback and "squeal". Ball screen filters out "pop". Response, 90-11,000 Hz. Dual impedances of 250 and 50,000 ohms. On-off switch. With 6-ft. cable and ¼" phone plug.
910-0020. Shpg. wt. 2 lbs.....12.95

REPLACEMENT TAPE RECORDING MIKES



J Type 33-918 Dynamic Mike with Desk Stand. Mike holder becomes stand adapter when base is removed. Response is 40-9000 Hz. Impedance, 50,000 ohms. Has −53 dB output level. Stand tilts vertically 100°, swivels in a full 360° circle. With 5½-ft. cable. 4x¾".
910-0023. Shpg. wt. 2 lbs.....8.95

K Type 33-928 Dynamic Lavalier Mike. Slender high-impedance mike can be used as a lavalier, hand or desk model. Has 50,000-ohm impedance. On-off switch. Gray molded case, neck cord, stand, 54" shielded cable. 4x1".
910-0024. Shpg. wt. 2 lbs.....6.95

L Type 33-907 "Lipstick" Crystal Mike. Super-value model for hand, stand or lavalier use. On-off switch. Full 60-10,000 Hz audio response—for voice or music 50,000 ohms impedance. Standard ⅝"-27 thread for stand. 5-ft. cable, neck cord. 4⅝x1⅛".
910-0022. Shpg. wt. 1 lb.....3.95

REALISTIC® PROFESSIONAL "HIGHBALL" DYNAMIC CARDIOID MIKE

- Special Wire Screen Eliminates Wind and Breath Noises—Cuts "Pops", "Booms"
- Dual Impedance of 50-250 and 50,000 Ohms
- Suppresses Feedback While Reducing Echo

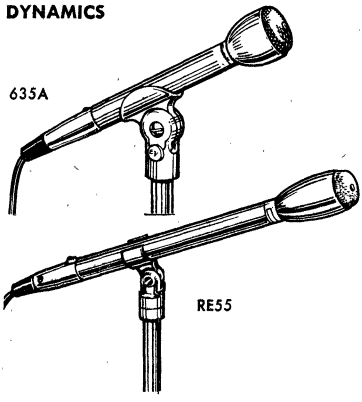
TYPE 33-983. Features a smooth wire screen that eliminates wind and breath noises while it cuts "popping" and "booming". Also suppresses feedback and reduces echo—even in near-empty rooms. Delivers full 50-15,000 Hz audio response for true hi-fi sound. Has on-off switch. Impedance: 50-250, 50,000 ohms. Cannon body connector. Includes 15-ft. cable with universal plugs, screw-in ¼" phone plug adapter; MCIF Amphenol plug. Made in the U.S.A.
910-0016. Shpg. wt. 5 lbs.....39.95

Electro-Voice

Professional Microphones

FOR BROADCAST, RECORDING, SOUND REINFORCEMENT

OMNIDIRECTIONAL DYNAMICS



MODEL 635A BROADCAST DYNAMIC. Omnidirectional pickup pattern. Can be hand-held, used on stand, or as lavalier. Four-stage blast filter is virtually unaffected by breath or wind. 80-13,000 Hz. Perfect for entertainers and vocalists. Minimum pickup of low-frequency reverberations, room "rumble" and prop noise. Output: −55 dB. Low impedance. Acoustalloy® diaphragm provides excellent vocal reproduction. Magnetically shielded housing, non-reflective matte nickel finish. Switchcraft A3M connector. 2-cond. 18-ft. cable, 310A clamp, lavalier. 6x1⅜″ dia. 2 lbs.
781-0635.....Ea. 75.60 2-Up Ea. 68.50

MODEL RE55 WIDE RANGE DYNAMIC. Flat response for exacting professional applications. May be used as secondary laboratory standard. For recording, broadcast, or sound reinforcement of symphony orchestra, organ, piano, etc. Also can be hand-held by performers and for interviews. Has "Pop-proof" wire mesh grille. Response, 40-20,000 Hz. Output, −55 dB. 150 ohms. Steel case in fawn beige Micromatte finish eliminates hot spots for "on camera" use. 10½x1¼″ diameter. 18′ 2-cond. shielded broadcast type cable, A3F connector, 310A clamp, metal carrying case. 4 lbs.
781-0187...Ea. 188.50 2-Up Ea. 179.75

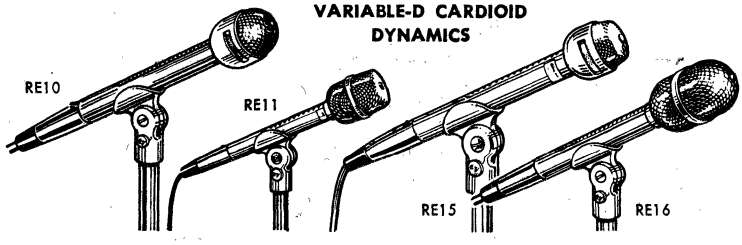
MODEL 654A SLIM-TRIM BROADCAST DYNAMIC. (Not illus.) May be used with a stand, hand-held or as a lavalier. Excellent for just about any application in radio or television broadcasting. Ideal for announcers, interviewers, etc. Response, 50-15,000 Hz. Output level, −57 dB. Matches all low-impedance inputs. Non-reflecting gray finish. 6⁵⁄₁₆″ x 1⅛″ dia. Built-in Switchcraft A3M connector. 18′ cable. With Model 300 clamp and lavalier neck cord. Shpg. wt. 3 lbs.
781-0654.....Ea. 90.00 2-Up Ea. 82.00

ACCESSORIES

MODEL 502B MICROPHONE LINE TRANSFORMER. Matches low impedance microphone to high impedance input of amplifiers, recorders, etc. Response flat from 30-20,000 Hz. With 2-ft. cable for high-impedance side. Shpg. wt. 1 lb.
781-0502.....Ea. 15.00 2-Up Ea. 14.50

MODEL 418 MICROPHONE DESK STAND. For use with microphones having small-type stud such as Models 611, 623, 630, 636, 641, 644, 664, 674. Heavy die-cast stand in non-reflecting gray. Shpg. wt. 3 lbs.
781-0416.....Ea. 12.40 2-Up Ea. 11.15

VARIABLE-D CARDIOID DYNAMICS



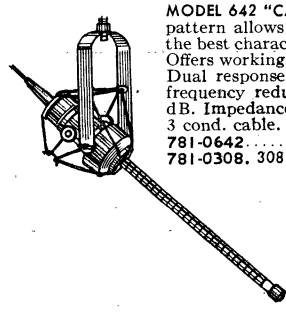
MODEL RE10 SUPER CARDIOID. Continuously variable-D response. Uniform response at all frequencies. Maximum off-axis rejection at 150° from front. For broadcasting, recording and PA applications. Switch provides controlled low frequency attenuation to cut feedback and rumble. Response: 80-13,000 Hz. Output: −56 dB. Impedance: Low-Z. Rugged housing with Micromatte finish. 18′ 2-conductor shielded broadcast cable. 6¾″ long x 1⅜″ diameter (shank ¾″ diameter). Switchcraft A3 connector. With metal case and 310A clamp. Actual weight 6 oz. Shpg. wt. 4 lbs.
781-0180....Ea. 132.80 2-Up Ea. 119.50

MODEL RE11 SUPER CARDIOID. Continuously variable-D response for uniform response at all frequencies. Incorporates integral blast and pop filter around head of microphone. Specifically designed for close-up vocal use and virtually eliminates pickup of breath noises. Strong, protective metal screen prevents damage in use. Response: 80-13,000 Hz. Output: −56 dB. Impedance: Low-Z. Housing has Micromatte finish. 18′ 2-cond. shielded broadcast cable. 7⅛″ x 1⅞″ dia. (shank ¾″ dia.). Switchcraft A3F connector. With metal case and 310A clamp. Shpg. wt. 4 lbs.
781-0181....Ea. 142.00 2-Up Ea. 127.80

RE15 SUPER CARDIOID. For exacting professional broadcast, recording, and PA applications. May be mounted on boom, stand or hand held. Variable D pattern provides maximum rejection at 150° off axis. Response virtually identical at any position around microphone, eliminating off-axis coloration. With bass tilt switch. Rugged case and inner construction. Fawn beige Micromatte finish. Response: 80-15,000 Hz. Impedance: Low-Z. Output: −56 dB. 18′ 2-conductor shielded broadcast cable with Switchcraft A3F connector. 6⁹⁄₁₆x1⅜″ (¾″ shank). With metal case, 310A clamp. Wt. 4 lbs.
781-0183....Ea. 226.40 2-Up Ea. 203.76

RE16 SUPER CARDIOID. For broadcast, recording and PA use. Incorporates integral blast and pop filter around head of microphone. Specifically designed for close-up vocal use and virtually eliminates pickup of breath noises. Strong, protective metal screen prevents damage in use. Maintains uniform directional cardioid pattern. Bass tilt switch. Rugged case with fawn beige Micromatte finish. Response: 80-15,000 Hz. Impedance: Low-Z. Output: −55 dB. 18′ 2-cond. shielded broadcast cable with Switchcraft A3F connector. 7⅜x1⅞″ (¾″ shank). With metal case, clamp. 4 lbs.
781-0184....Ea. 235.60 2-Up Ea. 212.04

HIGHLY DIRECTIONAL DYNAMIC LINE MICROPHONES

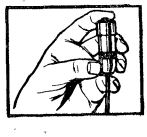


MODEL 642 "CARDILINE." Designed especially for television. 80° pickup pattern allows mike to be aimed for maximum directivity. Combines the best characteristics of cardioid and distributed front opening design. Offers working distance of over 2 to 3 times that of conventional mikes. Dual response: flat from 40-10,000 Hz; choice of 5 or 100 dB low-frequency reduction steps by screwdriver adjustment. Output: −48 dB. Impedance: 50, 150 or 25 ohms, adjustable. Gray. 17⅞x3³⁄₁₆″. 20′ 3 cond. cable. Order mount below. 9 lbs.
781-0642.....Ea. 361.60 2-Up Ea...325.44
781-0308. 308 Suspension Shock Mount...Ea. 34.55 2-Up Ea....31.10

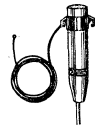
MODEL 644 SOUND SPOT. (Not illus.) Combination cardioid and distributed front opening mike. Better than 2½ times working distance of pressure types. Ideal for PA. High directivity. Response: 40-10,000 Hz. Dual impedance: 150 ohms or hi-Z. Output: −53 dB. 16x2⁵⁄₁₆″. ¾″ tube. 15′ cable. Wt. 4 lbs.
781-0644.....Ea. 93.95 2-Up Ea.....84.56

MINIATURE DYNAMIC LAVALIER MICROPHONES

MODEL RE85 NOISELESS LAVALIER. Miniature lavalier designed to eliminate rustling sounds from clothing and cable handling. Double case with rubber isolation. Very flat from 90-10,000 Hz. Low-Z. Output, −61 dB. 2⅝x1⁵⁄₁₆″. 30′ cable. Accessory clips. 8 oz.
781-0188.....Ea. 114.00 2-Up Each.....102.60



MODEL 649B MINIATURE LAVALIER. Omnidirectional. 31 grams (less cable). 70-10,000 Hz. Output, −61 dB. Low-Z. Wire mesh grille. Non-reflecting finish. 30′ shielded cable. With neck cord, belt clip, stand clamp. 2¼x¾″. Shpg. wt. 1 lb.
781-0649.....Ea. 98.00 2-Up Each.....88.20



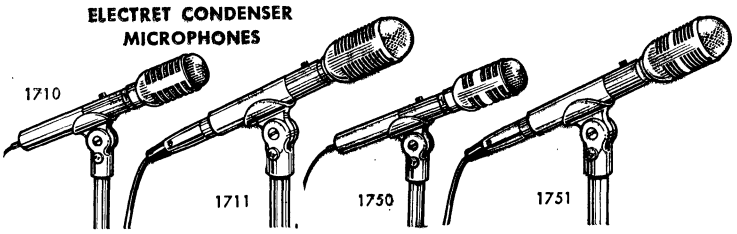
MODEL 647A. Wire-mesh grille, 70-10,000 Hz. For neck, hand-held, or clipped to jacket use. 18′ cable, output −60 dB.
781-0646. High Impedance.....Ea. 79.48 2-Up Each.....71.53
781-0647. Low Impedance.....Ea. 79.48 2-Up Each.....71.53

General-Purpose Microphones

Electro-Voice

FOR TAPE RECORDING, PA PERFORMERS, EXPERIMENTERS

ELECTRET CONDENSER MICROPHONES



NEW ELECTRET CONDENSER MICROPHONES FOR HIGH-QUALITY PERFORMANCE

Genuine condenser microphones with superior performance at surprisingly low cost. New discoveries in materials and techniques allow permanent charge of electret condenser generating element eliminating costly associated electronics. High performance characteristics associated with condensers, but with ruggedness and longevity previously available only in dynamic mikes. Excellent frequency response, transient response, and sensitivity make these microphones suitable for professional recording, high quality sound reinforcement, and serious home recording.

MODEL 1751 CARDIOID ELECTRET CONDENSER MICROPHONE. Cardioid pickup pattern reduces sound pickup from sides and rear to eliminate unwanted noise and reverberation and reduce feedback. Single-D type will emphasize bass when used close-up. Breath filter; aluminum case with anodized beige finish. On/off switch. Contains small FET impedance converting circuit requiring AA battery (not included). Because of high output, may be used with low, medium, or high impedance inputs. Response, 60-15,000 Hz. Impedance, 150 ohms balanced. Output, −43 dB. Stand mounting clamp. 18′ cable with Switchcraft A3F connector. 1⅜″ dia. (⅞″ shank) x 8″. Shpg. wt. 2 lbs.
781-1751....Ea. 90.00 2-Up...Ea. 82.00

MODEL 1750 CARDIOID CONDENSER. Similar to Model 1751 for less exacting applications. 80-13,000 Hz. Output not balanced to ground. 18′ integral shielded cable. 8⅝″. Wt. 2 lbs.
781-1750...Ea. 54.25 2-Up...Ea. 48.83

MODEL 1711 OMNIDIRECTIONAL ELECTRET CONDENSER MICROPHONE. Omnidirectional pickup pattern picks up sound from all directions, provides wide-range, smooth response pattern for highest quality recording applications. Aluminum case, beige finish. On/off siwtch. Low handling noise. Breath filter. Small FET amplifier circuit for impedance conversion requires AA battery. High output allows use with any impedance. Response, 60-15,000 Hz. Impedance, 150 ohms balanced. Output, −50 dB. Stand mounting clamp. 18′ broadcast-type cable with Switchcraft A3F connector at mike end. 1⅜″ dia. (⅞″ shank) x 8″. Shpg. wt. 2 lbs.
781-1711...Ea. 76.35 2-Up...Ea. 68.72

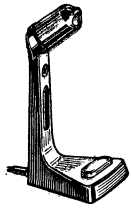
MODEL 1710 OMNIDIRECTIONAL CONDENSER. Similar to Model 1711 for less exacting applications. 80-13,000 Hz. Output not balanced to ground. 18′ integral shielded cable. 8⅝″. 2 lbs.
781-1710...Ea. 48.00 2-Up...Ea. 43.20

COMMUNICATIONS AND PAGING MICROPHONES

MODEL 600E DYNAMIC MOBILE MIKE. Highly-reliable mike has rugged dynamic construction and Cycolac case to assure protection against shock damage. Low-Z model provides open circuit switch wiring for multiple paging installation. Hi-Z provides straight-through circuit for VOX. In both models switch also closes relay circuit when depressed. High output level; −55 dB. Response: 100-7000 Hz. Provides high intelligibility. Shielded coiled cord extends to 5 ft. Complete with hang-up bracket. 2 lbs.
781-0601. Low-Z. Ea. 34.55 2-Up...31.10
781-0600. High-Z. Ea. 34.55 2-Up...31.10

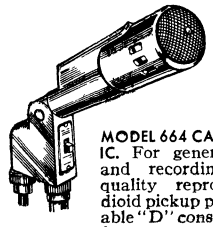
MODEL 634A DYNAMIC PAGING MICROPHONE. Modern two-tone mike for public address, home recording, communications, electronic teaching aids, paging. High output level, wide-range response. Fits any stand, boom, or gooseneck with complete cable concealment. Can be desk-mounted on teaching aids, communications and switchboard equipment. Integral on/off switch. 6′ cable. Standard ⅝″-27 threads in rear of case. 4x1¾″ diameter. Chrome plated die-cast zinc and gray plastic. 1 lb.
781-0634. Low-Z. Ea. 25.50 2-Up...22.95
781-0633. High-Z. Ea. 25.50 2-Up...22.95

MODEL 651 HEADSET MICROPHONE. Dynamic microphone leaves hands free for lecturing, announcing, mobile radio, paging. Lightweight (less than ½ oz.) mike assembly clips on eyeglass frame or headband furnished. Always same distance from mouth for clear pickup. Provides background noise cancellation. Includes 3½″ long microphone tube. Small battery powered amplifier clips to belt, has on/off switch, cough button, battery test lamp, cable connector. Response: 80-8000 Hz. Output: −56 dB. Dual Hi-Z and Low-Z. Shpg. wt. 3 lbs.
781-0651...Ea. 71.85 2-Up...Ea. 64.67



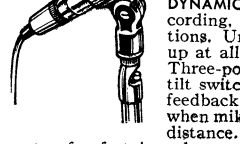
MODEL 619 DYNAMIC PAGING MICROPHONE. Provides excellent performance as a paging microphone or as base station communications microphone. Dynamic element provides reliable operation and wide frequency response. Press-to-talk switch located in the base may be moved into the upper part of stand for grip-to-talk use. Switch shorts in "off" position for relay operation. Response: 70-10,000 Hz. Output level: −57 dB. 9¾x4½x4¾″. In chrome and gray. 4 lbs.
781-0618. Low-Z. Has 15′ cable.
Each.....41.10 2-Up..Each 36.89
781-0617. Hi-Z. Has 6½′ cable.
Each.....41.10 2-Up..Each 36.89

VARIABLE D DYNAMIC CARDIOID MICROPHONES



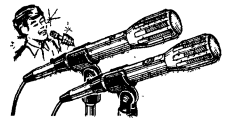
All Purpose PA Mike

MODEL 664 CARDIOID DYNAMIC. For general-purpose PA and recording use. High-quality reproduction. Cardioid pickup pattern and variable "D" construction for uniform response at all frequencies. Wire-mesh blast filter. Response: 60-15,000 Hz. Output: −58 dB. Impedance: Dual 150 ohms and hi-Z. On-off switch, detachable 15-ft. 2-cond. cord, QC4M connector. Chromed. ⅝″-27 thread. 7¼x1⅞″. Wt. 3 lbs.
781-0664..Ea. 68.40 2-Up..Ea. 61.56

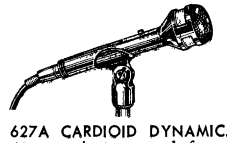


MODEL 676 CARDIOID DYNAMIC. For PA, recording, communications. Uniform pick-up at all frequencies. Three-position bass-tilt switch overcomes feedback and rumble when mike is used at a distance. QC-4M connector for fast impedance changes, 150 ohms or Hi-Z. Response: 60-15,000 Hz. Output: −57 dB. Satin chrome. Stand adapter. 2½ lbs.
781-0676..Ea. 73.62 2-Up..Ea. 66.26
781-0674. Model 674. With on-off switch and ⅝″-27 stud mount. Wt. 3 lbs.
Ea.....73.62 2-Up..Ea. 66.76

SINGLE-D DYNAMIC CARDIOID MICROPHONES

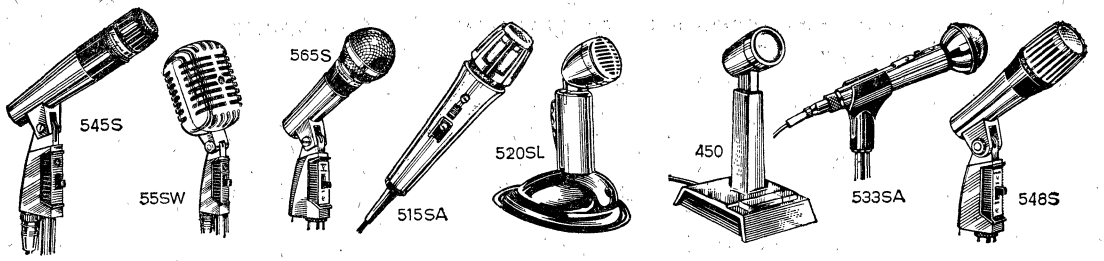


MODEL 670 CARDIOID DYNAMIC. For professional performers who want bass boost when using mike close up. For hand-held or stand use. Air-damped shock mount construction with mike head isolated from case. Pop filter. High degree of cancellation of sounds from sides and rear plus smooth, feedback-free response. Built-in Switchcraft A3M connector. On/off switch. User replaceable head. Response: 60-14,000 Hz. Output: −58 dB. Impedance: Hi-Z or Lo-Z selectable. With cable and stand clamp. 7½x1⅜″ (1″ shank). Wt. 2 lbs.
781-0669..Ea. 55.25 2-Up..Ea. 49.73
781-0670. Model 670V. With volume control. No on-off switch. **Ea.....60.15**
2-Up.....Each 54.14



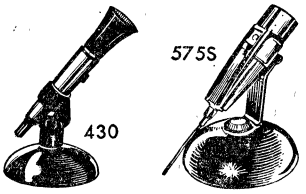
MODEL 627A CARDIOID DYNAMIC. Cardioid pattern rejects sound from sides and rear, reduces feedback. Enhances robust sound when used close to lips. Pop filter. For stand or handheld use. Response, 60-13,000 Hz. Output: −58 dB. High impedance. On-off switch. 15′ cable. Black satin chrome finish. 6½x1⅝″ dia. (¾″ shank). Stand clamp. 2 lbs.
781-0627..Ea. 46.40 2-Up..Ea. 41.76

SHURE General-Purpose and PA Microphones



MODEL 545S "UNIDYNE III" DYNAMIC

Features cardioid pickup pattern; dynamic element with 50-15,000 Hz frequency response. Impedance: 50-250 ohms or Hi-Z. Output levels: low-Z, −57 dB; hi-Z, −55 dB. Satin-chrome and black finish. Swivel-mount permits tilting the head a full 180°. On-off switch. With 15-ft. detachable cable. 1¼" diameter x 5¾" long. Shpg. wt. 3 lbs.
944-0546. Ea. 73.50 2-Up.....61.20
944-0545. Model 545. No on-off switch. Swivel adapter..**Ea. 69.20 2-Up....57.60**

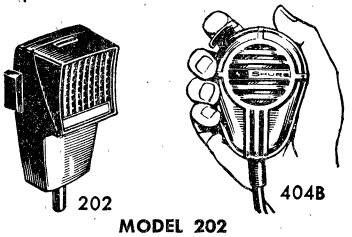


MODEL 430 CONTROLLED MAGNETIC

Omnidirectional, dual-impedance, controlled magnetic microphone. Excellent for PA paging; can be used both indoors and outdoors. Frequency response: 60-10,000 Hz. Impedances: 150 to 250 ohms and high impedance. Output: −52 dB. Black and satin chrome finish. On-off switch and swivel adapter. 15-ft. 3-conductor cable. Less base (see stands below). 6¾x1¾" dia. 2¼ lbs.
944-0430. Ea. 30.60 2-Up.....25.80

LOW-PRICED MODEL 575S

Omnidirectional high-impedance dynamic, 40-15,000 Hz. Built-in filters reduce voice "pop". Output: −56 dB. Black satin. Slide to talk locking on-off switch, stand adapter, lavalier assembly. 7' shielded cable. Less S-38B base (see below). Size: 4¾x1⅛". Shpg. wt., 1 lb.
944-0576. Ea. 19.90 2-Up.....16.70
944-0577. Model 575SB. Low Z. **Ea..18.00 2-Up.....Each 15.25**



MODEL 202

Ceramic, noise-canceling microphone, ideal for wide applications in CB, Radio and Amateur communications. For use where high noise levels may cause problems in clear voice transmission. Response: 200-4000 Hz. High impedance. Output: −50 dB. Press to talk. Bracket. 5-ft. coiled cable. 4x2¼x1⅝". Shpg. wt. 1 lb.
944-0202. Ea. 16.10 2-Up.....13.95

MODEL 404B

Controlled-magnetic press-to-talk mike. Response: 200-8000 Hz. 150-250 ohms. Output: −52 dB. Hand-held. High-impact gray case. With bracket. 5½-ft. cord. 1 lb.
944-0405. Ea. 27.25 2-Up.....22.90
944-0406. Model 404C. Same as above, but for high impedance. Output level, −54 dB.
Ea.....27.25 2-Up.....22.90

MODEL 55SW "UNIDYNE II" DYNAMIC

Cardioid dynamic mike has response of 50-15,000 Hz. Impedance: 35-50 ohms, 150-250 ohms, hi-Z. Output: 35-50 ohms, −55 dB; 150-250 ohms, −56 dB; hi-Z, −55 dB. Chrome. Swivel mount with on-off switch. 15-ft. 2-cond. cable. 4½x2¼x3¼". 3⅛ lbs.
944-0558. Ea. 71.00 2-Up.....59.00
944-0555. Model 55S. Same as above but no on-off switch. **Ea. 67.00 2-Up...57.00**
944-0557. Model 556S. Deluxe version of Model 55SW. Shock mount gives greater protection, high reliability. 40-15,000 Hz. Wt. 3½ lbs. **Ea. 112.00 2-Up.....93.00**

MODEL 565S "UNISPHERE I" DYNAMIC

Rugged, feedback-free dynamic cardioid mike. "Pop-proof" wire mesh screen for protection against wind blasts and pops. Frequency response is 50-15,000 Hz. Dual impedance, 50-250 ohms and hi impedance. Outputs: low-Z, −57 dB; hi-Z, −55 dB. Chrome, black housing. Complete with on-off switch, swivel mount, 15' detachable connecting cable. Diameter, 2"; length, 6¼". Shpg. wt., 2½ lbs.
944-0566. Ea. 81.50 2-Up.....68.20
944-0565. Model 565. Above, less on-off switch, swivel mount. With swivel adapter.
Ea.....78.00 2-Up.....65.20

MODEL 515SA "UNIDYNE B" DYNAMIC

Economy-priced dynamic microphone with highly effective cardioid pickup pattern rejects sounds from sides and rear. For all types of general purpose use—recording, stage and set voice pickup—where low-cost must be a consideration. On-off switch. Swivel adapter. Response: 80-13,000 Hz. Hi-Z output: −58 dB. Chrome and black housing. 1½ diax6⅞". With 15 ft. one-conductor non-detachable cable. Shpg. wt. 1½ lbs.
944-0515. Ea. 32.45 2-Up.....27.95
944-0517. Model 515SB. Same as 515SA, but low impedance. −59.5 dB..**Ea. 32.45 2-Up.....Each 27.95**
944-0516. Model 515SAC. As 515SA, but pre-wired plug and assembly.....**Ea. 34.00 2-Up.....Each 29.00**

MODEL 520SL

Rugged, top-performing controlled-magnetic mike, designed for efficient communications. For all types of voice pickup. Has grip-to-talk locking switch. Frequency response: 100-9000 Hz. Output level: −52.5 dB. Attractively styled, chrome and green finish. With 7-ft. two-conductor cable. Size, 9⅜x5x7". Wt. 5 lbs.
944-0520. Ea. 36.80 2-Up.....31.00

MODEL 450

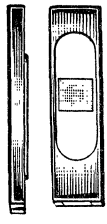
Deluxe controlled-magnetic mike features adjustable stand height; lockable push-to-talk mike relay switch. For limited frequency communications. Response: 100-10,000 Hz. High or low impedance. Output Levels: hi-Z, −54 dB; low-Z, −55 dB. Two-tone gray finish. 7-ft. 4-cond. cable. "Armo-Dur" case. 10½x5¾x4". 2¼ lbs.
944-0450. Ea. 40.60 2-Up.....34.25

MODEL 533SA DYNAMIC

High-impedance dynamic microphone with hand-to-stand feature. Wind, breath and pop filters. On-off switch. Frequency response: 40-11,000 Hz. High inpedance output: −54.5 dB. Single-conductor shielded 15-ft. cable, swivel adapter. Satin chrome finish. 6⅝x2 1/16" dia. Shpg. wt. 1¾ lbs.
944-0533. Ea. 41.00 2-Up.....35.00
944-0534. Model 533SB. Same as above, but low-impedance output: −55.5 dB. Two-conductor shielded cable. Wt. 1¾ lbs.
Ea.....41.00 2-Up.....35.00

DUAL-IMPEDANCE MODEL 548S

Improved shock mounting. Wind, pop and blast filters. Unidirectional pickup. Dual impedance. Response: 40-15,000 Hz. Output levels: high impedance, −55 dB; low, 150 ohms, −55.5 dB. With broadcast-type Cannon connector, 15' 2-cond. high flexibility detachable cable. Handsome contemporary styling. Swivel mount. On-off switch. Chrome and black housing. 5 13/16x1 9/16" dia. Shpg. wt. 2¼ lbs.
944-0549. Ea. 86.50 2-Up.....73.00
944-0548. Model 548. Same as above, less on-off switch and swivel mount. With swivel adapter. Shpg. wt. 2 lbs...**Ea. 82.50 2-Up.....Each 70.00**

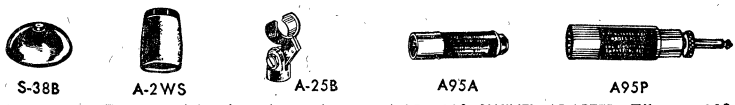


MODEL CA5AJ ULTRAMINIATURE CERAMIC MICROPHONE

- Only 1/10-Inch Thick
- 50-4500 Hz Response
- Weighs Just ¾ Gram
- For TV, Theater Work

Remarkably small mike can be hidden easily for TV and theater use. Ideal for closeup interviews, recordings, and many other uses. Originally designed to be used with miniature experimental equipment. Has a broad operating temperature range of −20° to −200° F. Frequency response of 50-4500 Hz equals mikes of much larger size and cost. High impedance. Output level: −70 dB. Only 1/10th of an inch thick, weighs just ¾ gram. Has 1" leads attached. Overall size: 1x¼x 1/10" Shpg. wt., 6 oz.
944-0020. Ea. 16.50 2-Up..14.00

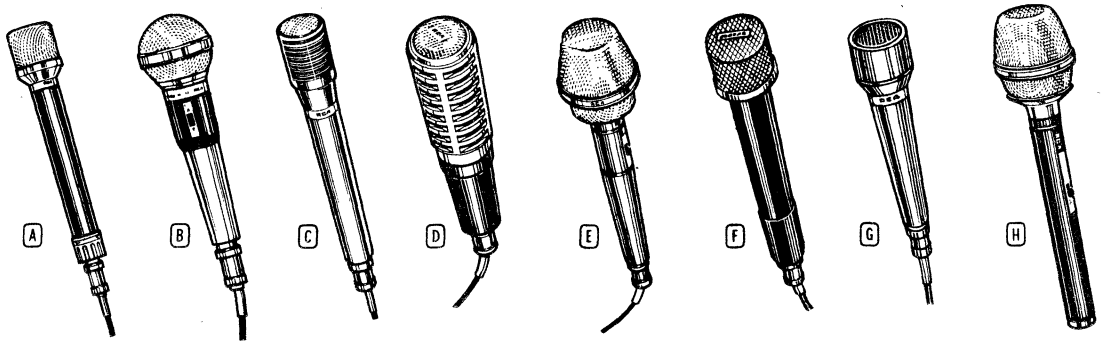
ACCESSORIES FOR SHURE MICROPHONES



S-38B BASE. For use with microphones having stand adapter. Shpg. wt., 1½ lbs.
944-0055. Ea. 4.00 2-Up.....3.50
A-2WS WINDSCREEN. Fits "Unidyne III" Model microphones—545S, 545, 545L, 546; "Omni-dyne" Models 578 and 578S. Protects from wind blasts. 4x2½". Wt. 5 oz.
944-0001. Ea. 5.60 2-Up.....4.50

A-25B 90° SWIVEL ADAPTER. Tilts to 90°.
944-0003. 8 oz. **Ea. 5.20 2-Up.....4.30**
A95A TRANSFORMER. 35-50, 150-250 ohms. MC1F output, XL-3-11 input. 2½x3¾".
944-0006. 9 oz. **Ea. 16.60 2-Up....14.00**
A95P TRANSFORMER. Above, with phone plug output. Shpg. wt. 10 oz.
944-0009. Ea. 18.40 2-Up.....16.50

Professional Quality Microphones from RCA



A MODEL HK-96 CARDIOID DYNAMIC MICROPHONE. Unidirectional. For mu, sic and recording. 50-15,000 Hz. Outputs-−57 and −60 dB. Wind screen, 3-position Bass-Roll-Off switch. Black/chrome. 9¾x 1⅝" dia. With carrying case, ⅝"-27 adjustable holder. High Z/Low Z connector, 20-ft. 2-cond. cable.
902-0096. Shpg. wt. 1½ lbs....**Each 50.00**

B MODEL HK-97 CARDIOID DYNAMIC MICROPHONE. Unidirectional for radio, TV broadcasting. Response, 50-15,000 Hz. Outputs, −60 and −67 dB. Has wind screen, ⅝"-27 adjustable holder, on/off switch. Black/chrome. 7½x1⅞" dia. With carrying case, High Z/Low Z connector, 20-ft. two-connector cable.
902-0097. Shpg. wt. 1 lb.....**Each 40.00**

C MODEL HK-103 "GOLDEN STARMAKER" CARDIOID DYNAMIC MICROPHONE. Unidirectional. For voice and orchestra. 100-15,000 Hz. Outputs, −63 and −64 dB. Has ⅝"-27 holder, weighted desk stand, High Z/Low Z connector. 6⅝x1" dia. Black/chrome. With carry case, 20-ft. two-conductor cable.
902-0103. Shpg. wt. 1 lb.....**Each 64.00**

D MODEL HK-106 "STARMAKER" SUPER-CARDIOID DYNAMIC MICROPHONE. Unidirectional. For high-noise ambients. Response, 150-10,000 Hz. Outputs, −62 and −65 dB. Has ⅝"-27 holder, weighted desk stand, High Z/Low Z connector. Black/chrome. 5¾x1¼" dia. With carry case, 20-ft. two-cond. cable.
902-0106. Shpg. wt. 7 oz.....**Each 44.00**

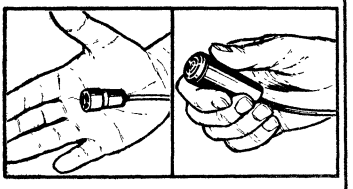
E MODEL HK-98 DYNAMIC MICROPHONE. Omnidirectional. For professional music and recordings. 40-17,000 Hz. Outputs, −57 and −60 dB. Has wind screen, ⅝"-27 adjustable holder, High Z/Low Z connector, on/off switch. Black/chrome. 7⅞x1⅞" dia. With carrying case, 20-ft. two-conductor cable.
902-0098. Shpg. wt. 1 lb.....**Each 40.00**

F MODEL HK-110 "GOLDEN STARMAKER" CARDIOID DYNAMIC MICROPHONE. Unidirectional. For "music" groups. 100-12,000 Hz. Outputs, −62 and −64 dB. Has ⅝"-27 and 5/16"-18 holder, High Z/Low Z connector, wind screen, on/off switch. Black/gold. 7⅝x1¾" dia. With case, 20-ft. 2-cond. cable.
902-0110. Shpg. wt. 1 lb.....**Each 54.00**

G MODEL HK-111 DYNAMIC MICROPHONE. Professional omnidirectional mike. Response, 50-20,000 Hz. Outputs, −57 and −60 dB. Removable wind screen, High Z/Low Z connector, ⅝"-27 and 5/16"-18 thread holder. Black/chrome. 10⅝x1⅝" dia. With carrying case, 20-ft. 2-cond. cable.
902-0111. Shpg. wt. 1 lb.....**Each 54.00**

H MODEL HK-115 "STARMAKER" DYNAMIC MICROPHONE. Omnidirectional. For music and recording. 70-16,000 Hz. Outputs, −62 and −64 dB. Has ⅝"-27 adjustable holder, removable wind screen, High Z/Low Z connector. On/off switch. Black/chrome. 8⅜x1⅞". With carrying case, 20-ft. two-conductor cable.
902-0115. Shpg. wt. 7 oz.....**Each 44.00**

SUBMINIATURE LAVALIER MIKES



BK-12A **BK-6B**

MODEL BK-12A. Dynamic. Very small, extra-lightweight with excellent speech balance. Inconspicuous when worn, held in the hand, or concealed on set or stage. Non-directional. 60-18,000 Hz. Use with 30-250 ohms unloaded inputs. 30-ft. 2-conductor cable, lanyard, tie-clip holder, cable clip. 1½x¾" dia.
902-0012. Shpg. wt. 7 oz...**Each 99.00**

MODEL BK-6B. Dynamic. Has excellent speech balance. Semi-directional. Ideal in situations where an unidistracting mike is needed. 60-15,000 Hz response. 250 ohm output easily altered to 30 or 150 ohms by simple cable connection. 30-ft. 3-conductor cable, lanyard and fastener. 2 9/16x1 5/16" dia.
902-0006. Shpg. wt. 3 oz...**Each 95.00**

SWITCHCRAFT AND SHURE PROFESSIONAL MIKE AND PROGRAM MIXERS

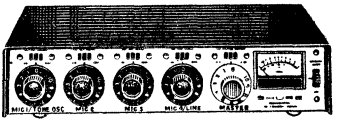
SWITCHCRAFT MIKE MIXER

- 6 Mono or 3 Stereo Inputs
- Front and Rear Panel Controls
- Ultra-Wide Frequency Response

MODEL 309TR. Offers professional performance and versatility for every user of hi-fi audio mixing/amplifying/switching components. Boasts one to six mono inputs or up to three stereo inputs, or stereo and mono combinations. Wide, flat frequency response of 20-20,000 Hz (±0.2 dB), with low distortion.

Standard phone and phono jack inputs for each channel, four channels with full phono equalizational (switchable) bass cut-off (switchable), extra set of output jacks for for convenient VU meter monitoring or headphone listening/monitoring. Uses any standard input audio source, either stereo or mono; tape recorder/players, high or low impedance mikes, tuners, etc.

Six low level inputs. Voltage gain: 71 dB. Signal-to-noise ratio: 60 dB, referred to 1 mv input. Output: up to 4 volts RMS unbalanced, 16⅝x3x6½". 117 VAC. 6 lbs.
932-1072. Each 122.00 2-Up.....114.00

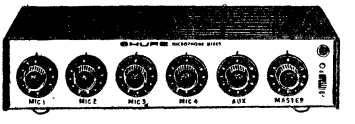


SHURE MIKE MIXER

MODEL M67. Professional microphone mixer /remote amplifier specifically designed for studio and remote broadcasting, recording and sound reinforcement. Compact and lightweight, ideal for studio, remote or original installation uses—or as add-on mixer for providing additional microphone inputs.

Has four balanced low-impedance mike inputs; one line input. Line and mike level outputs; two-level headphone monitor jack. Illuminated VU meter is calibrated for 4 and 10 dBm output. Built-in tone oscillator. Individual input gain controls; master control for overall output. Line input switchable for 600 ohms or bridging.

Low-frequency roll-off switch on each channel; direct mix bus permits stacking units for additional input capacity. Response, ±2 dB, 20-20,000 Hz. Hum and Noise: −125 dBv max. equivalent input hum and noise. 11⅜x7½x2½".115 VAC. Wt. 5½ lbs.
944-0035. Ea. 195.00 2-Up.....165.00



SHURE MIKE MIXER

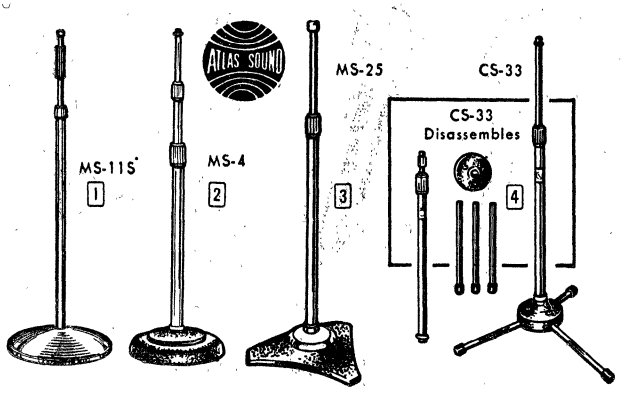
MODEL M68. Solid-state monophonic mixer handles up to five separate signals through four mike inputs and one auxiliary high-level input for tuner, tape or other accessories. Individual volume controls on each input govern proportional intensity of signal to mixed output. Master control provides level attenuation for overall input.

Switch-selected low or high impedance for mike inputs. Low or high impedance mike level output and high impedance auxiliary output. Frequency response, 30-20,000 Hz. 28 VDC jack. Size, 2½x11⅜x5¼". With male Cannon-type input receptacles. 105-130 V, 50-60 Hz AC. Shpg. wt. 4 lbs.
944-0037. Ea. 101.00 2-Up.....89.00

944-0042. Model M68FC. Provides same features as model above but with female Cannon-type input receptacles. **Ea..108.00 2-Up.....Each 94.00**

To assure the fastest, most accurate service, please specify both Stock Number and Type Number when placing your order.

Microphone Stands and Accessories



ATLAS SOUND FLOOR STANDS

1 MS-11S AUTOMATIC FLOOR STAND. Self-locking with automatic clutch for easy and instantaneous changes in height. Removing hand automatically locks the position. Adjusts from 39-62". All chromed. 10" base. 5/8"-27 thread. Shpg. wt. 13 lbs.
730-0511 Ea. 29.25 2-Up, Ea. 26.80

2 MS-4 TELESCOPING FLOOR STAND. Fully adjustable from 25-65". 3 chromed sections. 2 clutches. 10" gray base. 5/8"-27 thread. Shpg. wt. 12 lbs.
730-0504 Ea. 19.37 2-Up, Ea. 17.60

3 MS-25 PROFESSIONAL FLOOR STAND. "Air Lock Cushion" controls drop of chromed tube. 38-67". 17" base. 5/8"-27 thd. Wt. 22 lbs.
730-0525 Ea. 34.25 2-Up, Ea. 30.60

4 CS-33 COLLAPSIBLE FLOOR STAND. Fully demountable stand with full grip "Velvet Action." Can be collapsed to 22½", making it ideal for fixed and portable use. Base legs remove and are self-leveling. Adjusts from 26 to 64". Chromed. 20" base diameter. 5/8"-27 thread. 4 lbs.
730-0233 Ea. 19.48 2-Up, Ea. 16.60

REALISTIC "SURE-GRIP" MICROPHONE FLOOR STANDS

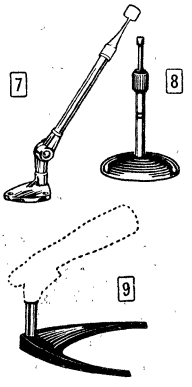
33-320 **9.95** 33-321 **11.95**

- Extended-Length Clutch Body for Full-Hand Grip
- Self-Leveling Base Pads and "Anti-Tip" Points

5 33-320—GRAY CAST BASE. Excellent for clubs, hotels, stages, etc. Velvet-smooth "sure-grip" clutch adjusts instantly from 35" to 63" and locks positively. Inner-lined with bakelite to prevent jamming or slipping. Two-section, chrome-plated tube. Shrivel-gray base, 10" in diameter, features specially designed leveling shock absorber pads for steadiness and anti-tipover bumpers to prevent accidents. Has standard 5/8"-27 threads for easy connection with most microphones. Shpg. wt. 10 lbs.
910L2X0053 ..... 9.95

6 33-321—CHROMED BASE. Similar to Model 33-320 above, but has all chromed finish. 34-62". Shpg. wt. 13 lbs.
910L2X0054 ..... 11.95

ATLAS SOUND MICROPHONE DESK STANDS

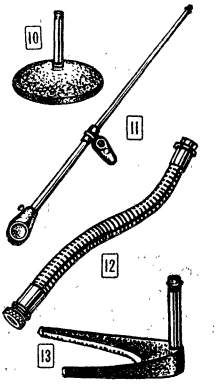


7 US-2 MULTIPURPOSE MICROPHONE SUPPORT. Ideal for language labs, switchboards, pulpits. Spring-loaded omni-swivel assembly "floats" in any position. Vertical: 180°. Horizontal: 360°. Chromed. 12¾" arm. 2⅝" base. 5/8"-27 thread. 2 lbs.
730-0552....Ea. 11.00 2-Up.....Ea. 9.95

8 DS-7. General-purpose desk stand with adjustable "Velvet Clutch." Base is of cast iron with gun metal shrivel finish; has pads to prevent damage to desks or table tops. Adjusts from 8 to 13". Base diameter 6", tube height 4". Chrome finished. 5/8"-27 thread. Shpg. wt. 3 lbs.
730-0307.....Ea. 6.87 2-Up.....Ea. 6.25

9 DS-14 CONTEMPORARY DESK STAND Modern stand with 3" chromed tube. Has gray-shrivel base. Standard 5/8"-27 thread. Shpg. wt. 2 lbs.
730-0314.....Ea. 5.25 2-Up.....Ea. 4.49

REALISTIC MICROPHONE ACCESSORIES



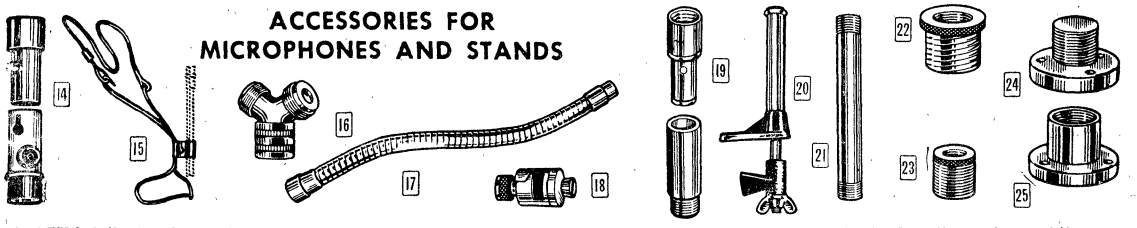
10 33-370 PADDED DESK STAND. Has heavily-padded 6" dia. cast iron base, gunmetal finish. 4" chrome tube attaches to any mike with standard 5/8"-27 thread. Shpg. wt. 9 lbs.
910-0132 ..... 2.99

11 33-343 BABY BOOM FLOOR STAND ATTACHMENT. Attaches to any floor stand for professional "studio" results. 31" long. 5/8"-27 thread. 8 lbs.
910-0131 ..... 7.95

12 33-330 FLEXIBLE 13" GOOSENECK. Connects to any mike—moves at any angle. Great for live shows. Ends have 5/8"-27 thds. Wt. 8 oz.
910-0130 ..... 2.49

13 33-329 CONTEMPORARY DESK STAND. Ideally suited to elongated and pencil-type mikes. Padded gunmetal base. 3" chrome tube. 5/8"-27 thread. Wt. 1½ lbs.
910-0129 ..... 2.70

ACCESSORIES FOR MICROPHONES AND STANDS



ADAPTERS AND FITTINGS. Add to the versatility of your equipment. Thread sizes shown as 1/8" pipe are International Pipe Standard. 5/8" dia., 27 threads-per-inch is standard—fits all stands on this page. Shpg. wt. 6 oz. except *1¼ lbs. †Switchcraft

Stock No.	Mfr's Type	Fig.	Description	EACH	2-Up, Ea.
730-0422	LO2	14	Lock-on mike attachment	4.50	4.00
730-0527	NS-1	15	Neck mike holder	7.55	6.70
732-0671	254	16	"Y" Mike Connector	1.90	1.72
730-0413	GN13	17	Flexible 13" gooseneck	3.30	3.10
730-0419	GN19	17	Flexible 19" gooseneck*	5.25	4.27
932-1080	329†	18	Mike volume control; hi-imp.	5.55	5.00
730-0451	SO1	19	Snap-on mike attachment*	3.67	3.38

Stock No.	Mfr's Type	Fig.	Description	EACH	2-Up, Ea.
730-0101	BC1	20	Bracket clamp; 6" stem*	4.75	4.35
730-0007	AD7	21	3" extension rod; 5/8"-27 ends	1.17	1.06
730-0008	AD8	21	6" extension rod; 5/8"-27 ends	1.20	1.06
730-0003	AD3	22	1/8" pipe female to 5/8"-27 female	.95	.88
730-0005	AD5	22	5/8"-27 to 5/8"-27 female coupling	.95	.88
730-0002	AD2	23	1/8" pipe female to 5/8"-27 male	.85	.79
730-0012	AD12	24	Mike base flange. Male. 5/8"-27	1.27	1.10
730-0011	AD11	25	Mike base flange. Female. 5/8"-27	1.27	1.10

All Stands on this Page Fit Microphones with Standard 5/8" -27 Thread

Public Address Speakers

WEATHERPROOF PAGING/TALK-BACK SPEAKERS

May be used as sensitive mikes for talk-back use. UH Series has 360° adjustable hood. IB-A8 for medium level sound systems. CIB-A8 for wide coverage in low-noise areas. CMIL-A8 for wide coverage with low power. Compact DLC Series for low-level use. MIL-A8 for low-power. IBR-A8 for wide coverage with minimum of speakers. MIS8 for low-power, flush mounting. All 8 ohms except DLC-45 and UH-45, 45 ohms. *Swivel mtg. bracket; fits ½" pipe without extra fixture. W: Watts.

Stock No.	Mfr's Type	Fig.	Frequency Range, Hz	W.	Dispersion	Dia.	Length Inch	Wt., Lbs.	EACH 1-4	EACH 5-Up
969-5184	UH-8	A	220-16,000	32	120°	10½"	*10⅞	5	34.96	29.13
969-5186	UH-45	A	220-16,000	32	120°	10½"	*10⅞	5	36.50	30.42
969-5126	IB-A8	D	250-13,000	30	90°	10¼"	*9	4¼	31.68	26.40
969-5110	CIB-A8	E	250-13,000	30	120x60°	.....	*7 3/8x14x12	6	38.46	32.05
969-5115	CMIL-A8	E	350-13,000	10	120x60°	.....	*6 7/32x9½x8 7/16	4	30.00	25.00
969-5120	DLC-8	F	400-10,000	7.5	120°	5⅞"	4	1½	16.58	13.82
969-5122	DLC-45	F	400-10,000	7.5	120°	5⅞"	4	1½	16.58	13.82
969-5155	MIL-A8	D	350-13,000	10	120°	7 13/16"	*6⅞	3¼	26.16	21.80
969-5128	IBR-A8	C	300-10,000	30	360°	13"	10¼	3¼	40.40	33.71
969-5161	MIS-8	....	500-13,000	7.5	150°	5½"	4 7/16	2½	30.20	23.63

DIRECTIONAL REFLEX TRUMPETS

Large horn diameters for deep sound-penetration with narrow angle where "long throw" is necessary, or ambient noise level is high. SWP projects bi-directionally with one driver. Model SMH, for voice reproduction only. Order drivers below. L: Length.

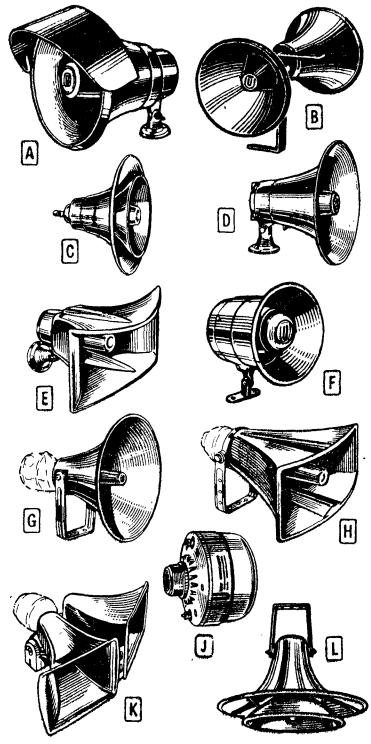
Stock No.	Mfr's Type	Fig.	Low Cutoff	Dispersion	L.	Dia.	Wt., Lbs.	EACH 1-4	EACH 5-Up
969-5165	PH	G	150 Hz	85°	15¾"	20⅜"	11¾	36.76	30.63
969-5180	SMH	G	200 Hz	95°	12"	16¼"	8¼	31.56	26.30
969-5176	RSH	L	180 Hz	360°	11"	19"	13	51.98	43.32
969-5174	RPH	L	140 Hz	360°	13¾"	25⅛"	19	55.44	46.20
969-5172	RLH	L	120 Hz	360°	18⅛"	28⅛"	25	77.96	64.97
969-5117	CLH	H	120 Hz	120x60°	20"	21½x11½"	13¼	45.36	37.80
969-5112	Cob. 2	K	200 Hz	120x60°	10¼"	18½x9¼"	10¼	38.08	31.73
969-5197	2WP	B	350 Hz	120° ea. hn.	20½"	8½"	4½	33.50	27.92
969-5178	SH	D	350 Hz	100°	7"	8¾"	2¾	33.90	28.25

HEAVY-DUTY DRIVERS FOR TRUMPETS ABOVE

16 ohms except multi-impedance transformer equipped (130T, 167/335/500/1000/2000/4000 ohms; 140T, 45/122/250/500/1000/2000; 160T, 16/80/165/250/500/1000/2000) with taps for 70.7 V. *Used as siren, 190-3600 Hz. All Fig. J at right. W: Maximum Watts.

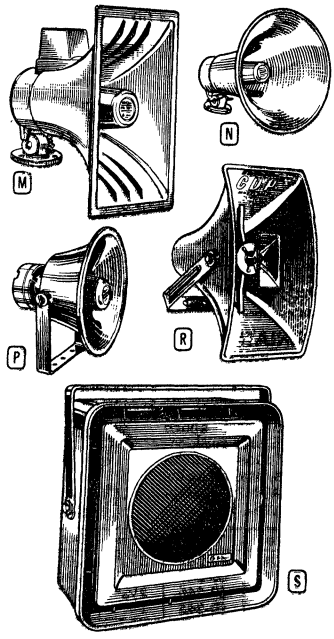
Stock No.	Mfr's Type	Frequency Range, Hz	Wattage of Taps	W.	Wt., Lbs.	EACH 1-4	EACH 5-Up
969-5132	ID-20	120-6500	.....	20	2½	20.35	18.15
969-5134	ID-30	85-7500	.....	30	3	27.66	23.05
969-5136	ID-30T	85-7500	30/15/10/5/2.5/1.25	30	4	40.20	33.50
969-5138	ID-40A	80-12,000	.....	40	4¼	33.60	28.00
969-5140	ID-40T	80-12,000	40/20/10/5/2.5	40	5¼	47.04	39.20
969-5142	ID-60	70-12,000	.....	60	5¾	48.72	40.60
969-5144	ID-60T	70-12,000	60/30/20/10/5/2.5	60	6¾	60.48	50.40
969-5146	ID-75*	150-7000	.....	75	5	48.16	40.14

UNIVERSITY SOUND



HIGH-EFFICIENCY HORN PROJECTOR PA SPEAKERS

Electro-Voice



M *PA30AT-7.* Rugged 30-watt paging projector speaker with integral 70-7 volt line transformer. Easily selected line power taps at 30, 15, 8, 4 and 2 watts. Virtually indestructible Implex rectangular horn for maximum durability, versatility, and sound dispersion. Driver, conservatively rated at 30 watts, provides smooth response for both voice and music. Universal swivel bracket mounts speaker in any position and allows rotation without dismounting. Response: 250-14,000 Hz. Power handling capacity: 30 watts. Dispersion: 120° by 90°. Sensitivity (EIA): 59 dB. Sound-pressure level: 125 dB. 11x6½x8½". Shpg. wt. 7½ lbs.
781 X0010..Each 41.40 5-Up.....34.50

N *848ACDP.* Compound diffraction wide-angle projector speaker with FC100 Horn and 1828C Driver. Low-distortion voice and music reproduction. Frequency response: 150-10,000 Hz. Power handling capacity: 30 watts. Nominal dispersion: 90° to 120°. Impedance: 8 ohms. Size: 10½x20½x20". Shpg. wt. 16¾ lbs.
781 U0070..Each 72.90 5-Up.....60.75

P *844A.* Durable, compact 30-watt general purpose paging projector speaker. Smooth natural voice reproduction; provides highly intelligible paging without feedback. Frequency response: 250-13,000 Hz. Power handling capacity: 30 watts. Nominal impedance: 8 ohms. Nominal dispersion: 90°. Sensitivity (EIA): 54 dB. Sound-pressure level: 123 dB. Size, 7½x9⅞" diameter. Shpg. wt. 13 lbs.
781 X0065..Each 34.56 5-Up.....28.80

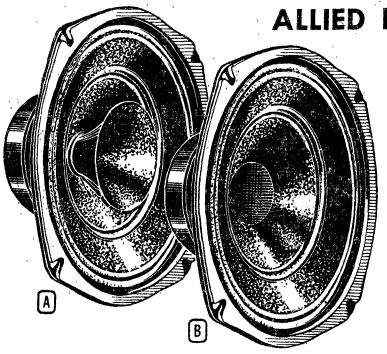
R *PA30R.* Re-entrant projector speaker has round spun-aluminum bell for uniform 105° dispersion. Conservatively rated 30-watt driver delivers smooth response for both voice and music. Universal swivel bracket mount speaker in any position and allows rotating without dismounting. Response: 250-14,000 Hz. Power capacity: 30 watts. Sensitivity (EIA): 60 dB. Sound pressure level: 127 dB. Impedance: 8 ohms. 9¾x10" dia. Shpg. wt. 6¾ lbs.
781 X0022..Each 32.40 5-Up.....27.00

COMPACT WIDE-RANGE ALL-WEATHER 12" SPEAKER SYSTEM

S *Musicaster 11A.* Integrated loudspeaker system particularly suited to voice and music reproduction. For indoor or outdoor use, in home, office, or industrial applications. Performs reliably at rallies, picnics and other outdoor events. Has 12" wide-range driver for good bass response. Radax dual-cone driver assembly for crisp highs. Weatherproofed and fungusproofed compression housing assures reliable operation under all weather conditions. Easy mounting. Universal "U" bracket converts to carrying handle for portability. Response: 80-16,000 Hz. Mechanical crossover at 4000 Hz. Electrical crossover at 5000 Hz. Dispersion: 120° Cap.: 30 watts (60 watts peak). Imp.: 8 ohms. 21½x21½x6½". Wt., 37 lbs.
781 U0045...Each 121.32 5-Up....101.10

Allied®, Nova®, Realistic® Replacement Speakers

ALLIED EXTRA-VALUE 8" SPEAKERS FOR PA SYSTEMS PRODUCTION LINE AND REPLACEMENT USES

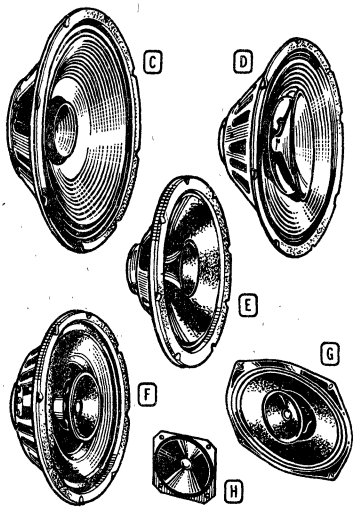


- Internal Dust Seals • Shallow Profile for Convenient In-Wall Mounting
- Mounting Facilities for Transformers with up to 2¾" Centers
- High-Efficiency Barium Ferrite Magnets • For Voice or Music

The best buys anywhere in general-purpose 8-inch speakers. Built right and priced right for good-quality sound in music and paging systems as well as low-cost stereo equipment. Many production line applications for OEM users as well. All speakers have high sensitivity for greater overall efficiency. Epoxy is used between plates and magnet—cured with RF heat—for an indestructible bond. Shallow construction profile for easier in-wall mounting. Use powerful barium-ferrite magnets with 1"-diameter voice coils. Integral mounting facilities for transformers with 1¾", 2" and 2¾" centers. Internal dust seals protect critical close-tolerance voice coil gaps. Models 801W and 803W have separate high-frequency (whizzer) cone for higher treble response. Impedance, 8 ohms. Made in U.S.A. Available exclusively from Allied Electronics.

Stock No.	Mfr's Type	Fig.	Magnet Oz.	Peak Watts	Response in Hz	Mtg. Depth	Mtg. Dia.	Wt., Lbs.	EACH 1-5	6-24	25-49	50-Up
706-8000	800	B	6	22	42-16,000	2¾"	7 11/16"	2½	8.30	6.90	6.21	5.60
706-8001	801W	A	6	22	42-17,000	2¾"	7 11/16"	2½	8.70	7.20	6.48	5.80
706-8002	802	B	10	30	38-16,500	3"	7 11/16"	2¾	9.00	7.50	6.75	6.00
706-8003	803W	A	10	30	38-18,000	3"	7 11/16"	2¾	9.35	7.80	7.02	6.25

NOVA REPLACEMENT HIGH-FIDELITY SPEAKERS



For consoles, radios, TV or phonos—as replacements or extension speakers. Provide crisp, clean sound at low cost. Choice of 6 sizes. Designed and manufactured in the U.S.A.

C 12" FULL-RANGE SPEAKER

MODEL 40-1200. Internal dust seal protects precison voice coil. Handles 30 watts of power. Dependable ceramic-magnet construction. High-efficiency design with frequency response from 50-11,000 Hz. Impedance, 8 ohms. Shpg. wt. 4½ lbs.
910-0021 ..... 6.99

D 12" 3-WAY COAX SPEAKER

MODEL 40-1230. Horn-shaped tweeter is coaxially mounted with prewired capacitive crossover. Midrange cone is coaxially mounted to woofer cone with mechanical crossover. Handles 16 watts; 30 watts peak. 35-17,000 Hz. 8 ohms. Shpg. wt. 4 lbs.
910-0027 ..... 11.95

E 8" DUAL CONE SPEAKER

MODEL 40-1232. Has 3-oz. ceramic magnet and whizzer cone for smooth highs. Priced low, but delivers wide-range sound. Power handling capacity, 8 watts. Frequency response, 40-12,500 Hz. Impedance, 8 ohms. Baked-on lacquer finish. Wt. 1¾ lbs.
910-0025 ..... 5.95

F 8" ROUND COAX SPEAKER

MODEL 40-1226. Only 2¾" deep—great for in-wall mounting. Prewired 3" tweeter and crossover simplify installation. 3-oz. ceramic magnet. Power handling capacity, 10 watts. Response, 50-17,000 Hz. Impedance, 8 ohms. Baked-on lacquer finish. 1¾ lbs.
910-0028 ..... 8.95

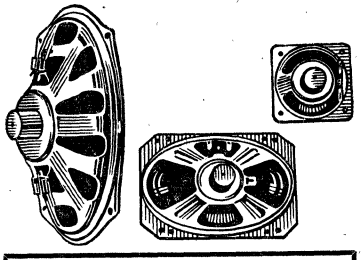
G 6x9" COAX SPEAKER

MODEL 40-1231. Ceramic magnet gives sharp clear reproduction of voice and music. Designed with separate coaxially mounted 3" tweeter. Power handling capacity, 8 watts. Frequency response, 50-15,000 Hz. Impedance, 8 ohms. Shpg. wt. 1½ lbs.
910-0026 ..... 8.95

H 3½" SQUARE TWEETER

MODEL 40-1224. Basket has sealed back to protect cone against woofer back pressure. Electronic crossover (non-polarized capacitor at 4500 Hz). Power handling capacity, 10 watts. Frequency response, 2000-16,000 Hz. Impedance, 8 ohms. Shpg. wt. ¾ lb.
910-0029 ..... 3.99

REALISTIC REPLACEMENT OR EXTENSION SPEAKERS

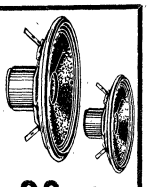


- Ideal for Home or Auto Radio, Public Address and TV Replacement Use
- High-Efficiency Alnico V Magnet • All Speakers Made in U.S.A.
- Perfect for Use as Extension Speakers • Each Speaker Individually Packed

High-quality American-designed and manufactured replacement speakers put your music system, home radio, Public Address system or automobile radio in top form. Choose from this wide variety of top-performing sound reproducers, all with rigid frame construction to maintain proper voice coil and magnet alignment. Powerful Alnico V magnets assure greater sensitivity for an overall efficiency approaching that of much costlier speakers. For extra convenience, each speaker is individually packaged for easy on-shelf storage. In the table below are 16 sizes from 3" to 6x9" speakers, meeting most needs for replacements in consoles, radios, TV and phonos. At the left are special space-saving sizes for miniaturized electronic components.

Stock No.	Mfr's Type	Size	Magnet	Watts	Ohms	Wt. Lbs.	EACH 1-3	4-9	10-Up
910-0030	40-1201	3"	.68 oz.	3	3-4	¼	2.29	2.09	1.69
910-0031	40-1202	3½"	.68 oz.	3	3-4	¼	2.39	2.19	1.79
910-0032	40-1203	4"	.55 oz.	3	3-4	¼	2.39	2.19	1.79
910-0033	40-1204	4"	1.00 oz.	4.5	3-4	¼	2.59	2.29	2.09
910-0034	40-1205	5"	.55 oz.	4	3-4	¾	2.39	2.19	1.79
910-0035	40-1206	5"	1.00 oz.	5	3-4	¾	2.79	2.49	2.19
910-0036	40-1207	6"	.68 oz.	5	3-4	1¼	2.99	2.69	2.39
910-0037	40-1209	5x3"	.55 oz.	4	3-4	½	2.39	2.19	1.79
910-0038	40-1210	4x6"	.68 oz.	4	3-4	½	2.79	2.49	2.19
910-0039	40-1211	5x7"	.68 oz.	4	3-4	¾	2.99	2.69	2.39
910-0040	40-1212	6x9"	.68 oz.	4	3-4	1¼	3.29	2.99	2.69
910-0041	40-1213	8"	1.47 oz.	8	3-4	2	3.99	3.59	2.99
910-0042	40-1905	6"	1.47 oz.	6	10/20/40	1¾	3.99	3.59	2.99
910-0043	40-1214	4x10"	2.15 oz.	8	10/20/40	2½	4.99	4.19	3.49
910-0044	40-1215	5x7"	1.48 oz.	7	10/20/40	2	4.99	4.19	3.49
910-0045	40-1216	6x9"	1.47 oz.	8	10/20/40	2	4.99	4.19	3.49

"MINIATURE" 8-OHM SPEAKERS

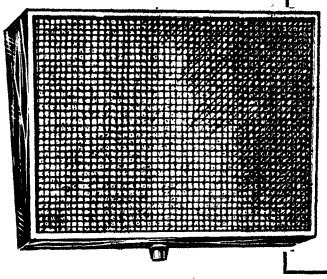


Alnico PM replacement speakers, very thin to fit the tightest space possible. Exact replacements for most transistor radios, walkie-talkies and tape recorders. Av. shpg. wt. ½ lb.

.98 4 Sizes

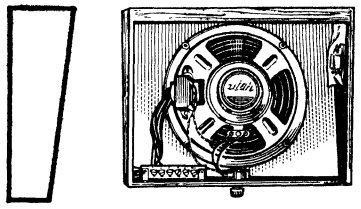
Stock No.	Type	Size	EACH
910-0109	40-262	2¾"	.98
910-0110	40-247	2½"	.98
910-0111	40-246	2¼"	.98
910-0112	40-245	2"	.98

Baffles and Speaker-Baffles



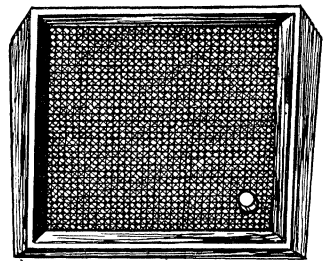
EXTRA-THIN BAFFLE WITH 8" SPEAKER

Optional Volume Control, Transformer



Smart, modern styling in a sloping baffle that's only 4" deep. Features 8" dia. shallow speaker with internal dust shield, bonded magnet structures and barium ferrite magnet for more sound per watt. Ideal for use in classrooms, offices, reception rooms, and many other background music and paging system applications. Impedance, 8 ohms. Size, 9x12x4". Available as baffle-speaker unit alone, or with tapped transformer and/or L-pad volume control for adjustments right at the speaker. Screw terminals for fast installation. Supplied with all hardware for easy mounting. "T" suffix in Mfr's Type indicates baffle-speaker with transformer, tapped at 5, 2.5, 1 25, 0.62 and 0.31 watts. Transformerless types, 15 watts peak. "V" suffix, with volume control.

Stock No.	Mfr's Type	Enclosure Finish	Wt., Lbs.	EACH 1-4	EACH 5-Up
973X1135	*TP8A-VT*	*Walnut-Finished Wood*	*4*	22.50	18.10
973X1141	TP8B-V	Walnut-Finished Wood	3½	19.55	16.50
973X1147	TP8C	Walnut-Finished Wood	3½	16.50	13.90
973X1156	TP8D-T	Walnut-Finished Wood	4	19.99	16.90
973X1170	TS8A-VT	Walnut-Textured Vinyl	3½	19.99	16.90
973X1175	TS8B-V	Walnut-Textured Vinyl	3	16.80	14.40
973X1180	TS8C	Walnut-Textured Vinyl	3	13.60	11.50
973X1185	TS8D-T	Walnut-Textured Vinyl	3½	17.75	15.00

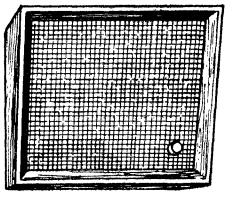


DELUXE BAFFLE WITH 8" SPEAKER, VOLUME CONTROL AND 70.7-VOLT TRANSFORMER

TYPE 1206. Utah's best. Molded styrene baffle has fine-furniture walnut finish. Big 8" speaker, with ceramic magnet, has factory wired L-pad volume control. 70.7 volt transformer has screw terminal taps for 10, 5, 2.5, 1.25 and .62 watts. 10⅜x13x6".
973X1206. Shpg. wt. 5 lbs..... 20.40

TYPE 1205. Above, less transformer. Handles 24 watts peak power.
973X1205. Shpg. wt. 4 lbs..... 17.10

973-1207. Baffle Alone. 2 lbs.... 5.85



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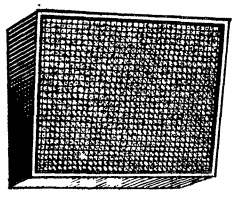

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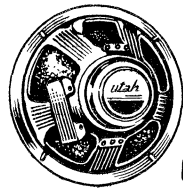

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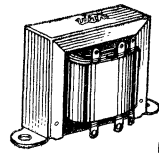


D

- These Factory Wired "Assemblies" Save You Labor Costs
- Constant-Voltage Type Ends Impedance-Matching Problems
- Excellent for Do-it-Yourself PA Systems—No Soldering

A BIG-VALUE BAFFLE WITH PREWIRED 8" SPEAKER, 70.7-VOLT TRANSFORMER, VOLUME CONTROL

TYPE 8A-W. Ready-to-hang assembly with all the tedious "wiring work" done at the factory. Speaker, transformer and L-pad volume control are already connected to the screw terminals. No soldering—all you need is a screwdriver. Transformer has taps for 5, 2.5, 1.25, 0.62 and 0.31 watts. Speaker has powerful Alnico V magnet. L-pad maintains a constant impedance on the line. Authentic walnut grain is molded into the styrene baffle, color goes all the way through. 10⅜x13x6".
973X1305. Shpg. wt. 3¼ lbs..... 16.30

A LOW-COST BAFFLE WITH 8" SPEAKER, AND VOLUME CONTROL—PREWIRED!

TYPE 8B-W. The same value-priced assembly above, but without the 70.7-volt transformer. The 8" speaker easily handles 14 watts of peak power for excellent voice or music reproduction. Speaker is factory wired to handy screw terminals for quick hook-up with no soldering. Use as an extension to existing installations or for new systems. Impedance, 8 ohms.
973X1306. Shpg. wt. 3 lbs..... 13.85

B "SLOPING" BAFFLE WITH 8" PREWIRED SPEAKER

TYPE A-124896. Sloping baffle has thin look for contemporary decors. With 8-inch speaker, designed for best dispersion angle. Nine-watt, 8-ohm speaker has 1.45-oz. Alnico V magnet. Screw terminals for easy installation with no soldering. Bonded corners for maximum strength and years of service. Recessed front for a neater, trimmer appearance. For use in average offices, classrooms, reception rooms, hospital rooms. All hardware is included in a coin envelope, for fast, easy mounting. Size, 9x11x6". Covered with durable wood-grained fabric. Attractive walnut finish enclosure matches most interiors.
973X1001. Shpg. wt. 4 lbs..... 10.60

C "PROFESSIONAL QUALITY" PA SPEAKERS

Built to deliver year-in, year-out dependability in commercial sound installations. Ceramic magnet assemblies are permanently bonded with RF-cured epoxy for the ultimate in reliability. Screw terminals eliminate all soldering—you need only a screwdriver. 8-ohms impedance, except SP Series, 45 ohms. Number in Mfr's Type column indicates speaker diameter. Suffix "W" indicates dual-cone design. *Coaxially mounted tweeter; †pincushion; ‡square style.

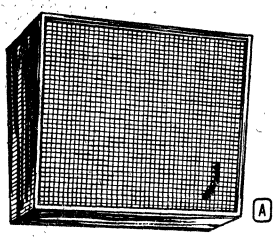
Stock No.	Mfr's Type	Watts	Mag. Oz.	Mtg. Depth	Wt., Lbs.	EACH 1-2	EACH 3-5	EACH 6-Up
973-1115	SP3.5AI‡	4	.68	1 7/16"	¾	3.52	3.17	3.05
973-1114	SP4AI	4	.68	1 9/16"	¾	3.48	3.13	2.97
973-1118	SP8FCI†	10	5.5	2¾"	1¾	6.29	5.67	5.39
973-1050	PA8ECS	8	3.0	1⅞"	1½	6.93	6.25	5.95
973-1052	PA8FC	10	5.5	2¾"	1¾	6.85	6.08	5.78
973-1053	PA8FC-W	10	5.5	2¾"	1¾	6.98	6.28	5.97
973-1064	PA8JC	15	10.0	3"	2¾	8.47	7.63	7.25
973-1065	PA8JC-W	15	10.3	3"	2¾	8.72	7.85	7.47
973X1075	PA12JC	18	10.0	4 7/16"	4½	10.85	9.77	9.27
973-1067	PA8JC-3*	15	10.0	3"	3¼	14.25	12.82	12.20

D LOW COST LINE-TO-VOICE COIL TRANSFORMERS

For driving speakers at various power levels from the same 70.7-volt or 25-volt audio line. Just select desired power (volume) level by changing transformer taps. Solder terminals. Impedance and wattage are printed on coil. For 4, 8 or 16-ohm speakers as indicated. Have 1¾" mounting centers, *except 2" centers; †2⅜ centers; ‡2¾ centers. Shpg. wt. 1 lb.

Stock No.	Mfr's Type	Watt Tape	Line Volts	Imp. Ohms	EACH 1-11	EACH 12-Up
973-1012	*CV705*	*5, 2.5, 1.25, .62, .31*	*70.7**	*8, 4*	2.89	2.61
973-1015	CV7010	10, 5, 2.5, 1.25, .62	70.7*	16, 8, 4	3.45	3.11
973-1016	CV7018	18, 9, 4.5, 2.25, 1.12	70.7†	16, 8, 4	4.25	3.83
973-1014	CV2510	10, 5, 2.5, 1.25, .62	25.0‡	16, 8, 4	4.37	3.94
973-1010	CV255	5, 2.5, 1.25, .62, .31	25*	8, 4	2.89	2.60
973-1011	CV274	4, 2, 1, .5, .25	25/70	8	3.10	2.79

Baffles and Baffles with Speakers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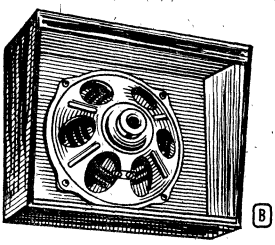
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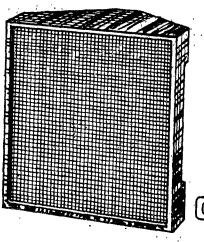
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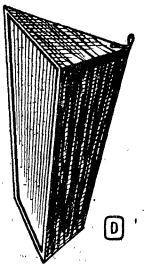
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A STELLAR WALL BAFFLES

Smart, modern styling in wall baffles. Ideal for use in offices, classrooms, reception rooms and many other background music and paging applications. Handsomely covered in walnut, wood-grained fabric. Recessed front for a neater, trimmer appearance. Frames and front panels are of particle board chosen for its acoustically correct density. Bonded corners for maximum strength. All hardware for fast, easy mounting included in coin envelope fastened inside each baffle. Less speaker.

Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH 1-5	EACH 6-Up
973-1106	S45-W	5⅞x7⅛x3½"	½	4.20	3.50
973-1100	S6-W	7¼x8¼x4¼"	1	4.95	4.16
973-1102	S8-W	9x11x6"	2	5.95	4.99
973-1104	S12-W	13½x15⅞x5"	3¾	15.80	13.33

B STELLAR BAFFLES WITH SPEAKERS

Utah's popular speakers, mounted in attractive walnut-finished enclosures, match most room interiors. Thin profile, 8 ohm speakers provide excellent voice or music reproduction. Price shown below includes speakers with solder lugs, installation of speaker in baffle and hanging hardware.

Stock No.	Mfr's Type	Spkr. Size	Size HxWxD	Wt., Lbs.	EACH 1-5	EACH 6-Up
973-1107	S45C-W	4"	5⅞x7⅛x3½"	1	6.70	5.60
973-1101	S6C-W	6"	7¼x8¼x4¼"	1½	7.90	6.60
973-1103	S8C-W	8"	9x11x6"	2¾	10.20	8.45
973-1105	S12C-W	12"	13½x15⅞x5"	5	15.80	13.30

C STELLAR STRAIGHT CORNER BAFFLES

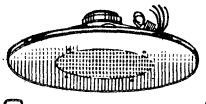
Model CS8-W. Straight corner baffle designed for use in schools, churches, all buildings with normal public address or background music broadcast needs. Each baffle comes complete with mounting hardware. Carefully constructed of acoustically correct particle board for life-long, trouble-free operation. Finished in fine walnut cover fabric. For use with 8" speaker. Has dimensions 9½x9½x 6¼". Less speaker. Shpg. wt. 1¼ lbs.
973-1005. 1-5.....Each 7.95 6-Up.....Each 6.50

Model CS12-W. As above but designed for 12" speaker. Dimensions 13½x13½x8¾". Less speaker. Shpg. wt. 2½ lbs.
973-1007. 1-5.....Each 10.35 6-Up.....Each 8.65

D DELUXE SLOPING CORNER BAFFLES

Model DCW8. Sloping corner baffle has contemporary look to match most modern decors. Available in pleasing walnut lacquered exterior finish. Enclosure front is made of fine mesh, acoustically correct grille cloth with cane appearance. Design blends trim, stylishly recessed front panel. 5 ply plywood used throughout. All corners are reinforced with glue blocks for maximum possible strength. Takes 8" speaker. Dimensions 14x15½x8¼" with minimum depth of 4⅜". Less speaker. Shpg. wt. 5 lbs.
973-1025. 1-5.....Each 15.40 6-Up.....Each 13.10

Model DCW12. Accepts 12" speaker. Has dimensions 18x19½x9⅞", 6" minimum depth. Same 5 ply plywood construction. Fast-mounting clips included inside each baffle. Less speaker. Wt. 8 lbs.
973-1027. 1-5.....Each 21.00 6-Up.....Each 17.50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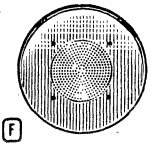
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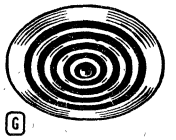
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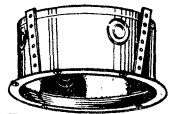
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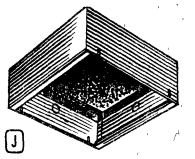
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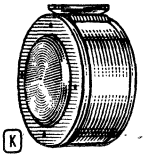

K

CEILING AND WALL BAFFLE ACCESSORIES

E 5-PACK TRIM RINGS

Model M8RA-5. For use with 8" speakers. 12" diam. Brushed aluminum. Mounts flush with ceiling. Hardware included. 3¾ lbs.
973-1036.....Package of 5 for 13.90
Model M8RW-5. As above but made of white steel. Can be repainted. Wt. 7½ lbs.
973-1041.....Package of 5 for 13.90

F ROUND TRIM RINGS

Model M8RA. Handsome, brushed aluminum grille. Mounts flush. Accepts 8" speaker. Overall diameter 12¾". Use with baffle E8R (right). Hardware included. Less speaker. Shpg. wt. ¾ lb.
973-1035. 1-5..Ea. 3.10 6-Up..Ea. 2.80
Model M8RW. As above but made of white steel. Can be repainted to match ceiling. Less speaker. Shpg. wt. 1½ lbs.
973-1040. 1-5..Ea. 3.10 6-Up..Ea. 2.80

ASSEMBLIES WITH SPEAKERS & TRANSFORMERS

Model 70-8EC-A. Pre-assembled, pre-wired, ready to mount. 8" speaker. 18 watts, 8 ohms. 70-volt transformer. Uses type M8RA grille (above). Wt. 2 lbs.
973-1270. 1-5..Ea. 9.90 6-Up..Ea. 8.25
Model 70-8EC-W. As above but with M8RW style grille (above). Wt. 2 lbs.
973-1272. 1-5..Ea. 9.90 6-Up..Ea. 8.25

G ROUND LOUVERED BAFFLE

Model M8RL. Brushed aluminum. Recessed louvers. Takes 8" speaker. Fits E8R enclosure. Less speaker. Wt. 2 lbs.
973-1037. 1-5..Ea. 5.80 6-Up..Ea. 4.84

ROUND LOUVERED BAFFLE WITH SPEAKER & TRANSFORMER

Model M8RL-ST. Pre-assembled for instant mounting. 12" diam. brushed aluminum louvered baffle. 8" speaker. 18 watts. 70 volt transformer. Shpg. wt. 2 lbs.
973-1038. 1-5.Ea. 12.51 6-Up.Ea. 10.50

J SQUARE BAFFLE

Model M8SW. Made of white steel. Can be repainted to match decor. Takes 8" speaker. 11½" square grille mounts flush. Fits E8S enclosure (right). Hardware included. Less speaker. Shpg. wt. 1½ lbs.
973-1045. 1-5..Ea. 3.10 6-Up..Ea. 2.59

SQUARE BAFFLE WITH SPEAKER & TRANSFORMER

Model M8SW-ST. 8" speaker. 8 ohms, 18 watts. 70 volt transformer. 3 oz. ceramic magnet. 11½" sq. baffle made of white steel. Assembly pre-wired and ready for immediate installation. Wt. 1½ lbs.
973-1046. 1-5..Ea. 9.90 6-Up..Ea. 8.25

H ROUND BACK BOX

Model E8R. Undercoated to prevent rust. Jute pads plus sound-deadening compound. 11" overall dia. x 4½" deep. Fits M8RA, M8RW and M8RL (left). Wt. 2½ lbs.
973-1028. 1-5..Ea. 5.90 6-Up..Ea. 4.92

J SQUARE BACK BOX

Model E8S. Rust-proof. Designed with sound deadening compound. 10⅝" sq. x 3¾" deep. Use with Model M8SW (left). Wt. 3 lbs.
973-1029. 1-5..Ea. 5.70 6-Up..Ea. 4.74

K BI-DIRECTIONAL BAFFLE

Model M8BD. For larger area-per-speaker coverage. Ideal for corridors, shopping centers, shipping docks. Mounts on wall, ceiling, any flat surface or outlet box. Fits 8" speakers up to 4½" deep. 10" x 5½". Sound radiates from front and back. Brushed aluminum finish. Wt. 2¼ lbs.
973-1033. 1-5.Ea. 13.53 6-Up.Ea. 11.14

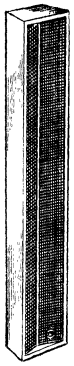
ABOVE WITH ALL-WEATHER SPEAKER

Model M8BD-SW. As above but pre-wired for convenience. 8" speaker designed for outdoor use. 30 watt peak. Color-coded leads pre-stripped to facilitate installation. Shpg. wt. 4 lbs.
973-1034. 1-5..Ea. 22.20 6-Up..Ea. 18.40

Sound Columns, Patio Speakers, Realistic® Intercoms

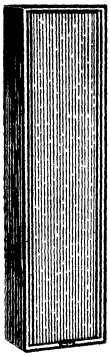
Argos Sound-Director Column

A



Utah SND-3 Sound Column

B



Argos SD-1100 Sound Director

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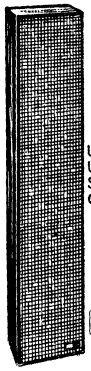


University Uniline Sound Column

D

A ARGOS SOUND DIRECTOR COLUMN FOR BETTER PA

MODEL SD-1064. Provides sound distribution for rooms up to 200-ft. long. "Focusing" adjustment adapts to room length. Uses six 5" speakers. Walnut-grain vinyl finish, plastic cane grille cloth. Response: 200-10,000 Hz. Capacity: 30 watts. Impedance: 16 ohms. Dispersion: 120° horizontal, 30° vertical. With mounting clips. 30¼x7x3⅛". Shpg. wt. 10 lbs.
729X2718. 1-3. Ea. 58.06 4-Up. Ea. 47.50

MODEL MSD-1060. Deluxe version of SD-1064, above. Features six 8" speakers. Excellent for meeting rooms, classrooms, churches. Provides even sound distribution from front to rear of room. Frequency response: 70-15,000 Hz. Capacity: 60 watts. Impedance: 16 ohms. Dispersion: 120° horizontal, 30° vertical. With mounting clips. 50½x10¾x8¼". Shpg. wt. 50 lbs.
729X2715. . Ea. 109.83 2-Up. Ea. 89.95

MODEL MSD-1060HD. Same as Model MSD-1060 but with ruggedized construction for institutional use. Has shock mounted speakers, protective bar across front and hidden steel grille to protect speakers. Ideally suited for schools, gymnasiums, and other institutions. Wt. 51 lbs.
729-2716. . . Ea. 120.33 2-Up. Ea. 94.50

B UTAH SOUND COLUMN

MODEL SND-3. Heavy-duty sound column with six 8" speakers for 72-watt power capability. Mounting bracket. Response: 50-15,000 Hz. 120° horizontal dispersion, 30° vertical dispersion. 8 ohms. 51x11x 7¾". Shpg. wt. 42 lbs.
973-1110. 1-3. . Ea. 99.99 4-Up. Ea. 79.95

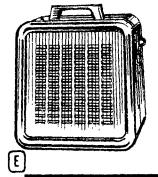
C ARGOS SOUND DIRECTOR

MODEL SD-1100. Designed to work under adverse acoustic conditions. Has ten 5½" speakers. Permits adjustment of vertical angle from 15° to 25°. Entire column tilts to focus the sound beam. Walnut grain vinyl finish. Capacity: 50 watts. Response: 200 to 10,000 Hz. 16 ohms. 49¼x7x6". Shpg. wt. 23 lbs.
729-2719. . Ea. 91.10 2-Up. . Ea. 74.50

D UNIVERSITY UNILINE COLUMN

MODEL CSO-4. Weatherproof steel enclosure with 4 fungus-proof 8" speakers. Response: 70-17,000 Hz. 75-watts. 8 ohms. Dispersion: 120° horiz. 18° vert. 41½x12x 8". Shpg. wt. 40 lbs.
969U5113. Ea. 185.60 2-Up. . . Ea. 156.87

MODEL CS-2. Six 5" speakers, 175-12,000 Hz. 30 watts. 8 ohms. 165° horiz., 25° vert. dispersion. 31x5½x5". 14 lbs.
969X5114. Ea. 79.00 2-Up. . . Ea. 65.67



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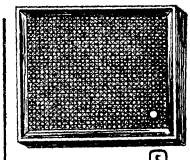

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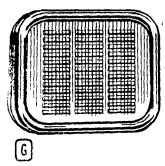

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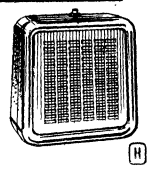


H

UTAH WEATHERPROOF SPEAKERS

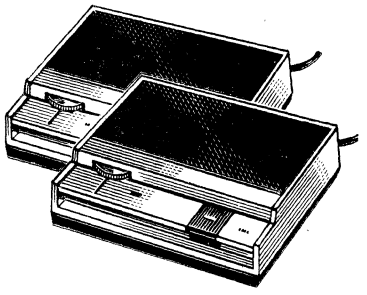
E HFOD-8 HI-FI PORTABLE PATIO SPEAKER. 8" speaker in steel case. High-frequency cone. Volume control. Carry it by handle or mount with screws. Response: 35-19,000 Hz. 30 watts peak. 8 ohms. 25-ft. cable. 10⅞x10⅞x5⅜". 6¼ lbs.
973-1030. . Ea. 17.80 2-Up. . Ea. 14.95

F U8B-W SPEAKER. 8" speaker in walnut finish styrene case. Mounts on wall. 18 watts peak. 8 ohms. Has 70-V transformer with 5, 2.5, 1.25, .62, .31 watt taps. L-pad control. 10⅜x13x6". Shpg. wt. 3 lbs.
973-1190. . Ea. 15.50 2-Up. . Ea. 10.65

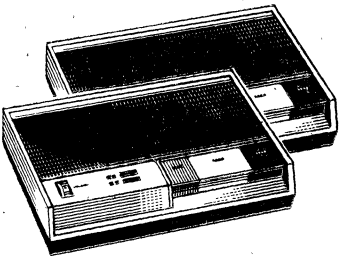
G MOD-4 PATIO SPEAKER. 4" speaker in steel cabinet. Compact enough to use anywhere. Screw terminals for easy wiring. Capacity, 4½ watts program. Keyhole slots for wall mounting, or will stand on shelf. 4⁵⁄₁₆x5⁵⁄₁₆x2¾". 1¼ lbs.
973-1047. . . Ea. 7.00 2-Up. . Ea. 5.75

H MOD-8 PATIO SPEAKER. 8" speaker in steel cabinet. Volume control. Slots for easy mounting. Connect the attached 25-ft. cable to hi-fi, radio or TV. Response: 40-15,000 Hz. 20 watts peak. 8 ohms. 10⅞x10⅞x5⅜". 6¼ lbs.
973-1048. . Ea. 15.00 2-Up. . Ea. 11.95

REALISTIC WIRELESS INTERCOM SYSTEMS FOR HOME OR BUSINESS



Wireless intercoms provide instant inter-room talking anywhere in the house. No wires to connect. Just plug each unit into a convenient AC outlet. May be used between adjacent homes employing the same power-line transformer.



2-WAY WIRELESS INTERCOM SYSTEM

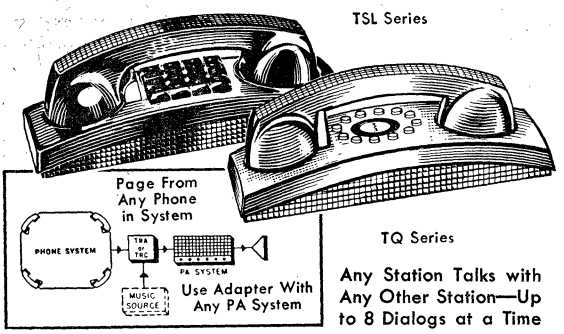
Type 43-210. You can unplug these units and take them with you when moving from one room to another. Each intercom is a Master station in its own right—you can call and reply to other stations. Buy two or three pairs and you can have a complete and inexpensive communication network for use around your home, in hospitals, factories, offices, stores. System pays for itself in convenience and the time you save. Perfect for monitoring baby's room or for talking between rooms. Has convenient illuminated talk-bar. Lock button for hands-free conversation, dictation, monitoring nursery. Large 2½" speaker gives extra-clear voice reproduction. Solid-state for maintenance-free operation. Size, 5x5½x5⅛". AC. Shpg. wt. 4 lbs.
910-0057 . . . . . Pair 29.95

WIRELESS DUAL-CHANNEL INTERCOM

Type 43-225. Update your home, office or shop with a modern solid-state wireless intercom system. Provides two separate channels on each station. Gives you instant inter-room or inter-office communication with quiet, step-saving efficiency. No wires to hook up. Just plug into AC outlet. Can be used in separate buildings on the same electric line transformer. Add as many stations as desired. Extra stations permit conferences, separate conversations simultaneously. Each unit has thumbwheel volume control. Lock button for hands-free conversation or monitoring. Illuminated press-to-talk bar. Channel switch on front panel. Call button signals other station when you want to talk. AC. Shpg. wt. 3 lbs.
910-0058 . . . . . Each Station 19.95

BOGEN Intercoms and Phone Systems

TSL Series



TQ Series

Any Station Talks with Any Other Station—Up to 8 Dialogs at a Time

TSL MULTI-CHANNEL BOGEN-PHONES

In 8-station TSL-8 system, up to 4 private conversations can be held at once; in 16-station TSL-16, up to 8; any station talks with any other. Push desired number of selector buttons for conference calls. To call, lift phone, press selector button, then press ring button; buzzer sounds at called station. 3½x9½x3¼". Beige. Use cable with at least 2 cond. more than number of phones. 4½ lbs.

733-0078. TSL-8 Phone. 1 ring, 7 station-selector buttons. Calls up to 7 other stations individually or together...**Ea. 45.15 2-Up 40.75**

733-0079. TSL-16 Phone. 1 ring. 15 station-selector buttons. Calls up to 15 other stations.....**Ea. 53.60 2-Up 48.25**

733-0063. PRS-16 Power Supply. Takes 1 per system. Use 3-cond. cable. 6x2x3½". 117 VAC. Wt. 4 lbs.....**Ea. 46.25 2-Up 41.55**

733-0075. TRC Phone-Page Adapter. Allows paging through PA system. Volume control for separate paging and music levels. Use 3-cond. cable. 4x4x2". Wt. 6 lbs. **Ea. 34.60 2-Up.....Ea. 31.65**

TQ COMMON-TALK BOGEN-PHONES

Any station talks with any other station, but only 1 conversation (2-way) can be held at a time. Has selective ringing, conference call feature. Total of 7 stations can be used in TQ-6A system; 13 in TQ-12A. Beige. 3¼x3¼x9¼". Use cable, below, with at least 3 conductors more than number of phones in system. 4 lbs.

733-0070. TQ-6A Phone. Up to 7 sta.....**Ea. 31.95 2-Up, Ea. 29.05**

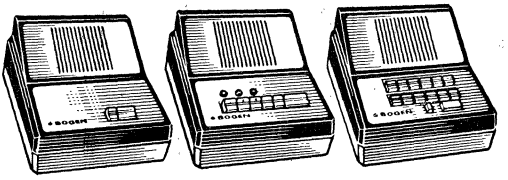
733-0072. TQ-12A Phone. Up to 13 sta....**Ea. 35.90 2-Up, Ea. 32.65**

733-0060. PRS-1A Power Supply. Takes 1 per system. Use 3-cond. cable, below. 3½x6x2". 117 VAC. 4 lbs...**Ea. 27.60 2-Up, Ea. 25.00**

733-0074. TRA Phone-Page Adapter. Allows paging through PA system. Volume control for separate paging and music levels. Use 3-cond. cable. 4x4x2". Wt. 3 lbs.....**Ea. 34.60 2-Up, Ea. 31.65**

CABLE FOR ABOVE IN 100 AND 500-FT. SPOOLS

No. of Cond.	Lbs./100'	Type	100-Ft. Spool Stock No.	100-Ft. Spool EACH	500-Ft. Spool Stock No.	500-Ft. Spool EACH
3	2	832203	768-9149	4.11	.....	.....
6	4	832206	768-9152	10.10	.....	.....
12	5½	832212	768-9155	14.66	.....	.....
15	7	8458	732-2200	22.87	732-2201	102.70
25	12	8459	732-2210	35.07	732-2211	161.99



RIE-1 Remote | IE-4 Master | IE-13 Master

SOLID-STATE PLANT INTERCOMS

ALL-MASTER SYSTEM. Use up to seven IE-7 or up to thirteen IE-13 Masters. One non-private RIE-1 Remote may be substituted in IE-7 system for hands-free reply, two RIE-1 Remotes can be used in IE-13 system. Any Master can call all others or page thru plant P.A. system. Each has volume control, press-to-talk bar with dictate lock, pushbutton selector switches. For desk or wall mounting. Gray. Each unit 4⅜x6⅞x7⁹⁄₁₆". Order cable below—use unshielded cable with at least one more conductor than total no. of stations. All Masters require 110-120 VAC.

SINGLE MASTER-MULTIPLE REMOTE SYSTEM. One IE-7 Master, up to six RIE-1 Remotes; or one IE-13 Master, up to twelve RIE-1 Remotes. Master calls one or more stations simultaneously. Remote originates calls to Master, has press-to-talk bar, privacy switch. Each unit, 4⅜x6⅞x7⁹⁄₁₆". Order cable below—use 3-conductor unshielded cable between Master and each Remote.

IE-4S "ANNUNCIATOR" SYSTEM. IE-4 Master takes up to three RIE-1 Remotes (one incl.). Calls one or more remotes as desired. Remotes originate calls to master by means of beep-tone and magnetic annunciator that remains visible until cleared by Master. IE-4 Master has volume control, press-to-talk bar, 3 pushbutton selector switches (each with annunciator), beep tone call button, clearing button. For desk or wall mounting. Gray. Each unit, 4⅜x6⅞x7⁹⁄₁₆". Order cable below—use 2-conductor unshielded cable between Master and each Remote. For 110-120 VAC.

TBR-1 RELAY ACCESSORY. For IE-7 and IE-13 systems only. Permits tie-in to plant P.A. system for paging from any Master and hands-free reply from loudspeaker or horn. IE-13 system can be used with two TBR-1 relays. Order cable below—requires single-conductor shielded cable for each TBR-1.

733-0006. IE-7 Seven-Station Master. 4 lbs....**41.60 2-Up 37.45**

733-0007. IE-13 Thirteen-Station Master. 4 lbs..**51.60 2-Up 46.45**

733-0005. IE-4S System. 1 Mas., 1 Re. 8 lbs...**49.95 2-Up 44.95**

733-0067. RIE-1 Remote Station. 3 lbs.....**13.30 4-Up 11.95**

733-0076. TBR-1 Relay. 2 lbs.....**33.25 4-Up 29.95**

733-0008. JB-E Jun. Box. For IE-7, IE-13.....**5.85 4-Up 5.25**

CABLE FOR ABOVE INTERCOMS IN 100-FT. SPOOLS

732-5045. Type 8740. 2-Cond. Unshielded. 2 lbs.....**3.14**

768-9149. Type 832203. 3-Cond. Unshielded. 2 lbs.....**4.11**

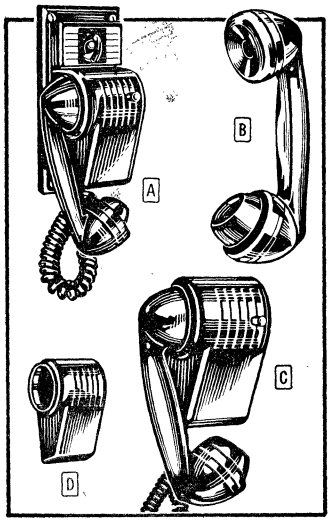
732-2099. Type 8449. 9-Cond. Unshielded. 5 lbs.....**12.19**

768-9155. Type 832212. 12-Cond. Unshielded. 5½ lbs....**14.66**

732-5066. Type 8748. 16-Cond. Unshielded. 7 lbs.....**20.20**

768-8822. Type 722201. 1-Cond. Vinyl Shielded. 1 lb.....**6.07**

WHEELER SOUND-POWERED TELEPHONE-TYPE INTERCOM SYSTEMS



- **Designed for Factories, Construction Sites, Farm or Anywhere Power Is Lacking**
- **Sound-powered Telephone and Ring Generator**
- **Up to 12 Phones Can Be Hooked Up**

Use these handsets for maintenance-free communications in the plant, on construction sites, the farm, anywhere electrical power is lacking. Comparable in size and quality to the finest commercial telephone equipment. No batteries required. Voice power alone generates current for transmission. Sound-powered elements in telephone and ring generator have Alnico permanent magnets for infinite life without loss of strength. Can remain on an indefinite "standby" for emergency service when other facilities fail. Up to 12 telephones may be connected in parallel to provide fast communication at low installation cost. SPT-102 handset has 4½-ft. non-coiled cord. SPT-123 and SPT-150 have 4-ft. coiled cord. All handsets supplied less connecting cable, listed below. SPS-205-MI wall-mounted handset holder can accommodate up to 12 telephones in a common ringing system. All units constructed of corrosion resistant materials for trouble-free operation in any weather. Wt. 1½ lbs., except A (5¼ lbs.) and D (¼ lb.)

Stock No.	Type	Fig.	Description	1-3, Ea.	4-Up, Ea.
987-4330	SPT-102	B	Handset. Up to 12 can be paralleled.	19.84	14.81
987-4333	SPT-123	B	Hi-level handset for noisy areas (less clips).	22.22	16.57
987-4336	SPT-150	B	Same as SPT-123 but with insulated clips.	23.04	17.20
987-4314	SPS-305	C	Wall-mount handset holder. For installations with separate ringing systems. 2⅞x5⅝x3".	17.60	13.17
987-4323	SPS-1205	C	Same as SPS-305 but with self-contained bell.	26.25	19.67
987-4312	SPS-205-MI	A	Master phone with station selector switch; up to 12 stations. Ready for installation. Less connecting wire.	71.50	54.81 (2-Up)
987-4306	B-5446	D	Handset hook. For wall or desk-side mtg.	1.98	1.49

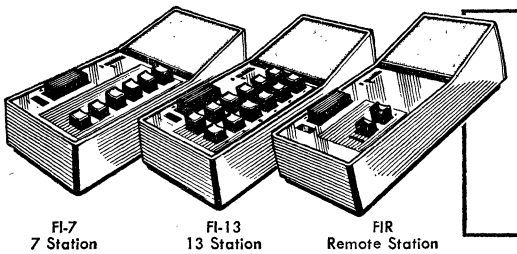
768-9172. Type 852201 Dearborn Cable for Sound-Powered Phones. 2-conductor. 100-ft. spool. Measure from Phone 1 to Phone 2, 2 to 3, etc. Shpg. wt. 3 lbs.....**3.70**

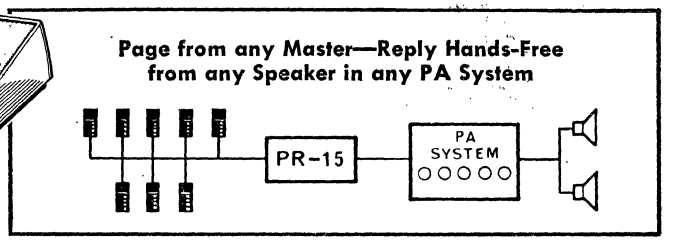
768-9149. Type 832203 3-Conduct. Cable. For SPS-205 Series. Wt. 2 lbs.....**100 ft. Spool 4.11**

Solid-State Intercom Systems

FANON

FI SERIES—USE AS MASTER-TO-MASTER OR MASTER-TO-REMOTE SYSTEM





- Plan Your Own All-Master or Master and Remote System
- Remotes Have Signal Button for Calling Master Station
- Remotes Can Be Set as either Private or Non-Private
- All Units May Be Used on Desk or Mounted on Wall

All-Master Unit system lets any station carry on private conversation with any other station. Up to 3 private two-way conversations can be held at a time with 7-station master system, up to 6 with 13-station master system.

Master-and-Remotes system lets master converse with any remote, or several remotes at a time. 7-station master can be used with up to 6 remotes: 13-station master with up to 12 remotes.
Master units have solid-state circuits, with full one watt output, volume control, on/off switch, talk/listen switch with lock position. Sealed, self-cleaning Isostat pushbutton selector switches for maximum reliability. Remote units have signal button for calling master station. Each remote can be set as either "private" or "non-private." Separate module AC power supply included to eliminate heat and hum. Stations can be used up to 500 feet apart. Station button No. 6 usable with PR-15 Paging relay for paging and talkback through PA systems. All units may be used on desk or wall-mounted. Designer-styled gray and charcoal styrene cases. 9¼x4x3¼". For 110-120 VAC. U.L. Listed. **Cable Requirements:** One more conductor than number of stations in system.

Model FI-7. Seven-Station Master Intercom Unit. Shpg. wt. 3 lbs.
790X0607.....Each 38.50 2-Up.....Each 34.65

Model FI-13 13-Station Master Intercom Unit. As above, with 13 stations, two paging buttons for PR-15 or FIR. Shpg. wt. 4 lbs.
790X0613.....Each 48.40 2-Up.....Each 43.50

Model FIR Remote Station. For above. Shpg. wt. 2 lbs.
790X0603.....Each 11.95 2-Up.....Each 10.75

Model PR-15 Paging/Talkback Relay. Links FI-7, FI-13 to PA systems for paging/talkback. Add one shielded wire for each PR-15. Shpg. wt. 1 lb.
790X1615.....Each 24.70 2-Up.....Each 22.25

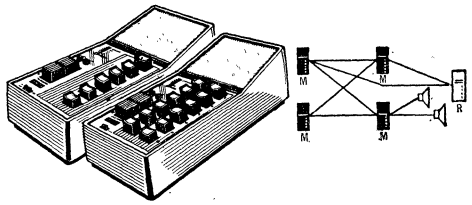
DPI SERIES HIGH-POWER INTERMIX INTERCOMS

These versatile intercoms permit master-to-master, master-to-remote or any combination of masters and remotes. Masters and Remotes have Privacy Switch allowing "hands-free" reply. Call-in lamp announces incoming calls, precluding eavesdropping of master in non-private position. Busy light registers when master calls another station engaged in conversation. One or more remotes or paging horns may be connected to more than one master station. Remotes or horns can reply Hands-Free to calling master but cannot originate calls. Master has Hi Power page position for noisy areas. Balanced line system eliminates any crosstalk, noise, and reduces audio loss due to long cable runs. May be used on desk or wall-mounted. 9½x4x3¾". For 110-120 VAC. U.L. Listed. Cable required: One more conductor than no. of stations.

Model DPI-7 Six-Station Master Intercom Unit. Shpg. wt. 4 lbs.
790-0407.....Each 61.75 2-Up.....Each 55.50

Model DPI-13 Twelve-Station Master Intercom Unit. Shpg. wt. 4 lbs.
790-0413.....Each 77.50 2-Up.....Each 69.85

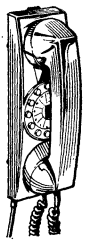
Model DPR Remote Station. Has privacy switch. Shpg. wt. 2 lbs.
790-0403.....Each 16.60 2-Up.....Each 14.95



- Use any Combination of Masters and Remotes
- Four Watts of Audio Power—Up to 2000 Feet Apart
- Masters Are Private or Non-Private
- Busy Signal

Model HDA-5/8 High Power Re-Entrant Horn. Weatherproof for outdoor use. 10-watt capacity. 6½" diameter horn. 8 ohms. Wt. 3½ lbs.
790X0805.....Each 11.05 2-Up.....Each 9.95

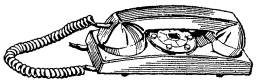
SOLID-STATE TELEPHONE INTERCOMS



77 SERIES WITH SELECTIVE RING

13-Station
7713

7-Station
7707



Features push-pull amplifier with excellent voice-reproduction qualities. 7707 has 7-station capacity using any combination of masters and remotes; with 7713, a maximum of 13 stations (Masters and remotes) can be installed. In an intermix system, any master can call any other master or remotes connected to it. The remote can call only one master. Conferences between any number of stations can easily be set up. One conversation channel is available. For desk or wall. 9¼x3x3½". For 110-120 VAC. U.L. Listed.

Model 7707 Seven-Station Master Intercom Unit. Shpg. wt. 3 lbs.
790X7707.....Each 32.20 2-Up.....Each 29.00

Model 7713 Thirteen-Station Master Intercom Unit. Shpg. wt. 3 lbs.
790X7713.....Each 36.10 2-Up.....Each 32.50

Model 7701 Remote Phone. For use with 7707 and 7713. Wt. 3 lbs.
790X7701.....Each 26.65 2-Up.....Each 24.00

Model PS-77 AC Power Supply. One req'd. per system. Wt. 2½ lbs.
790X1627.....Each 23.85 2-Up.....Each 21.50

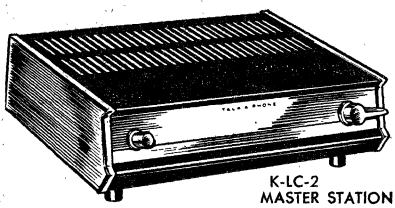
Model PR-7 Paging Relay. For 7713, 7707. Connects "77" Series phone system to any PA system. Shpg. wt. ½ lb.
790-1607.....Each 25.00 2-Up.....Each 22.50

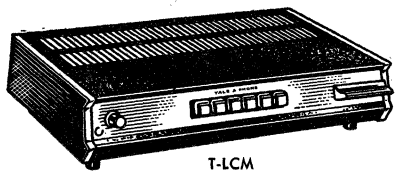
"PAGE-CALL" 5-WATT PAGING/PHONE SYSTEM

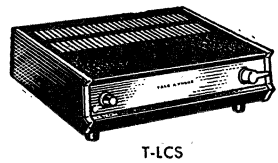
Paging and phone system designed specifically for offices, stores, supermarkets, warehouse, restaurants—where the key person you want is on-the-go. Localized paging through each PT-7 phone eliminates the need to "blast" your announcement over a PA system. Any one of the PT-7 phones in the "Page-Call" system can initiate a page call. This call is heard through built-in speaker at every phone in the system. Called party picks up nearest phone and is immediately in direct contact with caller, automatically cutting off page. Page-Call is a common talking system, therefore anyone can join in existing conversation by picking up any handset. No one can page through the system while a conversation is proceeding. Up to 20 stations may be installed in the system. In the event that it is required to extend the page call through large and noisy areas for which the sound from the phones is inadequate, a higher power PA amplifier may be added to the system. The paged call is then heard over the loudspeakers of the PA system in addition to the phone speakers. Suitable for desk or wall use.
High impact sytrene. 9¼x3x3½". For 110-120 VAC. U.L. Listed. Cable requirement: a 6-conductor cable, regardless of the number of phones in the system.

Model PT-7 Paging Telephone Unit. Shpg. wt. 3 lbs.
790X1637.....Each 30.00 2-Up.....Each 27.00

Model APS-5 Amplifier and Power Supply. One req'd. Wt. 6 lbs.
790X0105.....Each 65.00 2-Up.....Each 58.50


K-LC-2
MASTER STATION


T-LCM


T-LCS

K-LC-2 SOLID-STATE 2-STATION SYSTEM

Rugged two-station intercom system for office, plant or warehouse. Consists of one Master Station, one Remote Station and 50 feet of interconnecting cable (up to 2000 feet more can be added). Both Master and Remote can originate calls. Remote can be set for private or non-private operation. Extra Remote Stations (below) can be added at any time. Only Master need be connected to AC power outlet. Master has volume control and pilot light. Master's steel case finished in charcoal gray vinyl and brushed chrome. Remote's case in matching baked enamel. Master, 3⅛x10½x8¾". Remote, 2⅞x7½x8¾". U.L. Listed. For 110-120 VAC-DC. 11½ lbs.

951 X0085.....Ea. 56.11 2-Up.....51.50

951-0090. K-LR-3M Extra Remote Station. 4 lbs..Ea. 19.03 2-Up17.50

ALL-MASTER WIRELESS SYSTEM

Instantly operating wireless intercom systems, using up to six T-LCM-8906 or up to twelve T-LCM-8912 Master Stations. No installation or wiring—just plug each individual Master into electrical outlets on the same line transformer, and you're ready to talk. Each Master Station can originate calls to any other Master on any of 6 or 12 channels. It can also receive calls on any channel. And, by individually calling other Masters to come in on the same channel, it can set up a conference. T-LCM-8906 system can hold up to 3 separate conversations simultaneously; T-LCM-8912 system, up to 6 separate conversations simultaneously. Each Master has "Uni-Trans" for long periods of continuous transmission to another unit (as in dictation), and "Sonic-Gate" circuit to screen out line noises and hum. 3⅛x14x8¾". Charcoal gray vinyl and brushed chrome. U.L. Listed. For 110-120 V, 50-60 Hz AC-DC.

T-LCM-8906 6-STATION WIRELESS MASTER. Handles up to 6 stations individually or in conference. Wt., 10 lbs.

951 X0223.....Ea. 123.25 2-Up.....112.00

T-LCM-8912 12-STATION WIRELESS MASTER. Handles up to 12 stations individually or in conference. Wt., 12 lbs.

951-0224.....Ea. 143.00 2-Up.....125.00

TYPE T-LC-33 DELUXE TWO-STATION WIRELESS INTERCOM

Just plug each system into any AC outlet, on the same power company transformer, and you establish instant communications. "Uni-Trans" switch permits dictating or listening. Steel case finished in charcoal gray vinyl and brushed chrome—resists effects of liquids and corrosive atmospheres. Each unit, 3⅛x10½x8¾". U.L. Listed. For 110-120 V, 50-60 Hz AC or DC. Shpg. wt., 16 lbs.

951 X0220.....Ea. 123.25 2-Up.....112.00

T-LC-17 EXTRA STATION. Add any number—same as above. Shpg. wt., 8 lbs.

951 X0217.....Ea. 61.62 2-Up.....56.00

MASTER-AUXILIARY SYSTEMS

Consists of one or more T-LCM-8906 or T-LCM-8912 Master Intercoms and any number of the T-LCS Auxiliary Stations listed below. Master Stations are described above. Auxiliaries are for use in locations where calls need not be originated, but replies must be made to calls originating from Master Stations. Each Auxiliary is on one fixed channel—from channels 1 to 3—to match that of the Master. Place one or more channel 1 Auxiliaries in one area, one or more channel 2 Auxiliaries in another and one or more channel 3 Auxiliaries in a third. Master can then page any area as described above. Auxiliaries can be called by, and reply to any Master in the system.

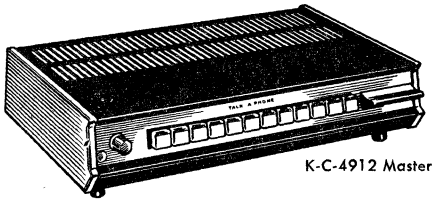
No wiring or cables necessary—simply plug each Auxiliary unit into an electrical outlet on the same line transformer as the rest of the system. Charcoal gray vinyl and brushed chrome. 3⅛x10½x8¾". U.L. Listed. For 110-120 V, 50-60 Hz AC-DC. Shpg. wt. 7 lbs.

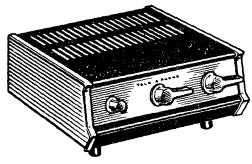
951-0226. T-LCS-901. Channel 1..Ea. 70.80 2-Up.....64.50

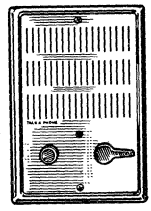
951-0227. T-LCS-902. Channel 2..Ea. 70.80 2-Up.....64.50

951-0228. T-LCS-903. Channel 3..Ea. 70.80 2-Up.....64.50

"CHIEF" SOLID STATE INTERCOMS


K-C-4912 Master


K-C-42 Staff


K-C-41R
Staff

"CHIEF" SOLID STATE UNIVERSAL MASTER STATIONS

Deluxe, all-transistor universal Master Stations that can be used in all-Master or Master(s)-Staff(s) systems with capacities of 6, 12, 20 or 30 stations. Effects savings of thousands of man-hours in offices, plants, factories, etc. Masters can operate privately or non-privately and engage in conference calls. In private operation, talk-listen switch is necessary to reply; in non-private, a control is not necessary.

Built-in signal indicates whether line is busy—priority calls can over-ride a busy line. Incoming call is indicated by a light and chime. Master unit includes pushbutton selector, push-to-talk bar, dictation control and volume control. Master Stations may be placed up to one thousand feet apart.

Relays to operate horns, sirens or lights can be connected to operate together with chime in high noise level areas. Master is still fully operational—relay does not take place of Master. Each Master has a junction box with a power supply, and 6-ft. of cable. Steel cases are styled in leather-textured, gray vinyl and brushed chrome. Size, 3⅛x14x8¾". U.L. Listed. For 120 VAC.

Stock No.	Mfr's Type	Capacity	Wt., Lbs.	EACH 1	EACH 2-Up
951-0049	K-C-4906	6 stations	15	123.25	112.00
951-0050	K-C-4912	12 stations	15	138.27	125.00
951-0051	K-C-4920	20 stations	16	164.33	149.00
951-0052	K-C-4930	30 stations	18	190.38	173.00

"CHIEF" SOLID-STATE EXTRA-POWER MASTER STATIONS

"Chief Redi-Power" Master Stations have features of "Chief" Masters at left, plus up to 30 watts of extra power. Provide reserve power for conference calls to many stations at once, or for calling individual stations in noisy area. Receive return speech at normal volume. Built-in 30-watt amplifier. Network automatically adjusts output to pre-selected volume level of each station. Same size, style, finish and AC rating as Masters. U.L. Listed.

Stock No.	Mfr's Type	Capacity	Wt., Lbs.	EACH 1	EACH 2-Up
951-0059	K-CRP-5912	12 stations	20	210.42	191.00
951-0060	K-CRP-5920	20 stations	21	236.47	214.00
951-0061	K-CRP-5930	30 stations	23	262.52	237.00

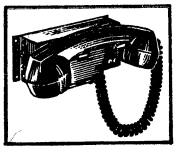
"CHIEF" ALL-TRANSISTOR STATIONS

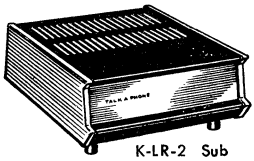
For mixed systems with Masters. Originates calls to private masters with which it is directly connected, answers calls from any Master in system. Cannot talk with another staff. "M" in Mfr's Type means grained, baked-enamel-gray finish; others, charcoal gray. Powered by Master Station. Metal case, 3⅛x7½x8¾". U.L. Listed.

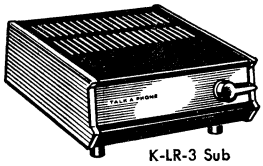
Stock No.	Mfr's Type	No. of Masters Staff Can Call	Wt., Lbs.	EACH 1	EACH 2-Up
951-0041	K-C-41	one	5	32.73	29.90
951-0042	K-C-41M	one	5	26.68	24.50
951-0044	K-C-42	two	5	40.74	37.00
951-0045	K-C-42M	two	5	35.07	32.00

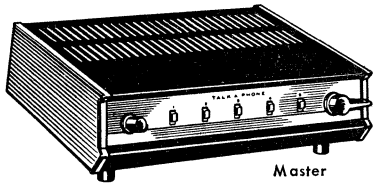
951X0043. Type K-C-41R Flush Wall-Mount Staff. Same as K-C-41 in operation. 4 13/16x7 3/16".....Ea. 28.20 2-Up.....24.50

and Systems For Office and Plant


Cradle Phone


K-LR-2 Sub


K-LR-3 Sub


Master

COMBINATION SYSTEMS

MASTERS AND STANDARD SUBS. Versatile system allows the Master calls to be either private or non-private. Speak to all units simultaneously or single out specific unit. Masters can call each other or any Sub, selectively. Subs cannot originate their own calls. Masters and K-LR-2 Sub have rugged steel cases in leather-textured gray vinyl and chrome. K-LR-2M Sub in grained enamel. *Indicates stainless steel front panel. Masters, 3⅛x10½x8¾"; Desk Subs, 2⅞x7½x8¾". Wall-mounting opening, 4⅛x4⅛x2"; front panel, 4 13/16" square. Less cable, below. U.L. Listed. 110-120 volts, 50-60 Hz AC-DC. **Do not mix K-CL and K-AC Masters in the same system.**

MASTER STATIONS

K-CL-5 MASTER. To be used with 5-station systems. Shpg. wt., 7 lbs.
951-0055...Ea. 65.46 2-Up...Ea. 59.95

K-CL-10 MASTER. For use with up to 10-station systems. Shpg. wt., 7 lbs.
951-0056...Ea. 79.15 .....72.00

951-0013. K-AC-610 High-Power Master. For 10-station systems. Wt. 7 lbs.....**Ea. 91.18**
2 Up.....83.30

SUBSTATIONS

K-LR-2 SUB. Shpg. wt., 5 lbs.
951-0086...Ea. 30.01 2-Up.....21.95

K-LR-2M SUB. Shpg. wt., 4½ lbs.
951-0087...Ea. 19.04 2-Up.....17.50

***K-LR-2R BUILT-IN WALL SUB.** 4 lbs.
951-0088...Ea. 19.04 2-Up.....17.50

951-0115. KSM Wall Mtg. Accessory. 4 13/16x 2⅛". 2 lbs....**Ea. 5.31 2-Up.....4.65**

HIGH-POWER SUBS. *See accessories, below.*

MASTER-SELECTIVE SYSTEMS

STANDARD-POWER MASTERS AND SUBS. For systems using one Master and up to ten Subs. Master can call and listen to one, several or all Subs simultaneously. Subs can call and converse with Master, but not other Subs. Subs can be private or non-private, and originate calls. Only Master needs power outlet. K-LR-3M Sub is finished in baked enamel; all others styled in leather-textured gray vinyl and chrome. Masters, 3⅛x10½x8¾"; Subs, 3⅛x7½x 8¾". K-LR-3R: panel, 7 3/16x4 13/16"; opening, 6½x4⅛x2". Less cable, below. U.L. Listed. For 110-120 V, 50-60 Hz AC-DC. **Only one Master-Station can be used per system.**

MASTER STATIONS

K-ML-5 MASTER. Accommodates up to 5 Sub stations. Shpg. wt., 7 lbs.
951-0097...Ea. 55.11 2-Up.....49.95

K-ML-10 MASTER. Accommodates up to 10 Sub stations. Shpg. wt., 7 lbs.
951-0098...Ea. 67.46 2-Up.....61.50

K-AC-5406 HIGH-POWER MASTER. 10 times greater volume. For up to 5 Subs. 7 lbs.
951-0017...Ea. 67.46 2-Up.....61.50

K-AC-5411 HIGH-POWER MASTER. For use with 10 Sub stations. Shpg. wt., 7 lbs.
951-0019...Ea. 80.82 2-Up.....73.30

SUBSTATIONS

K-LR-3 SUB. Shpg. wt., 4½ lbs.
951-0089...Ea. 24.04 2-Up.....21.95

K-LR-3M SUB. Shpg. wt., 4 lbs.
951-0090...Ea. 19.04 2-Up.....17.50

K-LR-3R BUILT-IN WALL SUB. Shpg. wt., 4 lbs.
951-0091...Ea. 19.04 2-Up.....17.50

951-0117. K-SM-L Wall Mtg. Accessory. 7 3/16x 4 3/16x2⅛". 2 lbs.....**Ea. 5.95**
2-Up.....5.25

HIGH-POWER SUBS. *See accessories, below.*

SUPER-SELECTIVE SYSTEMS

SELECTIVE MASTER STATIONS. Most versatile type of intercom systems consisting entirely of Master units. Any station can originate a call to any other station or stations and converse with them—several separate conversations can be held simultaneously without interfering with each other. System can be easily arranged so all units are simultaneously in communication with each other. Perfect for holding group conferences at a moment's notice.

Each unit has a translucent indicator that lights up when the unit is in operation. Fast action slide-switch lets you select each station instantly and effortlessly. Also features spring return, press-to-talk lever and volume control. All stations may be more than 1000 feet apart and still maintain excellent communications.

System operates for only a few pennies a day. Bonded leather-textured gray vinyl, trimmed in brushed chrome. Supplied less cables, below. 3⅛x10x8¾". U.L. Listed. 110-120 volts, 50-60 Hz AC or DC. *K-AC 510 High-Power Masters available on Special Order.* **Do not mix K-LS and K-AC Masters in same system.**

MASTER STATIONS

K-LS-5 MASTER. For use in systems with up to 5 Master stations. Wt., 6¼ lbs.
951-0094...Ea. 55.11 2-Up.....49.95

K-LS-10 MASTER. For use in systems with up to 10 Master stations. Shpg. wt., 8 lbs.
951-0095...Ea. 67.46 2-Up.....61.50

K-AC-505 HIGH-POWER MASTER. For high-noise areas. Provides 10 times the output of K-LS-5 Master above. Accommodates up to 5 Master stations. Shpg. wt., 7 lbs.
951-0005...Ea. 67.46 2-Up.....61.50

TALK-A-PHONE INTERCOM SYSTEM ACCESSORIES

OPTIONAL BUILT-IN CRADLE PHONE. To order any Master station (except K-CL-5, K-CL-10, K-AC-610) with optional built-in cradle phone, insert "Special" in place of regular stock number, and add "H" to Mfr's Type No. Example: Special. K-ML-5H Master with Cradle Phone. Add $38.00 to price of the Master for Model with Cradle Phone.

HIGH-POWER SUBSTATIONS. All Subs can answer Master, as well as originate calls in Master selective systems when used with K-S-100 switch, at right.
951-0020. K-C-20 Trumpet-Type. 9" reentrant horn. 5 lbs...**Ea. 35.40 2-Up.....33.00**
951-0080. K-HP-3 Indoor-Type. 8" speaker. 9½ lbs.....**Ea. 25.18 2-Up.....23.20**

TYPE K-S-100 ORIGINATION SWITCH. Allows High-Power Subs to originate calls in Master Selective Systems. 1¾x5¾x2½". 1 lb.
951-0100....Ea. 5.48 2-Up.....4.95

KW-I WALL-MOUNTING BRACKETS. Use with Subs above, except built-ins. Wt., ½ lb.
951-0141.....Per Pair .67

WIRING EXPLANATION

CONNECTING MASTER TO MASTER. To determine the required quantity of cable needed measure from first to second Master only; from second to third Master only; and so on, until you have reached the last Master in the system. Do not connect the last station to the first. Then add all measurements together. Use cable types 6210, 6226, 5506, 9911, or 6214. Consult table below for proper type. For 20 station Masters, double total measured length (two equal lengths of cable run parallel to each other between Masters). For 30 station Masters, triple total.

CONNECTING STAFF TO MASTER. To determine the required quantity of cable needed, measure from each staff to Master, and total all measurements. Use single length Types 6206, 6902, 5503, or 6303 cable to connect staffs to Masters. Consult table below for proper type.

CONNECTING HIGH POWER STAFFS. Determine quantity of cable needed in same method as above. Use Type 6206 cable if origination switch is used. If not used, connect each Staff to nearest Master with single 6902 cable.

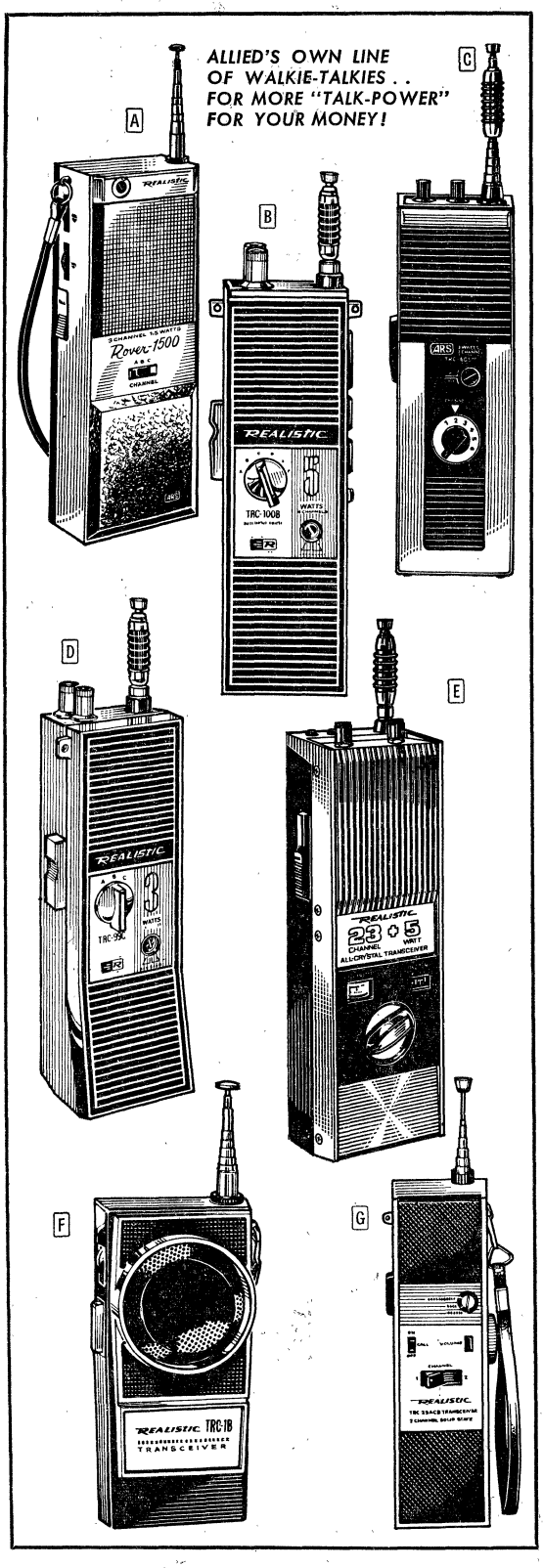
INTERCONNECTING INTERCOM CABLE

Weight per 100 lbs. Type 6210—6 lbs.; Type 6226—12 lbs.; Type 6902—2 lbs.; Type 5303—1 lb.; Type 6303—2 lbs.; Type 5506—4 lbs.; Type 9911—5 lbs.; Type 6214—7 lbs.; Type 6206—4 lbs. (*) Unshielded. (†) Shielded.

Mfr's Type	Cond.	For Connecting	Stock No.	50' Spools	Stock No.	100' Spools	Stock No.	200' Spools
6902	2	Sub to Nearest Master Only	951-0285	1.59	951-0286	3.17	951-0287	6.34
5303	3*	K-ML5, K-ML-10, K-AC-5406, K-AC-5411	951-0250	2.34	951-0251	4.68	951-0252	9.35
6303	3†	K-ML-5, K-ML-10, K-AC-5406, K-AC-5411	951-0280	3.67	951-0281	7.34	951-0282	14.69
5506	6	K-LS-5, K-AC-505	951-0255	6.34	951-0256	12.69	951-0257	15.20
9911	11	K-LS-10	951-0290	12.04	951-0291	24.04	951-0292	48.09
6206	3 pr.	Sub to Master or Sub	951-0260	6.34	951-0261	12.69	951-0262	25.38
6210	5 pr.	K-CL-5	951-0265	11.35	951-0266	22.71	951-0267	45.42
6214	7 pr.	K-C-4906	951-0270	13.27	951-0271	26.55	.....	.....
6226	13 pr.	K-CL-10, K-AC-610	951-0275	25.38	951-0276	50.10	951-0277	100.20

Allied offers fast, same-day shipment of industrial quantities at OEM price discounts. To assure the fastest and most accurate service, please specify manufacturer's type number and stock number on each order. Depend on Allied for prompt off-the-shelf delivery in industrial quantities for all your electronic needs. Contact the nearest Allied Electronics facility for information on prices and delivery on quantities larger than shown. See page 3 for complete list of Allied offices, from coast-to-coast.

Allied® and Realistic® Citizens Band Walkie-Talkies



A NEW! ALLIED 21-114 1.5-WATT, THREE CHANNEL

The "Rover 1500"—a full-feature model intended for shorter range applications. Low in cost, but really rugged. It has AGC, squelch, battery condition and RF indicator, accessory jacks for external antenna, earphone, external power, and battery charger. The transmitter has push-pull modulation with 100% capability. With hand strap, 8 "AA" batteries, plug-in crystals for Channel 11. 8⅜x3¼x2". Sensitivity: 1 μV for 10 dB S N/N or better.
910-1036. Shpg. wt. 2½ lbs. **34.95**

B REALISTIC 21-133 THREE-WATT, 3-CHANNEL

Loaded with features. Adjustable squelch, RF amplifier stage, silicon transistors, noise limiter, AGC, push-pull audio output, battery/RF indicator. Negative-ground chassis permits you to plug it into car cigarette lighter outlet with no chance of burn-out if antenna touches metal. With carry case, 10 "AA" batteries, plug-in Channel 11 crystals. Custom die-cast case. 9x2⅞x2⅞".
910-0062. Shpg. wt. 5½ lbs. **49.95**

C NEW! ALLIED 21-5501 THREE-WATT, SIX-CHANNEL

The finest 3-watter we've ever sold. Features center-loaded telescopic antenna, separate speaker and mike for clearer audio, battery condition and RF indicator, adjustable squelch control, RF stage, ANL, push-pull audio. Has jacks for external power, speaker and antenna. Sensitivity (minimum): 2 μV for 10 dB S/N ratio. FCC Type Accepted. Metal case. With crystals for Channel 11. 9⅝x3½x2⅜".
910-1055. Shpg. wt. 4½ lbs. **69.95**

D REALISTIC 21-134 FIVE-WATT, SIX-CHANNEL

Powerful 5-watt output, maximum allowable, for extra range. Up to 6 switchable channels. FET front-end for added sensitivity. Integrated circuit IF and 455 kHz mechanical filter for greater selectivity. Separate speaker and ceramic microphone. Adjustable squelch, noise limiter, automatic gain control, push-pull audio output. Battery/RF indicator. Center-loaded telescoping antenna. Can be powered by car cigarette lighter jack—negative ground gives complete safety. Die-cast case, 9x2⅞x2⅞". Complete with carrying case, 10 "AA" batteries, and plug-in Channel 11 crystals. Use alkaline or NiCad batteries for longer life.
910-0063. Shpg. wt. 5½ lbs. **79.95**

E NEW! REALISTIC 21-137 FIVE-WATT, 23-CHANNEL

It's like holding a CB base station in your hand! Full 5-watt power, all 23 channels, plus EVERY feature you could ask for! Dual-conversion receiver for super sensitivity, fine tuning, squelch, noise limiter, separate speaker and mike for finest audio, center-, loaded telescopic antenna, mechanical filter for best selectivity AGC, battery/RF power indicator, slideout battery case. Jacks for external mike, antenna, power, battery charger. With hand strap, batteries, carry case. Metal case. 10½x3⅝x2⅝". With all crystals.
910-1037. Shpg. wt. 4½ lbs. **119.95**

F REALISTIC 21-102 100-mW SUPERHET WALKIE-TALKIE

Provides user with more RF output, more audio and greater sensitivity than any comparable unlicensed walkie-talkie. Solid-state circuit. Extra-clear push-pull audio output. Offers performance far in excess of its modest price. Perfect for scouts, outdoorsmen, boaters, vacationers. No license required, no age requirement. Handsome die-cast front panel. Volume control with on-off switch. 45-inch telescoping 7-section antenna. Hand strap. Size, 6x2½x 1½". With Channel 11 crystals, 9-V battery.
910-0065. Shpg. wt. 2 lbs. **14.95**

For Extra 9-V Battery, see page 395

G 21-111 TWO-CHANNEL, 100-mW WALKIE-TALKIE

This versatile superhet model has all you need for go-anywhere communications. Features compact, slim-line design, push-pull audio, 2-channel operation, option of plug-in crystals for other CB channels, plus a separate speaker and microphone for maximum modulation and reception. "Beep" tone signal, battery condition indicator, 43" telescopic antenna, set of crystals for channel 11. Solid-state circuitry for dependable operation. Channel 1 or 2, call On/Off switches, volume control. Comes complete with 9-volt battery, convenient carrying strap and complete instructions. Size: 8⅛x2¼x1⅞".
910-0066. Shpg. wt. 4½ lbs. **19.95**

117V WALKIE-TALKIE AC SUPPLY/CHARGER

21-115. Not illustrated. Allows you to operate walkie-talkies on standard 117 VAC. Also charges 9-12 volt battery packs and NiCad cells. Rate: 40 ma/hr.
910-0068. Shpg. wt. 6 lbs. **24.95**

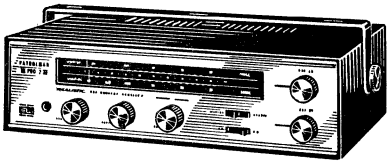
12 VDC PORTABLE BATTERY POWER PACK

20-1501. Not illus. Provides extra DC power for Realistic 1W to 5W walkie-talkies. Includes eight batteries, connecting cable, carrying case and plugs, 8 spare battery holders. 10¼x3⅛x3".
910-0069. Shpg. wt. 4 lbs. **8.95**

Units of Over 100-mW Power Require FCC License—But No Exam Necessary

VHF and UHF Monitors Plus Accessories

PATROLMAN PRO-2B SOLID-STATE DUAL-BAND VHF MONITOR RECEIVER

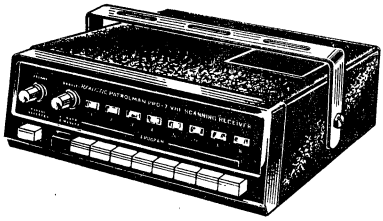


- 30-50 and 152-174 MHz
- 115 VAC or 12 VDC
- Superheterodyne Circuit

For the listener who wants to know NOW! Hear police calls, weather reports, fire and civil defense calls, navigation warnings, and many business-type voice communications. Covers low and high monitor frequencies. Dual power supply operates from 115 VAC at home or from 12 volts in your car. Separate tuning knobs for low and high bands. Can be used crystal control or manual tune. Superhet circuit with tuned RF and mixer stages for powerful reception and razor-sharp selectivity.

Power-packed audio stage coupled to a built-in speaker for faithful reproduction of signal. Front-panel jack for headphones or external speaker. Extra Features include: illuminated sliderule dial; Adjustable squelch; takes 2-crystals per band; Attractive panel and cabinet. 12¼x9x3¼". Comes with car mounting bracket and instructions.
910-1086. Shpg. wt. 13 lbs. **99.95**

NEW! AUTOMATIC SCANNING VHF MONITORS BY ALLIED & REALISTIC



ALLIED PRO-7. Automatically scans any 8 crystal controlled channels between 148 and 175 MHz. In less than one second, the PRO-7 sweeps across the 8 frequencies, and locks in on each active channel. When that channel becomes silent, the circuit resumes scanning. Features a channel lock-out control for skipping unwanted channels. Has squelch, manual channel selector, channel indicator, built-in speaker. For 117 VAC/12 VDC operation. With mobile mtg. bracket, power cables. Less crystals. 3x7½x9½".
910-1087. Shpg. wt. 5½ lbs. **99.95**

REALISTIC PRO-8. The only professional VHF scanning monitor available today with EVERY important feature! Scans any 8 crystal controlled channels from 148-174 MHz, has "selectable priority" for an extra-close check on any channel, channel lock-out, crystal filter, jacks for recording and headphone listening, 8 IC's, 2 FET's, 2-second delay to prevent missed "call-backs." Lighted channel indicators, auto/manual switch, built-in speaker, mounting bracket. AC/12 VDC. 3½x9¾x9¼". Less crystals.
910-1088. Shpg. wt. 5 lbs. **139.95**

12 VDC POWER PACK. Portable power supply for above receivers. 8 "D" cells and 8 spare holders. With cord for car cigarette lighter use. 10¼x 3⅛x3". Shpg. wt. 4 lbs.
910-0061. Type 20-1501 ..... **8.95**

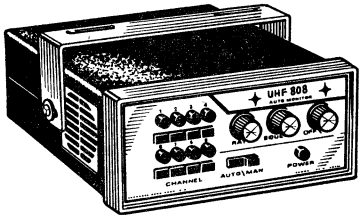
VHF/UHF ANTENNA. For 152-450 MHz. With cutting chart. 3 lbs.
910-0109. Type 20-176 ..... **9.95**

8-OHM HEADSET. Complete with standard ¼" phone plug. Shpg. wt. 1 lb.
910-0110. Type 279-200 ..... **5.95**

8-OHM EXTERNAL SPEAKER

For above receivers. Rated at 5 watts. Voice selective response for high intelligence. With cord and standard ¼" phone plug. 8 ohms. 5⅛x7x3½". Shpg. wt. 4 lbs.
910-0111. Type 20-1500 ..... **9.95**

NEW! PETERSEN AUTOMATIC SCANNING MONITORS

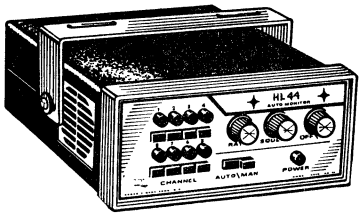


8-CHANNEL UHF MONITOR

MODEL UHF-808. A professional-quality monitor that scans any 8 crystal controlled channels, with a rate of search adjustable from 4-15 channels per second. Features a super-sensitive (0.8 microvolt for 20 dB quieting) dual conversion receiver. Selectivity is 30 kHz at 6 dB down. Features adjustable squelch, a crystal filter, provision for external speaker, channel indicator lights, automatic or manual operation, pushbutton on-off switch that eliminates need for resetting volume each time you switch the monitor on. Tunes 450-470 MHz in a 10 MHz spread. For 117 VAC/12 VDC. Adjustable car mounting bracket included. 2⅞x6¾x8" deep. Less crystals. Shpg. wt. 4½ lbs.
892-3116..Ea. 163.50 2-Up..Ea. 149.95

8-CHANNEL UHF-VHF MONITOR

MODEL UHF-800. Scans up to 8 channels. For any channels in a 10-MHz range between 150-170 MHz (VHF) and any channels in a 10-MHz range between 450-470 MHz (UHF). Very selective—15 kHz at 6 dB down. Sensitivity is 0.8 microvolt for 20 dB quieting, 0.3 microvolt for a readable signal. 117 VAC/12 VDC. 2⅞x6¾x8". With car mounting bracket. Less crystals. 4½ lbs.
892-3112..Ea. 174.50 2-Up..Ea. 159.95



8-CHANNEL VHF-HI/VHF-LO MONITOR

MODEL HL-44. You can program this monitor to sweep any channels you choose—from 2 to 8. It automatically locks on an active channel, then automatically resumes the scan when that channel goes quiet. Or you can lock it on any single channel, manually. You can control the rate of search—from 2 channels per second to about 12 per second. Sensitivity is 0.8 microvolt for 20 dB quieting. Selectivity is 15 kHz at 6 dB down. Tunes any channels in a 10 MHz range between 150-170 MHz and any channels in a 10 MHz range between 30-50 MHz.

The HL-44 features dual conversion, adjustable squelch, spurious rejection of 60 dB, a narrow band FM discriminator, 100% solid-state circuitry, and everything you need for "pro" quality monitoring. Includes adjustable car mounting bracket and power cables for 117 VAC and 12 VDC operation. Built-in speaker. Pushbutton power on-off switch—it's never necessary to readjust the volume once you set it the way you want it. 2⅞x6¾x8" deep Less crystals. 4½ lbs.
892-3104..Ea. 174.50 2-Up..Ea. 159.95

2-200 MHz FM/AM MONITOR

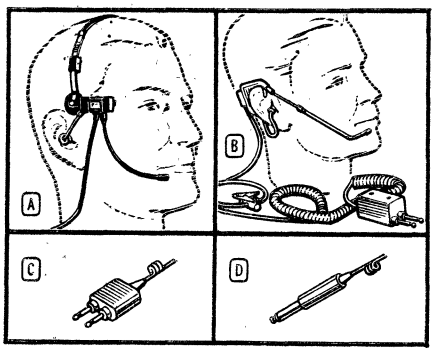
MODEL RM-200. Base/mobile monitor can operate on 2-200 MHz, AM or FM. Four channel capability through the use of precisely tuned frequency plug-in card. Comes with certificate for 1 plug-in card, to be filled out and sent to the factory. Built-in speaker and adjustable squelch circuit for varying background noise. Compact size gives real advantage for mobile and even base applications. Has antenna switching circuit for convenience when two widely spread frequencies are in use. Mobile mounting bracket and DC power cord for easy hookup.

Modern circuit design and solid-state construction eliminates heat, drift, frequency changes due to mobile operation. Size, 3⅜x5¾x7½". Uses include: civil defense monitor, fire monitor, airplane monitor, navigational listening, net frequency monitor, FM repeater monitoring, police monitor, and native language broadcast station monitors. For 115 VAC/12 VDC.
892-3108. Shpg. wt. 4 lbs. .... **Each 101.50**
2-Up ..... **Each 94.50**

OPTIONAL CRYSTALS FOR PETERSEN MONITORS

One "Plug-In Frequency Card" is required for each crystal you order. Just fill out the card and mail to Petersen. Petersen will mail the Card direct to you, postpaid, within 30 days.
892-3103 ..... **Each 19.25 2-Up** **16.50**

Headsets, Headphone Systems and Accessories



PACIFIC PLANTRONICS LIGHTWEIGHT MICROPHONE/RECEIVER HEADSETS

- For Broadcasting and Sound, Dispatchers
- For Portable and Mobile Radio Use
- Available With or Without Headband
- Weighs Less than 2 Ounces
- Mobility with 10-ft. Radius
- Can be Clipped to Eyeglasses

Ultra-lightweight communication headsets for telephone, aircraft, dispatchers, portable and mobile radio, television cameramen, paging and sound systems. Offer great clarity and intelligibility when talking or listening. Pickup of annoying sibilance and background noise is effectively eliminated. Lightweight design eliminates fatigue; extremely soft, chemically treated eartips assure maximum comfort and hygiene. Response: 300-3000 Hz. Headset with headband (MS50 models) weighs less than 2 oz.; without headband (StarSet), less than 1 oz. Both models can be attached to eyeglasses. Both mike and receiver consist of controlled reluctance elements within the capsule housing. Supplied with a set of 6 earpieces of various sizes, tinsel cord and zippered case. Contact your nearest Allied Electronics Branch for Larger Quantity Prices. Model MS50/T55-6 can be used with Clark intercom system on following page.

SWITCHBOARD TYPE HEADSETS

[A] [C] **Model MS50/T55-2.** Replaces carbon type headsets. Microphone amplifier output at 50 ohms, 112 mV. 300-ohm receiver requires 0.1 mW input for 89 dB SPL. Operating voltage: 4.4 VDC at 100 mA. 10-ft. coiled cord terminated with PJ-327 two-circuit plug. Supplied with headband. Shpg. wt. 16 oz.

[A] [D] **Model MS50/T55-6.** Same as above, but with PJ-051-B plug. Can be used with Clark Intercom System on next page.

[B] **Model HS0108-1B "StarSet."** Ultra-compact microphone/receiver headset which rests over the ear. No headband required. Microphone amplifier built into PJ-327 two-circuit plug has nominal output of 100 mV into 50-ohm resistive load. Receiver: 300 ohms. 10-ft. coiled cord. Amplifier provides switchable gain with a decrease in amplifier sensitivity of 12 dB when sound level drops below 80 dB SPL. Shpg. wt. 18 oz.

DISPATCHER/SUPERVISOR HEADSET

[A] [C] **Model MS50/T62-10-1.** Includes push-to-talk switch. 300-ohm receiver. 50-ohm microphone amp. 112 mV output. 4.4 VDC at 100 mA. 10-ft. coiled cord, PJ-511 dual 3-circuit plug. 16 oz.

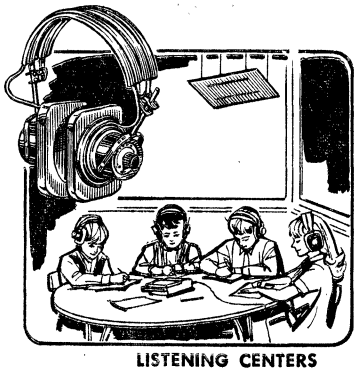
DYNAMIC HEADSETS WITHOUT PLUGS

[A] **Model MS50-59.** 3000 ohm dynamic microphone, 1.55 mV.0.1 mW needed for 98 dB SPL from 600-ohm receiver. 60" cord. 14 oz.
Model MS50-60. Same as above, except has 150-ohm microphone, output of 0.275 mV. 60" cord with solder leads. Shpg. wt. 14 oz.
Model MS40-4 Microphone. 3000 ohm impedance, output of 1.55 mV. 60" cord with solder leads. Shpg. wt. 13 oz.
Model MS40-5 Microphone. 150 ohm; 0.275 mV. 60" cord. 13 oz.

PRICES

Stock No.	Mfr's Type	EACH 1-4	5-9	10-24	25-49	50-Up
888-4409	MS50/T55-2	99.00	86.22	81.45	76.64	71.85
888-4410	MS50/T55-6	105.20	96.30	91.00	85.60	80.25
888-4400	HS0108-1-B	112.20	104.25	98.45	92.65	86.25
888-4415	MS50/T62-10-1	149.00	138.00	131.00	123.00	114.00
888-4402	MS50-59	66.00	53.96	50.96	47.96	44.95
888-4403	MS50-60	66.00	53.96	50.96	47.96	44.95
888-4401	MS40-4	48.00	40.46	38.20	35.96	33.70
888-4405	MS40-5	48.00	40.46	38.20	35.96	33.70

MURDOCK CORDLESS HEADPHONE SYSTEMS AND ACCESSORIES



Dynamic cordless headphone systems offer flexibility and economy in tape teaching. System consists of a Room Loop, Table Loop, or D.I.L. System Board and tape recorder, record player or sound projector; plus any number of headphones, with or without microphones. Students can work anywhere within coverage of Loop or Board. Battery and circuit are built into earcups. Headphones are powered by Mallory "N" battery; 1000-hour life.

Model CH-2 Listening Headphones. Response: ±6 dB, 150-5000 Hz.
562-0012. Shpg. wt. 1 lb. ..... **Each 24.50**

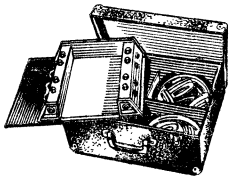
Model CH-3BMD Cordless Headphone with Boom Microphone. As above, but can be used for student recording as well as listening. Noise-cancelling.
562-0013. Shpg. wt. 1 lb. ..... **Each 34.50**

Model RL-2 Room Loop. Equips classroom up to 30x40-ft. Cable, hdwe. incl.
562-0092. Shpg. wt. 3 lbs. ..... **Each 24.00**

Model TL-2 Table Loop. Equips table up to 20-ft. perimeter. Cable, hdwe.
562-0098. Shpg. wt. 2 lbs. ..... **Each 22.00**

D.I.L. System Board. Can be anchored to or suspended from ceiling. Enables students sitting at adjacent tables to receive different programs.
562-0019. 14" square. Shpg. wt. 3 lbs. ..... **Each 44.00**

LISTENING CENTERS



Self-contained listening centers have lift-off cover (only 2" deep) that contains audio jacks, with mar-proof footing. Available with 4 or 8 stations, with volume controls for each unit; also available with an 8-station jack strip or junction box for connection to cassette player or other audio device. Heavy-duty, vinyl-clad carrying case has steel reinforced corners; headphones nest in compartment base. 12¼x16⅜x8⅜".

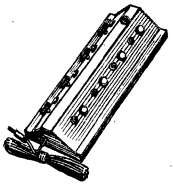
Model MLC-SC4 4-Station Center. Incl. four D-700 headphones.
562-0077. Shpg. wt. 11 lbs. ..... **Each 60.00**

Model MSL-SC8 8-Station Center. Includes 8 D-700 headphones.
562-0084. Shpg. wt. 15 lbs. ..... **Each 94.00**

Model MLC-JB 8-Station Center. As above, but also includes 8-station junction box with cavity for cassette player.
562-0070. Shpg. wt. 19 lbs. ..... **Each 94.00**

Model MLC-JS 8-Station Center. Above, but with 8-sta. jack strip.
562-0073. Shpg. wt. 18 lbs. ..... **Each 94.00**

8-STATION JACK STRIP



Model MJS-8V. Eight-station jack strip combines gold finished metal and an oiled walnut base with non-slip footings. Permanently attached 7-ft. cord with phone plug termination. Individual volume controls insure optimum listening levels for better student comprehension. Shpg. wt. 3 lbs.
562-0059 ..... **Each 27.50**

Model MJS-8. Above, less volume controls.
562-0058 ..... **Each 17.50**

DYNAMIC HEADPHONES

Model D-700. For use with any listening center. Provide seven full octaves of undistorted, true tone response for utmost clarity in music or speech laboratories. Ultra-sensitive headphones have soft vinyl-covered, foam-filled cushions for maximum acoustical isolation and easy cleaning. Lightweight, molded construction. Elements and cords are easily replaceable. 6-ft. cord. Wt. ½ lb.
562-0020 ..... **Each 7.95**

David Clark Headphones and Intercom Modules

SOUND-POWERED HEADSET-MICROPHONES FOR MAINTENANCE-FREE COMMUNICATIONS

The reliable Navy sound power system refined into a versatile and economical communications system for industry. Uses no amplifier, battery or power supply. Permits transmission between two headsets up to 30 miles. For shorter distances as many as ten headsets may be used. A portable setup can be made by plugging two headsets into a SXJ-409 jumper cord. J-6 junction box takes up to six headsets. All headsets have 2-cond. 30" cords with PJ-055 plugs.

[A] **155M-A NOISE-SHIELDED HEADSET-MICROPHONE.** Made to government specifications. Offers distinct communications in medium to high-noise areas up to 130 dB—noises such as hammering and sirens. Push-to-talk switch on mike shield.
535-0240. Shpg. wt. 3 lbs.....**Each 142.00** **2-Up....Each 120.00**

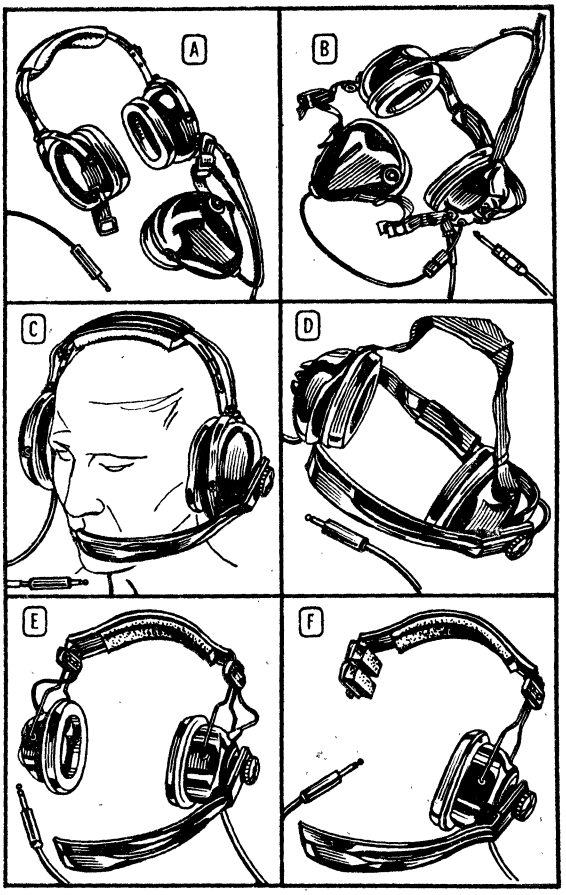
[B] **800SM-A NOISE-SHIELDED BEHIND-THE-HEAD MODEL.** Same features as 155M-A but lets user wear safety headgear.
535-0390. Shpg. wt. 3 lbs.....**Each 142.00** **2-Up....Each 120.00**

[C] **10SB-A ACOUSTIC BOOM HEADSET-MICROPHONE.** Backloads a receiver by use of acoustic boom. For 80-100 dB noise levels. Lightweight boom adjusts in all planes.
535-0185. Shpg. wt. 2 lbs.....**Each 138.00** **2-Up....Each 120.00**

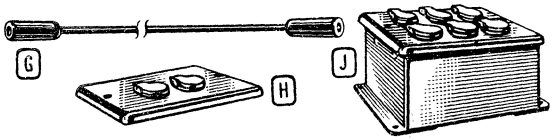
[D] **800SB-A ACOUSTIC-BOOM BEHIND-THE-HEAD MODEL.** Same features as 10SB-A but lets user wear safety headgear.
535-0380. Shpg. wt. 2 lbs.....**Each 138.00** **2-Up....Each 115.00**

[E] **720SB-A LIGHTWEIGHT ACOUSTIC BOOM HEADSET-MICROPHONE.** Provide high clarity communications with a maximum of long term wearing comfort. For noise levels up to 80 dB.
535-0340. Shpg. wt. 2 lbs.....**Each 79.50** **2-Up.....Each 66.25**

[F] **710SB-A LIGHTWEIGHT ACOUSTIC BOOM SINGLE HEADPHONE-MICROPHONE.** Single headphone model similar to 720SB-A. For noise environments of 70 dB and below.
535-0291. Shpg. wt. 2 lbs.....**Each 49.50** **2-Up.....Each 41.07**



SOUND POWER ACCESSORIES



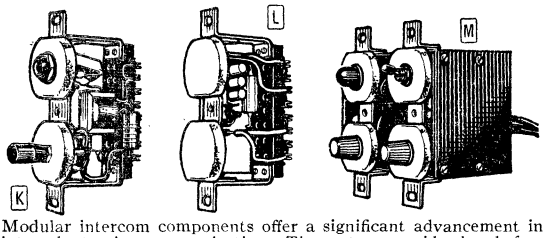
[G] **SXJ-409-12 JUMPER CORD.** All that is required to make a two-man system. Headsets plug into #88 jacks on cord. 12'.
535-0059. Shpg. wt. ½ lb.....**Each 13.40** **2-Up.....Each 11.15**

SX-334-12 EXTENSION CORD. (Not illus.) Has #88 phone jack on one end and PJ-055 phone plug on the other end. 12'.
535-0012. Shpg. wt. ½ lb.....**Each 14.00** **2-Up.....Each 11.65**

[H] **J-2 JACK PLATE.** Jacks with weatherproof covers are mounted on a standard outlet faceplate.
535-0040. Shpg. wt. ½ lb.....**Each 8.80** **2-Up.....Each 7.25**

[J] **J-6 JUNCTION BOX.** Jacks for 6 headsets. 2x4x2".
535-0044. Shpg. wt. 2½ lbs. **Each 54.00** **2-Up.....Each 45.00**

MODULAR ELECTRIC INTERCOM SYSTEMS



Modular intercom components offer a significant advancement in intra-plant voice communications. The system provides hands-free headset communications for the employee operating in and out of high noise level environments. Designed for total flexibility with cost savings, this system can be installed in standard conventional electrical outlet boxes or it can be panel mounted. Typical applications include TV studios, theaters, crane operators, turbine rooms, vibration test rooms, engine run-up, riveting, many others.

[K] **MODEL 3S-V HEADSET STATION.** With volume control. This is the standard David Clark Company headset station for single ended talk line installations. Terminal strip has access for wiring handset or hand held microphone.
535-0140. Shpg. wt. ½ lb.....**Each 50.00** **2-Up.....Each 41.75**

[L] **Model 3PA-2 Amplifier.** Eight or more stations. Output: 2 watts; input: 40,000 ohms. Gain 28 dB.
535-0124. Shpg. wt. 1 lb.....**Each 75.00** **2-Up.....Each 62.75**

[L] **MODEL 2LA-500 LINE AMPLIFIER.** Used for installation with from two to eight headset stations (Model 3S-V). Input: 1000 ohms. Output: 500 mw. Provides 25 dB voltage gain.
535-0080. Shpg. wt. ½ lb.....**Each 44.00** **2-Up.....Each 37.00**

[M] **MODEL 2PS-24 POWER SUPPLY.** A well regulated power supply specifically designed for intercom use. An on/off switch is provided. Also includes a pilot light for quick visual reference.
535-0101. Shpg. wt. 2 lbs.....**Each 101.60** **2-Up.....Each 98.00**

600 OHM HEADSET WITH CARBON MICROPHONE

- **Hands-Free Communications in High-Noise Environments**
- **For Indoor/Outdoor Uses**

[N] **MODEL 15BM.** For high level noise areas up to 135 dB. Mike shield, push-to-talk switch. Dynamic earphone. 3-conductor, 2½-ft. cord. PJ-051 plug.
535-0215. 3 lbs....**Each 138.70**
2-Up.....Each 115.00

MODEL 800HM. As above, but has behind the head band.
535-0360. 3 lbs....**Each 138.70**
2-Up.....Each 115.00

MODEL 10BB. For medium noise areas up to 120 dB. 3-conductor, 2½-ft. cord, Switchcraft #267 plug. Infinite adjustment of boom mike.
535-0160. Shpg. wt. 2 lbs. **Each 116.00** **2-Up. Each 96.75**

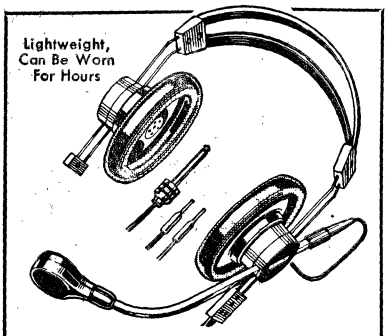
MODEL 800HB. As above, but has behind the head band.
535-0350. Shpg. wt. 2 lbs..**Each 116.00** **2-Up. Each 96.75**

MODEL 720HB. For low noise areas up to 100 dB. Dynetic earphone, 3-cond. 2½-ft. cord. Switchcraft #267 plug.
535-0320. Shpg. wt. 2 lbs...**Each 92.50** **2-Up. Each 77.00**

MODEL 710 HB. As above, but single ear. Up to 85 dB.
535-0271. Shpg. wt. 2 lbs...**Each 75.10** **2-Up. Each 62.50**

ASP-124-12 EXTENSION CORD. 12-ft., 3-cond. cord for Models 15BM and 800HM. PJ-051 plug, Switchcraft 838 jack.
535-0012. Shpg. wt. 1 lb....**Each 14.70** **2-Up. Each 12.25**

Allied® Headphones . . Quality at Low Prices

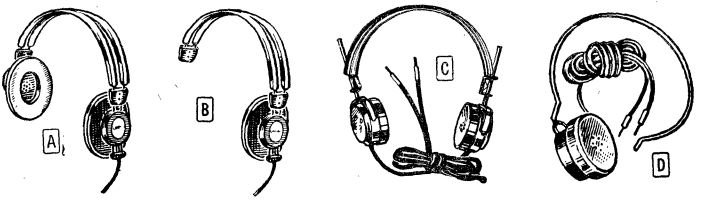


HEADSET WITH BOOM MIKE

- Earcushions Reduce Outside Sounds
- Sensitive Ceramic Boom Mike

Lightweight dual headset with boom mike is perfect for Hams, CB'ers, language labs, many other uses. Earpieces have extra-heavy-duty magnets for clear voice reproduction. Vinyl-covered headband. Comfortable ear-encompassing cushions are removable and washable. Earpieces adjust for perfect fit. Sensitive mike has ceramic element. Heavy-duty cord has phone plug for both mike and headset. Headset, 2000 ohms; mike, high impedance. Gray. Wt. 1½ lbs.

706-9006. Type 33-5006 ..... 17.38



A DELUXE DUAL HEADPHONES

Excellent-quality headset for Amateur and CB use. Lightweight, with vinyl-covered double headband. Adjustable earpieces have removable ear-encompassing cushions that block out distracting noise from the surrounding area. Heavy magnets for clear sound. Supplied with heavy-duty 5-ft. cord, standard ¼" phone plug. Gray. Shpg. wt., 1 lb.

706-9000. Type 33-5004. 2000 ohms 10.48
706-9001. Type 33-5008. 8 ohms 10.48

B DELUXE SINGLE HEADPHONE

Deluxe headphone for receiver monitoring and other uses. Perfect for mobile CB, since some States permit only a single phone for mobile operations. Vinyl-covered headband. Comfortable earcushion is removable. 1000 ohms. Five-ft. cord with ¼" phone plug. Shpg. wt., 1 lb.

706-9002. Type 33-5001 ..... 5.95

C LOW-COST DUAL HEADPHONES

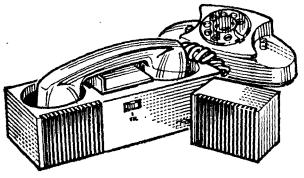
General-purpose headphones suitable for Amateur use and shortwave listening. Vinyl-covered double headband with easily adjustable yokes for comfort. Powerful Hyflux Alnico magnets. 1⅞" diaphragm. 4½-ft. high-quality plastic cord with phone tips. Terminals are inside the earphone. Shpg. wt., 1 lb.

706-9003. Type 33-5002. 2000 ohms . 3.95
706-9004. Type 33-5005. 11 ohms. Same as above, but with phone plug 6.48

D LOW-COST SINGLE HEADPHONE

Dependable headphone, suitable for hard-of-hearing installations, receiver and crystal set monitoring, other applications. 1⅞" diaphragm. 4½-ft. high-quality plastic cord with phone tips. Spring-metal headband permanently attached. 1000 ohms impedance. Shpg. wt., 8 oz.

706-9005. Type 33-5003 ..... 2.60



TWO-WAY TELEPHONE AMPLIFIER

REALISTIC MODEL 43-230. Conduct "hands-free" telephone conversations. Just place receiver in cradle and talk. Solid-state circuit. No installation required. Operates from one 9-volt battery. Earphone for privacy. Speaker, 3½x2"; cradle, 10¼x 4½x3¼".

910-0046. Shpg. wt. 4 lbs.... Each 14.95

SNAP-ON TELEPHONE AMPLIFIER

REALISTIC MODEL 277-007. Designed to eliminate noisy distractions and for the hard-of-hearing. Powerful 4-transistor amplifier boosts voice up to 5 times normal sound. Fits any standard receiver. 2⅝" around by 1". Complete with battery. Shpg. wt. 1 lb.

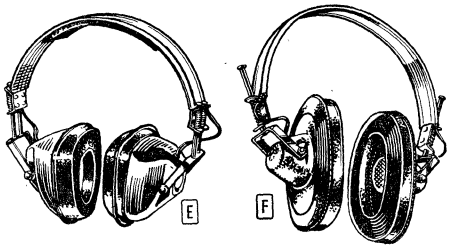
910-0047 ..... Each 7.95

30-FOOT PHONE EXTENSION CORD

TYPE 279-1261. Turn your telephone into a convenient "mobile unit" with this flexible four conductor cord, plug and standard telephone jack. Error-prevention fitting protects against wiring mistakes. Fast installation.

910-0182. Shpg. wt. 1¼ lbs..... 2.98

SUPEREX HEADPHONES



E HEADSET FOR LANGUAGE LAB USE

MODEL AP-S-2. Deluxe lightweight headset for prolonged use in language labs and for communications. Designed for comfort as well as for fine performance. So comfortable, lets you listen for hours without tiring. Soft, vinyl-covered foam earcushions provide easy listening; are washable. Has an excellent frequency response of 80-12,000 Hz. Factory connected for high-impedance 600-ohm output. Leads may be changed to 4-16 ohms. Comes complete with 7-ft. 4-conductor cord and attached standard ¼" phone plug.

949-8700. Shpg. wt. 3 lbs... Ea. 24.99 2-Up.. 22.75

F "COMMUNICATOR" HEADSET

MODEL COM-S. Extremely-sensitive headset for all communications applications. Has excellent frequency response of 100-10,000 Hz. Provides highly intelligible voice reception. Soft, vinyl-covered, foam-filled washable earcushions block out external noise, and are so comfortable you can listen for hours without tiring. Lightweight, fully adjustable headband is designed for comfort and easy listening. Phones have dynamic elements for crisp reproduction of the audio range at all communications frequencies. Impedance, 4-16 ohms. Comes complete with 7-ft. two-conducter cord and ¼" phone plug.

949-8710. Shpg. wt. 1 lb.... Ea. 13.99 2-Up.. 12.15

AVIATION/MARINE HEADSET

- High Intelligibility in Noisy Areas
- Lightweight and Comfortable
- 10' Retractable Cord with Plug

MODEL AV-NS-7. Features special noise-shield for maximum intelligibility of reception despite elevated noise level in high noise areas. External noise attenuated to 50 dB.

Lightweight and comfortable, designed for uninterrupted listening for long periods. Can be worn comfortably with glasses. Lets you listen for hours without strain. Contoured foam earcushions are so soft and easily worn that pressure is no problem even during long sessions at the radio receiver. Spring-steel headband is adjustable and padded for easy listening.

Frequency response of 10-15,000 Hz. Impedance, 600 ohms. 10-ft. retractable cord, phone plug. 3 lbs.

949-8702. Ea. 43.00 2-Up.. 39.50
949-8726. Model SX-NS-2. Above, 4-16 ohms; 7-ft. straight cord Ea. 38.00
2-Up 35.20

TELEPHONE PLUG

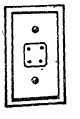
TYPE 279-366. Give your telephone complete mobility within your house. 4-conductor plug connects easily. Fits one way into jack to eliminate wiring mistakes.

910-0180. Shpg. wt. ¼ lb..... 1.25

TELEPHONE JACK

TYPE 279-367. Matches plug at left. Install several in your home and use your phone anywhere. 4-conductor. Plug fits one way to eliminate error in wiring. Easy hookup.

910-0181. Shpg. wt. ¼ lb..... 1.40



TELEPHONE WALL JACK

TYPE 279-1507. Use your telephone in the comfort of any room. Can be used with 2, 3, or 4 wire systems. Fits standard wall conduit boxes.

910-0183. Shpg. wt. 4 oz. 1.99

For Industrial Type Headphones See Pages 590, 591

Telex Language Lab, General-Purpose Headsets

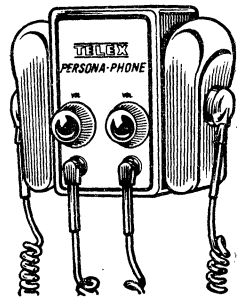
DELUXE DUAL HEADSET WITH BOOM MIKE

- Meets all Language Lab Requirements
- Mike Rotates 360° and Is Easily Detached
- Headset Response a Full 20-20,000 Hz
- Dynamic, Noise Canceling Microphone

MODEL 2400-42. Beautifully made dynamic headset with boom mike. Headset response is an excellent 20-20,000 Hz. Field-detachable dynamic noise-canceling mike has 100-8000 Hz response and 360° rotation. Impedances: headset, 600 ohms; mike, 300 ohms. Soft, removable earcushions form snug acoustic seal. With 5-ft. cord and straight ¼" molded plugs.

968-0182. Shpg. wt. 1½ lbs. . . Each 36.95 2-Up . . . . Ea. 32.50
968-0179. Model 2400-19. Same as above but has right-angle, plugs. Shpg. wt. 1 lb. . . . . Each 36.95 2-Up . . . . . Ea. 32.50
968-0100. Model ACV-4 Extra Foam Earcushions. Soft, comfortable, reduce outside sounds. Brown, washable. 2 oz. . Pair 1.80

PERSONA-PHONE® PRIVATE LISTENER FOR AUDIENCES



- Has Two Earsets—Each With Its Own Separate Volume Control
- Ideal for Churches, Theaters and Other Institutions With Audience PA System
- Connects Easily to Sound System
- Lets Each Listener Hear Clearly

MODEL 62185.00. Ideal for large auditoriums, churches, theaters, museums, exhibits, libraries—wherever audiences might have trouble hearing. Increases enjoyment of programs by letting listeners hear comfortably without straining.

Operate from institution's 70-volt, 25-volt, or 8-ohm sound system. Connects easily and quickly to system and is ready to operate without complicated wiring. Has built-in matching transformer and terminal strip for simplified installation.

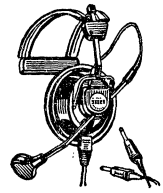
Compact dual-receiver unit provides individual listening for audiences of large institutions. Unit has two earsets, each with its own volume control. User can adjust sound to his personal preference. Earshells fit all listeners, even those who wear glasses; will not disturb ladies' hairdos. Earsets have 5-ft. coil-cords; hang up on control box when not in use; weigh less than 1.5 oz. Gold color. 4¾x3⅞x2 7/16".
968-0185. Shpg. wt. 5 lbs. . . . . Each 34.00 2-Up . . . . . Each 30.95

QUALITY HEADSETS FOR EVERY APPLICATION

"TWINSET" HEADPHONES

MODEL HTW-2. Lightweight, comfortable headphones for pilots, Hams, etc. Sound is fed direct to ears through adjustable arms. Background sounds remain intelligible. Magnetic elements rest at temples. 500 ohms. Weighs only 1.6 oz. Complete with 5-ft. cord ¼" plug. Shpg. wt., 10 oz.
968-0135 . . . . Each 15.65 2-Up . . . . Ea. 14.50

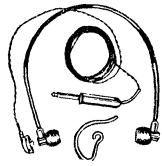
SINGLE HEADPHONE WITH MIKE



MODEL CS78. Professional type. Dynamic. headphone element with response of 20-20,000 Hz; carbon boom mike, 500-6,000 Hz. Impedance: headphone, 5000-600 ohms; mike, 20 ohms. Mike cannot accidentally rotate. 5-ft. cord, ¼" phone plugs. Black. Shpg. wt. 1 lb.
968-0105. . . . . Each 35.60 2-Up . . . . Ea. 32.10

LIGHTWEIGHT SECRETARIAL HEADSETS

"TELE-FI"® HEADSET



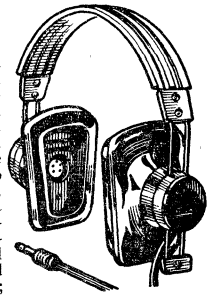
Designed for comfort as well as for fine performance. Worn under the chin for ease of operation and so as not to mess hairdos. Headset delays sound to one ear for improved clarity. Frequency Response, 60-6000 Hz. Earloop included for one-ear listening. Choice of 15-ohm or 2000-ohm impedance. Complete with 5-ft. cord and ¼" phone plug.
968-0110. Model HFR-91. 15 ohms. 1 lb. 5.95
968-0115. Model HFY-91. 2000 ohms. 1 lb. 5.95
968-0170. Model 2200 Replacement Cord. For HFR, HFY, and HMV-2. 3 oz. 2.25

SECRETARY'S MONOSET®

MODEL HMY-2. Comfortable, weighs only 1.2 oz. Worn under the chin for convenience; keeps headset cord from getting in the way; won't mess hairdos. Ideal for use in transcribing from office dictation equipment. Has magnetic element, metal housing, removable earplugs. Frequency Response, 50-5000 Hz. Impedance, 2000 ohms. Maximum Input, 25 milliwatts. Complete with 5-ft. cord and attached standard ¼" phone plug. Takes same replacement cord as "Tele-Fi" secretarial headset at left.
968-0130. Shpg. wt. 8 oz. 9.75

MODELS FOR HAMS, CB, LANGUAGE LABS AND SWL'S

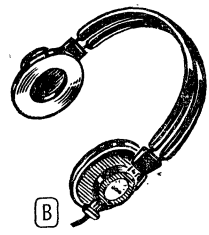
FULL-FIDELITY HEADSET FOR FINE PERFORMANCE



MODEL 820-02. Lightweight headset reproduces the entire orchestral spectrum with amazing fidelity. Provides enjoyable private listening, makes music a personal experience. Ideal for music courses, libraries, etc. Weighs only 10 ounces. Can be worn over head, or under chin to avoid ruffled hairdos. Comfortable, lets you listen for hours without strain. 50-18,000 Hz frequency response. Impedance, 4 ohms. High-impact plastic phones, vinyl-covered spring-steel headband. Circumaural earcushions reduce outside noise; remove easily for cleaning. 6-ft. cord, molded plug.
968-0150. Shpg. wt. 1 lb. 9.95
968-0152. Model 820-04. Above, but 600 ohms. Shpg. wt., 1 lb. 13.25

- Wide-Range Response for Music
- Choice of 4 or 600 Ohms

A



B

A "TELESET"® HEADSET

MODEL HM-100. Dual headset ideal for Amateurs, CB'ers, shortwave listeners, others. Magnetic element. Adjustable stainless-steel headband. 50-10,000 Hz. 2000 ohms. 5-ft. cord, ¼" phone plug.
968-0120. Shpg. wt., 8 oz. 18.50
968-0125. Model HM-500. Above, but 500 ohms. Wt., 8 oz. . . 18.50

B LOW-PRICED DUAL HEADSET

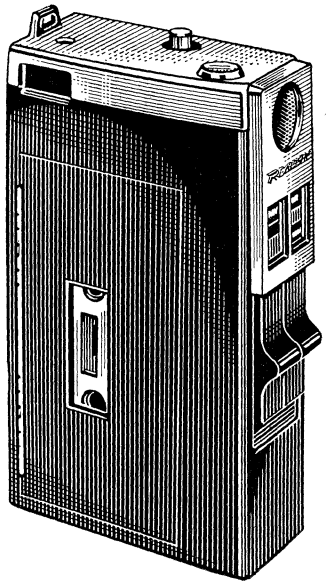
Provides faithful sound reproduction. Lightweight, adjusts to fit anyone. Removable earcushions. 5-ft. cord, ¼" phone plug.
968-0142. Model 610-2. 2000 ohms. Shpg. wt., 1 lb. 6.95
968-0141. Model 610-1. 600 ohms. Shpg. wt., 1 lb. 6.95

Realistic® Portable Tape Recorders

"MINISETTE" MINIATURE CASSETTE RECORDER FITS IN YOUR POCKET

- Battery Operated For Complete Portability
- Level Meter; Full Complement of Controls
- Easy Cassette Operation Saves Valuable Time

69.95

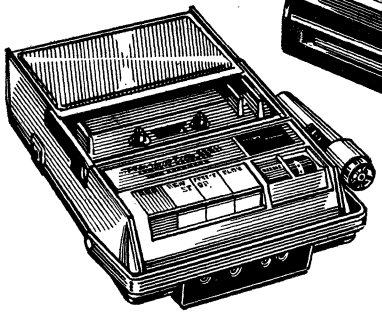


A miniature cassette tape recorder ideally suited to serve as a portable office for the student or businessman on the move. Records and plays up to 2 hours on a single cassette to let you dictate letters, take notes, record lectures, or study pre-recorded tapes. Features positive action slide function controls, combination record level meter/battery meter, external mike and earphone jacks, built-in mike and AC adapter jack. Includes 4 penlite batteries that are easily replaced in a slide-out case. Size, 6⅜x3¾x1⅞".

910-0048. Type 14-864. Shpg. wt. 4 lbs.....**69.95**
910-0049. Type 14-854. AC Adapter. Shpg. wt. 8 oz.....**5.95**

REALISTIC'S "TAKE-ALONG" CASSETTE RECORDERS

OUR LOWEST PRICED, EASIEST-TO-USE CASSETTE RECORDER

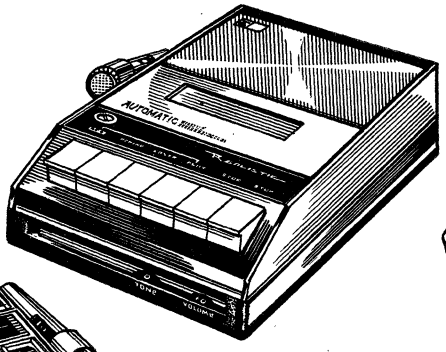


- Pushbutton Controls
- AC Adapter Jack

29.95

MODEL CTR-11. Now, a truly low-cost, value-packed cassette recorder. Perfect for lectures, note-taking, any voice recordings. Features fast-forward and rewind for locating selections easily, automatic level circuit assures even-volume recordings. Auxiliary input jack lets you record directly from radio, phono or your television by using a patch cord (included). Has earphone and AC adapter jacks, volume control, remote microphone with on-off switch. Styled in an attractive high-impact case with convenient carrying handle. 5¾x9¾x2½". With batteries and earphone.

910-1071. Shpg. wt. 5 lbs.....**29.95**
910-0049. Optional AC Adpt. ½ lb...**5.95**



DELUXE BATTERY/AC MODEL FEATURING AUTOMATIC "STOP"

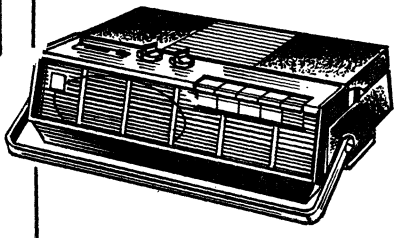
- Leather Case
- Remote On/Off Mike

59.95

MODEL CTR-12. The easiest-to-use cassette recorder ever made that's entertaining and practical, too. Lets you play pre-recorded cassettes or record your favorite tunes. Also ideal for dictation, taking notes, recording business lectures, classes, etc. Positive pushbutton control, full-range volume and tone controls. Magic "Auto-Level" circuit permits professional-type quality voice recordings—every time. Has record safety interlock, manual eject button. Unique "Auto Stop" makes your recording more convenient than ever—the motor stops, tape head retracts, and cassette ejects, automatically at end of tape. With jacks, batteries, mike.

910-1069. Shpg. wt. 7 lbs.....**59.95**

5" REEL AC/DC PORTABLE WITH AUTOMATIC GAIN, PUSHBUTTON CONTROLS



59.95

- Plays & Records at 1⅞ or 3¾ ips speeds
- Safety Record Interlock

MODEL 505-A. Get perfect recordings every time—without confusing meters or complicated controls. Features unique, easy-to-use pushbutton controls, "Auto-Take-Up Reel", big 3x6" speaker that delivers maximum quality sound.

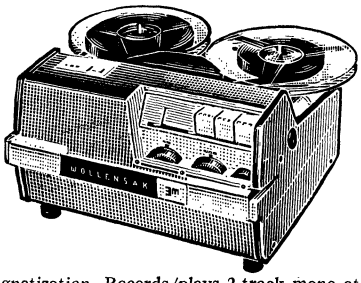
There's even a remote control dynamic mike, fast forward, pilot light, full range control, recording level meter, aux. input jacks, more. Response: 100-8000 Hz at 3¾ ips; 3 hrs. recording time with 900' tape at 1⅞ ips.

910-1050. Shpg. wt. 9 lbs.....**59.95**
"D" Cells (6 Required).
910-5105. Pkg. of Two.....**.79**

Tape Recorders for Business, Home or School

WOLLENSAK

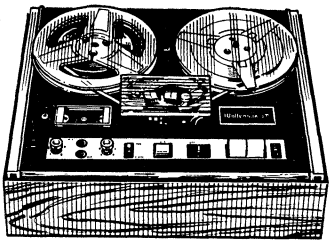
HIGH-FIDELITY TAPE RECORDER



MODEL 1500SS. Full-sized 7" recorder boasts a powerful 10-watt amplifier. Solid-state design. Provision for use as a public address system. Push-button controls, record level indicator, plus digital counter. Automatic head demagnetization. Records/plays 2-track mono at 7½ and 3¾ ips. 40-15,000 Hz at 7½ ips. Signal-to-Noise, 48 dB. Inputs: mike, radio, phono. Outputs: preamp, extension speaker. 6½x10¼x11¾". Mike, tape, takeup reel incl. 117 VAC.
999U1500. Shpg. wt. 20 lbs...**Each 213.68** **2-Up...Each 184.95**

WOLLENSAK

DELUXE 3-HEAD STEREO DECK



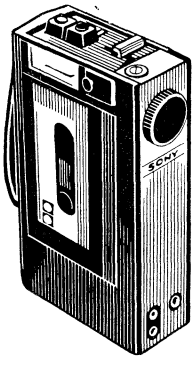
MODEL 6150. Professional-quality tape deck records excellent 4-track stereo or mono; plays through your system or console. Three heads for sound-on-sound, reverberation, direct monitoring. Non-magnetizing heads cut hiss. Dual VU meters, 4-digit tape counter and pause control for easy editing. Tape/source monitor. Record bias selector. Stereo headphone output with volume control. Automatic shutoff. Speeds, 7½, 3¾, 1⅞ ips. Response, 35-20,000 ips; flutter/wow, 0.12% at 7½ ips. Signal-to-Noise ratio, 52 dB. 16½x13½x6½". 117 VAC.
999-6150. Shpg. wt. 18 lbs....**Each 254.95** **2-Up...Each 199.95**

REALISTIC® 3-SPEED STEREO TAPE RECORDER WITH ALL THE "PLUS FEATURES"

- Detachable Wing Speakers
- 3 Speeds—No Capstan Change
- Dual Illuminated Record Pushbuttons

MODEL 909. Professional features! Plays and records 4-track monophonic or stereo, horizontally or vertically, without flutter or wow (less than 0.25%). Tapes from stereo FM radio, dubs echoes, makes special effects or additional sounds on pre-recorded tape for "sound-on-sound". 7 watts total amplifier power output for room-filling hi-fi sound. Signal-to-noise ratio is better than 50 dB. Inputs: 2 mikes, 2 auxiliary. Outputs: 2 speakers, 2 preamps, 1 stereo headphone. Other features include sturdy and easy-to-operate digital counter for faster editing and indexing. Comes complete with two dynamic mikes with stands, two patch cords, 7" take-up reel plus detachable wing speakers that separate for maximum stereo effect. Total Frequency Response: 50 to 18,000 Hz at 7½ ips. Dimensions: 24½x14x7 1/16". For use with 117 VAC. Shpg. wt. 28 lbs.
910-1074.....**169.95**

SONY/SUPERSCOPE



CASSETTE-CORDER WITH BUILT-IN CONDENSER MIKE

- Amazingly Small, Lightweight—Actually Fits in Coat Pocket
- Provides Larger Model Features

MODEL TC-40. Fully self-contained cassette recorder that is amazingly small and lightweight—actually fits in your coat pocket—yet provides performance comparable to many larger models. It's the ideal choice for business meetings, classroom lectures, anywhere good-quality voice recordings are desired. Counter-balance flywheel lets you carry and record in any position.

Special built-in electret condenser mike eliminates the need for external or remote control microphones. Also has a built-in speaker for good sound reproduction. Combination record level/battery condition meter permits even-volume recordings; shows you when batteries are weak. Easy-to-operate push-button controls. Automatic recording control assures distortion-free conference recordings.

Operates on 4 "AA" batteries (included). With soft vinyl carrying case, shoulder strap, one C-30 cassette. Shpg. wt. 3 lbs.
947X7040.Each 113.51 **2-Up.Each 99.95**

VALUE-PRICED STEREO DECK

- Has Sound-with-Sound Capability
- Front Stereo Headphone Monitor Jack

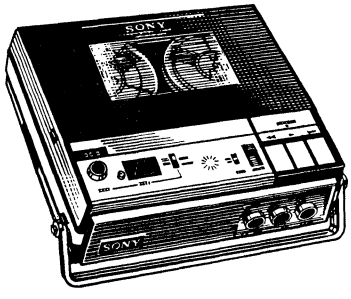
MODEL 252-D. Two-speed stereo tape deck has quality and features usually found only in higher-priced equipment. Record 4-track stereo or mono at 7½ and 3¾ ips; play through your home music system or console with true-to-life fidelity. Boasts clean, uncluttered styling for smart appearance.

Offers sound-with-sound capability; stereo headphone monitor jack; retractomatic pinch roller for easy tape threading; vibration-free motor; special scrape flutter filter to prevent tape modulation distortion; non-magnetizing record head eliminates hiss; easy-to-read dual-comparison record level meters; pause control and push-to-reset digital counter for editing and indexing.

Automatic tape lifter; automatic shutoff. Response: 30-18,000 Hz; flutter/wow, 0.12% at 7½ ips. S/N: 52 dB. AC. 18 lbs.
947U7052.Each 154.26 **2-Up.Each 139.95**

5" PORTABLE RECORDER

- With Built-In Condenser Mike
- AC or Battery Operation



MODEL 800B. Feature-packed battery/AC portable records and plays 2-track mono at 7½, 3¾, 1⅞ or 15/16 ips. Deluxe styling includes a built-in electret IC condenser mike, plus varispeed pitch control for easy, flawless recording.

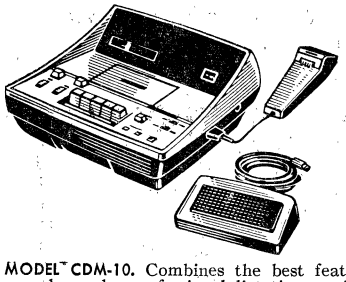
Three-position mike selector/mixer switch. Speaker monitor switch and digital counter for editing convenience. Battery condition indicator and VU meter. Tape lifters protect heads during fast forward and rewind. Safety record interlock switch.

Tone control and headphone monitor jack. Response, 30-18,000 Hz at 7½ ips. Signal-to-Noise ratio, 48 dB. Flutter and wow, 0.1%. Inputs: mike, auxiliary; outputs: line or earphone monitor. Uses 8 "D" batteries or 117 VAC. With mike, batteries, empty takeup reel, earphone and patch cord. 4 3/16x12¼x10¼". Shpg. wt. 17 lbs.
947-7800.Each 280.95 **2-Up.Each 219.95**

Crown Recording and Telephone Devices

JAPAN

SECRETARIAL CASSETTE RECORDER

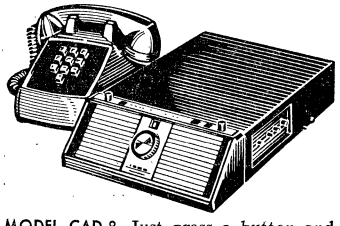


- For Dictating and Transcribing
- Includes Footswitch With Start, Stop And Backspace
- Accepts All Standard Tape Cassettes

MODEL CDM-10. Combines the best features of a cassette tape recorder and a professional dictating machine. Plays back through earphone or speaker for transcribing. Foot pedal starts and stops tape, also reverses to repeat the last 7 seconds of dictation. Accepts dictation using any standard cassette—records and plays up to 2 hours. 3⅛x4¾" speaker, pop-up cassette ejector, pushbutton recording controls, record level indicator, tone control. 5⅝x11¼x12⅜". With remote-control mike, steno earphone, foot pedal. AC/battery. Shpg. wt. 2 lbs.

762-0110. Each.....164.50 2-Up.....Each 149.95

AUTOMATIC TELEPHONE DIALER/AMPLIFIER

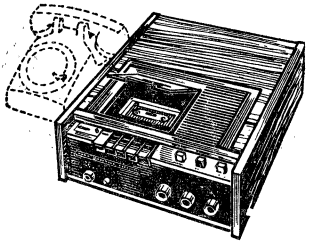


- Memorizes Up to 26 Phone Numbers
- Built-In Amplifier Allows Monitoring

MODEL CAD-8. Just press a button and your telephone will dial automatically. Memorizes up to 26 different numbers. Built-in voice amplifier has switch to boost sound enabling others to hear conversation. Simply dial a number once and it becomes magnetically recorded for future automatic dialing. Manual switch for regular dialing. Recorded numbers can be renewed whenever desired. Name panel with selector knob accommodates 26 names. Call button activates automatic dialing. Uses standard telephone socket. 2¾x9 1/16x7/16". AC. Shpg. wt. 8 lbs. See cables below for multi-line phones.

762-0108.....Each 154.95 2-Up.....Each 139.95

ANSWERER/RECORDER

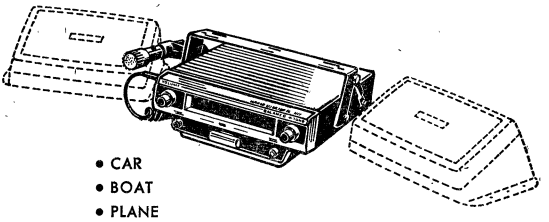


- Built In Tape Recorder
- Answers Phone
- Delivers Messages
- Records Caller's Message for Playback

MODEL CTA-4400T. Answers automatically. Gives up to 30-second message prerecorded on endless-loop tape, also records caller's message on built-in cassette recorder for playback later. Voice-activated recorder may be used separately. Uses standard cassettes. Pushbutton controls for record/rewind/playback/fast forward/stop. Separate tone, volume controls. Function selector switch (message record/message confirm/valet/cassette). Installs in minutes, no re-wiring. Walnut cabinet, 3 5/16x10 1/16x12 13/16". With tape, cassette, built-in mike. 117 VAC. Japan. 9 lbs.

762-0144.....Each 219.00 2-Up.....Each 199.95

MUSICRUISER—CASSETTE RECORDER/PLAYER

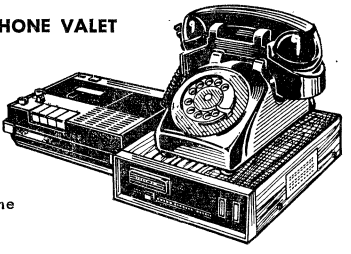


- CAR
- BOAT
- PLANE

MODEL CSC-1500. Ideal for music-minded motorist, pilots and boat enthusiast. Push cassettes into chamber and "Starr" mechanism plays tape automatically. Records in AC bias, double track, mono. Uses cassette C-60 (60 minutes) or C-90 (90 minutes). Tape speed: 1⅞ ips. Output: 15 watts—7½ per channel. Supplied with Dynamic microphone, microphone holder, mounting bracket, hardware, fuse and compact cassette C-15. Power supply: 12 VDC battery. Matte black metal cabinet. Size: 2 13/16x7⅝x8¼". Shpg. wt. 8 lbs.

762-1500. Each.....96.00 2-Up.....Each 91.50

TELEPHONE VALET

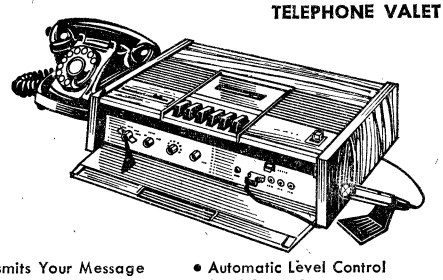


- Use With Any Type Of Standard Telephone
- Never Again Miss An Important Call

MODEL CTA-4100. Automatic telephone answering unit. Gives callers your dicated message in your voice, and records callers' messages. Picks up incoming signals without handset being lifted. Use with any type of standard telephone. Allows 60 seconds for outgoing and incoming message recording. Automatically hangs up and is ready for the next call. Output: 260 mW RMS. Supplied with message cartrige tape, crystal microphone, patch cord, CT1-4A voice induction cradle. Power supply: 171 VAC, 50/60 Hz. U.L. approved. Size: 3⅜x8½x10 7/16". Shpg. wt. 8 lbs.

762-0141.....Each 96.00 2-Up.....Each 89.95

TELEPHONE VALET



- Transmits Your Message
- Records Callers Message
- Records Both Sides Of Conversation
- Automatic Level Control
- Solid State Circuitry
- Low Level Volume Monitoring Of Incoming Calls

MODEL CTA-4450. Lets caller hear your message and leave his message for you. Recording time: 30, 60 and 90 seconds. Will answer only when in "0" position. Can record both sides of conversation. Tape speed: 1⅞ ips. Output: 1500 mW RMS. Supplied with earphone, dynamic microphone, compact cassette C-60, CT1-4A telephone cradle, telephone connector cord, 23-sec. loop cartirdge, and PM dynamic 2¼x4⅛" speaker. Power supply: 105/125 VAC. Wood grained cabinet. Size 15¾x11x4 5/16". See cables below for multi-line phones. Shpg. wt. 15 lbs.

762-0450.....Each 262.50 2-Up.....Each 250.00

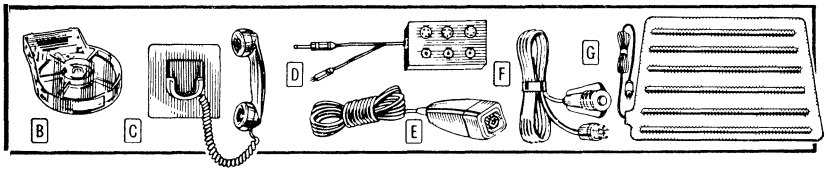
CONNECTORS AND CABLE ACCESSORIES

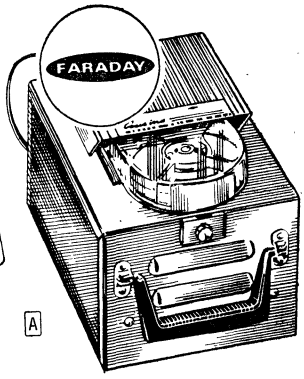
Stock No.	Type	For	Description	EACH
762-0800	CTC-800	CAD-8	Single line phone, 4 pin jack	19.95
762-0801	CTC-801	CAD-8	Multi line phone, Amphenol connector for line #1	19.95
762-0802	CTC-802	CAD-8	As above for line #2	19.95
762-0803	CTC-803	CAD-8	As above for line #3	19.95
762-0804	CTC-804	CAD-8	As above for line #4	19.95
762-0805	CTC-805	CAD-8	As above for line #5	19.95

Stock No.	Type	For	Description	EACH
762-0400	CTC-400	CTA-4450	Single line phone, 4 pin jack	19.95
762-0401	CTC-401	CTA-4450	Multi line phone, Amphenol connector for line #1	19.95
762-0402	CTC-402	CTA-4450	As above for line #2	19.95
762-0403	CTC-403	CTA-4450	As above for line #3	19.95
762-0404	CTC-404	CTA-4450	As above for line #4	19.95
762-0405	CTC-405	CTA-4450	As above for line #5	19.95

Faraday Automatic Tape Equipment

Automatic tape equipment offers unlimited possibilities for instruction and sales promotion. Operates continuously, periodically, or when cued. Available in playback units alone, or with recording facilities. Tape cartridges (below) thread automatically.





A AUDIO REPEATER-RECORDER

MODEL 773.310. Similar to Model 773.280, but also records tapes. Foil strips on tape provide automatic "end of cycle" shutoff. Shpg. wt., 16 lbs.
879S1163. Ea. 169.95 2-Up....Ea. 144.45

A SYNCHRO REPEATER-RECORDER

MODEL 773.410. Similar to Model 773.310, but also has facility for tone-triggering remote units on playback. Wt., 17 lbs.
879S1164. Ea. 229.95 2-Up....Ea. 195.45

B ECHO-MATIC TAPE CARTRIDGES

For all Faraday units listed here. Running time given in minutes, at 3¼ ips, except *seconds. †Empty cartridge. 1 lb.

Stock No.	Mfr's Type	Minutes	EACH 1-11	12-144	145-Up
879-1129	141.070	70*	3.00	2.70	2.40
879-1121	141.003	3	3.25	2.92	2.60
879-1123	141.006	6	3.75	3.37	3.00
879-1124	141.008	8	4.00	3.60	3.20
879-1125	141.010	10	4.25	3.82	3.40
879-1126	141.012	12	4.60	4.14	3.68
879-1127	141.015	15	4.95	4.45	3.96
879-1120	141.000	15†	2.00	1.80	1.60
879-1136	143.030	30	5.95	5.35	4.76
879-1134	143.000	40†	3.00	2.70	2.40

C PHONE HEADSET AND CRADLE

MODEL 846.010. Activating accessory starts Audio Announcer and provides quiet, private commentary for listener. Wt., 2 lbs.
879-1190. Black..Ea. 25.05 2-Up..22.50
879-1191. Model 846.040. White.....38.63

D JUNCTION BOX

MODEL 846.030. 3-phone input junction box.
879-1192. 1 lb..Ea. 17.99 2-Up.Ea. 16.75

E LOW-IMPEDANCE MICROPHONE

MODEL 843.120. Recommended as an accessory for Models 773.310 and 773.410.
879S1177. Shpg. wt. 1 lb.....**17.99**

F PUSHBUTTON REMOTE SWITCH

MODEL 845.410. Starts tape equipment from remote location by pressing button. With 6-foot cord and plug. Shpg. wt., 1 lb.
879-1183.....4.51

G FOOTMAT START SWITCH

MODEL 845.470. Vinyl footmat will activate any Audio Announcer when stepped on. Commonly used for point-of-purchase applications such as supermarkets, etc. Size, 17x23". Shpg. wt., 1 lb.
879-1184.....17.54

A AUDIO ANNOUNCER

Solid-State . . . Plays Continuously or On Cue . . . Two Speeds

MODEL 773.200. Solid-state cartridge-loading playback unit operates on cue, or continuously. Automatic shutoff. Countless uses for sales promotion or instructional purposes. Operates at 3¾ and 1⅞ ips. 4-pole motor. Requires power amplifier or headset. Size, 6x6x9". 117 VAC. Wt. 14 lbs.
879S1160. Ea. 99.95 2-Up.....Ea. 84.95

A AUDIO REPEATER

MODEL 773.280. Has same fine features as Model 773.200 listed above, but with built-in 4-watt audio amplifier; 4-inch speaker; external jack for remote speaker. Size, 6x6x9". Shpg. wt., 15 lbs.
879S1161. Ea. 124.95 2-Up....Ea. 106.21

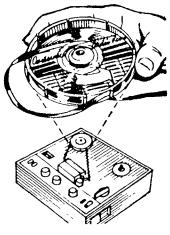
SYNCHRO REPEATER

MODEL 773.283. Plays message, plus trip-tone signal which may be recorded on Synchro Recorder. Shpg. wt. 9 lbs.
879S1162. Ea. 199.95 2-Up....Ea. 169.95

CONTINUOUS-PLAY AUDIO VENDORS

For use on most reel to reel recorders. For unlimited applications in all fields. Run counter-clockwise at 3¾ ips. *Indicates empty cartridge. †Indicates ready-mount spindle. Wt. 12 oz.

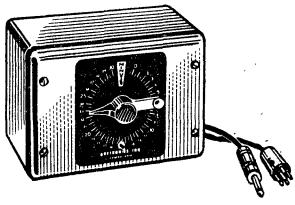
Stock No.	Type	Min.	1-9, EA.	10-Up, EA.
879-1141	150.003	3	3.95	3.55
879-1142	150.005	5	4.75	4.27
879-1140	150.000	*	3.18	2.86
879-1113	131.008	8	7.15	6.43
879-1114	131.012	12	8.00	7.20
879-1115	131.015	15	8.95	8.05
879-1110	131.000	*	4.75	4.27
879-1106	121.024	24	10.95	9.86
879-1130	121.030	30	12.95	11.66
879-1105	121.000	*	7.01	6.30
879-1174	831.088	†	1.50	1.35



TIMER MUTER CONTROL

Mutes Recorded Programs and Broadcasts Your Sales Message Automatically at Timed Intervals

MODEL 845.130. An accessory to be used in conjunction with the 773.310 Recorder-Repeater, or any other Audio Announcer models. Adaptable to background music systems to mute music automatically while broadcasting messages. Built-in timer may be set at increments of one to thirty minutes between broadcasts. Turns on and off automatically for broadcasts.
879-1180. Wt. 1 lb....**82.76**



TELEPRO "FIDELIPAC"® AUTOMATIC TAPE CARTRIDGES

MODEL NAB-3A TAPE CARTRIDGES

Stock No.	Length	Time at 7½ ips	Size	Wt., Oz.	EACH 1-49	50-99	100-499	500-Up
573-1001	25'	40 sec.	4x5 7/32x⅞"	4	2.91	2.33	2.06	1.81
573-1002	44'	70 sec.	4x5 7/32x⅞"	4	3.07	2.46	2.18	1.92
573-1003	63'	100 sec.	4x5 7/32x⅞"	4	3.24	2.59	2.29	2.01
573-1004	132'	3½ min.	4x5 7/32x⅞"	4	3.70	2.96	2.61	2.31
573-1005	207'	5½ min.	4x5 7/32x⅞"	5	4.25	3.39	3.00	2.64
573-1006	394'	10½ min.	4x5 7/32x⅞"	8	5.64	4.45	3.93	3.46
573-1007	....	*	4x5 7/32x⅞"	3	2.30	1.84	1.62	1.45

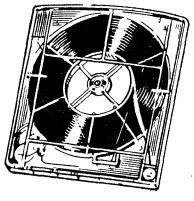
MODEL 6B TAPE CARTRIDGES

Stock No.	Length	Time at 7½ ips	Size	Wt., Oz.	EACH 1-9	10-99	100-499	500-Up
573-1008	600'	16 min.	6x6 31/32x⅞"	9	9.14	7.30	6.44	5.68
573-1009	.....	*	6x6 31/32x⅞"	5	3.80	3.05	2.70	2.38

MODEL 12CX TAPE CARTRIDGES

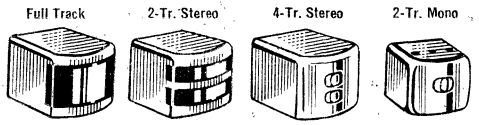
573-1010	1163'	31 min.	7⅝x8 13/32x⅞"	16	16.00	12.85	11.56	9.67
573-1011	.....	*	7⅝x8 13/32x⅞"	10	5.75	4.58	4.04	3.57

- Match All Major-Brand Cartridge Equipment
- Continuous Record/Play
- Endless-Loop Principle
- Self-Enclosed for Protection from Dust, Marring, Tearing

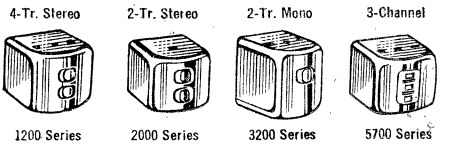


Continuous, self-contained automatic tape cartridges—the standard of the broadcast industry. They are compatible with all major-brand cartridge equipment available on the market today. Designed for both recording and playback—utilizing the endless-loop principle of tape operation. Fidelipac cartridges offer unlimited applications in all fields. The entire cartridge is constructed of plastic, and its specially lubricated tape is self-enclosed (with transparent cover) affording complete protection from dust, tearing, marring. Offers the utmost handling ease. Three model sizes, NAB-3A, 6B and 12CX, for program flexibility. See table at left. *Empty cartridge.

Nortronics Tape Head Replacements, Accessories



2800 REPLACEMENTS
Allied Electronics provides Nortronics replacements for over 2800 recorders. Give model, head number, track configuration.



PROFESSIONAL RECORDING HEAD REPLACEMENTS FOR AMPEX

Stock No.	Mfr's Type	Function†	†† QK	Models	EACH	2-Up
869-6253	9203	R 2-tr. St.	87	PR-10	54.50	45.25
869-6252	9202	P 2-tr. St.	87		54.10	45.05
869-6266	9226	E 2-tr. St.	87		54.10	45.05
869-6200	8600	P 4-tr. St.	87		37.70	31.40
869-6223	9103	R Full-Tr.	76		57.70	47.95
869-6222	9102	P Full-Tr.	76		57.30	47.75
869-6238	9125	E Full-Tr.	76		57.30	47.75
869-6253	9203	R 2-tr. St.	76		54.50	45.25
869-6263	9223	E 2-tr. St/Mo	76	300, 350,	54.10	45.05
869-6252	9202	P 2-tr. St.	76	352, 354	54.10	45.05
869-6181	8401	R 2-tr. Mono	76		21.90	18.10
869-6180	8400	P 2-tr. Mono	76		24.50	20.40
869-6203	8604	R 4-tr. St.	76		33.20	27.50
869-6200	8600	P 4-tr. St.	76		37.70	31.40
869-6216	8701	E 4-tr. St.	76		23.00	19.15
869-6240	9128	E Full-Tr.	76	300	57.30	47.75
869-6171	8304	E 2-tr. St.	76		27.30	22.75
869-6194	8504	E 2-tr. Mono	76		19.20	16.00
869-6224	9104	R Full-Tr.	76		57.70	47.95
869-6222	9102	P Full-Tr.	76		57.30	47.75
869-6239	9127	E Full-Tr.	76		57.30	47.75
869-6254	9204	R 2-tr. St.	76	AG350/355	54.50	45.25
869-6252	9202	P 2-tr. St.	76	On units	54.10	45.05
869-6262	9222	E 2-tr. St.	76	equipped with	54.10	45.05
869-6188	8414	R 2-tr. Mono	76	4 heads, use	21.90	18.10
869-6180	8400	P 2-tr. Mono	76	QK-87 instead	24.50	20.40
869-6262	9222	E 2-tr. Mono	76	of QK-76	54.10	45.05
869-6210	8614	R 4-tr. St.	76		33.20	27.50
869-6200	8600	P 4-tr. St.	76		37.70	31.40
869-6233	9113	R Full Tr.	76		57.70	47.95
869-6226	9106	P Full-Tr.	76		57.30	47.75
869-6167	8214	R 2-tr. St.	76		39.90	33.20
869-6256	9206	P 2-tr. St.	76	3300	54.10	45.05
869-6188	8414	R 2-tr. Mono	76	Playback	21.90	18.10
869-6182	8402	P 2-tr. Mono	76	only	24.50	20.40
869-6210	8614	R 4-tr. St.	76		33.20	27.50
869-6207	8610	P 4-tr. St.	76		37.70	31.40

FOR MAGNECORD

869-6232	9112	R Full-Tr.	*	1021	57.70	47.95
869-6185	8408	P 2-tr. Mono			21.50	17.90
		(optional)	*		27.80	23.15
869-6160	8102	E Full-Tr.	*		57.30	47.75
869-6231	9111	P Full-Tr.	*			
869-6164	8203	R 2-tr. St.	*	1022	54.10	33.20
869-6160	8202	P 2-tr. St.	*		54.10	45.05
869-6170	8302	E 2-tr. St.	*		27.30	22.75

FOR RCA

869-6227	9107	R Full-Tr.	*	RT21	77.30	64.25
869-6228	9108	P Full-Tr.	*		76.90	64.05
869-6163	8110	E Full-Tr.	*		47.40	39.45
869-6166	8206	R 2-tr. St.	*		59.40	49.50
869-6165	8205	P 2-tr. St.	*		73.60	61.35
869-6174	8307	E 2-tr. St.	*		40.90	34.05

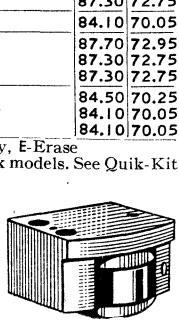
FOR SCULLY (**Includes Mounting)

869-6220	9100	P Full-Tr.	**	270	87.30	72.75
869-6250	9200	P 2-tr. St.	**	270-2	84.10	70.05
869-6213	8620	P 4-tr. St.	**	270-4	67.70	56.40
869-6220	9100	P Full-Tr.	**	275	87.30	72.75
869-6250	9200	P 2-tr. St.	**	275-2	84.10	70.05
869-6221	9101	R Full-Tr.	**	280	87.70	72.95
869-6220	9100	P Full-Tr.	**		87.30	72.75
869-6243	9130	E Full-Tr.	**		87.30	72.75
869-6251	9201	R 2-tr. St.	**	280-2	84.50	70.25
869-6250	9200	P 2-tr. St.	**		84.10	70.05
869-6261	9221	E 2-tr. St.	**		84.10	70.05

† In function column R means Record, P-Play, E-Erase
†† Indicates mounting kit required for Ampex models. See Quik-Kit table below for prices.
*No Quik-Kit needed.

QUIK-KIT MOUNTINGS

Stock No.	Type No.	EACH	2-Up
869-6005	QK-77	1.50	1.25
869-6006	QK-76	14.40	12.00
869-6007	QK-86	4.80	4.00
869-6008	QK-87	4.80	4.00



BROADCAST CARTRIDGE HEAD REPLACEMENTS FOR ATC

§ Notes. See Below for Numbers

Stock No.	Mfrs. Type	Function†	†† QK	Models	§	EACH	2-Up
869-6063	2053	R.Pr.C.		CP11, CP12, CP13		44.40	37.10
869-6067	2057	P.Pr.C		Mono	4	44.40	37.10
869-6113	5753	R.Pr.C.		CP21, CP22, CP23,		143.10	99.00
869-6117	5757	P.Pr.C.		CPR23 Stereo	4	143.10	99.00
869-6085	3205	R.Pr.		P150, P190, PB150,		21.50	17.90
869-6050	2000	P.Pr.R/P.C.	117	PB190, PC150, PC190	1	39.60	33.10
		FOR COLLINS					
869-6085	3205	R.Pr.		P150, P190, PB150,		21.50	17.90
869-6050	2000	P.Pr.R/P.C.	117	PB190	1	39.60	33.10
		FOR GATES					
869-6081	3201	R/P.Pr.		M5944		21.50	17.90
869-6080	3200	R/P.C.	115			21.50	17.90
869-6052	2002	P.Pr.C.	114	M6211 Series	2	39.60	33.10
869-6052	2002	P.Pr.C.		(Play only)		39.60	33.10
				M6212 Series			
869-6101	5701	P.Pr.C.	114	(3-Channel) P only		136.50	94.50
869-6052	2002	R.Pr.C.		M6213C		39.60	33.10
869-6052	2002	P.Pr.C.	114			39.60	33.10
869-6103	5703	R.Pr.C.		M6214C		136.50	94.50
869-6101	5701	P.Pr.C.	114	(3 Channel)	3	136.50	94.50
869-6063	2053	R.Pr.C.		Criterion		44.40	37.10
869-6067	2057	P.Pr.C.			4	44.40	37.10
		FOR MACARTA					
869-6091	3251	P.Pr.		105, 108 Playback		24.70	20.50
869-6091	3251	P.C.		2405, 2408 Carousels	4	24.70	20.50
869-6050	2000	P.Pr.C.		248 Carousel (trans.)		39.60	33.10
869-6050	2000	P.Pr.C.	114	500 Playback (trans.)		39.60	33.10
869-6055	2005	R.Pr.C.		560 Recorder		39.60	33.10
869-6050	2000	P.Pr.C.	114			39.60	33.10
869-6053	2003	R.Pr.C.		570, 590 Rec. Playback		39.60	33.10
869-6050	2000	P.Pr.C.	114	(trans.)		39.60	33.10
		FOR RCA					
869-6082	3202	R/P.Pr.		RT7B, RT7C		21.50	17.90
869-6081	3201	R/P.C.	115	Cue head is on left. Program head is next to capstan.		21.50	17.90
869-6091	3251	R/P.C.	115			24.70	20.50
869-6092	3252	R/P.P.R.	115			24.70	20.50
869-6062	2052	R.Pr.C.		RT7 Mono		44.40	37.10
869-6062	2052	P.Pr.C.			4	44.40	37.10
869-6112	5752	R.Pr.C.		RT37 Stereo (3-Ch.)		143.10	99.00
869-6112	5752	P.Pr.C.			4	143.10	99.00
		FOR SPARTA					
869-6051	2001	P.Pr.C.		PB211 (Play Only)		39.60	33.10
869-6081	3201	R/P.Pr.		200P, 200RP, 300P		21.50	17.90
869-6080	3200	R/P.C.	115			21.50	17.90
869-6053	2003	R.Pr.C.		300B, 400RP, 800RP		39.60	33.10
869-6051	2001	P.Pr.C.	114			39.60	33.10
869-6051	2001	P.Pr.C.	114	400, 800P		39.60	33.10
869-6101	5701	R.Pr.C.		600P, 600RP		136.50	94.50
869-6101	5701	P.Pr.C.	114			136.50	94.50
		FOR TAPECASTER					
869-6091	3251	R/P.Pr.		600P, 600RP		24.70	20.50
869-6090	3250	R.P.C.		600CP, 600CRP	4	24.70	20.50
869-6061	2051	R.Pr.C.		700P, 700RP		44.40	37.10
869-6061	2051	P.Pr.C.			4	44.40	37.10
869-6111	5751	R/P.Pr.C.		Stereo 700P, 700RP	4	143.10	99.00
869-6150	6150	R/E.Pr.C.		Delay 700RPD		61.00	35.20
869-6061	2051	P.Pr.C.			4	44.40	37.10

† In function column: R-Record; P-Play, PR-Program; C-Cue.
†† Mounting kit required for no-mount heads. See brkt. assemblies below. For rear-mount, add 50 to Head Type No. and $4.00 to cost of 2000 Series, $4.50 for 5700 Series, $5.50 for 6100 Series, $2.60 for 3200 Series (no mtg. kit required). For Stock No., use prefix 869- followed by Type No.
1. Converts program channel only to monitor.
2. Used with QK-114 to replace Gates Rear-Mount 730-0343, 730-0423 heads. Quik-Kit not req. for Gates No-Mount 730-0729 heads.
3. No-Mount must be used if original head was cylindrical or was Notronics No-Mount head.
4. Rear-Mount heads. Quik-Kit conversion to No-Mount heads is not recommended.

BRACKET ASSEMBLIES FOR CARTRIDGE MACHINES

Furnished with cartridge hold-down spring and cartridge guide rail. QK-114 installs two no-mount dual channel heads for mono, or two no-mount 3-ch. heads for stereo. Left head for record, right for playback. Requires heads similar to 2000 Series.
869-6001. QK-114. Shpg. wt. 6 oz. . . . . **Ea. 15.60** **2-Up. 13.00**
869-6002. QK-115. Installs two no-mount 2-track mono heads. Requires heads similar to 3200 Series. . . . . **Ea. 15.60** **2-Up. 13.00**

For Quantity Prices Call Your Local Allied District Office

Realistic® Recording Tapes and Accessories

MYLAR AND TENSILIZED MYLAR RECORDING TAPE

TENSILIZED MYLAR BASE: pre-stretched for uniformity after repeated playings. For professional and critical recordings if thin 1.0 and 0.5 mil tapes are used.
MYLAR BASE: extra-strength DuPont "Mylar" film base. Thin tapes yield 50% (1.0 mil) or 100% (0.5 mil) greater record/play time than standard 1.5 mil tapes. Shpg. wts.: 7" Reel, 1½ lbs.; 5" Reel, ¾ lb.; 3¼ and 3" Reel, ¼ lb.

Stock No.	Type No.	Reel Size	Feet	Mil	Base	EACH 1-5	6-9	10-49	50-Up
910-0070	44-734	3"	225	1.0	Mylar	.59	.49	.45	.49
910-0071	44-760	3¼"	600	0.5	T. Mylar	1.49	1.35	1.25	.99
910-0072	44-735	5"	600	1.5	Mylar	1.19	1.09	.99	.89
910-0073	44-753	5"	900	1.0	Mylar	1.79	1.69	1.59	1.49
910-0074	44-736	5"	1200	1.5	Mylar	1.79	1.69	1.59	1.49
910-0075	44-754	7"	1800	1.0	Mylar	2.69	2.49	2.35	2.20
910-0076	44-758	7"	2400	0.5	T. Mylar	3.99	3.69	3.39	2.99
910-0077	44-766	7"	3600	0.5	T. Mylar	6.99	6.35	5.99	5.25

CONCERTAPE™ ECONOMY RECORDING TAPE

DURABLE 1.5 MIL MYLAR

Perfect for school and language lab use. Careful testing plus rugged DuPont Mylar guarantees top quality. ¼ lb.

Stock No.	Type No.	Reel Size	Feet	EACH 1-2	3-9	10-49	50-Up
910-0086	44-755	7"	1200	1.29	1.15	1.05	.89
910-0087	44-1085	5"	600	.89	.85	.79	.69

EXTRA-LENGTH 1800-FT. 1 MIL POLYESTER

Bought in quantity from America's No. 1 manufacturer. Pretested, first-line tape free of defects. 1.0 mil thickness for 50% more recording time. Shpg. wt. ½ lb.

910-0088	44-1018	7"	1800	1.95	1.79	1.59	1.39

DOUBLE AND TRIPLE PLAY 0.5 MIL POLYESTER

Tensilized, stretch-free tape at lowest prices. Wt. 1 lb.

910-0089	44-1086	2⅜"	300	.69	.64	.59	.49
910-0090	44-1073	3"	300	.69	.64	.59	.49
910-0091	44-1087	3¼"	600	.99	.94	.84	.74
910-0092	44-1059	5"	1200	1.99	1.79	1.59	1.29
910-0093	44-1060	7"	2400	2.99	2.69	2.39	1.99
910-0094	44-1061	7"	3600	4.99	4.49	3.99	3.49

REALISTIC CASSETTE CARTRIDGES

WIDE-RANGE C-60 CASSETTES

A superior oxide coating with magnetic particles ⅓ the usual size reduces "dead spots." Provide longer tape head life due to less oxide coating. Formulated for wide-range frequency response—recommended for stereo recording. Low noise, low dropout, no flaking. Enclosed window prevents accumulation of dust and dirt in cartridge. Double transparent box for easy identification. *30 minutes each side. Av. shpg. wt. 4 oz.

Stock No.	Type No.	Time	EACH 1-11	12-23	24-47	48-Up
910-0095	44-605	60 minutes*	2.95	2.65	2.39	2.19

CASSETTE STORAGE ALBUM

Stores up to 12 cassettes. Keeps cassettes filed safely away from dust and grime. Provides easy accessibility.
910-0096. Type 44-612. Shpg. wt. 2 lbs. ..... Each 1.98

SET OF 3 CASSETTE "MAILERS"

Type 44-608. Sturdy plastic boxes for mailing or storage of cassettes. Complete with mailing labels. Wt. 4 oz.
910-0113. 1-11 ..... Ea. Set .39 12-Up ..... Ea. Set .29

ECONOMICAL CASSETTE CARTRIDGES

Finest quality at lowest prices. Excellent tensilized polyester recording tape for outstanding strength and long life. All cassettes have red and green polyester leaders for easy track identification. Polyester wafer pads with anti-static lubrication for long life. Each cassette packed in a rugged, heavy-duty case. *30 min./side; †45 min./side; ††60 min./side.

Stock No.	Type No.	Time Min.	Wt. Oz.	EACH 1-11	12-23	24-47	48-Up
910-0097	44-602	60*	8	1.49	1.35	1.19	1.09
910-0098	44-603	90†	12	1.99	1.79	1.59	1.49
910-0099	44-604	120††	16	2.49	2.19	1.99	1.79

SUPERTAPE™

PREMIUM QALITY TAPE

- Superior Fidelity
- Uniform Output
- Endorsed by Pros

Realistic's finest quality. Fine-grain formula that reduces hiss, print-thru and recorder head wear to the barest minimum. Priced lower than other premium quality recording, yet provides truly unsurpassed reproduction.

STANDARD SUPERTAPE ON 1.5 MIL ACETATE

Formulated to meet the most exacting requirements of the professional, educational or home recordist at lowest cost.

Stock No.	Type No.	Reel Size	Feet	Mil	Base	EACH 1-9	10-Up
910-0078	44-1870	5"	600	1.5	Acetate	1.69	1.55
910-0079	44-1871	7"	1200	1.5	Acetate	2.59	2.35

50% MORE RECORDING TIME ON 1 MIL MYLAR

Ultra-stable Mylar, extra durable base to assure trouble-free operation even in extreme heat or humidity. Retains original strength after repeated playings. Uniform sensitivity throughout. Provides extended listening time with superior quality.

910-0080	44-1872	5"	900	1.0	Mylar	2.49	2.16
910-0081	44-1873	7"	1800	1.0	Mylar	4.29	3.72

100% MORE TIME ON .5 MIL TEMPERED MYLAR

Plays twice as long and is twice as strong as other double length types. Amazingly resilient and strong. Will not get dry or brittle with age. Excellent for all general recording purposes.

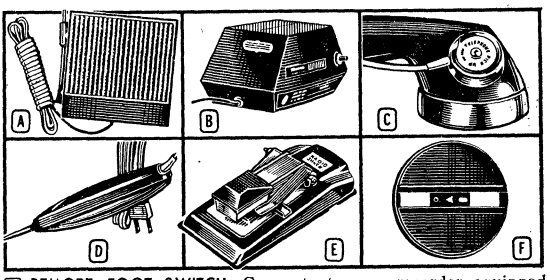
910-0082	44-1874	5"	1200	0.5	T. Mylar	3.79	3.27
910-0083	44-1875	7"	2400	0.5	T. Mylar	6.49	5.70

LOW NOISE AND HISS-REDUCING TAPE FOR PROFESSIONALS

Provides the high signal-to-noise ratio and drastically lowered hiss level required for professional recording without sacrificing other properties needed for top quality reproduction.

910-0084	44-1876	7"	1200	1.5	Acetate	2.99	2.58
910-0085	44-1877	7"	1800	1.0	Mylar	4.99	4.41

TAPE RECORDING ACCESSORIES



A REMOTE FOOT SWITCH. Connects to any recorder equipped with remote control plug. Allows control without use of hands. Shpg. wt. 1½ lbs.
910-0101. Type 44-610 ..... 2.95

B THREE-WAY BULK TAPE ERASER. Erases tape in seconds. Eliminates chance of incomplete erasure from mis-aligned recorder head. For AC operation. U.L. Listed. 5¼x2½x2¾". Shpg. wt. 10 lbs.
910-0102. Type 44-745 ..... 9.95

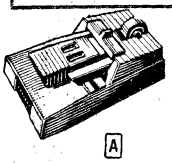
C TELEPHONE PICKUP COIL. Lets you record all phone calls without wiring. Attaches to amplifier to drive speaker. Suction cup-mounting. Clear recordings on tape or disc. ½ lb.
910-0104. Type 44-533 ..... .99

D REALISTIC TAPE HEAD DEMAGNETIZER. Demagnetizes recording, playback and erase heads to restore highs, improve signal-to-noise ratio. For AC operation only. Shpg. wt. 1 lb.
910-0105. Type 44-772 ..... 2.95

E PRECISION TAPE SPLICE. Holds tape securely while making splices. Cuts, trims tape. ⅜" splicing tape incl. 1 lb.
910-0107. Type 44-770 ..... 2.95

F AUTOTHREAD TAPE REEL. Tape reels thread themselves. Just drop tape in reel. Shpg. wt. 6 oz.
910-0108. 5" Reel. Type 44-1135 ..... .79
910-0109. 7" Reel. Type 44-1137 ..... .99

ROBINS Tape Recording Accessories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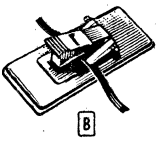
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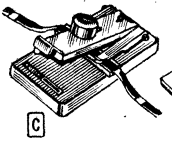
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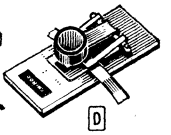
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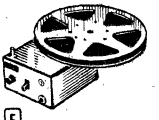
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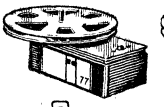
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A TS-8D DELUXE STEREO SPLICER. For 4-track tapes. Cuts diagonally with tiny "Gibson Girl" side trim. "See-thru" windows show operating position. Guide and fingers hold tape securely. Replaceable cutter, centering adjustment, integral tape dispenser. With 100 ft. of ½" splicing tape.
913-4074. Wt. 1 lb...Ea. 12.60 2-Up 10.50

B TS-7J JUNIOR STEREO SPLICER. Precision splicer cuts diagonally, with "Gibson Girl" trim. "See-thru" windows on knob shows cut or trim positions. Guide and fingers gently secure tape; centering adjustment for accuracy. Replaceable cutter. Uses ⅜" splicing tape. Shpg. wt., 8 oz.
913-4072.....Ea. 8.17 2-Up....6.82

C TS-1000 1" PROFESSIONAL VIDEOTAPE SPLICER. For Ampex 1" systems. Produces "Gibson Girl" trim to prevent adhesive from harming recorder. Replaceable blades, cutter pads; centering adjustment.
913-4089. Wt. 4 lbs..Ea. 90.00 2-Up 75.00
913-4097. TSV-100. Standard diagonal cut splicer, for 1" tape. With 25 splicing patches. Wt. 1¾ lbs.....Ea. 21.40 2-Up 17.37

D TS-500 ½" PROFESSIONAL VIDEOTAPE SPLICER. For studio work. "Gibson Girl" trimming; blades; cutter pads.
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913-4092. TSV-50. Diagonal cut ½" splicer. With 25 patches. Wt. 1¾ lbs.....Ea. 21.40
2-Up.....Each 17.37

E TM-100 AUDIO-VIDEO BULK TAPE ERASER. For tape to 1" on 10½" reel. 5 min. on/off cycle. Reduces background noise 50-90 dB below saturation minimum. 3¾x6x8". U.L. Listed. 115 VAC. Shpg. wt. 10 lbs.
913-4069.....Ea. 103.75 2-Up....86.50

F TM-77 DELUXE BULK TAPE ERASER. For tape reels to 7" dia.; ¼" tapes. Erasure 2 to 4 dB below erase-head level. 2⅜x3¾x6¼". U.L. Listed. For 110-120 V, 50-60 Hz.
913-4062. Wt. 5 lbs..Ea. 27.65 2-Up 23.00

G TM-44 BULK TAPE ERASER. For ¼" tape; reels to 7". Size, 5¼x2⅛x3⅛". Duty cycle: 1 minute on, 5 minutes off. For 115 V, 50-60 Hz AC. U.L. Listed.
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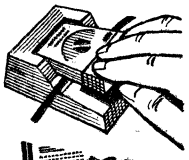

TS-115 CASSETTE TAPE SPLICER. Robins famous "Cut-N-Splice" economy model. Makes perfect cuts and splices at 45° angle. Includes 25 self-sticking splicing patches. Wt. 5 oz.
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TMC-1 CASSETTE ERASER. Automatically erases bulk tape faster and better than manual erasers. Provides "like new" condition to cassettes in seconds. For AC. Wt. 3 lbs.
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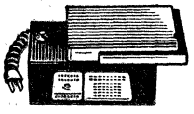
2-Up.....Each 16.50



TMC-2 CARTRIDGE ERASER. Indispensable for home or pro use. Restores 8-track cartridges to original condition in seconds. For AC. 5½ lbs.
913-4054.....Ea. 29.80
2-Up.....Each 24.80

TAPE EDITING AND ACCESSORY KITS

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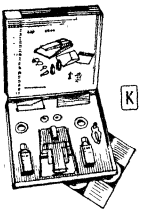
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H TK-9 TAPE EDITING WORKSHOP. For easy and accurate splicing and editing. Handles reels to 7". Consists of two tape winders and deluxe Stereo Tape Splicer, mounted on sturdy walnut-grain, warp-proof base. 7x14x5½". Accurately calibrated timing/editing scale on base. With splicing tape, editing and cuing pencil, handy guide book for professional-quality editing and splicing. Wt., 2 lbs.
913-4022...Ea. 25.12 2-Up..20.80

J TK-19 TAPE EDITING KIT. Low-cost kit includes: TS-5 "Cut-N-Splice" metal tape splicing block; 25 self-stick splicing patches; 3 editing and cuing pencils; editing and splicing guidebook. Shpg. wt., 5 oz.
913-4030....Ea. 4.40 2-Up....3.74

K TK-8DLX DELUXE TAPE ACCESSORY KIT. Everything needed for editing and recorder care. Contains: TS-8D Deluxe Stereo Tape Splicer; roll of ½" Splicing Tape; Tape Threader; 12 Tape Clips; 2-oz. Head Cleaner; 2-oz. Head and Guide Lubricant; Tape Jockey Cloth; pair of Reel Holders; 30 Reel Title Labels; Editing and Splicing Guide Book. Wt., 1½ lbs.
913-4021...Ea. 20.62 2-Up..17.25

L TK-6 CLEANER AND LUBE KIT. For cleaning and lubricating tape recorder heads and guides. Insures smooth performance and minimum wear. Includes 2-oz. bottle of Head Cleaner, 2-oz. bottle of Lubricant. Both have applicator caps. Wt., 6 oz.
913-4019....Ea. 2.10 2-Up....1.79

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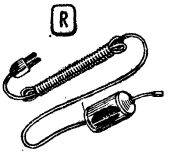
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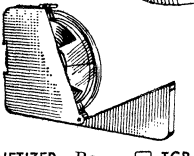
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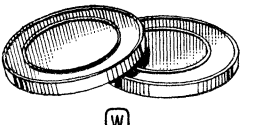
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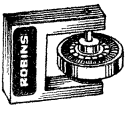

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M TT-16 COLOR-CODING LEADER TAPES. Reinforce and color-code tape ends. Set of five 2½" reels in 5 colors. Tear-proof 1½-mil Mylar base.
913-4098. Wt. 14 oz..Ea. 4.28 2-Up 3.56

N TL-240 COLOR-CODING TITLE LABELS. Package of 240 self-stick 2x½" labels; asstd. colors. Keeps track of your reels. Sheets of 10. Wt. 2 oz.
913-4045.....Pkg. of 240 For 1.70

P TL-180 REEL TITLE LABELS. Pkg. 180 white pressure-sensitive 2x½" labels. Write or type on them for identification of your recording titles.
913-4039. Wt. 5 oz....Pkg. of 180 For 1.43

R TD-3 TAPE HEAD DEMAGNETIZER. Removes residual magnetism from recorder heads which can distort your tape recordings. Soft plastic shield for safe head contact; angled for easy reaching of head gaps. 3½x1¼" dia. For 110 VAC.
913-4012. Wt. 8 oz....Ea. 6.30 2-Up..5.36

S TD-6 DELUXE HEAD DEMAGNETIZER. Heavy-duty demagnetizer removes residual magnetism from tape heads for better performance. Also "cleans" recorder parts to minimize tape drop-out. A "must" for the serious recording enthusiast. 4⅝x1¼" dia. U.L. Listed. 110-120 V, 50-60 Hz AC.
913-4015. Wt. 1 lb...Ea. 11.48 2-Up..9.77

T TCP-12 TAPE SAFES. Set of 12, to store and protect 7" tapes. Molded plastic with hinge cover and dovetail groove. Includes wall mtg. bracket. Less reels. Wt. 8 lbs.
913-4011.....Ea. 18.90 2-Up.....16.17

W TC7-2 TAPE STORAGE CANS. Pair of 7" dia. metal cans. Ribbed for stacking.
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TC5-2. Same, for 5" reels.
913-4008. Wt. 14 oz.....Pair 1.25

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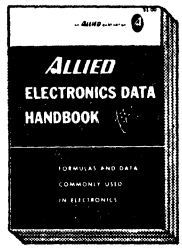

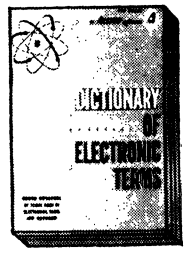

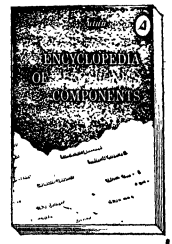

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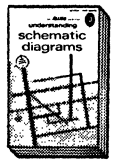

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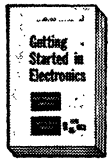

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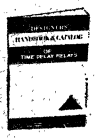

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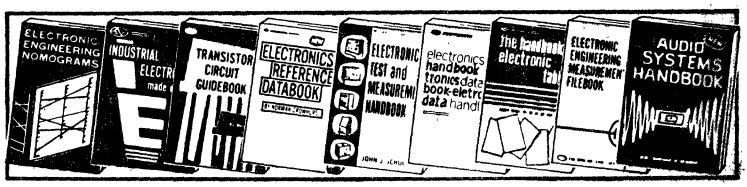

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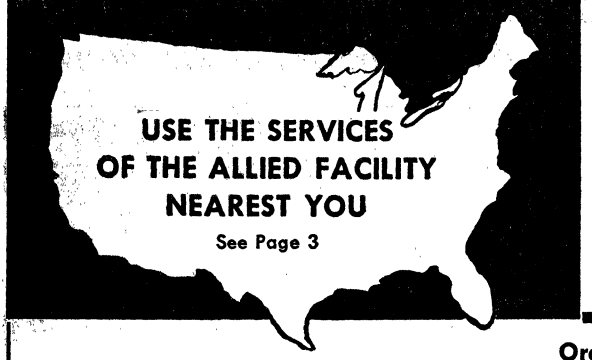

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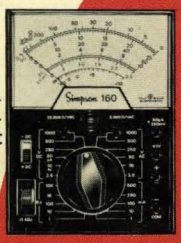

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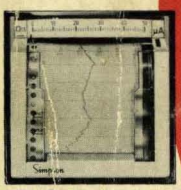

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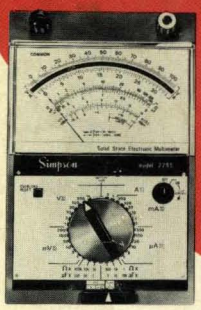

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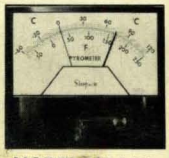

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