

**INSULATED
FEED-THRU TERMINALS
FOR HERMETIC
SEALING**



MINI



**"THE
Lundey
LINE"**

MAXI

Lundey

129 Bank Street, Attleboro, MA 02703 (508) 226-6012 FAX (508) 226-6013

The Lunday Line of terminal assemblies were developed by the Raytheon Company for use in hermetically sealed components of military communications equipment.

Today, Lunday Terminals are extensively used in industry for critical sealing applications due to their: Freedom of surface-tracking tendencies; ability to meet severe cycling requirements under military specifications; high voltage and current carrying capacity for space occupied; and exceptionally high resistance to mechanical and thermal shock over a wide range.

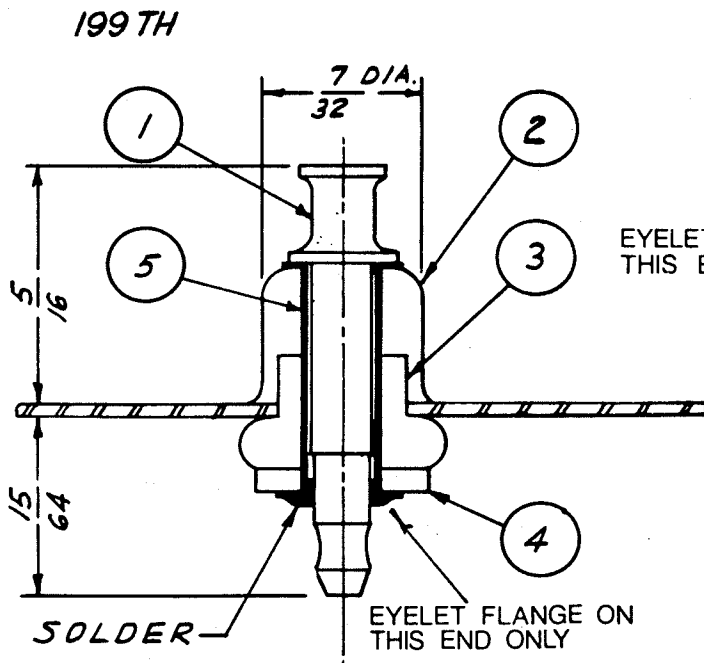
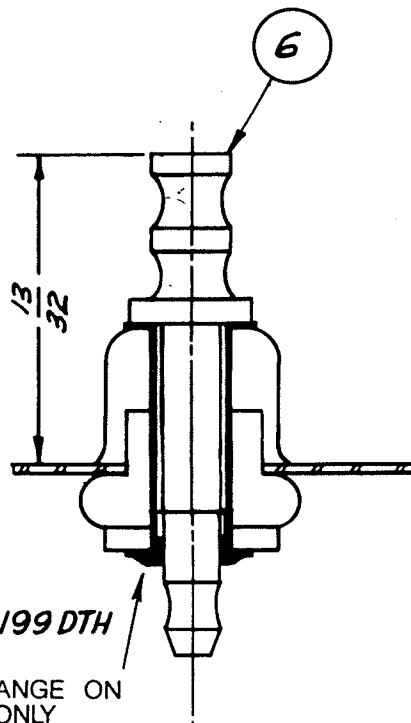
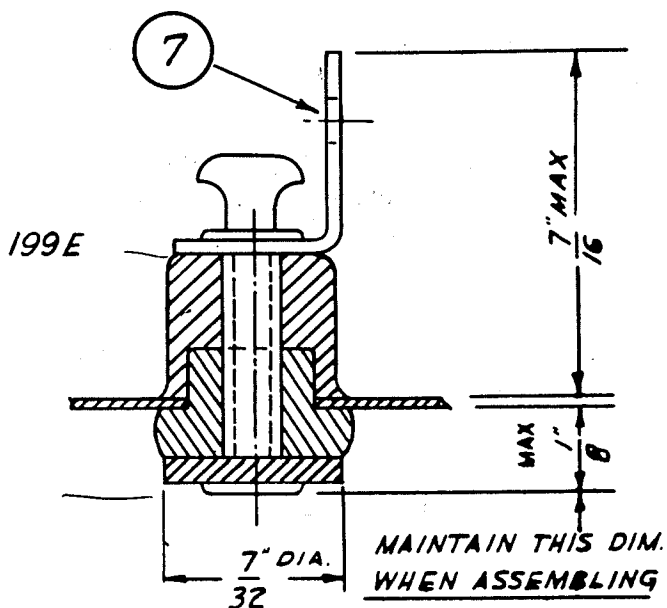
For applications not covered by our standard line we are prepared to design specials upon receipt of specifications. In many cases these specials can be developed with a minimum of tooling expense by adapting standard components.

The easy assembly of Lunday Terminals allows low-cost tooling and jiggling for production conditions. Suggestions for these techniques are available from us.

TABLE OF CONTENTS

PAGE NUMBER	DESCRIPTION	SERIES
2,3	EYELET STYLE TERMINALS	199, 399
4,5,6,7	CLINCH-LOC TERMINALS	499, 599, 601-TH, 609-TH
8	SWELL LOC TERMINALS	2250
9	CERAMIC TERMINALS	Method of Assembly
10	ENGINEERING DATA	
11	CERAMIC TERMINALS 13/64" DIA.	200
12	CERAMIC TERMINALS 1/4" DIA.	250
13	CERAMIC TERMINALS 5/16" DIA.	312
14	CERAMIC TERMINALS 13/32" DIA.	375
15	CERAMIC TERMINALS 1/2" DIA.	4501, 4762, 4862
16	CERAMIC TERMINALS 7/8" DIA.	4755, 4780
17	CERAMIC TERMINALS 1 1/8 DIA.	4785, 4791
18	CERAMIC TERMINALS 1 1/8" DIA.	4796
19	CERAMIC TERMINALS 1 3/8" DIA.	1375
20	CERAMIC TERMINALS 1 1/2, 1 5/8" 2 7/8"	4790, 4795, HV1000
21	COMPONENT PARTS LIST	Cushioning Washers, Inserts
22,23	COMPONENT PARTS LIST	Insulators
24,25	COMPONENT PARTS LIST	Conductors
25	ALTERNATE HEAD STYLES	Turret, Threaded & Custom
26	CAPABILITIES LIST	Machine Shop

199 SERIES



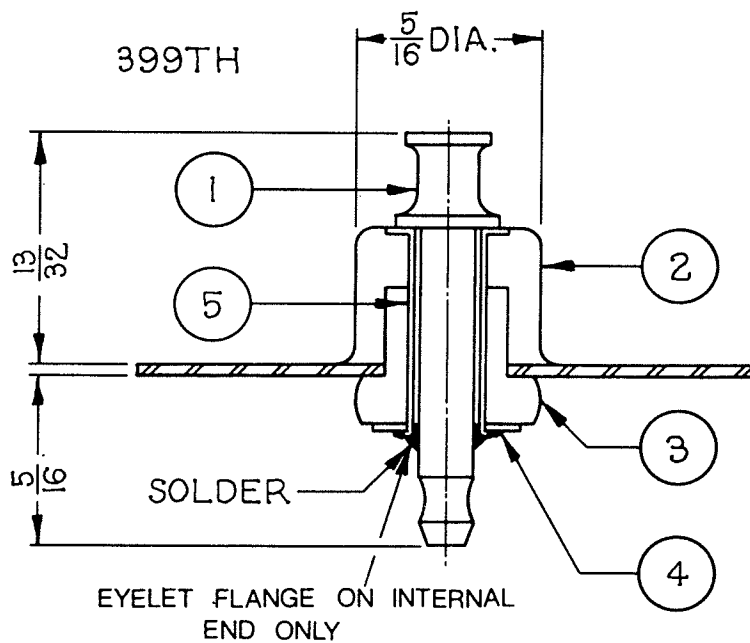
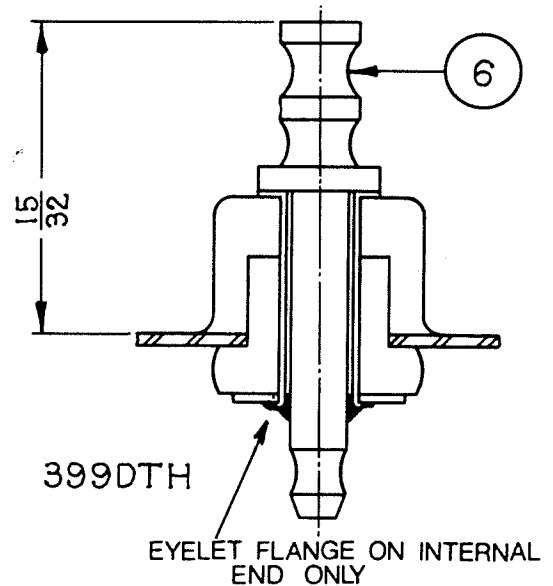
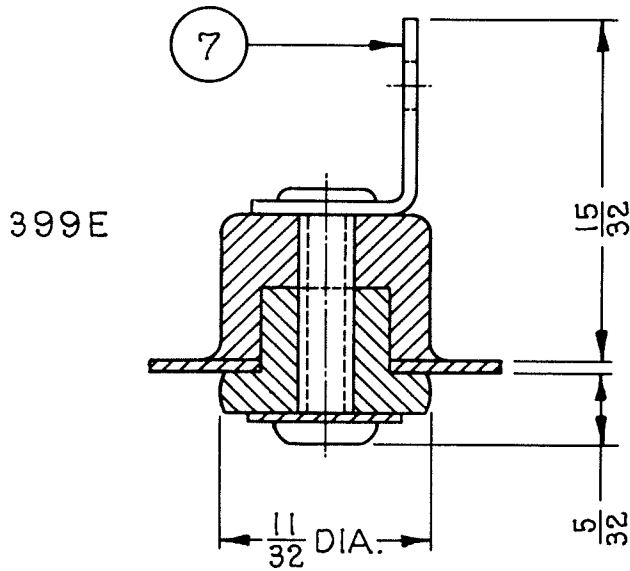
BRASS	L-59	7
BRASS	C-59A	6
BRASS	E-59	5
Fiber Washer	CW-59	4
SILICONE RUBBER	IN-59	3
TEFLON	I-59	2
BRASS	C-59	1
MAT.	PART NO.	PT.

— NOTES —

- FLASHOVER RATING - 60% RH @ 30° C. WITH BOTTOM IN AIR IS 2500 VOLTS RMS. RECOMMENDED TEST VOLTAGE 1500 VOLTS RMS. MAX. CURRENT 8 AMPERES.
- FOR OIL-FILLED UNITS THE USE OF NEOPRENE IS INDICATED FOR THE INNER INSULATING MEMBER.
- TEFLON IS AVAILABLE IN VARIOUS COLORS. WHITE IS STANDARD.

- MOUNTING HOLE DIAMETER { .161 DIA UNASSEMBLED
.164 DIA PRE-ASSEMBLED
- RECOMMENDED PANEL THICKNESS .018 TO .032.
- TERMINALS CAN BE MOUNTED ON A MINIMUM OF 15/64" ON CENTERS.
- UPSETTING DIES FOR INSTALLATION CAN BE FURNISHED UPON REQUEST.

399 SERIES



BRASS-CT	L-99	7
BRASS-CT	C-99A	6
BRASS-CT	E-99	5
Fiber Washer	CW-99	4
SILICONE RUBBER	IN-99	3
TEFLON	I-99	2
BRASS	C-99	1
MAT.	PART NO.	PT.

- NOTES -

1. FLASHOVER RATING - 60% RH @ 30°-C. WITH BOTTOM IN AIR IS 4,500 VOLTS RMS. RECOMMENDED TEST VOLTAGE 4,000 VOLTS RMS. MAX. CURRENT 10 AMPERES.
2. FOR OIL-FILLED UNITS THE USE OF NEOPRENE IS INDICATED FOR THE INNER INSULATING MEMBER.
3. TEFLON IS AVAILABLE IN VARIOUS COLORS. WHITE IS STANDARD.

4. MOUNTING HOLE DIAMETER .209 FREE OF BURRS.
5. RECOMMENDED PANEL THICKNESS .018 TO .038.
6. TERMINALS CAN BE MOUNTED ON A MINIMUM OF 23/64 ON CENTERS.
7. UPSETTING DIES FOR INSTALLATION CAN BE FURNISHED UPON REQUEST.



#499-TH CLINCH-LOC

HERMETIC TERMINAL

General Specifications

Mounting Hole	.190" - .193" burr-free
Operating Voltage	500 V dry 750 V potted or oil filled
Test Voltage	1700 V dry 2000 V potted or oil filled
Insulation Resistance	150 K megohms min. neoprene rubber 500 K megohms min. silicone rubber
Current Rating	5 Amps-continuous
Operating Temperature	105°C-neoprene rubber 200°C-silicone rubber

The above figures based on 50% R.H. @ 20°C

Notes

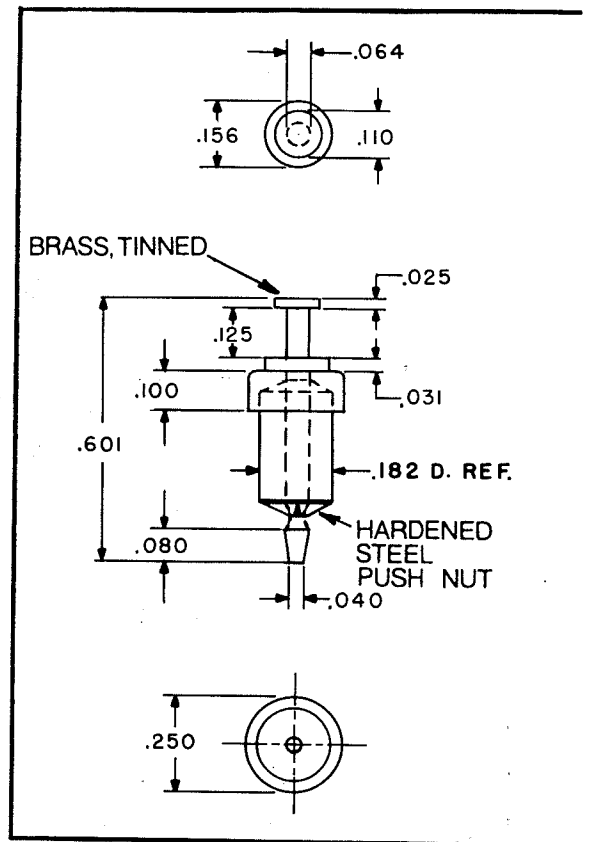
Because of no loose parts and no threads assembly is easy and fast.

The tool points, for use in a kick press or eyelet-setting machine, can be supplied by us. These fittings are 1/4" diameter x 3/4" long and should be spaced .155" to .160" apart plus the actual panel thickness.

The terminal is designed for use in components which must meet MIL-T-27-C.

For conditions beyond the normal range of neoprene and conventional silicone rubber, we are prepared to supply, as special, other materials.

U. S. Patents- 3,047,653 & 3,126,445



NO. 599 TERMINAL

Notes and Specifications

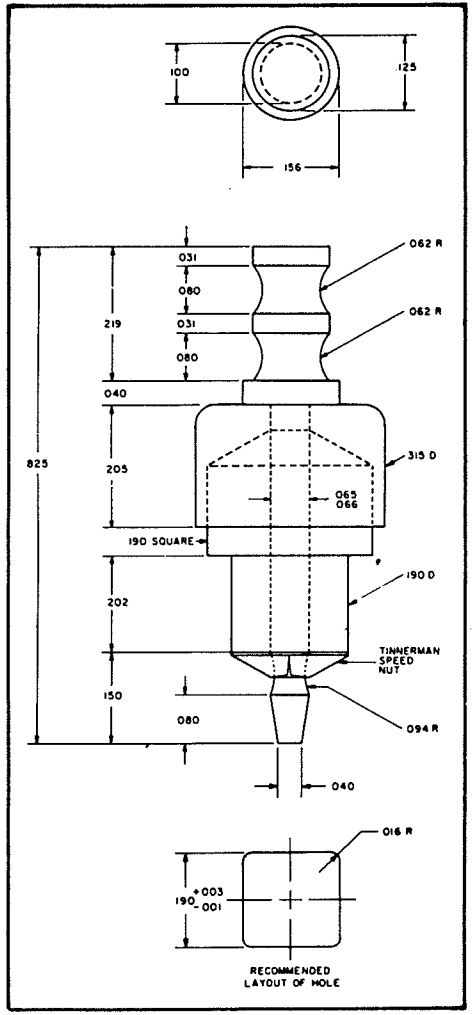
Operating Voltage _____ 1500 V RMS
Test Voltage _____ 3100 V RMS
Insulation Resistance _____ 150 K megohms min. neoprene rubber
500 K megohms min. silicone rubber
Current Rating (continuous) _____ 8 Amperes
Operating Temperature _____ 105°C - neoprene rubber
200°C - silicone rubber
Above figures based on 50% RH-20°C.

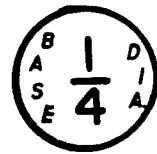
Conductor _____ Brass-Hot tinned
Push Nut _____ Hardened Steel-Cadmium plated
Insert _____ Neoprene or silicone rubber
(other elastomers special)
Cap (outer insulating member) _____ Teflon

Thorough tests have been made on this terminal assembly both by us and by an independent laboratory, to assure us and potential users of the terminal that it will pass MIL-T-27C and other pertinent specifications; and to further prove that it is mechanically sound and, in effect, non-turning, as we intended it to be.

After assurance that the terminal was electrically and mechanically sound, our further goals were: low initial cost for the terminal; substantial savings in assembly cost; elimination of loose parts. These objectives, we have also met.

Although the terminal at the present time is limited to this one size, we expect over a period of time to increase the voltage range and offer other electrode styles based on customer requirements.





NO. 601TH Clinch-Loc[®] HERMETIC TEFLON* TERMINAL

* Dupont Trademark

Notes and Specifications

Operating Voltage _____ 1000 V RMS
 Test Voltage _____ 2400 V RMS
 Insulation Resistance _____ 1000 K megohms min
 Current Rating (continuous) _____ 7 Amperes
 Operating Temperature _____ 200°C

Above figures based on 50% RH-20°C

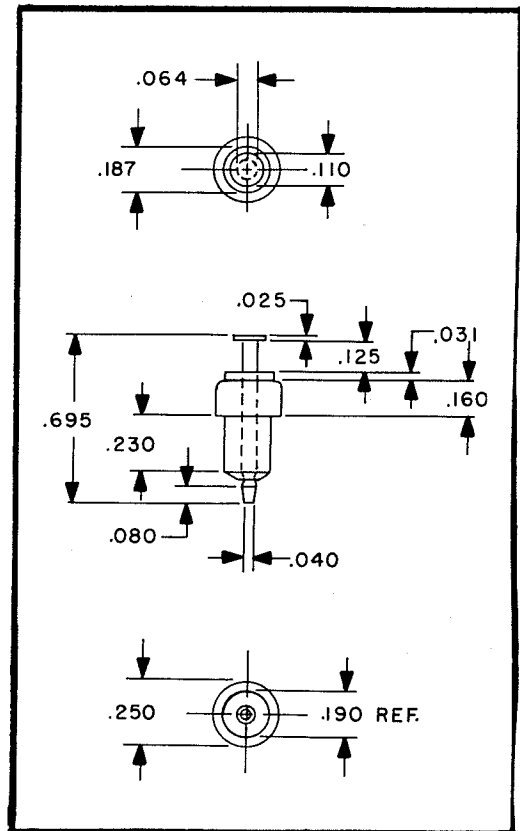
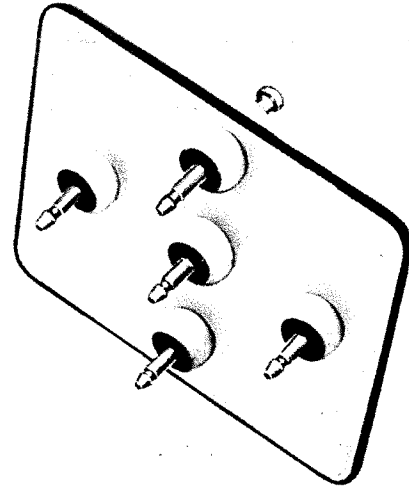
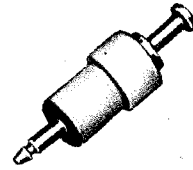
Conductor _____ Brass-Hot tinned
 Push Nut _____ Hardened Steel
 Mounting Hole _____ .193" +.000" -.003"
 Tool Point Spacing — .265" plus panel thickness

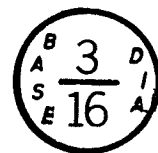
Thorough tests have been made by us and others to assure us that the unit is moisture-proof and will meet hermetic specifications as defined by MIL-T-27-C.

For use as a panel feed-thru, mechanical reliability is assured by positive fastening.

This, and other, terminals in our Clinch-Loc line, can be assembled by automatic machines, either singly for flexibility, or "gang" installations wherein large production of the same type of component would be involved. Detailed information is available on request.

U. S. Patent #3,166,634
 Canadian Patent #727,204





NO. 609TH Clinch-Loc[®] HERMETIC TEFLON* TERMINAL

* Dupont Trademark

Notes and Specifications

Operating Voltage _____ 700 V RMS

Test Voltage _____ 2000 V RMS

Insulation Resistance _____ 1000 K megohms min

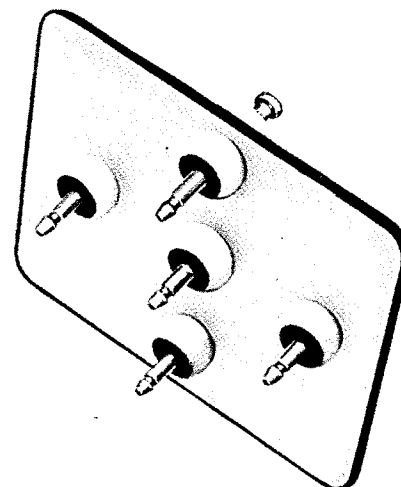
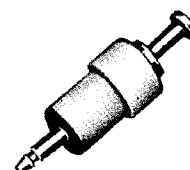
Current Rating (continuous) _____ 4 Amperes

Operating Temperature _____ to 200°C

Above figures based on 50% RH-20°C

Conductor _____ Brass-Hot tinned

Push Nut _____ Hardened Steel



Thorough tests have been made by us and others to assure us that the unit is moisture-proof and will meet hermetic specifications as defined by MIL-T-27-C.

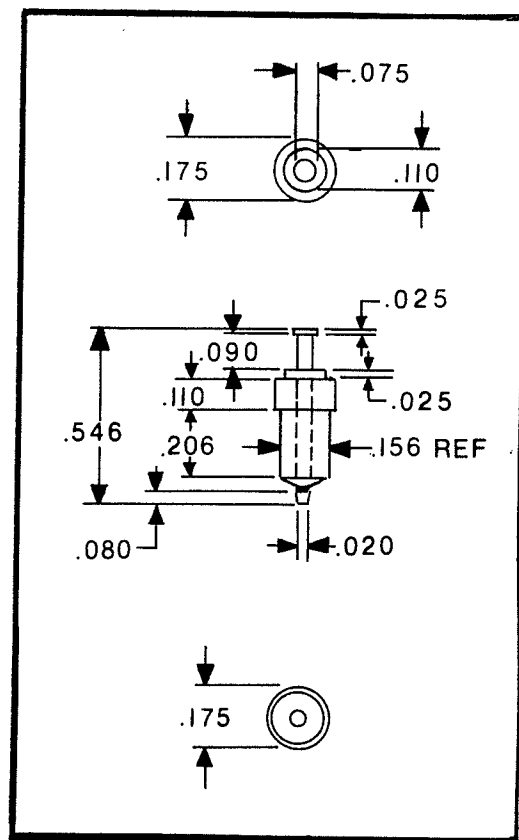
For use as a panel feed-thru, mechanical reliability is assured by positive fastening.

This, and other, terminals in our Clinch-Loc line, can be assembled by automatic machines, either singly for flexibility, or "gang" installations wherein large production of the same type of component would be involved. Detailed information is available on request.

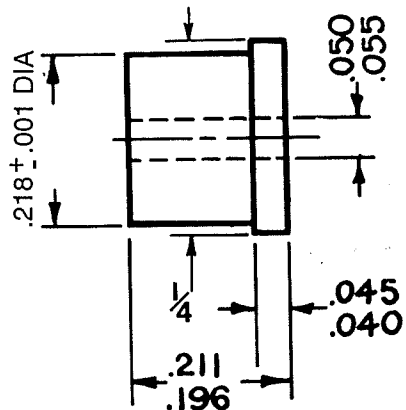
Mounting hole diameter _____ .160 ±.001

U. S. Patent #3,166,634

Canadian Patent #727,204



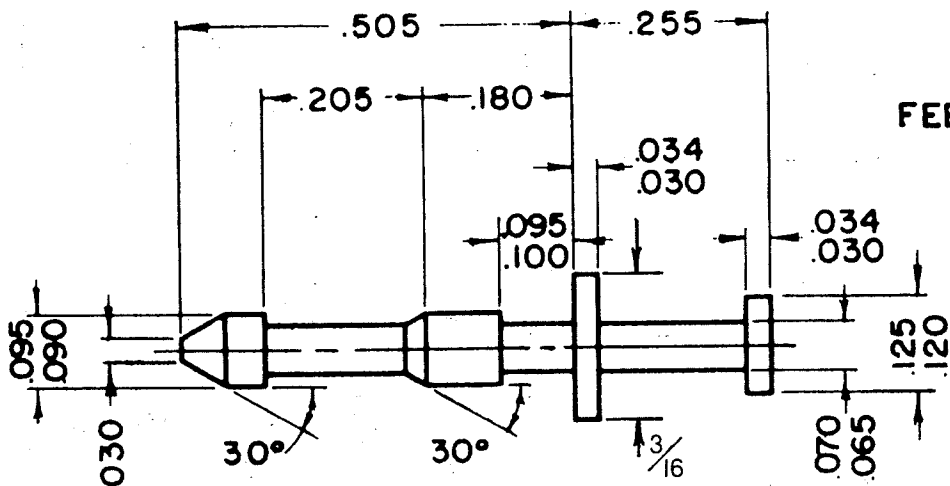
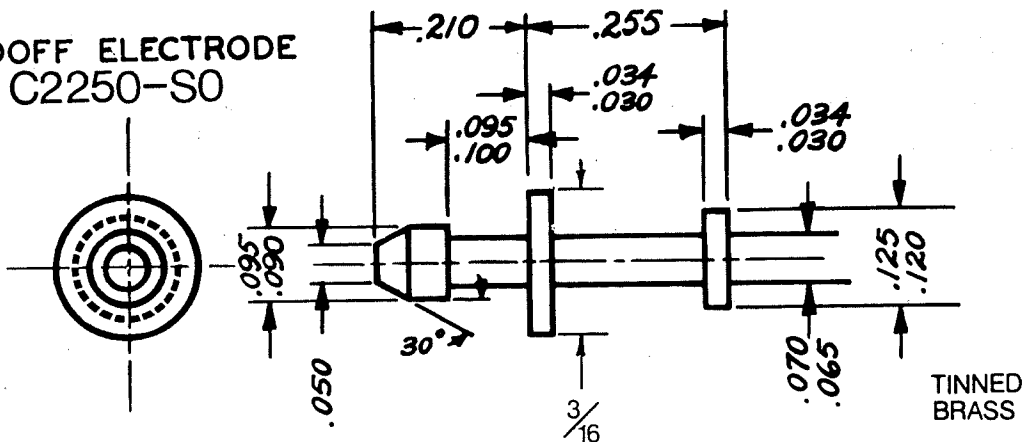
MICRO-TERMINAL
(low-loss)
Non-hermetic.



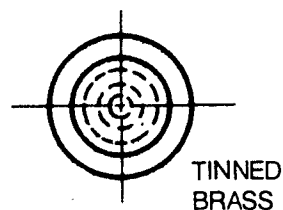
TEFLON INSERT *
I2251

* Can be mounted in
tinned eyelet for solder
seal type assembly.

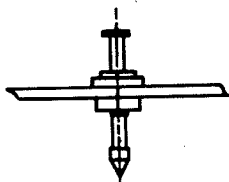
STANDOFF ELECTRODE
C2250-S0



FEED-THRU ELECTRODE
C2250-FT



USE ONLY FOR PANEL THICKNESSES OF .031 THRU .093
PROVIDE A $.221 \pm .001$ HOLE FOR MOUNTING
THE DIRECTION OF PUNCHING SHALL BE IN THE SAME
DIRECTION AS THE INSERTION OF THE BUSHING.



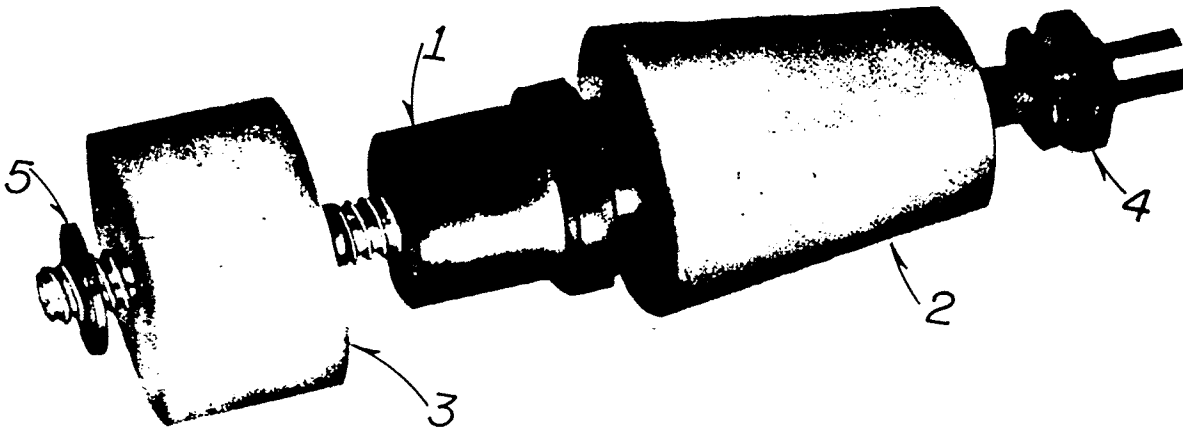
CERAMIC TERMINALS

Method of Assembly

- (1) Assemble insert and upper insulator.
See individual drawings for recommended panel thickness. For mounting panels having a thickness over those recommended we suggest counter boring on the underside to the proper thickness. An alternative is to have a filler supplied by Lundey, Inc.
- (2) While Holding the insert, press the conductor/cushioning washer sub-assembly through the upper insulator/insert sub-assembly.

NOTE THAT STEPS 1 & 2 ARE GENERALLY DONE BY LUNDEY PRIOR TO SHIPMENT

- (3) Assemble to mounting panel and apply bottom insulator.
- (4) Apply fiber cushioning washer.
- (5) Apply flat metal washer (if necessary).
- (6) Apply proper size nut and tighten to recommended torque using an accurate wrench. See individual drawings for recommended set-up torques to be used.
- (7) Apply proper size nut and tighten to recommended torque using an accurate wrench. See individual drawings for recommended set-up torques to be used.
- (8) Terminal cover assembly should be baked for 30 minutes at 100° Celcius; 150° Celcius for silicone inserts, and allowed to cool at room temperature.
- (9) Following this the nut should be retightened to approximately 75% of the original recommended set-up torque.
- (10) The upsetting pressure for the eyelet/style terminals in the #250 series should be equivalent to 8-10 inch/ounces torque as recommended for the for the #250 series terminals having a 4-40 threaded conductor.
- (11) Each new type of application should be tested for possible assembly defects by subjecting the underside of the mounting panel and terminal to 30 PSI while submerged in a suitable fluid at room temperature. Water containing fluids **should not be used.**



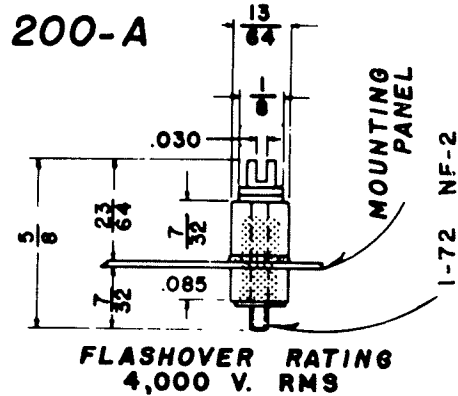
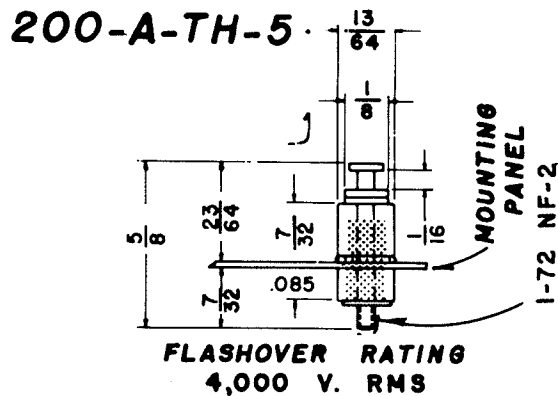
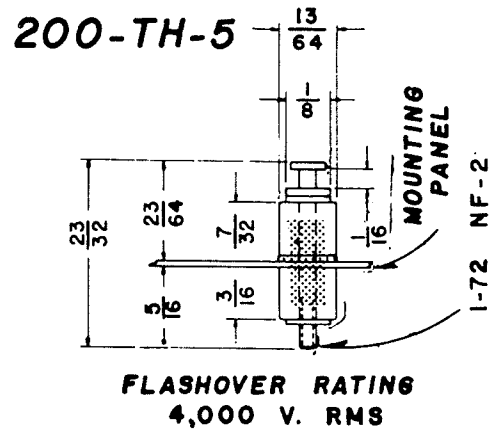
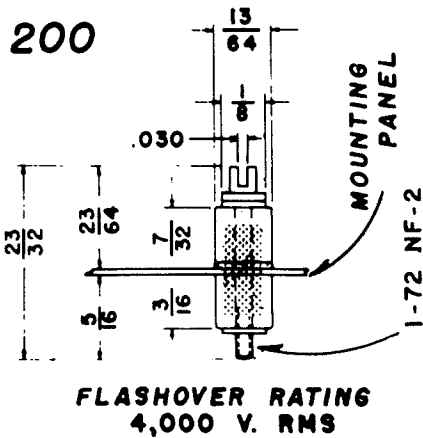
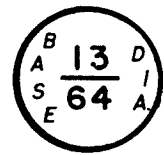
1. INSERT - Molded from specially compounded Neoprene or Silicone to provide maximum electrical, thermal and mechanical properties.
2. UPPER INSULATOR - Grade L-4 Steatite or equivalent.
3. LOWER INSULATOR - Grade L-4 Steatite or equivalent.
4. CONDUCTOR - Brass finished with bright cadmium, hot tin or to specification
5. CUSHIONING WASHER - Specially compounded fiber washer to prevent cold flowing.

ENGINEERING DATA

TERMINAL NUMBER	BASE DIAMETER	PAGE	OPERATING VOLTAGE ² RMS		FLASHOVER RATING ³		CORONA RATING ⁴		RA T I N G ⁴	
			60% RH @ 30° C.	60% RH @ 30° C.	60% RH @ 30° C.	60% RH @ 30° C.	60% RH @ 30° C.	60% RH @ 30° C.		
			In Potting Compound ⁵		In Oil ⁶		In Air ⁷		In Air ⁷	
			Sea Level	Sea Level	Sea Level	Sea Level	Sea Level	Sea Level	Sea Level	Sea Level
200	1 3/64	11	750	4000	1600	600	3000	3000	1700	1700
200-A	1 3/64	11	750	4000	1600	600	1500	3000	1000	1000
250-S	7/64	12	600	3200	3000	1100	5000	4000	2300	2300
250-S, -E, &-ES	1/4	12	750	6500	2600	1100	5000	4000	2300	2300
250	1/4	12	1000	5500	2600	1100	5000	4000	2300	2300
250-5/16	1/4	12	1000	3500	3500	1200	5000	4000	2300	2300
250-5/8	1/4	12	1000	4500	1400	4000	5000	4000	2300	2300
250-15/16	1/4	12	1000	1000	4500	1400	5000	4000	2300	2300
312	5/16	13	1500	7500	3000	1250	6500	4500	2600	2600
312-1/2	5/16	13	1500	9500	3700	1300	6500	4500	2600	2600
312-3/4	5/16	13	1500	4800	4800	1500	6500	4500	2600	2600
375-1/4	13/32	14	1750	8000	3500	1200	7500	5000	3000	3000
375	13/32	14	1750	9500	3700	1300	7500	5000	3000	3000
375-A	13/32	14	2000	9500	3700	1300	8500	5000	3000	3000
4762	1/2	15	1750	9500	3700	1300	7500	5000	3000	3000
4862	1/2	15	1500	9500	3700	1300	7500	4500	2600	2600
4762-A	1/2	15	2250	9500	3700	1300	8500	5000	3000	3000
4762-B	1/2	15	1750	10500	4100	1600	7500	5000	3000	3000
4762-C	1/2	15	2250	10500	4100	1600	8500	5000	3000	3000
4501	1/2	15	2250	16000	7000	2200	10500	8000	4500	4500
4780	7/8	15	5000	16000	7000	2200	14000	6500	5000	5000
4755	7/8	15	5000	18000	7200	2500	14000	6500	5000	5000
4785	1-1/8	16	7500	20000	9000	3200	16500	10000	8500	8500
4791	1-1/8	16	10000 - 12000	28000	11000	3700	16500	10000	8500	8500
4796	1-1/8	17	10000 - 15000	33000	13000	4500	16500	10000	8500	8500
4791-A	1-1/8	16	10000 - 12000	28000	11000	3700	28000	10000	8500	8500
4796-A	1-1/8	17	10000 - 15000	33000	13000	4500	28000	10000	8500	8500
1375	1-3/8"	18	10000	25000	10000	3800	22000	18000	15000	15000
4790	1-1/2	19	10000 - 12000	30000	12000	3800	16500	10000	8500	8500
4795	1-5/8	19	10000 - 15000	36000	16000	5000	16500	10000	8500	8500
HV-1000	2-3/4	19	25000	58000	16000	5000	16500	25000	8500	8500

- NOTES**
- ALL VOLTAGE RATINGS ARE RMS VALUES.
 - SOMEWHAT HIGHER VALUES MAY BE TOLERATED WHERE CLOSE SUPERVISION OF INSPECTION AND PRODUCTION IS MAINTAINED AND WHERE NO SURGE VOLTAGES ARE ENCOUNTERED. FOR SUCH CASES, USERS SHOULD THOROUGHLY SATISFY THEMSELVES BY COMPREHENSIVE TESTS.
 - FLASHOVER RATINGS ARE NOT DEPENDENT UPON INSERT MATERIAL.
 - CORONA RATINGS ESTABLISHED WITH SILICONE INSERTS. SLIGHTLY LOWER VALUES MAY BE ENCOUNTERED WITH NEOPRENE INSERTS.
 - ASPHALT BASE COMPOUND POURING TEMPERATURE FOR NEOPRENE INSERTS SHOULD NOT EXCEED 400° F. PRE-HEAT TEMPERATURE CYCLES SHOULD NOT EXCEED 240° F. FOR 1 1/4 HOURS.
 - MEASURED WITH BOTTOM INSULATOR IMMersed IN TRANSFORMER OIL.
 - MEASURED WITH BOTTOM INSULATOR EXPOSED IN AIR.
 - INSULATION RESISTANCE VALUES OF VARIOUS TYPES AND SIZES AVERAGE IN THE RANGE OF 25,000 TO OVER 1,000,000 MEGOHMS. AMBIENT HUMIDITY AND HISTORY OF PARTS HANDLING MAY AFFECT THESE VALUES MATERIALLY. INTENDED USES AND REQUIREMENTS SHOULD BE DISCUSSED WITH OUR ENGINEERS.

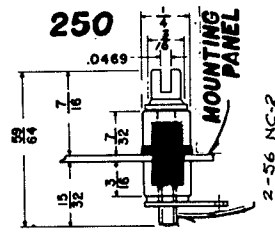
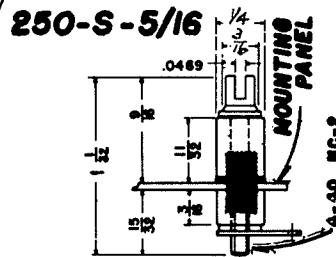
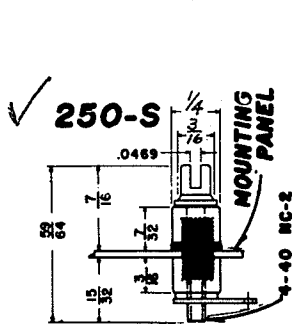
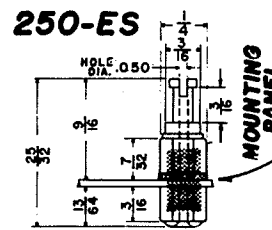
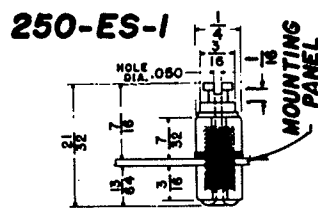
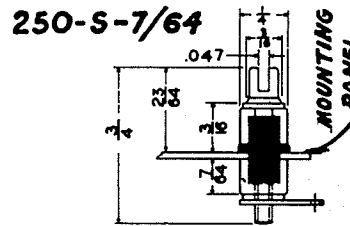
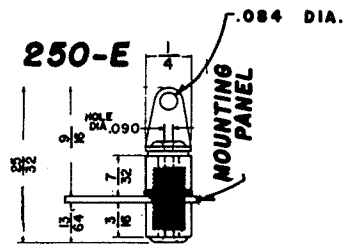
200 SERIES



— NOTES —

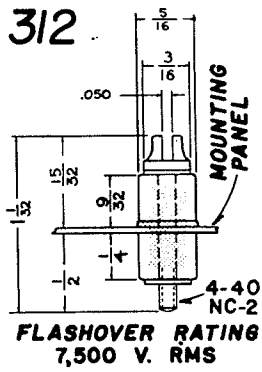
1. FLASHOVER RATING - 60% RH @ 30° C. WITH BOTTOM INSULATOR IMMERSSED IN OIL. SEE PAGE 10 FOR ADDITIONAL DATA.
2. RECOMMENDED PANEL THICKNESS - .020" TO .030".
3. MOUNTING HOLE DIAMETER - .133 MAX FOR SILICONE
.136 MAX FOR NEOPRENE
4. RECOMMENDED SET-UP TORQUE - 5 INCH-OZ.
5. ALTERNATE HEAD STYLES AND INDIVIDUAL PIECE PART DRAWINGS - SEE PAGES 21 TO 25.
6. TOLERANCES - FRACTIONAL $\pm 1/64$ " - DECIMAL $\pm .005$ ".

250 SERIES

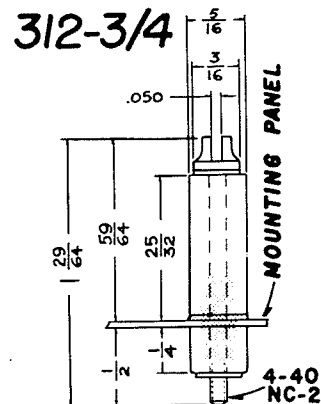
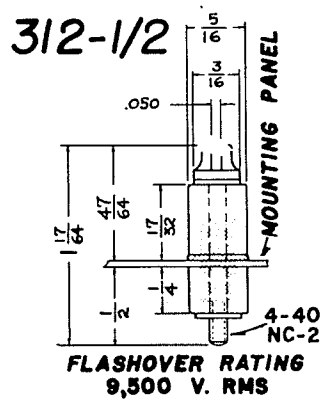


NOTES

- FLASHOVER RATING - 60% RH @ 30° C. WITH BOTTOM INSULATOR IMMERSERD IN OIL. 6500 V. RMS MAX.
- RECOMMENDED OPERATING VOLTAGES - 250-S-5/16, 250-S-5/8 AND 250-S-15/16 ARE SAME AS 250-S; 250-5/16, 250-5/8 AND 250-15/16 ARE SAME AS 250. SEE PAGE 10 FOR OPERATING VOLTAGES AND ADDITIONAL DATA.
- RECOMMENDED PANEL THICKNESS - .022" TO .034".
- MOUNTING HOLE DIAMETER - .161" - FREE OF BURRS.
- RECOMMENDED SET-UP TORQUE - 9 - 12 INCH-OZ.
- ALTERNATE HEAD STYLES AND INDIVIDUAL PIECE PART DRAWINGS - SEE PAGES 21 TO 25.
- TOLERANCES - FRACTIONAL $\pm 1/64$ " - DECIMAL $\pm .005$ ".



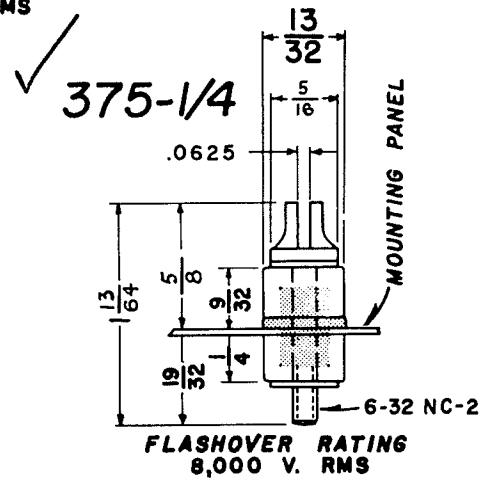
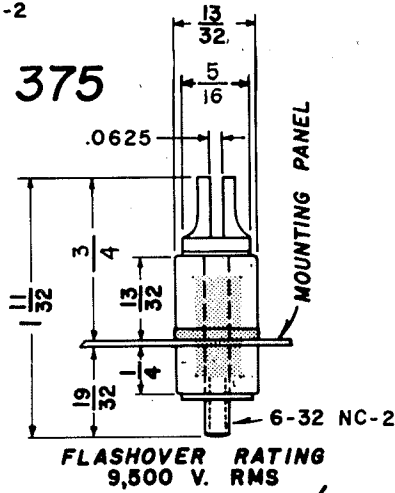
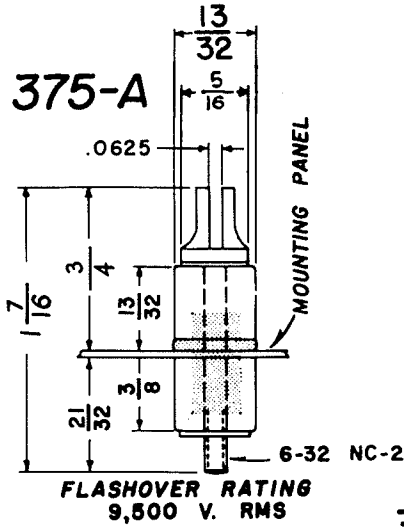
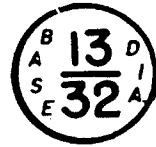
312 SERIES



— NOTES —

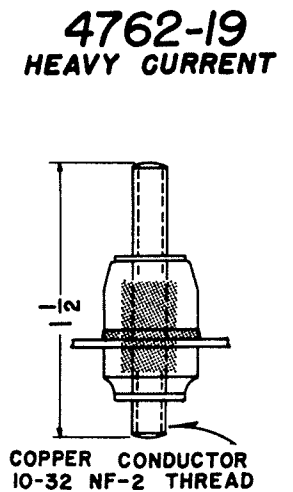
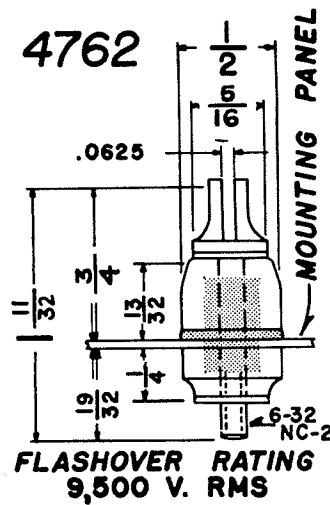
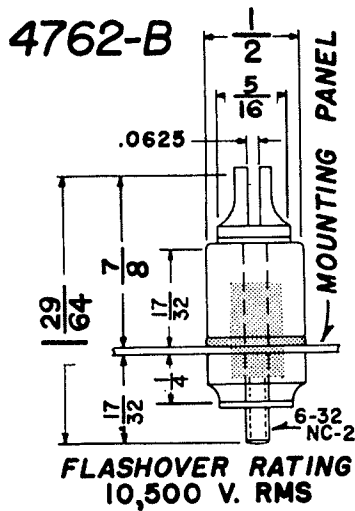
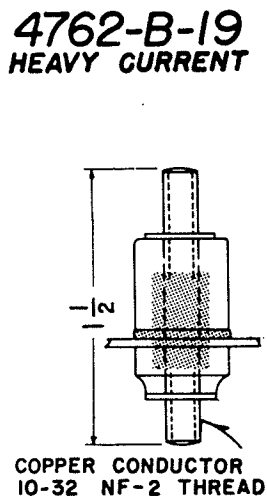
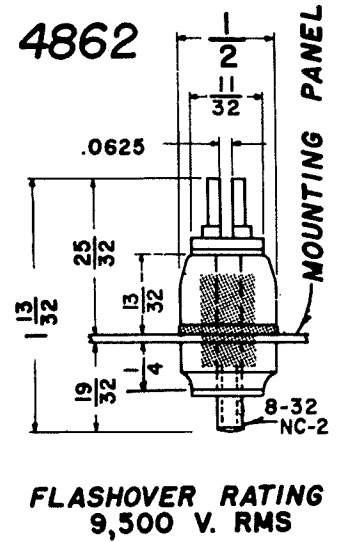
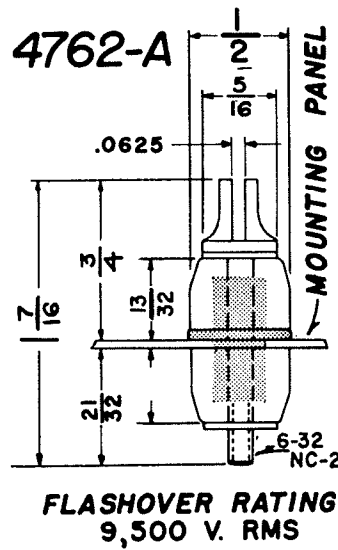
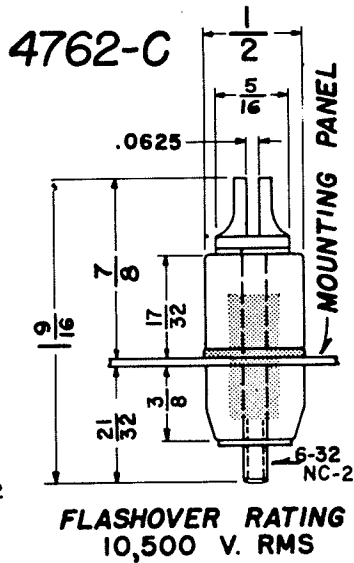
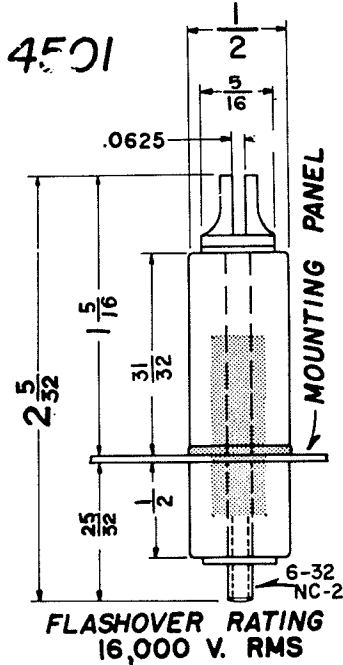
- | | |
|--|---|
| <p>1. FLASHOVER RATING - 60% RH @ 30° C. WITH BOTTOM INSULATOR IMMERSSED IN OIL. SEE PAGE 10 FOR ADDITIONAL DATA.</p> <p>2. RECOMMENDED PANEL THICKNESS - .022" TO .035".</p> <p>3. MOUNTING HOLE DIAMETER - .219 - FREE OF BURRS.</p> | <p>4. RECOMMENDED SET-UP TORQUE - 1-1/8-1-3/8 INCH-LBS.</p> <p>5. ALTERNATE HEAD STYLES AND INDIVIDUAL PIECE PART DRAWINGS - SEE PAGES 21 TO 25.</p> <p>6. TOLERANCES - FRACTIONAL $\pm 1/64"$ - DECIMAL $\pm .005"$.</p> |
|--|---|

375 SERIES



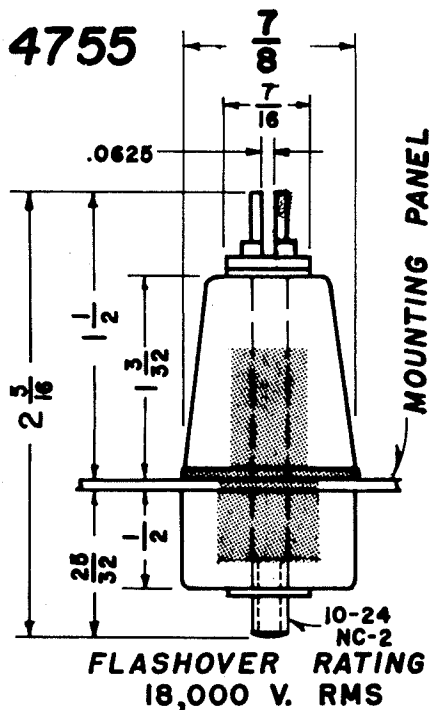
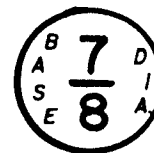
— NOTES —

- | | |
|--|---|
| <p>1. FLASHOVER RATING - 60% RH @ 30° C. WITH BOTTOM INSULATOR IMMersed IN OIL. SEE PAGE 10 FOR ADDITIONAL DATA.</p> <p>2. RECOMMENDED PANEL THICKNESS - .022" TO .035".</p> <p>3. MOUNTING HOLE DIAMETER - .261" - FREE OF BURRS.</p> | <p>4. RECOMMENDED SET-UP TORQUE - 3 ± 4 INCH-LBS.</p> <p>5. ALTERNATE HEAD STYLES AND INDIVIDUAL PIECE PART DRAWINGS - SEE PAGES 21 TO 25.</p> <p>6. TOLERANCES - FRACTIONAL ± 1/64" - DECIMAL ± .005".</p> |
|--|---|

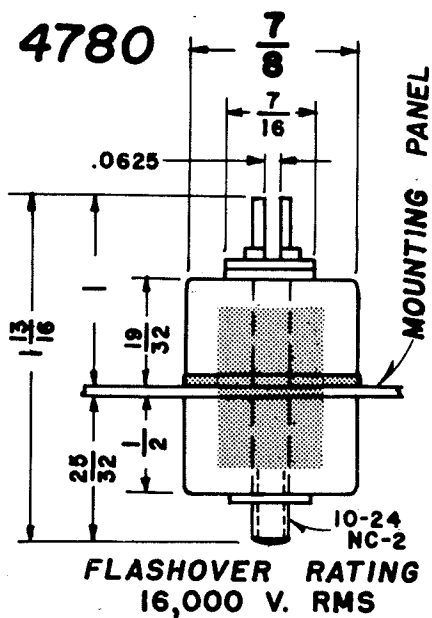
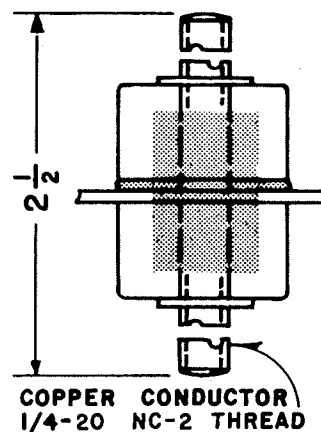


— NOTES —

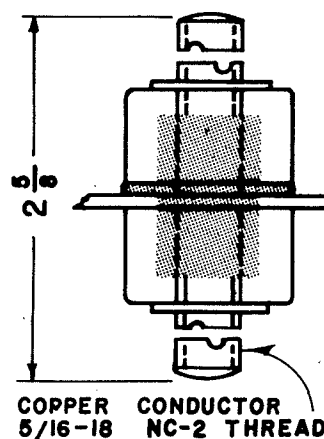
- FLASHOVER RATING - 60% RH @ 30° C. WITH BOTTOM INSULATOR IMMERSSED IN OIL. SEE PAGE 10 FOR ADDITIONAL DATA.
- RECOMMENDED PANEL THICKNESS - .022" TO .035".
- MOUNTING HOLE DIAMETER - .261" - FREE OF BURRS.
- RECOMMENDED SET-UP TORQUE - 3 1/4 INCH LBS.
- ALTERNATE HEAD STYLES AND INDIVIDUAL PIECE PART DRAWINGS - SEE PAGES 21 TO 25.
- TOLERANCES - FRACTIONAL ± 1/64" - DECIMAL ± .005".



✓ **4780-25**
HEAVY CURRENT

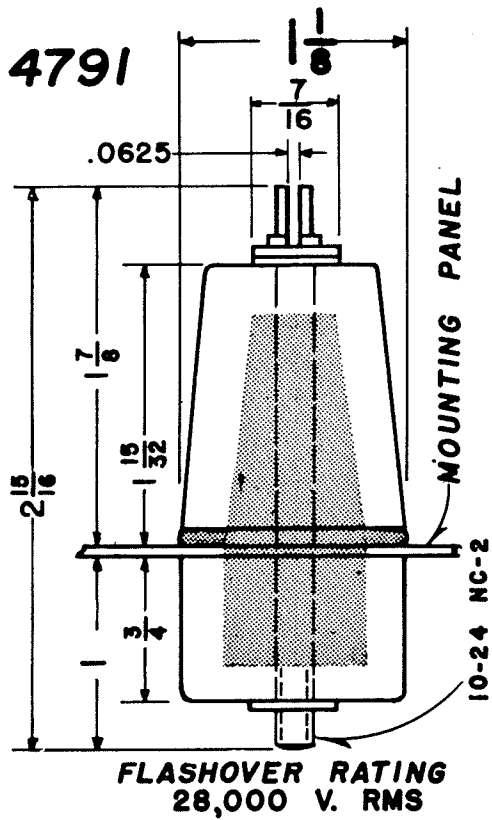
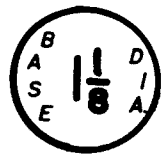


✓ **4780-31**
HEAVY CURRENT

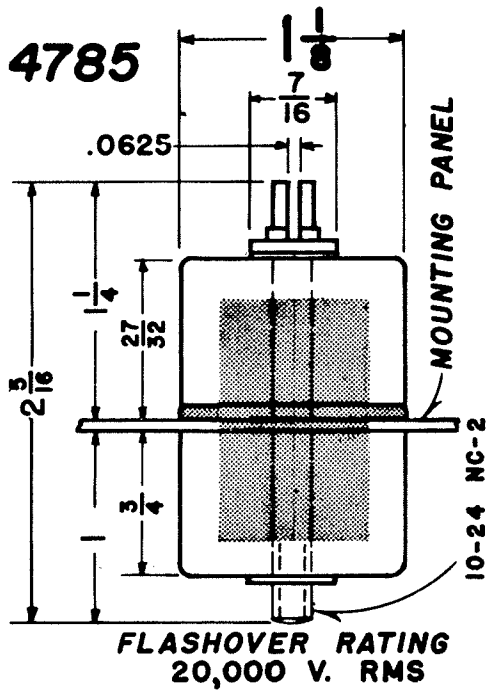
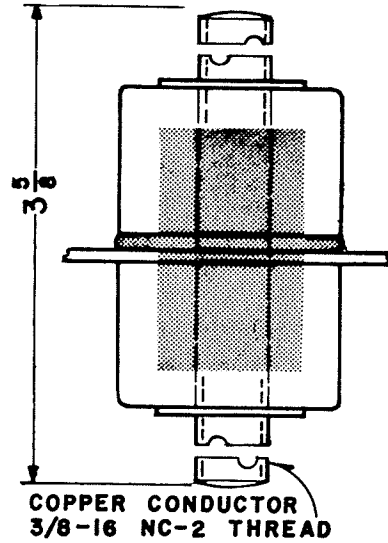


— NOTES —

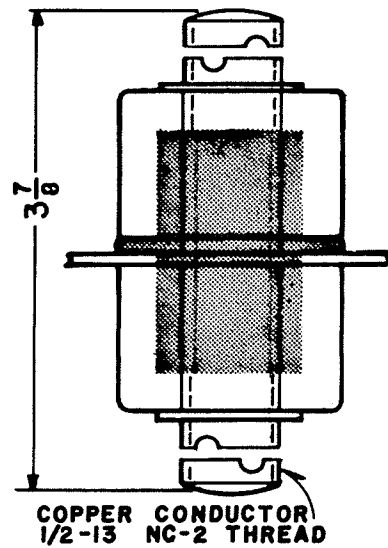
- | | |
|---|---|
| <p>1. FLASHOVER RATING - 60% RH @ 30° C. WITH BOTTOM INSULATOR IMMERSSED IN OIL. SEE PAGE 10 FOR ADDITIONAL DATA.</p> <p>2. RECOMMENDED PANEL THICKNESS - .026" TO .040".</p> <p>3. MOUNTING HOLE DIAMETER - .515" - FREE OF BURRS.</p> | <p>4. RECOMMENDED SET-UP TORQUE - 15-20 INCH-LBS.</p> <p>5. ALTERNATE HEAD STYLES AND INDIVIDUAL PIECE PART DRAWINGS - SEE PAGES 21 TO 25.</p> <p>6. TOLERANCES - FRACTIONAL $\pm 1/64$" - DECIMAL $\pm .005$".</p> |
|---|---|



4785-37
HEAVY CURRENT

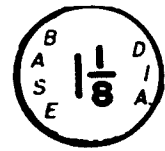


4785-50
HEAVY CURRENT



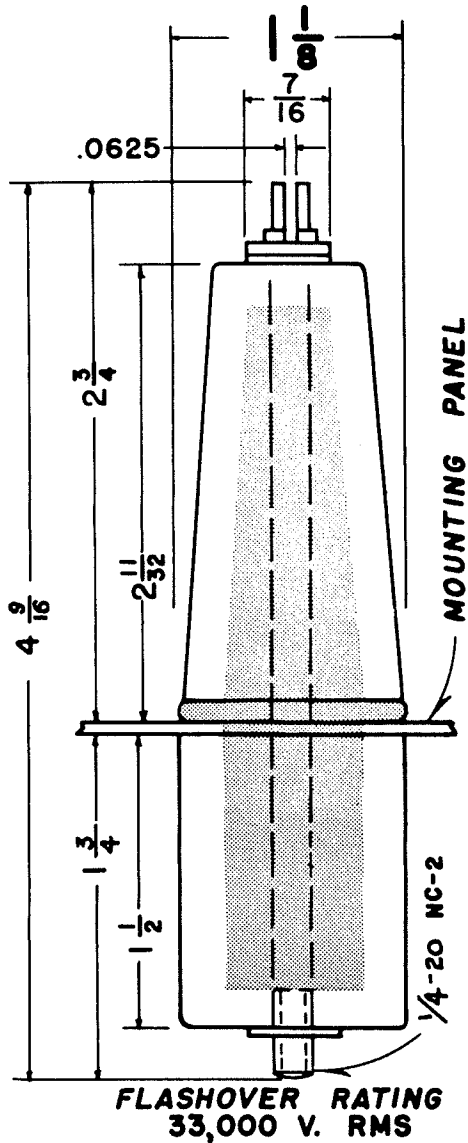
— NOTES —

1. FLASHOVER RATING - 60% RH @ 30° C. WITH BOTTOM INSULATOR IMMersed IN OIL. SEE PAGE 10 FOR ADDITIONAL DATA.
2. RECOMMENDED PANEL THICKNESS - .045" TO .065".
3. MOUNTING HOLE DIAMETER - .765" - FREE OF BURRS.
4. RECOMMENDED SET-UP TORQUE 18-24 INCH-LBS. FOR #10-24 STUDS. REDUCE BY 1/3 FOR #10-32 STUDS. TORQUE FOR #3/8-16 STUD 20-25 INCH-LBS. TORQUE FOR #1/2-13 STUD 25-30 INCH-LBS.
5. ALTERNATE HEAD STYLES AND INDIVIDUAL PIECE PART DRAWINGS - SEE PAGES 21 TO 25.
6. TOLERANCES - FRACTIONAL $\pm 1/64"$ - DECIMAL $\pm .005"$



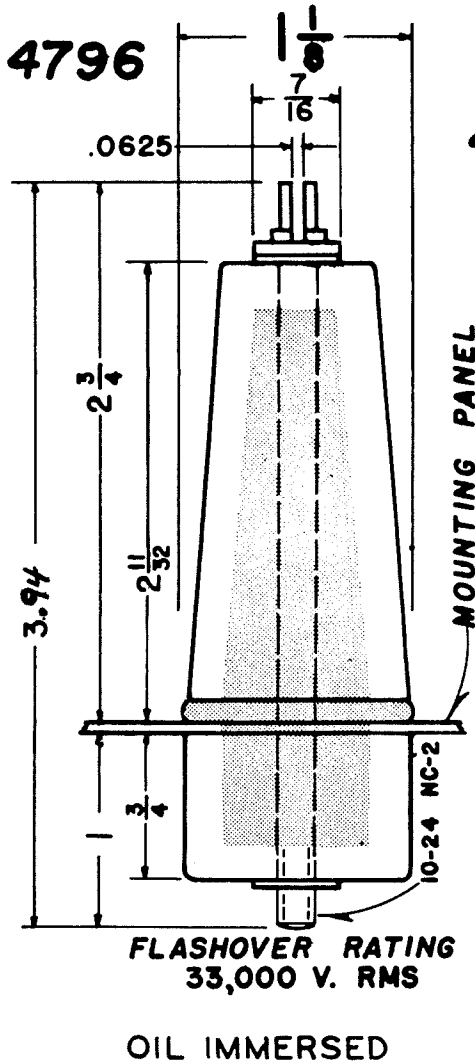
ALSO AVAILABLE WITH
CONVOLUTED UPPER CERAMIC

4796-A-25



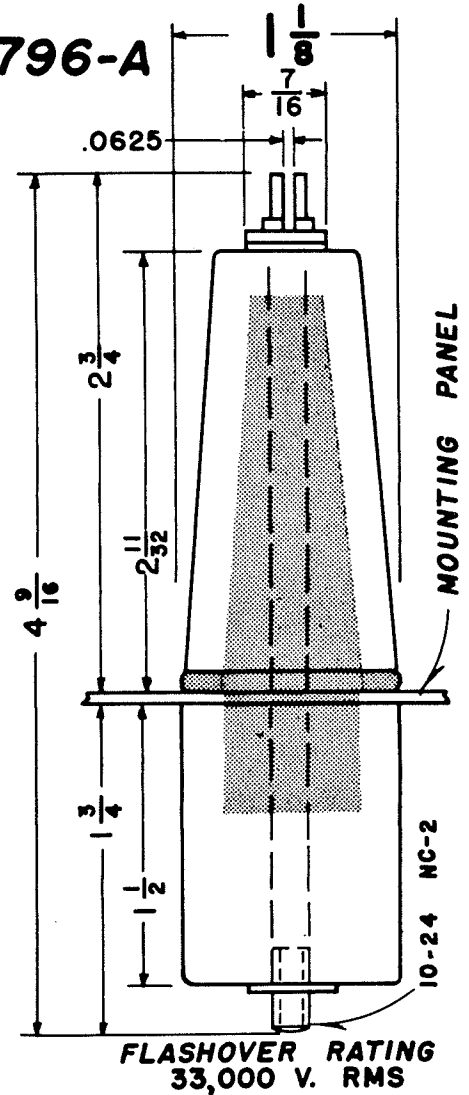
TORQUE 20 INCH-LBS.

4796



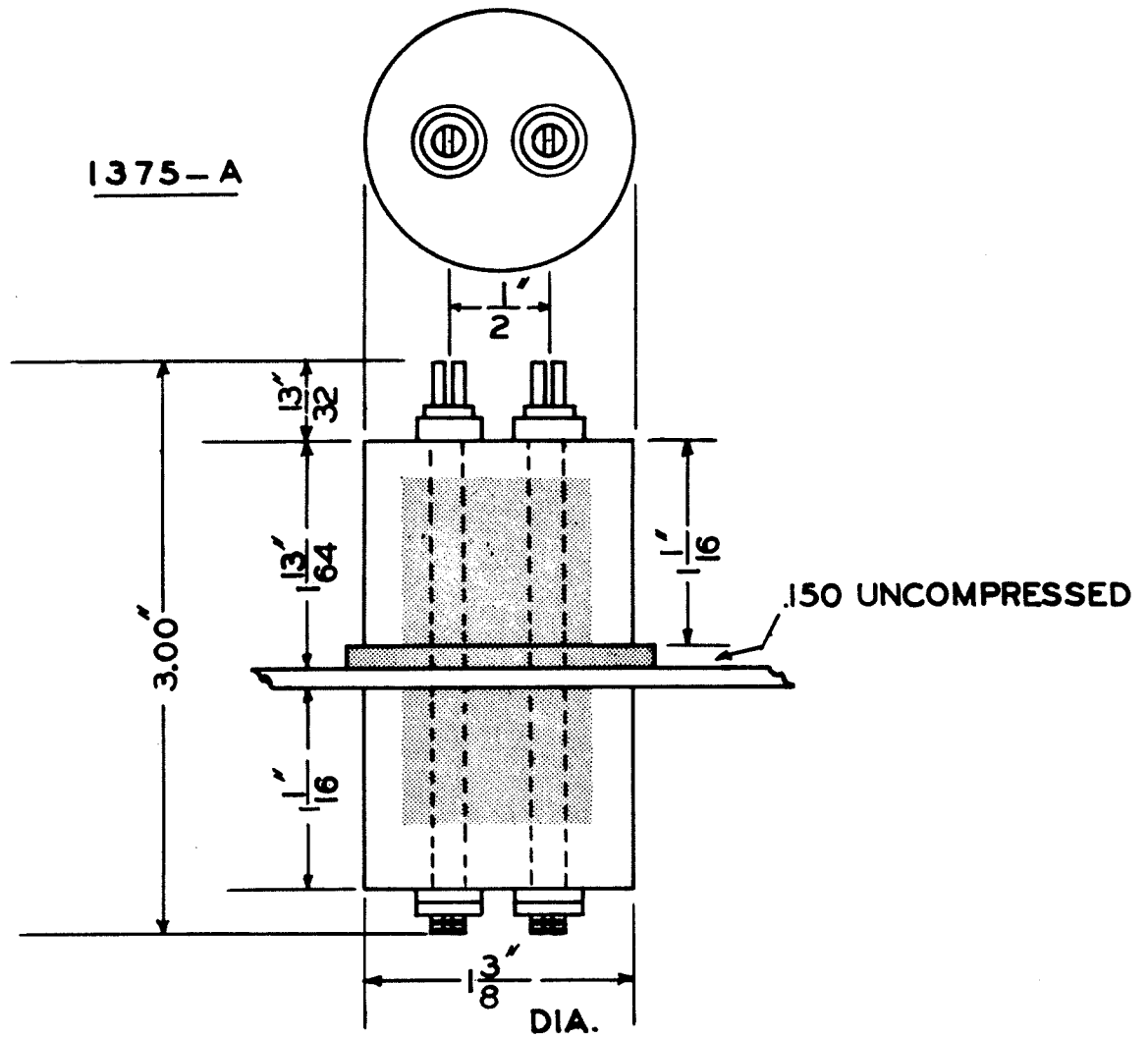
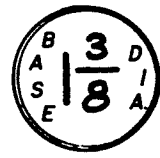
ALSO AVAILABLE
WITH CONVOLUTED
UPPER CERAMIC

4796-A



— NOTES —

1. FLASHOVER RATING - 60% RH @ 30° C. WITH BOTTOM INSULATOR IMMERSSED IN OIL. SEE PAGE 10 FOR ADDITIONAL DATA.
2. RECOMMENDED PANEL THICKNESS - .045" TO .065".
3. MOUNTING HOLE DIAMETER - .765" - FREE OF BURRS.
4. RECOMMENDED SET-UP TORQUE - 18-24 INCH-LBS. FOR 10-24 THREAD. REDUCE TORQUE 1/3 FOR 10-32 THREAD.
5. ALTERNATE HEAD STYLES AND INDIVIDUAL PIECE PART DRAWINGS - SEE PAGES 21 TO 25.
6. TOLERANCES - FRACTIONAL $\pm 1/64"$ - DECIMAL $\pm .005"$.



FLASHOVER RATING
25,000 V. RMS.

1375-B SAME TERMINAL AS 1375-A EXCEPT
3 ELECTRODES ON 1/2" CENTERS IN PLACE OF 2

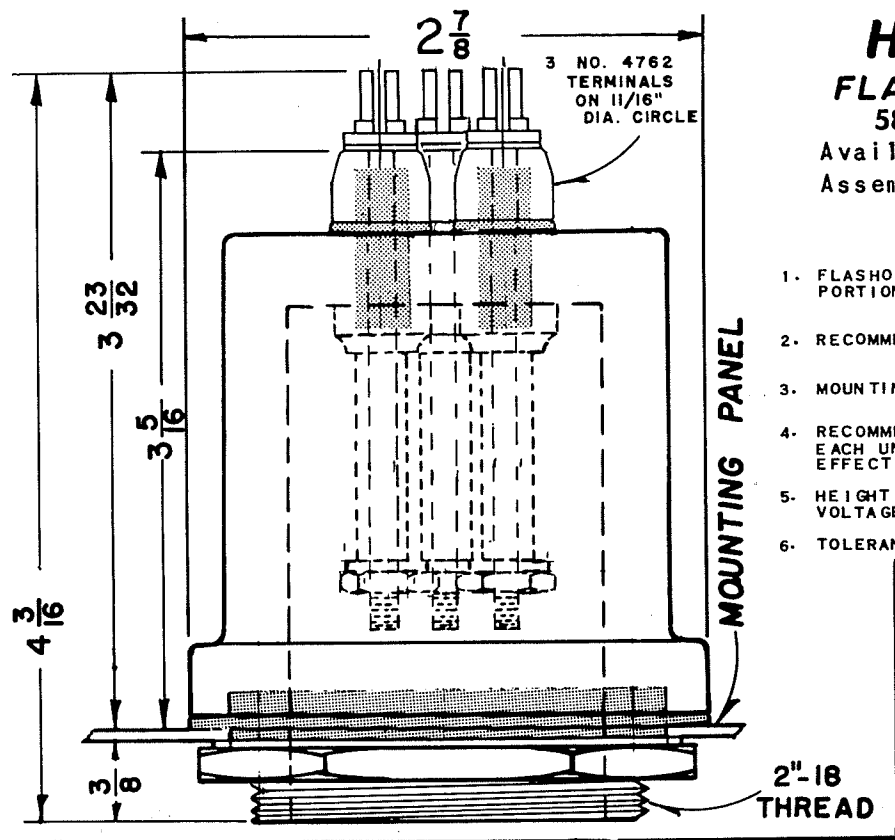
— NOTES —

1. MOUNTING HOLE DIAM. 1.00"

2. OPERATING VOLTAGE 10,000 - 12,000 VOLTS RMS.

3. SEE PAGE 21 FOR INSERT DETAILS.

4. SEE PAGE 22 FOR CERAMIC DETAILS.

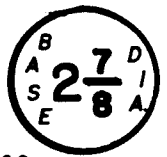


HV-1000-3

FLASHOVER RATING

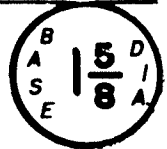
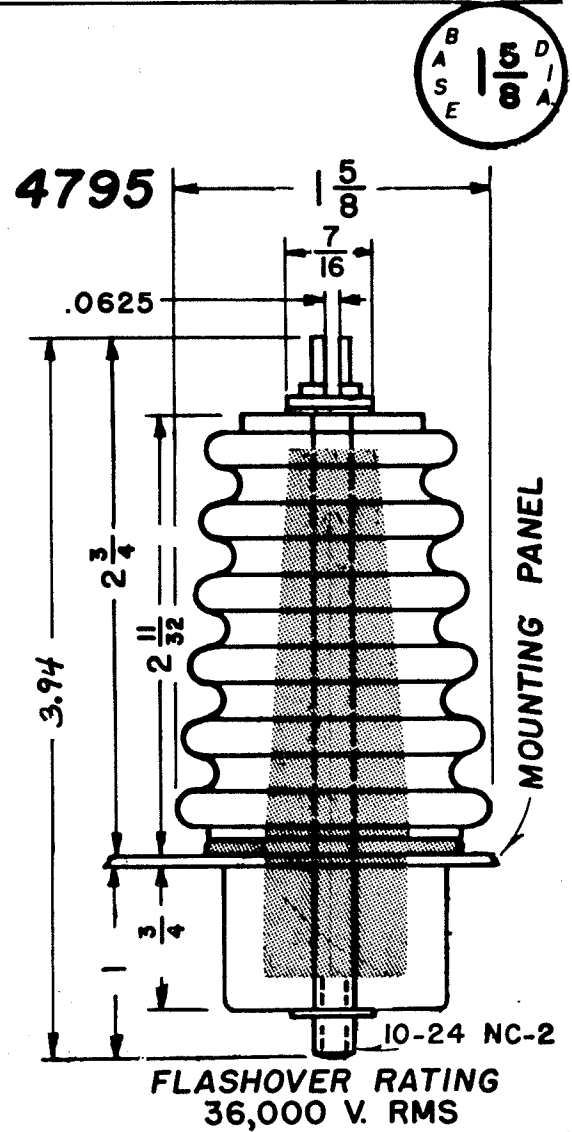
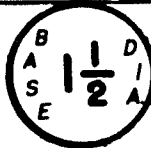
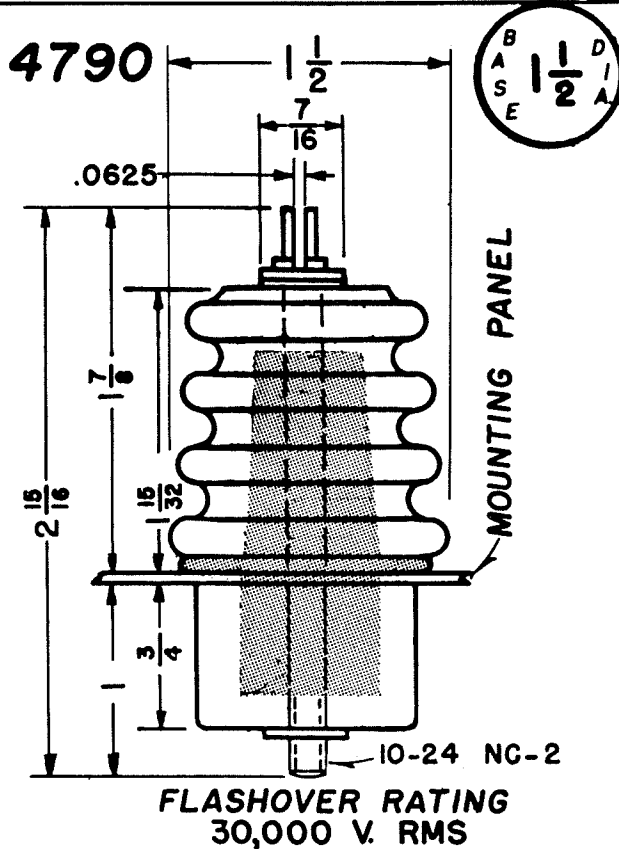
58,000 V. RMS

Available with 2 or 3 Electrodes
Assemble with closed End Wrench



— NOTES —

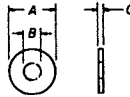
1. FLASHOVER RATING - 60% RH @ 30° C. WITH BOTTOM PORTION AND CAVITY IMMERSED IN OIL.
2. RECOMMENDED PANEL THICKNESS - .070" TO .150".
3. MOUNTING HOLE DIAMETER - 2-1/4" - FREE OF BURRS.
4. RECOMMENDED SET-UP TORQUE - 40 - 50 INCH-LBS. EACH UNIT SHOULD BE PRESSURE TESTED TO CONFIRM EFFECTIVENESS OF SEAL BEFORE COMPLETING INSTALLATION
5. HEIGHT MAY BE ALTERED TO SUIT VARIOUS FLASHOVER VOLTAGES.
6. TOLERANCES - FRACTIONAL ± 1/64" - DECIMAL ± .005".



— NOTES —

1. FLASHOVER RATING - 60% RH @ 30° C. WITH BOTTOM INSULATOR IMMERSED IN OIL. SEE PAGE 10 FOR ADDITIONAL DATA.
2. RECOMMENDED PANEL THICKNESS - .045" TO .065".
3. MOUNTING HOLE DIAMETER - .765" - FREE OF BURRS.
4. RECOMMENDED SET-UP TORQUE - 18-24 INCH-LBS. FOR #10-24 STUD. REDUCE TORQUE 1/3 FOR #10-32 STUD.
5. ALTERNATE HEAD STYLES AND INDIVIDUAL PIECE PART DRAWINGS - SEE PAGES 21 TO 25.
6. TOLERANCES - FRACTIONAL ± 1/64" - DECIMAL ± .005".

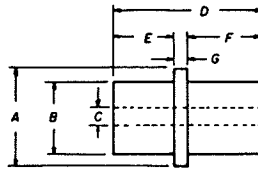
CUSHIONING WASHER



PART NO.	PART OF TERMINAL NO.	A	B	C
CW-60	200 & 200-A	.187	.078	.015
CW-80	250-E SERIES, 250-S SERIES, 250 SERIES & 312 SERIES	.218	.109	.031
CW-120	375 SERIES, 4762 SERIES & 4501	.375	.140	.031
CW-145	4762-19, 4762-B-19, 4780, 4755, 4785, 4790, 4791, 4791-A, 4795, 4796 & 4796-A, 4862	.375	.200	.031
CW-185	4780-25	.625	.265	.031
CW-186	4780-31	.687	.328	.031
CW-225	4785-37	.812	.390	.031
CW-226	4785-50	1.062	.515	.031
CW-1000	HV-1000-3	2.375	2.000	.046

Material - Armstrong Thermo-Tork TN-9001 (fiber)

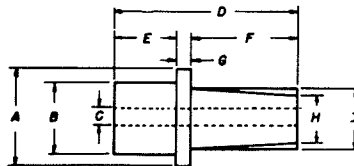
INSERT



PART NO.	PART OF TERMINAL NO.	A	B	C	D	E	F	G
IN-60	200 & 200-A	.180	.132	.070	.280	.095	.115	.070
IN-79	250-S 7/64	.218	.160	.106	.212	.055	.095	.062
IN-80	250-E & 250-S SERIES	.218	.160	.106	.294	.101	.131	.062
IN-81	250 SERIES	.218	.160	.080	.294	.101	.131	.062
IN-100	312, 312-1/2 & 312-3/4	.280	.214	.108	.490	.203	.225	.062
IN-120	375	.312	.256	.129	.488	.161	.265	.062
IN-122	375-A	.312	.256	.129	.622	.265	.295	.062
IN-124	375-1/4	.312	.256	.129	.354	.131	.161	.062
IN-140	4762 & 4762-B	.437	.256	.129	.488	.161	.265	.062
IN-144	4762-19 & 4762-B-19	.437	.256	.175	.488	.161	.265	.062
IN-142	4862	.437	.256	.152	.488	.161	.265	.062
IN-146	4762-A & 4762-C	.437	.256	.129	.622	.295	.265	.062
IN-148	4501	.437	.256	.129	.879	.270	.547	.062
IN-180	4780	.750	.508	.175	.935	.390	.420	.125
IN-181	4780-25	.750	.508	.240	.935	.390	.420	.125
IN-182	4780-31	.750	.508	.302	.935	.390	.420	.125
IN-220-85	4785	.937	.760	.175	1.375	.585	.650	.140
IN-222	4785-37	.937	.760	.365	1.375	.585	.650	.140
IN-224	4785-50	.937	.760	.488	1.375	.585	.650	.140
IN-1375	1375 A & B	1.370	1.000	.175	2.012	.905	.960	.150

SPECIAL INSERTS AVAILABLE FOR USE WITH SILICONE OIL.

INSERT



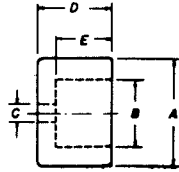
PART NO.	PART OF TERMINAL NO.	A	B	C	D	E	F	G	H	I
IN-190	4755	.625	.512	.175	1.215	.420	.670	.125		.435
IN-220	4790, 4791 & 4791-A	1.000	.760	.175	1.837	.650	1.031	.125	.540	.640
IN-240	4795, 4796 & 4796-A	1.062	.760	.175	2.775	.650	1.969	.125	.540	.655
IN-228	4796-A-25	1.062	.760	.240	3.300	1.162	1.969	.140	.540	.655

NOTES

DIMENSIONS ARE FOR STANDARD NEOPRENE PARTS.

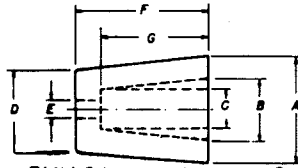
MATERIAL - STANDARD PARTS ARE NEOPRENE. TO ORDER SILICONE PREFIX TERMINAL NUMBER OR INSERT PART NUMBER WITH "S" e.g. S-375-A OR S-IN-122.

INSULATOR



PART NO.	PART OF TERMINAL NO.	LOCATION	FINISH	A	B	C	D	E
1-60	200	U & L	G & UG	.200	.130	.080	.190	.090
	200-A	U	G					
1-61	200-A	L	UG	.200	.130	—	—	.085
1-6585	250-S 7/64	U & L	G & UG	.250	.158	.120	.112	.049
1-6584	250, 250-E & 250-S SERIES	U	G	.250	.158	.120	.187	.094
	250, 250-E & 250-S SERIES	L	UG					
1-82	250-5/16 & 250-S-5/16	U	G	.250	.158	.120	.312	.094
1-100	312	U	G	.312	.212	.122	.250	.195
	312, 312-1/2 & 312-3/4	L	UG					
1-104	312-1/2	U	G	.312	.212	.122	.500	.195
1-108	312-3/4	U	G	.312	.212	.122	.750	.195
1-120	375 & 375-1/4	L	UG	.406	.255	.140	.250	.130
	375-1/4	U	G					
1-122	375	U	G	.406	.255	.140	.375	.255
	375-A	U & L	G & UG					
1-140	4762-B & 4762-C	U	G	.500	.255	.140	.500	.255
	4501	L	G					
1-142	4762-B-19	U	G	.500	.255	.200	.500	.255
1-148	4501	U	G	.500	.255	.140	.937	.540
1-180	4780	U & L	G & UG	.875	.500	.200	.500	.385
	4755	L	G					
1-181	4780-25	U & L	G & UG	.875	.500	.265	.500	.385
1-182	4780-31	U & L	G & UG	.875	.500	.325	.500	.385
1-220	4785	U & L	G & UG	1.125	.760	.200	.750	.575
	4790, 4791, 4795 & 4796	L	G					
1-222	4785-37	U & L	G & UG	1.125	.760	.390	.750	.575
1-224	4785-50	U & L	G & UG	1.125	.760	.515	.750	.575
1-226	4791-A & 4796-A	L	G	1.125	.760	.515	1.500	.575
1-228	4796-A-25	L	UG	1.125	.760	.265	1.500	1.080
1-1375A	1375-A	U & L	G & UG	1.375	1.000	.200	1.062	.905
1-1375B	1375-B	U & L	G & UG	1.375	1.000	.200	1.062	.905

INSULATOR



PART NO.	PART OF TERMINAL NO.	LOCATION	FINISH	A	B	C	D	E	F	G
1-190	4755	U	G	.875	—	.435	.625	.200	1.000	.665
1-240-A	4791	U	G	1.125	.640	.531	.875	.200	1.406	1.031
1-260-A	4796 & 4796-A	U	G	1.125	.660	.531	.875	.200	2.250	1.968
1-261-A	4796-A-25	U	G	1.125	.660	.531	.875	.265	2.250	1.968

— NOTES —

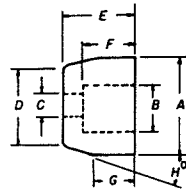
MATERIAL - CERAMIC GRADE L-4 OR BETTER.

LOCATION SYMBOLS INDICATE UPPER OR LOWER INSULATOR.

FINISH - AS INDICATED: G = GLAZED - UG = UNGLAZED.

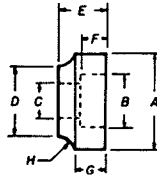


INSULATOR



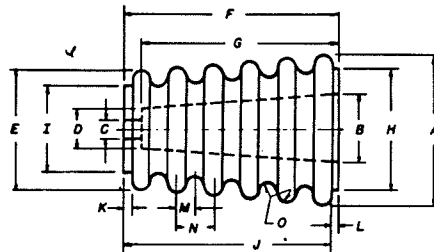
PART NO.	TERMINAL NO.	LOCATION	FINISH	A	B	C	D	E	F	G	H
I-155	4762	U	G	.500	.255	.140	.375	.375	.255	.187	75
	4762-A	U & L	G								
I-156	4862	U	G	.500	.255	.170	.375	.375	.255	.187	75
I-157	4762-19	U	G	.500	.255	.200	.375	.375	.255	.187	75

INSULATOR



PART NO.	PART OF TERMINAL NO.	LOCATION	FINISH	A	B	C	D	E	F	G	H
I-150	4762 & 4762-B	L	UG	.500	.255	.140	.343	.250	.130	.171	.093
I-151	4862	L	UG	.500	.255	.170	.343	.250	.130	.171	.093
I-152	4762-19 & 4762-B-19	L	UG	.500	.255	.200	.343	.250	.130	.171	.093

INSULATOR



PART NO.	TERMINAL NO.	LOCATION	FINISH	A	B	C	D	E	F	G	H							
I-240	4790	U	G	1.500	.640	.200	.531	1.281	1.406	1.031	—							
I-260	4795	U	G	1.625	.660	.200	.531	1.281	2.250	1.968	1.312							
I-261	4795-25	U	G	1.625	.660	.265	.531	1.281	2.250	1.968	1.312							
												I	J	K	L	M	N	O
												.875	—	.093	—	.187	.375	.093
												.875	2.156	.093	.093	.187	.375	.093
				.875	2.156	.093	.093	.187	.375	.093								

— NOTES —

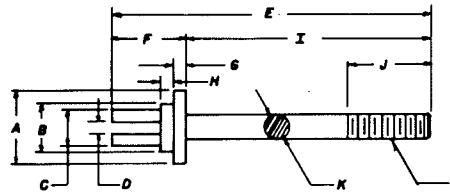
MATERIAL - CERAMIC GRADE L-4 OR BETTER.

LOCATION SYMBOLS INDICATE UPPER OR LOWER INSULATOR.

FINISH - AS INDICATED: G = GLAZED - UG = UNGLAZED.

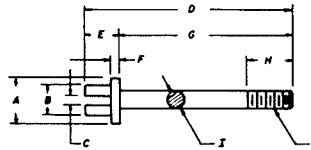


CONDUCTOR



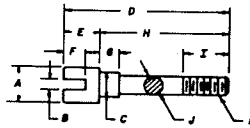
PART NO.	TERMINAL NO.	A	B	C	D	E	F	G	H	I	J	K	L
C-142	4862	.343	.250	.187	.062	1.406	.343	.062	.062	1.062	.437	.161	8-32
C-182	4780	.437	.250	.187	.062	1.812	.375	.062	.062	1.437	.500	.190	10-24
C-184	4755 & 4785	.437	.250	.187	.062	2.312	.375	.062	.062	1.937	.500	.190	10-24
C-220	4790 & 4791	.437	.250	.187	.062	2.937	.375	.062	.062	2.562	.750	.190	10-24
C-222	4791-A	.437	.250	.187	.062	3.687	.375	.062	.062	3.312	.750	.190	10-24
C-240	4795 & 4796	.437	.250	.187	.062	3.940	.375	.062	.062	3.560	.880	.190	10-24
C-242	4796-A	.437	.250	.187	.062	4.562	.375	.062	.062	4.187	.750	.190	10-24
C-242-25	4796-A25	.437	.250	.187	.062	4.562	.375	.062	.062	4.187	.750	.250	14-20
C-240-25	4795-25	.437	.250	.187	.062	3.812	.375	.062	.062	3.437	.750	.250	1/4-20
C-1375	1375-A	.312	.250	.195	.062	3.000	.375	.062	.062	2.625	.800	.190	10-32
	1375-B												

CONDUCTOR



PART NO.	PART OF TERMINAL NO.	A	B	C	D	E	F	G	H	I	J
C-60	200	.125	.093	.031	.750	.125	.040	.625	.250	.073	1-72
C-62	200-A	.125	.093	.031	.625	.125	.040	.500	.250	.073	1-72
C-80	250-S	.187	.148	.050	.930	.177	.035	.750	.312	.112	4-40
C-80-M	250-S 7/64	.187	.148	.050	.750	.177	.035	.573	.250	.112	4-40
C-100	312 & 250S 5/16	.187	.148	.050	1.031	.177	.035	.838	.312	.112	4-40
C-104	312-1/2	.187	.148	.050	1.265	.177	.035	1.088	.312	.112	4-40
C-108	312-3/4	.187	.148	.050	1.453	.177	.035	1.276	.312	.112	4-40
C-120	375-1/4	.312	.167	.062	1.203	.276	.049	.937	.375	.136	6-32
C-122-D	375, 4762	.312	.167	.062	1.343	.288	.049	1.062	.375	.136	6-32
C-124	375-A	.312	.167	.062	1.437	.295	.049	1.125	.375	.136	6-32
	4762 A & B										
C-144	4762-C	.312	.167	.062	1.562	.300	.049	1.250	.375	.136	6-32
C-148	4501	.312	.167	.062	2.150	.305	.050	1.843	.375	.136	6-32

CONDUCTOR



PART NO.	PART OF TERM. NO.	A	B	C	D	E	F	G	H	I	J	K
C-81	250	.187	.050	.112	.921	.187	.130	.109	.750	.437	.086	2-56

NOTES

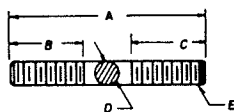
MATERIAL - BRASS.

FINISH - HOT-TIN PLATED

DIMENSIONS BASED ON STANDARD SCREW MACHINE FABRICATION. SOME HEAD STYLES SUBJECT TO MODIFICATION WHEN COLD FORMING TECHNIQUES USED.



CONDUCTOR



PART NO.	TERMINAL NO.	A	B	C	D	E
C-144-10	4762-19 & 4762-B-19	1.500	.500	.500	.190	10-32
C-181	4780-25	2.500	.750	.750	.250	1/4-20
C-182	4780-31	2.625	.750	.750	.312	5/16-18
C-222-37	4785-37	3.625	1.250	1.250	.375	3/8-16
C-224	4785-50	3.875	1.250	1.250	.500	1/2-13

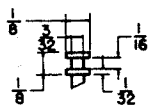
MATERIAL - COPPER.

FINISH - HOT-TIN PLATED

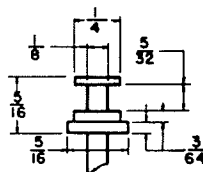
ALTERNATE HEAD STYLES

TURRET HEAD

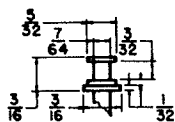
TH-5



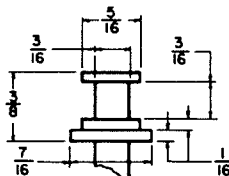
TH-15



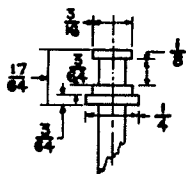
TH-10



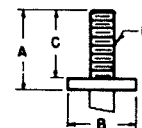
TH-20



TH-12 1/2



THREADED TOP



STYLE NO.

STYLE NO.	A	B	C	D
T-15	.343	.343	.281	6-32
T-20	.343	.343	.281	8-32
T-25	.375	.437	.312	10-24
T-26	.375	.437	.312	10-32
T-40	.750	.437	.687	1/4-20

TO ORDER THREADED TOP OTHER THAN THOSE SHOWN SUFFIX TERMINAL NUMBER WITH "T" PLUS THE DESIRED THREAD SIZE AND LENGTH. E.G. 375-A-T-8-32 X 5/8.

NOTES

SPECIAL HEAD STYLES OTHER THAN SHOWN ABOVE ARE AVAILABLE TO YOUR SPECIFICATION.

TO ORDER ALTERNATE HEAD STYLES SUFFIX TERMINAL NUMBER WITH STYLE DESIRED. E.G. 375-A-TH-15.

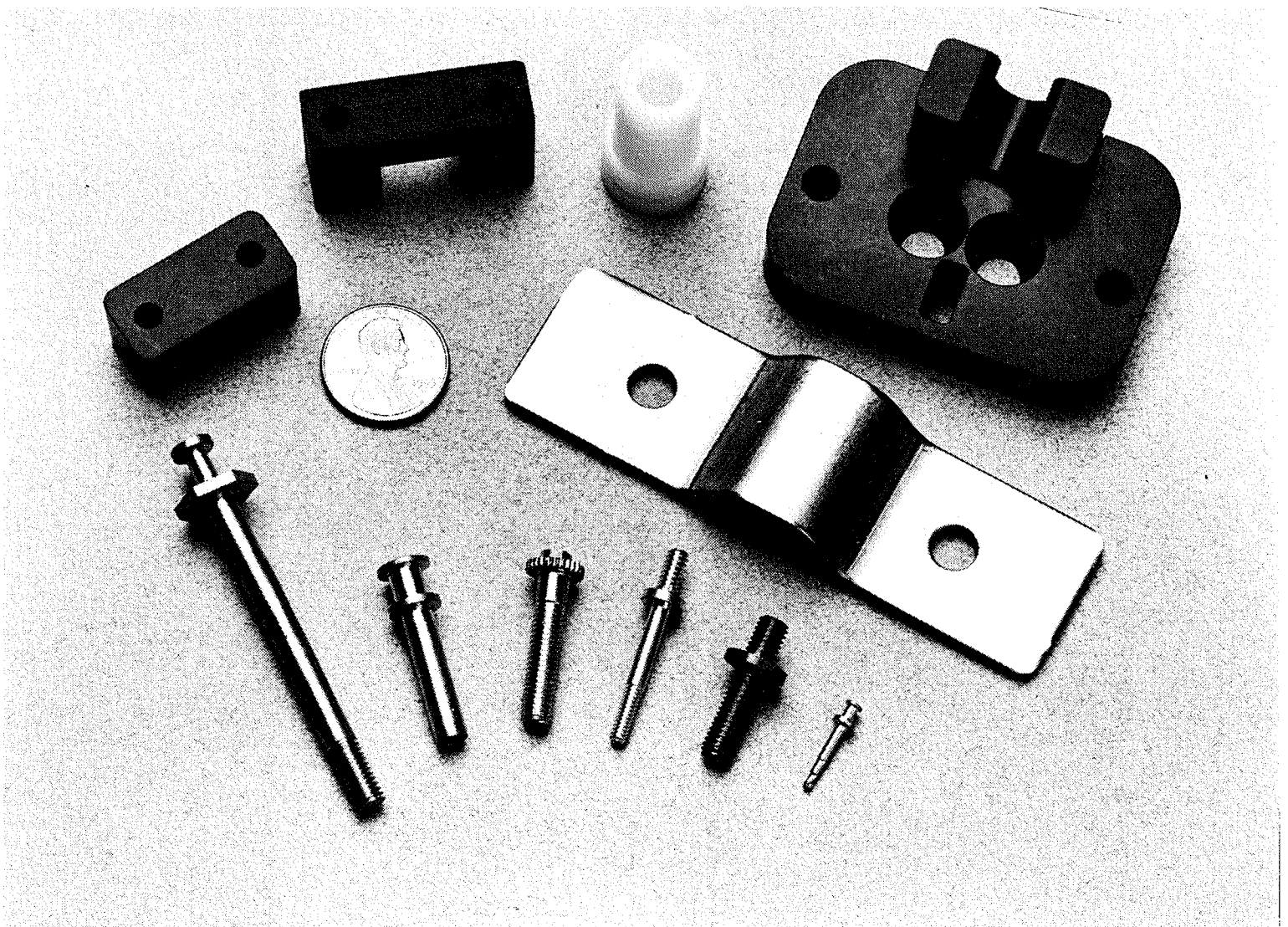
**CONSIDER LUNDEY, INC. FOR YOUR PRECISION MACHINING, SCREW MACHINE PARTS,
STAMPINGS & MOLDING REQUIREMENTS TOO**

In addition to our standard line of Feed-Thru Terminals Lundey, Inc. is pleased to offer you the highest quality products in these areas at competitive prices and prompt delivery.

Our expertise is in the machining of parts of various materials including:

**BRASS
STEEL
STAINLESS STEEL**

**COPPER
ALUMINUM
VARIOUS PLASTICS**



PROTOTYPE - SHORT RUN - LONG RUN

**FOR A QUICK RESPONSE TO QUOTATIONS, REQUESTS OR DELIVERY INFORMATION
PLEASE CALL (508) 226-6012.**