

Product Facts

- LGH leads and receptacles find wide application where high voltage is used in harsh environments
- Small high voltage power supplies
- Back lighting for LCD flat panel displays
- High voltage for flat panel FED (Field Emissive Displays)
- Small CRT's (Cathode Ray Tubes)
- Commercial and Military Avionics
- A series of miniature high voltage connectors for applications where space is limited
- HV performance in a small lightweight connector
- Operating voltages up to 12 KVDC
- Operation to 100,000 ft. [30,480 m] altitude
- Lead wire remains flexible to - 67°F [-55°C]
- Color coded for easy identification
- Leads are available with silicone, TEFLON or silicone coated TEFLON
- Connector is fully insulated
- Connectors are available with 26 thru 22 AWG wire



Materials

Molded silicone rubber
 Thermoset and thermoplastic polymers
 Socket contacts size 22 per MIL-C-39029 size 22

Electrical Characteristics

Operating Voltage — up to 12 KVDC
Current Rating — 5 amps max. with 22 GA wire

Mechanical Characteristics

Small size outside Dia. of .135 [3.43]
 Leads are preassembled
 Quick disconnect, push/pull mating

Operating Temperature —
 -67°F to +257°F [-55°C to +125°C]

Approvals

Meets applicable military specifications
 AMP product specifications listed below

Technical Documents

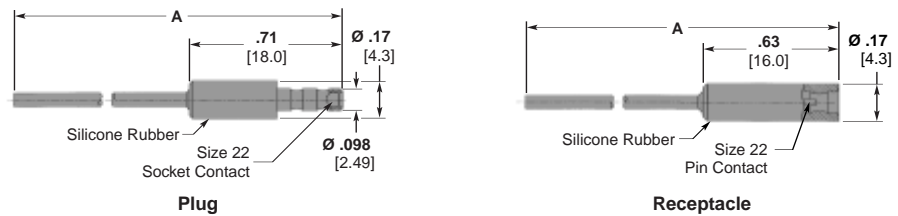
- 135 Series (.135 [3.43] Dia.)** — 108-1788
- 170 Series (.179 [4.55] Dia.)** — 108-1802
- 240 Series (.240 [6.10] Dia.)** — 108-1853
- Surface Mount/Plug Assembly** — 108-1880
- 1, 2, and 3 Position** — 108-1812

TEFLON is a trademark of E. I. DuPont de Nemours and Company.

LGH Micro-Miniature Connectors and Cable Assemblies (Continued)

170 Series

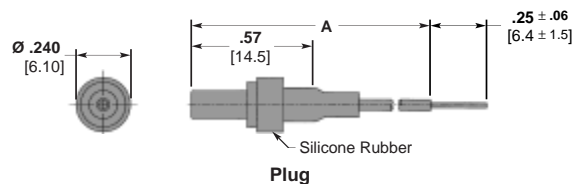
Product Specification — 108-1802
Operating Voltage — 6 KVDC
Test Voltage — 10 KVDC at 10,000 feet [3,046 m] and -67°F to +257°F [-55°C to +125°C]
Durability — 50 matings and unmating



Wire Description	Wire Color	Plug		Receptacle	
		Dim. A	Part Number	Dim. A	Part Number
24 AWG Silicone Coated TEFLON	Red	12.5 ± .12	1218147-1	12.0 ± .12	1218148-1
		317.5 ± 3.0		304.8 ± 3.0	
24 AWG Corona Resistant TEFLON	Yellow	18.5 ± .12	1218149-1	48.0 ± .48	1218148-2
		469.9 ± 3.0		1219.2 ± 12.2	

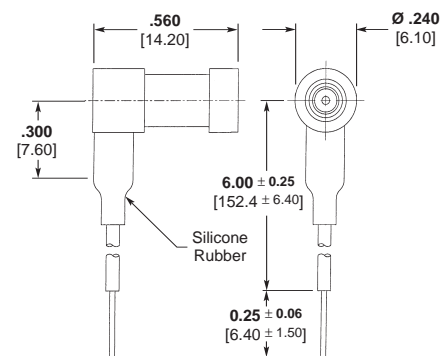
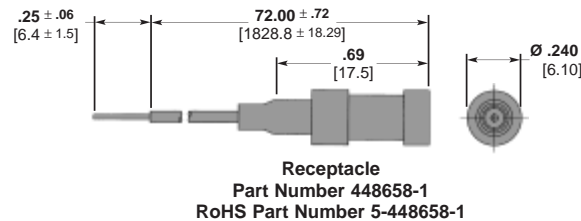
240 Series

Product Specification — 108-1853
Operating Voltage — 12 KVDC
Test Voltage — 18 KVDC at sea level 70,000 feet [21,336 m] and -67°F to +257°F [-55°C to +125°C]

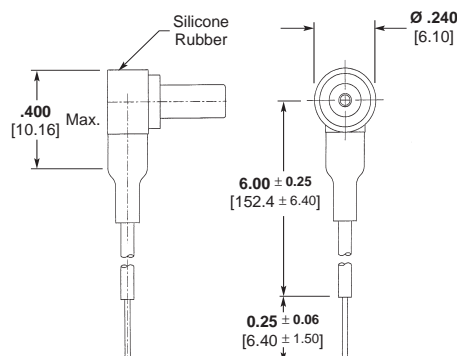


Dim. A	Plug Part Number
7.0 ± .025	448660-1 (straight)
177.8 ± 6.4	5-448660-1*
72.0 ± 1.0	448660-2 (straight)
1828.8 ± 25.4	

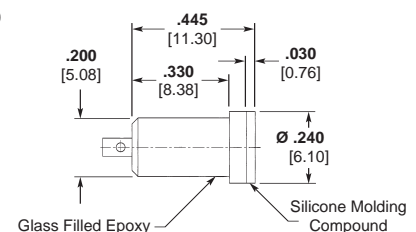
*RoHS compliant Part Number.



Receptacle (Right-Angle)
Part Number 448659-1



Plug (Right-Angle)
Part Number 448661-1



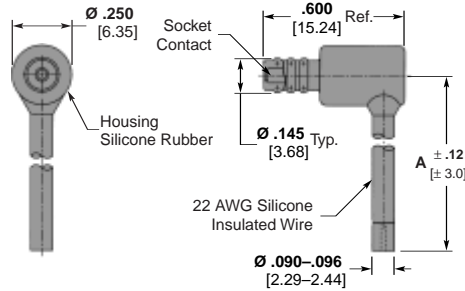
Receptacle Housing
Part Number 1484882-1

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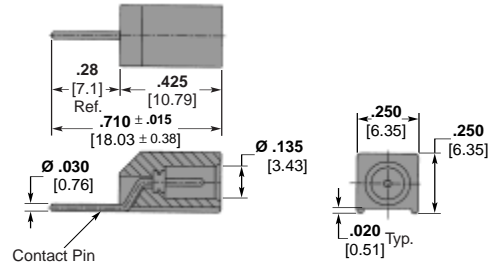
**Surface Mount/
Plug Assembly**

Product Specification — 108-1880
Operating Voltage — 7 KVDC
Test Voltage — 13 KVDC at 20,000 feet [6,096 m] at -13°F to +167°F [-25°C to +75°C] and 3 KVDC at 70,000 feet [21,336 m] at -67°F and 257°F [-55°C and 125°C]

Dim. A	Part Number
10.0 254.0	1218134-1
6.63 168.4	1218134-2
8.0 203.2	1218134-3
4.0 101.6	1218134-4



**Plug
Right-Angle Silicone**



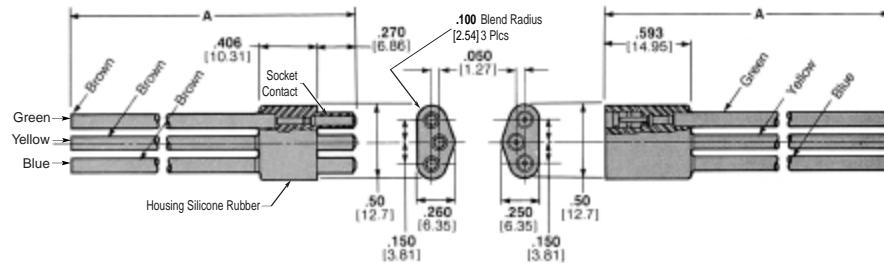
**Receptacle, Surface Mount
Glass Filled Epoxy, Black
Part Number 1218055-1
RoHS Part Number 5-1218055-1**

**Receptacle, Surface Mount
PPS Thermoplastic Polymer, Brown
Part Number 1218055-2
RoHS Part Number 5-1218055-2**

1, 2 and 3 Position

Product Specification — 108-1812
Operating Voltage — 7.5 KVDC
Test Voltage — 12 KVDC at 10,000 feet [3,048 m] and 5°F to +185°F [-15°C to +85°C]

3-Position Connectors



Plug		
Dim. A	Wire Color	Part Number
12 305	Brown Brown Brown	863743-1
16 406		863743-2
12 305		862424-1
18 457	Green Yellow Blue	862424-2
48 1219		862424-4

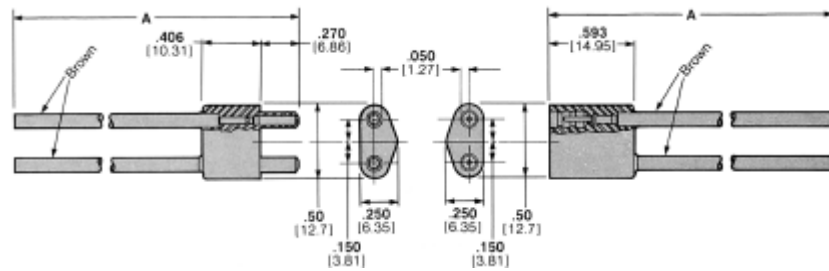
Receptacle	
Dim. A	Part Number
12 305	862425-1
18 457	862425-2
24 610	862425-3
48 1219	862425-4

LGH Micro-Miniature Connectors and Cable Assemblies (Continued)

1, 2 and 3 Position (Continued)

Product Specification — 108-1812
 Operating Voltage — 7.5 KVDC
 Test Voltage — 12 KVDC at 10,000 feet [3,048 m] and -5°F to +185°F [-15°C to +85°C]

2-Position Connectors



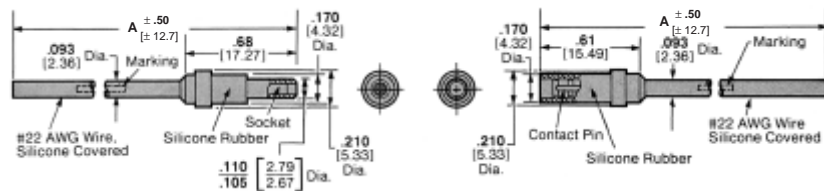
Plug

Receptacle

Dim. A	Part Number
12 305	866559-1
16 406	866559-5
18 457	866559-2
24 610	866559-3
48 1219	866559-4

Dim. A	Part Number
12 305	866196-1
16 406	866196-5
18 457	866196-2
24 610	866196-3
48 1219	866196-4

1-Position Connectors



Plug

Receptacle

Dim. A	Wire Color	Part Number
15 381	White	867823-1
30 762	White	867823-2
36 914	Green	867823-3
36 914	White	867823-4
6 152	White	867823-5
40 1016	White	867823-6

Dim. A	Wire Color	Part Number
24 610	White	867824-1
24 610	Green	867824-2
6 152	White	867824-3
40 1016	White	867824-4