

Gas Discharge Tube Type Arrestor with SMA connectors

- ✦ Frequency to 12.5 GHz
- ✦ Superior RF Performance
- ✦ Normal and Reverse Polarity SMA



- ✦ Multiple Strike Capability
- ✦ 20 kA Surge Protection
- ✦ Rugged and Waterproof
- ✦ Bi-directional Protection

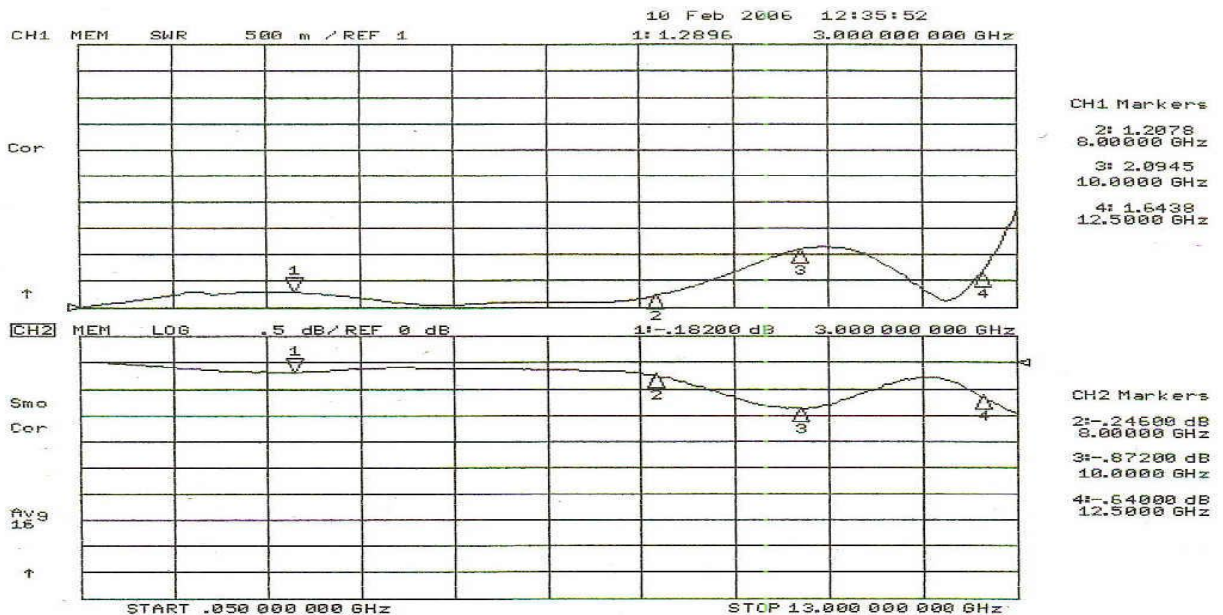
RF Specifications

- ✦ Nominal Impedance: 50Ω
- ✦ RF Power: 100 W Maximum
- ✦ Through Current: 65 Vdc / 5A Maximum

Transient Specifications

- ✦ Protection Voltage: 200V
- ✦ Maximum Transient: 20 kA (8x20μs)
- ✦ Multiple Strike: 5kA 10 times
- ✦ Let-through: 475 V<sub>peak</sub>/300μJ  
(Input 4kV 1.2x50μs / 2kA 8x20μs)

| Frequency (GHz) | VSWR (Average) | Insertion Loss, dB |
|-----------------|----------------|--------------------|
| Dc – 2.5        | 1.2            | 0.1                |
| 2.5 – 8.0       | 1.3            | 0.3                |
| 8.0 – 12.5      | 1.5            | 0.3                |



Typical VSWR and Insertion Loss

## Mechanical Specifications

✦ Weight: 0.7 ounces typ / 20 g typ

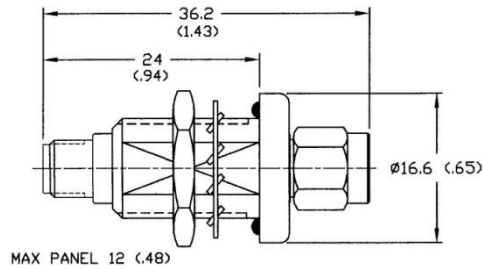
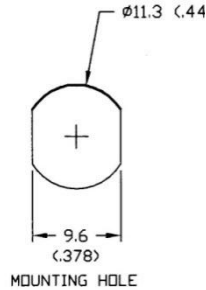


Figure 1



MOUNTING HOLE

mm (inches)

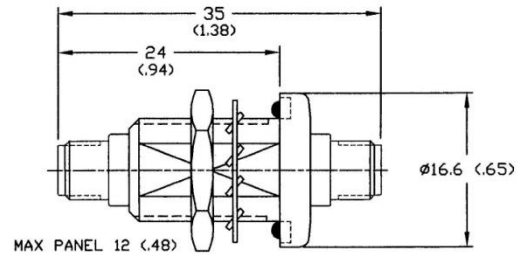


Figure 2

## Environmental Specifications

|                                    |  |
|------------------------------------|--|
| <b>Temperature Range</b>           | -40°C to +90°C   |
| <b>Salt Fog</b>                    | MIL-STD-202 Method 101D / Condition B (35°C/96 hrs)                    |
| <b>Immersion</b>                   | MIL-STD-202 Method 104A / Condition A (65°C to 25°C w/NaCl – 2 cycles) |
| <b>Moisture Resistance</b>         | MIL-STD-202 Method 106E (65 °C/98% RH condensing/240 hrs)              |
| <b>Temperature Shock</b>           | MIL-STD-202 Method 107D / Condition B-1 (25 cycles -65°C to +125°C)    |
| <b>Life (Elevated Temperature)</b> | MIL-STD-202 Method 108A / Condition A (96 hours at 100°C)              |
| <b>Dust and Waterproof Rating</b>  | IEC529 IP68 (dust-tight and water proof 24 hrs / 1 m)                  |
| <b>Vibration</b>                   | MIL-STD-202 Method 204D / Condition D (10Hz-2kHz 0.06"DA/20g)          |
| <b>Mechanical Shock</b>            | MIL-STD-202 Method 213 / Condition A (50g/11ms ~24")                   |

## Material and Finish

| Component               | Material      | Finish |
|-------------------------|---------------|--------|
| Outer Parts             | Brass         | Nickel |
| Inner and Outer Contact | BeCu or Brass | Gold   |
| Connectors              | Brass         | Gold   |
| Insulator               | PTFE          | -      |
| Gasket                  | EPDM          | -      |

Shown with  
Optional  
Bracket  
(P/N 782-0009)



## Part Number

| Polarity               | Part Number  | Mounting Nut Side Connector | Flange Side Connector | Fig. |
|------------------------|--------------|-----------------------------|-----------------------|------|
| Normal                 | PTCSAFSAF20G | SMA Female                  | SMA Female            | 2    |
|                        | PTCSAMSAF20G | SMA Female                  | SMA Male              | 1    |
| Reverse                | PTCSJMSJM20G | RP SMA Jack                 | RP SMA Jack           | 2    |
|                        | PTCSPFSJM20G | RP SMA Jack                 | RP SMA Plug           | 1    |
| Mixed Normal & Reverse | PTCSAFSJM20G | SMA Female                  | RP SMA Jack           | 2    |
|                        | PTCSJMFAF20G | RP SMA Jack                 | SMA Female            | 2    |
|                        | PTCSPFAF20G  | SMA Female                  | RP SMA Plug           | 1    |
|                        | PTCSAMSJM20G | RP SMA Jack                 | SMA Male              | 1    |