

## Gas Discharge Tube Lightning Arrestor UHF (SO-239) Connectors and a Replaceable Protective Element



### Features:

- ✦ DC pass
- ✦ Multiple Strike Capability
- ✦ 50 kA Surge Protection
- ✦ Bi-directional Protection
- ✦ Rugged and Waterproof

### RF Specifications

- ✦ Nominal Impedance 50Ω

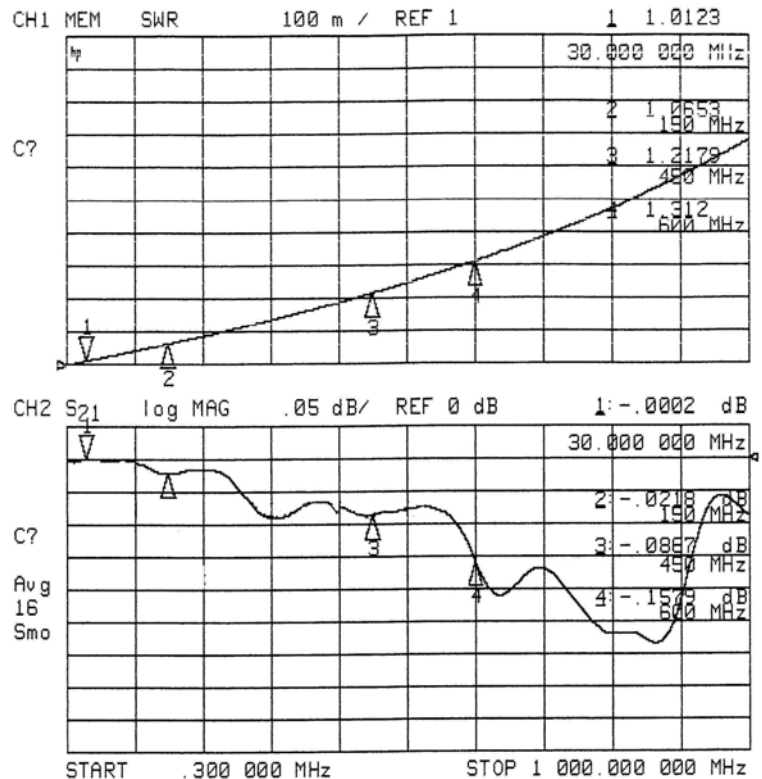
Frequency (MHz)	VSWR	Insertion Loss (dB)
dc – 30	1.02 Max	0.01 Max
30 – 150	1.10 Max	0.05 Max
150 – 450	1.25 Typ	0.1 Typ

- ✦ Through Current: 65V/12.5A Max
- ✦ RF Power: See Protection Voltage table

### Transient Specifications

(1.2X50μs Voltage / 8X20μs Current waveform)

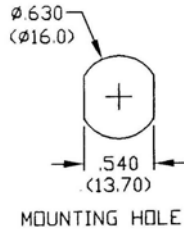
- ✦ Maximum Transient: 50 kA
- ✦ Multiple Strike: 20 kA 10 times
- ✦ Let-through: See Protection Voltage table
- ✦ Lifetime is renewable with exchange of protector tube
- ✦ Replaceable Gas Discharge Tube 90V to 1000V



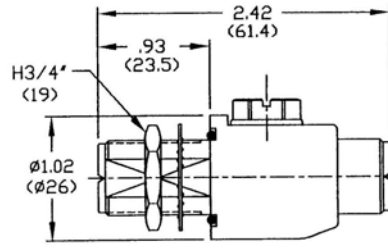
**Typical VSWR and Insertion Loss**

### Mechanical Specifications

- ✦ Mounting/Grounding:  $\phi$ .625 (15.9) bulkhead mount with environmental gasket. Grounding can also be via a bracket or wire lug to the bulkhead connector.
- ✦ Weight: 0.3 pounds typ / 140 g typ



inches (mm)



PANEL .44 (11) MAX

PTR UHFUHF XX S

### Environmental Specifications

<b>Temperature Range</b>	-40°C to +90°C
<b>Salt Fog</b>	MIL-STD-202 Method 101D /A (96 hours at 35°C with moisture wrap)
<b>Moisture Resistance</b>	MIL-STD-202 Method 106E (65°C/98% RH 96hrs)
<b>Temperature Shock</b>	MIL-STD-202 Method 107D / Condition B-1 (25 cycles -65°C to +125°C)
<b>Dust and Waterproof Rating</b>	IEC 529 IP65 (dust-tight and splash resistant with moisture wrap)
<b>Vibration</b>	MIL-STD-202 Method 204D /Condition D (10Hz-2kHz 0.06"DA/20g)
<b>Mechanical Shock</b>	MIL-STD-202 Method 213B /Condition A (50Gpk/11ms)
<b>Stress Screen</b>	MIL-STD-202 Method 108 A/A (96 hours at 100°C)

### Material and Finish

Component	Material	Finish
Outer Parts	Brass	Nickel
Center Contact	BeCu	Silver
Insulator	PTFE	
Gasket	Si Rubber	

- Use the voltage code in the part number
- For multiple carriers, sum of peak voltages should not exceed 60% of the protection voltage
- Input is 6kV @ 1.2x50 $\mu$ s/ 3kA @ 8x20 $\mu$ s.

### Protection Voltage

Protection Voltage	Voltage Code <sup>1</sup>	RF Power (W) <sup>2</sup>	Let-through (V <sub>pk</sub> / $\mu$ J) <sup>3</sup>
90	09	37	600 / 0.3
150	15	95	600 / 0.3
230	23	240	650 / 0.5
350	35	550	800 / 0.7
470	47	1000	1200 / 2.2
600	60	1600	1500 / 4.4
800	80	2900	1900 / 9.0
1000	99	4500	2200 / 14

### Part Number

PTR UHFUHF XX S

