

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)

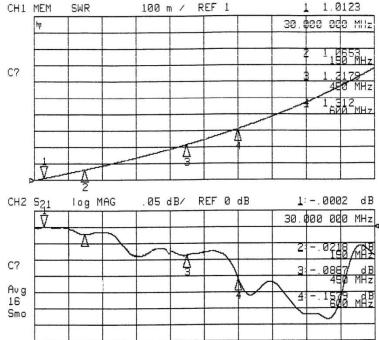
→ Maximum Transient: 50 kA

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

300 000 MHz

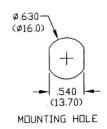
START

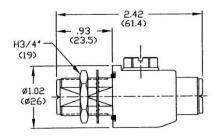
STOP 1 000.000 000 MHz



Mechanical Specifications

- → Mounting/Grounding: ϕ .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





PANEL .44 (11) MAX

inches (mm)

PTR UHFUHF XX S

Environmental Specifications

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

Material and Finish

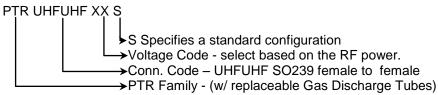
Component	Material	Finish
Outer Parts	Brass	Nickel
Center Contact	BeCu	Silver
Insulator	PTFE	
Gasket	Si Rubber	

¹ Use the voltage code in the part number

Protection Voltage

Protection Voltage	Voltage Code ¹	RF Power (W) ²	Let-through (V _{pk} / μJ) ³
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



For multiple carriers, sum of peak voltages should not exceed 60% of the protection voltage

³ Input is 6kV @ 1.2x50μs/ 3kA @ 8x20μs.