Product Specification
PTRUHFUHFxxS

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

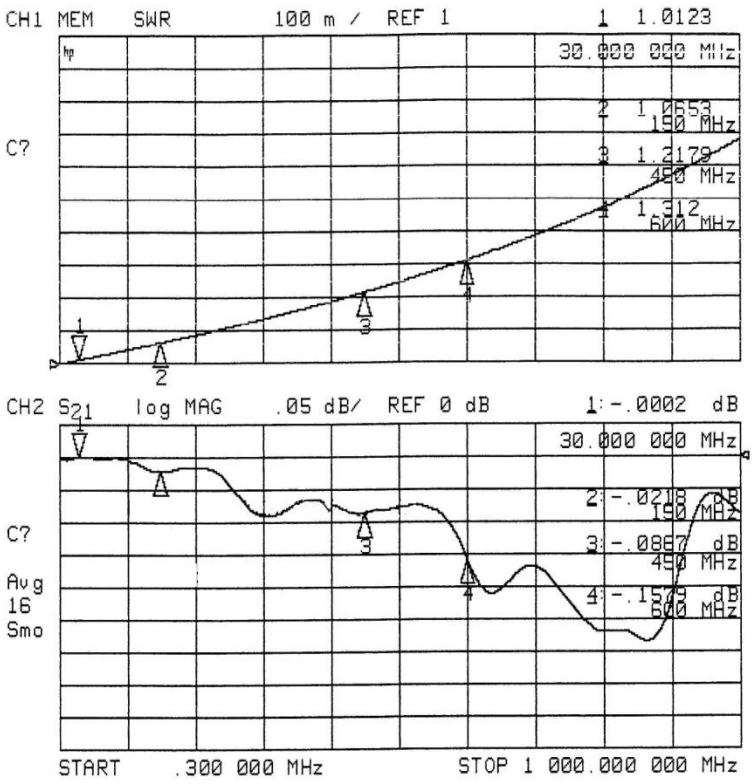
Frequency (MHz)	VSWR	Insertion Loss (dB)
dc – 30	1.02 Max	0.01 Max
30 – 150	1.10 Max	0.05 Max
150 – 450	1.25 Typ	0.1 Typ

- 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

101 Billerica Ave, Building 5, Suite 101
North Billerica, MA 01862
(978) 486-0582

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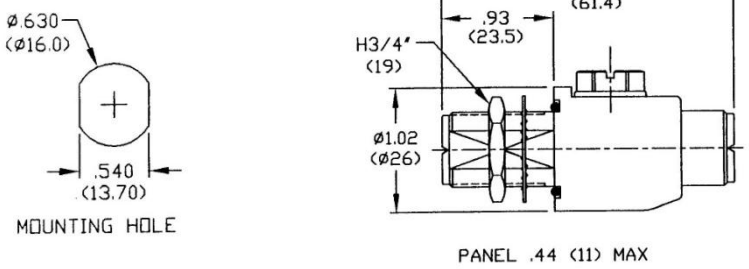
www.nextek.com

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



inches (mm)

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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
[2] For multiple carriers, sum of peak voltages should not exceed 60% of the protection voltage
[3] Input is 6kV @ 1.2x50μs/ 3kA @ 8x20μs.

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

PTR UHFUHF XX S

- S Specifies a standard configuration
- Voltage Code - select based on the RF power.
- Conn. Code – UHFUHF SO239 female to female
- PTR Family - (w/ replaceable Gas Discharge Tubes)