

Gas Discharge Tube Lightning Arrestor 75Ω TNC Connectors and a Replaceable Protective Element



Photo Shows 50Ω Version – Outline and Dimensions are Identical

Features:

- DC pass
- Multiple Strike Capability
- → 40 kA Surge Protection
- → Bi-directional Protection
- → Rugged and Water Resistant
- + 75Ω TNC Connectors
- → Performance to 750MHz

RF Specifications

Nominal Impedance 75Ω

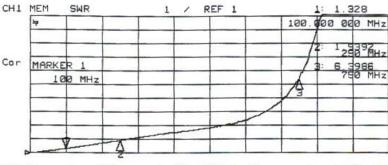
Frequency (MHz)	VSWR	Insertion Loss (dB)
dc – 250	1.5 avg	0.10 max
250 – 750	2.0 avg	0.14 max

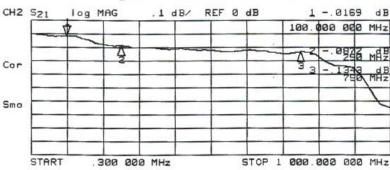
- → Through Current: 65V/7.5A Max
- → RF Power: See Protection Voltage table

Transient Specifications

(1.2X50μs Voltage / 8X20μs Current waveform)

- → Maximum Transient: 40 kA
- → Multiple Strike: 20 kA 10 times
- + Let-through: See Protection Voltage table
- Replaceable Gas Discharge Tube 90V to 600V

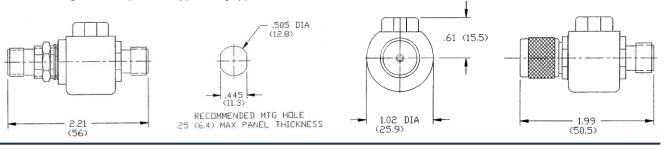




Typical VSWR and Insertion Loss

Mechanical Specifications

- Mounting/Grounding: Female to female by φ.500" (12.7mm) bulkhead mount with gasket or a bracket or wire lug to the bulkhead connector. Grounding of the male to female by an integral ground lug.
- → Weight: 0.12 pounds typ / 55 g typ



Environmental Specifications

Temperature Range	-40°C to +90°C	
Temperature Shock	MIL-STD-202 Method 107D /Condition B-1 (25 cycles -65°C to +125°C)	
Dust and Waterproof Rating	IEC 529 IP67 (dust-tight and waterproof 1hr / 1m)	
Moisture Resistance	MIL-STD-202 Method 106E (65°C to 25 °C /98% RH 240hrs)	
Salt Fog	MIL-STD-202 Method 101D /Condition A (96 hours at 35°C)	
Vibration	MIL-STD-202 Method 204D /Condition D (10Hz-2kHz 0.06"DA/20g)	
Mechanical Shock	MIL-STD-202 Method 213B /A (50Gpk/11ms)	
Immersion	MIL-STD-202 Method 104A /B (12" 65°C to 15°C)	

Protection Voltage

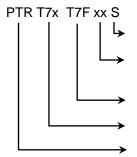
Protection Voltage ⁴	Voltage Code ¹	RF Power (W) ²	Let-through (V _{pk} / μJ) ³
90	09	37	600 / 0.3
150	15	95	600 / 0.3
230	23	240	650 / 0.5
350	35	550	800 / 0.7
470	47	1000	1200 / 2.2
600	60	1600	1500 / 2.2

Material and Finish

Component	Material	Finish
Outer Parts	Brass	Nickel
Center Contact	BeCu	Gold
Insulator	PTFE	
Gasket	Elastomer	

- ¹ use voltage code in ordering part number
- for multiple carrier sum of peak voltage should be less than 60% of protection voltage
- ³ input is 6kV 1.2x50µs / 3 kA 8x20µs waveform
- 4 for voltages greater than 600V, please contact NexTek

Part Number



S specifies the standard model

Voltage Code - select based on the RF power. Use 23 for most applications

Second connector is TNC female

Replace x with M for male or F for female,

PTR Family - (Protector with Replaceable Gas Discharge Tubes)