

Gas Discharge Tube Lightning Arrestor TNC connectors



Features:

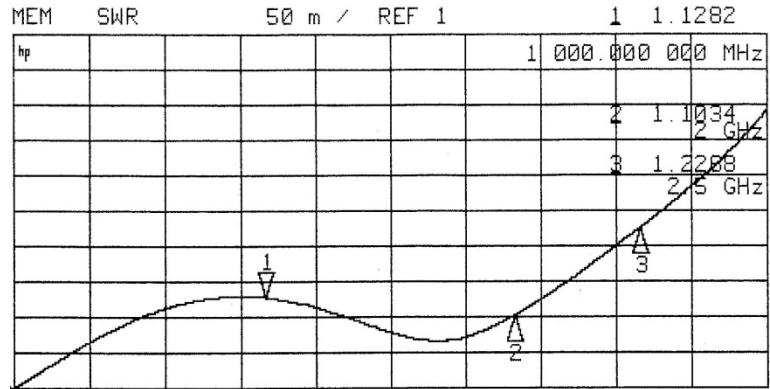
- ✦ Multiple Strike Capability
- ✦ 40 kA Surge Protection
- ✦ Rugged and Water Resistant
- ✦ DC pass
- ✦ Bi-directional Protection

RF Specifications

- ✦ Nominal Impedance – 50Ω

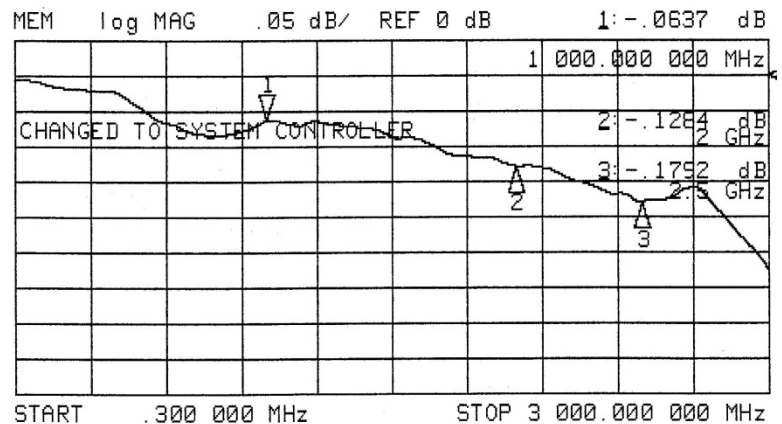
Frequency (GHz)	VSWR	Insertion Loss (dB)
dc – 2.5	1.25 Max	0.15 Max

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



Transient Specifications

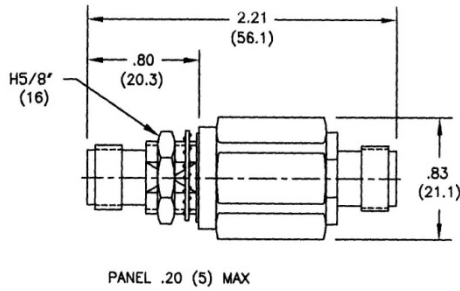
- ✦ 8.2x50 / 8x20 Gas Discharge Tube 90V to 600V
- ✦ Maximum Transient: 40 kA (8x20μs)
- ✦ Multiple Strike: 20kA ~10 times
- ✦ Let-through: See Protection Voltage table



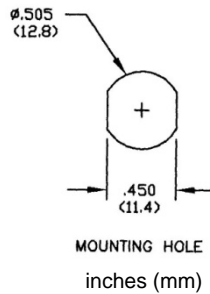
Typical VSWR and Insertion Loss

Mechanical Specifications

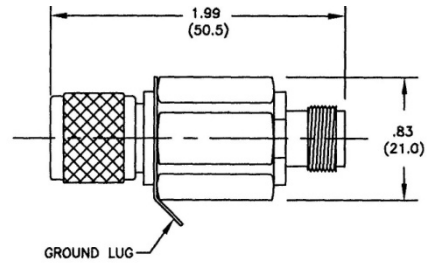
- ✦ Mounting/Grounding: Female to female by $\phi .500''$ (12.7mm) bulkhead mount with gasket or a bracket or wire lug to the bulkhead connector. Grounding of the male to female by an integral ground lug.
- ✦ Weight: 0.12 pounds typ / 55 g typ



PTC TNFTNFXXS



MOUNTING HOLE
inches (mm)



PTCTNMTNFXXS

Environmental Specifications

Temperature Range	-40°C to +90°C
Temperature Shock	MIL-STD-202 107D /B-1 (25 cycles -65°C to +125°C)
Dust and Waterproof Rating	IEC 529 IP65 (dust-tight and splash resistant)
Moisture Resistance	MIL-STD-202 Method 106E (65°C to 25 °C /98% RH 96hrs)
Salt Fog	MIL-STD-202 Method 101D /A (96 hours at 35°C)
Vibration	MIL-STD-202 Method 204 /D (10Hz-2 kHz 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} / μ J) 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
- ² for single frequency signal; for multiple carrier sum of V_{peak} should be less than 60% of Protection Voltage
- ³ input is 6kV 1.2x50 μ s / 3 kA 8x20 μ s waveform
- ⁴ for voltages greater than 600V, please contact NexTek

Part Number

PTC TNX TNF XX S

- 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,
- PTC Family - (Protector Gas Discharge Tubes)