Product Specification
PTRTNxTNFxxS

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

Features:

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

RF Specifications

- Nominal Impedance 50Ω

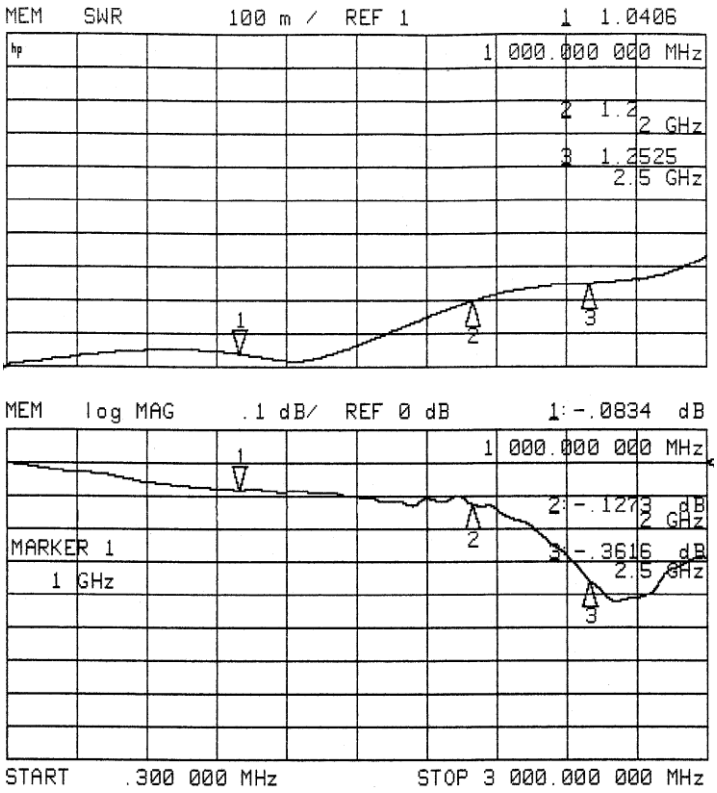
Frequency (GHz)	VSWR	Insertion Loss (dB)
dc – 2.0	1.2 Max	0.15 Max
2.0 – 2.5	1.4 Max	0.40 Max

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

Transient Specifications

(1.2X50µs Voltage / 8X20µs Current waveform)

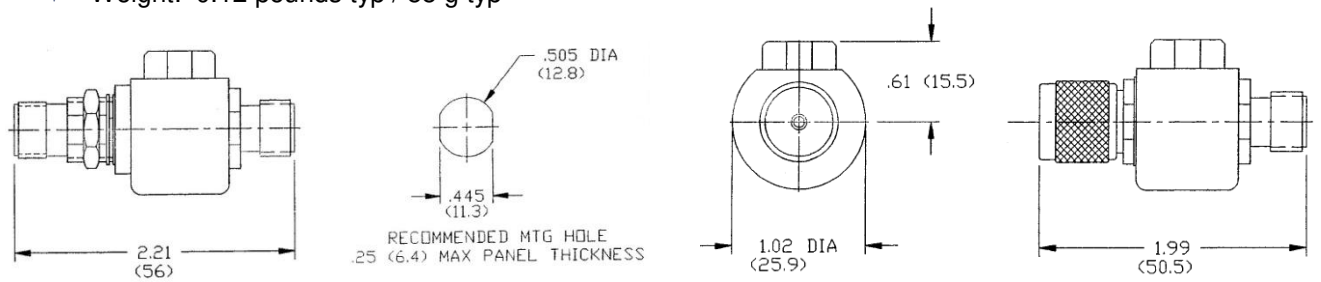
- Maximum Transient: 40 kA
- Multiple Strike: 20 kA 10 times
- Let-through: See Protection Voltage table
- Replaceable Gas Discharge Tube 90V to 600V



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
2 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

PTR 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,
- PTR Family - (Protector with Replaceable Gas Discharge Tubes)