

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



Features:

- + Frequency to 2.5 GHz
- + Excellent RF Performance
- + Multiple Strike Capability
- + 40 kA Surge Protection
- + Bi-directional Protection
- + Rugged and Waterproof

RF Specifications

Nominal Impedance – 50 Ω

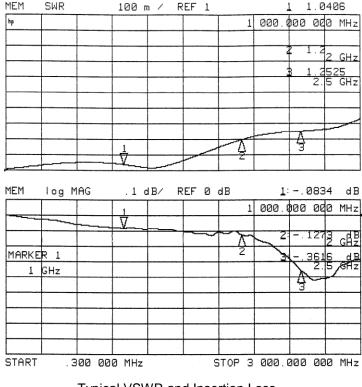
Frequency (GHz)	VSWR	Insertion Loss (dB)
dc – 2	1.25 Max	0.15 Max
2 – 2.5	1.4 Max	0.4 Max

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

Transient Specifications

(1.2X50µs Voltage / 8X20µs Current waveform)

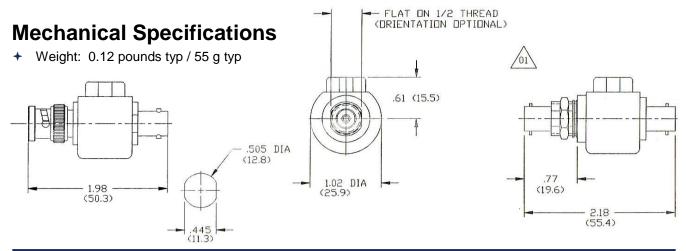
- Maximum Transient: 40 kA (8x20μs)
- + Multiple Strike: 20 kA 10 times
- + Let-through: See Protection Voltage table
- Replaceable Gas Discharge Tube 90V to 600V



Typical VSWR and Insertion Loss



Product Specification PTRBNxBNFxxS



Environmental Specifications

Temperature Range	-40°C to +90°C
Salt Fog	MIL-STD-202 Method 101D / Condition B (35°C/96 hrs)
Immersion	MIL-STD-202 Method 104A / Condition A (65°C to 25°C w/NaCI – 2 cycles)
Moisture Resistance	MIL-STD-202 Method 106E (65 °C/98% RH condensing/240 hrs)
Temperature Shock	MIL-STD-202 Method 107D / Condition B-1 (25 cycles -65°C to +125°C)
Life (Elevated Temperature)	MIL-STD-202 Method 108A / Condition A (96 hours at 100°C)
Dust and Waterproof Rating	IEC529 IP68 (dust-tight and water proof 24 hrs / 1 m)
Vibration	MIL-STD-202 Method 204D / Condition D (10Hz-2kHz 0.06"DA/20g)
Mechanical Shock	MIL-STD-202 Method 213 / Condition A (50g/11ms ~24")

Material and Finish

Component	Material	Finish
Outer Parts	Brass	Guardplate™
Center Contact	BeCu	Gold
Insulator	PTFE	
Gasket	Si Rubber	

Guardplate[™] is an alloy finish with the PIM and conductivity of Silver and the durability and anti-tarnish properties of Nickel.

Protection Voltage

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

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.

Part Number

PTR BNXBNF XX S					
			S Specifies the Standard model,		
		$ \rightarrow $	Voltage Code - select based on the RF power. Use 23 for most applications		
		\rightarrow	Connector Codes – BNF BNF for female to female, BNM BNF for male to female		
		\rightarrow	PTR Family - (Protector w/ replaceable Gas Discharge Tubes)		