Product Specification
PTCBNxBNFxxS

Gas Discharge Tube Lightning Arrestor
BNC Connectors

Features:

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

RF Specifications

- Nominal Impedance – 50 Ω
- 75Ω intermatable with excellent performance for applications to 500MHz

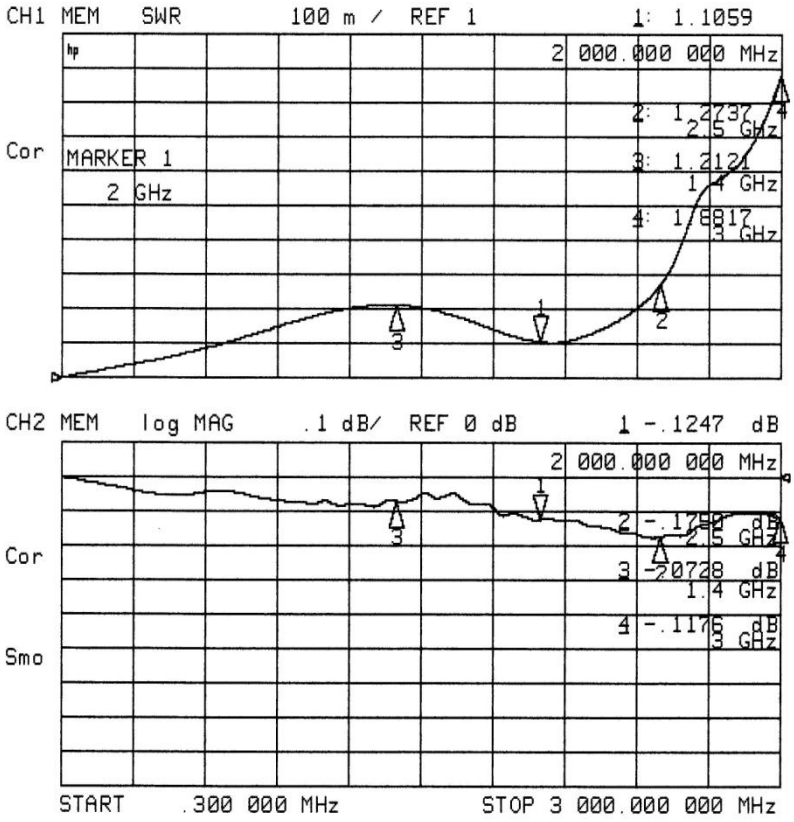
Frequency (GHz)	VSWR	Insertion Loss (dB)
dc – 2.5	1.25 Max	0.15 Max

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

Transient Specifications

(1.2X50μs Voltage / 8X20μs Current waveform)

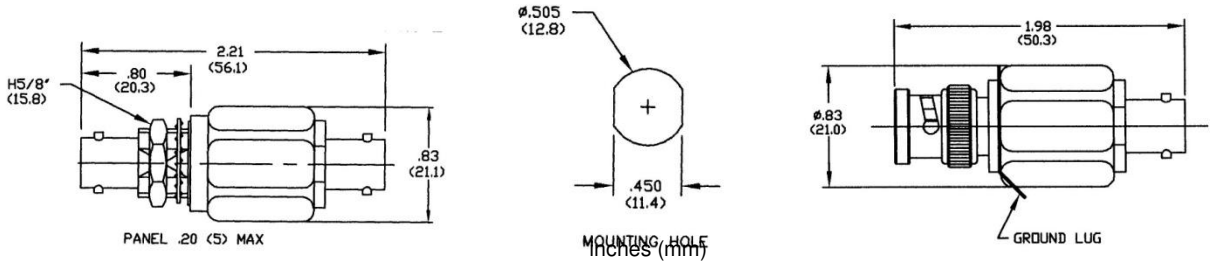
- Gas Discharge Tube 90V to 600V
- Maximum Transient: 40 kA (8x20μs)
- Multiple Strike: 20kA 10 times
- Let-through: See Protection Voltage table



Typical VSWR and Insertion Loss

Mechanical Specifications

- Mounting/Grounding: Female to female by 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



PTC BNF BNF XX S

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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/NaCl – 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")

Protection Voltage

Protection Voltage[4]	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 / 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] Contact NexTek for voltages geater than 600V

Part Number

PTC BNX BNF XX S

- S specifies the standard model
- Voltage Code - select based on the RF power. Use 23 for most applications
- Second connector is BNC female
- Replace X with M for male or F for female
- PTC Family - (Protector Gas Discharge Tubes)