

# 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  $\Omega$
- 75Ω intermatable with excellent performance for applications to 500MHz

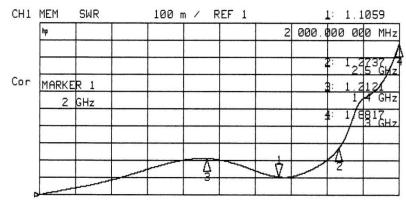
Frequency (GHz)	VSWR	Insertion Loss (dB)
dc – 2.5	1.25 Max	0.15 Max

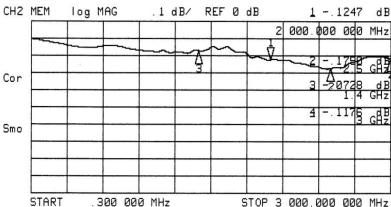
- → Through Current: 65V/7.5 A Max
- RF Power: See Protection Voltage table

#### **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

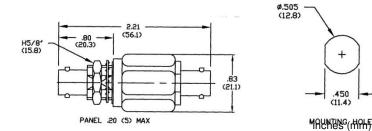


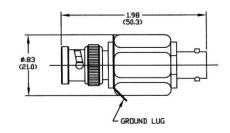


Typical VSWR and Insertion Loss

#### **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





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PTC BNM BNF XX S

#### **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)		
<b>Dust and Waterproof Rating</b>	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 <sup>4</sup>	Voltage Code <sup>1</sup>	RF Power (W) <sup>2</sup>	Let-through (V <sub>pk</sub> / mJ) <sup>3</sup>
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	

- use voltage code in ordering part number
- for multiple carrier sum of peak voltage should be less than 60% of protection voltage
- <sup>3</sup> input is 6kV 1.2x50μs / 3 kA 8x20μs waveform
- Contact NexTek for voltages geater than 600V

### **Part Number**

