

Gas Discharge Tube Lightning Arrestor N to SMA connectors



Features:

- Transition from rugged N to more compact SMA connector
- Multiple Strike Capability
- + 20 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: 5 A Max
- +RF Power: See Protection Voltage table

Transient Specifications

(1.2X50µs Voltage / 8X20µs Current waveform)

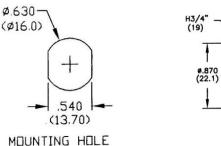
- Replaceable Gas Discharge Tube 90 to 470 V
- +Maximum Transient: 20 kA (8x20μs)
- +Multiple Strike: 10kA 10 times
- +Let-through: See Protection Voltage table

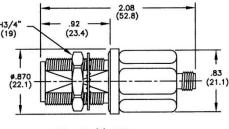
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Mechanical Specifications

- Mounting/Grounding: φ.625 (15.9) bulkhead mount with environmental gasket. Grounding can also be via a bracket or wire lug to the bulkhead connector
- + Weight: 0.13 pounds typ / 70 g typ





PANEL .28 (7) MAX

Environmental Specifications

TemperatureRange	-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} / 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

Material and Finish

Component	Material	Finish	
Outer Parts	Brass	Nickel	
Center Contact	BeCu	Gold	
Insulator	PTFE	-	
Gasket	Elastomer	-	

¹ use in ordering part number

² for single frequency signal; multiple carrier sum of

Vpeak should be less than 60% of Protection Voltage

³ input is 6kV 1.2x50µs / 3 kA 8x20µs

⁴ contact NexTek for voltages greater than 470 V

Part Number

PTC ONFSAF XX S

S specifies the standard model Voltage Code - select based on the RF power. Use 23 for most applications Connector code for SMA female Connector Code for N female bulkhead PTC Family - (Protector w/ Gas Discharge Tubes)