

Gas Discharge Tube Lightning Protector SMA connectors



Features:

- ✦ Multiple Strike Capability
- ✦ 10 kA Surge Protection
- ✦ Lifetime gas tube
- ✦ Rugged and water resistant
- ✦ DC pass
- ✦ Bi-directional Protection

RF Specifications

- ✦ Nominal Impedance: 50Ω

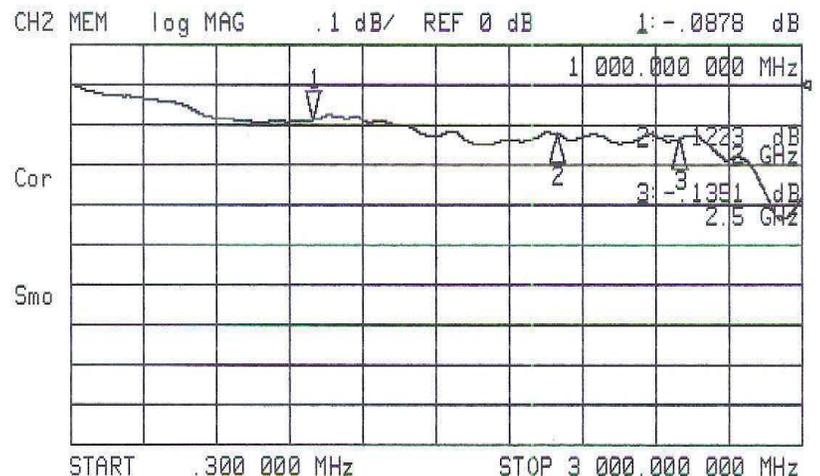
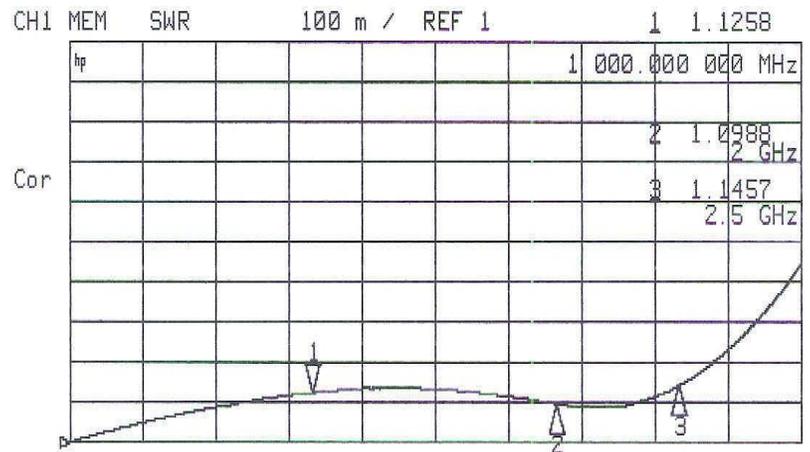
Frequency (GHz)	VSWR	Insertion Loss (dB)
dc – 2.5	1.25 Typ	0.15 Typ

- ✦ Through Current: 65V/5 A Max
- ✦ RF Power: See Protection Voltage table

Transient Specifications

(1.2X50μs Voltage / 8X20μs Current waveform)

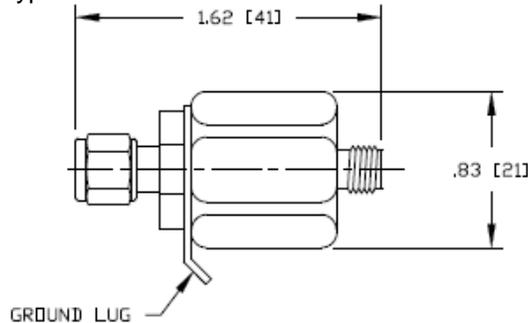
- ✦ Gas Discharge Tube 90 to 470 V
- ✦ Maximum Transient: 10 kA (surge limited by SMA connector size)
- ✦ Multiple Strike: 7.5kA 10 times
- ✦ Let-through: See Protection Voltage table



Typical VSWR and Insertion Loss

Mechanical Specifications

- ✦ Mounting/Grounding: Mounting to a grounded bulkhead SMA and/or by integral ground lug
- ✦ Weight: 0.10 pounds typ / 45 g typ



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 IP67 (dust-tight and water proof 30 min / 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 V_{peak} should be less than 60% of Protection Voltage

³ Input is 4kV 1.2x50μs / 2 kA 8x20μs

⁴ For voltages greater than 470 please call Nextek

Part Number

PTC SAM SAF XX S

