Product Specification
PTRONFONM23S

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

PTRONFONM23S (N-Female to N-Male)

Features:

- **Frequency to 2.5 GHz**
- **Excellent RF Performance**
- **Multiple Strike Capability**
- **50 kA Surge Protection**
- **Bi-directional Protection**
- **Rugged and Waterproof**
- **High RF Power and Low PIM**

RF Specifications

- Nominal Impedance – 50 Ω

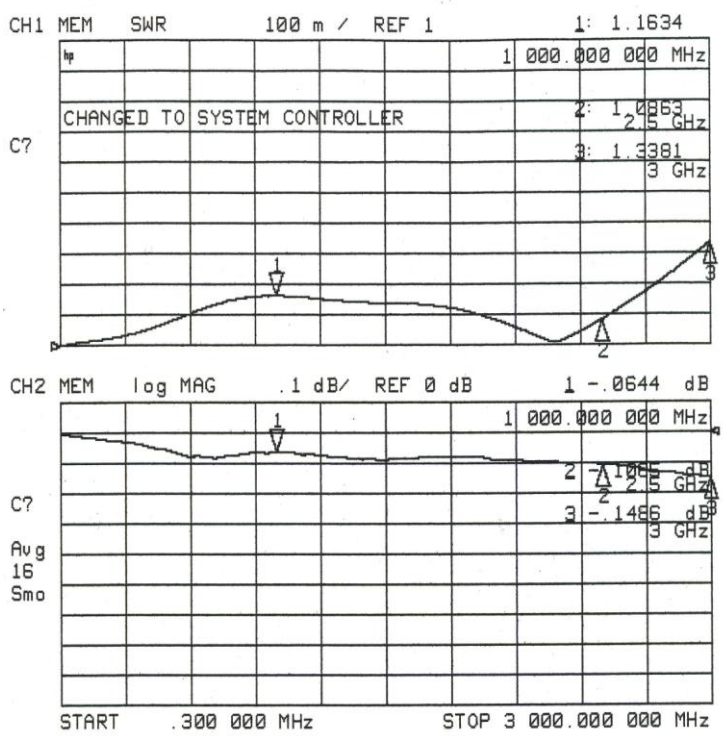
Frequency (GHz)	VSWR	Insertion Loss (dB)
dc – 2.5	1.30 Max	0.15 Max

- Through Current: 65V/10A Max
- RF Power: 230W
- PIM3: -116 dBc
  (2X43 dBm 1.9 GHz tones)

Transient Specifications

(1.2X50μs Voltage / 8X20μs Current waveform)

- Maximum Transient: 50 kA
- Multiple Strike: 20 kA 10 times
- Let-through: 650Vpk / 0.5mJ
- Replaceable Gas Discharge Tube 230V



Typical VSWR and Insertion Loss

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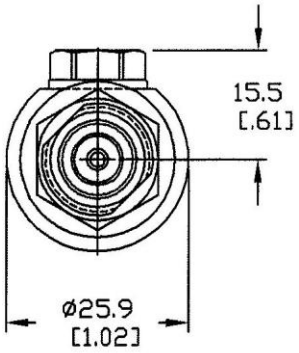
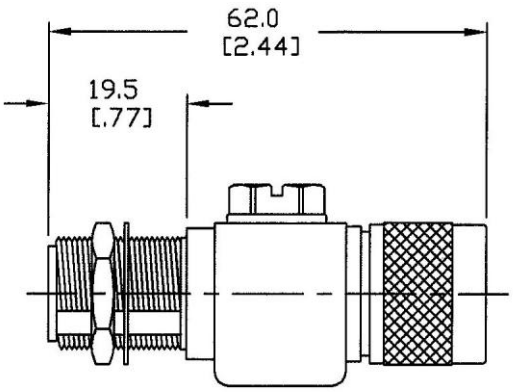
Westford, MA 01886

This specification is for reference only, and is subject to change without notice

(978) 486-0582
www.nexteklightning.com

Mechanical Specifications





PANEL 3.3 [.13] MAX

PTR ONFONM 23S
FEMALE TO MALE

DIMENSIONS IN [ ] ARE INCHES

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
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 1 hr / 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	Nickel
Center Contact	BeCu	Gold
Insulator	PTFE	-
Gasket	Si Rubber	-

[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.

Protection Voltage

Protection Voltage	Voltage Code[1]	RF Power (W)[2]	Let-through (V_{pk} / mJ)[3]
230	23	240	650 / 0.5