

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

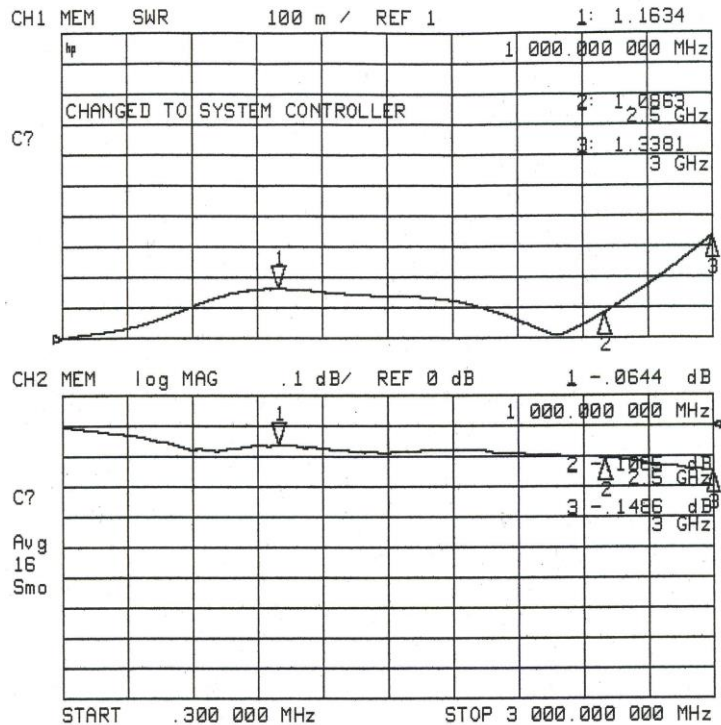
| Frequency (GHz) | VSWR | Insertion Loss (dB) |
|-----------------|----------|---------------------|
| dc – 2.0 | 1.30 Max | 0.15 Max |
| 2.0 – 2.5 | 1.50 Max | 0.45 Max |

- ✦ Through Current: 65V/10A Max
- ✦ RF Power: See Protection Voltage table
- ✦ PIM3: -116 dBc
(2X43 dBm 1.9 GHz tones)

Transient Specifications

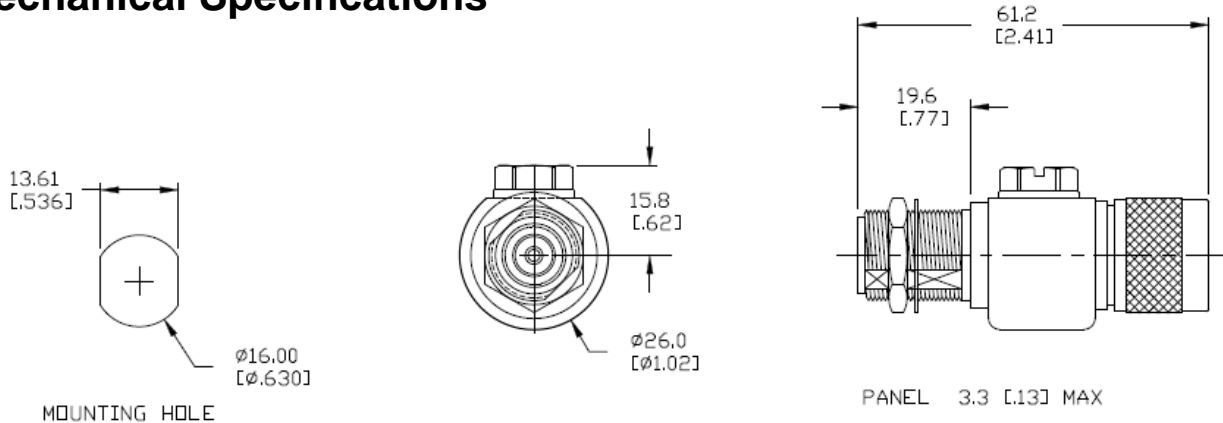
(1.2X50µs Voltage / 8X20µs Current waveform)

- ✦ Maximum Transient: 50 kA
- ✦ Multiple Strike: 20 kA 10 times
- ✦ Let-through: See Protection Voltage table
- ✦ Replaceable Gas Discharge Tube 90V to 1000V



Typical VSWR and Insertion Loss

Mechanical Specifications



Typical Weight - .25 lbs

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 | - |

Protection Voltage

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

- 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.