

# N to N Quarter Wave Lightning Protector 0.82 to 0.97 GHz



#### Features:

- Low VSWR
- Low Insertion Loss
- → 60 kA Surge Protection
- → Bi-directional Protection
- + Rugged and Weatherproof

## **RF Specifications**

→ Nominal Impedance 50Ω

Frequency	VSWR	Loss (dB)
(GHz)	typ / max	typ / max
0.82 - 0.96	1.05 / 1.15	0.05 / 0.10

→ Return Loss (dB typ/min): 32.5/23.1

→ RF Power: 0.8kW<sub>avg</sub>/4kW<sub>pk</sub>

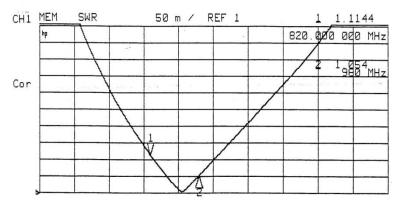
→ PIM 3: -160dBc typ(2X43dBm)

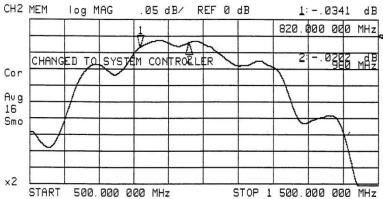


(1.2X50μs Voltage / 8μsX20μs Current waveform)

→ Maximum Transient: 60 kApk

+ Let Through (V<sub>peak</sub>/μJ): 7V/7μJ Input: 6kV/3kA Output: into 50Ω



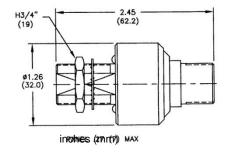


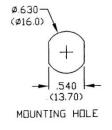
Typical VSWR and Insertion Loss

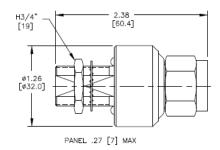


### **Mechanical Specifications**

- 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: 0.3 pounds typ / 140 g typ







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#### **Material and Finish**

Component	Material	Finish
Outer Parts	Brass	Guardplate™
Center Contact	BeCu	Gold
Insulator	PTFE	-
Gasket	Si Rubber	-

Guardplate<sup>™</sup> is an alloy finish with the PIM and conductivity of Silver and the durability and antitarnish properties of Nickel.

## **Environmental Specifications**

Temperature Range	-40oC to +90oC
Salt Fog	MIL-STD-202 Method 101D / Condition B (35oC/96 hrs)
Immersion	MIL-STD-202 Method 104A / Condition A (65oC to 25oC w/NaCl – 2 cycles)
Moisture Resistance	MIL-STD-202 Method 106E (65 oC/98% RH condensing/240 hrs)
Temperature Shock	MIL-STD-202 Method 107D / Condition B-1 (25 cycles -65oC to +125oC)
Life (Elevated Temperature)	MIL-STD-202 Method 108A / Condition A (96 hours at 100oC)
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")

### **Part Number**

