

### N to N Quarter Wave Lightning Protector – 1.45GHz to 1.70GHz (Normal and Reverse Polarity)



- ✦ Low VSWR and Insertion Loss
- ✦ 60kA Surge Protection
- ✦ Normal and Reverse Polarity
- ✦ Bi-directional Protection
- ✦ DC Block
- ✦ Rugged and Weatherproof
- ✦ Ideal for GPS applications

## RF Specifications

- ✦ Nominal Impedance 50Ω

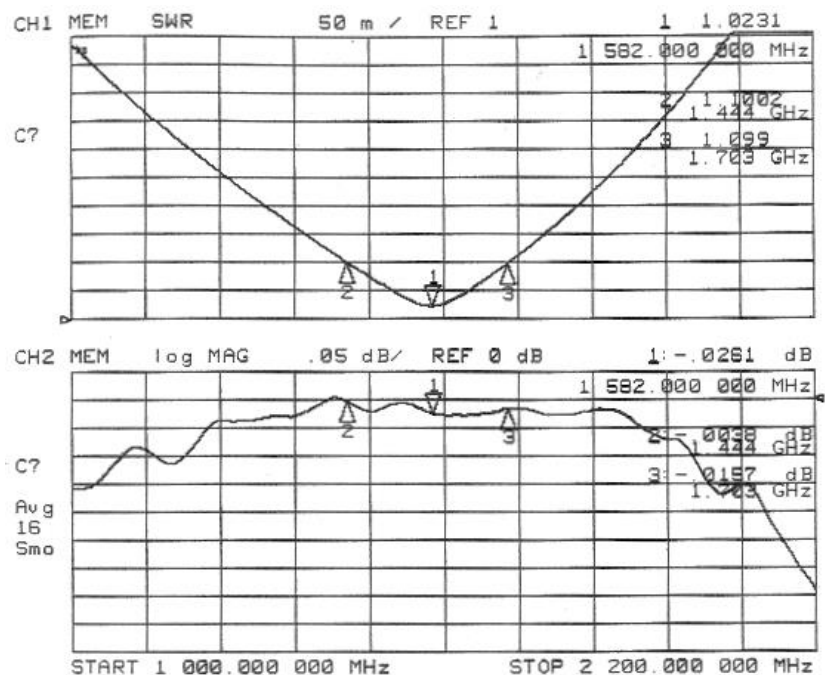
Frequency (GHz)	VSWR typ / max	Loss (dB) typ / max
1.45 – 1.70	1.05 / 1.15	0.05 / 0.10

- ✦ Return Loss (dB typ/min): 25.7/20.0
- ✦ RF Power: 0.5kW<sub>avg</sub> / 4kW<sub>pk</sub>

## Transient Specifications

(1.2X50μs Voltage / 8X20μs Current waveform)

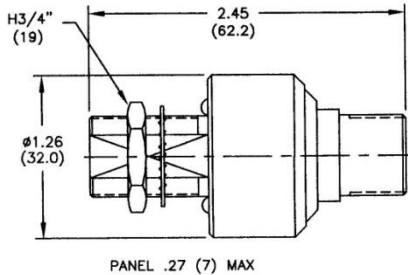
- ✦ Maximum Transient: 60kA<sub>pk</sub>
- ✦ Let Through (V<sub>peak</sub>/μs): 13V/17μs  
Input: 6kV/3kA Output: into 50Ω



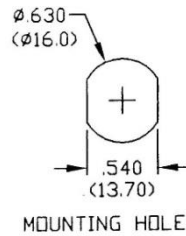
Typical VSWR and Insertion Loss

### Mechanical Specifications

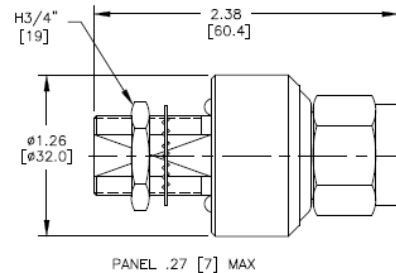
- ✦ Mounting/Grounding:  $\phi$ .625 (15.9) bulkhead mount with environmental gasket. Grounding can also be via a bracket or wire lug to the bulkhead connector
- ✦ Weight: 0.30lbs / 140g typical



QSSNFNFAU00  
QSSNJNJAU00



inches (mm)



QSSNFNMAU00  
QSSNJNPAU00

### Material and Finish

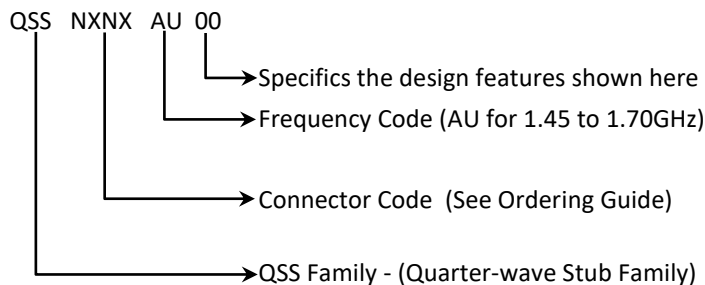
Component	Material	Finish
Outer Parts	Brass	Guardplate™
Center Contact	BeCu	Gold
Insulator	PTFE	-
Gasket	Si Rubber	-

Guardplate™ is an alloy finish with the PIM and conductivity of Silver and the durability and anti-tarnish properties of Nickel.

### Environmental Specifications

Temperature Range	-40°C to +90°C
Temperature Shock	MIL-STD-202 Method 107D / Condition B-1 (25 cycles -65°C to +125°C)
Dust and Waterproof Rating	IEC529 IP68 (dust-tight and water proof 24 hrs / 1 m)
Moisture Resistance	MIL-STD-202 Method 106E (65°C/98% RH condensing/240 hrs)
Salt Fog	MIL-STD-202 Method 101D / Condition B (35°C/96 hrs)
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")
Immersion	MIL-STD-202 Method 104A / Condition A (65°C to 25°C w/NaCl – 2 cycles)

### Part Number



### Connector Ordering Guide

Connector Orientation	Ordering Code
N Female – N Male	NFNM
N Female – N Female	NFNF
N RP Jack – N RP Jack	NJNJ
N RP Jack – N RP Plug	NJNP