

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

→ Return Loss (dB typ/min): 25.7/20.0

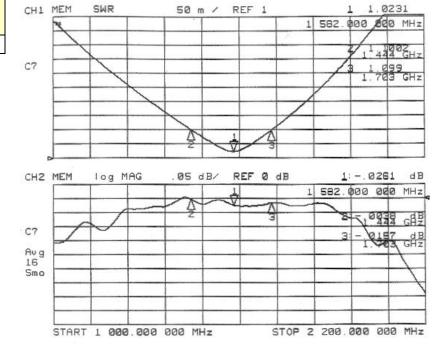
→ RF Power: 0.5kW_{avg} / 4kW_{pk}

Transient Specifications

(1.2X50μs Voltage / 8X20μs Current waveform)

Maximum Transient: 60kA_{pk}

Let Through (V_{peak}/μJ): 13V/17μJ
Input: 6kV/3kA Output: into 50Ω

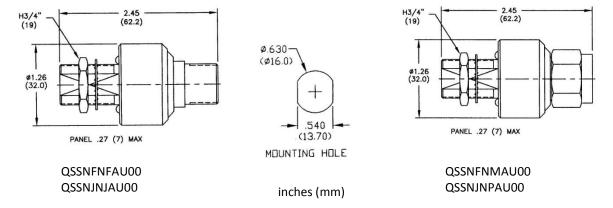


Typical VSWR and Insertion Loss



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



Material and Finish

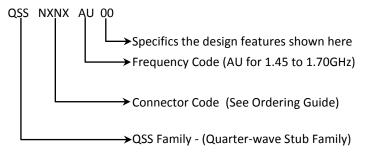
Component	Material	Finish
Outer Parts	Brass	Guardplate™
Center Contact	BeCu	Gold
Insulator	PTFE	-
Gasket	Si Rubber	-

Guardplate™ is an alloy finish with the PIM and conductivity of Silver and the durability and antitarnish 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