Product Specification
QSSNFNX0300

N to N Quarter Wave Lightning Protector
0.82GHz to 2.2GHz

Features:

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

RF Specifications

- Nominal Impedance 50Ω

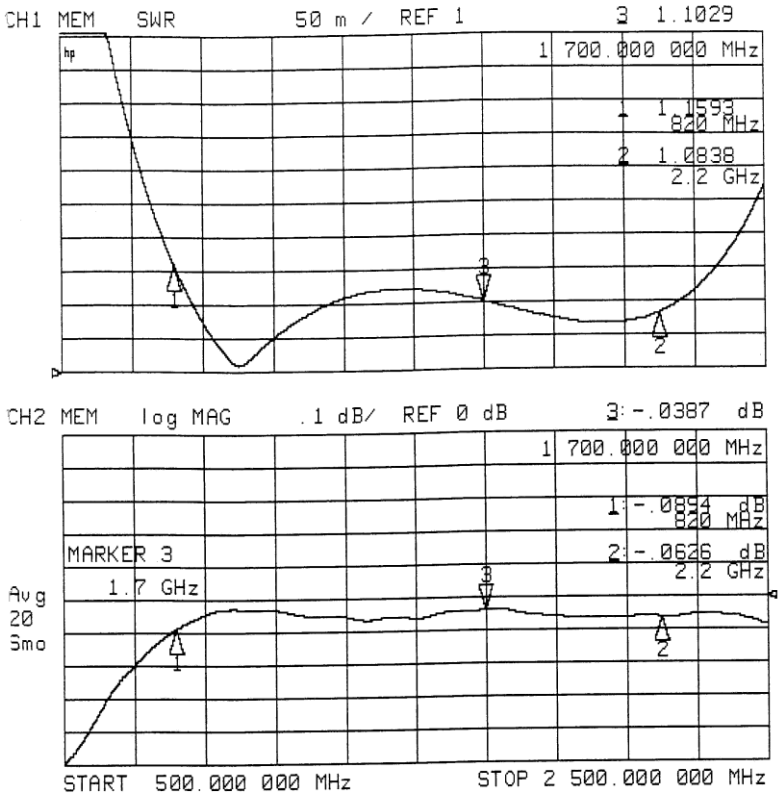
Frequency (GHz)	VSWR typ / max	Loss (dB) typ / max
0.82 – 2.20	1.05 / 1.15	0.05 / 0.10

- Return Loss (dB typ/min): 32.3/23.1
- RF Power: 1.2kW$_{avg}$ /4kW$_{pk}$
- PIM 3: -160dBc typ(2X43dBm)

Transient Specifications

(1.2X50μs Voltage / 8X20μs Current waveform)

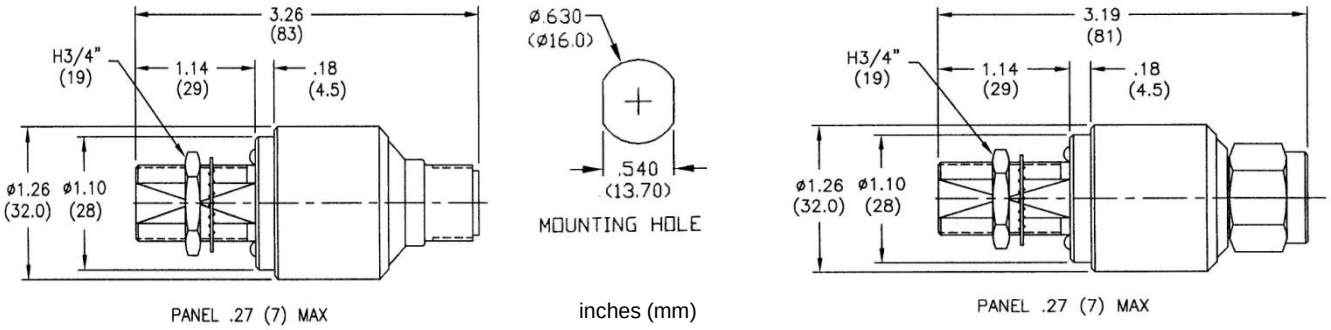
- Maximum Transient: 60kA$_{pk}$
- Let Through (V$_{peak}$/μJ): 12V/15μJ
  Input: 6kV/3kA Output: into 50Ω



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 (PN: 750-0088-01) or wire lug to the bulkhead connector.
- Weight: 0.4 pounds typ / 180 g typ



QSS NFNF 03 00

QSS NFNM 03 00

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
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 cycles)
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 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

QSS NF NX 03 00

- → Specifies the design features shown here
- → Frequency Code (03 for 0.82GHz to 2.20GHz)
- → Connector NF for N female, NM for N male
- → NF for bulkhead N female
- → QSS Family - (Quarter-wave Stub Family)