

### Wideband TNC to TNC Quarter Wave Lightning Protector 2.4 to 6.0 GHz (Normal and Reverse Polarity)



#### Features:

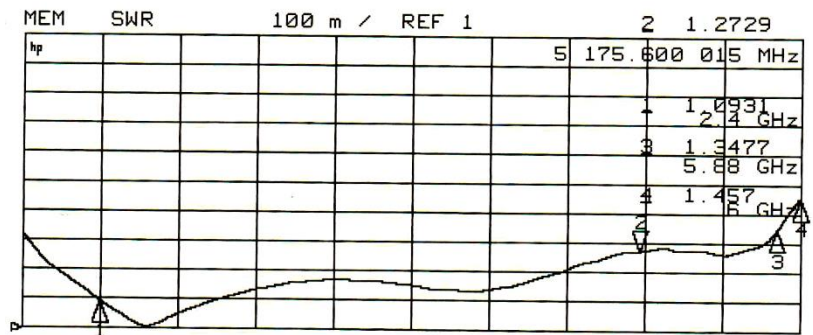
- ✦ Low VSWR
- ✦ Low Insertion Loss
- ✦ 45 kA Surge Protection
- ✦ Covers UNII, ISM, 802.11 in one unit
- ✦ Normal and Reverse Polarity
- ✦ Bi-directional Protection
- ✦ Rugged and Weatherproof

#### RF Specifications

- ✦ Nominal Impedance 50Ω

Frequency (GHz)	VSWR typ / max	Loss (dB) max
2.4 – 5.0	1.05 / 1.25	0.15
4.8 – 6.0	1.30 / 1.50	0.20

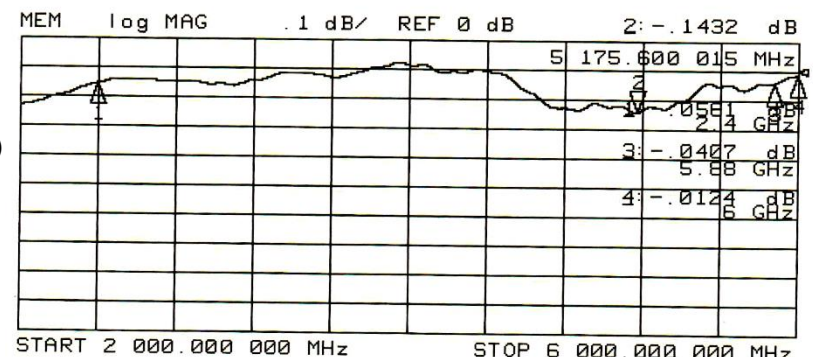
- ✦ Return Loss (dB typ/min): 32.5/23.2
- ✦ RF Power: 0.13 kW<sub>avg</sub>/1.0 kW<sub>pk</sub>



#### Transient Specifications

(1.2X50μs Voltage / 8X20μs Current waveform)

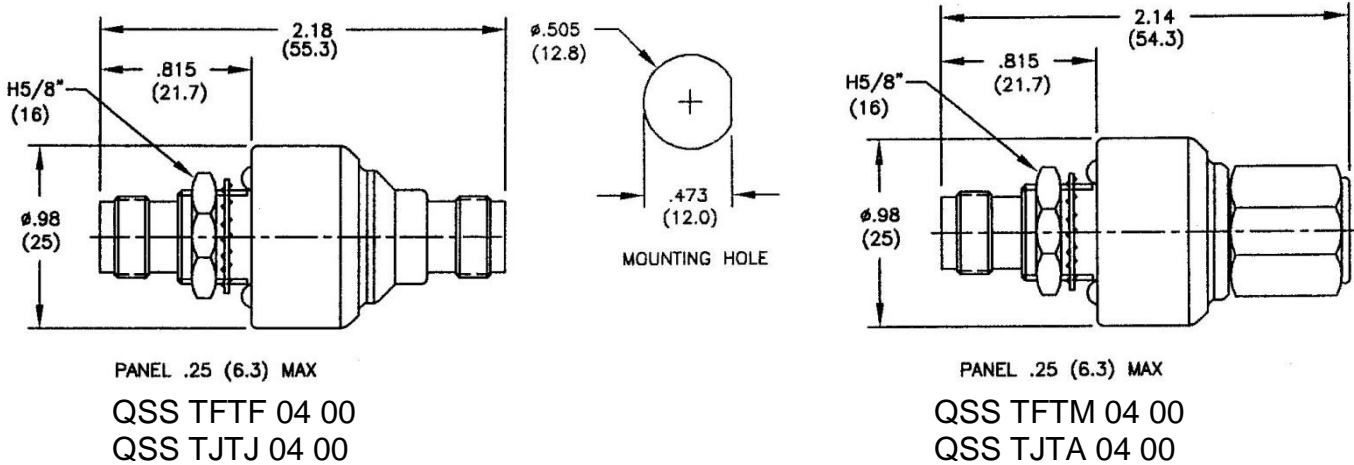
- ✦ Maximum Transient: 45 kA<sub>pk</sub> (8x20μs)
- ✦ Multiple Strike: 30 kA<sub>pk</sub> 10 times
- ✦ Let Through (V<sub>peak</sub>/μJ): 6.5V/3.5μJ  
Input: 6kV/3kA Output: into 50Ω



Typical VSWR and Insertion Loss

### Mechanical Specifications

- ✦ Mounting/Grounding:  $\phi$ .500 (12.7) bulkhead mount with environmental gasket. Grounding can also be via a bracket or wire lug to the bulkhead connector.
- ✦ Weight: 0.15 pounds typ / 70 g typ



### Environmental Specifications

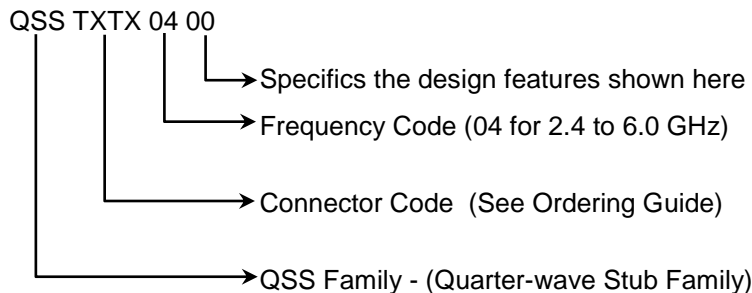
<b>Temperature Range</b>	-40oC to +90oC
<b>Salt Fog</b>	MIL-STD-202 Method 101D / Condition B (35oC/96 hrs)
<b>Immersion</b>	MIL-STD-202 Method 104A / Condition A (65oC to 25oC w/NaCl – 2 cycles)
<b>Moisture Resistance</b>	MIL-STD-202 Method 106E (65 oC/98% RH condensing/240 hrs)
<b>Temperature Shock</b>	MIL-STD-202 Method 107D / Condition B-1 (25 cycles -65oC to +125oC)
<b>Life (Elevated Temperature)</b>	MIL-STD-202 Method 108A / Condition A (96 hours at 100oC)
<b>Dust and Waterproof Rating</b>	IEC529 IP68 (dust-tight and water proof 24 hrs / 1 m)
<b>Vibration</b>	MIL-STD-202 Method 204D / Condition D (10Hz-2kHz 0.06"DA/20g)
<b>Mechanical Shock</b>	MIL-STD-202 Method 213 / Condition A (50g/11ms ~24")

### 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.

### Part Number



### Connector Ordering Guide

Connector Orientation	Ordering Code
TNC Female – TNC Male	TFTM
TNC Female – TNC Female	TFTF
TNC RP Jack – TNC RP Jack	TJTJ
TNC RP Jack – TNC RP Plug	TJTP