

## Satellite Navigation Fine Protector - Multistage Lightning Arrestor with TNC Connectors

GPS – L1, L2, L5  
Galileo, EGNOS  
WASS, GLONASS



### Features:

- ✦ Very Low Let-Through Voltage
- ✦ Frequency 1.10GHz – 1.70GHz
- ✦ Excellent RF Performance
- ✦ 30kA Surge Protection
- ✦ Rugged and Waterproof
- ✦ Bulkhead Grounding
  - L-Bracket and Wire Lug Available

## RF Specifications

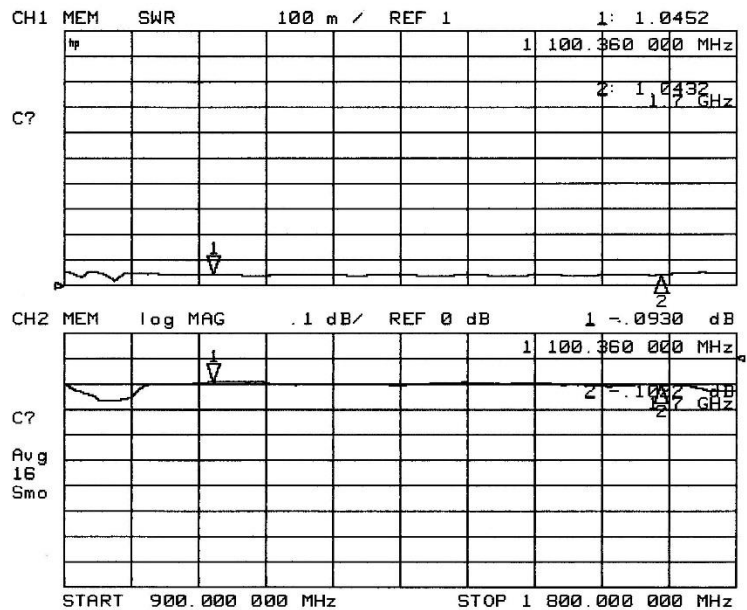
Frequency (GHz)	VSWR	Insertion Loss (dB)
1.10 - 1.70	1.10 typ	0.10 typ

- ✦ Nominal Impedance – 50Ω
- ✦ Through Current: 2.5 Amp
- ✦ DC Thru-Resistance - 150mΩ typ
- ✦ RF Power: 5 watts

## Transient Specifications

(1.2X50μs Voltage / 8X20μs Current waveform)

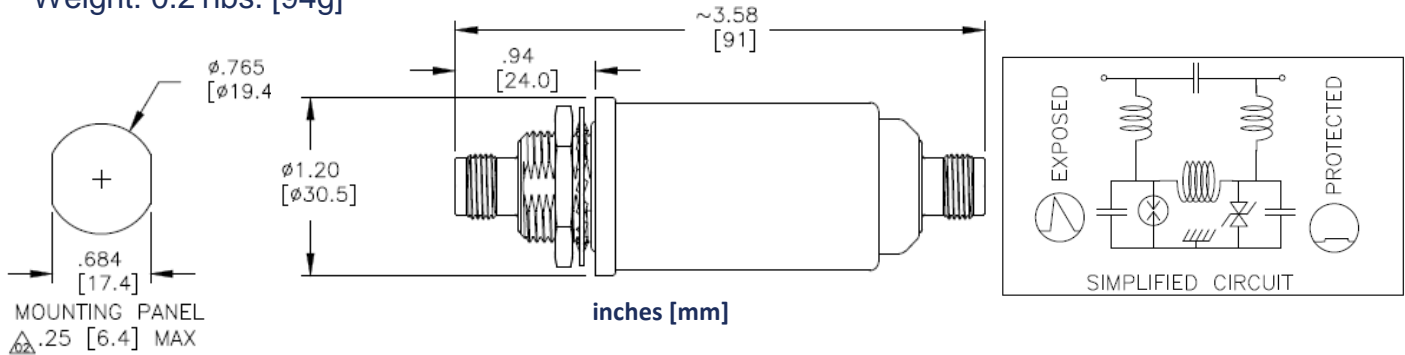
- ✦ Response Time: 10ns
- ✦ Maximum Transient ( $I_{max}$ ): 30kA 1x
- ✦ Multiple Strike ( $I_N$ ): 20kA 10x
- ✦ Let-through: see Voltage table below



Typical VSWR and Insertion Loss

## Mechanical Specifications

Weight: 0.21lbs. [94g]



**Optional - Mounting bracket order P/N 750-0632-00**

**Recommended Panel/Bulkhead Mounting Torque: 15ft-lbs (20.3Nm)**

## Material and Finish

Component	Material <sup>1,2</sup>	Finish
Outer Parts	Aluminum	Nickel
Connectors - Outer Contact	Brass	Nickel
Connectors - Center Contact	BeCu	Gold
Insulator	PTFE	-
Gasket	EPDM or SIL	-

<sup>1</sup> Special materials are available for extreme environments

<sup>2</sup> Tin plated ground wire is preferred

## Voltage

Nominal Voltage <sup>1</sup>	Maximum Voltage <sup>1</sup>	Let Through Voltage <sup>2</sup>	Voltage Code <sup>3</sup>
+5V	+6.7V	+8V	P05
+12V	+15V	+18V	P12
+24V	+30V	+39V	P24
+48V	+55V	+80V	P48
-48V	-64V	-90V	N48

<sup>1</sup> Protector not suitable for opposite polarity voltage

<sup>2</sup> Clamping voltage

<sup>3</sup> Use the voltage code in the part number

## Environmental Specifications

<b>Temperature Range</b>	-50°C to +90°C
<b>Salt Fog</b>	MIL-STD-202 Method 101D / Condition B (35°C/48 hrs)
<b>Immersion</b>	MIL-STD-202 Method 104A / Condition A (65°C to 25°C w/NaCl – 2 cycles)
<b>Moisture Resistance</b>	MIL-STD-202 Method 106E (65°C/98% RH condensing/240 hrs)
<b>Temperature Shock</b>	MIL-STD-202 Method 107D / Condition B-1 (25 cycles -65°C to +125°C)
<b>Life (Elevated Temperature)</b>	MIL-STD-202 Method 108A / Condition A (96 hours at 100°C)
<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")