

Product SpecificationFPLNFNFDxxx

Satellite Navigation Fine Protector - Multistage Lightning Arrestor with Type N Connectors

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



- → Very Low Let-Through Voltage
- + Frequency 1.10GHz 1.70GHz
- + Excellent RF Performance
- + DC Pass for Amplified Antennas
- + 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



→ Through Current: 2.5 Amp

→ DC Thru-Resistance - 150mΩ typ

♦ RF Power: 5 watts



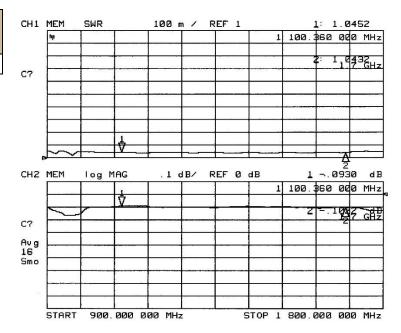
(1.2X50μs Voltage / 8X20μs Current waveform)

♦ Response Time: 10ns

→ Maximum Transient (I_{max}): 30kA 1x

→ Multiple Strike (I_N): 20kA 10x

★ Let-through: see Voltage table below

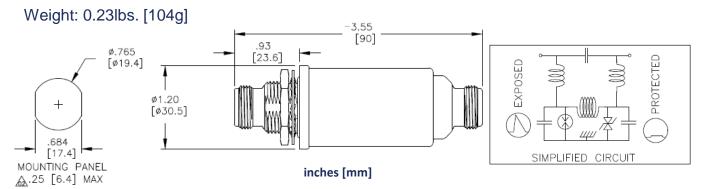


Typical VSWR and Insertion Loss



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Mechanical Specifications



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

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

Material and Finish

Component	Material ^{1,2}	Finish
Outer Parts	Aluminum	Nickel
Connectors - Outer Contact	Brass	Nickel
Connectors - Center Contact	BeCu	Gold
Insulator	PTFE	-
Gasket	EPDM or SIL	-

¹ Special materials are available for extreme environments

Voltage

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

¹ Protector not suitable for opposite polarity voltage

Environmental Specifications

Temperature Range	-50°C to +90°C
Salt Fog	MIL-STD-202 Method 101D / Condition B (35°C/48 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")

² Tin plated ground wire is preferred

² Clamping voltage

³ Use the voltage code in the part number