Product Specification
FPHNFNFBG000-E

RF Surge Protector for High Altitude Electromagnetic Pulse (HEMP) and other Electromagnetic Pulse (EMP) Protection Applications

COTS product that meets MIL-STD 188-125-1, MIL-STD 188-125-2, & MIL-STD-461 standards.
Custom versions are available, please contact NexTek or local representative.

- High-Speed Protection Design
- Ultra-Low Let-Through Energy
- Meet MIL-STD Requirements for EMP
- Type N Connectors
- 5.2 to 18.0GHz Pass
- Tested and Verified Design

Transient Specifications

MIL-STDs 188-125-1 and 188-125-2	E1 (20x500nsec) - Input Current Levels	5000A
	Peak Response Current Residuals (20x500nsec)	<1A (Levels 1, 2, 3 & 4) & <0.1A
	Peak Rate of Rise 20x500nsec (A/s)	<1x10^7
	Root Action 20x500nsec ((A-(sec)^1/2)	1.6x10^-3
MIL-STD 461	CS115 & CS116 (1MHz, 30MHz, 100MHz) Residuals	<25V
IEC 61000-4-5	Max Surge Current (8x20µs)	60kA
	Protection (Let-Thru) Voltage (8x20µs) @ 3kA	<5V

RF Bands and Performance

Frequency Range:	5.2-18.0GHz
Max VSWR:	1.3:1
Max Insertion Loss:	0.2dB
RF Power Ranges:	Up to 1kW cw

Environmental Specifications

Temperature Range	-50°C to +85°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 -55°C to +100°C)
Life (Elevated Temperature)	MIL-STD-202 Method 108A / Condition A (96 hours at 85°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")

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Material and Finish

Body Material	Brass
Body Finish	Nickel
Connector Material	Brass
Connector Finish	Nickel
Center Pin Material	BeCu
Center Pin Finish	Gold
Watertight	IP68

Part Number Configuration

Series	Type	Surge Conn	Surge Gender	Protected Conn	Protected Gender	Freq	Polarity	Voltage	Package
FP	H	N	F	N	F	BG	0	00	-E

Connector Types: S – SMA, N – Type N, T – TNC
Connector Genders: F – Female, M – Male
DC Polarity (for DC Pass only): P – Positive (+), N – Negative (-)

Package Drawing