

## Multistage Surge Protector for RTCA DO-160 Applications

- ✔ Meets DO-160G Section 22, Indirect Lightning
- ✔ Including All Waveforms and Test Levels
- ✔ High-Speed Protection Designs
- ✔ Ultra-Low Let-Through Energy
- ✔ Tested and Verified Design
- ✔ Meets MIL-STD Environmental Requirements
- ✔ IPC-610 and J-STD 001 Compliant
- ✔ SMA Connectors
- ✔ 50 Ω



### Transient Specifications

RTCA/DO-160	INPUT LEVEL (EXPOSED)	WAVEFORM	LET THRU TYPICAL ** (PROTECTED)
WF3	600V/24A	1 MHz	<10V
	300V/60A (PIN)	10 MHz	<25V
WF4	300V/60A	6.4 x 69	<5V
WF5A	300V/300A	40x120	<5V
*	±4kA/2kA*	1.2x50/8x20	<25V

\* PER IEC 61000-4-5

\*\* INTO 50-OHM LOAD

## RF Specifications

<b>Frequency Band</b>	10 – 80 MHz and 900 – 2400 MHz
<b>VSWR</b>	1.4:1 at 10 – 80 MHz and 900 – 2400 MHz
<b>Insertion Loss</b>	0.3 dB 10 – 80 MHz and 0.4 dB 900 – 2400 MHz
<b>Power (Max)</b>	6dBm at 10 – 80 MHz; 20dBm at 900 – 2400 MHz

## Environmental Ratings

<b>Temperature Range</b>	-55°C to +85°C
<b>Salt Fog</b>	MIL-STD-202 Method 101D / Condition B (35°C/96 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 -55°C to +100°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”)

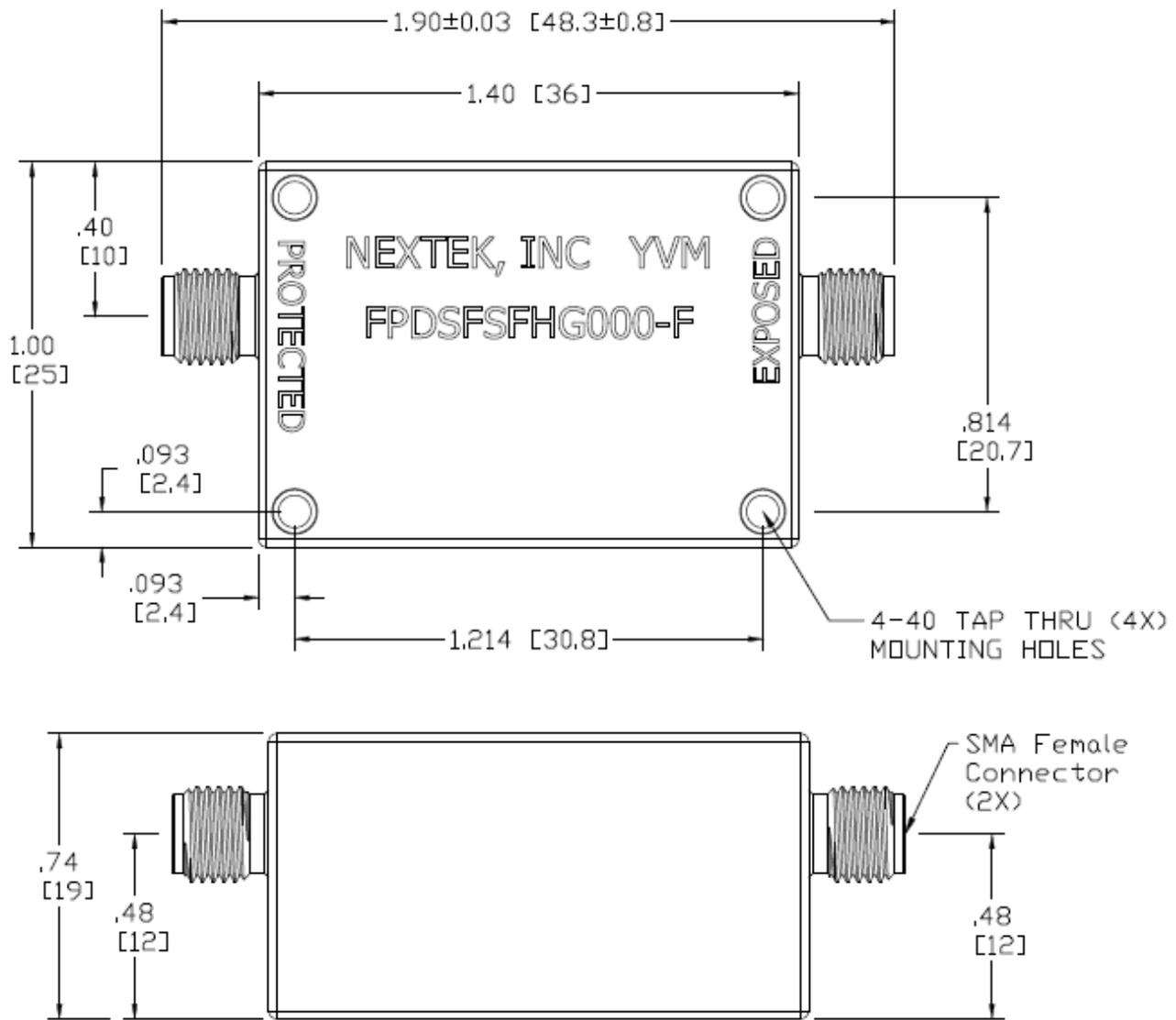
## Material and Finish

	<b>-F</b>
<b>Body Material</b>	6061 Aluminum
<b>Body Finish</b>	Conversion Coated
<b>Connectors Material</b>	18-8 Stainless Steel
<b>Connector Finish</b>	Passivated
<b>Center Pin Material</b>	BeCu
<b>Center Pin Finish</b>	Gold
<b>Watertight w/ Mated Connectors</b>	IP67

## P/N Configuration

Series	Type	Surge Conn	Surge Gender	Protected Conn	Protected Gender	Freq	Polarity	Voltage	Package
<b>FP</b>	<b>D</b>	<b>S</b>	<b>F</b>	<b>S</b>	<b>F</b>	<b>HG</b>	<b>0</b>	<b>00</b>	<b>-F</b>

**Outline Drawing**



<b>Weight</b>	1.0 oz. (30 grams)
<b>Mounting</b>	4x Thru Holes; 4-40 Mounting Screws Should Extend at Least 5/16" (8mm) into Box; 2-56 or M2 Screws Can Pass Through These Holes for Mounting Purposes