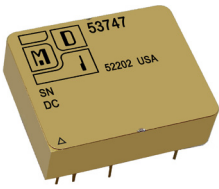


# Model 53747 EMI Filter

## For MIL-STD-461C CE03, CE102 Requirements



MDI model 53747 hermetic power line EMI filters compliment MDI DC-DC converters without internal filters to meet MIL-STD-461C CE03, CS01 and MIL-STD-461D-G CE102, CS101 test method requirements.

In applications where low reflected noise currents are needed to meet MIL-STD-461, power line filtering provides attenuation to reduce common mode (line to ground) and differential mode (line to line) currents. MDI's model 53747 provides such filtration in both modes to provide compliance whether measured in dBuA or dBuV test modes.

A single filter can serve several DC-DC converters up to the rated maximums.

Several grade and screening levels are available to suit any reliability requirement

### Features/Benefits

- Compliant with MIL-STD-461C, CE03 and CS01.
- Compliant with MIL-STD-461D-G, CE102 and CS101
- Common and differential mode filtering for low reflected input power line ripple currents
- For 12 VDC Cube Sat and 28 VDC Satellite systems.
- Compact 0.980 x 0.805 x 0.275 inch (LWH) package; rugged full hermetic construction

Models 53747 Power Line EMI Filters Specifications								
Model No.	Nominal Input Voltage (VDC)	Input Voltage Range (VDC)	Absolute Maximum Input Voltage (VDC)	Input Transient Rating (V)	Compatible With	Rated Current (A)	Maximum Power Dissipation at Rated Current (W)	Typical Attenuation (dB at 200kHz)
53747	12 - 28	0 - 50	100	80	12VDC CubeSat or 28VDC Systems	1.2	1.4	-80

### Specifications

#### Environment:

**Temperature range,** storage non-operating (Tcase): -60°C to +150°C

**Shock:** MIL-STD-810, Method 516.5 Procedure III (50Gs 11mS pulse, all axis)

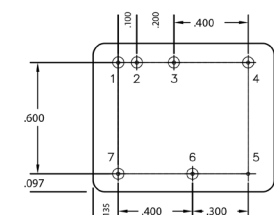
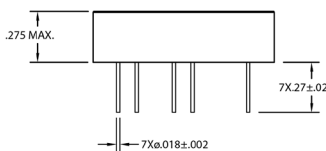
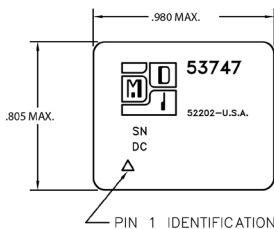
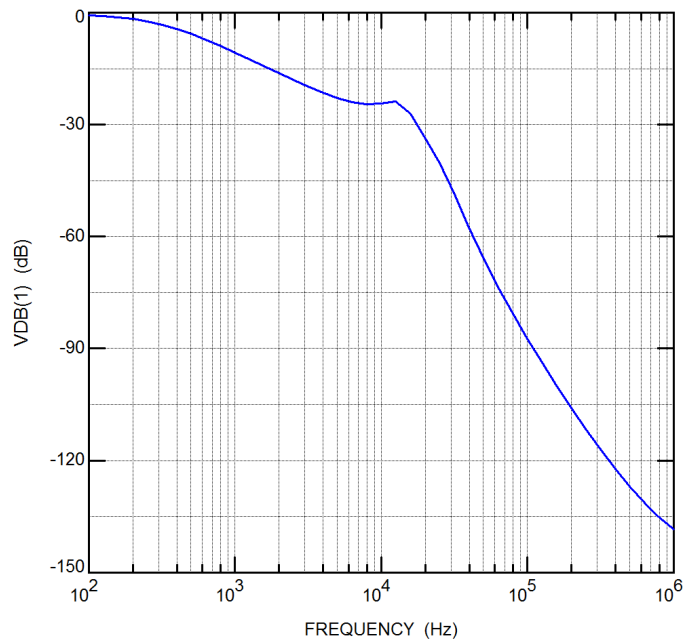
**Random Vibration:** MIL-STD-883, Method 2026, Test Condition 2H (32.3G, all axis)

**Acceleration:** MIL-STD-883, Method 2001, Test Condition A1, Y1 direction, 500Gs

**Grade:** EU -55°C to +85°C, derates Pout to zero at 115°C

**Grades:** SE -55°C to +125°C, derate Pout to zero at 135°C

**Weight:** 20 grams typical



### Pin Out Chart

Pin 1	+28VDC Input
Pin 2	N/C
Pin 3	+28VDC Input Return
Pin 4	N/C
Pin 5	Case Gnd
Pin 6	+28VDC Output Return
Pin 7	+28VDC Output

Model No.	Case Style	Pin Count	Mounting
53747	16	7	Seam Weld Flangeless PCB Mount

### Case Dimensions

Units: inches | millimeters

Case Style	A	B	C	D	E		
16	0.980	24.892	0.805	20.447	0.275   6.985	0.600   15.240	0.700   17.78

TOLERANCES: Drawings in Inches. All dimensions ±0.01 except F = max, C = +0.01/-0.020. For Custom Packages, Contact MDI Engineering



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