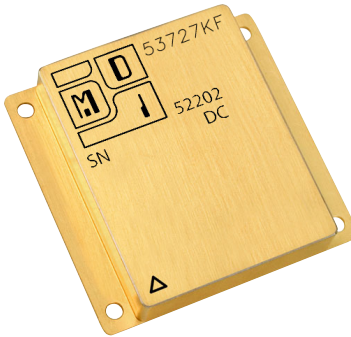


Series *3784 MOAF+ EMI Filter

For MIL-STD-461D,E,F,G CE102 Requirements

MDI model *3784 MOAF+ (Mother Of All Filters) series meets the latest MIL-STD-461D,E,F,G CE102 test method requirements when used with most unfiltered DC - DC converters



Now, MDI offers the model *3784 MOAF+ series, a compact standalone, low attenuation low I²R loss solution that permits users to meet newer MIL-STD-461D,E,F,G CE102 limits with legacy converters having built-in 461C CE03 filters. They are particularly useful in power system applications where multiple DC-DC converters are paralleled in high load current and/or N+1 redundant applications.

The *3784 MOAF+s, sized to accommodate a broad range of popular satellite, ISS/Orion, airframe and vehicle input voltage buses, incorporate two common mode stages and four low attenuation, low resonance differential mode stages. The resulting design achieves the necessary attenuation for CE102 compliance while minimizing the possibility of excessive input filter impedance mismatch that might otherwise result in DC-DC converter loop instability. Further, the design avoids use of multi-turn wound inductors, greatly reducing internal I²R copper losses, improving efficiency and reducing power dissipation.

A single MOAF+ can serve multiple DC-DC converters up to the published rated maximum current.. Please see our application notes for insertion loss curves and full technical details.

Features/Benefits

- Compact stand alone hermetically sealed solution.
- Low loss design for maximum efficiency and low power dissipation.
- Easily incorporated into new or existing system design layouts as "add-on" modules.
- PWB mount package style, rugged full hermetic hybrid construction.
- Several grade and screening levels available to suit any reliability requirement.
- Available in all popular bus voltages.

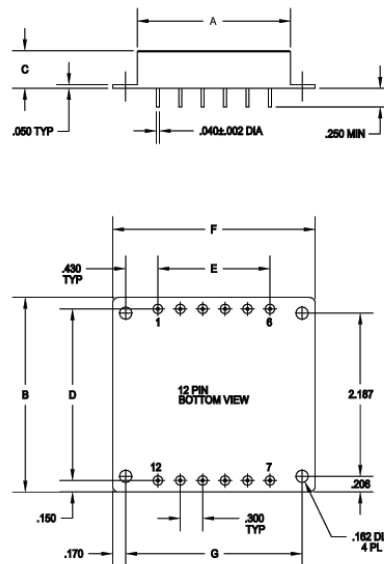
*3784 MOAF+ Family Selection Guide

Model Number	Application Bus	Input Nominal Volts DC	Input Range Volts DC	Rated Current Amperes	Rated Power Dissipation (Pd) Watts
3784	28V Military Aircraft or Vehicle (MIL-STD-704, 1275)	28	16 – 50	70	20
53784	28 VDC Satellite Bus	28	16 – 50	70	20
73784	50 VDC Satellite Bus	50	30 – 75	70	20
83784	70 VDC Satellite Bus	70	55 – 90	40	10
93784	100 VDC Satellite Bus	100	80 – 120	40	10
33784	120 V ISS Orion Bus	120	86 – 158	40	10
23784	270 V MIL-STD-704 Aircraft Bus	270	182 – 335	40	10

Connections *3784 MOAF+

Pin No.	Designation
1	Input Positive
2	Input Positive
3	Input Positive
4	Input Return
5	Input Return
6	Input Return
7	Output Return
8	Output Return
9	Output Return
10	Output Positive
11	Output Positive
12	Output Positive

CASE STYLE 7



Units: inches | millimeters

TOLERANCES: All dimensions ±0.01 except F = max, C = +0.01/-0.020. Drawings in Inches.

Case Style	A	B	C	D	E	F	G
7 KF	2.040	51.816	2.610	66.294	0.650	16.510	2.300
	58.420	1.500	38.100	2.710	68.834	2.360	59.944



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