

MDCFM-01A

Encapsulated DC Surge Suppression EMC Filter Module



Key Features:

- 0 to 40 VDC Input
- Compact Case
- 30 dB Attenuation
- -40°C to +85°C Operation
- Chassis Mount Option
- DIN Rail Mount Option
- Low Cost

Electrical Specifications

Specifications typical @ +25°C, nominal input voltage & rated output current, unless otherwise noted. Specifications subject to change without notice.

Parameter	Conditions	Min.	Typ.	Max.	Units
Input Voltage Range	See Note 1	0.0		40.0	VDC
Nominal Current	See Note 2			0.6	A
DCR			600		mΩ

General

Parameter	Conditions	Min.	Typ.	Max.	Units
Frequency Attenuation		30			dB
Surge	EN 61000-4-5			Criteria B; ±2 kV (2Ω Internal Res.) Criteria B; ±4 kV (12Ω Internal Res.)	

Environmental

Parameter	Conditions	Min.	Typ.	Max.	Units
Operating Temperature Range	Ambient	-40	+25	+85	°C
Storage Temperature Range		-55		+125	°C
Cooling	Free Air Convection				
Humidity	RH, Non-condensing			95	%

Physical

Case Size	Module	See Mechanical Drawing (Page 2)
	Chassis (A2) Mount	See Mechanical Drawing (Page 2)
	DIN (A4) Mount	See Mechanical Drawing (Page 2)
Case Material	Non-Conductive Black Plastic (UL94-V0)	
Weight	Module	0.53 Oz (15g)
	Chassis (A2) Mount	1.24 Oz (35g)
	DIN (A4) Mount	1.95 Oz (55g)



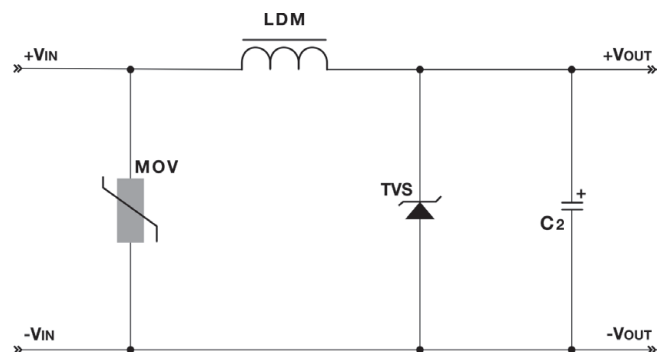
Notes:

1. The Max input voltage level of the DC/DC converter must be less than the maximum specified input of the **MDCFM-01A**.
2. The Max input current of the DC/DC converter must be less than the maximum specified nominal current of the **MDCFM-01A**.

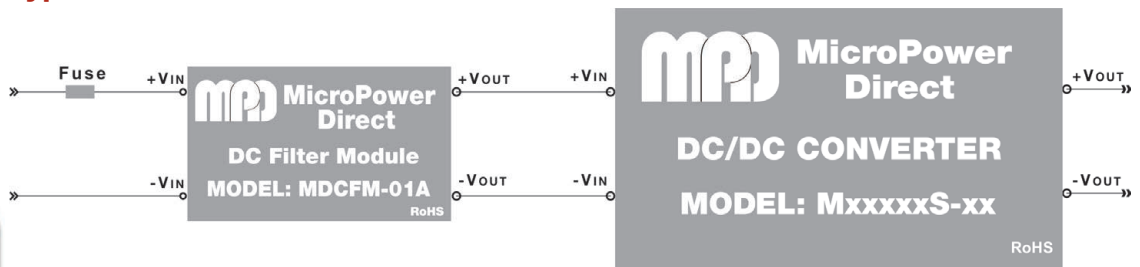
The **MDCFM-01** noise suppression modules operate with many **MPD** standard DC/DC converters.

When connected to the input, these modules will substantially improve the EMS performance of the converter. When used on the output, they will substantially reduce the converter output noise and ripple. Contact the factory for more information

Schematic: MDCFM-1A



Typical Connection



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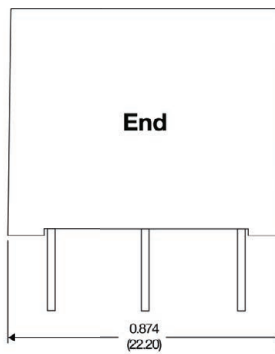
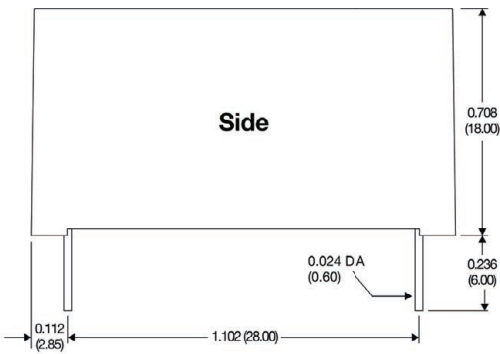
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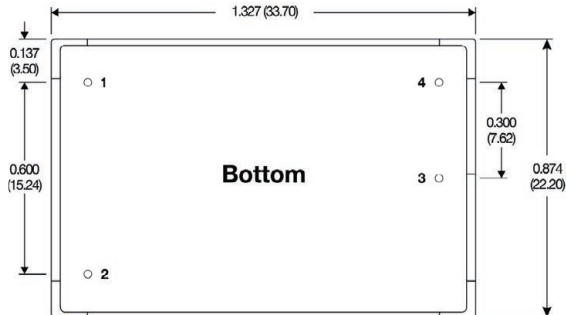
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Mechanical Dimensions



Pin Connections

Pin	Function
1	-VIN
2	+VIN
3	+VOUT
4	-VOUT



The **MDCFM-01A** is available mounted on an adapter plate for mounting to a chassis or on a DIN rail. Mechanical dimensions for these adapters are shown at right. The photo below shows a product mounted on a similar adapter. Please contact the factory for more information.

For the chassis mount option, add suffix "A2" to the model number (i.e. **MDCFM-01A-A2**)

For the DIN rail mount option, add suffix "A4" to the model number (i.e. **MDCFM-01A-A4**)

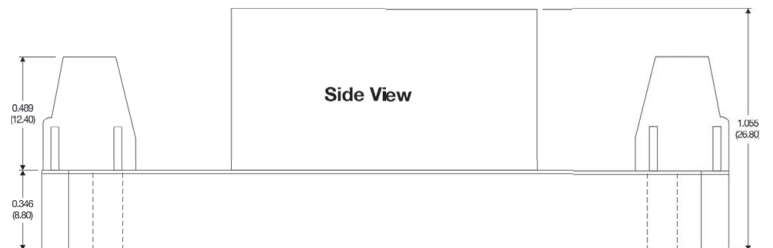
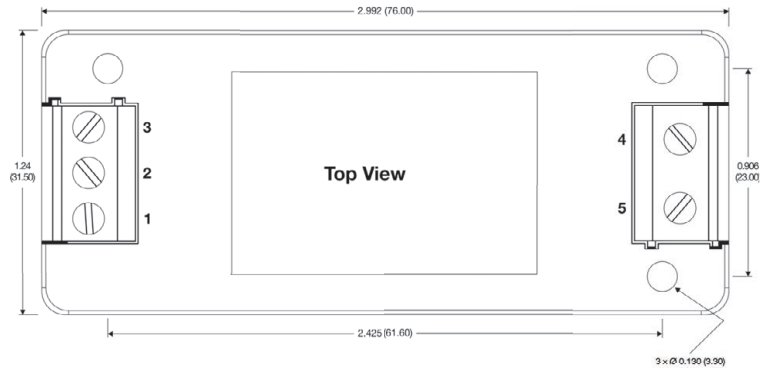
Pin Connections

Pin	Function
1	-VIN
2	No Connection
3	+VIN
4	+VOUT
5	-VOUT

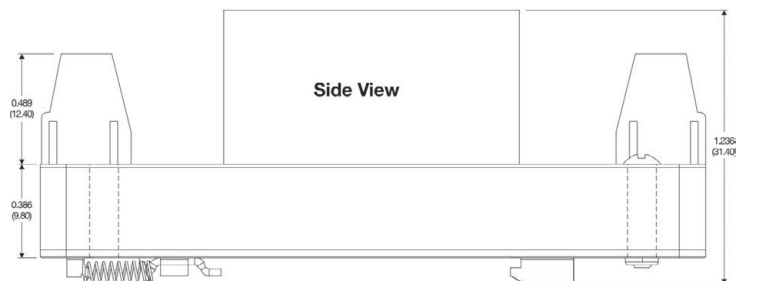
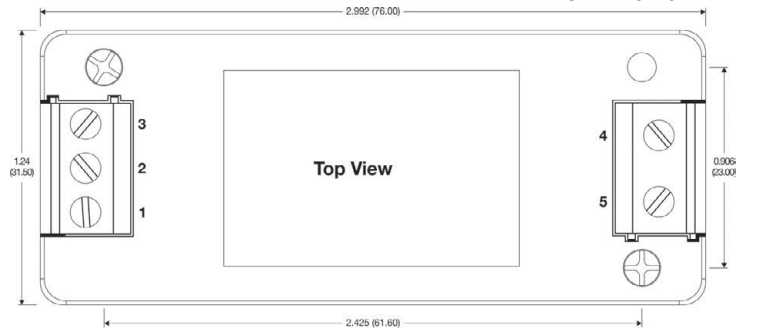
Connection is the same for A2 & A4



Mechanical Dimensions: With Chassis Mount Option (A2)



Mechanical Dimensions: With DIN Rail Option (A4)



Notes:

- All dimensions are typical in inches (mm)
- Tolerance x.xx = ±0.02 (±0.50)
- Wire range for A2 & A4 connection is 24 - 12 AWG



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