

# MDCFM-03AW

## Wide Input, DC Compact EMC Filter Module



### Key Features:

- 0 to 80 VDC Input
- Compact 1" x 1" Case
- 20 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		80.0	VDC
Nominal Current, See Note 2				3.0	A
DCR			30		mΩ

### General

Parameter	Conditions	Min.	Typ.	Max.	Units
Frequency Attenuation		30			dB
EFT	EN 61000-4-4			Criteria B; ±4 kV	

### 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	0.71 Oz (20g)
	Chassis (A2) Mount	1.41 Oz (40g)
	DIN (A4) Mount	2.11 Oz (60g)



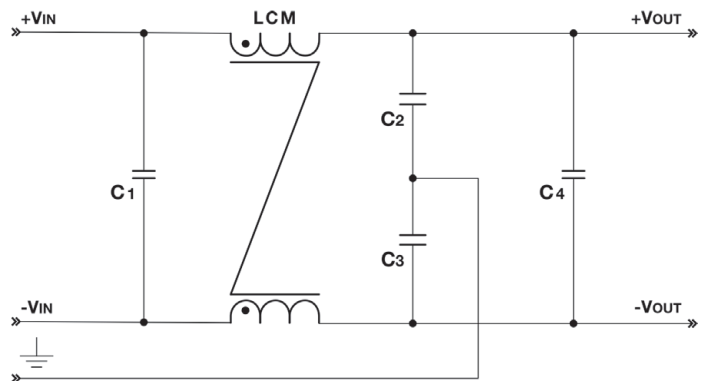
### Notes:

1. The Max input voltage level of the DC/DC converter must be less than the maximum specified input of the **MDCFM-03AW**.
2. The Max input current of the DC/DC converter must be less than the maximum specified nominal current of the **MDCFM-03AW**.
3. The -V<sub>OUT</sub> pin should not be connected to the "ground" input.

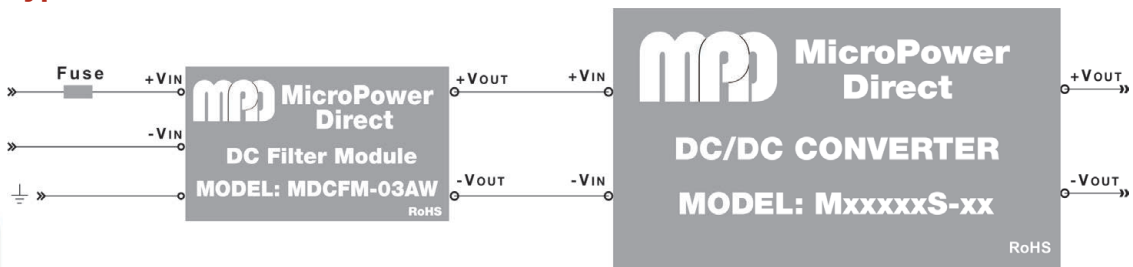
The **MDCFM-03AW** EMC filter module operate with many standard **MPD** DC/DC converters.

When connected to the input, these modules will substantially improve the EMS performance of the converter.

### Schematic: MDCFM-03AW



### Typical Connection



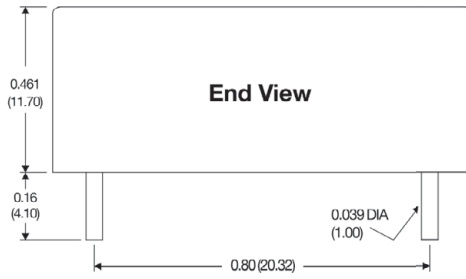
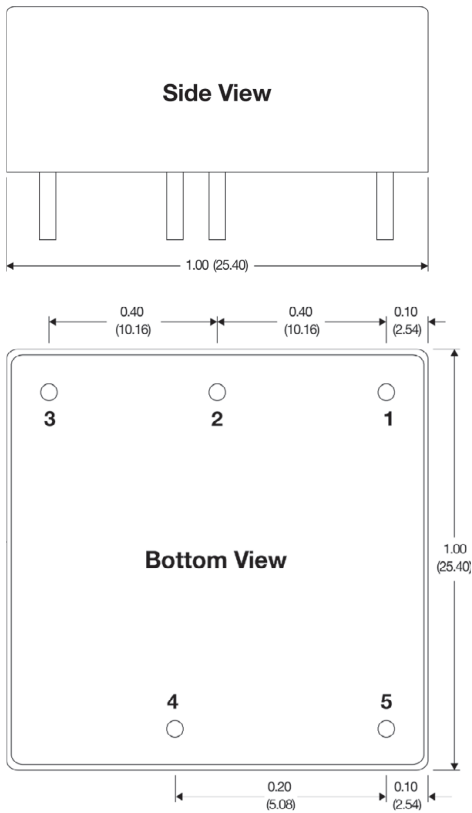
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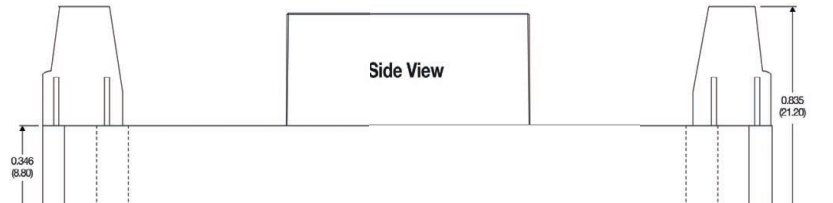
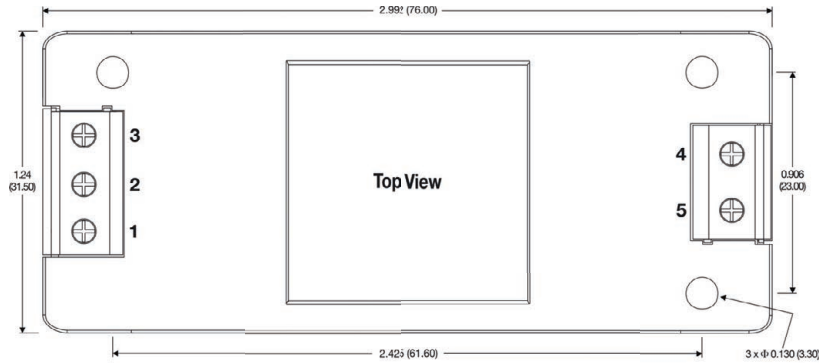
**Mechanical Dimensions**



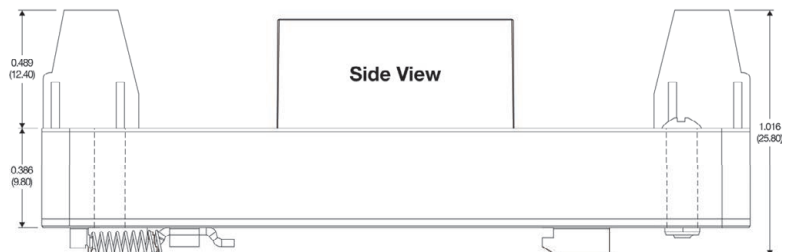
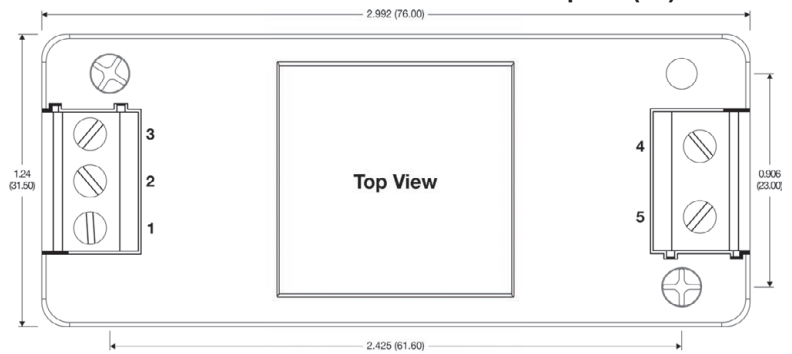
**Pin Connections**

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

**Mechanical Dimensions: With Chassis Mount Option (A2)**



**Mechanical Dimensions: With DIN Rail Option (A4)**



The **MDCFM-03AW** is available mounted on an adapter plate for mounting to a chassis or on a DIN rail. Mechanical dimensions for these adapters is 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-03AW-A2**)

For the DIN rail mount option, add suffix "A4" to the model number (i.e. **MDCFM-03AW-A4**)

**Pin Connections**

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

Connection is the same for A2 & 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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