

MACFM-03D

Wide Input, AC Encapsulated EMC Filter Module



Key Features:

- 85 to 305 VAC Input
- Compact Case
- -40°C to +85°C Operation
- Low Cost

Electrical Specifications

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

Input

Parameter	Conditions	Min.	Typ.	Max.	Units
Input Voltage Range, See Note 1		85		305	VAC
Nominal Current, See Note 2				0.3	A

General

Parameter	Conditions	Min.	Typ.	Max.	Units
Test Voltage	60 Sec, 1 mA Leakage Current		2,000		VAC
Conducted Emissions	EN 55022	Class B			
Surge	EN 61000-4-5	Criteria B; ±1 kV (1.2 μS/50 μS 2Ω) Criteria B; ±2 kV (1.2 μS/50 μS 12Ω)			

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	See Mechanical Drawing (Page 2)				
Case Material	Non-Conductive Black Plastic (UL94-V0)				
Weight	0.71 Oz (20g)				

Notes:

1. The Max input voltage level of the power supply must be less than the maximum specified input of the **MACFM-03D**.
2. The Max input current of the power supply must be less than the maximum specified nominal current of the **MACFM-03D**.

RoHS



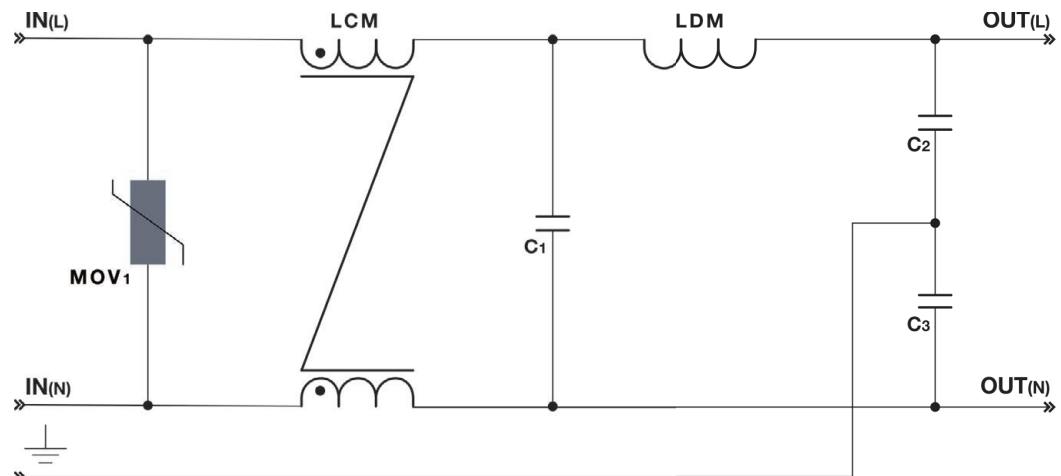
MicroPower Direct

292 Page Street
Suite D
Stoughton, MA 02072
USA

T: (781) 344-8226
F: (781) 344-8481
E: sales@micropowerdirect.com
W: www.micropowerdirect.com

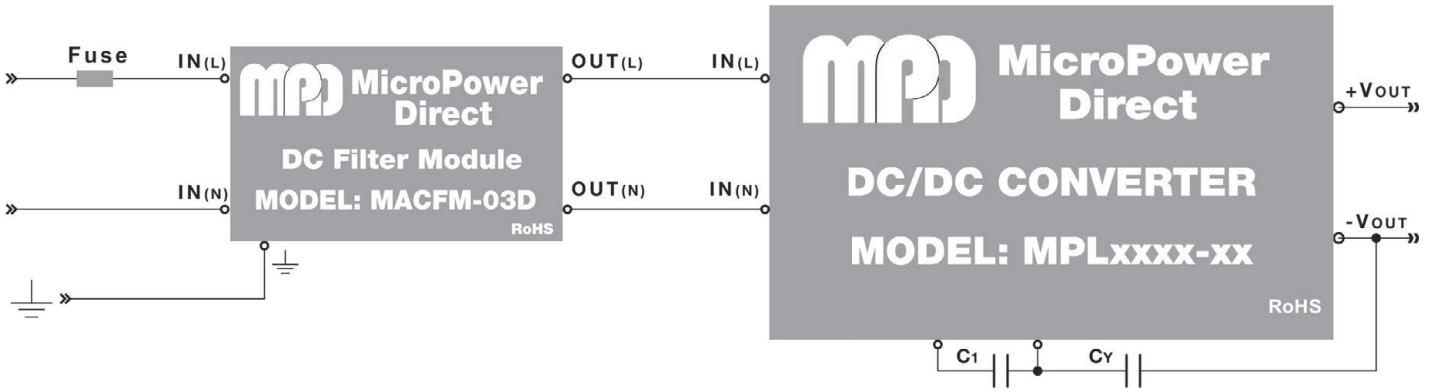


Schematic



www.micropowerdirect.com

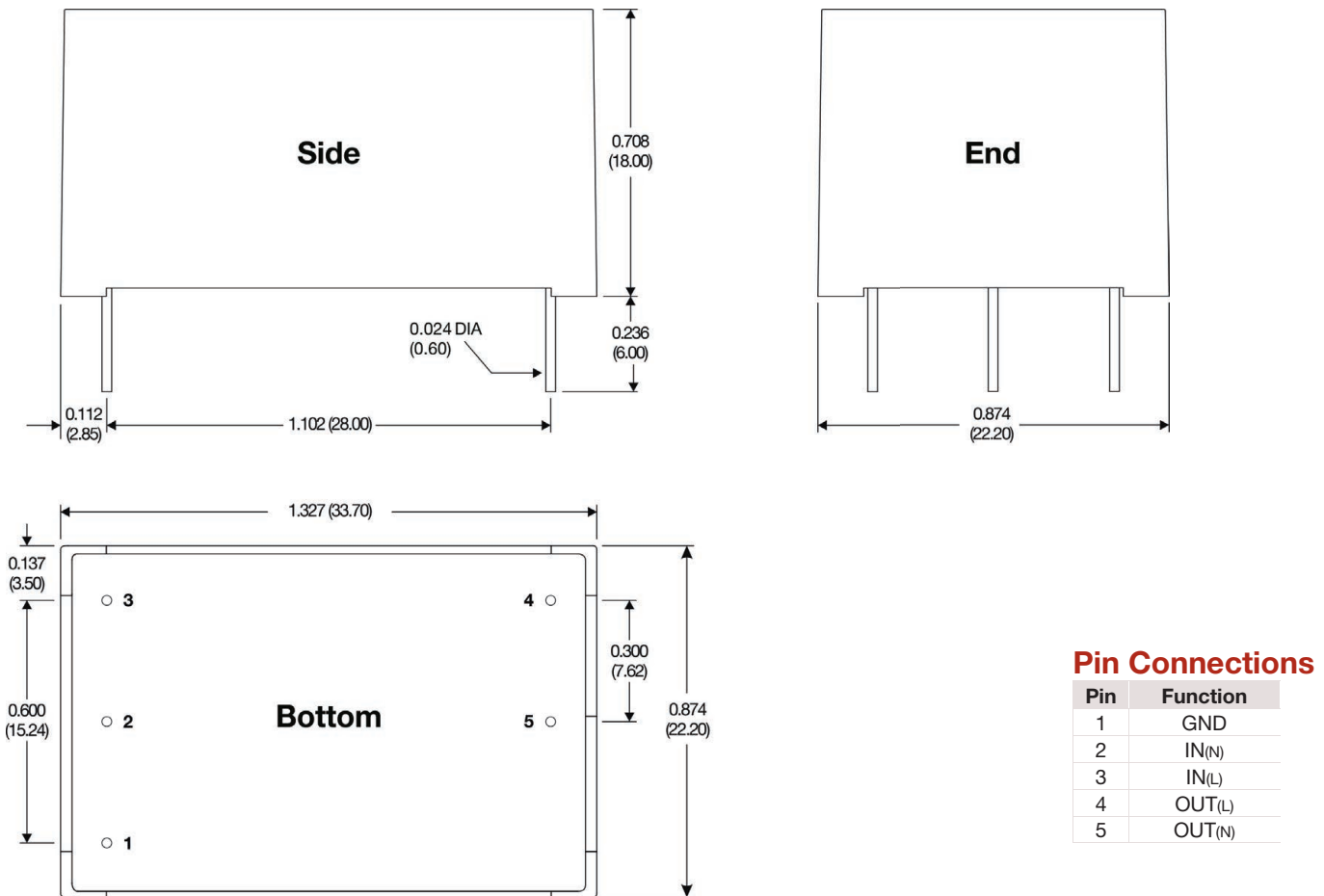
Typical Connection



MACFM-03D filter modules operate with MPD's ultra-miniature 1W, 3W and 5W MPL AC/DC power supplies. The MPL units provide 1W, 3W and 5W of power from miniature SIP packages.

With these modules, the AC power supply will meet the surge requirements of EN 61000-4-5 and the EMS requirements of EN 55022. Capacitors C1 and Cy are required for proper operation of MPL units. Refer to the product datasheet for recommended values. Contact the factory for information on our full range of filter products.

Mechanical Dimensions



Pin Connections

Pin	Function
1	GND
2	IN(N)
3	IN(L)
4	OUT(L)
5	OUT(N)

- Notes:
- All dimensions are typical in inches (mm)
 - Tolerance x.xx = ±0.02 (±0.50)