SERIES: EMC-03 | **DESCRIPTION:** AC POWER LINE FILTER

FEATURES

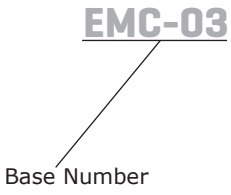
- reduces emissions to help comply with CISPR22 / EN 55022 Class B
- protects against surge events and Electrical Fast Transients
- wide input voltage range (85 ~ 305 Vac)
- 0.3 A rated current
- -40 to +85°C temperature range



SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
input voltage		85		305	Vac
input current				0.3	A
RoHS	yes				
operating temperature		-40		85	°C
storage temperature		-40		105	°C
case temperature rise	at 220 Vac, 0.3 A			30	°C
leakage current (line to ground)	2000 Vac, tested for 1 minute		2		mA
EFT	IEC/EN61000-4-4, +/-4 kV				
surge	IEC/EN61000-4-5, +/-1 kV (2 ohms) / +/-2 kV (12 ohms)				

PART NUMBER KEY



Please read our datasheet & drawing disclaimer here.

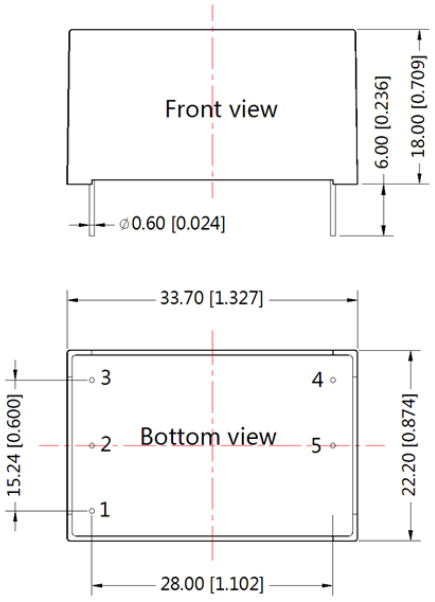
MECHANICAL

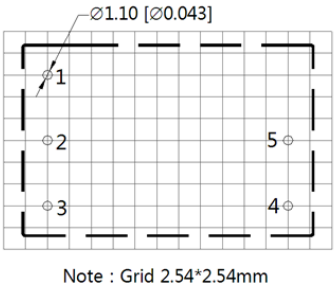
parameter	conditions/description	min	typ	max	units
dimensions	33.70 x 22.20 x 18.00 [1.327 x 0.874 x 0.709 inch]				mm
case material	black flame-retardant heat-proof epoxy resin (UL94V-0)				
weight			20		g

MECHANICAL DRAWING

units: mm [inch]
tolerance: ±0.50[±0.020]
pin diameter tolerance: ±0.10[±0.004]

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





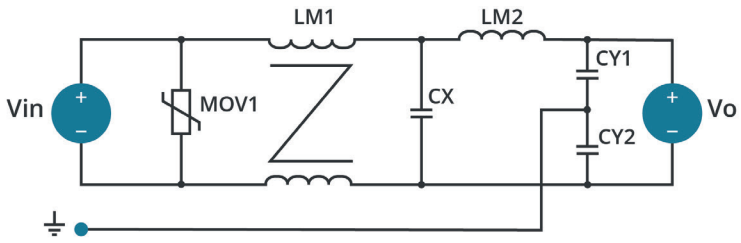
Note : Grid 2.54*2.54mm

Recommended PCB Layout
Top View

Supporting Product Table			
Model	EMI	Surge	EFT
PBO-1	CISPR22/EN55022 CLASS B	IEC/EN61000-4-5 ±1KV/±2KV, perf. Criteria B	IEC/EN61000-4-4 ±4KV, perf. Criteria B
PBO-3	CISPR22/EN55022 CLASS B	IEC/EN61000-4-5 ±1KV/±2KV, perf. Criteria B	IEC/EN61000-4-4 ±4KV, perf. Criteria B
PBO-5	CISPR22/EN55022 CLASS B	IEC/EN61000-4-5 ±1KV/±2KV, perf. Criteria B	IEC/EN61000-4-4 ±4KV, perf. Criteria B

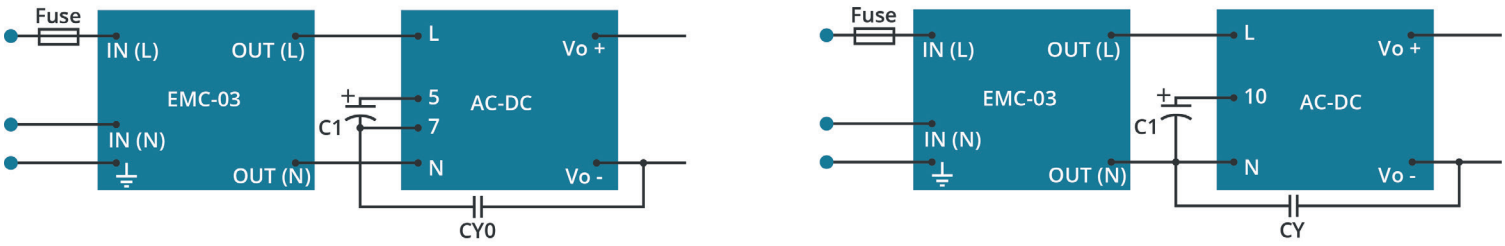
DESIGN REFERENCE

Figure 1
Internal Circuit



APPLICATION CIRCUIT

Figure 2
Application Circuit



REVISION HISTORY

rev.	description	date
1.0	initial release	11/11/2019
1.01	circuit figures updated	01/12/2022

The revision history provided is for informational purposes only and is believed to be accurate.

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