

EMC Filter



RoHS

FEATURES

- Compact size
- Restrain line disturb of DC power source
- The attenuation coefficient of frequency meet 20dB
- Cost-effective
- Low Temperature Rise
- Mounting: PCB mounting, chassis mounting with screw terminals, DIN-Rail mounting

This model applies to analog circuit which is noise-sensitive. Put FI-BO3D on to the input of module can ensure EMI performance by a big margin.

Selection Guide

Model	Input Voltage Range (VDC)	Nominal Current (A)(max)
FI-BO3D	0~80	3.0

Note: series with suffix "A2S" are chassis mounting, with suffix "A4S" are DIN-Rail mounting, for example FI-BO3DA4S.

General Specifications

Item	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		-40	--	85	°C
Storage Temperature		-55	--	125	
Welding Temperature	Wave soldering welding,10 seconds MAX	+255	+260	+265	
Storage Humidity		5	--	95	%
Casing Temperature Rise	Nominal Current	--	--	40	°C
Withstand Voltage to GND		--	--	1500	VDC
D·C·R	Input - Output	--	30	--	mΩ

General Specifications

Casing Material	Aluminum Alloy	
Package Dimensions	Horizontal package	25.40x25.40x11.70 mm
	A2S wiring package	76.00x31.50x21.20 mm
	A4S rail package	76.00x31.50x25.80 mm
Weight	Horizontal package/A2S wiring package/A4S rail	15g/35g/55g(Typ)

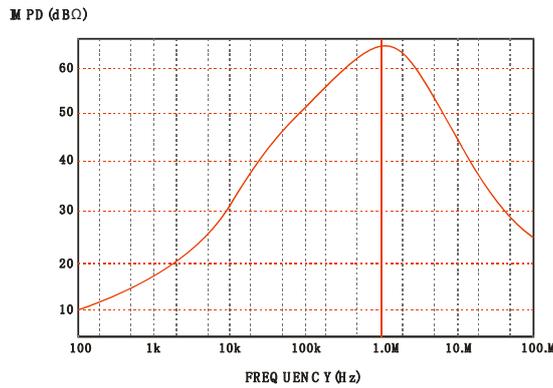
Frequency Impedance Specifications

Item	Test Conditions	Min.	Typ.	Max.	Unit
Im	150KHz~100 MHz	--	20	--	dBΩ

Devise Standard

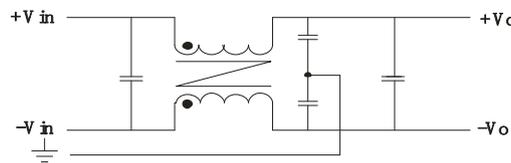
FI-BO3D can ensure MORNSUN DC/DC converter module with 3A input current EMI meet EN 55022 Class B.

Impedance Specifications

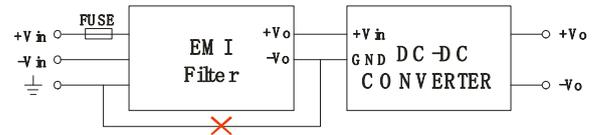
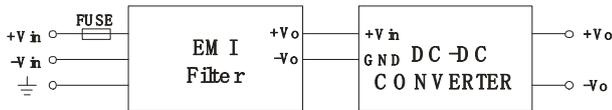


Design Reference

1. Inside schematic



2. Typical application

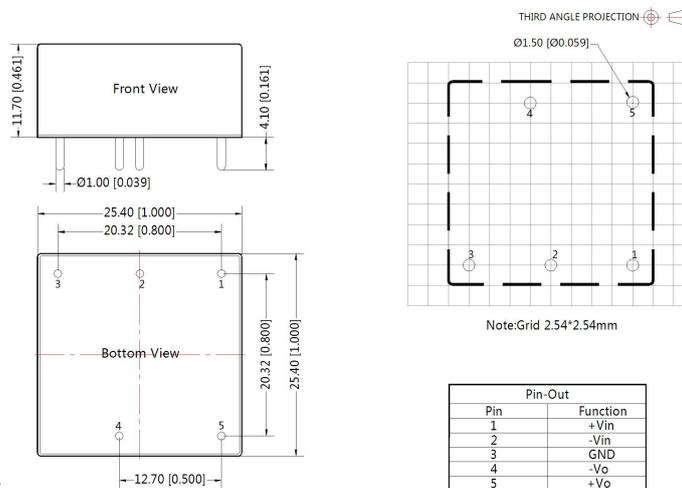


FUSE: Due to the difference of the power module input current, the fuse of the recommended values, please refer to the Technical Manual for the power module.

Note: This application is not supported for this series.

3. For more information Please find the application notes on www.mornsun-power.com

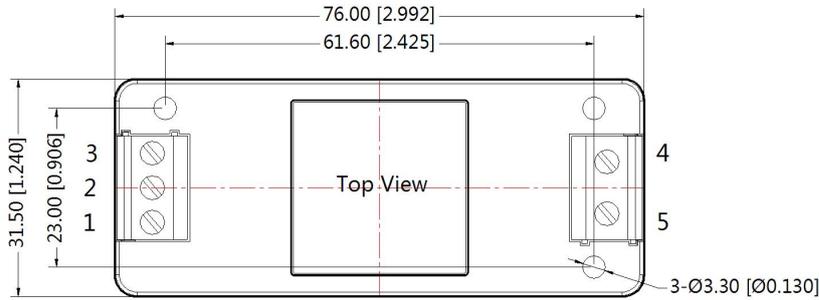
FI-BO3D Dimensions and Recommended Layout



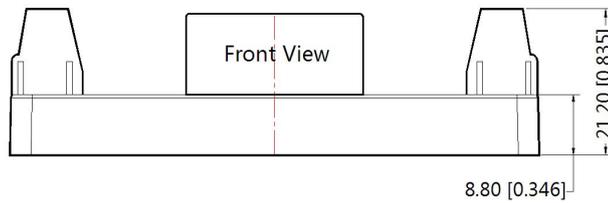
Note:
Unit :mm[inch]
Pin diameter tolerances :±0.10[±0.004]
Pin height tolerances :±0.50[±0.020]
General tolerances:±0.25[±0.010]

FI-B03DA2S Dimensions

THIRD ANGLE PROJECTION 



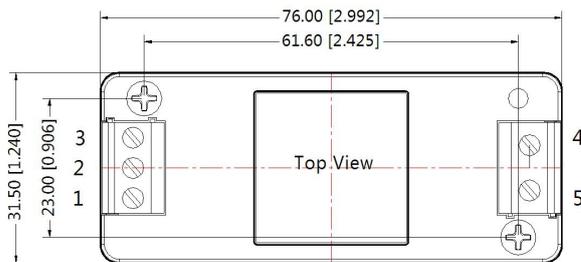
Pin-Out	
Pin	Function
1	+Vin
2	-Vin
3	⏏
4	-Vo
5	+Vo



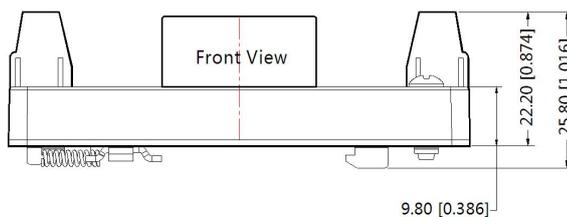
Note:
Unit:mm[inch]
Wire range:24~12 AWG
General tolerances:±0.50[±0.020]

FI-B03DA4S Dimensions

THIRD ANGLE PROJECTION 



Pin-Out	
Pin	Function
1	+Vin
2	-Vin
3	GND
4	-Vo
5	+Vo



Note:
Unit:mm[inch]
Wire range:24~12 AWG
General tolerances:±0.50[±0.020]

Note:

1. Packing Information please refer to 'Product Packing Information'. The Packing bag number of Horizontal package : 58220003, the Packing bag number of A2S/ A4S package:58220022;
2. Unless otherwise specified, data in this data sheet should be tested under the conditions of $T_a=25^{\circ}\text{C}$, humidity<75%;
3. All index testing methods in this datasheet are based on our Company's corporate standards;
4. The performance indexes of the product models listed in this manual are as above, but some indexes of non-standard model products will exceed the above-mentioned requirements, and please directly contact our technicians for specific information;
5. We can provide product customization service;
6. Specifications of this product are subject to changes without prior notice.

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