# **MORNSUN®**

### **EMC** Filter



# 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

RoHS

This model applies to analog circuit which is noise-sensitive. Put FI-B03D 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-B03D	0~80	3.0

Note: series with suffix "A2S" are chassis mounting, with suffix "A4S" are DIN-Rail mounting, for example FI-B03DA4S.

General Specificati	ons				
Item	Test Conditions	Min.	Тур.	Max.	Unit
Operating Temperature		-40		85	- °C
Storage Temperature		-55	-	125	
Storage Humidity		5		95	%
Casing Temperature Rise	Nominal Current			40	°C
Withstand Voltage to GND			-	1500	VDC
D-C-R	Input - Output		30		mΩ

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

Frequency Imped	dance Specifications				
Item	Test Conditions	Min.	Тур.	Max.	Unit
lm	150KHz~100 MHz		20		dBΩ

## **Devise Standard**

FI-B03D can ensure MORNSUN DC/DC converter module with 3A input current EMI meet EN 55022 Class B.



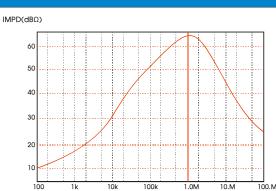
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2014.02.18-A/2 Page 1 of 3

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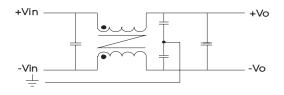


## impedance Specifications



# Design Reference

1. Inside schematic



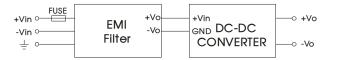
FUSE

+Vin 아

FREQUENCY(Hz)

## 2. Typical application

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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.

+Vin 0 -Vin 0 -Vin

+Vo

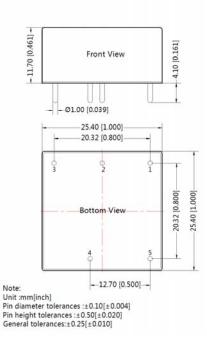
+Vin

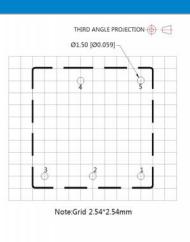
-> +Vo

Note: This application is not supported for this series.

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

# FI-B03D Dimensions and Recommended Layout





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

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2014.02.18-A/2 Page 2 of 3

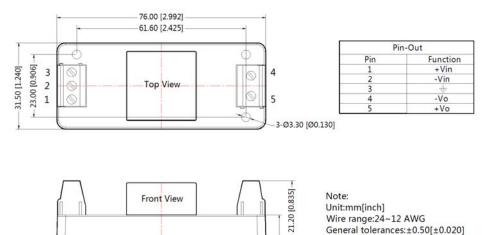
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# **EMC** Filter **FI-B03D Series**

# FI-B03DA2S Dimensions

# **MORNSUN®**

THIRD ANGLE PROJECTION



8.80 [0.346]

FI-B03DA4S Dimensions

76.00 [2.992] 61.60 [2.425] 4 1 23.00 [0.906] 31.50 [1.240] 3 4 2 Top View 1 5

> 22.20 [0.874] 25.80 [1.016] Front View 9.80 [0.386]

THIRD ANGLE PROJECTION

General tolerances: ±0.50[±0.020]

F	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:

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

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Page 3 of 3 2014.02.18-A/2

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