

EFT Suppressor



RoHS

FEATURES

- Compact size
- Design to suppress the DC power interference
- The attenuation coefficient of frequency meet 30dB
- Cost-effective
- Low Temperature rise
- Mounting: PCB mounting, chassis mounting with screw terminals, DIN-Rail mounting

Apply to analog circuit which is noise-sensitive. FT-A/BX1D put on to the input of DC/DC module can substantially improve the EMS performance of the module, FT-A/BX1D put on to the output of DC/DC module can substantially reduce the ripple and noise of the module. FT-A/BX1D used with the MORNSUN DC/DC module, DC/DC module's max. Input voltage must less than FT-A/BX1D's max. Voltage, DC/DC module's max. Input current must less than FT-A/BX1D's nominal current.

Selection Guide

Model	Input Voltage Range (VDC)	Nominal Current (A)(max)
FT-AX1D	0~40	1.5
FT-BX1D	0~80	1.5

Note: series with suffix "A2S" are chassis mounting, with suffix "A4S" are DIN-Rail mounting, for example FT-AX1DA4S.

General Specifications

Item	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		-40	--	85	℃
Storage Temperature		-55	--	125	
Casing Temperature Rise	Nominal Current	--	15	--	
D-C-R		--	160	--	mΩ

General Specifications

Casing Material	Black flame-retardant heat-proof epoxy resin (UL94-V0)				
Package Dimensions	Horizontal package	33.70x22.20x18.00 mm			
	A2S wiring package	76.00x31.50x26.80 mm			
	A4S rail package	76.00x31.50x31.40 mm			
Weight	Horizontal package/A2S wiring package/A4S rail package		20g/40g/60g(Typ)		

EFT Suppressor Specifications

Item	Test Conditions	Min.	Typ.	Max.	Unit
Attenuation multiples	2.5KHz/5KHz/100KHz/1MHz	30	--	--	dB

Devise Standard

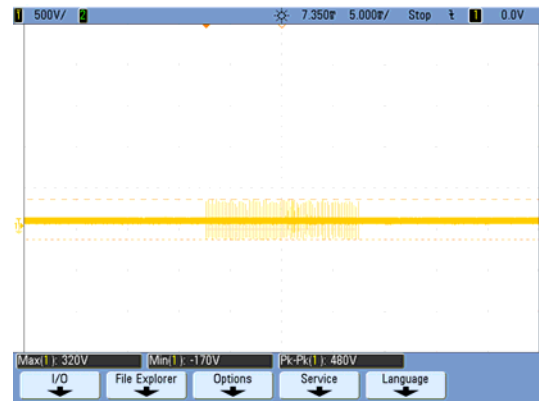
FT-A/BX1D can ensure MORNSUN DC/DC converter module meet EFT level of IEC/EN61000-4-4 ±4KV.

EMC Specifications

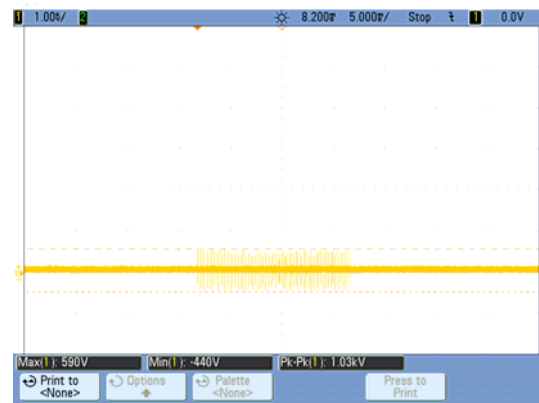
FT-A/BX1D Input voltage waveform

FT-A/BX1D Output voltage waveform

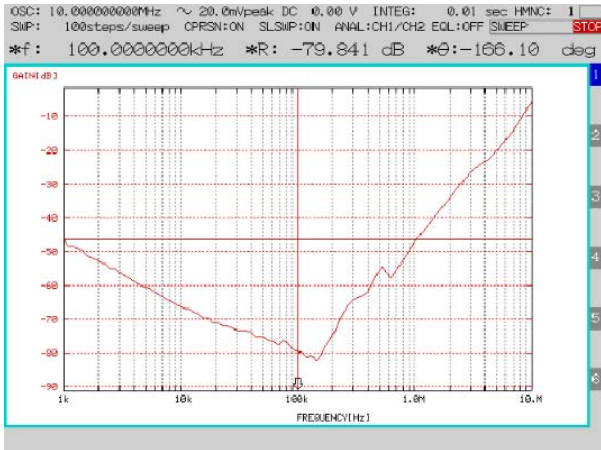
2KV



4KV



Attenuation Specifications

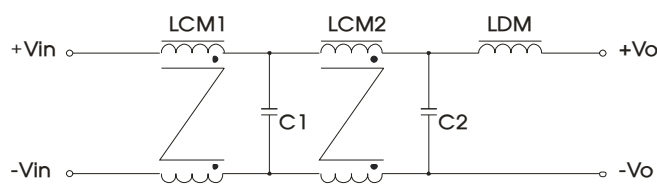


Model	FT-AX1D			
Frequency	2.5KHz	5KHz	100KHz	1MHz
Gain (dB)	-55.86	-61.77	-78.19	-47.1

Model	FT-BX1D			
Frequency	2.5KHz	5KHz	100KHz	1MHz
Gain (dB)	-53.5	-66.1	-74.7	-46.8

Design Reference

1. Inside schematic



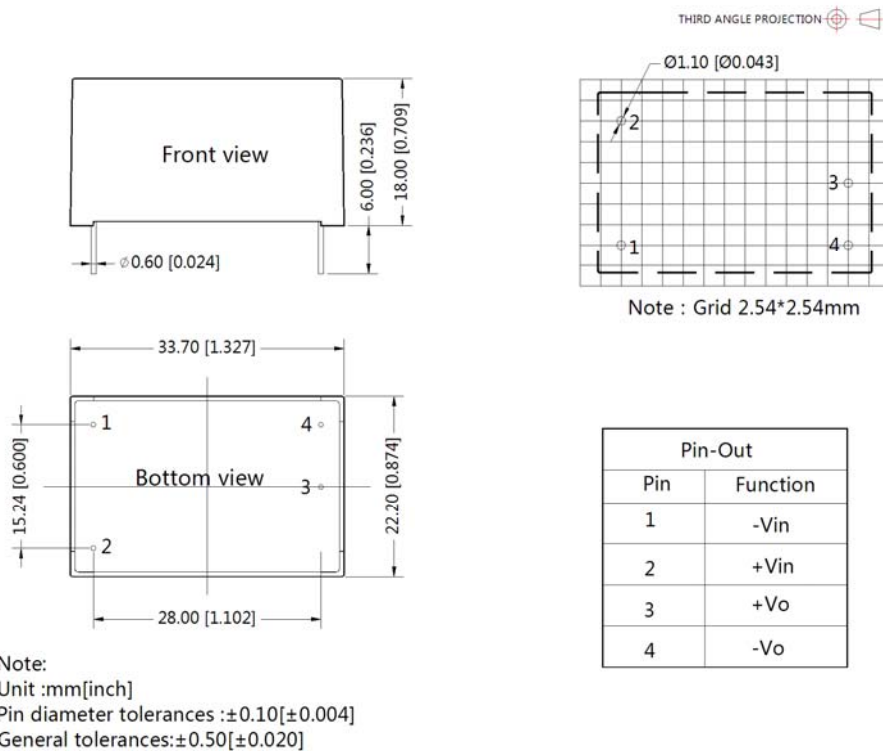
2. Typical application



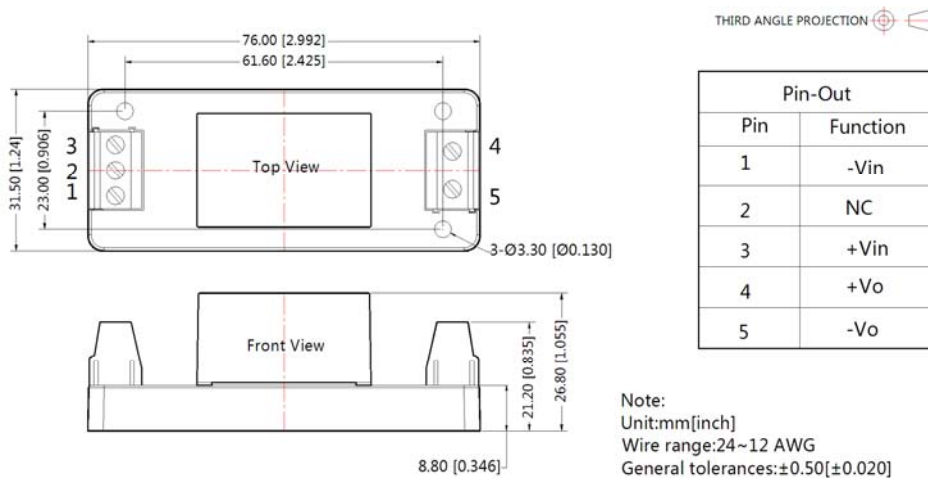
Note: 1.FUSE: Due to the difference of the power module input current, the fuse of the recommended values, please refer to the Technical Manual for the power module.  
2. FT-A/BX1D: Add based on the actual apply.

3. For more information please find the application notes on [www.mornsun-power.com](http://www.mornsun-power.com)

FT-AX1D & FT-BX1D Dimensions and Recommended Layout

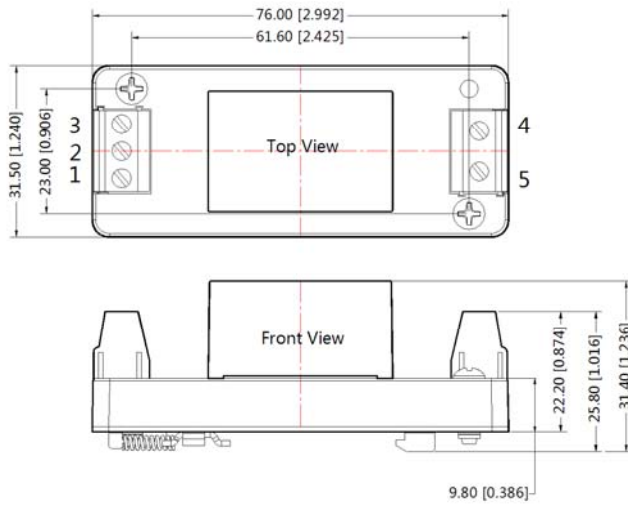


FT-AX1DA2S & FT-BX1DA2S Dimensions



FT-AX1DA4S & FT-BX1DA4S Dimensions

THIRD ANGLE PROJECTION



Pin-Out	
Pin	Function
1	-Vin
2	NC
3	+Vin
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 : 58220014, 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 Ta=25°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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