Descriptions

EMC Filter



RoHS

Features

- Global wide input voltage: 85-305VAC.
- Operating ambient temperature range: -40℃ to +85℃
- Ensure the power supply module to meet EMI the requirement of CISPR32/EN55032 Class B
- Ensure the power supply module to meet EMS the requirement of level 4

Applications

- Communication equipment
- Industrial automation equipment
- Power electronic equipment

Selection Guide

Certification	Part No.	Supporting The Power Module Part No.	Input Voltage Range (VAC)	Nominal Current (A)(RMS)
--	EFP2DX2	APS05-S12-F	85-305	0.2

Specifications

Specifications	Item	Test Conditions	Min.	Typ.	Max.	Unit
General Specifications	Operating Temperature		-40	--	85	℃
	Storage Temperature		-40	--	105	
	Welding Temperature	Wave soldering welding,10 seconds MAX	+255	+260	+265	
	Isolation (Input-PE)	Electric Strength Test for 1min., leakage current <5mA	2000	--	--	VAC
Mechanical Specifications	Case Material	Black plastic, flame-retardant and heat-resistant (UL94V-0)				
	Dimension	33.70 x 22.20 x 18.00 mm				
	Weight	18g (Typ.)				

Devise Standard

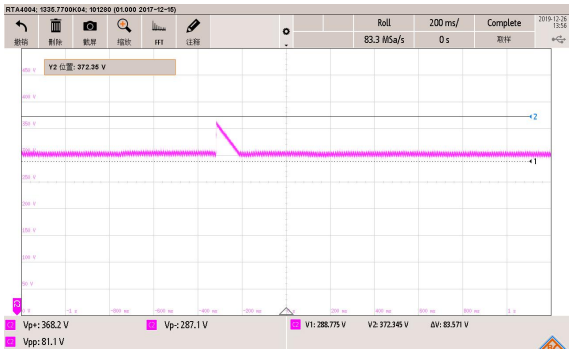
Installing EFP2DX2 on the front of the AC/DC module, makes the system meet EFT of ±4KV(IEC/EN61000-4-4) and surge of ±2KV/±4KV(IEC/EN61000-4-5) and EMI of Class B(CISPR32/EN55032).

Electromagnetic Compatibility (EMC)

Emissions	CE	CISPR32/EN55032 CLASS B (Supporting AC/DC module)	
	RE	CISPR32/EN55032 CLASS B (Supporting AC/DC module)	
Immunity	EFT	IEC/EN61000-4-4 ± 4KV (Supporting AC/DC module)	perf. Criteria B
	Surge	IEC/EN61000-4-5 line to line ±2 KV/line to ground ±4 KV (Supporting AC/DC module)	perf. Criteria B

EFP2DX2 Surge Test Result

① Line to line 2KV



Residual voltage of the internal bus of the product when inputting differential mode 2KV: 368.2V

②Line to ground 4KV



Residual voltage of the internal bus of the product when inputting common mode 4KV: 458.0V

Note: Above result was tested on EFP2DX2+APS series modules (Input capacitors: 4.7uF).

Devise Reference

1. Inside schematic

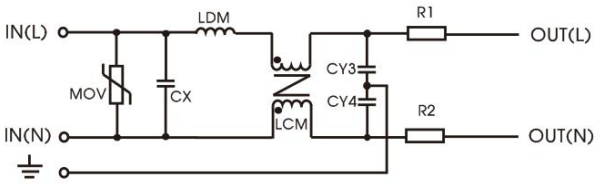


Fig. 1

2. Typical application

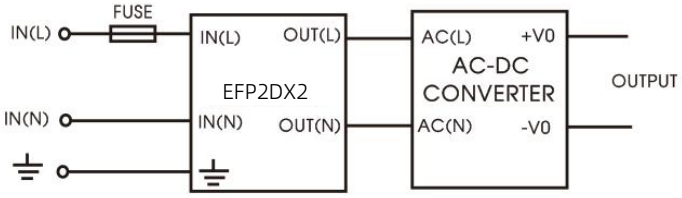
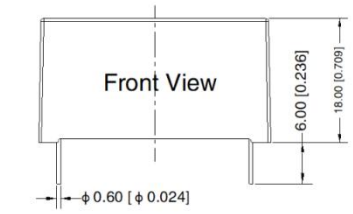
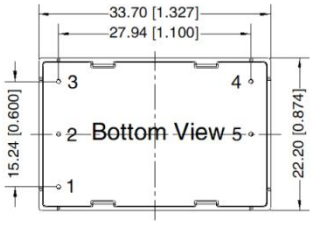


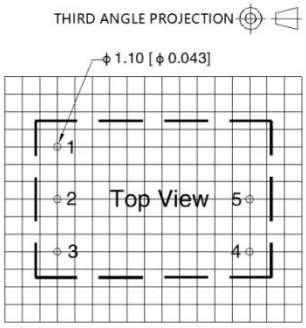
Fig 2

FUSE: 2A/300V, slow-blow, required.

Dimensions and Recommended Layout







Pin-Out	
Pin	Function
1	⏚
2	IN(N)
3	IN(L)
4	OUT(L)
5	OUT(N)

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

Note:

1. After our company's products are scrapped, they should be classified and stored in accordance with ISO14001 and relevant environmental laws and regulations, and handed over to qualified units for disposal.
2. Unless otherwise specified, parameters in this datasheet were measured under the conditions of Ta=25℃, humidity<75% with nominal input voltage and rated output load;
3. All index testing methods in this datasheet are based on our company corporate standards;
4. Products are related to laws and regulations: see "Features" and "EMC";
5. Our products shall be classified according to ISO14001 and related environmental laws and regulations, and shall be handled by qualified units.