Descriptions

EMC Fllter



3 Years Warranty

RoHS

CE Report EN62368-1

UKCA Report BS EN62368-1

Features

- Ultra wide input voltage range：0-305VAC / 0-430VDC
- Operating ambient temperature range：-40℃ to +85℃
- EMC compliance ： IEC/EN61000-4、CISPR32/EN55032
- High surge suppression capability：2kV/4kV、4kV/6kV
- Insertion loss DM & CM up to 40dB@200KHz~10MHz

Applications

- Industrial control
- Home appliances

Selection Guide

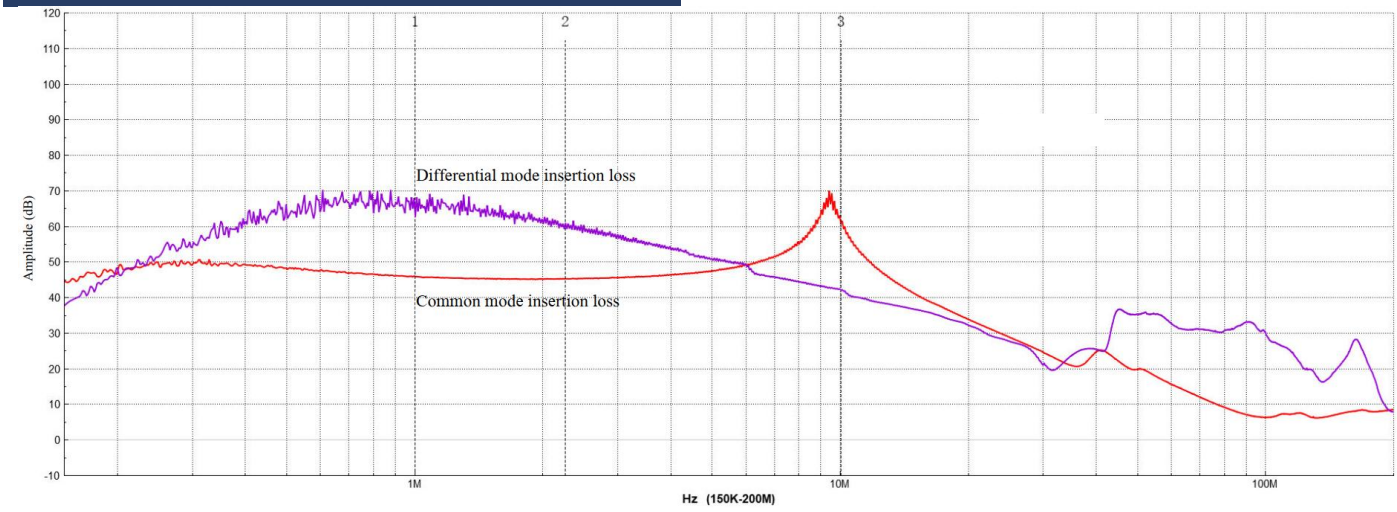
Certification	Model	Operating Voltage(VAC)		Operating Current(A)		Surge Performance
		Typ. (Range)	Max*	Typ.	Max	
--	EFP2D03L	230 (0-305)	310	--	3.0	Line-Line ±2kV Line-PE ±4kV
EN/BS EN	EFP2D03	230 (0-305)	310	--	3.0	Line-Line ±4kV Line-PE ±6kV

Note：1.The input voltage must not exceed this value,otherwise it may cause permanent and irreversible damage.
2.The product picture is for reference only.For details, please refer to the actual product.

Specifications

Product Specifications	Item	Operating 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	
	Storage Humidity		--	--	95	%RH
	Isolation Voltage	IN(L) ~ PE, IN(N) ~ PE, test time 1 minute, leakage current < 5mA	3000	--	--	VAC
			4200	--	--	VDC
	Insertion Loss (CM/DM)	150KHz~1MHz	25	30	-	dB
		1MHz~10MHz	30	35	-	dB
		10MHz~30MHz	18	20	-	dB
	Altitude	80-110kPa	≦5000m			
	Impact and Vibration test		10-55Hz, 5G, 30 Min. along X, Y and Z			
	MTBF		MIL-HDBK-217F@25℃ ≥500,000h			
Mechanical Specifications	Case Material	Black plastic, flame-retardant and heat-resistant (UL94 V-0)				
	Dimension	FP2D03L	52.40 x 27.20 x 24.00 mm			
		EFP2D03				
	Weight	FP2D03L	51g(Typ.)			
		EFP2D03	54g(Typ.)			
	Cooling Method	Free air convection				

EFPxD03 Insertion Loss Specifications

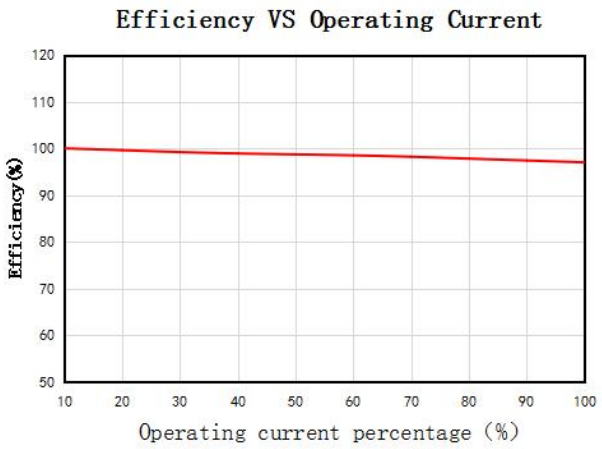


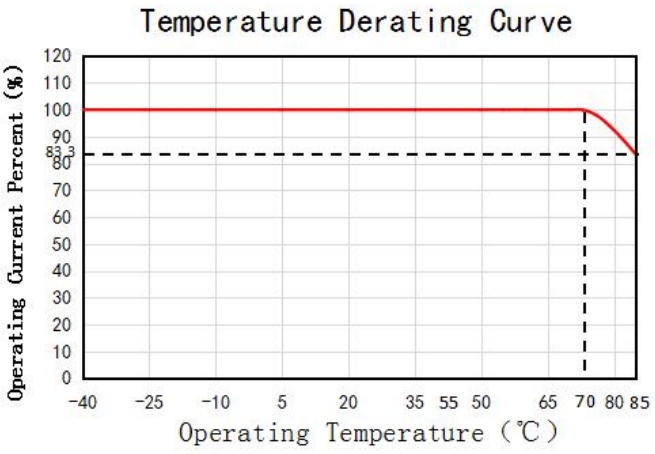
Electromagnetic Compatibility (EMC)

EMI	CE		CISPR32/EN55032	CLASS B	
	RE		CISPR32/EN55032	CLASS B	
EMS	ESD		IEC/EN61000-4-2	Contact ±6kV Air ±8kV	perf. Criteria A
	RS		IEC/EN61000-4-3	10V/m	perf. Criteria A
	EFT		IEC/EN61000-4-4	±4kV	perf. Criteria A
	CS		IEC61000-4-6	10V r.m.s	perf. Criteria A
	PFMF		IEC61000-4-8	50/60Hz 30A/m	perf. Criteria A
	Surge	FP2D03L	IEC/EN61000-4-5	Line-Line ±2kV Line-PE ±4kV	perf. Criteria A
		EFP2D03		Line-Line ±4kV Line-PE ±6kV	perf. Criteria B

Note: * Matching EFPxD03 to the front end of the AD40/60/90-23BxxR2 series power supply can make the power module meet above EMC characteristics.

Product Typical Curve





Note: This product is suitable for applications using natural air cooling; for applications in closed environment please consult factory or one of our FAE.

Design Reference

Typical application

Note: Matched the AD40/60/90-Bxx series AC power module supply;

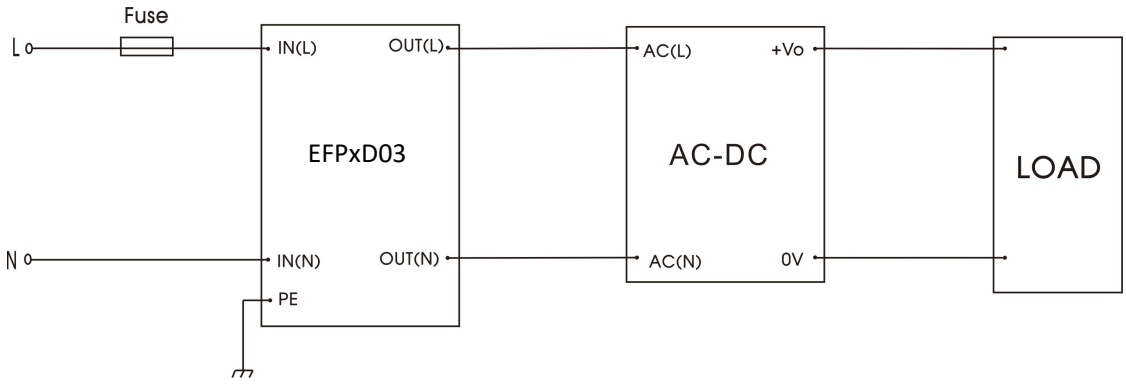
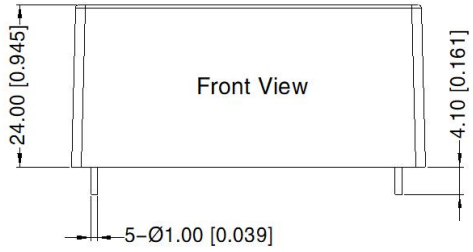


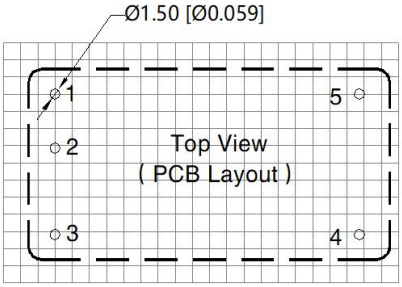
Fig.1

Components	Value	Recommended Component
Fuse	Required.The Fuse must be selected in accordance with the specified input current of the corresponding power converter.	

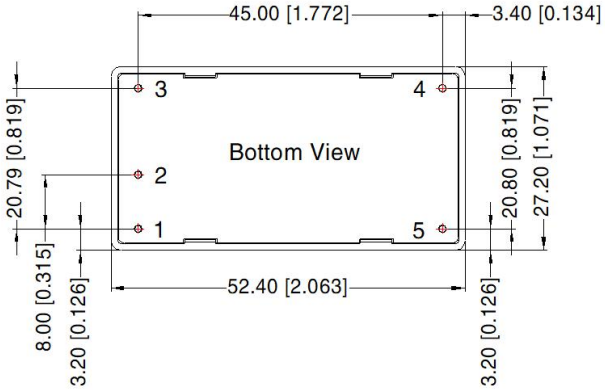
Dimensions and Recommended







Note: Grid 2.54*2.54mm



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

Note:
Unit: mm[inch]
PIN1/2/3/4/5: ϕ 1.0mm
Pin diameter tolerances: ± 0.10[± 0.004]
General tolerances: ± 0.50[± 0.020]

Note:
1.Unless otherwise specified, data in this datasheet should be tested under the conditions of Ta=25℃, humidity<75%RH with nominal input voltage and rated load;
2. All index testing methods in this datasheet are based on our company corporate standards;
3. Products are related to laws and regulations: see "Features" and "EMC";
4. Our products shall be classified according to ISO14001 and related environmental laws and regulations, and shall be handled by qualified units;