FHSM series

XP Power

1, 3, 6, 10, 15 & 20A

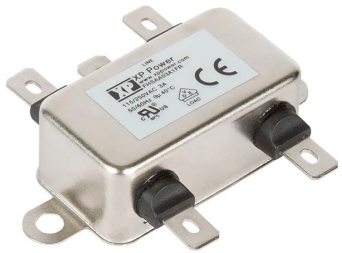
Chassis mount filter

EMI filters

The FHSM single stage filters are housed in a compact, chassis mounting metal case, for ITE applications. Input and output connections are via 6.3 x 0.8mm Faston terminals.

The filter should be fitted as close as possible to the mains cable entry point to minimize any radiated emissions from the mains cable within the equipment.

Suitable for class I appliances, all models feature a shielded metal body, and are fitted with a bleed resistor to safely discharge the filter capacitors when power is disconnected.



Features

- Chassis mount filter
- Single stage
- Compact design
- ITE version
- Voltage range 0 to 250VAC
- Current rating 1, 3, 6, 10, 15 & 20A
- 6.3 x 0.8mm Faston terminals
- Bleed resistor
- Shielded metal body
- Wide operating temperature range
- 3 year warranty

Applications

Medical

Dimensions

See mechanical details

Documentation

For further information click the link or scan the code

→ xppower.com

Models & ratings

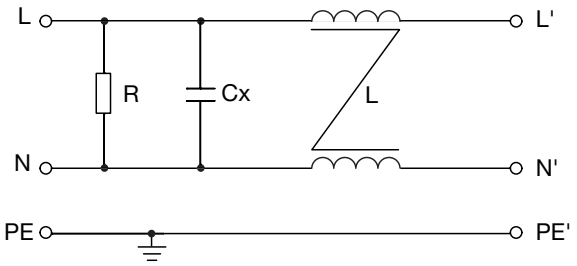
Model number/ filter	Rated current	Leakage current		Inductance at 10kHz, 0.25V	Capacitance		Resistance	Weight	Application	Mounting
		115VAC/60Hz	250VAC/50Hz		Cx	Cy				
FHSMA01A1FR	1A	2µA	5µA	2 x 10mH	0.1µF	None	1MΩ	37g	Medical	Chassis
FHSMA03A1FR	3A			2 x 1.2mH				37g		Chassis
FHSMA06A1FR	6A			2 x 0.8mH				43g		Chassis
FHSMA10A1FR	10A			2 x 0.3mH				43g		Chassis
FHSMA15A2FR	15A			2 x 0.8mH				99g		Chassis
FHSMA20A2FR	20A			2 x 0.6mH				94g		Chassis

Specification

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Rated voltage			250	VAC	
Input frequency	DC		400	Hz	
Rated current	1		20	A	See models and ratings
Earth leakage current	2		5	mA	See models and ratings
MTBF	2.2			Mhrs	MIL-HDBK 217F, 250VAC at +40°C
Flammability rating	UL94V-2				
Temperature operating	-40		+110	°C	See derating curve
Safety approvals	EN60939-2				Passive filter units for EMI suppression
	ANSI/UL1283				Electromagnetic Interference Filters
Terminals	Faston 6.3 x 0.8mm straight				
Protection class	Suitable for appliances with protection Class I				
Dielectric strength		1500		VAC	

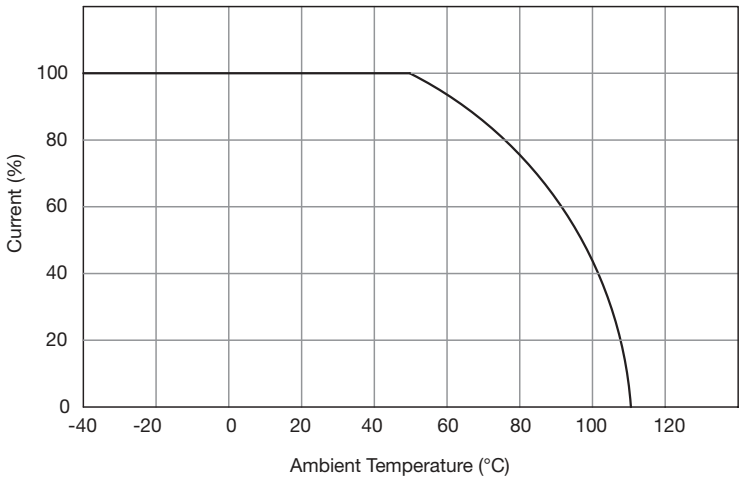
Application notes

Electrical schematic



Note: fuse not supplied

Thermal derating



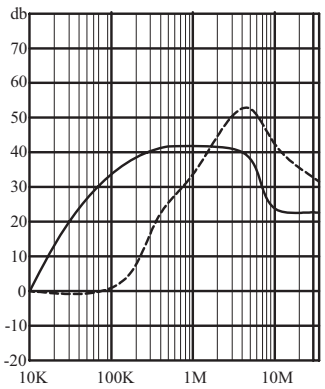
Application notes

Typical attenuation curves

Asymmetrical (Common Mode)

Symmetrical (Differential Mode)

FHSMM01A1FR



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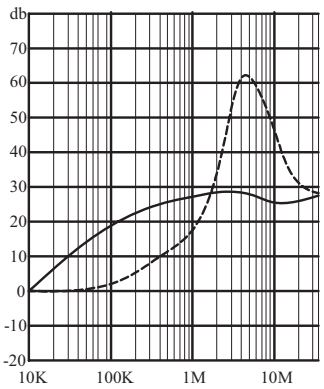

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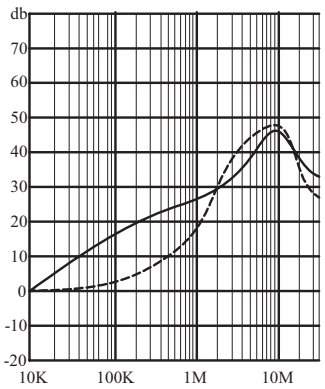

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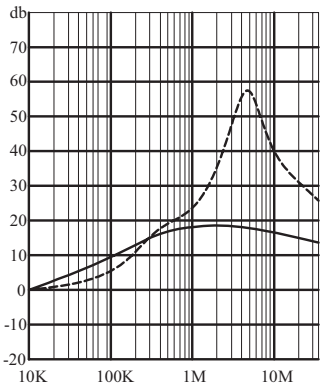

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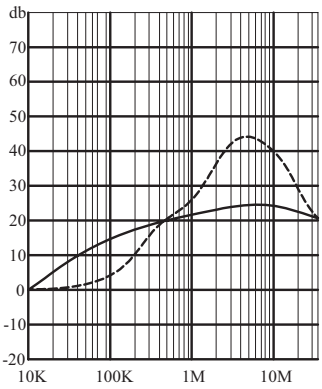

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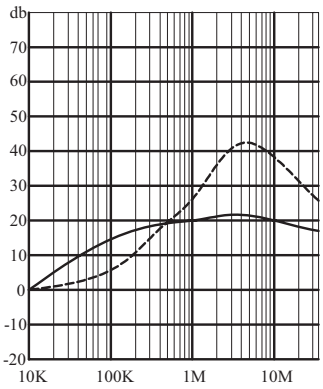
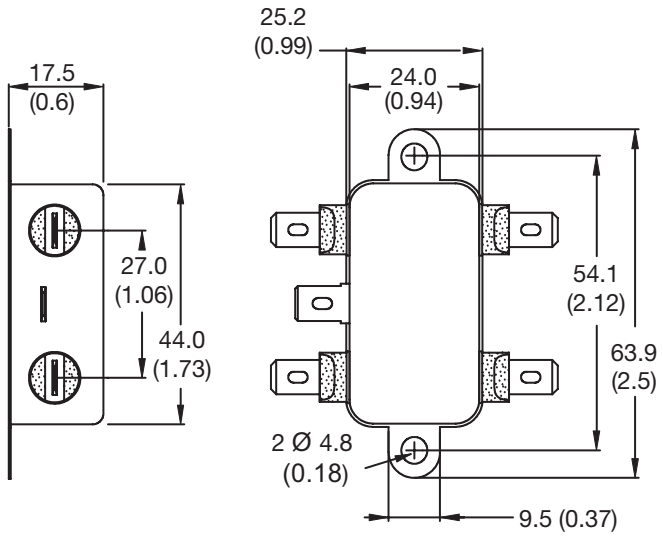


Safety approvals

Safety Agency	Standard	Notes & conditions
CE	Meets all applicable directives	
UKCA	Meets all applicable legislation	

Mechanical details

FHSMMxxA1FR



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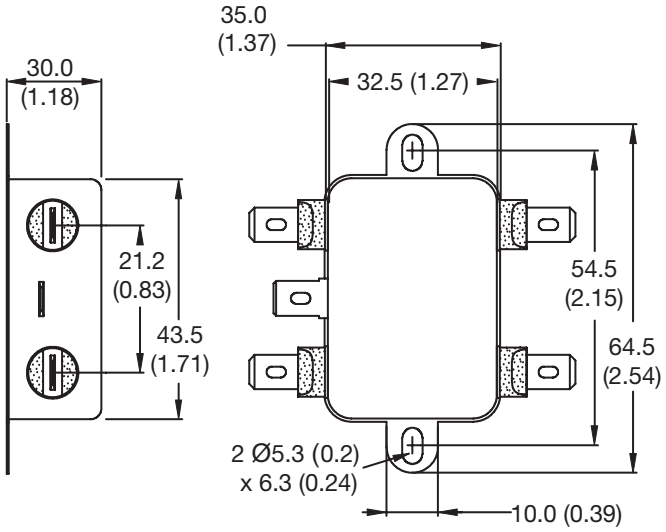

Notes:

1. All dimensions are in mm (inches)