



# Chassis Mount Filter

- Chassis Mount Filter
- Single Stage Design
- Compact Design
- Medical Applications
- 1, 3, 6, 10, 15 & 20A Rating
- 6.3 x 0.8mm Faston Terminals
- Bleed Resistor
- Shielded Metal Body
- Wide Operating Temperature Range
- 3 Year Warranty

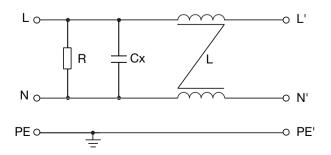


The FHSM single stage filters are housed in a compact, chassis mounting metal case, for medical applications with a low  $5\mu$ A @250VAC earth leakage. Input and output connections are via  $6.3 \times 0.8$ mm Faston terminals. The filter should be fitted as close as possible to the mains cable entry 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. Safety approvals are EN60939-2 for passive filters & ANSI/UL1283 for EMI filters. They feature a wide operating temperature range of -40°C to +110°C with full power operation up to +50°C.

Speci	tica	tions

Characteristics	Minimum	Typical	Maximum	Units	Notes and Conditions		
Input Voltage	0	115/230	264	VAC			
Input Frequency	DC		400	Hz			
Rated Current	1		20	Α	See models and ratings table		
Earth Leakage Current	2		5	μΑ	See models and ratings table		
MTBF	2.2			MHrs	MIL-STD 217F		
Flammability Rating	UL94V-2		•	•			
Temperature Operating	-40		110	°C	See derating curve		
0.51.4	EN60939-2				Passive filter units for EMI suppression		
Safety Approvals	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	VAC		

### **Electrical Schematic**



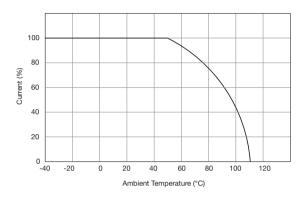




# **Models & Ratings**

Rated Leakag		current	Inductance	Capacitance		Resistance	Weight	Application	Mounting	Filter
current	115VAC/60Hz	250VAC/50Hz	at 10 kHz, 0.25 V	Сх	Су	nesistance	weignt	Application	wounting	Filter
1 A	2 μΑ	5 μΑ	2 x 10 mH	0.1 μF	None	1 ΜΩ	37g	Medical	Chassis	FHSMM01A1FR
3 A	2 μΑ	5 μΑ	2 x 1.2 mH	0.1 μF	None	1 ΜΩ	37g	Medical	Chassis	FHSMM03A1FR
6 A	2 μΑ	5 μΑ	2 x 0.8 mH	0.1 μF	None	1 ΜΩ	43g	Medical	Chassis	FHSMM06A1FR
10 A	2 μΑ	5 μΑ	2 x 0.3 mH	0.1 μF	None	1 ΜΩ	43g	Medical	Chassis	FHSMM10A1FR
15 A	2 μΑ	5 μΑ	2 x 0.8 mH	0.1 μF	None	1 ΜΩ	99g	Medical	Chassis	FHSMM15A2FR
20 A	2 μΑ	5 μΑ	2 x 0.6 mH	0.1 μF	None	1 ΜΩ	94g	Medical	Chassis	FHSMM20A2FR

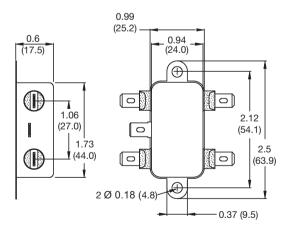
## **Thermal Derating**



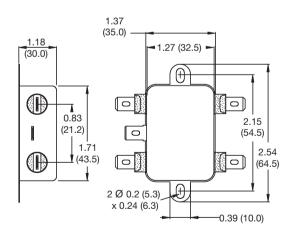
## **Mechanical Details**

All dimensions in inches (mm)

### FHSMMxxA1FR



#### FHSMMxxA2FR





# **Typical Attenuation Curves**

Per CISPR 17, 50 Ω system

Asymmetrical (Common Mode)

Symmetrical (Differential Mode)

