

Chassis Mount Filter

- Chassis Mount Filter
- Dual 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

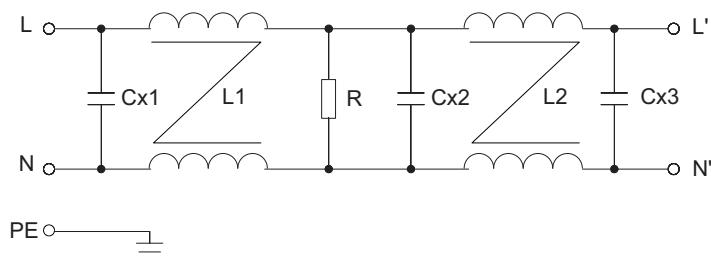


The FIHM high attenuation dual stage filters are housed in a compact, chassis mounting metal case, for medical applications with a low 5µA @250VAC earth leakage. Input and output connections are via 6.3 x 0.8mm Faston terminals. The filter should be fitted as close as possible to the mains cable entry 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. 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.

Specifications

Characteristics	Minimum	Typical	Maximum	Units	Notes and Conditions
Rated Voltage			250	VAC	
Input Frequency	DC		400	Hz	
Rated Current	1		20	A	See models and ratings table
Earth Leakage Current	2		5	µA	See models and ratings table
MTBF	2.2			MHrs	MIL-HBDK 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	

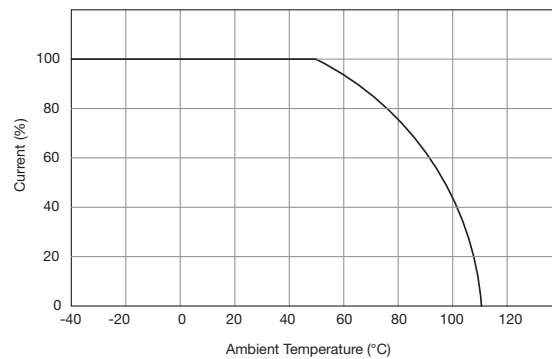
Electrical Schematic



Models & Ratings

Rated current	Leakage current		Inductance L1	Inductance L2	Capacitance				Resistance	Weight	Application	Mounting	Filter
	115VAC/60Hz	250VAC/50Hz	@10kHz, 0.25V	@10kHz, 0.25V	Cx1	Cx2	Cx3	Cy					
1A	2uA	5uA	2 x 7.4mH	2 x 7.4mH	0.3μF	0.3μF	0.3μF	None	2.2MΩ	121g	Medical	Chassis	FIHMA01C1F
3A	2uA	5uA	2 x 3.6mH	2 x 3.6mH	0.3μF	0.3μF	0.3μF	None	2.2MΩ	121g	Medical	Chassis	FIHMA03C1F
6A	2uA	5uA	2 x 1.4mH	2 x 1.4mH	0.3μF	0.3μF	0.3μF	None	2.2MΩ	124g	Medical	Chassis	FIHMA06C1F
10A	2uA	5uA	2 x 2.0mH	2 x 2.0mH	0.3μF	0.3μF	0.3μF	None	2.2MΩ	125g	Medical	Chassis	FIHMA10C2F
15A	2uA	5uA	2 x 1.8mH	2 x 1.8mH	0.3μF	0.3μF	0.3μF	None	2.2MΩ	130g	Medical	Chassis	FIHMA15C2F
20A	2uA	5uA	2 x 1.0mH	2 x 1.0mH	0.3μF	0.3μF	0.3μF	None	2.2MΩ	130g	Medical	Chassis	FIHMA20C2F

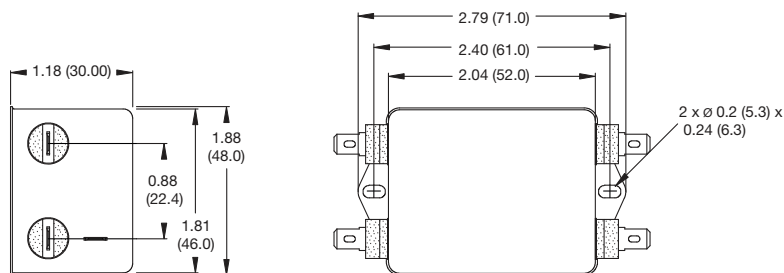
Thermal Derating



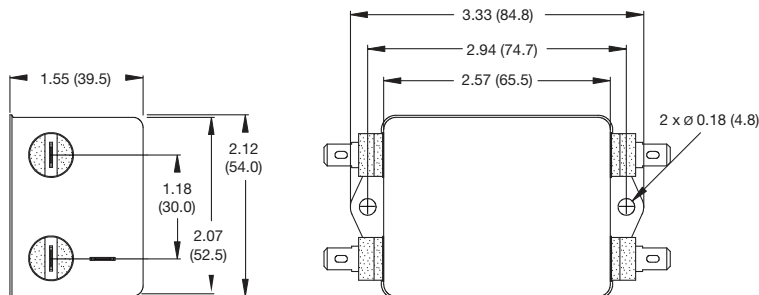
Mechanical Details

All dimensions in inches (mm)

FIHMAxxC1F



FIHMAxxC2F



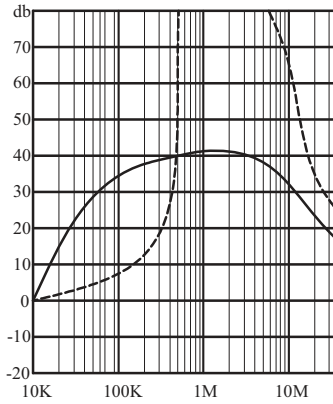
Typical Attenuation Curves

Per CISPR 17, 50 Ω system

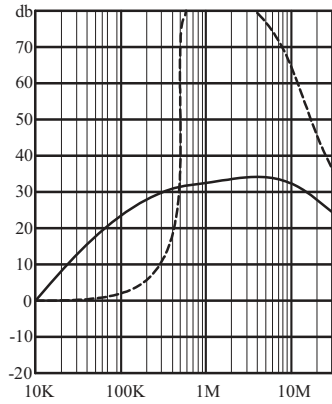
———— Asymmetrical (Common Mode)

----- Symmetrical (Differential Mode)

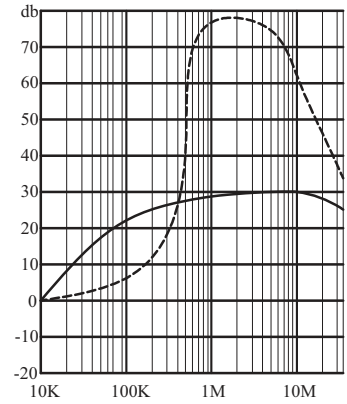
FIHMA01C1F



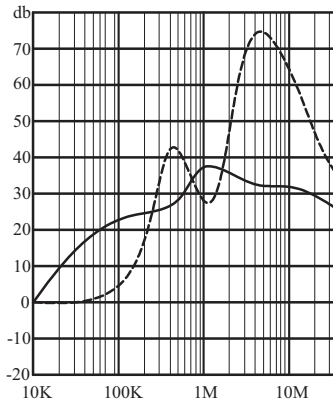
FIHMA03C1F



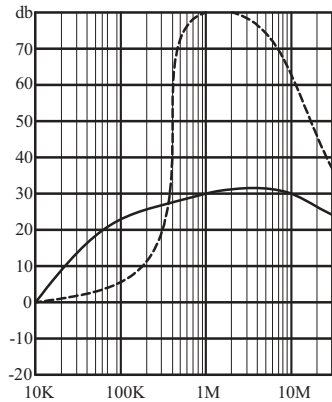
FIHMA06C1F



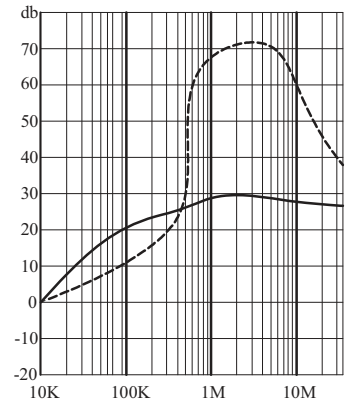
FIHMA10C2F



FIHMA15C2F



FIHMA20C2F



Safety Approvals

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