

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

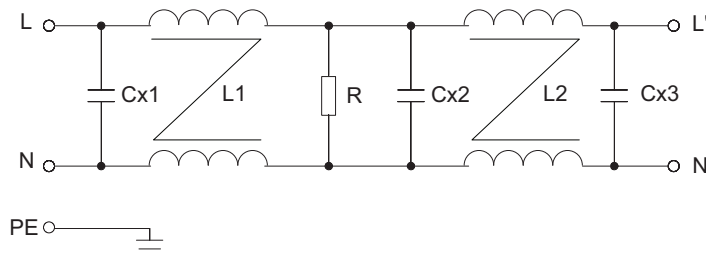


The FIHM high attenuation dual stage filters are housed in a compact, chassis mounting metal case, for medical applications with a low 5µA @250VAC earth leakage. Input and output connections are via 6.3 x 0.8mm Faston terminals. The filter should be fitted as close as possible to the mains cable entry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

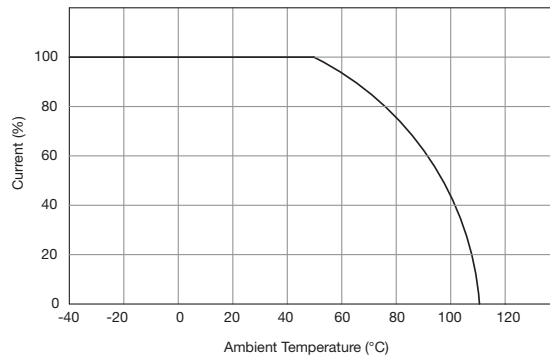
Electrical Schematic



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 |

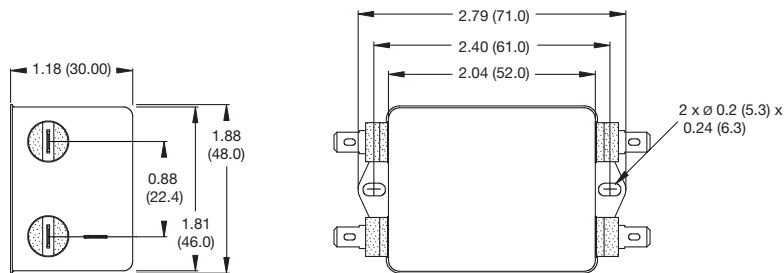
Thermal Derating



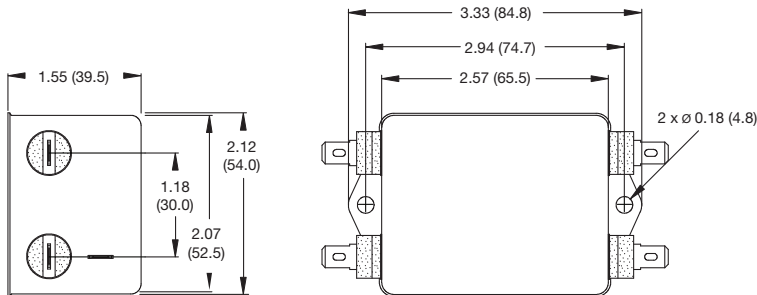
Mechanical Details

All dimensions in inches (mm)

FIHMAxxC1F



FIHMAxxC2F



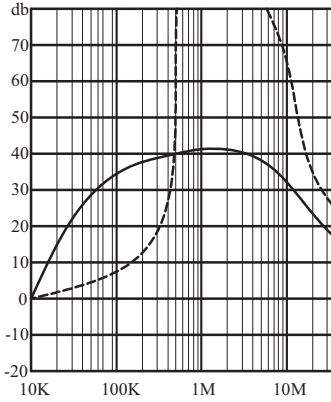
Typical Attenuation Curves

Per CISPR 17, 50 Ω system

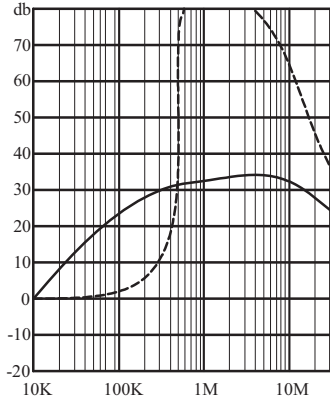
———— Asymmetrical (Common Mode)

----- Symmetrical (Differential Mode)

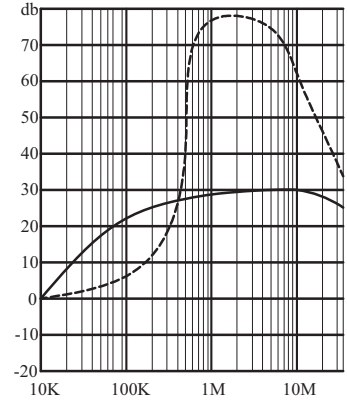
FIHMA01C1F



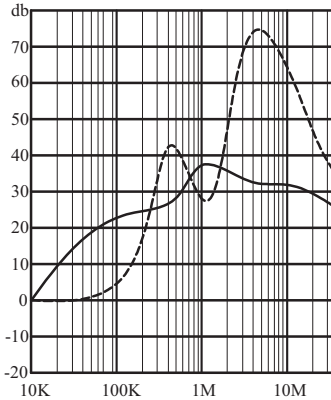
FIHMA03C1F



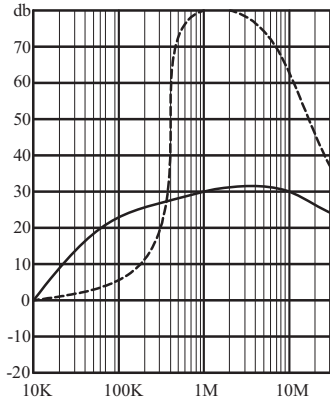
FIHMA06C1F



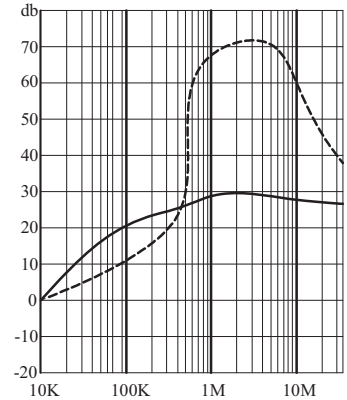
FIHMA10C2F



FIHMA15C2F



FIHMA20C2F



Safety Approvals

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

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