



**THE DATASHEET OF  
FHSAA03A1FR**



### Chassis Mount Filter

- Chassis Mount Filter
- Single Stage Design
- Compact Design
- ITE 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

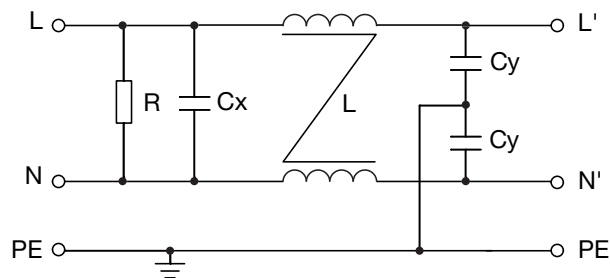


The FHSA single stage filters are housed in a compact, chassis mounting metal case, for ITE applications. Input and output connections are via 6.3 x 0.8mm Faston terminals. The filter should be fitted as close as possible to the mains cable entry point to minimize any radiated emissions from the mains 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. 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	0.3		0.6	mA	See models and ratings table
MTBF	2.2			MHrs	MIL-HDBK 217F, 230 VAC 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	

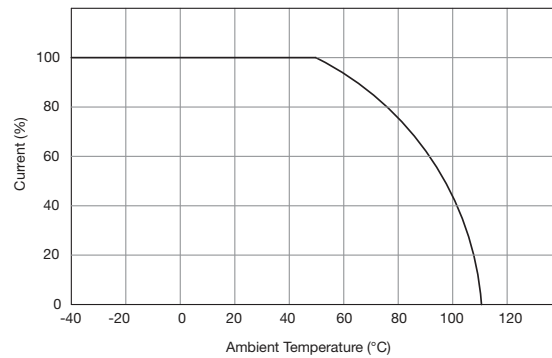
#### Electrical Schematic



## Models & Ratings

Rated current	Leakage current		Inductance at 10 kHz, 0.25 V	Capacitance		Resistance	Weight	Application	Mounting	Filter
	115VAC/60Hz	250VAC/50Hz		Cx	Cy					
1 A	0.3 mA	0.6 mA	2 x 10 mH	0.1 $\mu$ F	2 x 3.3 nF	1 M $\Omega$	37g	ITE	Chassis	FHSAA01A1FR
3 A	0.3 mA	0.6 mA	2 x 1.2 mH	0.1 $\mu$ F	2 x 3.3 nF	1 M $\Omega$	37g	ITE	Chassis	FHSAA03A1FR
6 A	0.3 mA	0.6 mA	2 x 0.8 mH	0.1 $\mu$ F	2 x 3.3 nF	1 M $\Omega$	43g	ITE	Chassis	FHSAA06A1FR
10 A	0.3 mA	0.6 mA	2 x 0.3 mH	0.1 $\mu$ F	2 x 3.3 nF	1 M $\Omega$	43g	ITE	Chassis	FHSAA10A1FR
15 A	0.3 mA	0.6 mA	2 x 0.8 mH	0.1 $\mu$ F	2 x 3.3 nF	1 M $\Omega$	99g	ITE	Chassis	FHSAA15A2FR
20 A	0.3 mA	0.6 mA	2 x 0.6 mH	0.1 $\mu$ F	2 x 3.3 nF	1 M $\Omega$	94g	ITE	Chassis	FHSAA20A2FR

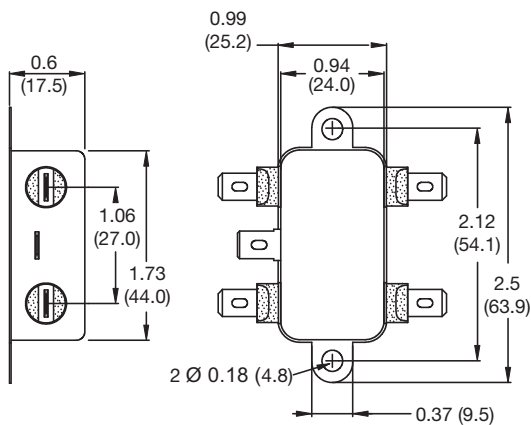
## Thermal Derating



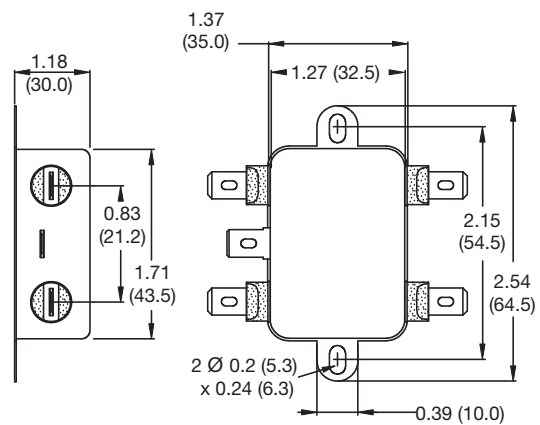
## Mechanical Details

All dimensions in inches (mm)

### FHSAAxxA1FR



### FHSAAxxA2FR



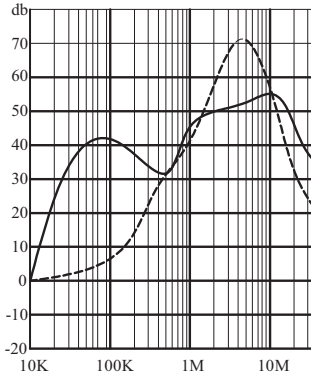
## Typical Attenuation Curves

Per CISPR 17, 50 Ω system

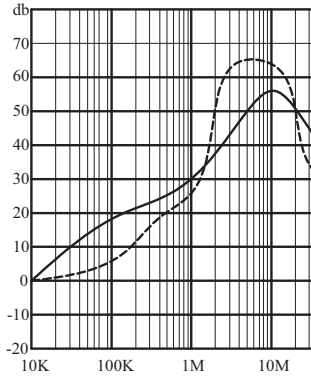
———— Asymmetrical (Common Mode)

----- Symmetrical (Differential Mode)

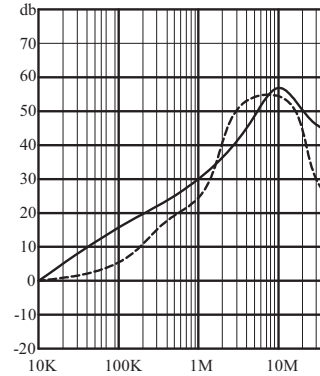
FHSAA01A1FR



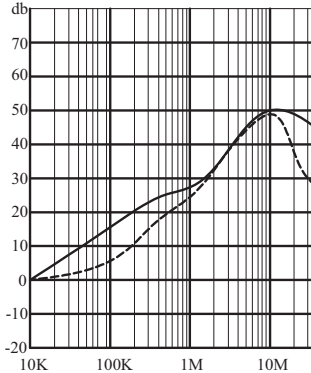
FHSAA03A1FR



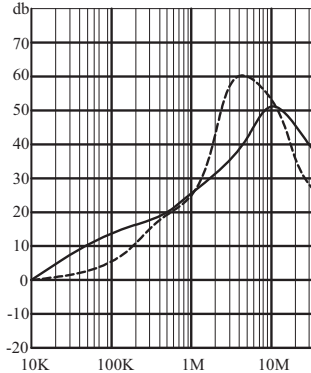
FHSAA06A1FR



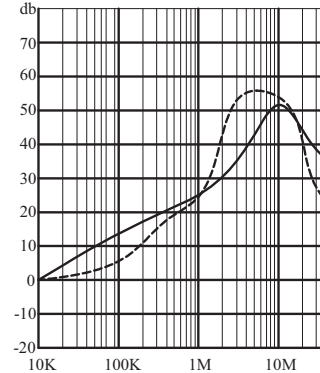
FHSAA10A1FR



FHSAA15A2FR



FHSAA20A2FR





## Safety Approvals







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

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View FHSAA03A1FR](#) on WIN SOURCE
-  [XP Power](#) Information

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management