# FGSM

## XP Power

## IEC Power Entry Inlet with Line Filter

- IEC320-C14 Filtered Inlet
- Dual Fuse
- Input Switch
- Screw Mount
- Compact Design
- Medical Applications
- 1, 2, 4, 6 & 10A Rating
- 6.3 x 0.8mm Faston Terminals
- Bleed Resistor
- Shielded Metal Body
- Wide Operating Temperature Range
- 3 Year Warranty



**EMI Filter** 

Combining a double pole switch, front accessible (when the mains connector is disconnected) dual fuse holder and a low earth leakage filtered IEC320-C14 inlet in a compact single housing, the FGSM is designed for medical applications. When fitted to mains powered equipment, they provide excellent attenuation to conducted electro-magnetic interference from the mains supply, whilst reducing any conducted emissions from within the equipment onto the mains supply. 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		10	A	See models and ratings table		
Earth Leakage Current	2		5	μA	See models and ratings table		
MTBF	1.35			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	3		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**



Note: Fuses not supplied

#### **Models & Ratings**

Rated	Leakage current		Inductance	Capacitance				A 11 11		
current	115VAC/60Hz	250VAC/50Hz	@10kHz, 0.25V	Сх	Су	Resistance	Weight	Application	Mounting	Filter
1 A	2 µA	5 μΑ	2 x 6.5mH	0.1 µF	None	1MΩ	95g	Medical	Screw	FGSMA01BFR
2 A	2 µA	5 μΑ	2 x 3.8mH	0.1 µF	None	1MΩ	95g	Medical	Screw	FGSMA02BFR
4 A	2 µA	5 μΑ	2 x 1.6mH	0.1 µF	None	1MΩ	95g	Medical	Screw	FGSMA04BFR
6 A	2 µA	5 μΑ	2 x 0.8mH	0.1 µF	None	1MΩ	97g	Medical	Screw	FGSMA06BFR
10 A	2 µA	5 μΑ	2 x 0.2mH	0.1 µF	None	1MΩ	108g	Medical	Screw	FGSMA10BFR

### Thermal Derating



#### **Mechanical Details**

All dimensions in inches (mm)



Output Terminals: 6.3 mm x 0.8 mm Fast-ons

Fuse is not supplied. Correct fuse dimensions are 5mm x 20mm

# FGSM

EMI Filter

### Typical Attenuation Curves

------ Common Mode/Asymmetrical(L-G)

----- Differential Mode/Symmetrical(L-L)





FGSMA02BFR

#### FGSMA04BFR



#### FGSMA06BFR





ab			
70			
60			
50			1
40		111 /	
30		1	
20			
10		14T	
0			
-10			
-20			
10K	100K	1M	10M