

General Purpose AC EMI Filter



*Image shown is for illustrative purpose only

Features and benefits

- All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- Filter available in panel mounting provision.
- Single stage.
- High reliable.
- CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- Input connection through IEC 60320 C14 plug.
- Output connection with fast-on or wire terminal
- Filters available in medical version without capacitor to earth.
- With surge suppressor filters also available.

Application

- Portable electrical and electronic equipment
- Datacom equipment
- Control Panel
- SMPS, single phase power supplies
- Medical equipment

Approvals /Conformance



Technical Specifications

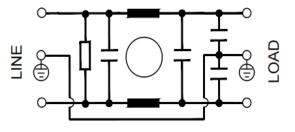
Operating voltage	120/250 VAC
Current rating	1A - 10A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> N 1414VDC (applicable excluding surge suppressor filter)
Insulation resistance	\ge 300 MΩ @ 500VDC (PN→E)
Operating temperature	40°c /-25°c +85°C

Attenuation type

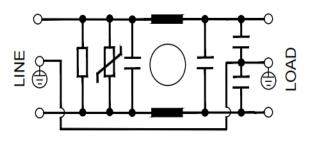
Single Stage

Standard

Electrical schematic for filter: General purpose –

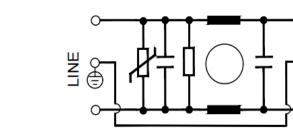


General purpose with surge suppressor -



Electrical schematic for filter :

Medical equipment application -



Mechanical Drawing

C

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C

LINE

Wire terminal

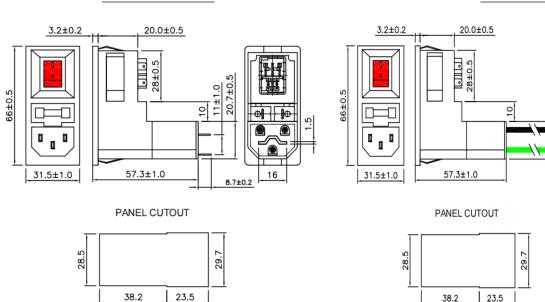
Medical equipment application with surge suppressor -

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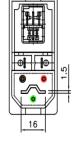
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LOAD

20.7±0.5



LOAD





*All dimensions in mm.

Product Selection Table:

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°c	Leakage current (mA) @250VA C	Terminals (X)			Energy		
				Fast-on	Wire	Max. Peak current (8/20 μ sec 1 time) (KA)	surge rating (10/1000 μ sec) (Joules)	Approx. weight (gm)	Attenuatio n
1	EF-1B001 <u>×</u> 01E-B04	1	< 0.5	С	G			65	Standard
2	EF-1B001 <u>X</u> 02E- B04	1	< 0.5	С	G	6.5	175	65	Standard
3	EF-1B001 <u>X</u> 03E- B04	1	< 0.003	С	G			65	Standard

Fast-on terminal



4	EF-1B001 <u>X</u> 04E- B04	1	< 0.003	С	G	6.5	175	65	Standard
5	EF-1B003 <u>X</u> 01E- B04	3	< 0.5	С	G			65	Standard
6	EF-1B003 <u>X</u> 02E- B04	3	< 0.5	С	G	6.5	175	65	Standard
7	EF-1B003 <u>X</u> 03E- B04	3	< 0.003	С	G			65	Standard
8	EF-1B003 <u>X</u> 04E- B04	3	< 0.003	С	G	6.5	175	65	Standard
9	EF-1B006 <u>X</u> 01E- B04	6	< 0.5	С	G			65	Standard
10	EF-1B006 <u>X</u> 02E- B04	6	< 0.5	С	G	6.5	175	65	Standard
11	EF-1B006 <u>X</u> 03E- B04	6	< 0.003	С	G			65	Standard
12	EF-1B006 <u>X</u> 04E- B04	6	< 0.003	С	G	6.5	175	65	Standard
13	EF-1B010 <u>X</u> 01E- B04	10	< 0.5	С	G			65	Standard
14	EF-1B010 <u>X</u> 02E- B04	10	< 0.5	С	G	6.5	175	65	Standard
15	EF-1B010 <u>X</u> 03E- B04	10	< 0.003	С	G			65	Standard
16	EF-1B010 <u>X</u> 04E- B04	10	< 0.003	С	G	6.5	175	65	Standard

- To compile complete part number, replace the 'X' with required output connection terminal. (e.g., EF-1B001B01E-B02)

Maximum leakage under usual AC operating conditions (acc. IEC 60939-3). Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

- Customize products provided on request.

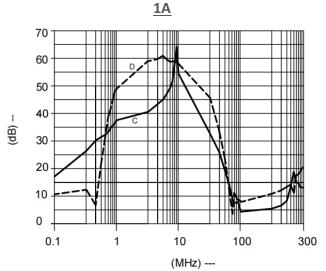
Connection Method

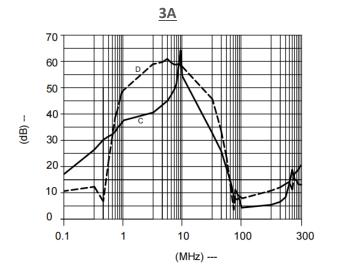
Current Rating (A)	Fast -on	Wire	Earthing	
1, 3 & 6	4.8 X 0.8mm	18AWG	Fact on Awira loads	
10	4.8 X 0.811111	14AWG	Fast-on/wire leads	



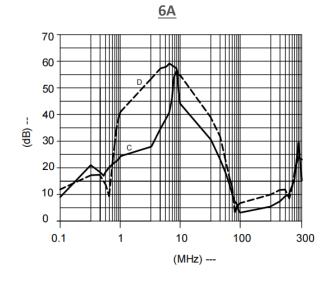
Filter attenuation graph

C = Common mode (asymmetrical) – For general purpose

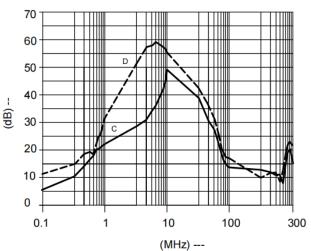




D = Differential mode (symmetrical) ------







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