General Purpose AC EMI Filter



*Image shown is for illustrative purpose only

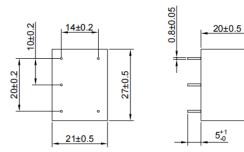
Attenuation Type

Single Stage

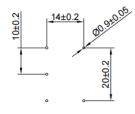


27±0.5

Mechanical details



PCB DRILLING DETAILS



All dimensions in mm.





Technical specifications

| Operating voltage | 120/250 VAC |
|-----------------------------|--|
| Current rating | 1A-6A |
| 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 | ≥ 300 MΩ @ 500VDC (PN→E) |
| Operating temperature | 40°c /-25°c +85°c |

Features and benefits

- I All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- I Compact PCB-mountable design.
- I High reliable.
- I Plastic housing with good aesthetic.
- I Single stage.
- I Input and output connection through soldering pins.
- Filters available in medical version without capacitor to earth.
- I With surge suppressor filters also available.
- I Cost effective solution.

Application

- I Electrical and electronic equipment
- I Consumer product
- I Medical equipment
- SMPS
- Test & measurement equipment
- I Small to medium-sized machines and household equipment
- | Office automation equipment

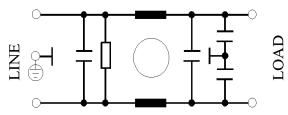
Note: For medical application filter, earthing terminal is not provided.



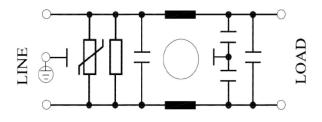


Electrical schematic

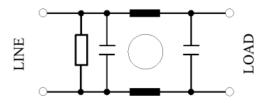
General Purpose -



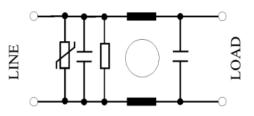
General Purpose with Surge Suppressor -



Medical equipment application -



Medical equipment application with Surge Suppressor -

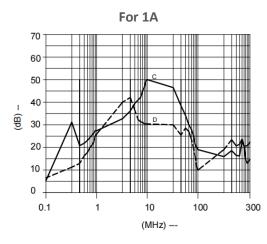


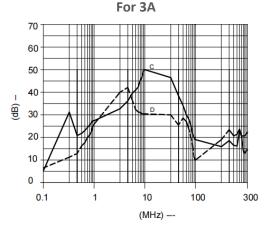
Filter attenuation graph

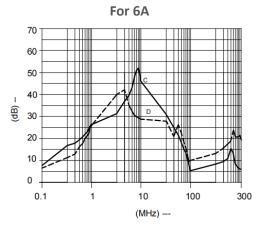
C = Common mode (asymmetrical) —

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

For general purpose











El.italia EC-EA02[EP-403] serie

Filter Selection Table

| Sr. No. | Elcom part codes (ordering code) | Rated Current rating (A) @40°c | Leakage current (mA) @250VAC | Pin-type terminal | Max. Peak current (8/20 µ sec 1 time) (KA) | Energy surge rating (10/1000 µ sec) (Joules) | Approx. Weight (gm) | Attenuation |
|------------|-------------------------------------|---|---------------------------------------|----------------------|---|--|---------------------------|-------------|
| 1 | EF-1B001A01E-A02 | 1 | < 0.5 | А | | | 20 | Standard |
| 2 | EF-1B001A02E-A02 | 1 | < 0.5 | А | 1.75 | 42 | 20 | Standard |
| 3 | EF-1B001A03E-A02 | 1 | < 0.003 | А | | | 20 | Standard |
| 4 | EF-1B001A04E-A02 | 1 | < 0.003 | А | 1.75 | 42 | 20 | Standard |
| 5 | EF-1B003A01E-A02 | 3 | < 0.5 | А | | | 20 | Standard |
| 6 | EF-1B003A02E-A02 | 3 | < 0.5 | А | 1.75 | 42 | 20 | Standard |
| 7 | EF-1B003A03E-A02 | 3 | < 0.003 | А | | | 20 | Standard |
| 8 | EF-1B003A04E-A02 | 3 | < 0.003 | А | 1.75 | 42 | 20 | Standard |
| 9 | EF-1B006A01E-A02 | 6 | < 0.5 | А | | | 20 | Standard |
| 10 | EF-1B006A02E-A02 | 6 | < 0.5 | А | 1.75 | 42 | 20 | Standard |
| 11 | EF-1B006A03E-A02 | 6 | < 0.003 | А | | | 20 | Standard |
| 12 | EF-1B006A04E-A02 | 6 | < 0.003 | А | 1.75 | 42 | 20 | Standard |

- Customize products provided on request.

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.





<u>Syntax</u>

