

## General Purpose AC EMI Filter



\*Image shown is for illustrative purpose only

## Approvals /Conformance



## 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<br>P -> N 1414VDC (Applicable for general purpose filter) |
| Insulation resistance       | ≥ 300 MΩ @ 500VDC (PN→E)   |
| Operating temperature       | 40°C / -25°C +85°C   |

## Features and benefits

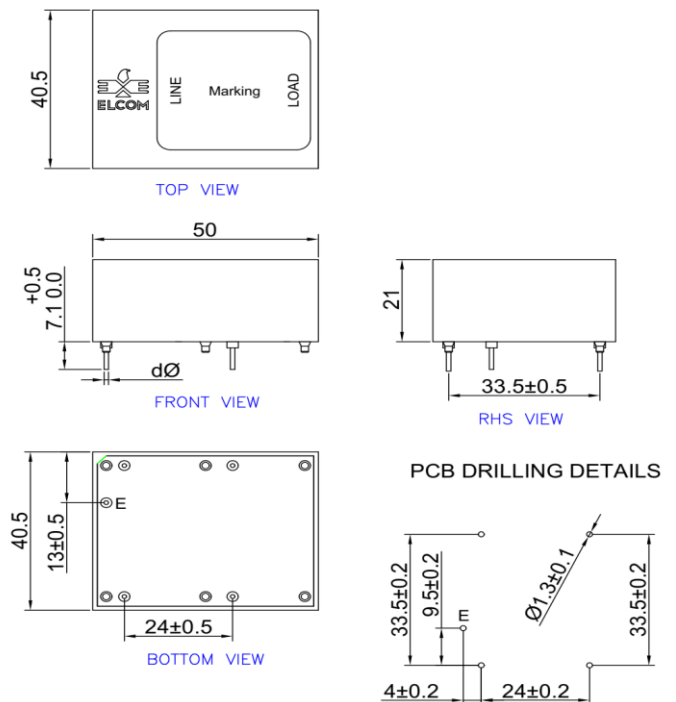
- | All filters provide high attenuation performance.
- | All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- | Compact PCB-mountable design.
- | High reliable.
- | Plastic housing with good aesthetic.
- | Single stage.
- | Input and output connection through soldering pins.
- | Filters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

## Attenuation type

Single Stage

**Standard**

## Mechanical Details



## Application

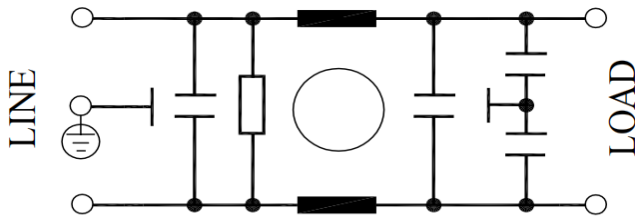
- | Electrical and electronic equipment
- | Consumer product
- | Medical equipment
- | SMPS
- | Test & measurement equipment
- | Small to medium-sized machines and household equipment
- | Office automation equipment

\*All dimensions are in mm.

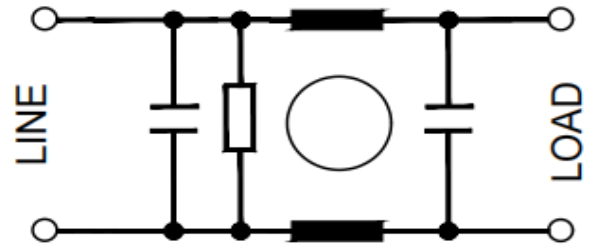
Note: For medical application filter, earthing terminal is not provided.

## Electrical schematic for Filter

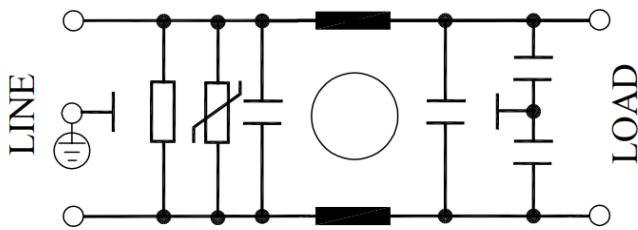
General purpose -



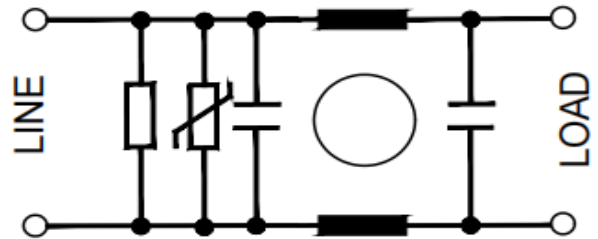
Medical equipment application -



General purpose with surge suppressor -



Medical equipment application with surge suppressor-



## Filter Selection Table

| Sr. No. | Elcom part codes (ordering code) | Rated Current rating (A) @40°C | Leakage current (mA) @250VAC | Pin-type terminal<br>⌊ | 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-A04                 | 1                              | < 0.5                        | A                      | ----                                       | ----   | 50                  | Standard    |
| 2       | EF-1B001A02E-A04                 | 1                              | < 0.5                        | A                      | 6.5  | 175  | 50                  | Standard    |
| 3       | EF-1B001A03E-A04                 | 1                              | < 0.003                      | A                      | ----                                       | ----   | 50                  | Standard    |
| 4       | EF-1B001A04E-A04                 | 1                              | < 0.003                      | A                      | 6.5  | 175  | 50                  | Standard    |
| 5       | EF-1B002A01E-A04-A               | 2                              | < 0.5                        | A                      | ----                                       | ----   | 50                  | Standard    |
| 6       | EF-1B002A02E-A04                 | 2                              | < 0.5                        | A                      | 6.5  | 175  | 50                  | Standard    |
| 7       | EF-1B002A03E-A04                 | 2                              | < 0.003                      | A                      | ----                                       | ----   | 50                  | Standard    |
| 8       | EF-1B002A04E-A04                 | 2                              | < 0.003                      | A                      | 6.5  | 175  | 50                  | Standard    |
| 9       | EF-1B003A01E-A04                 | 3                              | < 0.5                        | A                      | ----                                       | ----   | 50                  | Standard    |
| 10      | EF-1B003A02E-A04                 | 3                              | < 0.5                        | A                      | 6.5  | 175  | 50                  | Standard    |
| 11      | EF-1B003A03E-A04                 | 3                              | < 0.003                      | A                      | ----                                       | ----   | 50                  | Standard    |
| 12      | EF-1B003A04E-A04                 | 3                              | < 0.003                      | A                      | 6.5  | 175  | 50                  | Standard    |
| 13      | EF-1B006A01E-A04                 | 6                              | < 0.5                        | A                      | ----                                       | ----   | 50                  | Standard    |

|    |                  |   |         |   |      |      |    |          |
|----|------------------|---|---------|---|------|------|----|----------|
| 14 | EF-1B006A02E-A04 | 6 | < 0.5   | A | 6.5  | 175  | 50 | Standard |
| 15 | EF-1B006A03E-A04 | 6 | < 0.003 | A | ---- | ---- | 50 | Standard |
| 16 | EF-1B006A04E-A04 | 6 | < 0.003 | A | 6.5  | 175  | 50 | 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.

## Connection Type

| Current Rating (A) | Pin type terminal | Earthing    |
|--------------------|-------------------|-------------|
| 1,2,3,6 Amp        | Solder pins       | Solder pins |

## Filter attenuation graph

C = Common mode (asymmetrical) —————

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

For General Purpose

### 1 A to 6 A

