

Datasheet | EA03

EP-405 Series

General Purpose AC EMI Filter



El.italia EC-EA03[EP-405] serie



*Image shown is for illustrative purpose only



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	≥ 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

Application

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

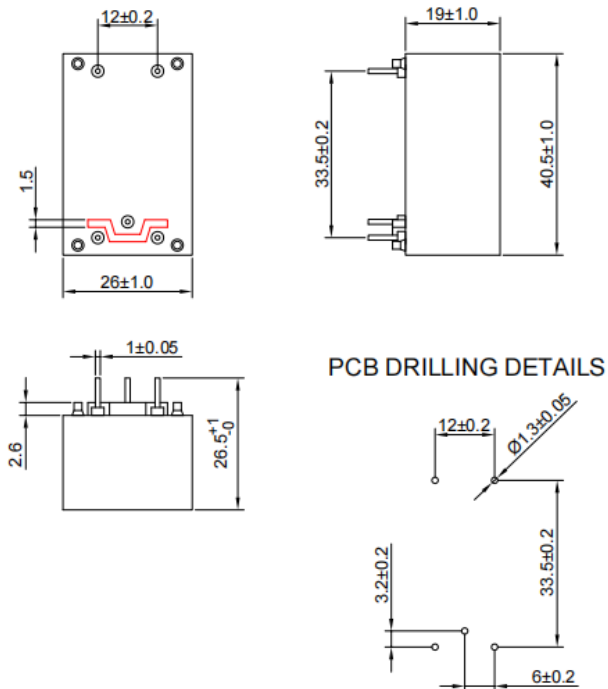
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Mechanical details

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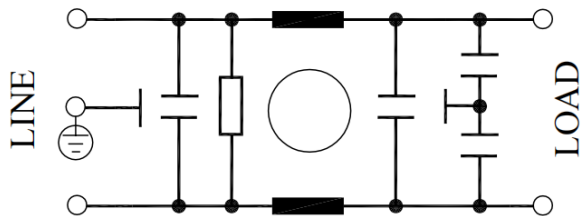


All dimensions in mm.

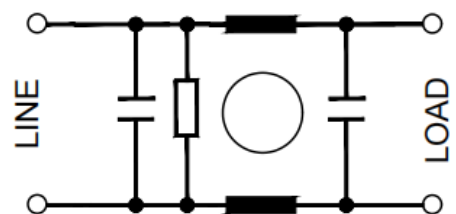
Note: For medical application filter, earthing terminal is not provided.

Electrical schematic for filter

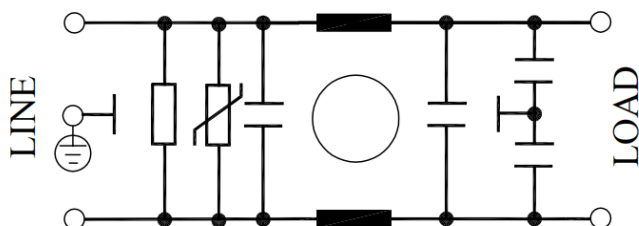
General purpose -



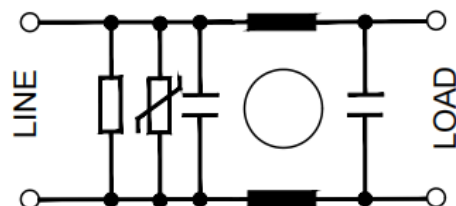
Medical equipment application -



General purpose with Surge Suppressor -



Medical equipment application with Surge Suppressor -



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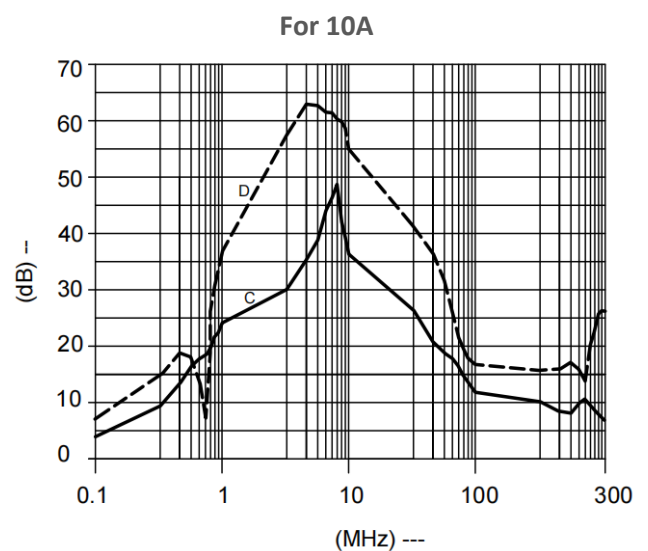
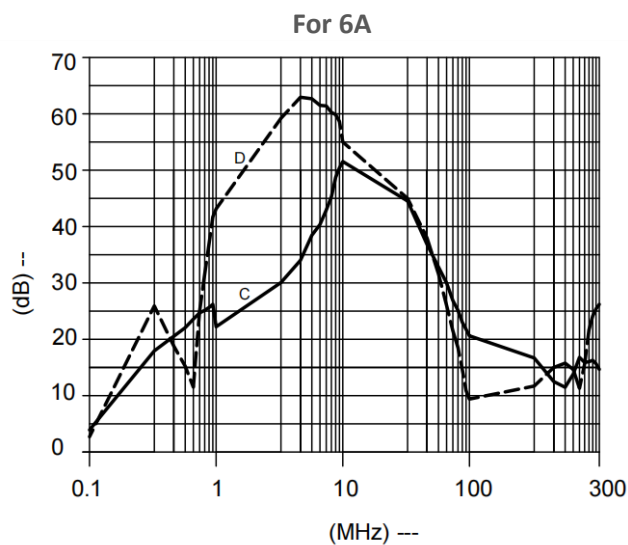
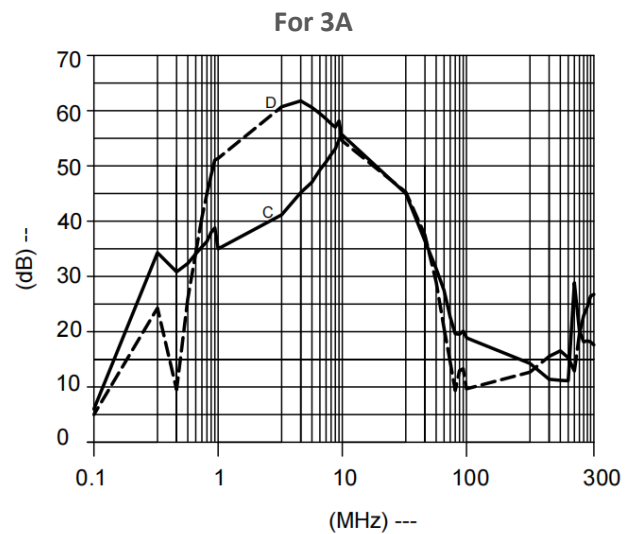
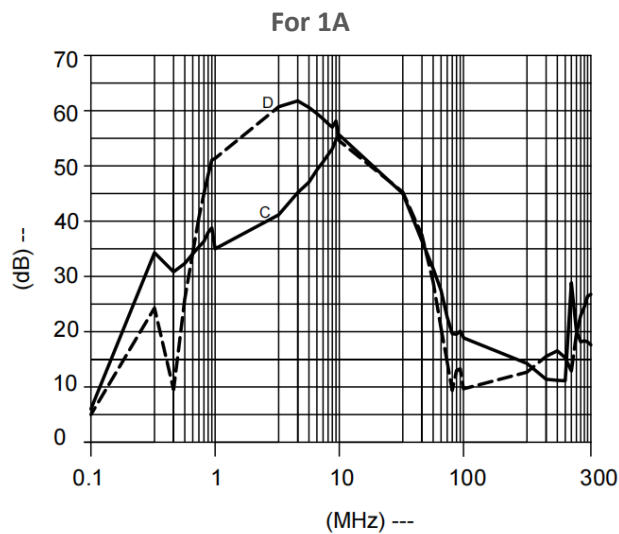
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Filter attenuation graph

C = Common mode (asymmetrical) ———

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

For general purpose



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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-A03	1	< 0.5	A	----	----	30	Standard
2	EF-1B001A02E-A03	1	< 0.5	A	6.5	175	30	Standard
3	EF-1B001A03E-A03	1	< 0.003	A	----	----	30	Standard
4	EF-1B001A04E-A03	1	< 0.003	A	6.5	175	30	Standard
5	EF-1B003A01E-A03	3	< 0.5	A	----	----	30	Standard
6	EF-1B003A02E-A03	3	< 0.5	A	6.5	175	30	Standard
7	EF-1B003A03E-A03	3	< 0.003	A	----	----	30	Standard
8	EF-1B003A04E-A03	3	< 0.003	A	6.5	175	30	Standard
9	EF-1B006A01E-A03	6	< 0.5	A	----	----	30	Standard
10	EF-1B006A02E-A03	6	< 0.5	A	6.5	175	30	Standard
11	EF-1B006A03E-A03	6	< 0.003	A	----	----	30	Standard
12	EF-1B006A04E-A03	6	< 0.003	A	6.5	175	30	Standard
13	EF-1B010A01E-A03	10	< 0.5	A	----	----	30	Standard
14	EF-1B010A02E-A03	10	< 0.5	A	6.5	175	30	Standard
15	EF-1B010A03E-A03	10	< 0.003	A	----	----	30	Standard
16	EF-1B010A04E-A03	10	< 0.003	A	6.5	175	30	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.

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Syntax

EF - 1B CCC A YY E - A03

