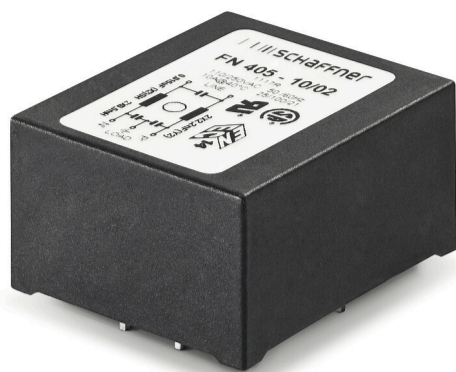


PCB-mounting filter



- Rated currents from 0.5 to 10 A
- Compact PCB-mountable design
- Low profile



Performance indicators

Attenuation performance



Rated current [A]



Approvals & Compliances



The FN 405 PCB filter is a single-phase filter designed for easy and fast PCB-mounting. Choosing the FN 405 product line brings you the rapid availability of a standard filter associated with the necessary safety acceptance. Standard PCB single-phase filters are a practical solution helping you to pass EMI system approval in a short time. A selection on amperage ratings are designed to offer you the desired standard product.

Features and Benefits

- Good conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- PCB through hole mounting
- Low profile
- Custom specific versions on request

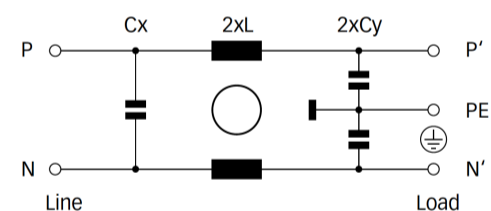
Technical Specifications

| | |
|--|--|
| Maximum continuous operating voltage | 250 VAC, 50/60 Hz |
| Nominal operating voltage | 230 VAC |
| Rated currents | 0.5 to 10 A @ 40°C |
| Operating frequency | DC to 400 Hz |
| High potential test voltage | P → PE 2000 VAC for 2 sec P → N 760 VAC for 2 sec |
| Temperature range (operation and storage) | -25°C to +100°C (25/100/21) |
| Flammability corresponding to | UL 94 V-0 |
| Design corresponding to | UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939 |
| MTBF (Mil-HB-217F) | >1,600,000 h @ 40°C/230 V |

Typical Applications

- Electrical and electronic equipment
- Small to medium-sized machines and household equipment
- Single-phase power supplies, switch-mode power supplies
- Test and measurement equipment

Typical electrical schematic



Filter Selection Table

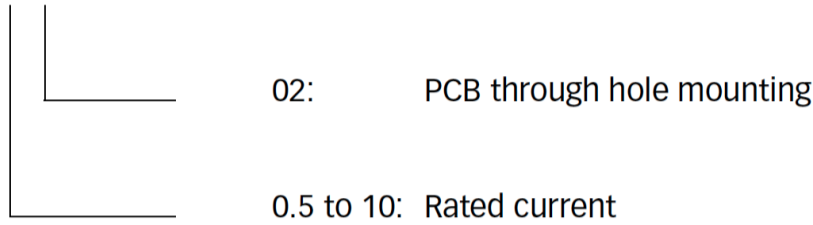
| Filter | Rated current @ 40°C (25°C) [A] | Leakage current* @ 230 VAC/50 Hz [µA] | Inductance** L [mH] | Capacitance** | | Input/Output connections | Weight [g] |
|---------------|---------------------------------------|---|---------------------------|---------------|------------|-----------------------------|---------------|
| | | | | Cx [nF] | Cy [nF] | | |
| FN 405-0.5-02 | 0.5 (0.6) | 373 | 24 | 15 | 2.2 | -02 | 40 |
| FN 405-1-02 | 1 (1.2) | 373 | 10 | 15 | 2.2 | -02 | 40 |
| FN 405-3-02 | 3 (3.6) | 373 | 2 | 15 | 2.2 | -02 | 40 |
| FN 405-6-02 | 6 (6.9) | 373 | 0.8 | 15 | 2.2 | -02 | 40 |
| FN 405-10-02 | 10 (11.5) | 373 | 0.5 | 15 | 2.2 | -02 | 40 |

* Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

** Tolerances apply: Inductance: -30/+50%, Capacitance: ±20%, Resistance: ±10%

Product selector

FN 405-yy-..



For example: FN 405-0.5-02, FN 405-10-02

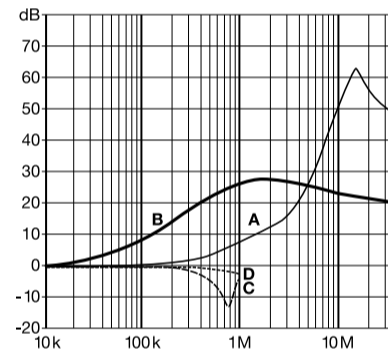
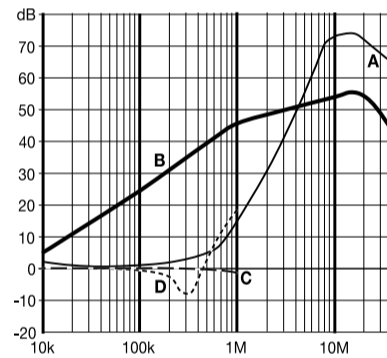
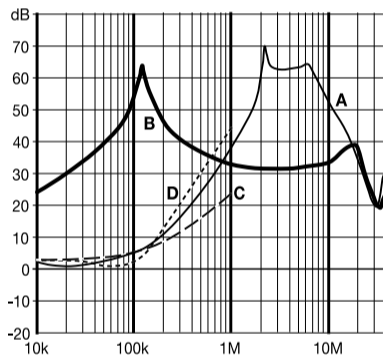
Typical Filter Attenuation

Per CISPR 17; A=50 Ω/50 Ω sym; B=50 Ω/50 Ω asym; C=0.1 Ω/100 Ω sym; D=100 Ω/0.1 Ω sym

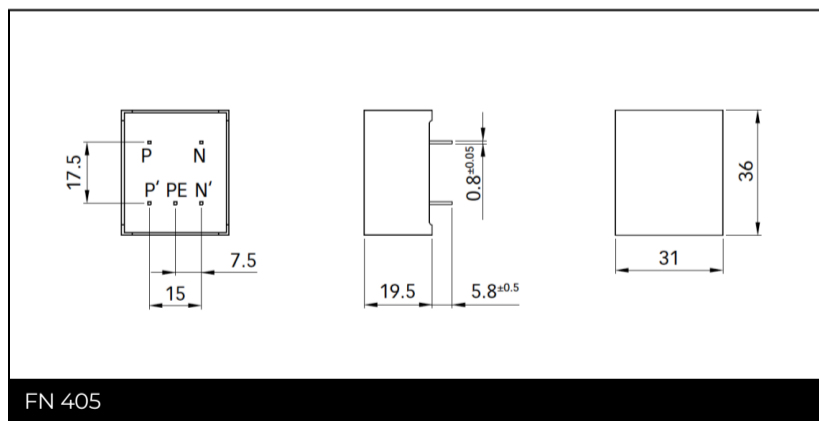
0.5 and 1 A types

3 and 6 A types

10 A types



Mechanical Data



FN 405

All dimensions in mm; 1 inch = 25.4 mm

Tolerances according: ISO 2768-m/EN 22768-m

Please visit www.schaffner.com to find more details on filter connectors.

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