

## PCB-mounting filter PCB Filters FN 405



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



### Performance indicators

Attenuation performance



Rated current [A]



### Technical specifications

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

### Approvals



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

### 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

### Filter selection table

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

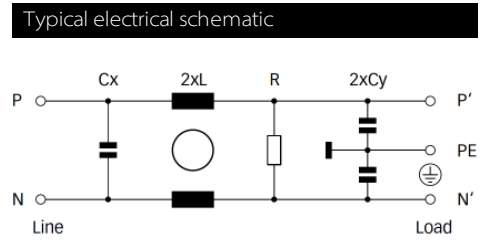
\* Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

**Product selector**

FN 405-yy-..

02: PCB through hole mounting

0.5 to 10: Rated current



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

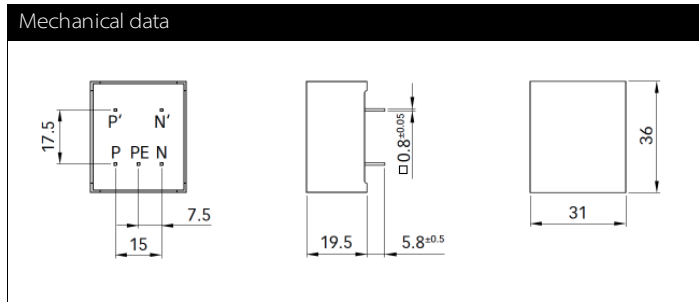
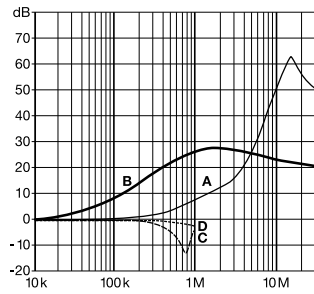
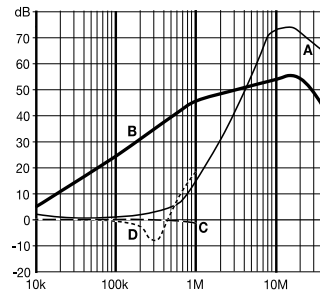
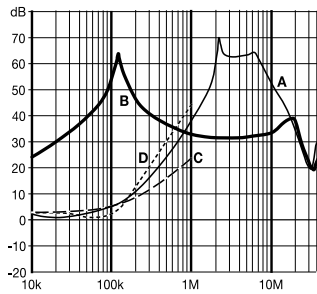
### Typical filter attenuation

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



All dimensions in mm; 1 inch = 25.4 mm  
Tolerances according: ISO 2768-m / EN 22768-m



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