Low Cost PCB Filter

- Rated currents from 0.5 to 6.5 A
- Compact PCB-mountable design
- Very low profile
- Optional medical versions (B type)

Performance indicators

<table>
<thead>
<tr>
<th>Rated current [A]</th>
<th>standard</th>
<th>high</th>
<th>very high</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Technical specifications

- **Maximum continuous operating voltage**: 250 VAC, 50/60 Hz
- **Operating frequency**: DC to 400 Hz
- **Rated currents**: 0.5 to 6.5 A @ 40°C max
- **High potential test voltage**: P –> PE 2000 VAC for 2 sec (standard types), P –> N 760 VAC for 2 sec, P –> PE 2500 VAC for 2 sec (B types)
- **Temperature range (operation and storage)**: -25°C to +100°C
- **Design corresponding to**: UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
- **Flammability corresponding to**: UL 94 V-0 or better
- **MTBF @ 40°C/230 V (Mil-HB-217F)**: 1,900,000 hours

Features and benefits

- Good conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- PCB through hole mounting
- Low cost 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
- Medical equipment

Typical electrical schematic

![Typical electrical schematic](image-url)
## Filter selection table

<table>
<thead>
<tr>
<th>Filter</th>
<th>Rated current @ 40°C (25°C)</th>
<th>Leakage current* @ 230 VAC/50 Hz</th>
<th>Inductance**</th>
<th>Capacitance**</th>
<th>Resistance**</th>
<th>Input/Output connections</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>[A]</td>
<td>[µA]</td>
<td>[mH]</td>
<td>[nF]</td>
<td>[nF]</td>
<td>[kΩ]</td>
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<td>FN 402-0.5-02</td>
<td>0.5 (0.6)</td>
<td>373</td>
<td>40</td>
<td>100</td>
<td>2.2</td>
<td>1000</td>
<td>-02</td>
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<tr>
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<td>1 (1.2)</td>
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<td>100</td>
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<td>1000</td>
<td>-02</td>
<td>40</td>
</tr>
</tbody>
</table>

* 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% to +50%, Capacitance: ±20%, Resistance: ±10%
Mechanical data

### FN 402

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<th>Value</th>
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<td>Depth</td>
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### FN 402 B

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<td>45</td>
</tr>
</tbody>
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All dimensions in mm; 1 inch = 25.4 mm

Tolerances according: ISO 2768-m/EN 22768-m
EMC/EMI Products
Schaffner Group
Datasheets
11 Jun 2019

Headquarters, global innovation and development

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