POWrFuse™ PF-J Series Features

■ Designed to UL 248-14 supplemental standard
■ 30–70 A / 500 VAC ratings available
■ Up to 2 kA interrupting rating
■ RoHS compliant* and halogen free**
■ Agency recognition: cULus

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Clearing Time Characteristics for Series

<table>
<thead>
<tr>
<th>% of Current Rating</th>
<th>Clearing Time at 25 °C</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
<td></td>
</tr>
<tr>
<td>100 %</td>
<td>4 hours</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>200 %</td>
<td>—</td>
<td>120 seconds</td>
<td></td>
</tr>
</tbody>
</table>

Electrical Characteristics

<table>
<thead>
<tr>
<th>Model</th>
<th>Rated Current (A)</th>
<th>Nominal Resistance (Ω)***</th>
<th>Rated Voltage</th>
<th>Interrupting Rating</th>
<th>Nominal I²t (A²s)****</th>
<th>Agency Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF-JT3-30</td>
<td>30</td>
<td>0.0028</td>
<td>500 VAC</td>
<td>2000 A @ 500 VAC</td>
<td>675</td>
<td></td>
</tr>
<tr>
<td>PF-JT3-40</td>
<td>40</td>
<td>0.0019</td>
<td>125 VDC</td>
<td>2000 A @ 250 VAC</td>
<td>2616</td>
<td></td>
</tr>
<tr>
<td>PF-JT3-50</td>
<td>50</td>
<td>0.0014</td>
<td>1000 A @ 125 VDC</td>
<td>1000 A @ 125 VDC</td>
<td>3975</td>
<td></td>
</tr>
<tr>
<td>PF-JT3-63</td>
<td>63</td>
<td>0.0011</td>
<td>500 VAC</td>
<td>2000 A @ 500 VAC</td>
<td>6271</td>
<td></td>
</tr>
<tr>
<td>PF-JT3-70</td>
<td>70</td>
<td>0.0010</td>
<td>500 VAC</td>
<td>2000 A @ 500 VAC</td>
<td>11760</td>
<td></td>
</tr>
</tbody>
</table>

*** Resistance value measured with ≤10 % rated current at 25 °C ambient.
**** Nominal I²t value measured at 10x rated current.

Recommended Drilling Pattern

Dimensions: MM (INCHES)

WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

** Bourns considers a product to be “halogen free” if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
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PF-J Series – Industrial Power Fuses

Wave Soldering Recommendations

<table>
<thead>
<tr>
<th>Profile Feature</th>
<th>Pb-Free Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preheat:</td>
<td></td>
</tr>
<tr>
<td>Temperature Max.</td>
<td>150 °C</td>
</tr>
<tr>
<td>Temperature Min.</td>
<td>100 °C</td>
</tr>
<tr>
<td>Solder Pot Temperature</td>
<td>280 °C max.</td>
</tr>
<tr>
<td>Solder Dwell Time</td>
<td>8 seconds max.</td>
</tr>
</tbody>
</table>

Hand Soldering Recommendations (for PCB Mounting)

<table>
<thead>
<tr>
<th>Soldering Iron Temperature</th>
<th>Heating Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>350 °C ± 5 °C</td>
<td>40 sec. max.</td>
</tr>
</tbody>
</table>

Environmental Characteristics

Operating Temperature: -55 °C to +125 °C

Current Rating Thermal Derating Curve

<table>
<thead>
<tr>
<th>AMBIENT TEMPERATURE (°C)</th>
<th>DERATING PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-60</td>
<td>140</td>
</tr>
<tr>
<td>-40</td>
<td>120</td>
</tr>
<tr>
<td>-20</td>
<td>100</td>
</tr>
<tr>
<td>0</td>
<td>80</td>
</tr>
<tr>
<td>20</td>
<td>60</td>
</tr>
<tr>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>80</td>
<td>0</td>
</tr>
</tbody>
</table>

How to Order

PF - J T3 - 30

POWfFuse™
Product Designator
Series Name
Mounting Type
T3 = PCB Mounting, Type 3
Rated Current
30 - 70 = 30 A - 70 A

Packaging

<table>
<thead>
<tr>
<th>Model</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF-J</td>
<td>80 pcs. / box</td>
</tr>
</tbody>
</table>

Typical Part Marking

<table>
<thead>
<tr>
<th>Model</th>
<th>Note</th>
<th>Brass End Cap 1</th>
<th>Brass End Cap 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF-JT3-30</td>
<td>30</td>
<td>CUS</td>
<td>PF-JT3</td>
</tr>
<tr>
<td>PF-JT3-40</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF-JT3-50</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF-JT3-63</td>
<td>63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF-JT3-70</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Note) A 500V

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Average Pre-Arcing Time vs. Current Curves

- 30 A
- 40 A
- 50 A
- 63 A
- 70 A

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