**NEW PRODUCT BRIEF**

**Bourns® PF-K Series EV Power Fuses**

**POWrFuse™ High-Power Fuses**

**INTRODUCTION**

Bourns® POWrFuse™ High-Power Fuses are industrial fuse links designed to meet UL 248 and IEC 60269 standards. The new POWrFuse™ PF-K model series are designed to meet the ISO 8820 standard to protect high-voltage accessory circuits in electric vehicles and hybrid electric vehicles.

POWrFuse™ PF-K models are housed in a midget style package (10 mm dia. x 38 mm) with bolt and PCB mounting options for Level 1/2 EV/HEV AC/DC inverter and Level 3 battery charging systems.

**FEATURES**

- ISO 8820-8 compliant
- Designed for protection of high-voltage accessory circuits in EV and HEV
- 15-50 A ratings available
- 10 kA @ 275 VAC interrupting rating
- Bolt and PCB mounting options
- Temperature range: -55 to +125 °C
- RoHS compliant*
- Halogen free**

**APPLICATIONS**

- Electric Vehicle
- Lithium Battery
- Inverter
- On Board Charger
- Volts DC

**BENEFITS**

- Global quality with local services
- The standard compliance and robust interrupting rating help to ensure the safety and quality as well as minimal service calls, thereby minimizing the Total Cost of Ownership (TCO)
- Complete solution with Bourns® high current rating overvoltage protectors is listed under “MORE INFORMATION”

**MORE INFORMATION**

- AEC-Q Compliant Products
- Automotive Component Selection Guide
- Heaters
- SinglFuse™ SMD Fuses - AEC-Q200-Equivalent Compliant

**HOW TO ORDER**

- **POWrFuse™ Product Designator**
- **Series Name**
- **Mounting Type**
- **Rated Current**
  - 15-50 = 15 - 50 A

**PACKAGING SPECIFICATIONS**

- PF-KB1 Series …………………………….. 40 pcs./box
- PF-KT1 Series …………………………….. 50 pcs./box

** 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.
Bourns® PF-K Series EV Power Fuses

ELECTRICAL CHARACTERISTICS

<table>
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<tr>
<th>Series</th>
<th>Rated Current</th>
<th>Rated Voltage</th>
<th>Interrupting Rating</th>
<th>Compliant</th>
<th>Mounting Type</th>
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</thead>
<tbody>
<tr>
<td>PF-K</td>
<td>15 – 50 A</td>
<td>275 VAC</td>
<td>10 kA @ 275 VAC</td>
<td>ISO 8820</td>
<td>√</td>
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<tr>
<td></td>
<td></td>
<td>500 VDC</td>
<td>20 kA @ 500 VDC</td>
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<td></td>
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<td>10 kA @ 450 VDC</td>
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<td>10 kA @ 450 VDC</td>
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PRODUCT DIMENSIONS

<table>
<thead>
<tr>
<th>Bolt Mounting (T1) Type</th>
<th>PCB Mounting (B1) Type</th>
</tr>
</thead>
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DIMENSIONS:

**MM**

- Width: 38 ± 0.6 (1.496 ± 0.024)
- Height: 39.35 ± 0.6 (1.549 ± 0.024)
- Thickness: 0.4 ± 0.1 (0.018 ± 0.004)

**INCHES**

- Width: 1.496 ± 0.024
- Height: 1.549 ± 0.024
- Thickness: 0.018 ± 0.004

**MM**

- Width: 10.3 ± 0.1 (0.406 ± 0.004)
- Height: 15.5 ± 0.1 (0.610 ± 0.004)
- Thickness: 3.0 ± 0.2 (0.118 ± 0.008)

**INCHES**

- Width: 0.406 ± 0.004
- Height: 0.610 ± 0.004
- Thickness: 0.118 ± 0.008

**MM**

- Width: 3.8 ± 0.2 (0.150 ± 0.008)
- Height: 8.7 ± 0.2 (0.343 ± 0.008)

**INCHES**

- Width: 0.150 ± 0.008
- Height: 0.343 ± 0.008

**MM**

- Width: 65.5 ± 0.8 (2.579 ± 0.031)
- Height: 38 ± 0.8 (1.496 ± 0.031)
- Thickness: 6 ± 0.1 (0.236 ± 0.004)

**INCHES**

- Width: 2.579 ± 0.031
- Height: 1.496 ± 0.031
- Thickness: 0.236 ± 0.004

**MM**

- Width: 53.5 ± 0.5 (2.106 ± 0.020)
- Height: 10.3 ± 0.15 (0.406 ± 0.006)
- Thickness: 10.3 ± 0.2 (0.406 ± 0.008)

**INCHES**

- Width: 2.106 ± 0.020
- Height: 0.406 ± 0.006
- Thickness: 0.406 ± 0.008

**MM**

- Width: 6.0 ± 0.16 (0.236 ± 0.006)

**INCHES**

- Width: 0.236 ± 0.006