



POWrFuse™ PF-F Series Features

- Designed to UL 248-13 semiconductor class aR fuse standard
- 800 VAC/VDC rated voltage
- Designed in the traditional round body bolted style package
- RoHS compliant* and halogen free**
- Agency recognition: 



PF-F Series – Semiconductor (aR) Power Fuses

Electrical Characteristics

| Model | Rated Current (A) | Rated Voltage | Interrupting Rating | Clearing at 800 V I ² t (A ² s) | Power Loss (W) | Agency Recognition | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|-------------------|--------------------|-------------------------------------|---|----------------|---|--------------------|-------------------------------------|-------|------|-------------------------|--------------------|-------------------------------------|--------|----|-------------------------|--------------------|-------------------------------------|-------|----|-------------------------|--------------------|-------------------------------------|-------|----|-------------------------|--------------------|-------------------------------------|-------|----|-------------------------|--------------------|-------------------------------------|-------|----|-------------------------|--------------------|-------------------------------------|-------|------|-------------------------|--------------------|-------------------------------------|-------|----|-------------------------|--------------------|-------------------------------------|-------|----|-------------------------|
| | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-50 | 50 | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 800 | 11 | E500949 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB2-50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-75 | 75 | | | | | | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 1500 | 15.5 | E500949 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB2-75 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-100 | 100 | | | | | | | | | | | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 3100 | 24 | E500949 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB2-100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-125 | 125 | | | | | | | | | | | | | | | | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 10000 | 28 | E500949 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB2-125 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-150 | 150 | | | | | | | | | | | | | | | | | | | | | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 16900 | 32 | E500949 | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB2-150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-160 | 160 | | | | | | | | | | | | | | | | | | | | | | | | | | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 17100 | 33 | E500949 | | | | | | | | | | | | | | | | | | | | |
| PF-FB2-160 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-175 | 175 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 17500 | 35 | E500949 | | | | | | | | | | | | | | | |
| PF-FB2-175 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-200 | 200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 22000 | 40.5 | E500949 | | | | | | | | | | |
| PF-FB2-200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-225 | 225 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 30000 | 43 | E500949 | | | | | |
| PF-FB2-225 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-250 | 250 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 37000 | 46 | E500949 |
| PF-FB2-250 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-300 | 300 | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 52000 | 56 | E500949 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB2-300 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-350 | 350 | | | | | | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 81000 | 65 | E500949 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB2-350 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB1-400 | 400 | | | | | | | | | | | 800 VAC 800 VDC | 100 kA @ 800 VAC 50 kA @ 800 VDC | 110000 | 77 | E500949 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-FB2-400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Minimum breaking capacity: 800 % I_n @ 800 VAC/VDC



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Additional Information

Click these links for more information:



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* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

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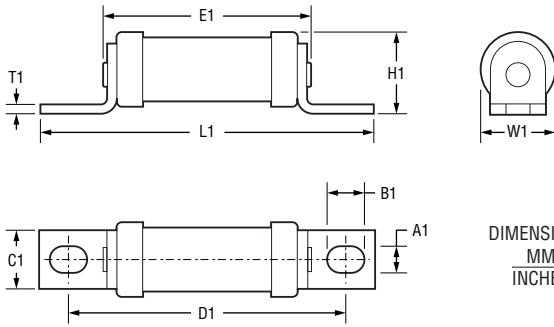
WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

PF-F Series – Semiconductor (aR) Power Fuses

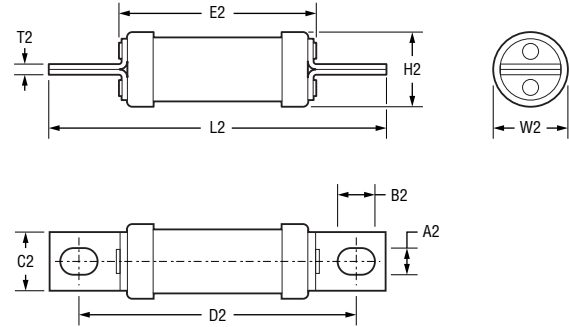


Product Dimensions (Bolt Mounting)

B1 Type



B2 Type



DIMENSIONS:
MM
INCHES

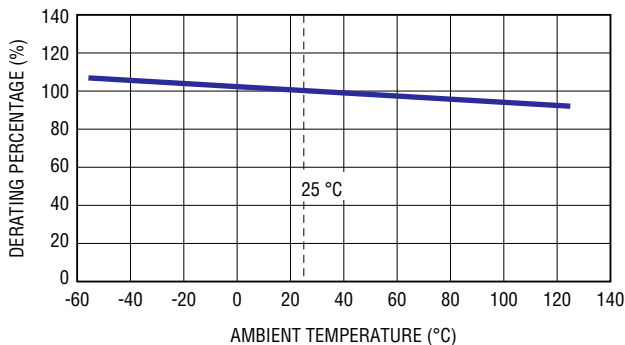
| B1 Type | A1 | B1 | C1 | D1 | E1 | H1 | L1 | T1 | W1 |
|---------------|--|--|---|---|---|---|--|---------------------------------------|---|
| 50 A ~ 150 A | $\frac{8.8 \pm 1.0}{(.346 \pm .039)}$ | $\frac{12.4 \pm 1.0}{(.488 \pm .039)}$ | $\frac{19.1 \pm 1.0}{(.752 \pm .039)}$ | $\frac{91.6 \pm 3.6}{(3.606 \pm .142)}$ | $\frac{69.0 \pm 3.0}{(2.717 \pm .118)}$ | $\frac{27.1 \pm 2.0}{(1.067 \pm .079)}$ | $\frac{111.6 \pm 3.0}{(4.394 \pm .118)}$ | $\frac{3.0 \pm 0.2}{(.118 \pm .008)}$ | $\frac{24.1 \pm 2.0}{(.949 \pm .079)}$ |
| 160 A ~ 400 A | $\frac{10.5 \pm 1.0}{(.413 \pm .039)}$ | $\frac{15.0 \pm 1.0}{(.591 \pm .039)}$ | $\frac{26.0 \pm 1.0}{(1.024 \pm .039)}$ | $\frac{95.0 \pm 4.5}{(3.740 \pm .177)}$ | $\frac{69.2 \pm 3.0}{(2.744 \pm .118)}$ | $\frac{38.2 \pm 2.0}{(1.504 \pm .079)}$ | $\frac{117.6 \pm 3.0}{(4.630 \pm .118)}$ | $\frac{3.0 \pm 0.2}{(.118 \pm .008)}$ | $\frac{35.2 \pm 2.0}{(1.386 \pm .079)}$ |

| B2 Type | A2 | B2 | C2 | D2 | E2 | H2 | L2 | T2 | W2 |
|---------------|--|--|---|---|---|---|--|---------------------------------------|---|
| 50 A ~ 150 A | $\frac{8.8 \pm 1.0}{(.346 \pm .039)}$ | $\frac{12.4 \pm 1.0}{(.488 \pm .039)}$ | $\frac{19.1 \pm 1.0}{(.752 \pm .039)}$ | $\frac{91.6 \pm 3.6}{(3.606 \pm .142)}$ | $\frac{66.0 \pm 3.0}{(2.598 \pm .118)}$ | $\frac{24.1 \pm 2.0}{(.949 \pm .079)}$ | $\frac{111.6 \pm 3.0}{(4.394 \pm .118)}$ | $\frac{3.4 \pm 0.2}{(.134 \pm .008)}$ | $\frac{24.1 \pm 2.0}{(.949 \pm .079)}$ |
| 160 A ~ 400 A | $\frac{10.5 \pm 1.0}{(.413 \pm .039)}$ | $\frac{15.0 \pm 1.0}{(.591 \pm .039)}$ | $\frac{26.0 \pm 1.0}{(1.024 \pm .039)}$ | $\frac{95.0 \pm 4.5}{(3.740 \pm .177)}$ | $\frac{69.2 \pm 3.0}{(2.744 \pm .118)}$ | $\frac{35.2 \pm 2.0}{(1.386 \pm .079)}$ | $\frac{117.6 \pm 3.0}{(4.630 \pm .118)}$ | $\frac{6.0 \pm 0.2}{(.236 \pm .008)}$ | $\frac{35.2 \pm 2.0}{(1.386 \pm .079)}$ |

Environmental Characteristics

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

Current Rating Thermal Derating Curve



How to Order

PF - F B1 - 100

POWrrFuse™ _____

Product Designator _____

Series Name _____

Mounting Type _____

B1 = Bolt Mounting, Type 1
B2 = Bolt Mounting, Type 2

Rated Current _____

50 - 400 = 50 A - 400 A

Packaging

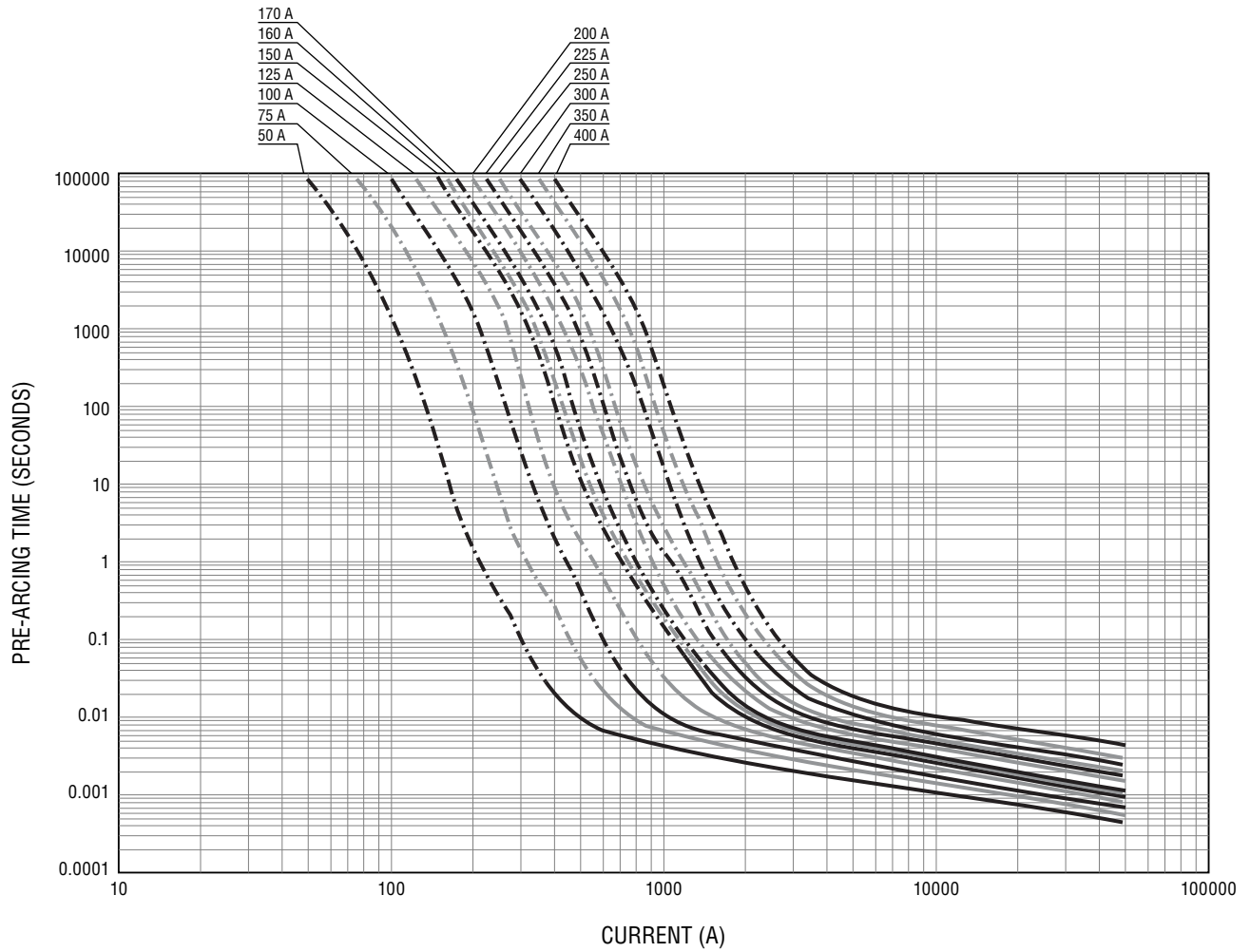
| Model | Quantity |
|----------------------|---------------|
| PF-F (50 A - 150 A) | 20 pcs. / box |
| PF-F (160 A - 400 A) | 10 pcs. / box |

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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Average Pre-Arcing Time vs. Current Curves



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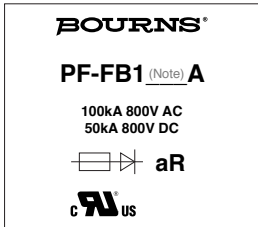
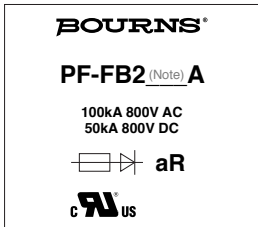
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PF-F Series – Semiconductor (aR) Power Fuses



Typical Part Marking

| Model | Note | Ink Color | Marking |
|------------|------|-----------|---|
| PF-FB1-50 | 50 | Black |  <p>BOURNS® PF-FB1 (Note) A 100kA 800V AC 50kA 800V DC aR CULUS</p> |
| PF-FB1-75 | 75 | | |
| PF-FB1-100 | 100 | | |
| PF-FB1-125 | 125 | | |
| PF-FB1-150 | 150 | | |
| PF-FB1-160 | 160 | | |
| PF-FB1-175 | 175 | | |
| PF-FB1-200 | 200 | | |
| PF-FB1-225 | 225 | | |
| PF-FB1-250 | 250 | | |
| PF-FB1-300 | 300 | | |
| PF-FB1-350 | 350 | | |
| PF-FB1-400 | 400 | | |
| PF-FB2-50 | 50 | Black |  <p>BOURNS® PF-FB2 (Note) A 100kA 800V AC 50kA 800V DC aR CULUS</p> |
| PF-FB2-75 | 75 | | |
| PF-FB2-100 | 100 | | |
| PF-FB2-125 | 125 | | |
| PF-FB2-150 | 150 | | |
| PF-FB2-160 | 160 | | |
| PF-FB2-175 | 175 | | |
| PF-FB2-200 | 200 | | |
| PF-FB2-225 | 225 | | |
| PF-FB2-250 | 250 | | |
| PF-FB2-300 | 300 | | |
| PF-FB2-350 | 350 | | |
| PF-FB2-400 | 400 | | |

Recommended Mounting Torque and Bolt Sizes

| Mounting Torque | Bolt Size |
|-----------------|-----------|
| 12 ± 1 Nm | M8 |

REV. 06/22

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