



Features

- Designed to UL 248-14 and IEC 60127-1 fuse standards
- 500 VAC/VDC and 10-40 A ratings available
- Up to 30 kA interrupting rating
- Available in cartridge and axial lead options
- RoHS compliant* and halogen free**



PF-63R50H Series – Cartridge & Axial Lead Power Fuses

Clearing Time Characteristics for Series

| % of Current Rating | Clearing Time at 25 °C | |
|---------------------|------------------------|------------|
| | Minimum | Maximum |
| 100 % | 4 hours | — |
| 200 % | — | 5 minutes |
| 300 % | — | 10 seconds |
| 1000 % | — | 1 second |

Additional Information

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Electrical Characteristics

| Model | Rated Current (A) | Nominal Resistance (Ω) ^{***} | Rated Voltage | Interrupting Rating | Pre-arcing Nominal I ² t (A ² s) ^{****} | Typical Voltage Drop (mV) | Agency Recognition | |
|--------------|-------------------|---------------------------------------|--------------------|------------------------------------|--|---------------------------|--------------------|---------------|
| | | | | | | | cUL E198545 | TÜV J50671806 |
| PF-63R50H10 | 10 | 13.2 | 500 VAC 500 VDC | 30 kA @ 500 VAC 20 kA @ 500 VDC | 50 | 230 | ✓ | ✓ |
| PF-63R50H12 | 12 | 12.9 | | | 43 | 250 | ✓ | ✓ |
| PF-63R50H15 | 15 | 10.7 | | | 80 | 280 | ✓ | ✓ |
| PF-63R50H16 | 16 | 10.7 | | | 90 | 300 | ✓ | ✓ |
| PF-63R50H20 | 20 | 7.2 | | | 150 | 320 | ✓ | ✓ |
| PF-63R50H25 | 25 | 5.1 | | | 220 | 280 | ✓ | ✓ |
| PF-63R50H30 | 30 | 4.3 | | | 270 | 300 | ✓ | ✓ |
| PF-63R50H35 | 35 | 3.5 | | | 650 | 310 | ✓ | ✓ |
| PF-63R50H40 | 40 | 2.75 | | | 2080 | 280 | ✓ | ✓ |
| PF-63R50H10X | 10 | 13.2 | 500 VAC 500 VDC | 30 kA @ 500 VAC 20 kA @ 500 VDC | 50 | 230 | ✓ | ✓ |
| PF-63R50H12X | 12 | 12.9 | | | 43 | 250 | ✓ | ✓ |
| PF-63R50H15X | 15 | 10.7 | | | 80 | 280 | ✓ | ✓ |
| PF-63R50H16X | 16 | 10.7 | | | 90 | 300 | ✓ | ✓ |
| PF-63R50H20X | 20 | 7.2 | | | 150 | 320 | ✓ | ✓ |
| PF-63R50H25X | 25 | 5.1 | | | 220 | 280 | ✓ | ✓ |
| PF-63R50H30X | 30 | 4.3 | | | 270 | 300 | ✓ | ✓ |
| PF-63R50H35X | 35 | 3.5 | | | 650 | 310 | ✓ | ✓ |
| PF-63R50H40X | 40 | 2.75 | | | 2080 | 280 | ✓ | ✓ |

^{***} Resistance value was measured with less than 10 % of rated current at 25 °C.

^{****} Pre-arcing nominal I²t value is measured at 1000 % In.

* 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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Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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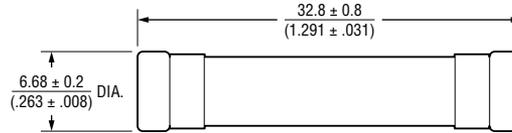
WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

PF-63R50H Series – Cartridge & Axial Lead Power Fuses

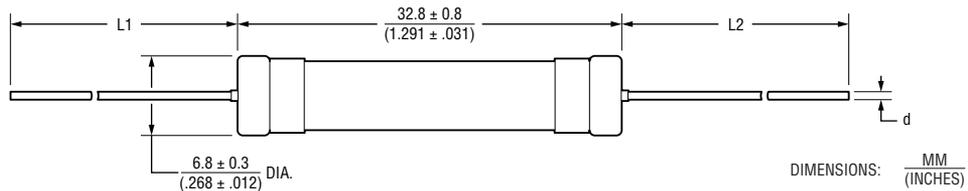


Product Dimensions

Model: PF-63R50Hxx



Model: PF-63R50Hxx X, PF-63R50Hxx L, PF-63R50Hxx XL



| Model | L1 | L2 | d Dia. | | |
|----------------|---|---|----------------------|----------------------|----------------------|
| | | | < 15A | 15A to 30A | ≥ 35A |
| PF-63R50Hxx X | $\frac{38.0 \pm 2.0}{(1.496 \pm .079)}$ | | | | |
| PF-63R50Hxx L | $\frac{50.0 + 3.0/-1.0}{(1.969 \pm .118/-0.039)}$ | | $\frac{0.8}{(.031)}$ | $\frac{1.0}{(.039)}$ | $\frac{1.2}{(.047)}$ |
| PF-63R50Hxx XL | $\frac{10.0 + 4.0/-0}{(.394 \pm .157/-0)}$ | $\frac{52.0 \pm 2.0}{(2.047 \pm .079)}$ | | | |

Wave Soldering Recommendations

| Profile Feature | Pb-Free Assembly |
|--|------------------|
| Preheat: Temperature Max. Temperature Min. | 150 °C 100 °C |
| Solder Pot Temperature | 260 ± 3 °C |
| Solder Dwell Time | 10 seconds max. |

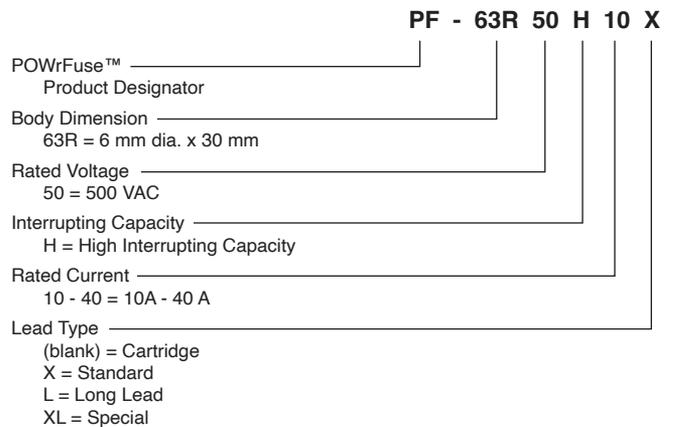
Hand Soldering Recommendations (for PCB Mounting)

| Soldering Iron Temperature | Heating Time |
|----------------------------|--------------|
| 350 ± 10 °C | 3 sec. max. |

Packaging

| Model | Quantity | |
|-----------------------------|-----------|----------------|
| | Inner Box | Outer Box |
| PF-63R50H | 250 pcs. | 20 inner boxes |
| PF-63R50H-X | 200 pcs. | |
| PF-63R50H-L PF-63R50H-XL | | |

How to Order

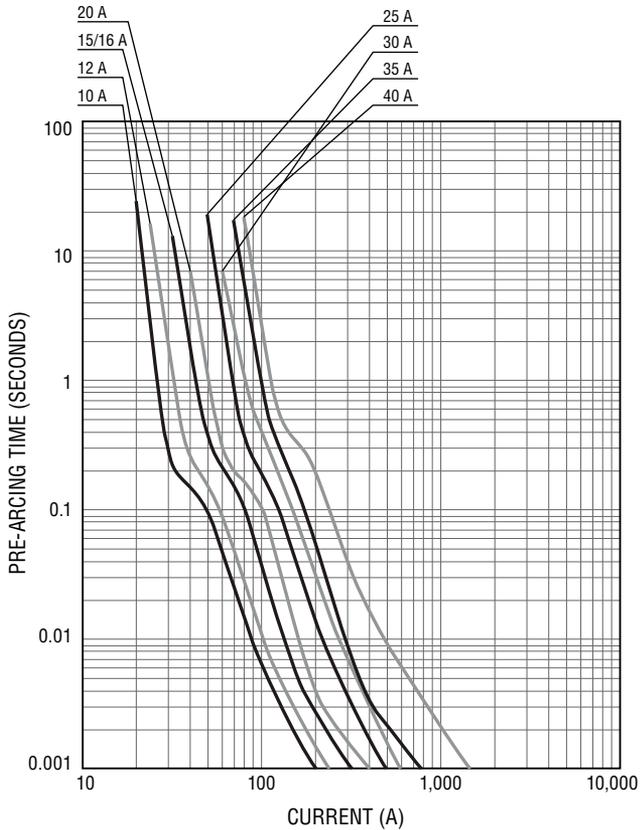


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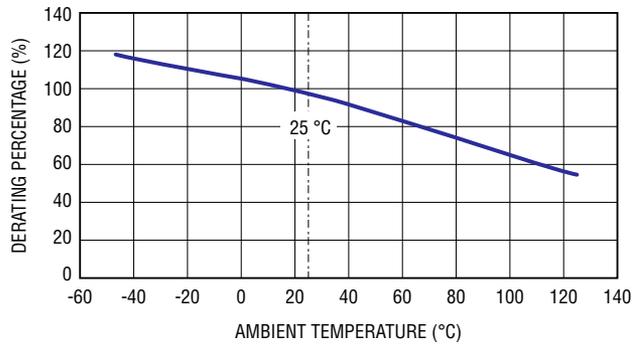
PF-63R50H Series – Cartridge & Axial Lead Power Fuses



Average Pre-Arcing Time vs. Current Curves



Current Rating Thermal Derating Curve



Typical Part Marking

| Rating Current (A) | Note | Ink Color | Marking (for Cartridge type) |
|--------------------|------|-----------|---|
| 10 | 10 | Black | PF-63R50H <small>(Note)</small> A 500VAC 500VDC |
| 12 | 12 | | |
| 15 | 15 | | |
| 16 | 16 | | |
| 20 | 20 | | |
| 25 | 25 | | |
| 30 | 30 | | |
| 35 | 35 | | |
| 40 | 40 | | |

Environmental Characteristics

| | |
|-----------------------|-------------------|
| Operating Temperature | -40 °C to +125 °C |
|-----------------------|-------------------|



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