# **High Current & Voltage Cartridge Fuses**

Lead-free > 10x32mm Fuse > 607 Series











### **Agency Approvals**

| Agency          | Agency File Number | Ampere Range |  |
|-----------------|--------------------|--------------|--|
| c <b>'Al</b> os | E71611             | 40 A to 63 A |  |
| <b>A</b>        | J 50514752         | 40 A to 63 A |  |

#### **Electrical Characteristics**

| % of Ampere Rating | Ampere Rating | Opening Time at 25°C |
|--------------------|---------------|----------------------|
| 100%               | 40 A to 63 A  | 4hrs, Min.           |
| 200%               | 40 A to 63 A  | 120 seconds, Max.    |

#### **Description**

The 607 series fuses are specifically designed and tested to cater to the circuit protection needs of compact applications, which is 500Vdc/Vac rated with remarkable interrupting rating.

#### **Features**

- RoHS compliant and Lead-free
- High Interrupt Rating
- Rated voltage 500 Vdc/Vac

#### **Benefits**

- Small size
- High current
- High voltage
- High breaking capacity

#### **Applications**

- Data Center Power Supplies
- Uninterruptible Power Supply (UPS)
- Power conversion equipment like inverters and rectifiers

#### **Additional Information**







Resources

Accessories

Samples

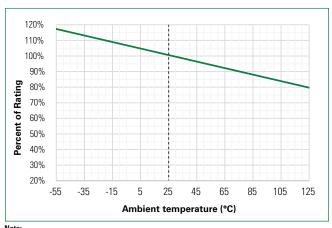
#### **Electrical Specifications**

| Ampere<br>Rating | Amp  | Max<br>Voltage Rating      | Interrupting<br>Rating                   | Nominal Code<br>Resistance            | Nominal<br>Melting | Agency Approvals |   |
|------------------|------|----------------------------|--|---------------------------------------|--------------------|------------------|---|
| (A)              | Code | ode (V) (AC/DC) (Ohm)      |  | I <sup>2</sup> t (A <sup>2</sup> sec) | c <b>'%\</b> us    | <b>A</b>         |   |
| 40               | 040. | 500VDC                     | 10KA@500VDC<br>10KA@500VAC               | 0.00187                               | 2570               | ×                | X |
| 50               | 050. | 500VAC                     |  | 0.00145                               | 4230               | ×                | X |
| 63               | 063. | 500VDC<br>500VAC<br>300VAC | 10KA@500VDC<br>5KA@500VAC<br>10KA@300VAC | 0.00102                               | 7060               | Х                | Х |

Unless otherwise stated, all specifications are referenced at room ambient temperature.

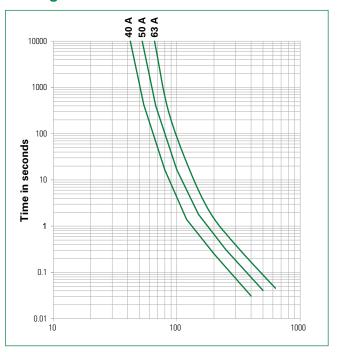
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#### **Temperature Re-rating Curve**



Note: Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

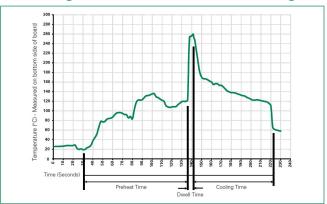
#### **Average Time Current Curves**



#### **Product Characteristics**

| Materials                 | Body: Glass fiber Cap: Ni plated copper alloy Terminal: Tin plated copper alloy   |  |  |  |
|---------------------------|---|--|--|--|
| Mechanical Shock          | MIL-STD-202, Method 213,<br>Test Condition I<br>(100 G's peak for 6 milliseconds) |  |  |  |
| Solderability             | Reference MIL-STD-202 method 208  |  |  |  |
| Product Marking           | Cap 1: Brand logo,<br>current and voltage ratings<br>Cap 2: Agency approval marks |  |  |  |
| Resistance to Solder Heat | MIL-Std 202 Method 210<br>Test Condition B<br>(10sec at 260 °C)                   |  |  |  |
| Operating Temperature     | -55 °C to +125 °C   |  |  |  |
| Thermal Shock             | MIL-STD-202G, Method 107G,<br>Test condition B                                    |  |  |  |
| Vibration                 | MIL-STD-202G, Method 201A   |  |  |  |
| Moisture Resistance       | MIL-STD-202G, Method 103B,<br>Test condition A                                    |  |  |  |
| Salt Spray                | MIL-STD-202G, Method 101E,<br>Test condition B                                    |  |  |  |

#### **Soldering Parameters-Wave Soldering**



| Wave Parameter   | Lead-Free Recommendation          |  |
|--|-----------------------------------|--|
| <b>Preheat:</b> (Depends on Flex Activation Temperature) | (Typical Industry Recommendation) |  |
| Temperature Minimum                                      | 100 °C                            |  |
| Temperature Maximum                                      | 150 °C                            |  |
| Preheat Time   | 60-180 seconds                    |  |
| Solder Pot Temperature                                   | 260 °C Maximum                    |  |
| Solder Dwell Time  | 2-5 seconds                       |  |

#### **Recommended Hand-Solder Parameters:**

Solder Iron Temperature: 350 °C +/- 5 °C

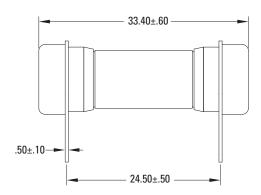
Heating Time: 5 seconds max.

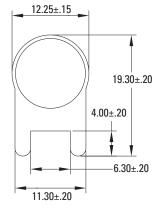
Note: These devices are not recommended for IR or Convection Reflow process.



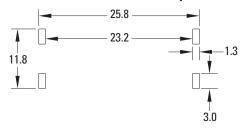
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#### **Dimensions**



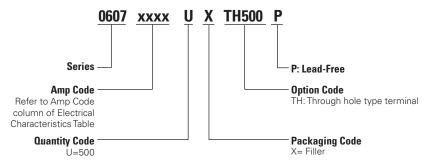


#### **Recommended PCB Layout**



All dimensions in mm

#### **Part Numbering System**



#### **Packaging**

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Reel Size |  |
|------------------|-------------------------|----------|---------------------------|-----------|--|
| 607 Series       |                         |          |                           |           |  |
| Tray             | NA                      | 500      | NA                        | NA        |  |

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