

526 Series

Lead-free > 10x32mm Fuse



Description

The 526 series fuses are specifically designed and tested to the circuit protection needs of compact auto-electronics applications, which is 500 Vdc/Vac rated with remarkable interrupting rating.

Features & Benefits

- RoHS compliant and Lead-free
- High Interrupt Rating
- Recognized to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-14
- Small size
- High current
- High voltage
- Available in through-hole or bolt down
- AEC-Q200 qualified

Additional Information



Resources



Accessories



Samples

Applications

- On-Board Charger (OBC)
- Power Distribution Unit (PDU)

Agency Approvals

| Agency | Agency File Number | Ampere Range |
|--------|--------------------|--------------|
| | E10480 | 30 A - 60 A |

Electrical Characteristics

| % of Ampere Rating | Ampere Rating | Opening Time at 25°C |
|--------------------|---------------|----------------------|
| 100% | 30 A to 60 A | 4 hours, Min. |
| 135% | 30 A to 40 A | 60 minutes, Max. |
| 200% | 30 A to 60 A | 120 seconds, Max. |

Electrical Specifications

| Ampere Rating (A) | Amp Code | Max Voltage Rating (V) | Interrupting Rating (AC/DC) | Nominal Cold Resistance (Ohm) ¹ | Nominal Melting I ² t (A ² sec) ² | Agency Approvals |
|-------------------|----------|------------------------|-----------------------------|--|--|------------------|
| 30 | 030. | 500VDC 500VAC | 10KA@500VDC 10KA@500VAC | 0.0028 | 1070 | x |
| 40 | 040. | | | 0.0018 | 2340 | x |
| 50 | 050. | | | 0.0014 | 3850 | x |
| 60 | 060. | 500VDC 300VAC | 10KA@500VDC 10KA@300VAC | 0.0011 | 6290 | x |

Notes:

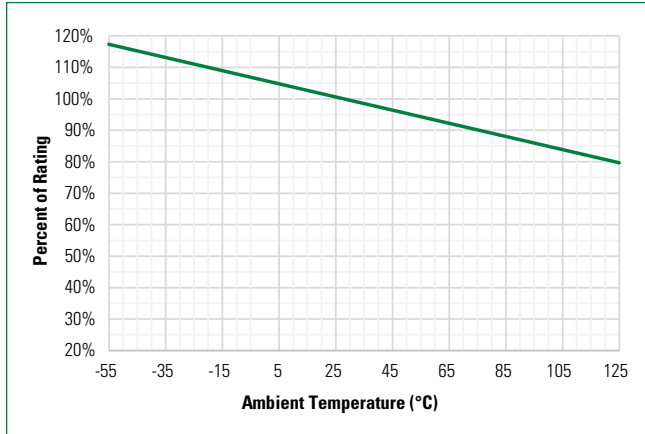
1. Resistance is measured at 10% of rated current, 25 °C.

2. Nominal Melting I²t is measured at 10 the Ampere Rating (I_a)

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Temperature Re-rating Curve

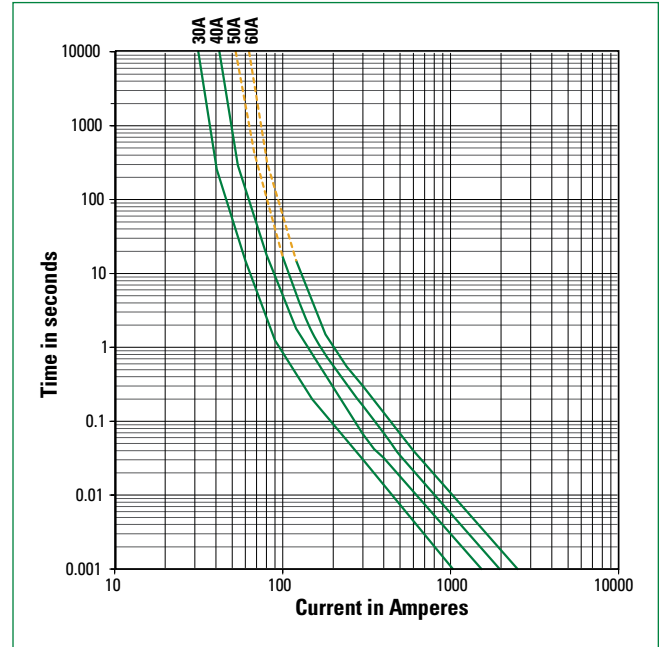


Note:
Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

Product Characteristics

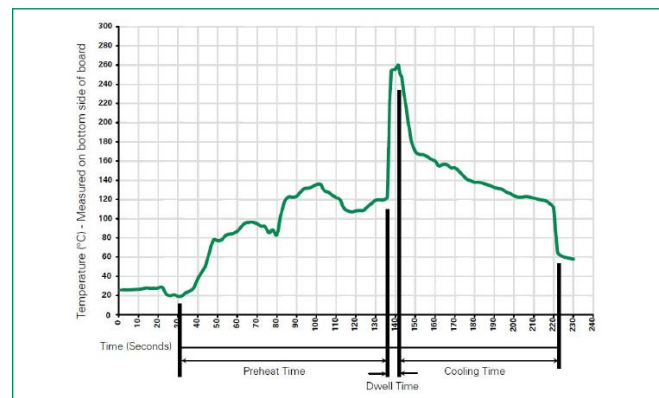
| | |
|----------------------------------|---|
| Materials | Body: Glass fiber Cap: Ni plated copper alloy Terminal: Ni/Sn plated copper alloy |
| Mechanical Shock | MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 milliseconds) |
| Solderability | Reference MIL-STD-202 method 208 |
| Product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

Average Time Current Curves



Note:
The 50 A and 60 A ratings, it may not break current consistently when overload current is less than 200%In (represented by dotted portion of this time-current curve), as maybe arc current continuously pass-through fuse under this condition. It is not recommended to use in conditions requiring overloads below 200%In

Soldering Parameters–Wave Soldering



| Wave Parameter | Lead-Free Recommendation |
|---|-----------------------------------|
| Preheat: (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.

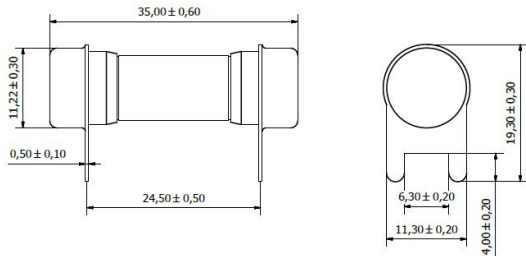
Note: These devices are not recommended for IR or Convection Reflow process.

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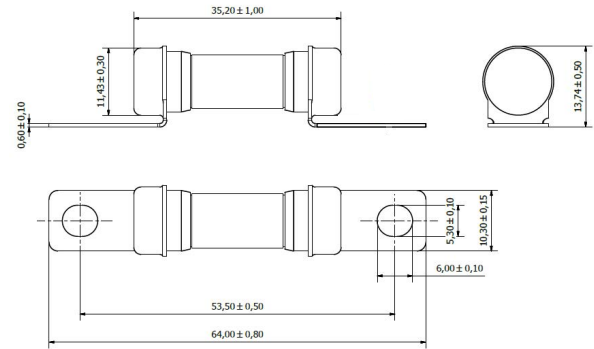
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Dimensions (mm)

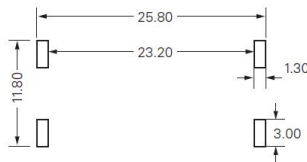
- Through-hole terminal



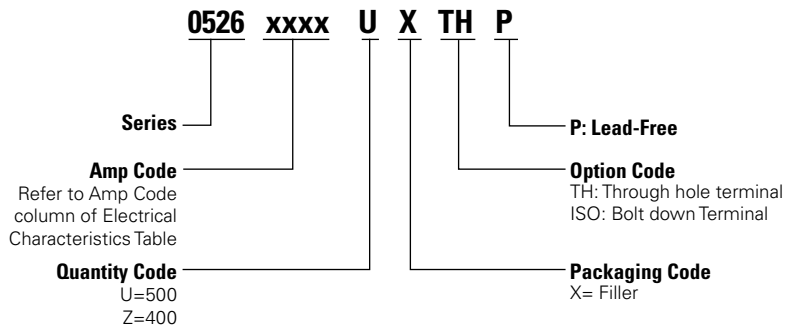
- Bolt down terminal



Recommended PCB layout



Part Numbering System



Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Reel Size |
|----------------------------------|-------------------------|----------|---------------------------|-----------|
| 526 Through hole terminal | | | | |
| Tray | NA | 500 | NA | NA |
| 526 Bolt down terminal | | | | |
| Tray | NA | 400 | NA | NA |

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