

ATOF® Series

Blade Fuses – Rated 32V



Description

ATOF® automotive blade fuses were developed to take the place of obsolete ATO Series 257 fuses. Automakers consider ATOF fuses standard equipment for protecting low-voltage circuits.

Features & Benefits

- Color coding indicates amperage rating
- See-through housings make it easier to see when fuses blow
- Checkpoints on top make it possible to measure resistance without removing the fuse
- Shunt version available (Tin plated only)
- High-contrast ampere stamps on housings aid identification
- Simple to install and remove
- Comply with ISO 8820-3

Applications

- Cars / SUVs
- Trucks
- Offroad vehicles
- Buses
- Watercraft as approved by Littelfuse®

Agency Approvals

| Agency | Agency File Number | Current Rating (A) |
|--------|--------------------|--------------------|
| | 20150609-E71611 | 1 – 40 |

Additional Information



Resources



Samples

See Disclaimer Notice

Specifications

| | |
|---|---|
| Voltage Rating: | 32 V DC |
| Interrupting Rating: | 1000 A @ 32 V DC |
| Recommended Environmental Temperature: | –40 °C to +125 °C (ATOF®) –40 °C to +105 °C (ATOF® Shunt) |
| Terminals Material: | Tin- or silver-plated* |
| Housing Material: | PA66 (UL 94 Flammability rating of V-2) |
| Typical Weight Per Fuse: | 1.4 g |
| Comply With: | SAE J1284 and ISO 8820-3 |
| UL Listed: | File AU1410 |
| CSA Certified: | File No. 29862 |

*Note: Silver plating allows up to 150 °C at the terminal interface.

Ordering Information

| Part Name | Part Number | Current Rating (A) | Package Size |
|------------------------|--------------|--------------------|--------------|
| ATOF® (Tin Plated) | 0287xxx.PXCN | 1–40 & Shunt | 2000 |
| | 0287xxx.U | 1–40 | 500 |
| | 0287xxx.H | 1–40 | 100 |
| | 0287xxx.L | 1–40 | 50 |
| ATO Ag (Silver-Plated) | 0287xxx.PXS | 1–40 | 2000 |

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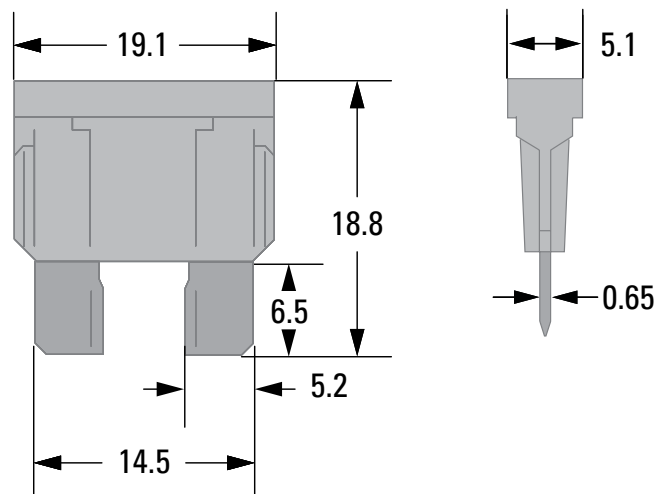
Ratings

| Part Number | Current Rating (A) | Housing Material Color | Test Cable Size (mm ²) | Typ. Voltage Drop (mV) | Typ. Cold Resistance (mΩ) | Typ. I ² t (A ² s) |
|-------------|--------------------|------------------------|------------------------------------|------------------------|---------------------------|--|
| 0287001_ | 1 | Black | 0.35 | 176 | 123 | 0.4 |
| 0287002_ | 2 | Grey | 0.35 | 141 | 53.5 | 1.4 |
| 0287003_ | 3 | Purple | 0.35 | 137 | 31.1 | 7.4 |
| 0287004_ | 4 | Pink | 0.35 | 136 | 22.8 | 14 |
| 0287005_ | 5 | Brown | 0.5 | 128 | 17.85 | 26 |
| 0287075_ | 7.5 | Dark Brown | 0.75 | 116 | 10.91 | 60 |
| 0287010_ | 10 | Red | 1 | 109 | 7.70 | 115 |
| 0287015_ | 15 | Blue | 1.5 | 102 | 4.80 | 340 |
| 0287020_ | 20 | Yellow | 2.5 | 98 | 3.38 | 520 |
| 0287025_ | 25 | Light Orange | 2.5 | 92 | 2.52 | 1000 |
| 0287030_ | 30 | Teal | 4 | 84 | 1.97 | 1500 |
| 0287035_ | 35 | Dark Green | 6 | 87 | 1.61 | 2300 |
| 0287040_ | 40 | Orange | 6 | 96 | 1.44 | 3300 |
| 0287900_ | SHUNT | White | - | - | - | - |

Note: The typical I²t is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs.

Dimensions

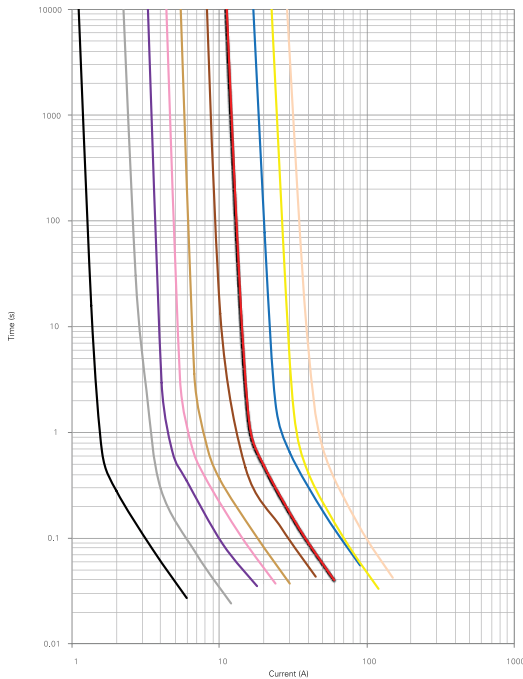
Dimensions in mm. Please refer to the outline drawing for dimensions and tolerances.



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Time-Current Characteristic



| % of Rating | Current Rating (A) | Opening Time Min. / Max. (s) |
|-------------|--------------------|------------------------------|
| 100 | 35 – 40 | 360 000 / – |
| 110 | 1 – 30 | 360 000 / – |
| 135 | 1 – 2 3 – 40 | 0.35 / 600 0.750 / 600 |
| 160 | 1 – 40 | 0.250 / 50 |
| 200 | 1 – 2 3 – 40 | 0.1 / 5 0.15 / 5 |
| 350 | 1 – 2 3 – 40 | 0.02 / 0.5 0.08 / 0.5 |
| 600 | 1 – 30 35 – 40 | 0.1 max 0.15 max |

- 1 A
- 2 A
- 3 A
- 4 A
- 5 A
- 7.5 A
- 10 A
- 15 A
- 20 A
- 25 A
- 30 A
- 35 A
- 40 A

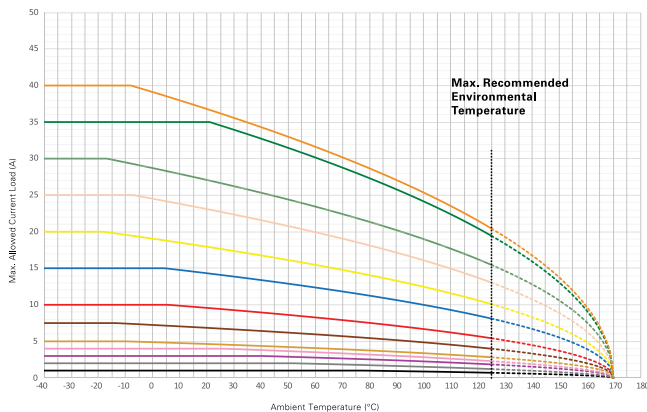
Note: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

Typical Derating Curves

Temperature security margin is 20%.

Wire cross-section and fixture test setup refer to ISO 8820-3.

Please contact Littelfuse® for Details Regarding Derating Test Set Up.



| | Max. allowed current load (A) at ambient temperature based on typical derating (°C) | | | | | | |
|--------------|---|----|----|----|----|-----|-----|
| | -40 | 0 | 20 | 65 | 85 | 110 | 125 |
| 1 A | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 A | 2 | 2 | 2 | 2 | 2 | 1 | 1 |
| 3 A | 3 | 3 | 3 | 3 | 2 | 2 | 2 |
| 4 A | 4 | 4 | 4 | 3 | 3 | 3 | 2 |
| 5 A | 5 | 5 | 5 | 4 | 4 | 3 | 3 |
| 7.5 A | 8 | 7 | 7 | 6 | 5 | 5 | 4 |
| 10 A | 10 | 10 | 10 | 8 | 7 | 6 | 5 |
| 15 A | 15 | 15 | 14 | 12 | 11 | 9 | 8 |
| 20 A | 20 | 19 | 18 | 15 | 14 | 12 | 10 |
| 25 A | 25 | 25 | 23 | 19 | 18 | 15 | 13 |
| 30 A | 30 | 29 | 27 | 23 | 21 | 18 | 15 |
| 35 A | 35 | 35 | 35 | 29 | 27 | 22 | 19 |
| 40 A | 40 | 39 | 37 | 31 | 28 | 24 | 20 |

- 1 A
- 2 A
- 3 A
- 4 A
- 5 A
- 7.5 A
- 10 A
- 15 A
- 20 A
- 25 A
- 30 A
- 35 A
- 40 A

Note 1: ATOF® SHUNT Maximum Continuous Load at 85°C: 40A.

Note 2: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <https://www.littelfuse.com/legal/disclaimers/product-disclaimer.aspx>