# ATOF® Blade Fuses

## Rated 32V



ATOF® Shunt

## Specifications

| | |
|---|---|
| **Voltage Rating:** | 32 V dc |
| **Interrupting Rating:** | 1000 A @ 32 V dc |
| **Recommended Environmental Temperature:** | –40 °C to +125 °C (ATOF®)<br>–40 °C to +105 °C (ATOF® Shunt) |
| **Terminals Material:** | Tin- or silver-plated* |
| **Housing Material:** | PA66 (UL 94 Flammability rating of V-2) |
| **Net Weight Per Fuse:** | 1.4 g ± 5 % |
| **Comply With:** | SAE J1284 and ISO 8820-3 |
| **UL Listed:** | File AU1410 |
| **CSA Certified:** | File No. 29862 |

*Tin plating's temperature limit is ≈130 °C. Silver plating allows up to 150 °C at the terminal interface.

## 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.

## Applications

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

## 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
- High-contrast ampere stamps on housings aid identification
- Simple to install and remove
- Shunt version available (Tin plated only)

## Ordering Information

| 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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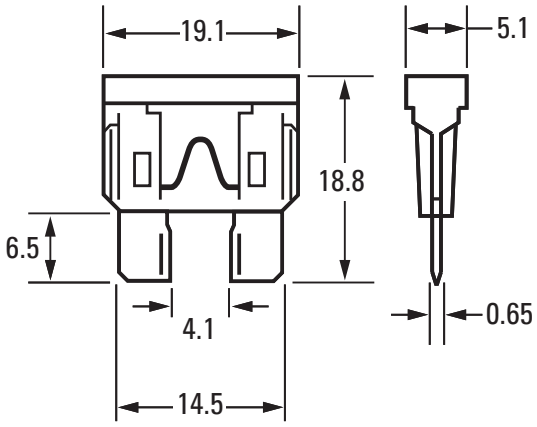
## Ratings

| Part Number | Current Rating (A) | Housing Material Color | Test Cable Size (mm²) | Typ. Voltage Drop (mV) | Typ.Cold Resistance (mΩ) | Typ. I²t (A²s) |
|---|---|---|---|---|---|---|
| 0287001._ | 1 | | 0.35 | 176 | 123 | 0.4 |
| 0287002._ | 2 | | 0.35 | 141 | 53.5 | 1.4 |
| 0287003._ | 3 | | 0.35 | 137 | 31.1 | 7.4 |
| 0287004._ | 4 | | 0.35 | 136 | 22.8 | 14 |
| 0287005._ | 5 | | 0.5 | 128 | 17.85 | 26 |
| 028707.5_ | 7.5 | | 0.75 | 116 | 10.91 | 60 |
| 0287010._ | 10 | | 1 | 109 | 7.70 | 115 |
| 0287015._ | 15 | | 1.5 | 102 | 4.80 | 340 |
| 0287020._ | 20 | | 2.5 | 98 | 3.38 | 520 |
| 0287025._ | 25 | | 2.5 | 92 | 2.52 | 1 000 |
| 0287030._ | 30 | | 4 | 84 | 1.97 | 1 500 |
| 0287035._ | 35 | | 6 | 87 | 1.61 | 2 300 |
| 0287040._ | 40 | | 6 | 96 | 1.44 | 3 300 |
| 0287900._ | SHUNT | | - | - | - | - |

The typical $I^2t$ is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs.

## Dimensions

Dimensions in mm for reference only.
See outline drawing for dimensions and tolerances.



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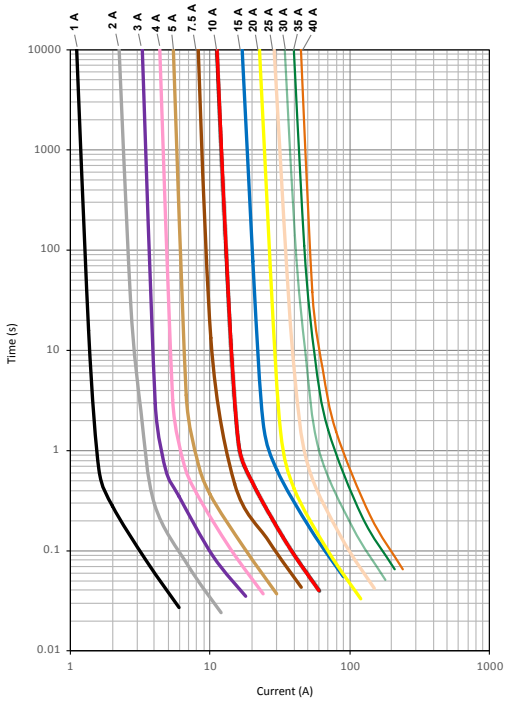
## Time-Current Characteristic Curves

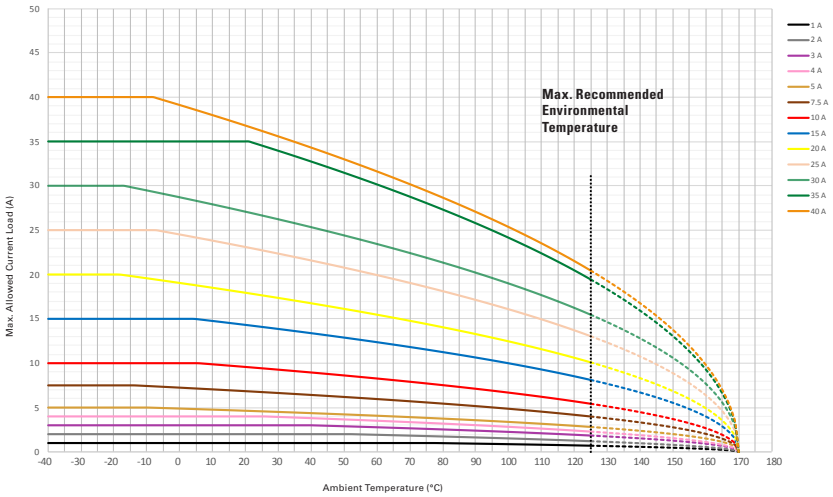



## Time-Current Characteristics

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

## Typical Derating of Fuse Melting Element

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 setup.




Derating curves may change depending on the final condition of the application (terminals' characteristics, wire size, etc.). Please ask Littelfuse® for more information.

## Temperature Table

| | Max. allowed current load (A) at ambient temperature (typical derating) | | | | | | |
|---|---|---|---|---|---|---|---|
| | -40 °C | 0 °C | 20 °C | 65 °C | 85 °C | 110 °C | 125 °C |
| 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 |

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