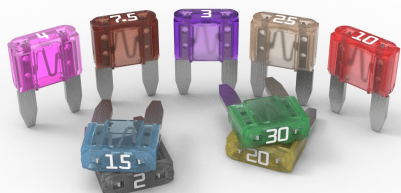


# MINI® Blade Fuses

Rated 32V



MINI® Shunt

## Description

MINI® 32V automotive blade fuses boast a miniature design that allows automakers to pack more circuit protection into less space. Despite their light weight, MINI® fuses perform reliably in adverse environments and at extreme temperatures.

## Ordering Information

| Part Number   | Rating            | Package Size |
|---------------|-------------------|--------------|
| 0297xxx.WXNV  | 2 - 30<br>& SHUNT | 3000         |
| 0297xxx.U     | 2 - 30            | 500          |
| 0297xxx.H     | 2 - 30            | 100          |
| 0297xxx.L     | 2 - 30            | 50           |
| MINI® Sn Fuse |                   |              |
| 0297xxx.WXT   | 2 - 30            | 3000         |

## Specifications

|                                                |                                                                                                                      |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Voltage Rating:</b>                         | 32 VDC                                                                                                               |
| <b>Interrupting Rating:</b>                    | 1000A @ 32 VDC                                                                                                       |
| <b>*Recommended Environmental Temperature:</b> | -40°C to +125°C                                                                                                      |
| <b>Terminals Material:</b>                     | Silver plated / Tin plated zinc alloy                                                                                |
| <b>Housing Material:</b>                       | PA66 (U.L. 94 Flammability rating – V2)                                                                              |
| <b>Net Weight Per Fuse:</b>                    | 0.57±5% gr                                                                                                           |
| <b>Complies with:</b>                          | Ag plated: SAE J2077, ISO 8820-3, UL 248 Special Purpose Fuses<br>Sn plated: SAE J2077, ISO 8820-3 not UL recognized |

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

## Applications

- Cars
- Trucks
- SUVs
- Offroad vehicles
- Buses
- Watercraft

## Features & Benefits

- Color coding shows the amperage rating for each fuse
- See-through housing makes it easy to check whether a fuse has blown
- Checkpoints on top make it possible to measure resistance without removing the fuse
- High-contrast amperage stamp on the top of the housing aids identification
- Simple to install and remove

# MINI® Blade Fuses

## Rated 32V

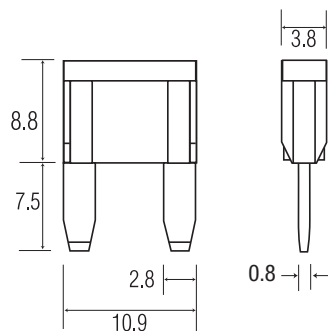
### Ratings

| Part Number | Current Rating (A) | Housing Material Color                                                            | Test Cable Size (mm <sup>2</sup> ) | Typ. Voltage Drop (mV) | Typ. Cold Resistance (mΩ) | Typ. I <sup>2</sup> t (A <sup>2</sup> s) |
|-------------|--------------------|-----------------------------------------------------------------------------------|------------------------------------|------------------------|---------------------------|------------------------------------------|
| 0297002._   | 2                  |  | 0.5                                | 171                    | 55.60                     | 9                                        |
| 0297003._   | 3                  |  | 0.5                                | 153                    | 33.75                     | 20                                       |
| 0297004._   | 4                  |  | 0.5                                | 121                    | 23.48                     | 31                                       |
| 0297005._   | 5                  |  | 0.5                                | 129                    | 17.75                     | 37                                       |
| 029707.5._  | 7.5                |  | 0.75                               | 135                    | 10.85                     | 82                                       |
| 0297010._   | 10                 |  | 1                                  | 108                    | 7.42                      | 122                                      |
| 0297015._   | 15                 |  | 1.5                                | 98                     | 4.58                      | 308                                      |
| 0297020._   | 20                 |  | 2.5                                | 96                     | 3.21                      | 442                                      |
| 0297025._   | 25                 |  | 2.5                                | 86                     | 2.36                      | 622                                      |
| 0297030._   | 30                 |  | 4                                  | 87                     | 1.85                      | 1 230                                    |
| 0297900._   | SHUNT              |  | -                                  | -                      | -                         | -                                        |

The typical I<sup>2</sup>t is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs.

### Dimensions

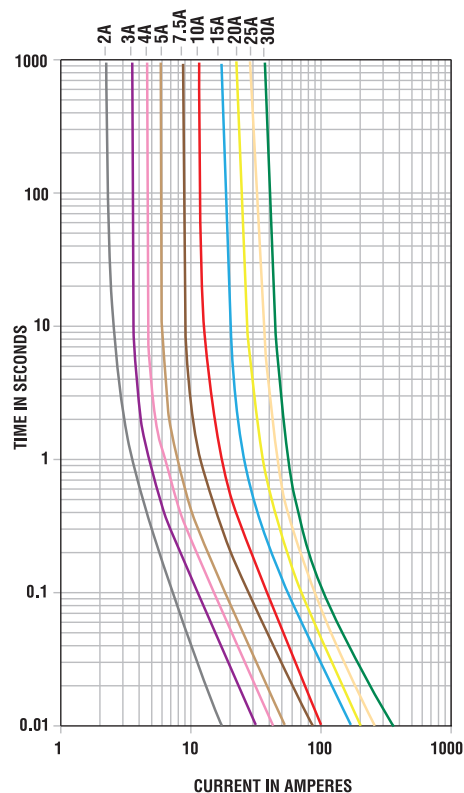
Dimensions in mm for reference only.  
See outline drawing for dimensions and tolerances.



# MINI® Blade Fuses

## Rated 32V

### Time-Current Characteristic Curves



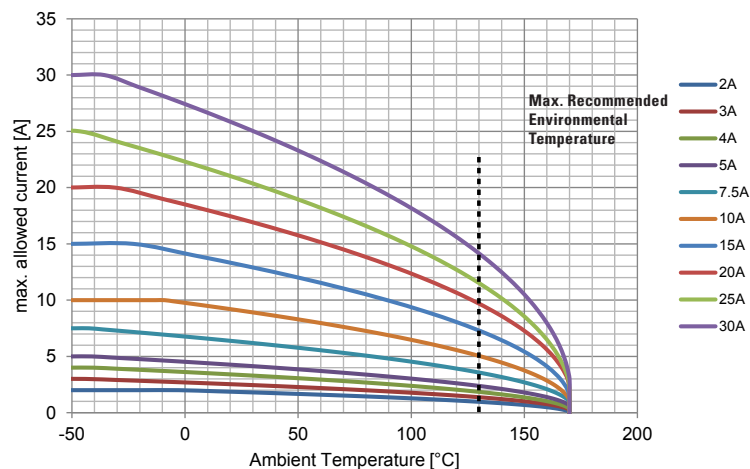
### Time-Current Characteristics

| % of Rating | Opening Time Min / Max (s) |
|-------------|----------------------------|
| 110         | 360,000 / ∞                |
| 135         | 0.75 / 600                 |
| 200         | 0.15 / 5                   |
| 350         | 0.08 / 0.5                 |
| 600         | 0.03 / 0.1                 |

### Typical Derating of Fuse Melting Element

Temperature Security Margin is 20%

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



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                                                                   | -20°C | 0°C | 20°C | 40°C | 60°C | 80°C | 100°C |
| 2A   | 2.0                                                                     | 2.0   | 2.0 | 1.9  | 1.7  | 1.6  | 1.4  | 1.3   |
| 3A   | 3.0                                                                     | 2.8   | 2.7 | 2.5  | 2.4  | 2.2  | 2.0  | 1.8   |
| 4A   | 4.0                                                                     | 3.8   | 3.6 | 3.4  | 3.2  | 2.9  | 2.7  | 2.4   |
| 5A   | 5.0                                                                     | 4.8   | 4.5 | 4.3  | 4.0  | 3.7  | 3.4  | 3.0   |
| 7.5A | 7.5                                                                     | 7.1   | 6.8 | 6.4  | 6.0  | 5.5  | 5.1  | 4.5   |
| 10A  | 10                                                                      | 10    | 9.8 | 9.2  | 8.6  | 8.0  | 7.3  | 6.5   |
| 15A  | 15                                                                      | 15    | 14  | 13   | 12   | 12   | 11   | 9.0   |
| 20A  | 20                                                                      | 19    | 18  | 17   | 16   | 15   | 14   | 12    |
| 25A  | 25                                                                      | 24    | 22  | 21   | 20   | 18   | 17   | 15    |
| 30A  | 30                                                                      | 29    | 27  | 26   | 24   | 22   | 20   | 18    |

MINI SHUNT Maximum Continuous Load at 85°C: 20A