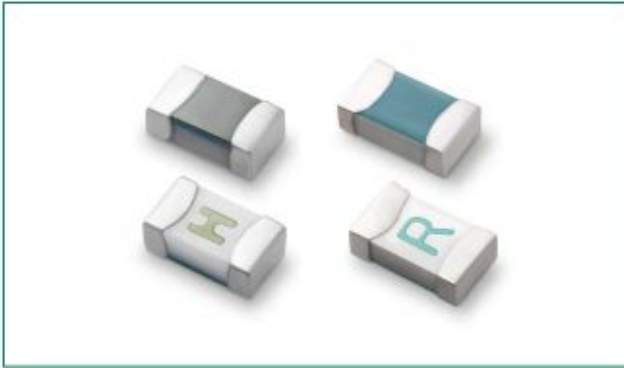


Surface Mount Fuses

Ceramic Fuse > 438A Series



The 438A series AECQ-compliant fuses are specifically tested to cater secondary circuit protection needs of compact auto electronics application.

The general design ensures excellent temperature stability and performance reliability.

The high I²t values which is typical in the Littelfuse ceramic fuse family ensure high inrush current withstand capability.

Agency Approvals

| AGENCY | AGENCY FILE NUMBER | AMPERE RANGE |
|--------|--------------------|--------------|
| | E10480 | 0.250A – 6A |
| | 29862 | 0.250A – 6A |

- Operating Temperature from -55°C to +150°C
- 100% Lead-free, RoHS compliant and Halogen-free
- Suitable for both leaded and lead-free reflow/wave soldering
- Meets Littelfuse's Automotive qualifications*

* Largely based on Littelfuse internal AECQ-200 test plan.

Electrical Characteristics for Series

| % of Ampere Rating | Ampere Rating | Opening Time at 25°C |
|--------------------|---------------|----------------------|
| 100% | 0.250A – 6A | 4 Hours, Minimum |
| 250% | 0.250A – 6A | 5 Seconds, Maximum |

Applications

- Li-ion Battery
- LED Head-Lights
- Automotive Navigation System
- TFT Display
- Battery Management System (BMS)
- Clusters

Additional Information



Datasheet



Resources



Samples

Electrical Specifications by Item

| Ampere Rating (A) | Amp Code | Max. Voltage Rating (V) | Interrupting Rating (AC/DC) ₁ | Nominal Resistance (Ohms) ₂ | Nominal Melting I ² t (A ² Sec.) ₃ | Nominal Voltage Drop At Rated Current (V) ₄ | Nominal Power Dissipation At Rated Current (W) | Agency Approvals | |
|-------------------|----------|-------------------------|--|--|---|--|--|------------------|---|
| 0.25 | .250 | 63VDC | 50A @ 63VDC 50A @ 32VAC | 2.218 | 0.0017 | 0.550 | 0.138 | x | x |
| 0.375 | .375 | 63VDC | | 1.247 | 0.0041 | 0.488 | 0.183 | x | x |
| 0.5 | .500 | 63VDC | | 0.829 | 0.0100 | 0.486 | 0.243 | x | x |
| 0.75 | .750 | 63VDC | | 0.466 | 0.0281 | 0.378 | 0.284 | x | x |
| 1 | 001. | 63VDC | | 0.310 | 0.0593 | 0.351 | 0.351 | x | x |
| 1.25 | 1.25 | 63VDC | 50A@32VAC/32VDC | 0.200 | 0.0510 | 0.365 | 0.456 | x | x |
| 1.75 | 1.75 | 32VDC | | 1.405 | 0.1440 | 0.360 | 0.540 | x | x |
| 2 | 002. | 32 | 50A @ 32VDC/12VAC | 0.0490 | 0.181 | 0.107 | 0.214 | x | x |
| 2.5 | 02.5 | 32 | | 0.0364 | 0.240 | 0.095 | 0.238 | x | x |
| 3 | 003. | 32 | | 0.0264 | 0.439 | 0.093 | 0.279 | x | x |
| 3.5 | 03.5 | 32 | | 0.0210 | 0.647 | 0.082 | 0.287 | x | x |
| 4 | 004. | 32 | | 0.0177 | 0.730 | 0.079 | 0.316 | x | x |
| 5 | 005. | 32 | | 0.0127 | 0.747 | 0.074 | 0.370 | x | x |
| 6 | 006. | 24 | | 50A @ 24VDC/12VAC | 0.0086 | 1.444 | 0.072 | 0.432 | x |

Notes:

1. AC Interrupting Rating tested at rated voltage with unity power factor. DC Interrupting Rating tested at rated voltage with time constant < 0.8 msec.
2. Nominal Resistance measured with < 10% rated current.
3. Nominal Melting I²t measured at 1 msec. opening time.
4. Nominal Voltage Drop measured at rated current after temperature has stabilized.

Devices designed to carry rated current for 4 hours minimum. It is recommended that devices be operated continuously at no more than 80% rated current. See "Temperature Re-rating Curve" for additional re-rating information.

Devices designed to be mounted with marking code facing up.