

Surface Mount Fuses

Ceramic Fuse > 501A Series



The 501A series AECQ-Compliant fuses and Halogen free fuse series are specifically tested to cater to secondary circuit protection needs of compact auto electronics application.

The general design ensures excellent temperature stability and performance reliability. The high I_{2t} values which are typical in the Littelfuse Ceramic Fuse family, ensure high inrush current withstanding capability.

Agency Approvals

AGENCY	AGENCY FILE NUMBER	AMPERE RANGE
	E10480	10A - 20A
	29862	10A - 20A

- Operating Temperature from -55°C to +125°C
- Meets Littelfuse's automotive qualifications*
- 100% Lead-free, RoHS compliant and Halogen-free
- Suitable for both leaded and lead-free reflow/wave soldering

* Largely based on Littelfuse internal AEC-Q200 test plan

Electrical Characteristics for Series

% of Ampere Rating	Ampere Rating	Opening Time at 25°C
100%	10A – 20A	4 Hours, Minimum
350%	10A – 20A	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 (DC) ₁	Nominal Resistance (Ohms) ₂	Nominal Melting I _{2t} (A ² Sec.) ₃	Nominal Voltage Drop at Rated Current (V) ₄	Nominal Power Dissipation at Rated Current (W)	Agency Approvals	
10	010.	32	150A @ 32VDC	0.00362	10.385	0.04407	0.4407	x	x
12	012.	32		0.00311	20.341	0.04927	0.5912	x	x
15	015.	32		0.00250	39.700	0.04843	0.7265	x	x
20	020.	32		0.00194	86.360	0.05888	1.1776	x	x

Notes:

- DC Interrupting Rating tested at rated voltage with time constant <0.5msec.
- Nominal Resistance measured with <10% rated current.
- Nominal Melting I_{2t} measured at 1 msec. opening time. For other I_{2t} data refer to chart.
- Nominal Voltage Drop measured at rated current after temperature has stabilized and with fuse mounted on board with 3oz Cu trace.

Devices designed to carry rated current for four 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.