

### 508 Series Lead-Free 3AB Fuse



#### Description

A 1000Vac/Vdc rated ceramic fuse with a 10,000A interrupting rating in a compact 6.3×32mm package, which is well suited for circuit protection in high energy applications.

#### Features

- In accordance with Underwriter's Laboratories Standard UL 248-14
- Available in cartridge and axial lead
- RoHS compliant and Lead-free
- Interrupting rating of 10,000 Amperes
- Compact form factor of 6.3×32mm

#### Applications

Used as supplementary protection in appliance or utilization equipment to provide individual protection for components or internal circuits.

#### Additional Information



**Datasheet**



**Resources**



**Samples**



**Accessories**

For recommended fuse accessories for this product series, see '[Recommended Accessories](#)' section.

#### Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	0.315A - 1A
	N/A	0.315A - 1A

#### Electrical Characteristics

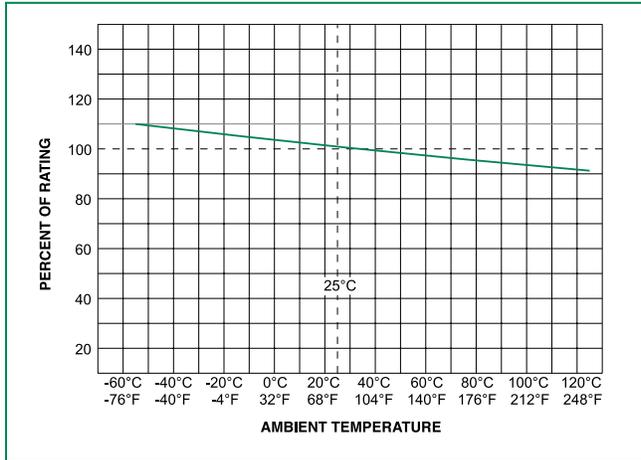
% of Ampere Rating	Ampere Rating	Opening Time
100%	0.315A - 1A	4 Hours, Minimum
135%		1 Hour, Maximum
200%		120 Seconds, Maximum

#### Electrical Characteristic

Amp Code	Amp Rating	Voltage Rating	Interrupting Rating	Nominal Cold Resistance (mohms)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec.)	Agency Approvals	
.315	0.315	1000	10kA @ 1000Vac 10kA @ 1000Vdc	9200	0.071	x	x
.500	0.5	1000		3572	0.259	x	x
001	1	1000		1580	0.449	x	x

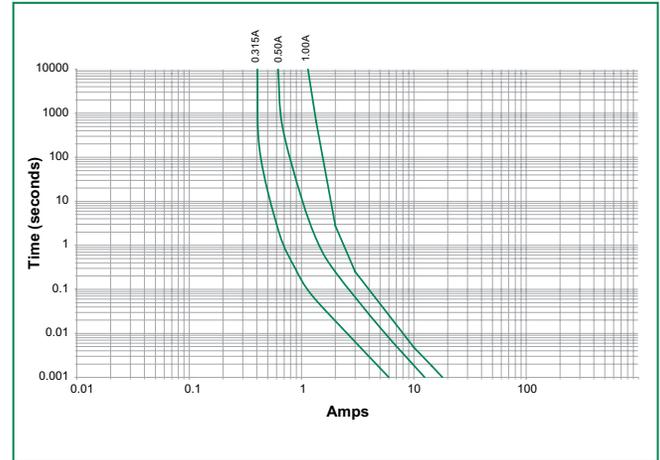
\* 10KA@600Vac/dc also cURus approved. Add suffix "6" Example: 0508.315MX6P.

### Temperature Re-rating Curve

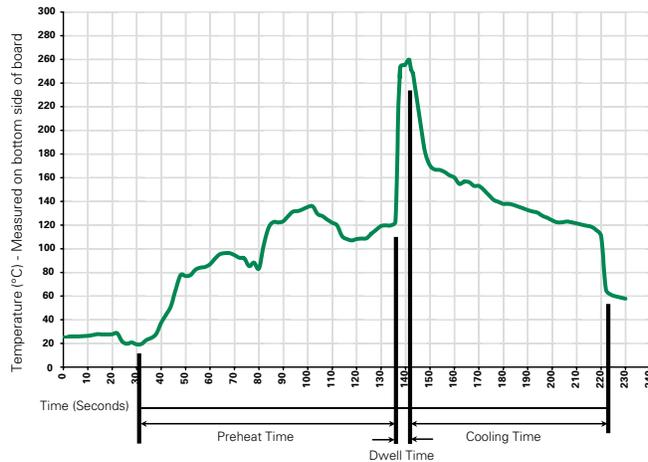


Note:  
 Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

### Average Time Current Curves



### Soldering Parameters - Wave Soldering



### Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
<b>Preheat:</b> (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100°C
Temperature Maximum:	150°C
Preheat Time:	60-180 seconds
<b>Solder Pot Temperature:</b>	260°C Maximum
<b>Solder Dwell Time:</b>	2-5 seconds

### Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350°C +/- 5°C  
 Heating Time: 5 seconds max.

**Note: These devices are not recommended for IR or Convection Reflow process.**

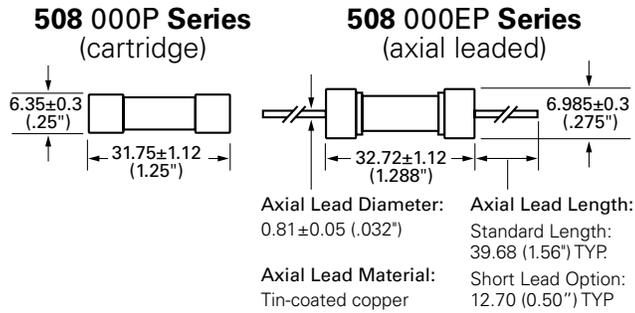
### Product Characteristics

<b>Materials</b>	Body : Ceramic Cap : Nickel-plated brass Leads : Tin-plated Copper
<b>Terminal Strength</b>	MIL-STD-202, Method 211, Test Condition A
<b>Solderability</b>	MIL-STD-202 Method 208
<b>Product Marking</b>	Cap1 : Brand logo, current and voltage ratings Cap2 : Series and agency approval marks

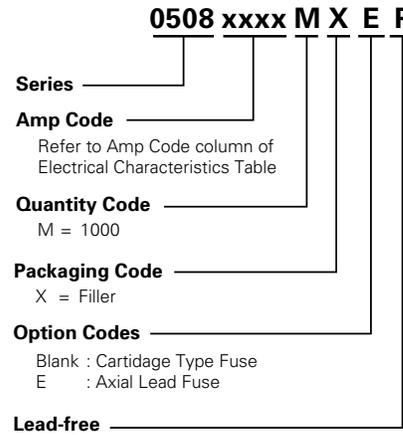
<b>Operating Temperature:</b>	-55°C to 125°C.
<b>Thermal Shock:</b>	MIL-STD-202, Method 107, Test Condition B (5 Cycles -65°C to +125°C).
<b>Vibration</b>	MIL-STD-202, Method 201
<b>Humidity</b>	MIL-STD-202, Method 103, Test Condition A: High relative humidity (95%) and elevated temp (40°C) for 240 hours
<b>Salt Spray</b>	MIL-STD-202, Method 101, Test Condition B

### Dimensions

Measurements displayed in millimeters (inches)



### Part Numbering System



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
<b>508 Series</b>				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MXE	N/A

### Recommended Accessories

Accessory Type	Series	Description	Max Application Voltage	Max Application Amperage
Holder	<a href="#">150322</a>	In-Line Fuseholder	500	15
Block	<a href="#">354</a>	Low Profile OMNI-BLOK® Fuse Block	600	30
	<a href="#">359</a>	High Current Screw Terminal Fuse Block		30
Clip	<a href="#">122</a>	High Current Traditional PC Board Fuse Clip	1000	30
	<a href="#">101</a>	Rivet/Eyelet Type Fuse Clip	1000	15

- Notes:
- Do not use in applications above rating.
  - Please refer to fuseholder data sheet for specific re-rating information.
  - Please contact factory for applications greater than the max voltage and amperage shown.

**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: [www.littelfuse.com/disclaimer-electronics](http://www.littelfuse.com/disclaimer-electronics).