

### 508 Series Lead-Free 3AB Fuse



#### Description

A 1000Vac/Vdc rated ceramic fuse with remarkable 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
- Superior 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

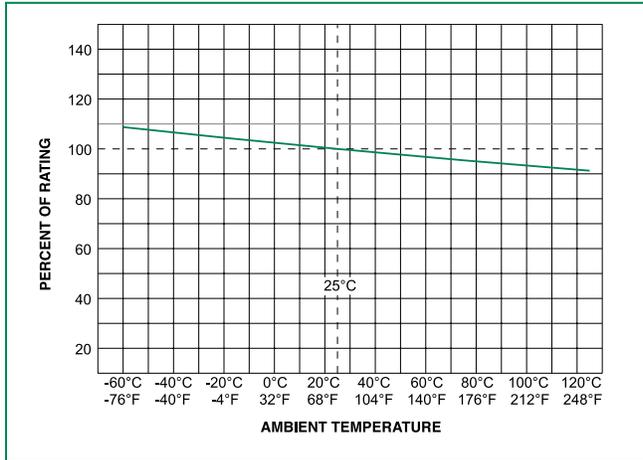
% of Ampere Rating	Ampere Rating	Opening Time
100%	0.315A - 1A	4 Hours, Minimum
135%		1 Hour, Maximum
200%		120 Seconds, Maximum

#### 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

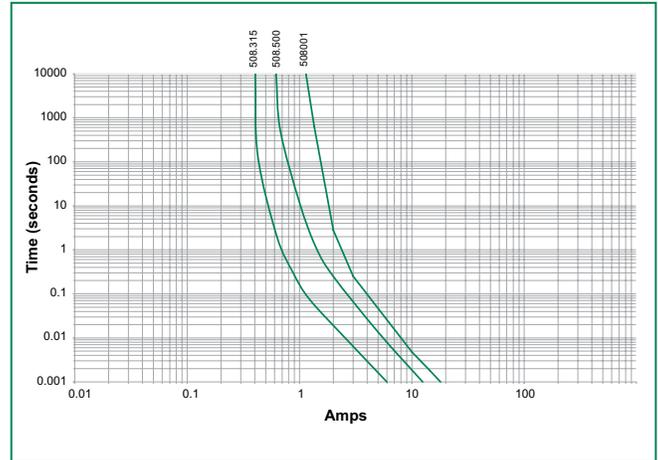
\* 10KA@600Vac/dc also cURus approved. Add suffix "6" Example: 0508.315MX6P.

### Temperature Re-rating Curve

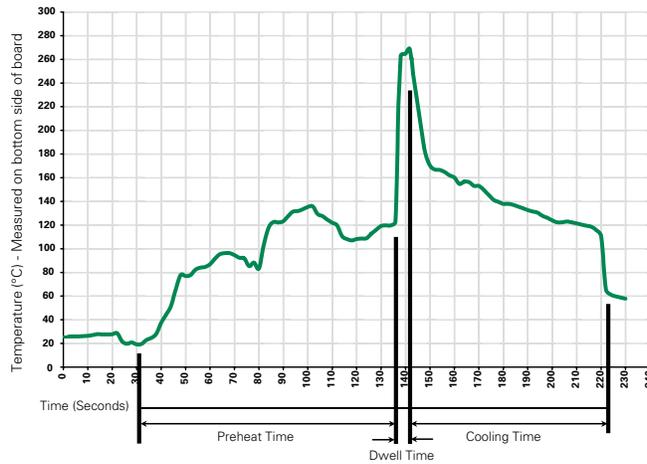


Note:  
 Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

### 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.**

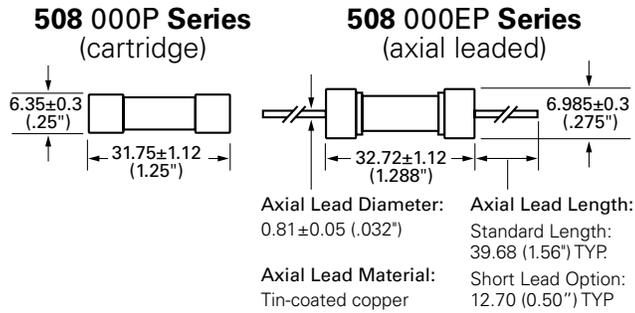
### Product Characteristics

<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

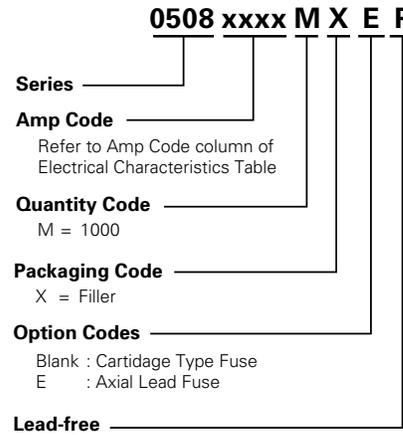
<b>Operating Temperature:</b>	-55°C to 125°C.
<b>Thermal Shock:</b>	MIL-STD-202, Method 107, Test Condition B (5 Cycles -65°C to +125°C).
<b>Vibration</b>	MIL-STD-202, Method 201
<b>Humidity</b>	MIL-STD-202, Method 103, Test Condition A: High relative humidity (95%) and elevated temp (40°C) for 240 hours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