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Axial Lead & Cartridge Fuses

3AB 1000Vac/dc High Voltage Fuse

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

Agency Approvals

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

Applications

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

Electrical Characteristics

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

Additional Information

Datasheet | Resources | Samples | Accessories

For recommended fuse accessories for this product series, see 'Recommended Accessories' section.

Electrical Characteristic

Amp Code	Amp Rating	Voltage Rating	Interrupting Rating	Nominal Cold Resistance (mohms)	Nominal Melting I^2t (A^2 sec.)	Agency Approvals	
						cULus	CE
.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.

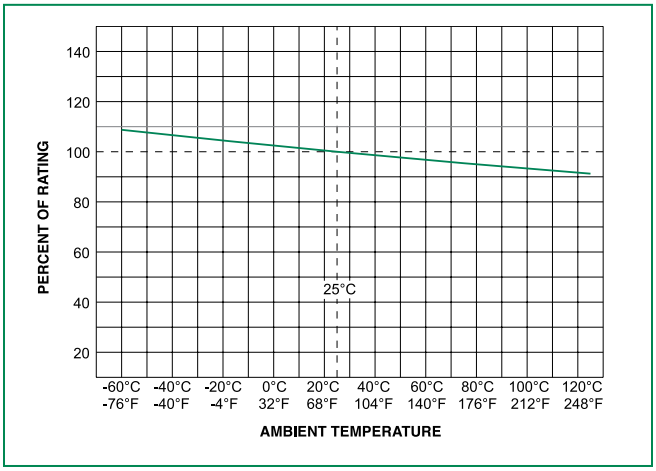
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Application testing is strongly recommended. Specifications are subject to change without notice.
Revised: 06/30/16

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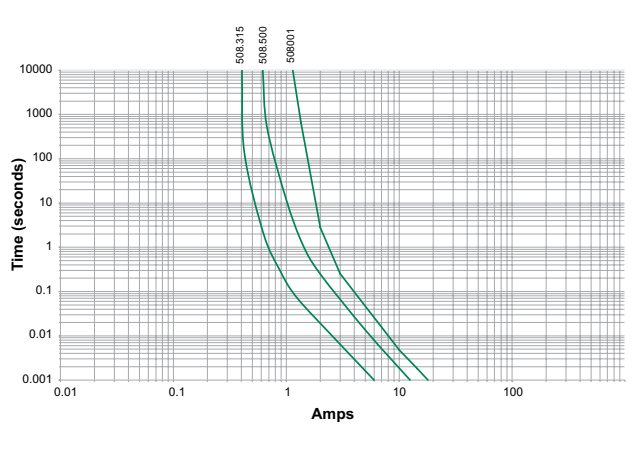
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Temperature Re-rating Curve

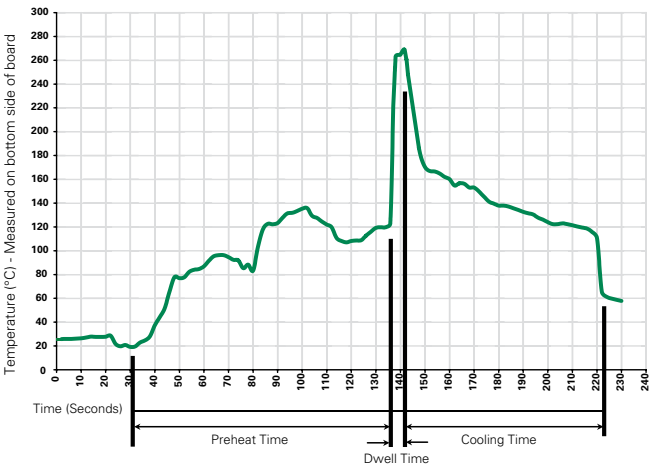


Note:
Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

Average Time Current Curves



Soldering Parameters - Wave Soldering



Recommended Process Parameters:

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

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

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

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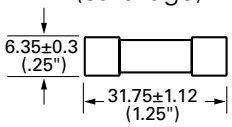
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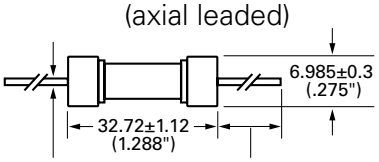
Dimensions

Measurements displayed in millimeters (inches)

508 000P **Series**
(cartridge)



508 000EP **Series**
(axial leaded)



Axial Lead Diameter:
0.81±0.05 (.032")

Axial Lead Material:
Tin-coated copper

Axial Lead Length:
Standard Length:
39.68 (1.56") TYP.

Short Lead Option:
12.70 (0.50") TYP

Part Numbering System

0508 xxxx M X E P

Series

Amp Code
Refer to Amp Code column of Electrical Characteristics Table

Quantity Code
M = 1000

Packaging Code
X = Filler

Option Codes
Blank : Cartidage Type Fuse
E : Axial Lead Fuse

Lead-free

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
508 Series				
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	150322	In-Line Fuseholder	500	15
Block	354	Low Profile OMNI-BLOK® Fuse Block	600	30
	359	High Current Screw Terminal Fuse Block		30
Clip	122	High Current Traditional PC Board Fuse Clip	1000	30
	101	Rivet/Eyelet Type Fuse Clip	1000	15

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

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