

506 Series Lead-Free 3AB, Fast-Acting Fuse



**Description**

A 600Vdc rated ceramic fuse with remarkable interrupting rating in a compact 6.3x32mm package, which is well suited for circuit protection in high DC energy applications.

**Features**

- Recognized to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-14
- Available in cartridge and axial lead form.
- Lead-free, Halogen free, and RoHS compliant.
- Superior interrupting rating of 10,000 Amperes.
- Compact form factor of 6.3x32mm.

**Agency Approvals**

Agency	Certificate Number	Ampere Range
	E10480	15A - 20A
	N/A	15A - 20A

**Electrical Characteristics for Series**

% of Ampere Rating	Ampere Rating	Opening Time
100%	15A - 20A	3600 sec, Min
135%		3600 sec, Max
200%		120 sec, Max

**Applications**

High energy and power efficient applications.

**Additional Information**



Datasheet



Resources



Samples



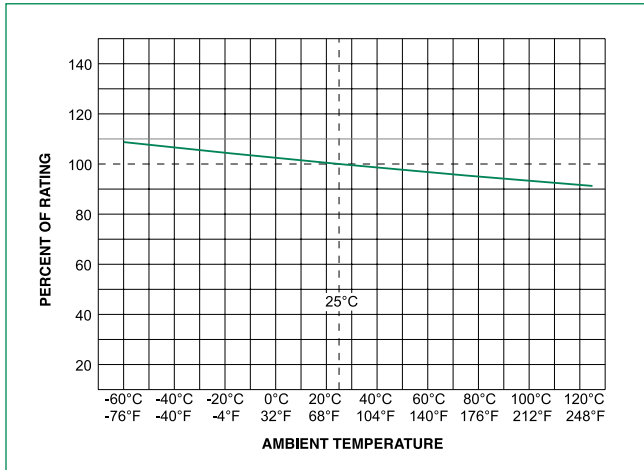
Accessories

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

**Electrical Characteristic by Item**

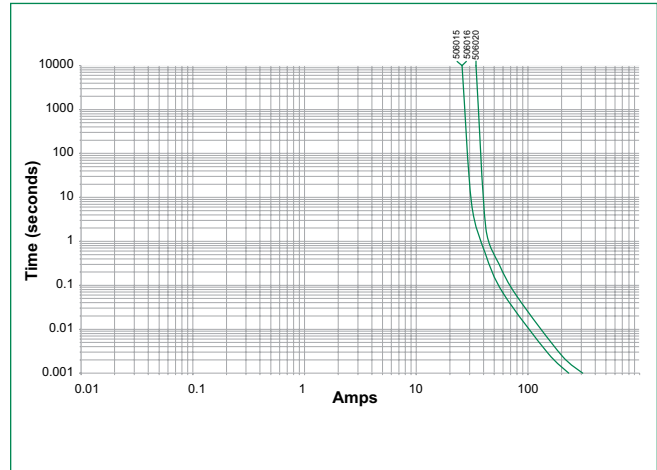
Amp Rating (A)	Amp Code	Voltage Rating (DC)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec.)	Agency Approvals
15	015.	600	10KA @ 600VDC	0.008	61	x
16	016.	600		0.008	61	x
20	020.	600		0.006	105	x

### 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

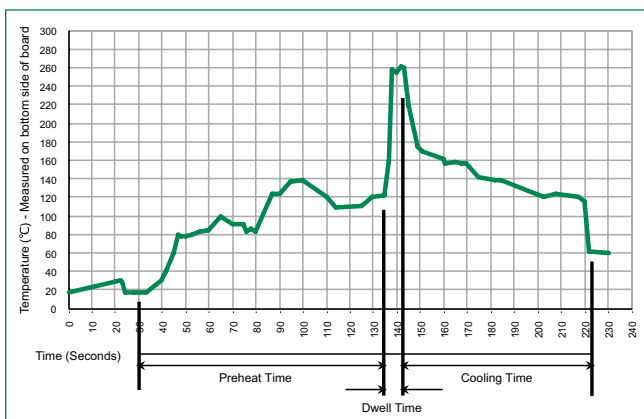


### Product Characteristics

<b>Materials</b>	Body : Ceramic Cap : Nickel Plated Brass
<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 temperature (40°C) for 240 hours
<b>Salt Spray</b>	MIL-STD-202, Method 101, Test condition B

### Soldering Parameters - Wave Soldering



### Recommended Process Parameters:

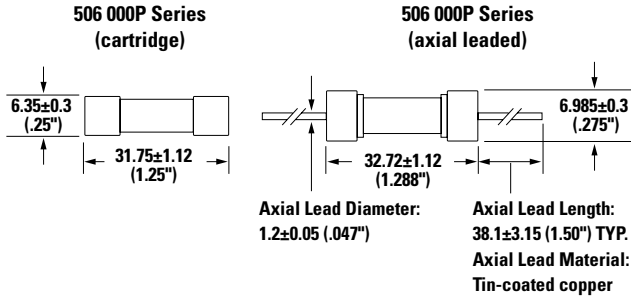
Wave Parameter	Lead-Free Recommendation
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100°C
Temperature Maximum:	150°C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	260°C Maximum
Solder Dwell Time:	2-5 seconds

### Recommended Hand-Solder Parameters:

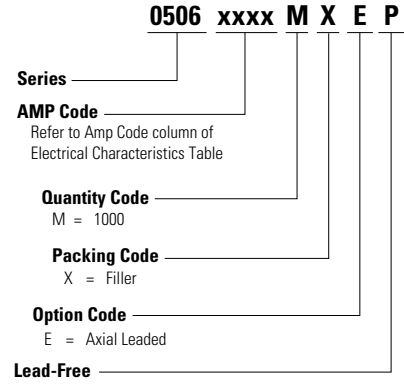
Solder Iron Temperature: 350°C +/- 5°C  
 Heating Time: 5 seconds max.

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

### Dimensions



### Part Numbering System



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
<b>506 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.