# Axial Lead & Cartridge Fuses 3AB > Fast-Acting > 506 Series

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





### **Agency Approvals**

Agency	Certificate Number	Ampere Range	
c <b>FU</b> °us	<b>c %1</b> °us E10480		
(€	N/A	15A - 20A	

### **Electrical Characteristics for Series**

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

### **Description**

A 600Vdc rated ceramic fuse with remarkable interrupting rating in a compact 6.3×32mm 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 6.3×32mm.

#### **Applications**

High energy and power efficient applications.

#### **Additional Information**









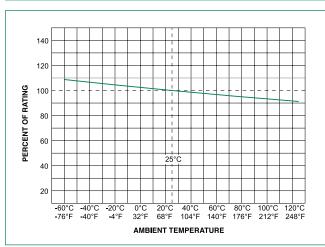
For recommended fuse accessories for this product series, see 'Recommended Accessories' section.

## **Electrical Characteristic by Item**

Amp Rating (A)	Amp Code	Voltage Rating (DC)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A² sec.)	Agency Approvals
15	015.	600		0.008	61	Х
16	016.	600	10KA @ 600VDC	0.008	61	Х
20	020.	600		0.006	105	X

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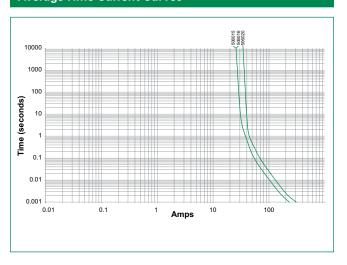
## **Temperature Re-rating Curve**



#### Note:

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

## **Average Time Current Curves**

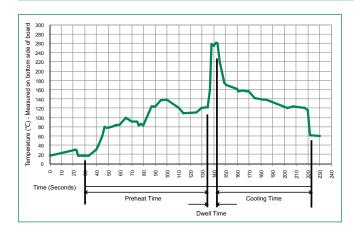


#### **Product Characteristics**

Materials Body: Ceramic Cap: Nickel Plated Brass		
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	MILSTD-202, Method 103, Test condition A: High relative humidity (95%) and Elevated temperature (40°C) for 240 hours		
Salt Spray	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		

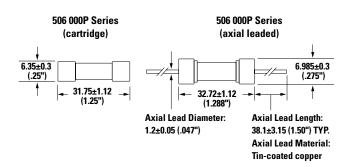
#### **Recommended Hand-Solder Parameters:**

Solder Iron Temperature:  $350^{\circ}\text{C}$  +/-  $5^{\circ}\text{C}$  Heating Time: 5 seconds max.

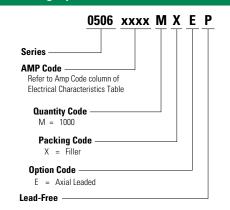
Note: These devices are not recommended for IR or Convection Reflow process.

## **Axial Lead & Cartridge Fuses** 3AB > Fast-Acting > 506 Series

### **Dimensions**



### **Part Numbering System**



### **Packaging**

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size	
506 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	<u>150322</u>	In-Line Fuseholder	seholder 500	
Block	354 Low Profile OMNI-BLOK® Fuse Block 600		30	
359	High Current Screw Terminal Fuse Block	600	30	
Clim	High Current Traditional PC Board Fuse Clip		1000	30
Clip <u>101</u>	<u>101</u>	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.