

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



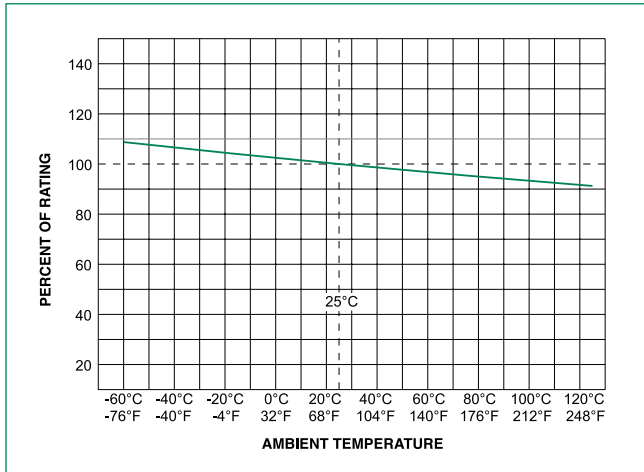
Accessories

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

Electrical Characteristic by Item

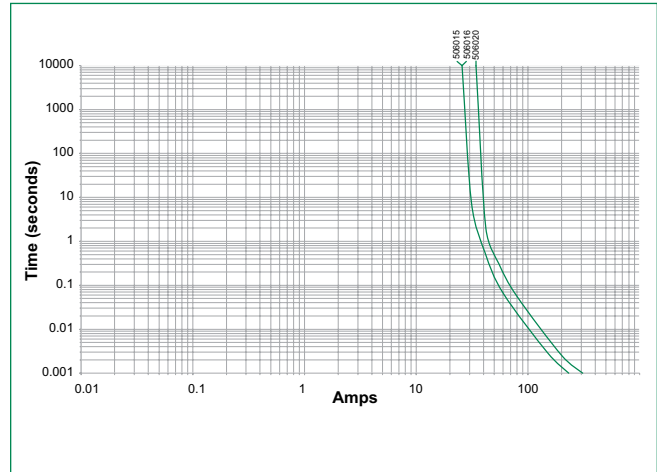
Amp Rating (A)	Amp Code	Voltage Rating (DC)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec.)	Agency Approvals
15	015.	600	10KA @ 600VDC	0.008	61	x
16	016.	600		0.008	61	x
20	020.	600		0.006	105	x

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

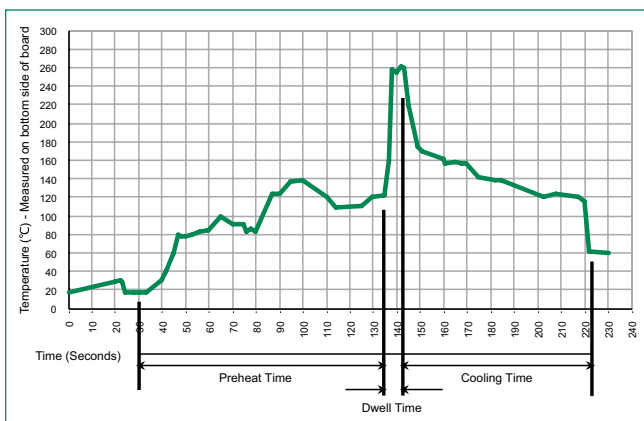


Product Characteristics

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	MIL-STD-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:

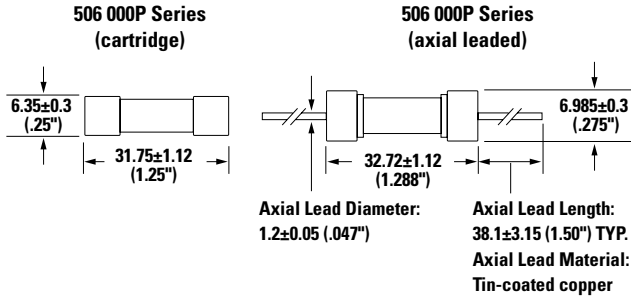
Wave Parameter	Lead-Free Recommendation
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100°C
Temperature Maximum:	150°C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	260°C Maximum
Solder Dwell Time:	2-5 seconds

Recommended Hand-Solder Parameters:

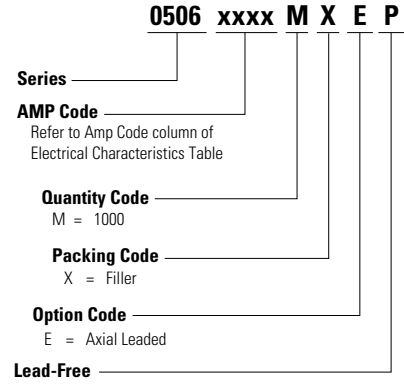
Solder Iron Temperature: 350°C +/- 5°C
Heating Time: 5 seconds max.

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
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	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:

- 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.

Mouser Electronics

Authorized Distributor

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