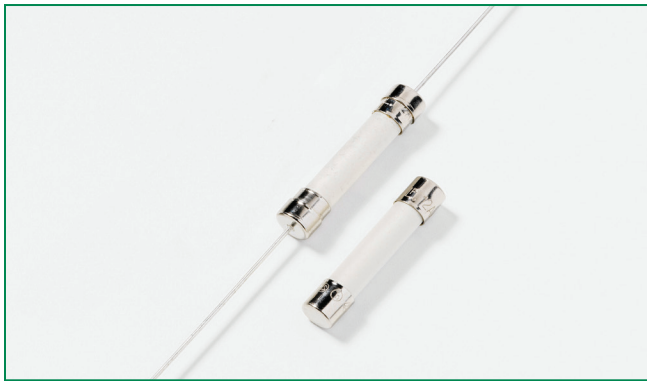


### 514 Series Lead-Free 3AB, Fast-Acting Fuse



#### Description

The 514 Series fuses are 500VAC rated ceramic fuses with remarkable interrupting rating in a compact 6.3 x 32mm package. They are well suited for circuit protection in high energy applications.

#### Features

- Available in cartridge and axial lead form
- Compact form factor of 6.3mm x 32mm
- Lead-free, Halogen free, and RoHS compliant
- High Interrupting Rating

#### Applications

High energy and power efficient applications

#### Agency Approvals

AGENCY	CERTIFICATE NUMBER	AMPERE RANGE
	E10480	0.4 - 16A
	N/A	1.6 - 12.5A

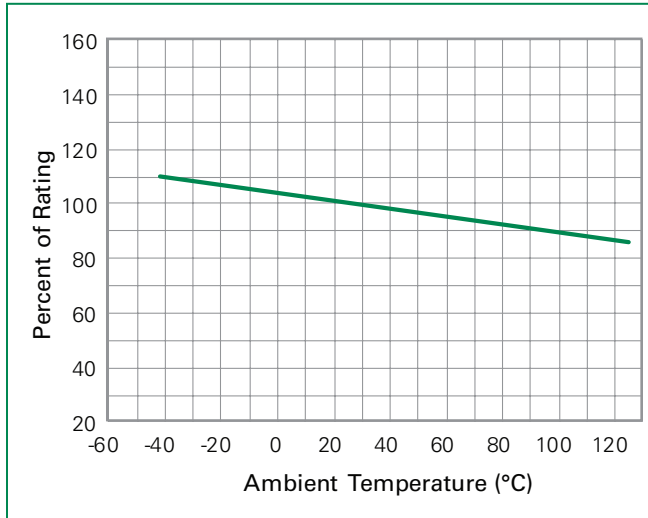
#### Electrical Characteristics for Series

% of Ampere Rating	Ampere Rating	Opening Time
100%	1.6A - 12.5A	4hours, Min
200%		120 sec, Max

#### Electrical Characteristics

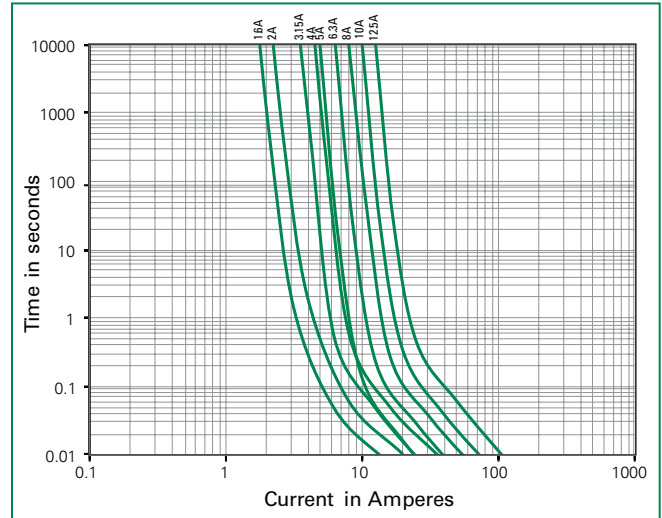
Amp Code	Amp Rating (A)	Max. Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (mOhm)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec)	Agency Approvals	
01.6	1.6	500VAC	5000A @500Vac	214	1.92	X	X
002.	2			150	4.12	X	X
3.15	3.15			76	5.54	X	X
004.	4			49	12.43	X	X
005.	5			63.6	6.14	X	X
06.3	6.3			43	13.5	X	X
008.	8			29	28.8	X	X
010.	10			20.2	50.6	X	X
12.5	12.5			14.9	114	X	X

### Temperature Re-rating Curve

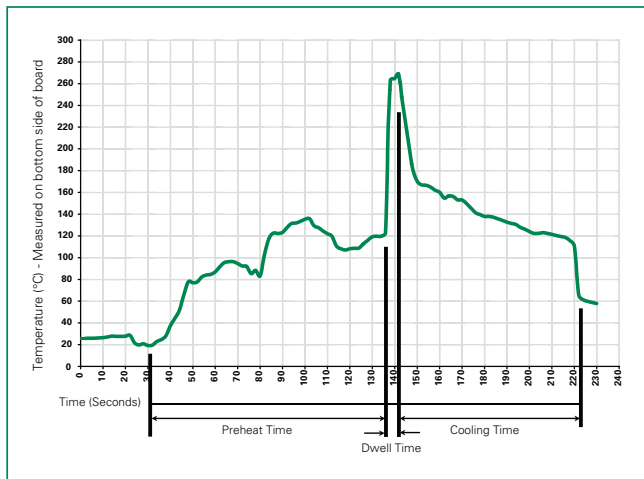


Note:  
 Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

### Average Time Current Curves



### 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 to 5 seconds

### Recommended Hand-Solder Parameters:

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

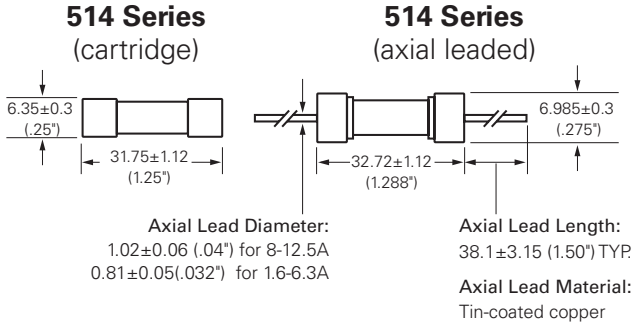
**Note: These devices are not recommended for IR or Convection Reflow process.**

### Product Characteristics

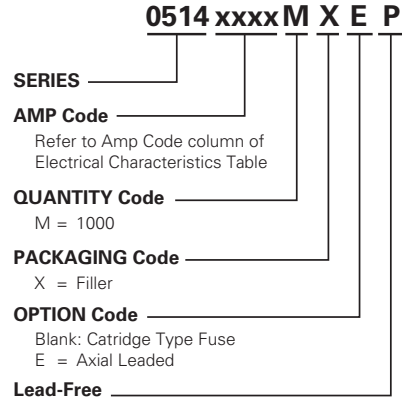
<b>Materials</b>	Body : Ceramic Cap : Nickel Plated Brass Leads: Tin-plated copper
<b>Terminal Strength</b>	MIL-STD-202G, Method 211A, Test condition A
<b>Solderability</b>	Reference MIL-STD-202 Method 208
<b>Product Marking</b>	Cap1 : Brand logo, current and voltage ratings Cap2 : Series and agency approval marks

<b>Operating Temperature</b>	-55°C to +125°C
<b>Thermal Shock</b>	MIL-STD-202G, Method 107G, Test condition B: (5 cycles -65°C to 125°C)
<b>Vibration</b>	MIL-STD-202G, Method 201A
<b>Moisture Resistance</b>	MIL-STD-202G, Method 103B, Test condition A
<b>Salt Spray</b>	MIL-STD-202G, Method 101E, Test condition B

### Dimensions



### Part Numbering System



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
<b>514 Series</b>				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MXE	N/A

**Disclaimer Notice** - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at [www.littelfuse.com/disclaimer-electronics](http://www.littelfuse.com/disclaimer-electronics).