

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	0.4A - 12.5A
	N/A	0.4A - 12.5A

Electrical Characteristics for Series

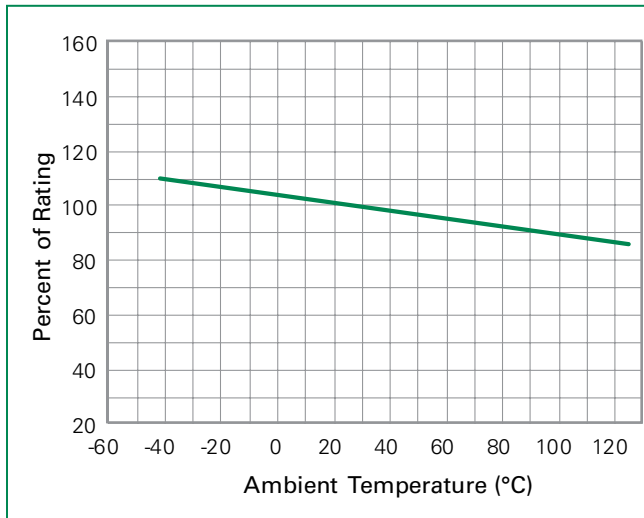
% of Ampere Rating	Ampere Rating	Opening Time
100%	1.6A - 12.5A	4hours, Min
200%		120 sec, Max

Electrical Characteristics

Amp Code	Amp Rating (A)	Max. Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (mOhm)	Nominal Melting I ² t (A ² 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

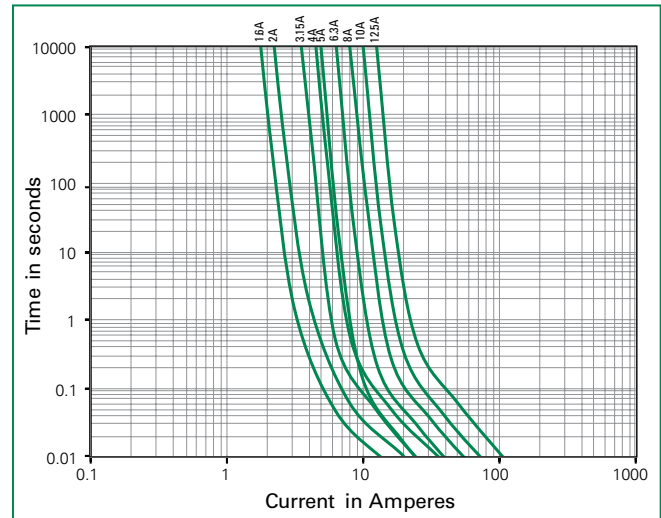
* 25KA@500VAC interrupting rating available for 1.6A

Temperature Re-rating Curve

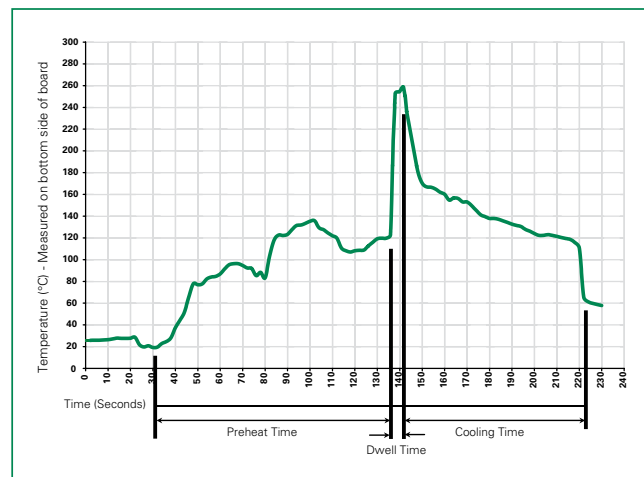


Note:
Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

Average Time Current Curves



Soldering Parameters - Wave Soldering



Recommended Process Parameters:

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

Recommended Hand-Solder Parameters:

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

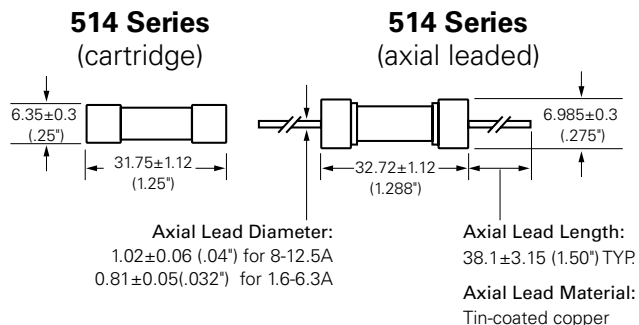
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

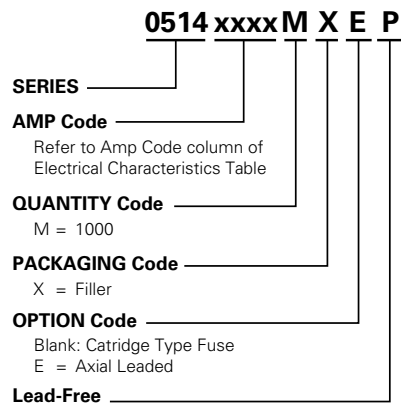
Materials	Body : Ceramic Cap : Nickel Plated Brass Leads: Tin-plated copper
Terminal Strength	MIL-STD-202G, Method 211A, Test condition A
Solderability	Reference MIL-STD-202 Method 208
Product Marking	Cap1 : Brand logo, current and voltage ratings Cap2 : Series and agency approval marks

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

Dimensions



Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
514 Series				
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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

[0514010.MXEP](#) [051401.6MXP](#) [051412.5MXEP](#) [05143.15MXEP](#) [051406.3MXEP](#) [051401.6MXEP](#) [0514008.MXP](#)
[0514004.MXP](#) [0514002.MXEP](#) [0514004.MXEP](#) [0514005.MXEP](#) [051406.3MXP](#) [0514010.MXP](#) [0514005.MXP](#)
[0514002.MXP](#) [0514008.MXEP](#) [05143.15MXP](#) [051412.5MXP](#) [0514016.MXP](#) [0514016.MXEP](#)