514 Series, Lead free 3AB Fuse

Description

A 500VAC rated ceramic fuse with remarkable interrupting rating in a compact 6.3 x 32mm package, which is well suited for circuit protection in high energy applications.

Features

- In accordance with Underwriters Laboratories Standard UL 248-14
- Available in cartridge and axial lead form
- RoHS compliant and Lead-free
- Compact form factor of 6.3mm x 32mm

Application

- High Voltage AC power application

Agency	Agency File Number	Ampere Range
cULus	E10480	1.6A -12.5A
CE	N/A	1.6A-12.5A

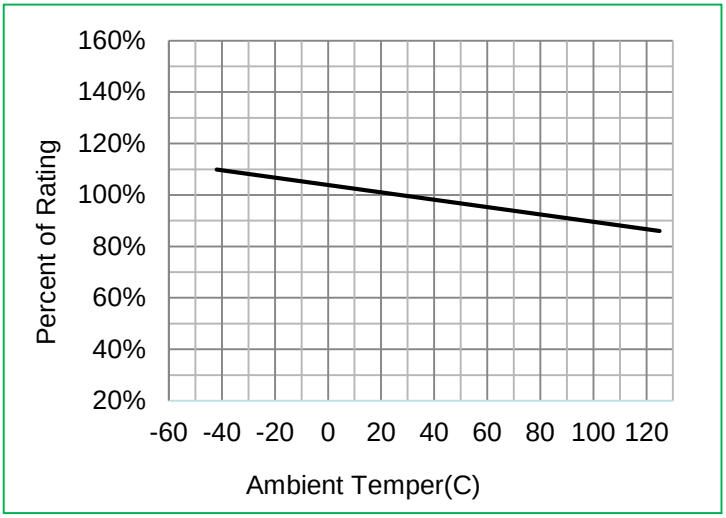
Electrical Characteristics

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

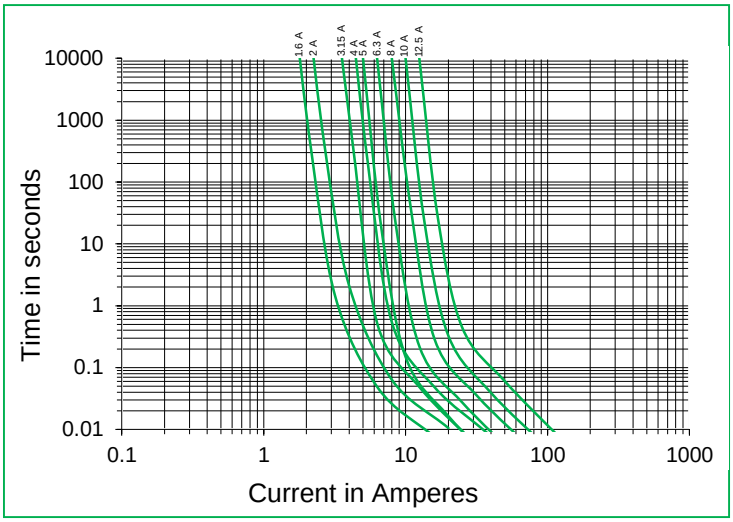
Electrical Characteristics

Amp Code	Amp Rating(A)	Max. Voltage Rating(V)	Interrupting Rating	Nominal Cold Resistance (mohm)	Nominal Melting I^2t (A2sec)	Agency Approvals	
						cULus	CE
1.6	1.6	500VAC	5000A @500Vac	214	1.92	X	X
2	2			150	4.2	X	X
3.15	3.15			76	5.54	X	X
4	4			49	12.43	X	X
5	5			63.6	6.14	X	X
6.3	6.3			43	13.5	X	X
8	8			29	28.8	X	X
10	10			20.2	50.6	X	X
12.5	12.5			14.9	114	X	X

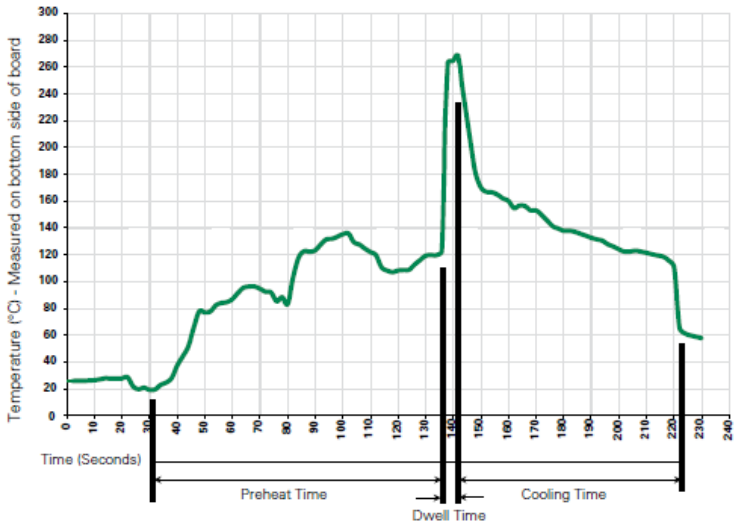
Temperature Rerating Curve



Average Time Current Curve



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.

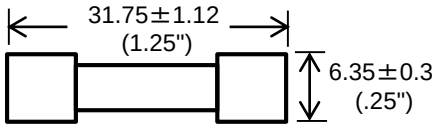
Product Characteristics

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	Cap 1: Brand logo, current and voltage ratings Cap 2: Agency approval marks

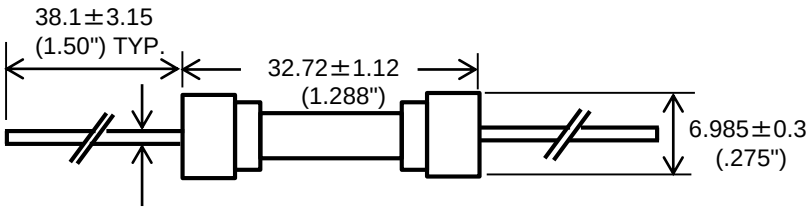
Operating Temperature	-55℃ to +125℃
Thermal Shock	MIL-STD-202G, Method 107G, Test condition B
Vibration	MIL-STD-202G, Method 201A
Moisture Resistance	MIL-STD-202G, Method 103B, Test condition A
Salt Spray	MIL-STD-202G, Method 101E, Test condition B

Dimensions

514 000P **Series** (cartridge)



514 000P **Series** (axial leaded)



Axial Lead Diameter:
1.02±0.06 (.04") for 8-12.5A
0.81±0.05(.032") for 1.6-6.3A

Axial Lead Material:
Tin-coated copper

Part Numbering System

0514 xxxx M X E P

Series

Amp Code
Refer to Amp Code column of Electrical Characteristics Table

Quantity Code
M=1000

Packaging Code
X= Filler

Option Code
Blank: Cartridge Type Fuse
E=Axial Leaded Fuse

P: Lead-Free

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