

314/324 Series Lead-free 3AB, Fast-Acting Fuse



Description

The 3AB Fast-Acting Fuse with ceramic body construction permits higher interrupting ratings and voltage ratings. Ideal for applications where high current loads are expected.







Features

- In accordance with UL Standard 248-14
- Available in cartridge and axial lead format and with various forming dimensions
- RoHS compliant and Lead-free

Applications

Used as supplementary protection in appliance or utilization equipment to provide individual protection for components or internal circuits.







Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	375mA - 15A
	LR 29862	375mA - 20A
	E10480	10A* - 40A
	NBK 030805 - E10480A-F NBK 260106 - JP1021A/B	375mA - 30A
	SU05001 - 6001/6002/6003/7006/8002/8003	375mA - 30A
		375mA - 30A

Electrical Characteristics for Series

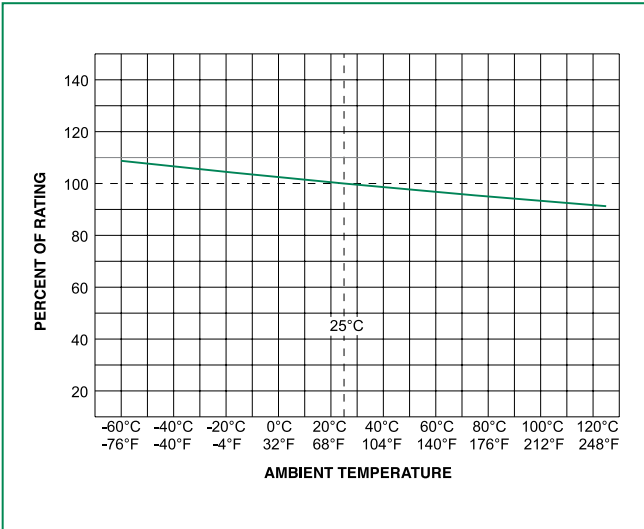
% of Ampere Rating	Ampere Rating	Opening Time
100%	1/8 - 40	4 hours, Minimum
135%	1/8 - 30	1 hour, Maximum
200%	1/8 - 12	15 secs., Maximum
	15 - 30	30 secs., Maximum
250%	40	30 secs., Maximum

Electrical Specification by Item

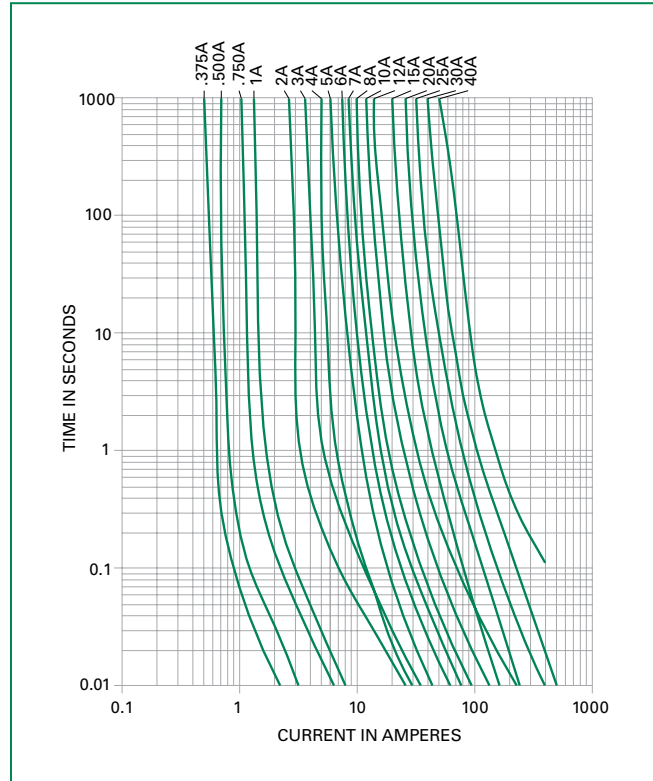
Amp Code	Ampere Rating (A)	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Agency Approvals						
												
.375	0.375	250	35 A @ 250 VAC 10 kA @ 125 VAC 10 kA @ 125 VDC	0.820	0.050	x	x				x	
.500	0.5	250		0.500	0.115	x	x				x	
.750	0.75	250		0.250	0.466	x	x				x	
001.	1	250	100 A @ 250 VAC 10 kA @ 125 VAC 10 kA @ 125 VDC	0.189	0.690	x	x				x	x
002.	2	250		0.0700	11.0	x	x				x	x
003.	3	250		0.0432	14.6	x	x	x			x	x
004.	4	250		0.0470	10.4	x	x	x			x	x
005.	5	250		0.0300	26.0	x	x	x			x	x
006.	6	250		0.0240	45.0	x	x	x			x	x
007.	7	250		0.0187	71.0	x	x	x			x	x
008.	8	250		0.0153	105	x	x	x			x	x
010.	10	250		0.0105	206	x	x	x			x	x
010.*	10	280		0.0105	206				x			x
012.	12	250	0.00760	570	x	x	x			x	x	
015.	15	250	0.00505	292	x	x	x			x	x	
015.*	15	280	0.00505	292				x			x	
020.	20	250	1000 A @ 250 VAC 200 A @ 300 VAC 10 kA @ 125 VAC 10 kA @ 125 VDC	0.00355	631		x	x	x		x	x
020.*	20	280		0.00355	631				x			x
025.	25	250	100 A @ 250 VAC 1000A @ 75 VDC 400A @ 125 VAC 400 A @ 125 VDC	0.00235	1450			x	x		x	x
025.**	25	280		0.00235	1450				x			x
030.	30	250		0.00182	2490			x	x		x	x
040.	40	250	1000 A @ 250 VAC 400 A @ 150 VDC	0.0014	22925				x			x

* 350A@280VAC interrupting rating available for 10A, 15A and 20A. ** 50A@280VAC for 25A. Add suffix '280'. Example: 0324020.MX280P
I²t test at 10x rated current

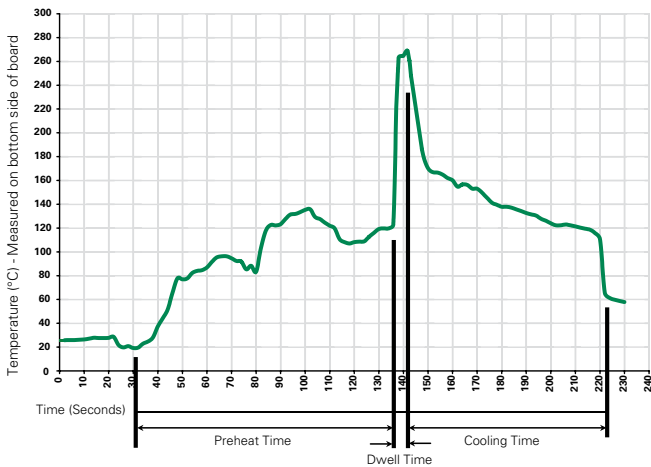
Temperature Re-rating Curve



Average Time Current Curves



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.

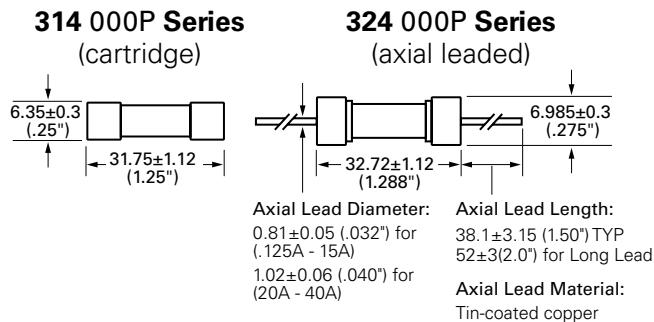
Product Characteristics

Materials	Body: Ceramic Cap: Nickel-plated Brass Leads: Tin-plated Copper
Terminal Strength	MIL-STD-202G, Method 211A, Test Condition A
Solderability	Reference IEC 60127 Second Edition 2003-01 Annex A
Product Marking	Cap1: Brand logo, current and voltage ratings Cap2: Series and agency approval marks

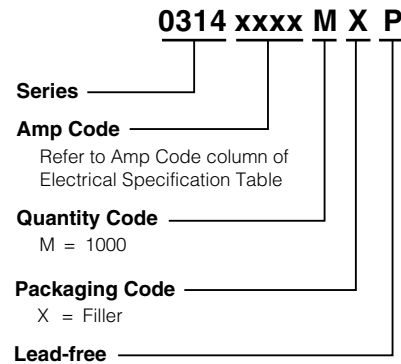
Operating Temperature	-55°C to +125°C
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (5 cycles, -65°C to +125°C)
Vibration	MIL-STD-202G, Method 201 A
Humidity	MIL-STD-202G, Method 103B, Test Condition A (High RH (95%) and Elevated temperature (40°C) for 240 hours)
Salt Spray	MIL-STD-202G, Method 101D, Test Condition B

Dimensions

Measurements displayed in millimeters (inches)



Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
314 Series				
Bulk	N/A	5	VX	N/A
Bulk	N/A	100	HX	N/A
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MX52L (long lead)	N/A
Bulk	N/A	1000	MXCC	N/A
Bulk	N/A	1000	MX52LE (long lead)	N/A
324 Series				
Bulk	N/A	5	VX	N/A
Bulk	N/A	100	HX	N/A
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MX280	N/A
Bulk	N/A	1000	MX52 (long lead)	N/A
Bulk	N/A	1000	MXF24	N/A

Additional Information



Datasheet 314 Series



Resources 314 Series



Samples 314 Series



Datasheet 324 Series



Resources 324 Series



Samples 324 Series