

RoHS **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	125mA - 15A
	LR 29862	125mA - 20A
	E10480	15A* - 40A
	NBK 030805 - E10480A-F NBK 260106 - JP1021A/B	125mA - 30A
	SU05001 - 6001/6002/6003/7006	125mA - 30 A
		125mA - 30A

Electrical Characteristics for Series

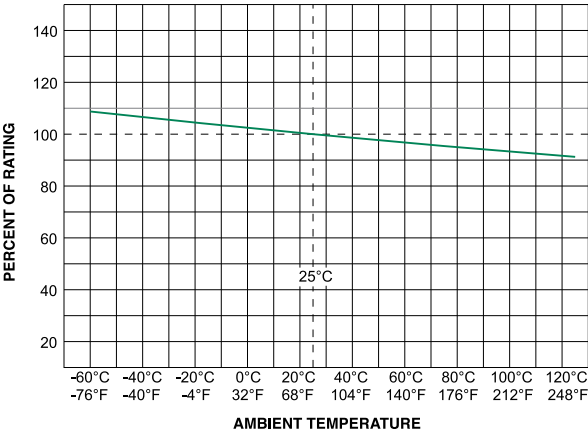
% of Ampere Rating	Ampere Rating	Opening Time
100%	125mA – 30A	4 hours, Minimum
135%	125mA – 30A	1 sec., Maximum
200%	125mA – 12A	15 sec., Maximum
	15A – 30A	30 sec., Maximum

Electrical Characteristic Specification by Item

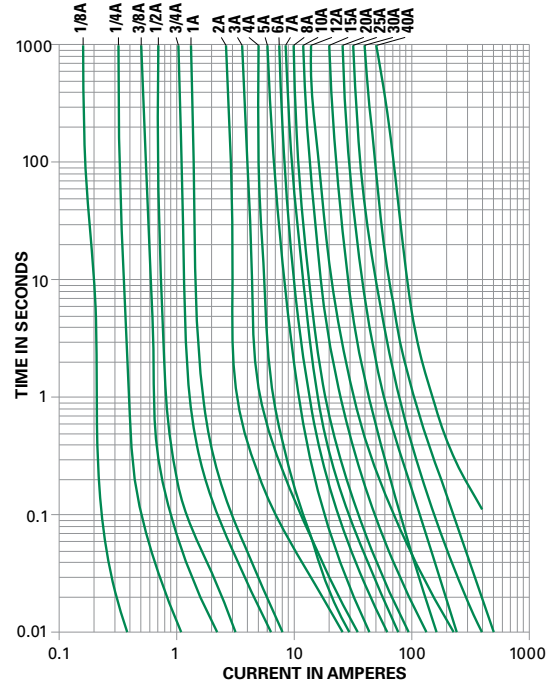
Amp Code	Ampere Rating (A)	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Agency Approvals					
											
.125	0.125	250	35A@250Vac 10KA@125Vac 10KA@125Vdc	6.20	0.00149	x	x				x
.250	0.25	250		1.95	0.0140	x	x				x
.375	0.375	250		0.820	0.050	x	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	100A@250Vac 10KA@125Vac 10KA@125Vdc	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	750A@250Vac 10KA@125Vac 10KA@125Vdc	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
012.	12	250		0.00760	570	x	x			x	x
015.	15	250		0.00505	292	x	x			x	x
015.*	15	280		0.00505	292				x		x
020.	20	250		0.00355	631		x		x	x	x
020.*	20	280		0.00355	631				x		x
025.	25	250		0.00235	1450			x	x	x	x
025.**	25	280	100A@250Vac 1000@75Vdc 400@125Vac 400A@125Vdc	0.00235	1450				x		x
030.	30	250		0.00182	2490			x	x	x	x
040.	40	250	1000A@250Vac 400A@150Vdc	0.0014	22925				x		x

* 350A@280Vac interrupting rating available for 15A and 20A. ** 50A@280Vac for 25A. Add suffix '280'. Example: 0324020.MX280P

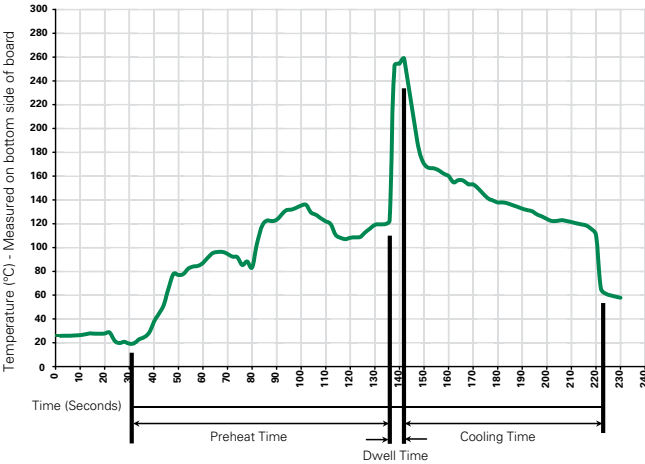
Temperature Derating Curve



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 (Typical Industry Recommendation)
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.

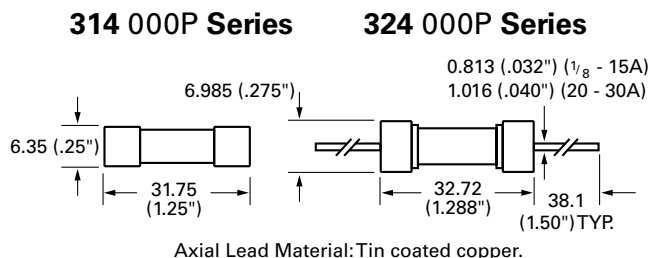
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

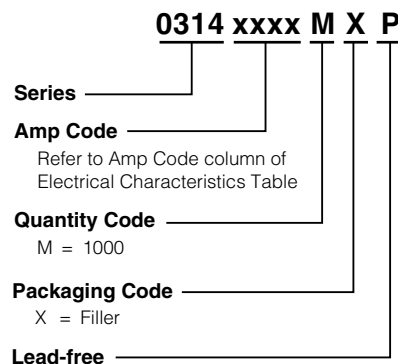
Materials	Body: Ceramic Cap: Nickel-plated brass Leads: Tin-plated Copper
Terminal Strength	MIL-STD-202G, Method 211A, Test Condition A
Solderability	Reference IEC 60127 Second Edition 2003-01 Annex A
Product Marking	Cap1: Brand logo, current and voltage ratings Cap2: Series and agency approval marks

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



Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
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	N/A
Bulk	N/A	1000	MXCC	N/A
Bulk	N/A	1000	MX52LE	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	N/A
Bulk	N/A	1000	MXF24	N/A