

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
- RoHS compliant and Lead-free
- Available in cartridge and axial lead format and with various forming dimensions

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
	E 10480	125mA - 15A
	LR 29862	125mA - 20A
	E 10480	15A* - 40A
	NBK 030805 - E 10480A-F NBK 260106 - JP1021A/B	125mA - 30A
	SU05001 - 6001/6002/6003/7006	125mA - 30 A
		125mA - 30A

Electrical Characteristics for Series

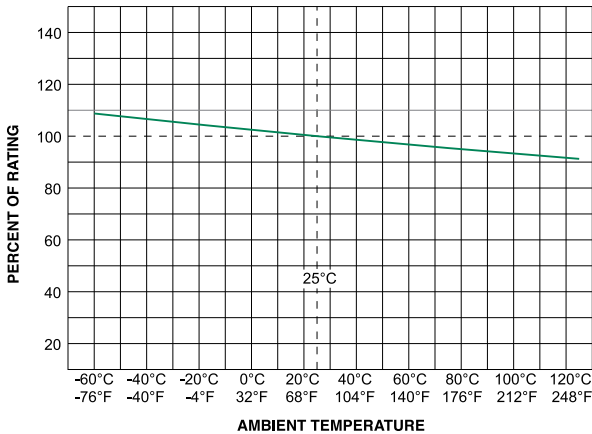
% of Ampere Rating	Ampere Rating	Opening Time
100%	125mA – 30A	4 hours, Minimum
135%	125mA – 30A	1 sec., Maximum
200%	125mA – 12A	15 sec., Maximum
	15A – 30A	30 sec., Maximum

Electrical Characteristic Specification by Item

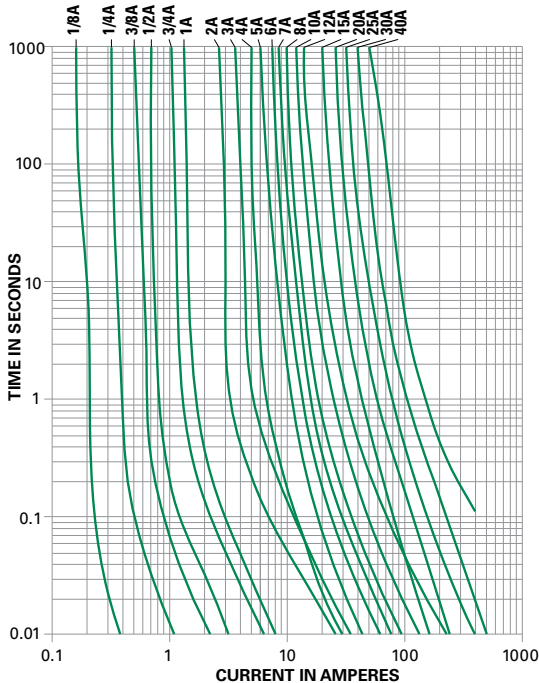
Amp Code	Ampere Rating (A)	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A² sec)	Agency Approvals						
												
.125	0.125	250	35A@250Vac 10KA@125Vac 10KA@125Vdc	6.20	0.00149	x	x				x	
.250	0.25	250		1.95	0.0140	x	x				x	
.375	0.375	250		0.820	0.050	x	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	750A@250Vac 10KA@125Vac 10KA@125Vdc	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	
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		1000A@250Vac 200A@300Vac 10KA@125Vac 10KA@125Vdc	0.00355	631		x		x	x	x
020.*	20	280			0.00355	631				x		
025.	25	250	100A@250Vac 1000@75Vdc 400@125Vac 400A@125Vdc	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	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

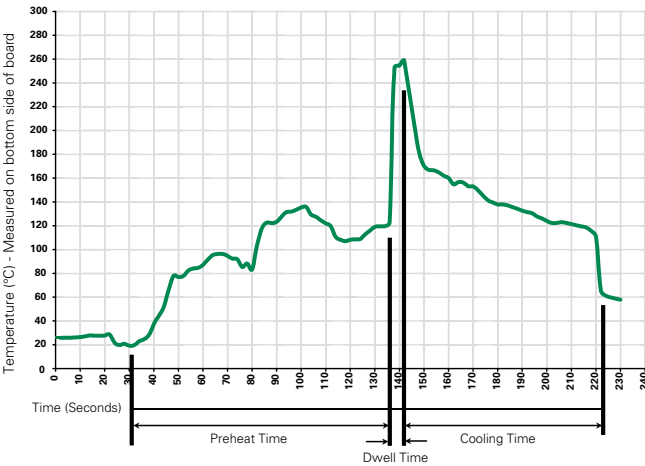
Temperature Derating Curve



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.

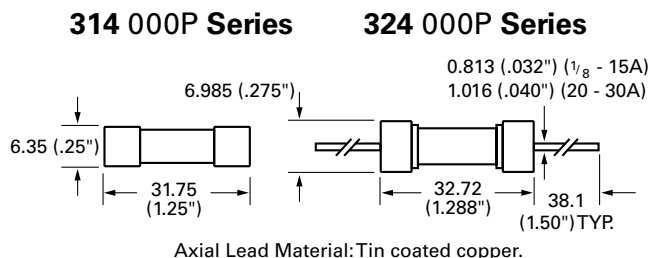
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

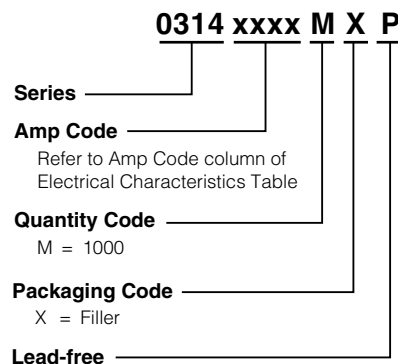
Materials	Body: Ceramic Cap: Nickel-plated brass Leads: Tin-plated Copper
Terminal Strength	MIL-STD-202G, Method 211A, Test Condition A
Solderability	Reference IEC 60127 Second Edition 2003-01 Annex A
Product Marking	Cap1: Brand logo, current and voltage ratings Cap2: Series and agency approval marks

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

Mouser Electronics

Authorized Distributor

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

Littelfuse:

0324025.HXP	0324030.MXP	0324010.HXP	0324.375MXP	0314006.HXP	0314030.HXP	0314004.HXP
0314020.HXP	0324001.MXP	0314006.MXP	0324006.HXP	0324030.HXP	0314.500HXP	0314008.MXP
0324003.MXP	0324006.MXP	0314007.MXP	0314012.HXP	0314025.MXP	0324007.MXP	0324008.HXP
0324005.HXP	0324025.MXP	0324.500HXP	0324002.MXP	0314.375HXP	0324010.MXP	0314.750HXP
0314.750MXP	0314012.MXP	0324012.HXP	0314004.MXP	0314010.HXP	0324005.MXP	0324003.HXP
0314025.HXP	0314030.MXP	0324.500MXP	0324012.MXP	0324008.MXP	0324004.HXP	0324015.HXP
0324001.HXP	0314010.MXP	0314001.MXP	0324.750MXP	0324020.MXP	0324.750HXP	0314.375MXP
0314005.MXP	0324004.MXP	0324015.MXP	0314003.HXP	0314008.HXP	0314015.MXP	0314020.MXP
0314001.HXP	0314007.HXP	0324007.HXP	0314.500MXP	0314002.HXP	0314002.MXP	0324002.HXP
0314003.MXP	0314005.HXP	0324.375HXP	0324020.HXP	0314010.MXANP	0314015.MXANP	0314012.MXANP