

Axial Lead & Cartridge Fuses

2AG > Fast Acting > 224/225 Series

224/225 Series Lead-Free 2AG, Fast-Acting



Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	375mA - 3.5A
	E10480	4A - 10A
	LR 29862	375mA - 10A
	NBK200405-E10480A/B/C/D NBK110512-E10480A/B	1A - 3.5A 4A - 5A
		375mA - 10A

Description

The 2AG Fast-Acting Fuses are available in cartridge form or with axial leads. 2AG Fuses provide the same performance characteristics as their 3AG counterpart, while occupying one-third the space. Sleeved fuses are available.

Features

- In accordance with underwriter's Laboratories Standard UL 248-14
- Available in cartridge and axial lead form 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.

Electrical Characteristic Specifications by Item

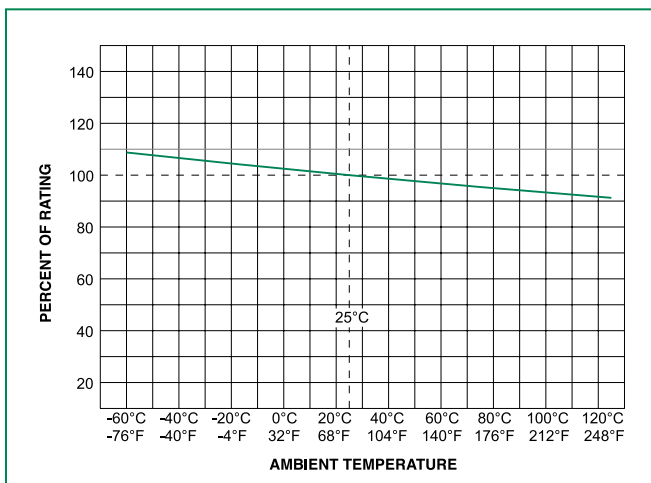
Amp Code	Ampere Rating (A)	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Agency Approvals				
.375	0.375	250	35A@250Vac 10KA@125Vac 10KA@125Vdc	0.3950	0.171	x		x		x
.500	0.5	250		0.2650	0.365	x		x		x
.750	0.75	250		0.1520	1.050	x		x		x
.001	1	250		0.1027	2.220	x		x	x	x
01.5	1.5	250	100A@250Vac 10KA@125Vac 10KA@125Vdc	0.0712	0.800	x		x	x	x
002.	2	250		0.0497	1.500	x		x	x	x
02.5	2.5	250		0.0372	2.680	x		x	x	x
003.	3	250		0.0317	4.620	x		x	x	x
03.5	3.5	250	100A@250Vac 500A@125Vac	0.0265	6.700	x		x	x	x
004.	4	125		0.0240	9.400		x	x	x	x
005.	5	125		0.0186	17.0		x	x	x	x
005.	5	250		0.0186	17.0		x	x		x
006.	6	125	500A@125Vac	0.0154	22.1		x	x	x	x
007.	7	125		0.0130	40.0		x	x	x	x
008.	8	125		0.0107	56.0		x	x	x	x
010.	10	125		0.0075	116.0		x	x	x	x

* 10A with 500A @ 125 Vdc internal breaking capacity testing.

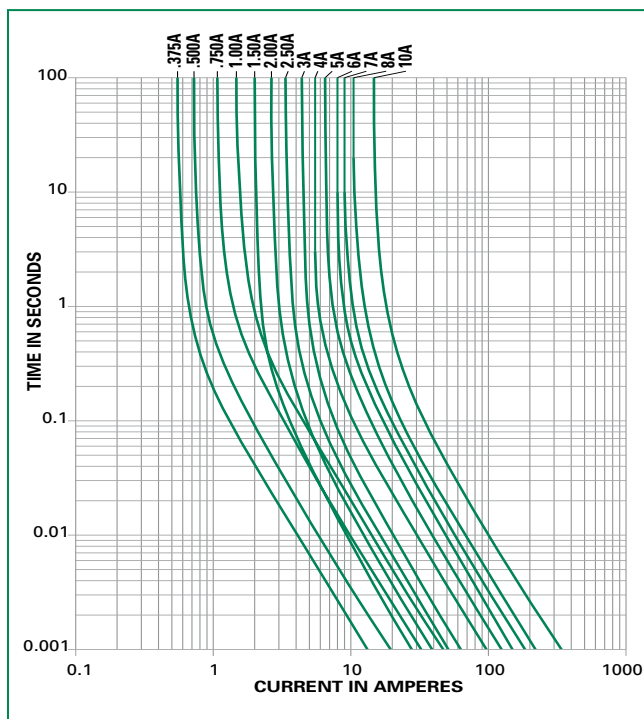
Electrical Characteristics for Series

% of Ampere Rating	Opening Time
100%	4 hours, Minimum
135%	1 hour, Maximum
200%	1 sec., Maximum

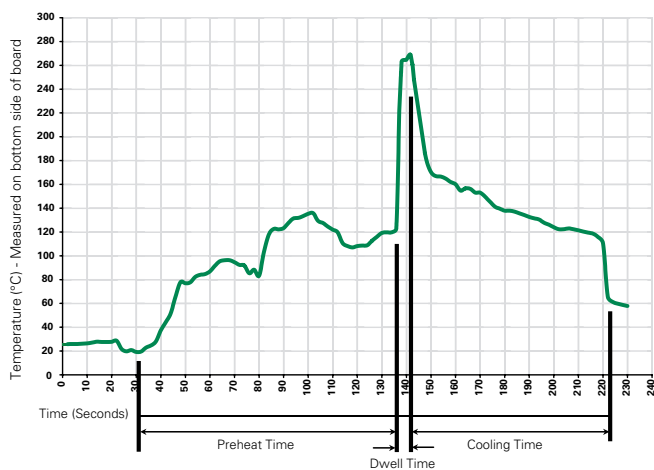
Temperature Derating Curve



Average Time Current Curves



Soldering Parameters - Wave Soldering



Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
Preheat:	
(Depends on Flux Activation Temperature)	(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.

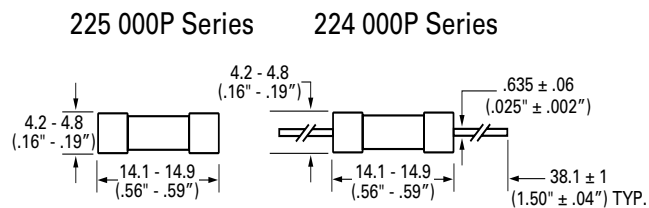
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

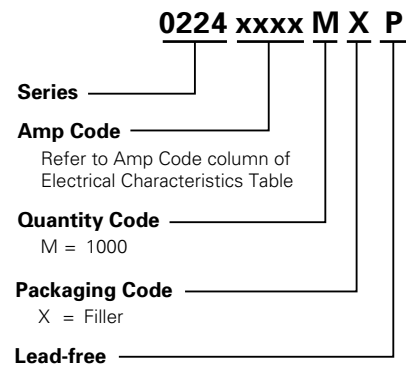
Materials	Body : Glass Cap : Nickel-plated brass Leads: Tin-plated Copper
Terminal Strength	MIL-STD-202G, Method 211A, Test Condition A
Solderability	Reference IEC 60127 Second Edition 2003-01 Annex A
Product Marking	Cap1 : Brand logo, current and voltage ratings Cap2 : Series and agency approval marks

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 201A
Humidity	MIL-STD-202G, Method 103B, Test Condition A: High RH (95%) and elevated temp (40°C) for 240 hours
Salt Spray	MIL-STD-202G, Method 101D, Test Condition B

Dimensions



Part Numbering System



Note: The ratings from 4A to 10A with MXUP in the suffix

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
224 Series				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	100	HX	N/A
Reel and Tape	EIA 296-E	1500	DRT1	T1=53mm (2.087")
225 Series				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	100	HX	N/A

Additional Information



Datasheet
224 Series



Resources
224 Series



Samples
224 Series



Datasheet
225 Series



Resources
225 Series



Samples
225 Series