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# 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
(I)	E10480	0.375A - 3.5A
71	E10480	4A - 10A
<b>(</b>	29862	0.375A - 10A
PS E	NBK200405-E10480A/B/C/D NBK110512-E10480A/B NBK210405-E10480E/F	1A - 3.5A 4A - 5A 6A - 10A
Œ	N/A	0.375A - 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 Characteristics for Series**

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

# **Electrical Characteristic Specifications by Item**

	Ampere	Voltage		Nominal	Nominal		Age	ency Approv	vals	
Amp Code	Rating (A)	Rating (V)	Interrupting Rating	Cold Resistance (Ohms)	Resistance   Melting	(Î)	<i>9</i> 1	<b>®</b>	PS	Œ
.375	0.375	250	35A@250Vac	0.3950	0.171	Х		X		X
.500	0.5	250	10KA@125Vac	0.2650	0.365	X		X		X
.750	0.75	250	10KA@125Vdc	0.1520	1.050	X		X		X
001.	1	250	10KA@125VUC	0.1027	2.220	X		X	X	X
01.5	1.5	250		0.0712	0.800	×		X	X	X
002.	2	250	100A@250Vac	0.0497	2.180	×		X	X	X
02.5	2.5	250	10KA@125Vac	0.0372	3.820	×		X	X	X
003.	3	250	10KA@125Vdc	0.0317	4.620	X		X	X	X
03.5	3.5	250		0.0265	6.700	Х		X	X	X
004.	4	125	100A@250Vac	0.0240	9.400		X	X	X	X
005.	5	125		0.0186	17.0		X	X	X	X
005.	5	250	500A@125Vac	0.0186	17.0		X	X		X
006.	6	125		0.0154	22.1		X	Х	X	Х
007.	7	125	500A@125Vac	0.0130	40.0		X	X	х	X
008.	8	125	000A@125VaC	0.0107	56.0		X	X	Х	X
010.	10	125		0.0075	116.0		Х	X	Х	X

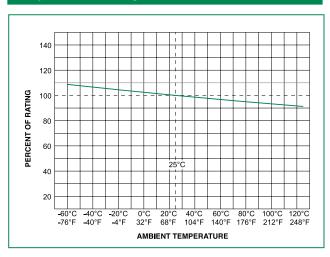
<sup>\* 10</sup>A with 500A @ 125 Vdc internal breaking capacity testing.





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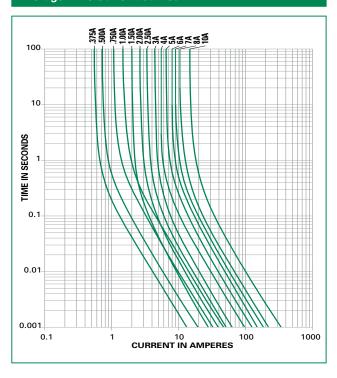
### **Temperature Re-rating Curve**



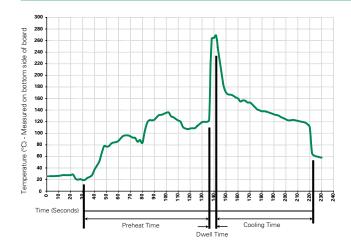
Note

Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

# **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.



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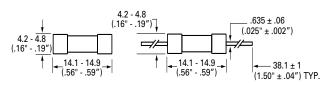
#### **Product Characteristics**

Materials	Body: Glass Cap: Nickel-plated brass Leads: Tin-plated Copper		
Terminal Strength	MIL-STD-202, Method 211, Test Condition A		
Solderability	MIL-STD-202 Method 208		
Product Marking	Cap1 : Brand logo, current and voltage ratings Cap2 : Series and agency approval marks		

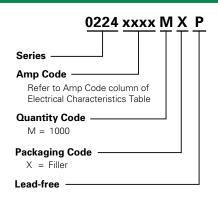
Operating Temperature:	−55°C to 125°C.
Thermal Shock:	MIL-STD-202, Method 107, Test Condition B (5 Cycles -65°C to +125°C).
Vibration	MIL-STD-202, Method 201
Humidity	MIL-STD-202, Method 103, Test Condition A: High RH (95%) and elevated temp (40°C) for 240 hours
Salt Spray	MIL-STD-202, Method 101, Test Condition B

#### **Dimensions**

# 225 000P Series 224 000P Series



#### **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



Datasheet 225 Series



Resources 224 Series



Resources 225 Series



Samples



Samples 225 Series

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