

## RoHS (Po)

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











#### **Agency Approvals**

Agency	Agency File Number	Ampere Range		
(I)	E10480	100mA - 3.5A		
<b>71</b> 2	E10480	4A - 10A		
<b>(</b>	LR 29862	100mA - 10A		
PS	NBK200405-E10480 NBK060405-E10480	Cartridge: 1A - 10A Pigtail: 1A - 10A		
Œ		100mA - 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

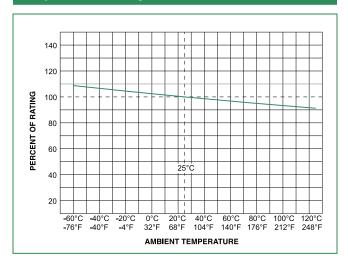
#### **Electrical Characteristic Specifications by Item**

	Ampere	Voltage		Nominal	Nominal	Agency Approvals				
Amp Code	Rating (A)	Rating (V)	Interrupting Rating	Resistance (Ohms)	(J)	<i>9</i> 1	<b>⊕</b> ®	PS	Œ	
.100	.1	250		6.1500	0.00075	X		Х		Х
.125	0.125	250		3.9000	0.00286	X		X		X
.250	0.25	250	35A@250Vac	1.1500	0.0300	X		Х		X
.375	0.375	250	10KA@125Vac	0.3950	0.171	X		Х		X
.500	0.5	250	10KA@125Vdc	0.2650	0.365	X		Х		X
.750	0.75	250	TUNA@125VUC	0.1520	1.050	X		X		X
001.	1	250		0.1027	2.220	X		Х	X	X
01.5	1.5	250		0.0712	0.800	X		X	X	X
002.	2	250	100A@250Vac	0.0497	1.500	X		Х	X	X
02.5	2.5	250	100A@250Vac 10KA@125Vac	0.0372	2.680	X		Х	X	X
003.	3	250	10KA@125Vac 10KA@125Vdc	0.0317	4.620	X		Х	X	X
03.5	3.5	250	TUNA@125VUC	0.0265	6.700	X		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	X	X	X
007.	7	125	E004@12EV/ca	0.0130	40.0		X	X	X	X
008.	8	125	500A@125Vac	0.0107	56.0		Х	Х	Х	Х
010.	10	125		0.0075	116.0		X	X	X	X

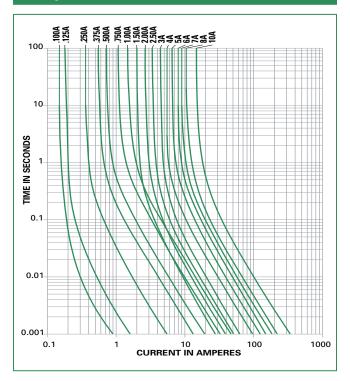
<sup>\* 10</sup>A with 500A @ 125 Vdc internal breaking capacity testing.



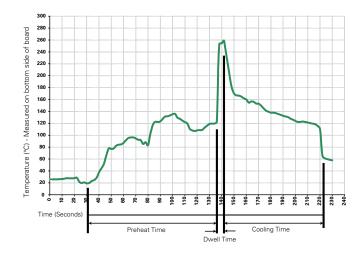
#### **Temperature Rerating Curve**



#### **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 DwellTime:	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**

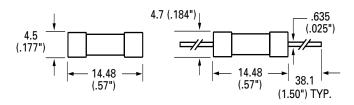
Materials	Body: Glass Cap: Nickel-plated brass Leads: Tin-plated Copper		
Terminal Strength	MIL-STD-202F Method 211A, Test Condition A		
Solderability	Reference IEC 6012/Second Edition 2003-01 Annex A		
Product Marking	Cap1: Brand logo, current and Voltage Ratings Cap2: Series and Agency approval Mark		

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

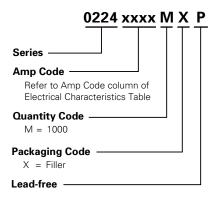
## **Dimensions**

# 225 000P Series

# **224** 000P Series



## **Part Numbering System**



257

# Axial Lead & Cartridge Fuses 2AG > Fast Acting > 224/225 Series



# 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=52mm (2.062")
225 Series				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	100	HX	N/A