

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

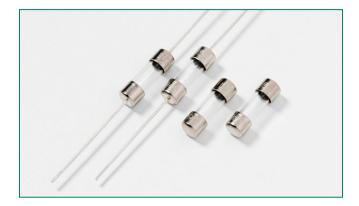












Agency Approvals

Agency	Agency File Number	Ampere Range
(I)	E10480	0.375A - 3.5A
71 °	E10480	4A - 10A
(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

Additional Information



Datasheet 224 Series



224 Series



224 Series



Datasheet 225 Series



225 Series For recommended fuse accessories for this product series, see 'Recommended Accessories' section.



Samples 225 Series



224 & 225 Series

Electrical Characteristic Specifications by Item

Amp Code	Ampere Rating (A)	Voltage Rating (V)	Interrupting Rating	Cold Melti	Nominal	Agency Approvals				
					Melting I ² t (A ² sec)	(J)	71	⊕ ®	PS	Œ
.375	0.375	250	35A@250Vac	0.3950	0.171	X		Х		Х
.500	0.5	250	10KA@125Vac	0.2650	0.365	X		X		Х
.750	0.75	250	10KA@125Vdc	0.1520	1.050	X		X		X
001.	1	250	TUNA@125VUC	0.1027	2.220	X		X	X	X
01.5	1.5	250		0.0712	0.800	X		X	X	X
002.	2	250	100A@250Vac	0.0497	2.180	X		X	X	X
02.5	2.5	250	10KA@125Vac	0.0372	3.820	X		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	X		X	X	X
004.	4	125	1004@250\/aa	0.0240	9.400		Х	X	X	Х
005.	5	125	100A@250Vac 500A@125Vac	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	Х	Х
010.	10	125		0.0075	116.0		×	X	X	X

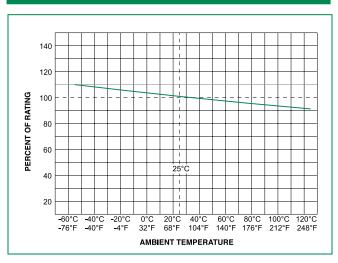
^{* 10}A with 500A @ 125 Vdc internal breaking capacity testing.

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Specifications are subject to change without notice. Application testing is strongly recommended. Revised: 02/07/19

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

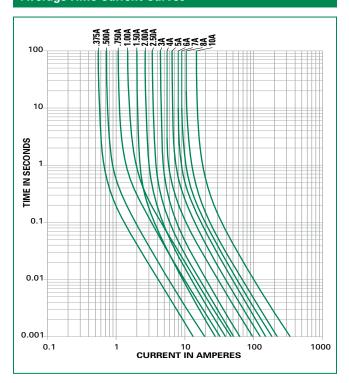
Temperature Re-rating Curve



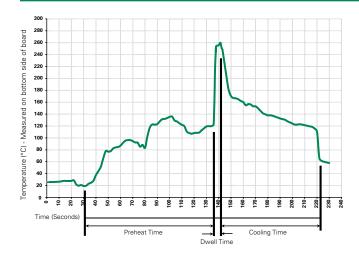
Note:

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.



Product Characteristics

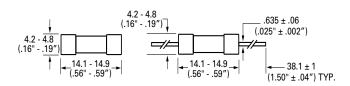
Materials	Body : Glass Cap : Nickel-plated brass Leads: Tin-plated Copper
Terminal Strength	MIL-STD-202, Method 211, Test Condition A
Solderability	MIL-STD-202 Method 208
Product Marking	Cap1 : Brand logo, current and voltage ratings Cap2 : Series and agency approval marks

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

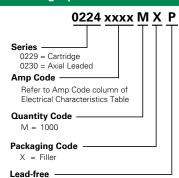
Dimensions

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			

Recommended Accessories

Accessory Type	Series	Description	Max Application Voltage	Max Application Amperage
	245	Panel Mount Shock-Safe Fuseholder	300	10
Holder	150	In-Line Fuseholder	350	10
	286	Panel Mount Flip-Top Shock-Safe Fuseholder	250	10
Block	254	OMNI-BLOK® Fuse Block	400	10
Clip	111	PC Board Mount Fuse Clip	250	10

Notes:

Do not use in applications above rating.
 Please refer to fuseholder data sheet for specific re-rating information.
 Please contact factory for applications greater than the max voltage and amperage shown.

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