

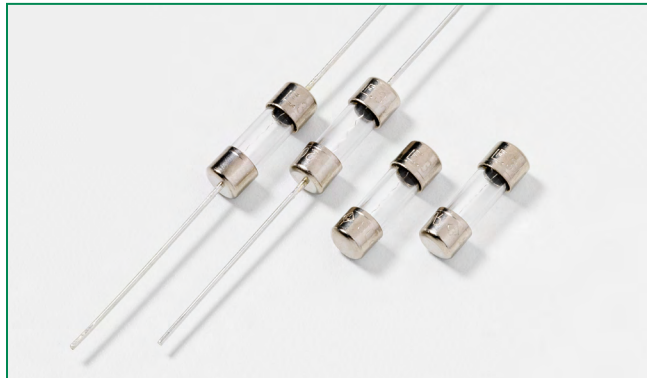
## 阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。






## Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

### 220 Series, Lead-Free 2AG Special Fuse



#### Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	0003,0004,0010,0011,0025,0029,0030,0031,0036
	E10480	0007,0012,0013,0019,0044,0045,0059,0060,0061
	NBK200405-E10480A/B/C/D NBK110512-E10480A/B NBK210405-E10480E/F	1A - 3.5A 4A - 5A 6A - 7A
	29862	0003,0004,0007,0010,0011,0013,0019,0029,0044
		0003-0061

#### Additional Information



Datasheet



Resources



Samples



Accessories

For recommended fuse accessories for this product series, see '[Recommended Accessories](#)' section.

#### Description

The 2AG Special Fuses with various voltage ratings, provide special electric performance as required.

#### Features

- In accordance with Underwriters Laboratories Standard UL 248-14
- Available in cartridge and axial lead format 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	Amp code	Opening Time
100%	0007,0012,0013,0019,0031,0036,0037,0044,0054,0060,0061	4 hours, Minimum
135%		1 hour, Maximum
200%		1 sec., Maximum

% of Ampere Rating	Amp code	Opening Time
100%	0025,0030,0038,0040,0045,0059	4 hours, Minimum
135%		1 hour, Maximum
200%		3 secs., Minimum 20 secs., Maximum

% of Ampere Rating/Overload Current	Amp code	Opening Time
100%	0010	4 hours, Minimum
150%		15 mins, Maximum
0.9A		90 secs., Maximum

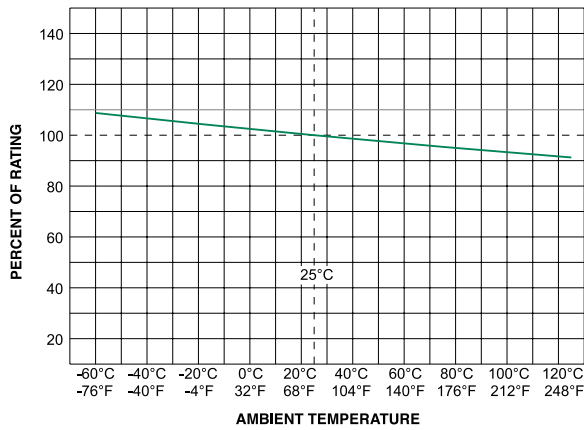
Overload Current	Amp code	Opening Time
0.6A	0003,0004,0011	90 secs., Maximum

Overload Current	Amp code	Opening Time
0.6A	0029	90 secs., Maximum
2A		2 secs., Maximum
6A		0.5 sec., Maximum

**Electrical Characteristics**

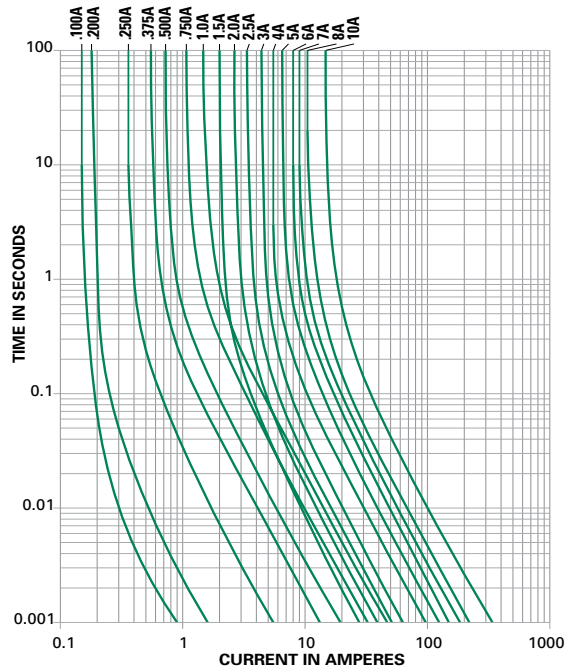
Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec)	Agency Approvals				
						UL	RU	PS	SP	CE
0.35	0003	250	35A@250Vac, 10KA@125Vac	1.3100	0.490	X			X	X
0.35	0004	250		1.3100	0.490	X			X	X
3	0007	350	100A@350Vac, 60A@530Vac	0.0317	4.62		X	X	X	X
0.55	0010	250	35A@250Vac, 10KA@125Vac, 10KA@125Vdc	0.4945	2.04	X			X	X
0.35	0011	250	35A@250Vac, 10KA@125Vac	1.3100	0.49	X			X	X
2	0012	350	100A@350Vac	0.0497	1.50		X	X		X
5	0013	300		0.0186	170		X	X	X	X
3	0019	350	100A@350Vac, 100A@125Vdc	0.0317	4.62		X	X	X	X
1.25	0025	250	100A@250Vac, 10KA@125Vac, 10KA@125 Vdc	0.1460	15.4	X		X		X
0.35	0029	250	35A@250Vac, 10KA@125Vac	1.3100	0.490	X			X	X
0.375	0030	250	35A@250Vac, 10KA@125Vac, 10KA@125Vdc	1.1685	0.82	X				X
0.3	0031	250	10KA@125Vdc	0.5900	0.0300	X				X
0.5	0036	300	35A@300Vac, 10KA@125Vac	0.2650	0.365	X				X
0.75	0037	300		0.1520	1.05					X
5	0038	250	50A@250Vac	0.0186	267					X
0.5	0040	250	35A@250Vac, 10KA@125Vac, 10KA@125Vdc	0.6935	1.58					X
1	0044	350	100A@350Vac	0.1027	2.22		X	X	X	X
2	0045	350	100A@250Vac, 100A@350Vac, 10KA@125Vac, 10KA@125Vdc	0.0698	30.0		X	X		X
7	0059	350	100A@350Vac / 160A@140Vdc	0.0116	464		X	X		X
0.5	0060	350	35A@350Vac	0.2650	0.365		X			X
0.75	0061	350		0.1520	1.05		X			X

**Temperature Re-rating Curve**

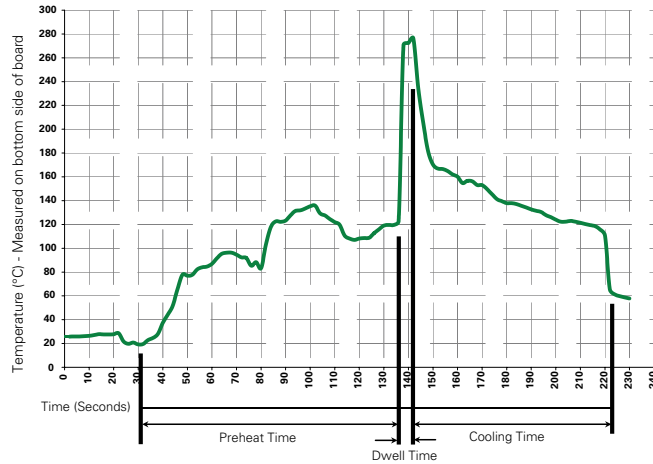


Note:  
Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

**Average Time Current Curves**



### Soldering Parameters - Wave Soldering



### Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
<b>Preheat:</b> (Depends on Flux Activation Temperature) (Typical Industry Recommendation)	
Temperature Minimum:	100°C
Temperature Maximum:	150°C
Preheat Time:	60-180 seconds
<b>Solder Pot Temperature:</b> 260°C Max.	
Solder Dwell Time:	2-5 seconds

### Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350°C +/- 5°C  
Heating Time: 5 seconds max.

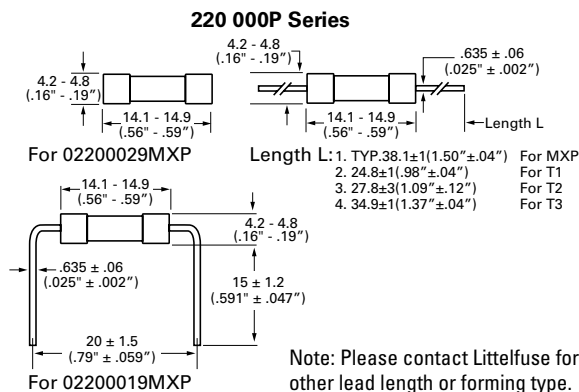
**Note: These devices are not recommended for IR or Convection Reflow process.**

### Product Characteristics

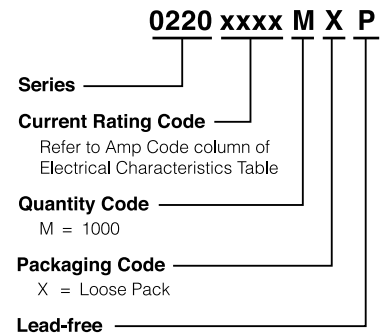
<b>Material</b>	Body: Glass Cap: Nickel-plated brass Leads: Tin-plated Copper
<b>Terminal Strength</b>	MIL-STD-202, Method 211, Test Condition A
<b>Solderability</b>	MIL-STD-202 method 208
<b>Product Marking</b>	Cap1: Brand logo, current and voltage ratings Cap2: Series and agency approval marks

<b>Operating Temperature</b>	-55 °C to +125 °C
<b>Thermal Shock</b>	MIL-STD-202, Method 107, Test Condition B: (5 cycles - 65°C to 125°C)
<b>Vibration</b>	MIL-STD-202, Method 201
<b>Humidity</b>	MIL-STD-202, Method 103, Test Condition A: High RH (95%) and Elevated Temp (40 °C) for 240 hours
<b>Salt Spray</b>	MIL-STD-202, Method 101, Test Condition B

### Dimensions



### Part Numbering System



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MXSL	N/A
Reel and Tape	EIA 296-E	1000	MRT1	53mm (2.087")
Reel and Tape	EIA 296-E	1500	DAT1	53mm (2.087")
Reel and Tape	EIA 296-E	1500	DRT1	53mm (2.087")
Reel and Tape	EIA 296-E	1500	DRT2	63mm (2.500")
Reel and Tape	EIA 296-E	1500	DRT3	73mm (2.874")
Reel and Tape	EIA 296-E	2500	ERT1	53mm (2.087")

### Recommended Accessories

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

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