

## 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" .

# Axial Lead & Cartridge Fuses

5x20 mm > Fast-Acting > 217 Series

## 217 Series, 5 x 20 mm, Fast-acting Fuse



### Agency Approvals

Agency	Agency File Number	Ampere Range
	Cartridge: NBK090205-E10480A NBK120802-E10480C	1A – 5A 6.3A – 15A
	Leaded: NBK090205-E10480B NBK120802-E10480D	1A – 5A 6.3A – 15A
	2002010207007600	0.032A – 6.3A
	SU05001-3004	0.032A – 40mA
	SU05001-2005	50mA – 0.0315A
	SU05001-2006	0.0400A – 6.3A
	SU05001-2007	8A & 10A
	E10480	0.032A – 10A
	29862	0.032A – 6.3A
	1517221	0.032A – 6.3A
	40014645	0.032A – 6.3A, 8A*, 10A*
	40016647	15A*
	KM41462	0.0400A – 6.3A
	N/A	0.032A – 15A

\*Approval for cartridge versions only

### Description

5x20mm fast-acting glass body cartridge fuse designed to IEC specification.

### Features

- Designed to International (IEC) Standards for use globally
- Meets the IEC 60127-2, Sheet 2 specification for fast-acting fuses
- Available in cartridge and axial lead form
- 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	Ampere Rating	Opening Time
150%	0.032A–0.0100A	60 minutes, Minimum
	0.0125A-6.3A	60 minutes, Minimum
	8A-15A	30 minutes, Minimum
210%	0.032A-0.0100A	30 minutes, Maximum
	0.0125A-6.3A	30 minutes, Maximum
	8A-15A	30 minutes, Maximum
275%	0.032A-0.0100A	0.01 sec., Min.; .5 sec. Max.
	0.0125A-6.3A	0.05 sec., Min.; 2 sec. Max.
	8A-15A	0.05 sec., Min.; 2 sec. Max.
400%	0.032A-0.0100A	.003 sec., Min.; 0.1 sec. Max.
	0.0125A-6.3A	.01 sec., Min.; 0.3 sec. Max.
	8A-15A	.01 sec., Min.; 0.4 sec. Max.
1000%	0.032A-0.0100A	.02 second, Maximum
	0.0125A-6.3A	.02 second, Maximum
	8A-15A	.04 second, Maximum

### Additional Information



Datasheet



Resources



Samples



Accessories

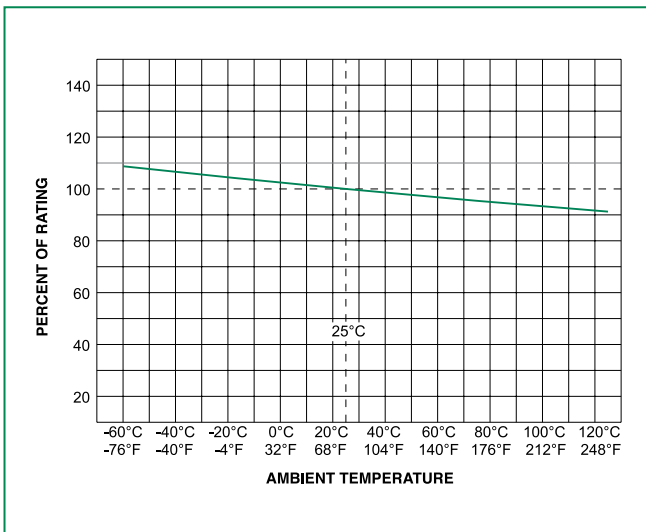
For recommended fuse accessories for this product series, see '[Recommended Accessories](#)' section.

## Electrical Characteristic Specifications by Item

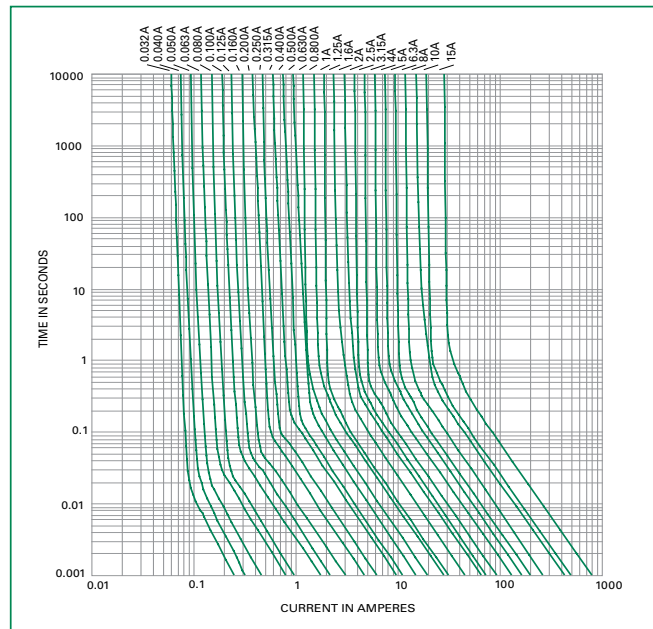
Amp Code	Amp Rating (A)	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec)	Maximum Voltage Drop at Rated Current (mV)	Maximum Power Dissipation At 1.5In(W)	Agency Approvals								
								UL	CCC	CSA	IEC	UL	UL	UL	UL	UL
.032	0.032	250	35A @ 250VAC	262.2000	0.00015	10000	1.6		x	x		x	x	x	x	x
.040	0.04	250		183.1500	0.00008	8000	1.6		x	x		x	x	x	x	x
.050	0.05	250		15.2000	0.00049	7000	1.6		x	x		x	x	x	x	x
.063	0.063	250		10.4500	0.00056	5000	1.6		x	x		x	x	x	x	x
.080	0.08	250		7.8900	0.00132	4000	1.6		x	x		x	x	x	x	x
.100	0.1	250		5.6965	0.00260	3500	1.6		x	x		x	x	x	x	x
.125	0.125	250		3.8200	0.00478	2000	1.6		x	x		x	x	x	x	x
.160	0.16	250		2.5250	0.01000	2000	1.6		x	x		x	x	x	x	x
.200	0.2	250		1.7000	0.02000	1700	1.6		x	x		x	x	x	x	x
.250	0.25	250		1.2325	0.04000	1400	1.6		x	x		x	x	x	x	x
.315	0.315	250		0.8800	0.11000	1300	1.6		x	x		x	x	x	x	x
.400	0.4	250		0.2770	0.12500	1200	1.6	x	x	x		x	x	x	x	x
.500	0.5	250		0.2065	0.21500	1000	1.6	x	x	x		x	x	x	x	x
.630	0.63	250		0.1900	0.41000	650	1.6	x	x	x		x	x	x	x	x
.800	0.8	250		0.1203	0.85000	240	1.6	x	x	x		x	x	x	x	x
001.	1	250		0.0964	1.04500	200	1.6	x	x	x	x	x	x	x	x	x
1.25	1.25	250		0.0701	2.23000	200	1.6	x	x	x	x	x	x	x	x	x
01.6	1.6	250		0.0528	4.61500	190	1.6	x	x	x	x	x	x	x	x	x
002.	2	250		0.0416	5.73000	170	1.6	x	x	x	x	x	x	x	x	x
02.5	2.5	250		0.0334	9.46000	170	1.6	x	x	x	x	x	x	x	x	x
3.15	3.15	250	0.0224	17.72000	150	2.5	x	x	x	x	x	x	x	x	x	
004.	4	250	40A @ 250VAC	0.0165	29.16500	130	2.5	x	x	x	x	x	x	x	x	
005.	5	250	50A @ 250VAC	0.0137	42.79500	130	2.5	x	x	x	x	x	x	x	x	
06.3	6.3	250	63A @ 250VAC	0.0095	62.46500	130	2.5	x	x	x	x	x	x	x	x	
008.	8	250	80A @ 250VAC	0.0068	198.16000	130	4		x		x	x		x	x*	
010.	10	250	100A @ 250VAC	0.0063	217.63500	130	4		x		x	x		x	x*	
015.	15	250	150A @ 250VAC	0.0040	607.13500	130	4				x	x		x	x*	

\* Approval for cartridge versions only.

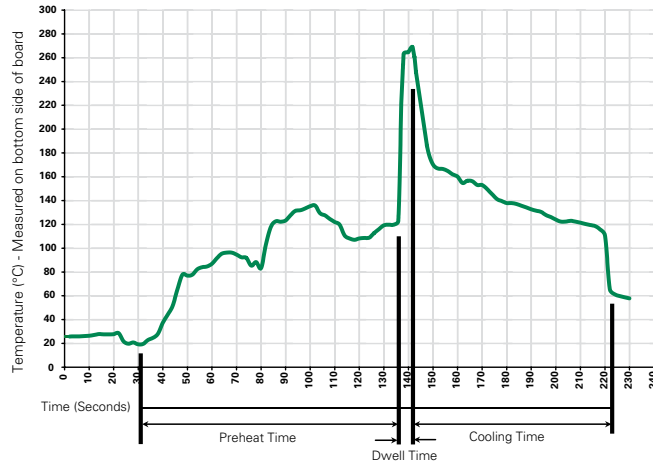
## Temperature Re-rating Curve



## 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 Maximum
<b>Solder Dwell Time:</b>	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.**

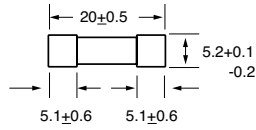
## Product Characteristics

<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: Agency approval marks
<b>Packaging</b>	Available in Bulk (M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel)

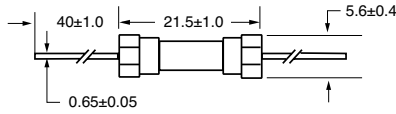
<b>Operating Temperature</b>	-55°C to +125°C
<b>Thermal Shock</b>	MIL-STD-202, Method 107, Test Condition B: (5 cycles -65°C to +125°C)
<b>Vibration</b>	MIL-STD-202, Method 201
<b>Humidity</b>	MIL-STD-202, Method 103, Test Condition A. high RH (95%) and elevated temperature (40°C) for 240 hours.
<b>Salt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

## Dimensions

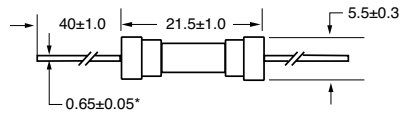
0217 000P



0217.032 XEP  
to  
0217.315 XEP



0217.400 XEP  
to  
0217015 XEP

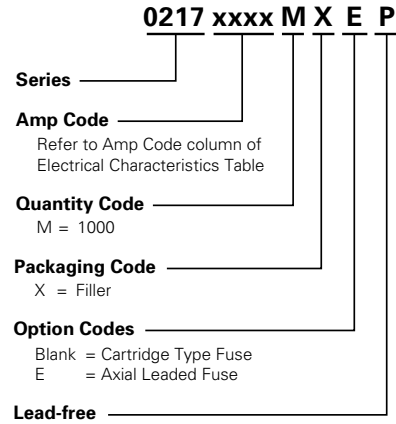


All dimensions in mm

Notes:

\* Ratings above 6.3A have 0.8±0.05 diameter lead.

## Part Numbering System



## Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
<b>217 Series</b>				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MXE	N/A
Reel and Tape	EIA 296-E	1000	MRET1	T1=53mm (2.087")
Bulk	N/A	1000	MXG	N/A
Bulk	N/A	1000	MXB	N/A
Bulk	N/A	100	HX	N/A

## Recommended Accessories

Accessory Type	Series	Description	Max Application Voltage	Max Application Amperage
Holder	<a href="#">345_ISF</a>	Panel Mount Shock-Safe Fuseholder	250	10
	<a href="#">345</a>	Shock-Safe Fuseholder with PC Mount, Solder Mount and Panel Mount options		20
	<a href="#">830</a>	PC Mount Shock-Safe Miniature Fuseholder		16
Block	<a href="#">520</a>	Metric OMNI-BLOK® Fuse Block		10
	<a href="#">646</a>	PC Mount Miniature Fuse Block		6.3
	<a href="#">658</a>	Surface Mount Miniature Fuse Block		10
Clip	<a href="#">520_W</a>	PC Mount Miniature Fuse Clip	6.3	
	<a href="#">111</a>	PC Board Mount Fuse Clip	10	
	<a href="#">445</a>	PC Board Mount Fuse Clip	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.

**Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at [www.littelfuse.com/disclaimer-electronics](http://www.littelfuse.com/disclaimer-electronics).**