# 208 Series Lead-Free 2AG, Fast-Acting Fuse



### **Agency Approvals**

Agency	Agency File Number	Ampere Range				
c <b>FL</b> <sup>®</sup> us	E10480	0.375A - 10A				
~	Cartridge	Cartridge				
	NBK200405-E10480A NBK200405-E10480C NBK110512-E10480A NBK210405-E10480E	1A 1.5A - 3.5A 4A - 5A 6A - 10A				
< PS E	Leaded					
	NBK200405-E10480B NBK200405-E10480D NBK110512-E10480B NBK210405-E10480F	1A 1.5A - 3.5A 4A - 5A 6A - 10A				
Œ	N/A	0.375A - 10A				

### Additional Information



For recommended fuse accessories for this product series, see '<u>Recommended Accessories</u>' section.

# Description

Littelfuse 208 Series (2AG) 350V Fast-Acting Fuses are available in cartridge form or with axial leads. This series provides the same performance characteristics as its 3AG counterpart, while occupying one-third the space. Sleeved fuses are available.

#### Features

 In accordance with Underwriter's Laboratories Standard UL 248-14 various lead forming dimensions

ROHS 🕫 c 🔁 us 🔹 🤅

- RoHS compliant and Lead-free
- Available in cartridge and axial lead form and with

## Applications

• Electrical ballasts used in fluorescent lighting and other applications

# **Electrical Characteristics for Series**

% of Ampere Rating	OpeningTime
100%	4 Hours, <b>Min.</b>
135%	1 Hour, <b>Max.</b>
200%	1 Second, <b>Max</b> .

# **Axial Lead & Cartridge Fuses**

2AG > Fast-Acting > 208 Series



Amp Code Amp Rating			Nominal Cold	Nominal	Agency Approvals			
	Amp Rating	Voltage Rating	Interrupting Rating	Resistance (Ohms)	Melting I²t (A² sec)	c <b>FN</b> us	PS	Œ
.375	0.375	350		0.395	0.171	х		x
.500	0.500	350		0.265	0.365	х		x
.750	0.750	350		0.152	1.050	х		x
001.	1.0	350		0.103	2.220	х	х	x
01.5	1.5	350		0.0712	0.800	х	х	x
002.	2.0	350		0.0497	2.169	х	х	x
02.5	2.5	350	]	0.0372	2.68	х	х	x
003.	3.0	350	100A @ 350V AC	0.0317	4.62	х	х	x
03.5	3.5	350		0.0265	6.70	х	х	x
004.	4	350		0.0240	9.40	х	х	x
005.	5	350	]	0.0186	17.00	х	х	x
006.	6	350		0.0154	22.10	x	х	x
007.	7	350	-	0.0130	40	x	х	x
008.	8	350		0.0107	56	х	х	x
010.	10	350		0.0075	116	x	х	x

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20°C 40°C 68°F 104°F

AMBIENT TEMPERATURE

60°C 80°C 100°C 120°C 140°F 176°F 212°F 248°F

# Temperature Re-rating Curve

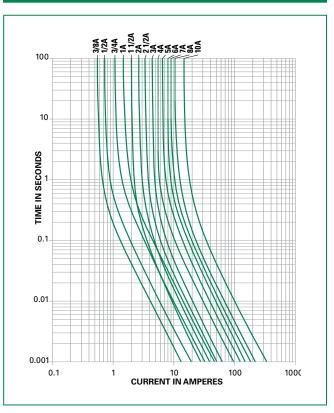
20

for continuous operation.

-60°C -40°C -20°C -76°F -40°F -4°F

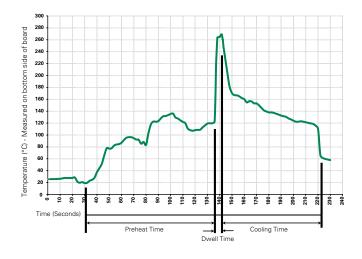
Note: Rerating depicted in this curve is in addition to the standard derating of 25%

0°C 32°F 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.

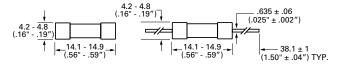
#### **Product Characteristics**

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			

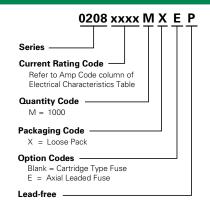
Operating Temperature:	–55°C to 125°C.
Thermal Shock:	MIL-STD-202, Method 107, Test Condition B (5 Cycles -65°C to +125°C).
Vibration	MIL-STD-202, Method 201
Humidity	MIL-STD-202, Method 103, Test Condition A: High RH (95%) and elevated temp (40°C) for 240 hours
Salt Spray	MIL-STD-202, Method 101, Test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

#### Dimensions





## Part Numbering System



# **Axial Lead & Cartridge Fuses**

2AG > Slo-Blo® Fuse > 209 Series



Packaging						
Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width		
208 Series						
Bulk	N/A	1000	MX	N/A		
Bulk	N/A	1000	MXE	N/A		
Reel and Tape	EIA 296-E	1500	DRT1	T1=53mm (2.087")		

Recommended Accessories						
Accessory Type	Series	Description	Max Application Voltage	Max Application Amperage		
l la la la n	<u>150</u>	In-Line Fuseholder	350	10		
Holder	<u>286</u>	Panel Mount Flip-Top Shock-Safe Fuseholder	250	10		
Block	<u>254</u>	OMNI-BLOK <sup>®</sup> Fuse Block	400	10		
Clip	<u>111</u>	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.

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