# **Axial Lead & Cartridge Fuses** 2AG > Slo-Blo® Fuse > 209 Series

# 209 Series Lead-Free 2AG, Slo-Blo® Fuse







#### **Agency Approvals**

Agency	Agency File Number	Ampere Range
c <b>FL</b> °us	E10480	0.250A - 7A
PS E	NBK200405-E10480C/D NBK110512-E10480A/B NBK210405-E10480E/F	1A - 3.5A 4A - 5A 6A - 7A
(€		0.250A - 7A

#### **Additional Information**









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

#### **Description**

Littelfuse 209 Series (2AG) 350V, Slo-Blo® 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
- Available in cartridge and axial lead form and
- with various forming dimensions
- RoHS compliant and Lead-free

#### **Applications**

• Electronic Lighting Ballasts

#### **Electrical Characteristics for Series**

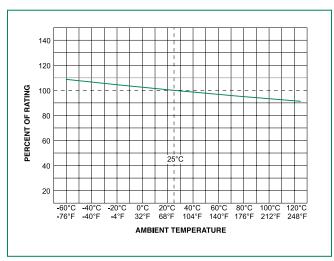
% of Ampere Rating	Opening Time
100%	4 Hours, <b>Min</b> .
135%	1 Hour, <b>Max.</b>
200%	3 Sec. <b>Min.</b> ; 20 Sec. <b>Max.</b>

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

Amp Ampere Rating (A)	Amnere	Voltage		Nominal Cold	Nominal	Agency Approvals		ls
	Rating Interrupti	Interrupting Rating	Resistance	Melting I <sup>2</sup> t (A <sup>2</sup> sec)	c <b>'AL</b> 'us	PSE	Œ	
.250	0.25	350		2.410	0.216	Х		Х
.375	0.375	350		1.170	0.87	x		Х
.500	0.5	350		0.688	1.60	x		Х
.600	0.6	350		0.477	1.750	×		Х
.750	0.75	350		0.340	2.950	×		Х
.800	0.8	350		0.304	3.450	×		Х
001.	1	350		0.210	5.640	×	X	Х
1.25	1.25	350		0.1460	16.2	×	X	Х
01.5	1.5	350	100A @	0.1077	20.8	×	X	Х
002	2	350	350Vac	0.0689	30.0	×	X	Х
2.25	2.25	350		0.0567	39.0	×	X	Х
02.5	2.5	350		0.0502	70.0	×	X	Х
003	3	350		0.0383	77.0	x	X	Х
03.5	3.5	350		0.0312	110	x	×	Х
004	4	350		0.0258	148	×	х	Х
005	5	350		0.0186	267	×	х	Х
006	6	350		0.0141	380	×	х	Х
007	7	350		0.0116	464	x	×	Х



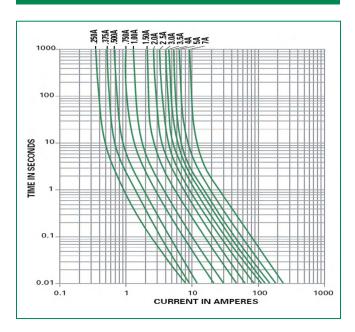
#### **Temperature Re-rating Curve**



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 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.

# **Axial Lead & Cartridge Fuses** 2AG > Slo-Blo® Fuse > 209 Series

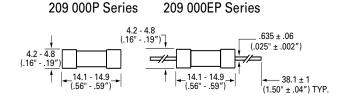
#### **Product Characteristics**

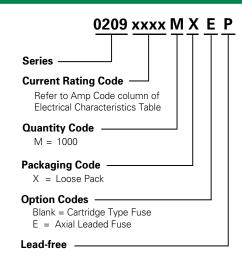
Materials	Body : Glass Cap : Nickel-plated brass Leads: Tin-plated Copper		
Terminal Strength	MIL-STD-202, Method 211, Test Condition A		
Solderability	MIL-STD-202 method 208		
Product Marking	Cap1 : Brand logo, current and voltage ratings Cap2 : Series and agency approval marks		

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**





Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
209 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
I I a I a I a a	<u>150</u>	In-Line Fuseholder	350	10
Holder 28	<u>286</u>	Panel Mount Flip-Top Shock-Safe Fuseholder	250	10
Block	<u>254</u>	OMNI-BLOK® 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.