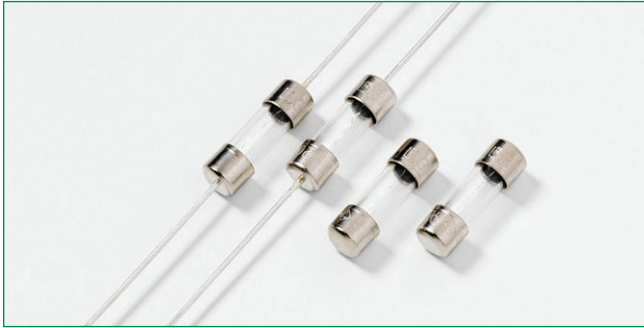


### 209 Series Lead-Free 2AG, Slo-Blo® Fuse







#### 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

- Recognized to UL/CSA/ NMX 248-1 and UL/CSA/ NMX 248-14
- Conforms to DENAN's Appendix 3
- Available in cartridge and axial lead form and with various forming dimensions
- RoHS compliant and Lead-free

#### Agency Approvals

| Agency  | Agency File Number | Ampere Range |
|---|--------------------|--------------|
|    | E10480             | 0.25A - 7A   |
|    | Cartridge          |              |
|   | NBK200405-E10480C  | 1A - 3.5A    |
|   | NBK110512-E10480A  | 4A - 5A      |
|   | NBK190619-E10480A  | 6A - 7A      |
|    | Axial Leads        |              |
|   | NBK200405-E10480D  | 1A - 3.5A    |
|   | NBK110512-E10480B  | 4A - 5A      |
|   | NBK190619-E10480B  | 6A - 7A      |
|  | N/A                | 0.250A - 7A  |

#### Applications

- Electronic Lighting Ballasts

#### Electrical Characteristics for Series

| % of Ampere Rating | Opening Time               |
|--------------------|----------------------------|
| 100%               | 4 Hours, Min.              |
| 135%               | 1 Hour, Max.               |
| 200%               | 3 Sec. Min. ; 20 Sec. Max. |

#### Additional Information



**Datasheet**



**Resources**



**Samples**



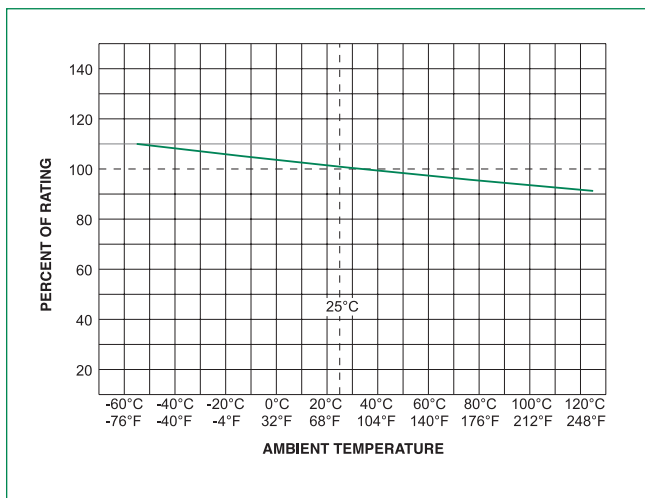
**Accessories**

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

**Electrical Characteristic Specifications by Item**

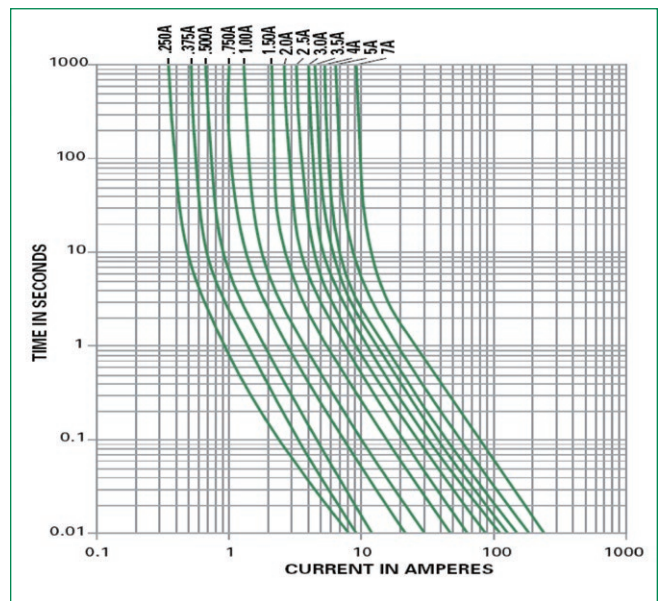
| Amp Code | Ampere Rating (A) | Voltage Rating (V) | Interrupting Rating | Nominal Cold Resistance (Ohms) | Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec) | Agency Approvals |      |    |
|----------|-------------------|--------------------|---------------------|--------------------------------|---|------------------|------|----|
|          |                   |                    |                     |                                |   | UL US            | PS E | CE |
| .250     | 0.25              | 350                | 100A @ 350Vac       | 2.410                          | 0.216   | x                | -    | x  |
| .375     | 0.375             | 350                |                     | 1.170                          | 0.87  | x                | -    | x  |
| .500     | 0.5               | 350                |                     | 0.688                          | 1.60  | x                | -    | x  |
| .600     | 0.6               | 350                |                     | 0.477                          | 1.750   | x                | -    | x  |
| .750     | 0.75              | 350                |                     | 0.340                          | 2.950   | x                | -    | x  |
| .800     | 0.8               | 350                |                     | 0.304                          | 3.450   | x                | -    | x  |
| 001.     | 1                 | 350                |                     | 0.210                          | 5.640   | x                | x    | x  |
| 1.25     | 1.25              | 350                |                     | 0.1460                         | 16.2  | x                | x    | x  |
| 01.5     | 1.5               | 350                |                     | 0.1077                         | 20.8  | x                | x    | x  |
| 002.     | 2                 | 350                |                     | 0.0689                         | 30.0  | x                | x    | x  |
| 2.25     | 2.25              | 350                |                     | 0.0567                         | 39.0  | x                | x    | x  |
| 02.5     | 2.5               | 350                |                     | 0.0502                         | 70.0  | x                | x    | x  |
| 003.     | 3                 | 350                |                     | 0.0383                         | 77.0  | x                | x    | x  |
| 03.5     | 3.5               | 350                |                     | 0.0312                         | 110   | x                | x    | x  |
| 004.     | 4                 | 350                |                     | 0.0258                         | 148   | x                | x    | x  |
| 005.     | 5                 | 350                |                     | 0.0186                         | 267   | x                | x    | x  |
| 006.     | 6                 | 350                |                     | 0.0141                         | 380   | x                | x    | x  |
| 007.     | 7                 | 350                |                     | 0.0116                         | 464   | x                | 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          |
|---|-----------------------------------|
| 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.

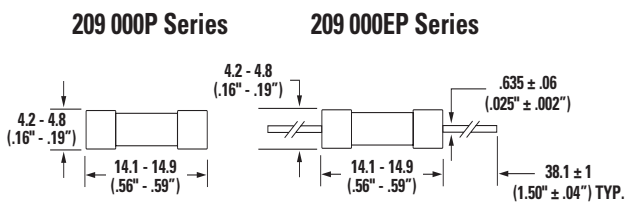
**Note:** These devices are not recommended for IR or Convection Reflow process.

**Product Characteristics**

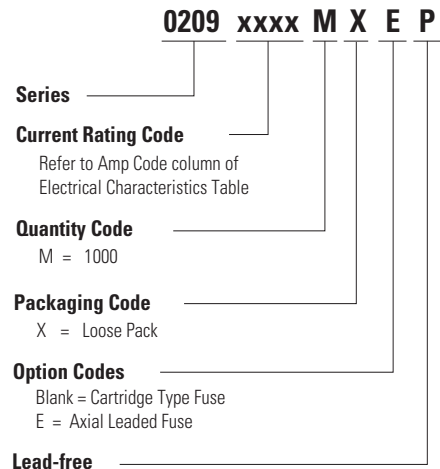
|                          |   |
|--------------------------|---|
| <b>Materials</b>         | Body : Glass<br>Cap : Nickel-plated brass<br>Leads: Tin-plated Copper                     |
| <b>Terminal Strength</b> | MIL-STD-202, Method 211, Test Condition A   |
| <b>Solderability</b>     | MIL-STD-202 method 208  |
| <b>Product Marking</b>   | Cap1 : Brand logo, current and voltage ratings<br>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 Option  | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width     |
|-------------------|-------------------------|----------|---------------------------|------------------|
| <b>209 Series</b> |                         |          |                           |                  |
| 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 |
|----------------|---------------------|--|-------------------------|--------------------------|
| Holder         | <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:**

- 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.