

### 325SP Series Lead-Free 3AB, Slo-Blo® Fuse



#### Agency Approvals

| Agency                                                                              | Agency File Number   | Ampere Range |
|-------------------------------------------------------------------------------------|----------------------|--------------|
|    | E10480               | 12A - 20A    |
|    | 29862                | 12A - 20A    |
|    | NBK 030805 - E10480F | 12A - 15A    |
|                                                                                     | NBK 260106 - JP1021B | 20A          |
|  | SU05001-5011         | 12A - 15A    |
|                                                                                     | SU05001-5012         | 20A          |
|  | N/A                  | 12A - 20A    |
|  | R50405573            | 12A-15A      |

#### Description

The 3AB Slo-Blo® Fuse with ceramic body construction permits higher interrupting ratings and voltage ratings. Ideal for applications where high current loads are expected.

#### Features

- In accordance with UL Standard 248-14
- RoHS compliant and Lead-free
- Available in axial lead format and with various forming dimensions

#### Applications

Used as supplementary protection in appliance or utilization equipment to provide individual protection for components or internal circuits.

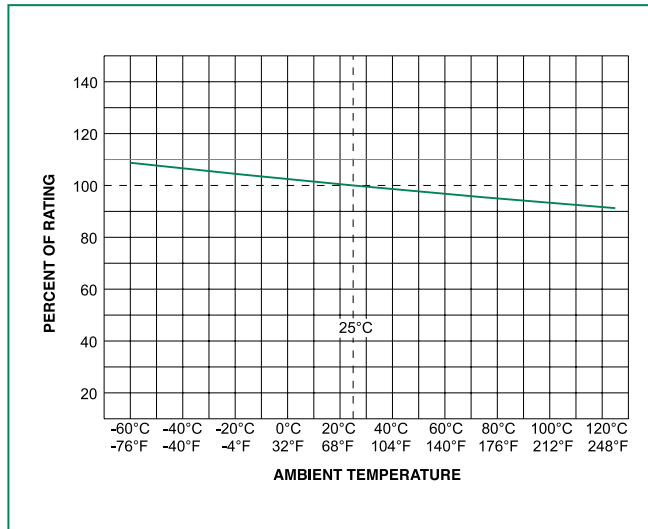
#### Electrical Characteristics for Series

| % of Ampere Rating | Ampere Rating | Opening Time                |
|--------------------|---------------|-----------------------------|
| 100%               | 12 – 20A      | 4 hours, Minimum            |
| 135%               | 12 – 20A      | 1 hour, Maximum             |
| 200%               | 12 – 20A      | 5 sec., Min., 60 sec., Max. |

### 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 |   |   |   |   |   |
|----------|-------------------|--------------------|-------------------------------------------|--------------------------------|-------------------------------------------------------|------------------|---|---|---|---|---|
|          |                   |                    |                                           |                                |                                                       |                  |   |   |   |   |   |
| 012.     | 12                | 250                | 400A@250Vac<br>10KA@125Vac<br>600A@125Vdc | 0.0067                         | 129                                                   | x                | x | x | x | x | x |
| 015.     | 15                | 250                |                                           | 0.0050                         | 245                                                   | x                | x | x | x | x | x |
| 020.     | 20                | 250                |                                           | 0.0034                         | 575                                                   | x                | x | x | x | x | - |

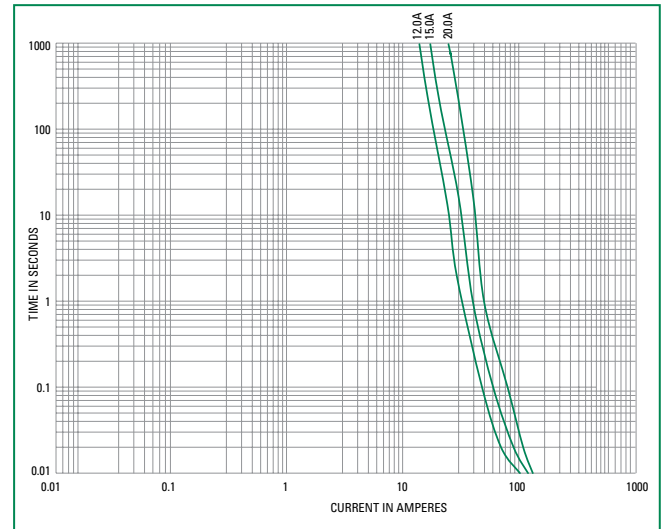
### Temperature Rerating Curve



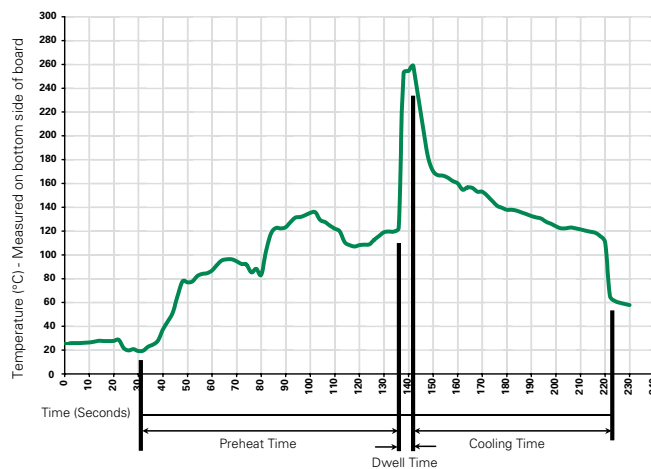
Note:

1. 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 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.

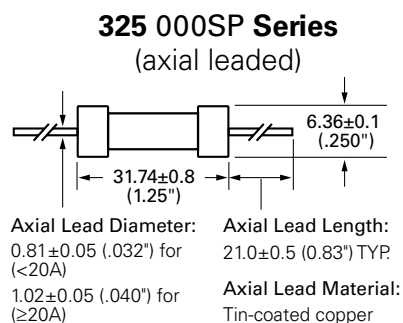
### Product Characteristics

|                          |                                                                                         |
|--------------------------|-----------------------------------------------------------------------------------------|
| <b>Materials</b>         | Body: Ceramic<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 |

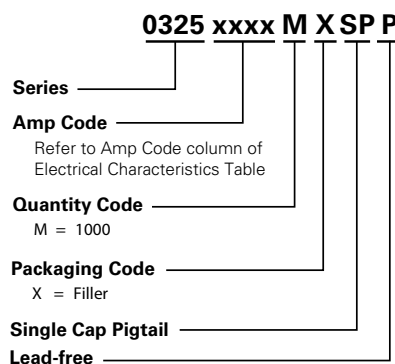
|                              |                                                                                                        |
|------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Operating Temperature</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 temperature (40°C) for 240 hours |
| <b>Salt Spray</b>            | MIL-STD-202, Method 101, Test Condition B                                                              |

### Dimensions

Measurements displayed in millimeters (inches)



### Part Numbering System



### Packaging

| Packaging Option    | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|---------------------|-------------------------|----------|---------------------------|--------------|
| <b>325SP Series</b> |                         |          |                           |              |
| Bulk                | N/A                     | 1000     | MXSPP                     | N/A          |
| Bulk                | N/A                     | 1000     | MXF48SPP                  | N/A          |