



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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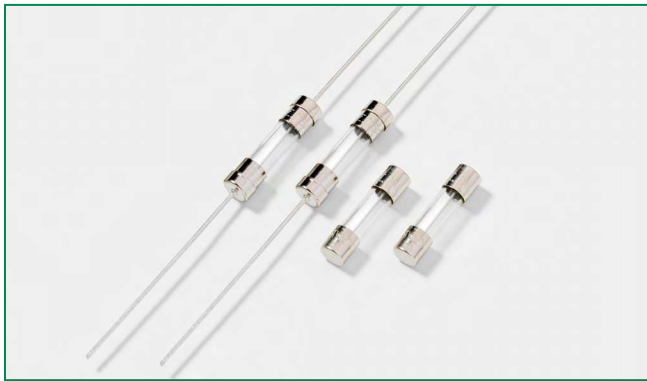
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213 Series, 5x20 mm, Time-Lag Fuse



Description

5x20mm time-Lag surge withstand glass body cartridge fuse designed to IEC specification.










Features

- Designed to International (IEC) Standards for use globally
- Available in cartridge and axial lead form
- Meets the IEC 60127-2, Sheet 3 specification for time-Lag fuses
- RoHS compliant and lead-free.

Applications

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

Agency Approvals

| Agency | Agency File Number | Ampere Range |
|---|---|--------------------------------|
|  | Cartridge: NBK090205-E10480A NBK120802-E10480C Leaded: NBK090205-E10480B NBK120802-E10480D | 1A-5A 6.3A 1A-5A 6.3A |
|  | 2003010207045592 | 0.200A – 6.3A |
|  | E10480 | 0.200A – 6.3A |
|  | 029862 | |
|  | 1403414 | |
|  | 40015638 | |
|  | KM41462 | 0.200A – 6.3A |
|  | SU05001-12002 SU05001-12001 | 3.15A-5A 6.3A |
|  | N/A | 0.200A – 6.3A |

Electrical Characteristic for Series

| % of Ampere Rating | Ampere Rating | Opening Time |
|--------------------|---------------|--------------------------------|
| 150% | All Ratings | 60 minutes, Minimum |
| 210% | | 2 minutes, Maximum |
| 275% | | 0.6 sec., Min.; 10 sec. Max. |
| 400% | | .15 sec., Min.; 3 sec. Max. |
| 1000% | | 0.02 sec., Min.; 0.3 sec. Max. |

Additional Information



Datasheet












Resources

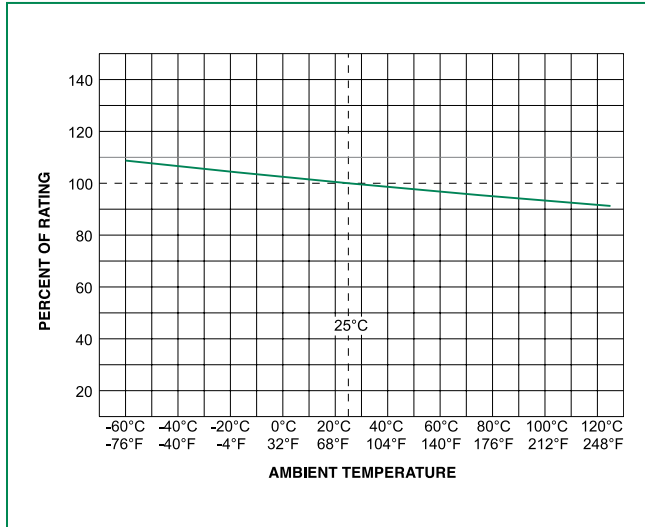


Samples

Electrical Characteristic Specifications by Item

| Amp Code | Ampere Rating | Voltage Rating (V) | Interrupting Rating | Nominal Cold Resistance (Ohms) | Nominal Melting I ² t (A ² sec) | Maximum Voltage Drop at Rated Current (mV) | Maximum Power Dissipation at 1.5In (W) | Agency Approvals | | | | | | | | |
|----------|---------------|--------------------|---------------------|--------------------------------|---|--|--|--|---|---|---|---|---|---|---|---|
| | | | | | | | |  |  |  |  |  |  |  |  |  |
| .200 | 0.2 | 250 | 35A@250Vac | 1.6000 | 0.22500 | 1500 | 1.6 | x | x | | x | x | x | x | | x |
| .250 | 0.25 | 250 | | 1.0495 | 0.55500 | 1300 | 1.6 | x | x | | x | x | x | x | | x |
| .315 | 0.315 | 250 | | 0.8475 | 1.14000 | 1100 | 1.6 | x | x | | x | x | x | x | x | x |
| .400 | 0.4 | 250 | | 0.5350 | 1.36000 | 1000 | 1.6 | x | x | | x | x | x | x | x | x |
| .500 | 0.5 | 250 | | 0.3700 | 2.90500 | 900 | 1.6 | x | x | | x | x | x | x | x | x |
| .630 | 0.63 | 250 | | 0.2750 | 4.80000 | 300 | 1.6 | x | x | | x | x | x | x | x | x |
| .800 | 0.8 | 250 | | 0.1635 | 9.42000 | 250 | 1.6 | x | x | | x | x | x | x | x | x |
| 001. | 1 | 250 | | 0.1165 | 19.20000 | 150 | 1.6 | x | x | x | x | x | x | x | x | x |
| 1.25 | 1.25 | 250 | | 0.0817 | 27.15000 | 150 | 1.6 | x | x | x | x | x | x | x | x | x |
| 01.6 | 1.6 | 250 | | 0.0551 | 44.20000 | 150 | 1.6 | x | x | x | x | x | x | x | x | x |
| 002. | 2 | 250 | | 0.0452 | 92.70500 | 150 | 1.6 | x | x | x | x | x | x | x | x | x |
| 02.5 | 2.5 | 250 | | 0.0305 | 138.00000 | 120 | 1.6 | x | x | x | x | x | x | x | x | x |
| 3.15 | 3.15 | 250 | | 0.0231 | 202.00000 | 100 | 1.6 | x | x | x | x | x | x | x | x | x |
| 004. | 4 | 250 | | 0.0170 | 226.50500 | 100 | 1.6 | x | x | x | x | x | x | x | x | x |
| 005. | 5 | 250 | | 0.0116 | 314.00000 | 100 | 1.6 | x | x | x | x | x | x | x | x | x |
| 06.3 | 6.3 | 250 | | 0.0095 | 600.00000 | 100 | 1.6 | x | x | x | x | x | x | x | x | x |

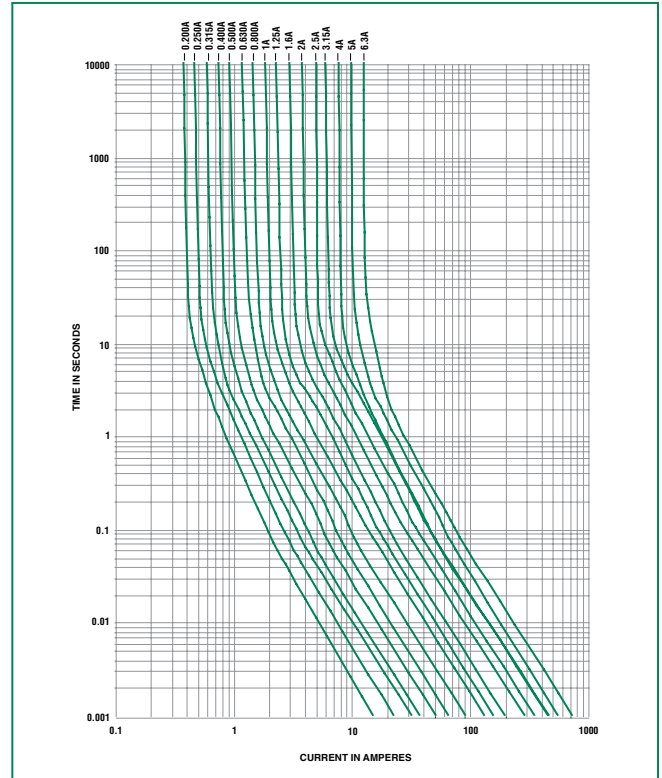
Temperature Re-rating Curve



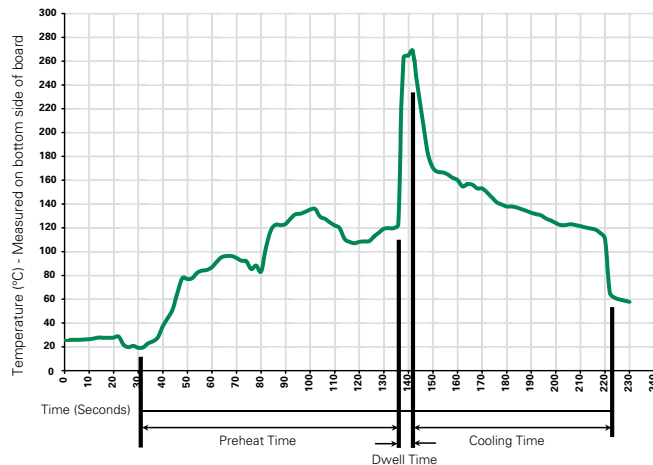
Note:

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 |
|---|-----------------------------------|
| 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.

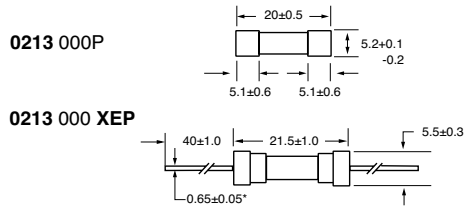
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

| | |
|--------------------------|---|
| Material | 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 Cap2: Agency approval marks Series |
| Packaging | Available in Bulk (M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel) |

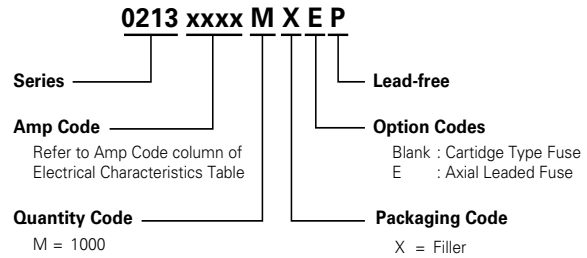
| | |
|------------------------------|---|
| Operating Temperature | -55°C to +125°C |
| Thermal Shock | MIL-STD-202, Method 107, Test Condition B: (5 cycles -65°C to +125°C) |
| Vibration | MIL-STD-202, Method 201 |
| Humidity | MIL-STD-202, Method 103, Test Condition A. High RH (95%) and elevated temperature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

Dimensions



Note:
- All dimensions in mm

Part Numbering System



Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|-------------------|-------------------------|----------|---------------------------|------------------|
| 213 Series | | | | |
| Bulk | N/A | 1000 | MX | N/A |
| Bulk | N/A | 1000 | MXE | N/A |
| Reel and Tape | N/A | 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 |