

328 Series, Lead-Free 3AB, High Surge Withstanding Fuse



Agency Approvals

| Agency | Agency File Number | Ampere Range |
|--------|--------------------|--------------|
| | T5026058201 | 21A |
| | E10480 | 21A |

Description

The – is a 300VAC rated, 10kA surge withstanding, 6.3x32mm ceramic fuse, designed in accordance to UL248-14 Standard, provided in cartridge and axial-lead packages.

Features

- High surge withstanding capability
 - 20 hits of 10kA 8/20μs surge
 - Meets ANSI/IEEE C62.41, Category C-High
 - Meets US Dept of Energy (DOE) MSSLC/ CBEA street lighting and parking lot lighting, elevated level
- Small form factor (6.3x32mm) with cartridge and axial-lead package options
- Breaking capacity: 200A@300VAC, 200A@100VDC
- Lead-free, RoHS compliant, halogen-free
- Compliant with UL248-14 and NFPA 70 (NEC) primary fusing requirements
- Operating temperature: –55°C to 125 °

Electrical Characteristics for Series

| % of Ampere Rating | Opening Time |
|--------------------|-------------------|
| 100% | 4 hours, minimum |
| 200% | 120 sec., maximum |

Applications

Commercial and outdoor LED luminaries
Outdoor electronics and electrical equipment.
Surge protection for telecom application.

Electrical Characteristic by Item

| Amp Rating (A) | Voltage Rating (VAC) | Interrupting Rating | Surge Rating | Nominal Cold Resistance (Ohms) | Nominal Melting I ² t (A ² sec) | Agency Approvals | |
|----------------|----------------------|----------------------------|---------------------------------------|--------------------------------|---|------------------|---|
| | | | | | | TUV | |
| 21 | 300 | 200A@300VAC 200A@100VDC | 1.2/50 - 8/20μs, 20kV/10kA 20 hits | 0.0042 | 4,800 | X | X |

Additional Information



Datasheet

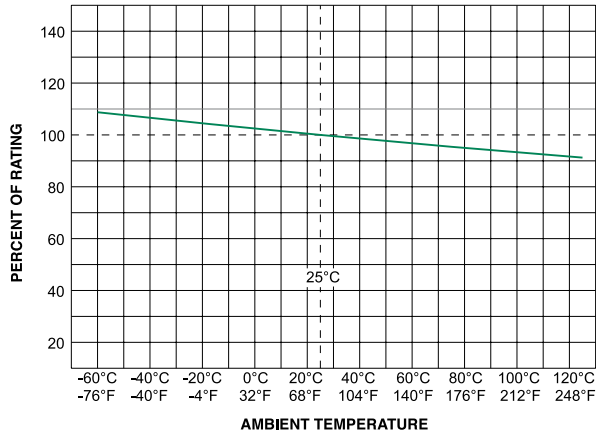


Resources

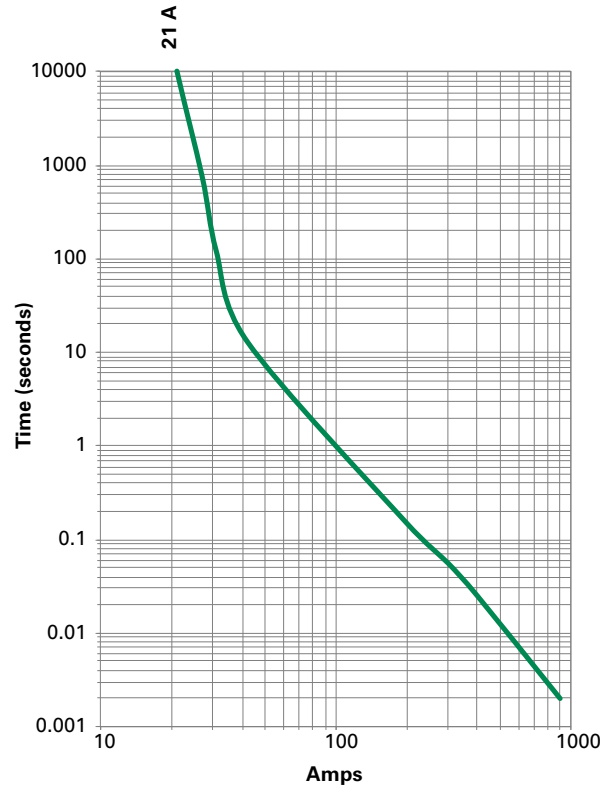


Samples

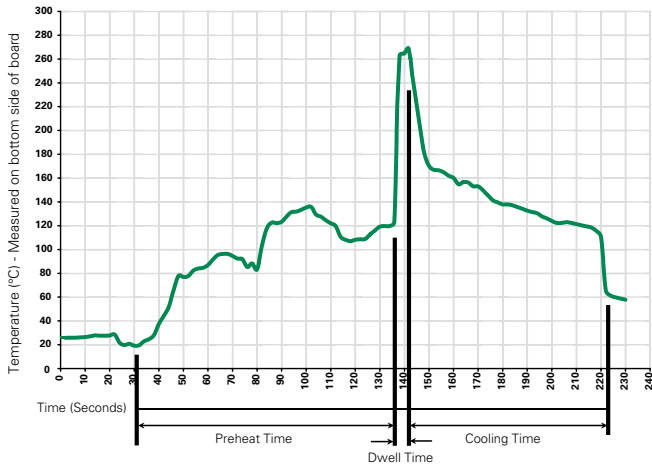
Temperature Derating Curve



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.

Axial Lead & Cartridge Fuses

3AB > High I²t > 328 Series

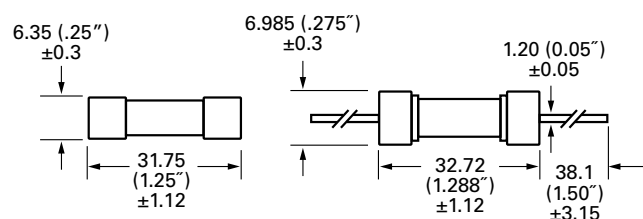
Product Characteristics

| | |
|--------------------------|---|
| Materials | Body: Ceramic Cap: Nickel-plated brass Leads: Tin-plated copper |
| Terminal Strength | MIL-STD-202G, Method 211A, Test Condition A |
| Solderability | Reference IEC 60127 Second Edition 2003-01 Annex A |
| Product Marking | Cap1: Brand logo, current and voltage ratings Cap2: Series and agency approval marks |

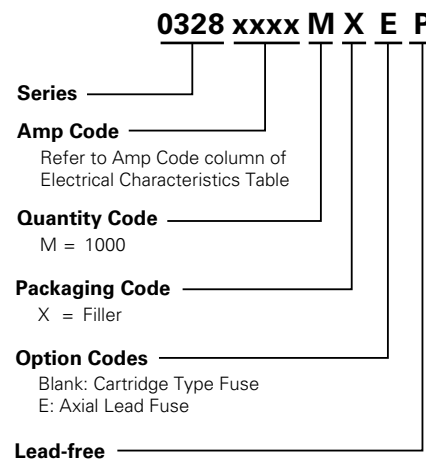
| | |
|------------------------------|---|
| Operating Temperature | –55°C to +125°C |
| Thermal Shock | MIL-STD-202G, Method 107G, Test Condition B: (5 cycles –65°C to +125°C) |
| Vibration | MIL-STD-202G, Method 201A |
| Humidity | MIL-STD-202G, Method 103B, Test Condition A. High RH (95%) and elevated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

Dimensions

Measurements displayed in millimeters (inches).



Part Numbering System



Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|-------------------|-------------------------|----------|---------------------------|--------------|
| 328 Series | | | | |
| Bulk | N/A | 1000 | MX | N/A |