


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




#### Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	21A

#### Electrical Characteristics

% of Ampere Rating	Ampere Rating	Opening Time
100%	21A	4 hours, minimum
200%		120 sec., maximum

#### Electrical Characteristics

Amp Rating (A)	Voltage Rating (VAC)	Interrupting Rating	Surge Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec)	Agency Approvals
21	300	200A @ 300VAC	1.2/50 - 8/20μs, 20kV/10kA 20 hits	0.0042	4,800	 E10480

#### Description

The 328 Series 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.

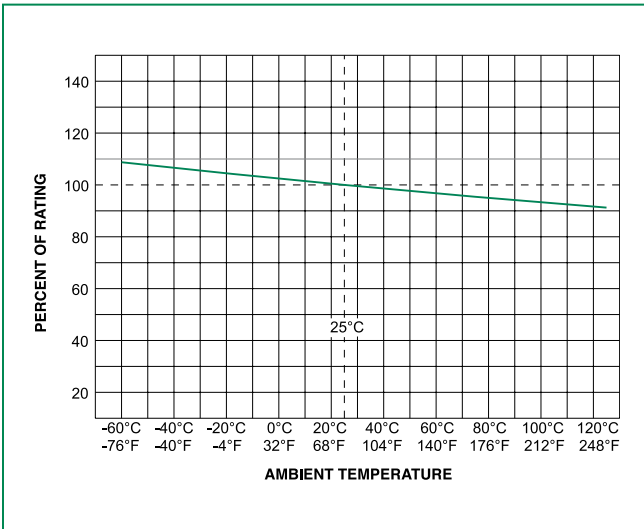
#### Features

- 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
- High breaking capacity: 200A@300VAC
- Lead-free, RoHS compliant, halogen-free
- Compliant with UL248-14 and NFPA 70 (NEC) primary fusing requirements
- Operating temperature: -55°C to 125 °

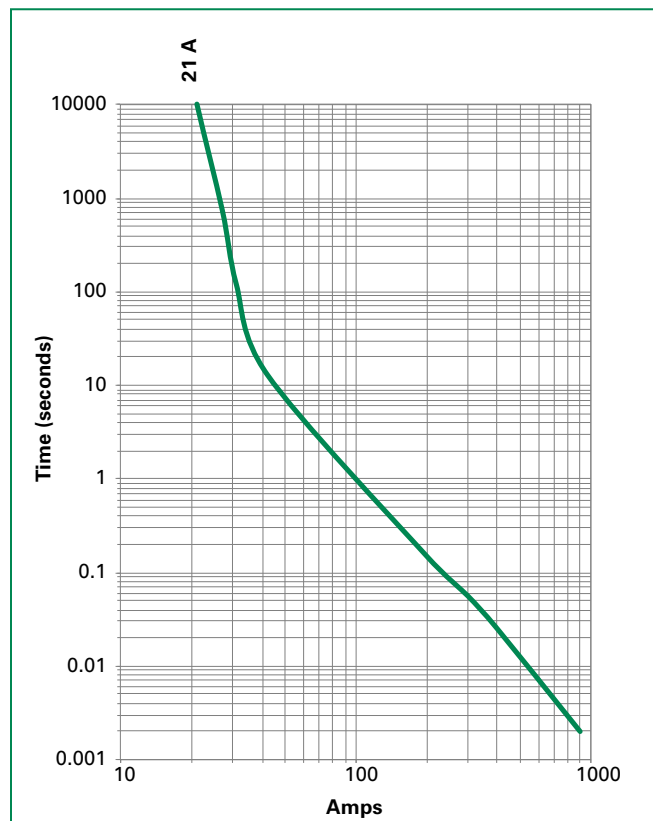
#### Applications

Commercial and outdoor LED luminaries  
Outdoor electronics and electrical equipment

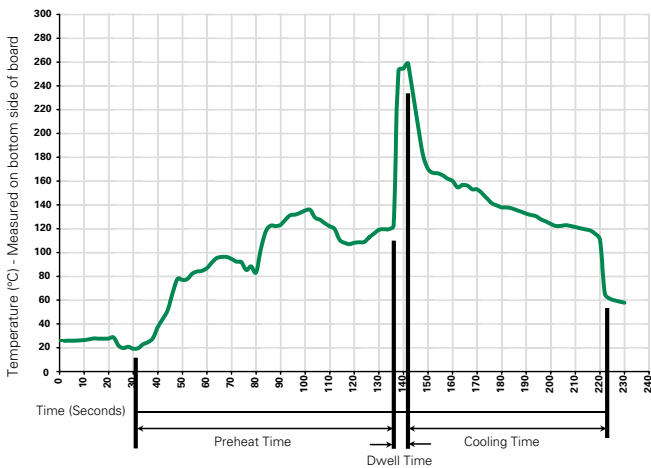
### Temperature Derating Curve



### 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.**

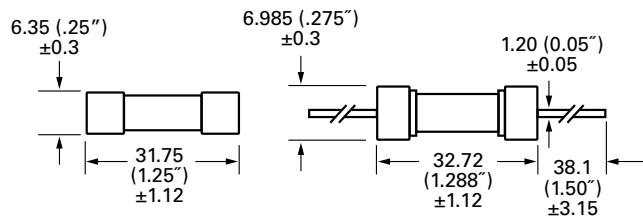
### Product Characteristics

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

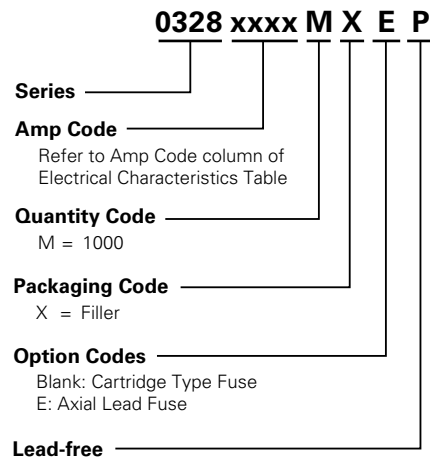
<b>Operating Temperature</b>	-55°C to +125°C
<b>Thermal Shock</b>	MIL-STD-202G, Method 107G, Test Condition B: (5 cycles -65°C to +125°C)
<b>Vibration</b>	MIL-STD-202G, Method 201A
<b>Humidity</b>	MIL-STD-202G, Method 103B, Test Condition A. High RH (95%) and elevated temperature (40°C) for 240 hours.
<b>Salt Spray</b>	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
<b>328 Series</b>				
Bulk	N/A	1000	MX	N/A

# Mouser Electronics

Authorized Distributor

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