

3AB > High I²t > 328 Series

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



Agency Approvals					
Agency	Agency File Number	Ampere Range			
\triangle	T 50260582 01*	21A			
c RL us	E10480	21A			
* - Approved to III 248-1 and III 248-14					

Approved to UL 248-1 and UL 248-14

Electrical Characteristics for Series

% of Ampere Rating	OpeningTime
100%	4 hours, minimum
200%	120 sec., maximum

Additional Information



For recommended fuse accessories for this product series, see 'Recommended Accessories' section.

Description

The 328 Series is a 300VAC rated, 10kA surge withstand, 6.3×32mm ceramic fuse, designed in accordance to UL 248-1 and UL 248-14 Standards, provided in cartridge and axial-lead packages.

Features

- High surge withstand capability
 - 20 hits of 10kA 8/20µs surge
 - Meets ANSI/IEEE C62.41.2, Category C-High
 - Meets US Dept of Energy (DOE) MSSLC/ **CBEA** street lighting and parking lot lighting, elevated level
- Small form factor (6.3×32mm) with cartridge and axial-lead package options

RoHS 🗭 C Rus 🛆

- Breaking capacity: 200A@300VAC, 200A@100VDC
- · Lead-free, RoHS compliant and halogenfree
- Recognized to UL/CSA/ NMX 248-1 and UL/CSA/ NMX 248-14
- Operating temperature: –55°C to 125°C

Applications

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

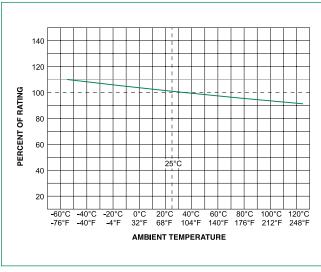
Electrical Characteristic by Item							
Amp Rating	Voltage Rating	g Interrupting Surge Nominal Cold Nominal Melti Rating Rating Resistance (Ohms) I²t (A² sec)	Nominal Melting	Agency Approvals			
(A)	(VAC)					${\bf A}$	
21	300	200A@300VAC 200A@100VDC	1.2/50 - 8/20µs, 20kV/10kA 20 hits	0.0042	4,800	Х	Х



Axial Lead & Cartridge Fuses

 $3AB > High I^2t > 328$ Series

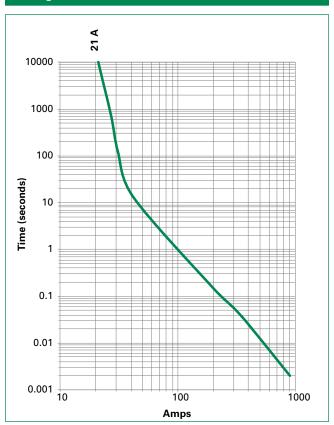
Temperature Re-rating Curve



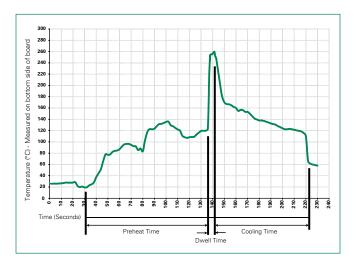
Note:

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

Dimensions

6.35 (.25")

±0.3

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Measurements displayed in millimeters (inches).

31.75

(1.25")

±1.12

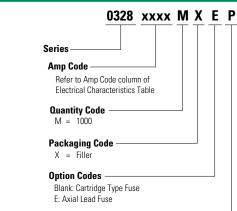
Materials	Body: Ceramic Cap: Nickel-plated brass Leads: Tin-plated copper		
Terminal Strength	MIL-STD-202, Method 211, Test Condition A		
Solderability	MIL-STD-202 Method 208		
Product Marking	Cap1: Brand logo, current and voltage ratings Cap2: Series and agency approval marks		

6.985 (.275″) ±0.3

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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	MILSTD-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		

Part Numbering System



Lead-free

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

1.20 (0.05")

±0.05

38.1

(1.50")

±3.15

32.72

(1.288")

±1.12

Recommended Accessories

Accessory Type	Series	Description	Max Application Voltage	Max Application Amperage
Block	<u>354</u>	Low Profile OMNI-BLOK [®] Fuse Block	600	30
	<u>359</u>	High Current Screw Terminal Fuse Block	800	30
Clip	<u>122</u>	High Current Traditional PC Board Fuse Clip	1000	30

Notes: 1. Do not use in applications above rating. 2. Please refer to fuseholder data sheet for specific re-rating information. 3. Please contact factory for applications greater than the max voltage and amperage shown.

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