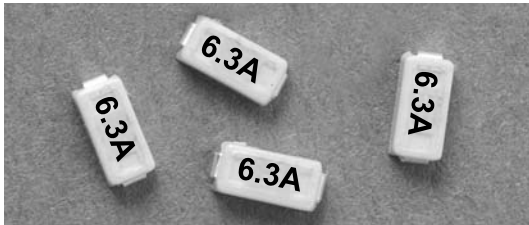


# 3216TD

## Time-delay Chip™ surface mount fuse



### Product features

- Time-delay, surface mount fuse
- RoHS compliant, lead-free and halogen-free
- High inrush withstand capability
- Wire-in-Air performance
- Compatible with leaded and lead-free reflow and wave solder

### Agency information

- cURus Recognition File number: E19180

### Environmental data

- Operating temperature range: -55 °C to +125 °C with proper derating
- Vibration: MIL-STD-202, Method 204 Condition D
- Solderability: ANSI/J-STD-002C, Test B

### Soldering method

- Wave immersion: 260°C, 10 Sec. max.
- Infrared reflow: 260°C, 30 Sec. max.
- Hand solder: 350°C, 3 Sec. max.

### Ordering

- Specify packaging and product code (i.e., TR/3216TD1-R)

Electrical Characteristics	
% of Amp Rating	Opening Time
100%	4 Hours Minimum
200%	1 Sec. Minimum, 120 Sec. Maximum
300%	0.05 Sec. Minimum, 3 Sec. Maximum
800%	0.002 Sec. Minimum, 0.05 Sec. Maximum

Specifications								
Product Code	Current Rating Amps	Voltage Rating		Interrupting Rating (Amps)*		Typical Resistance (Ω)**	Typical Melt I <sup>††</sup> DC	Typical Voltage Drop (mV)‡
		Vac	Vdc	AC	DC			
3216TD6.3-R	6.3	32	32	35	35	0.006	10.54	56
3216TD7-R	7	32	32	35	35	0.006	12.03	64
3216TD8-R	8	32	32	35	35	0.0055	16.03	65
3216TD10-R	10	32	32	35	35	0.0045	42.71	72
3216TD12-R	12	32	32	35	35	0.00425	45.56	79

\* AC Interrupting Rating (Measured at rated voltage with a unity power factor); DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

\*\* DC Cold Resistance (Measured at 10% of rated current)

† Typical Melting† (Measured with a battery bank at rated DC voltage, 10x-rated current at 1 microsecond, not to exceed IR. Above 7A uses 70 micron thickness copper layer test board of IEC 60127-3 Others uses 35 micron thickness copper layer.

‡ Typical Voltage Drop (Measured at rated current after temperature stabilizes)

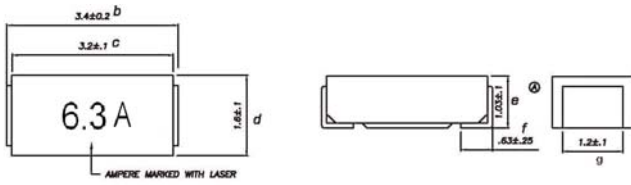
Device designed to carry rated current for four hours minimum. An operating current of 80% or less of rated current is recommended, with further derating required at elevated ambient temperature



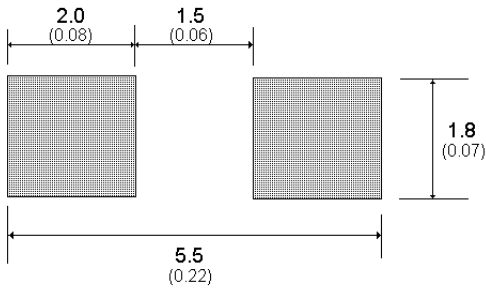
Powering Business Worldwide

**Dimensions - mm (in)**

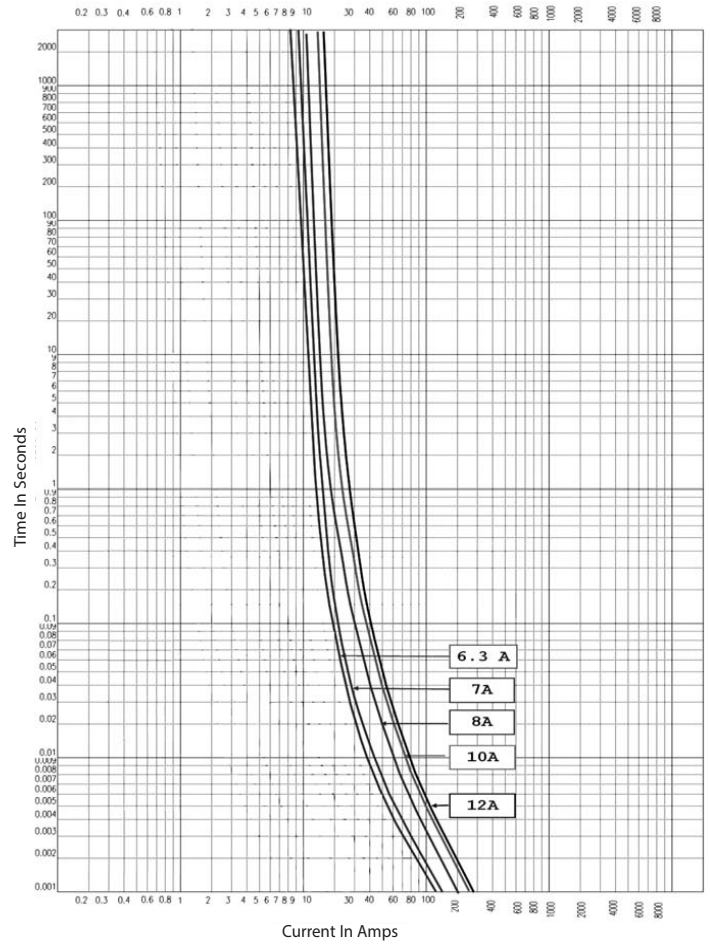
Drawing Not to Scale



**Recommended Pad Layout - mm (in)**



**Time-Current Curves**



Packaging	
Packaging Code Prefix	Description
TR	2500 fuses on 12mm tape-and-reel on a 180mm reel per EIA-481-A & IEC286-3

Life Support Policy: Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

**Eaton**  
**Electronics Division**  
 1000 Eaton Boulevard  
 Cleveland, OH 44122  
 United States  
[www.eaton.com/electronics](http://www.eaton.com/electronics)

© 2017 Eaton  
 All Rights Reserved  
 Printed in USA  
 Publication No. 4321 BU-SB10214  
 May 2017

Eaton is a registered trademark.

All other trademarks are property of their respective owners.