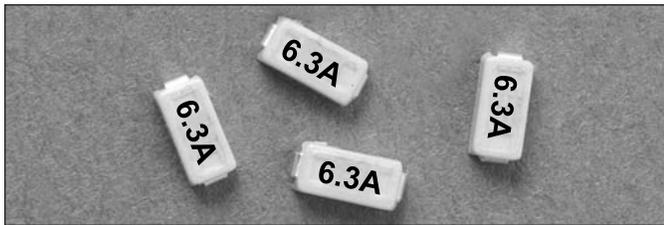
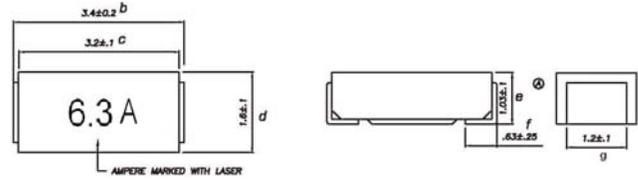


Time-Delay Chip™ Fuses 3216TD Series

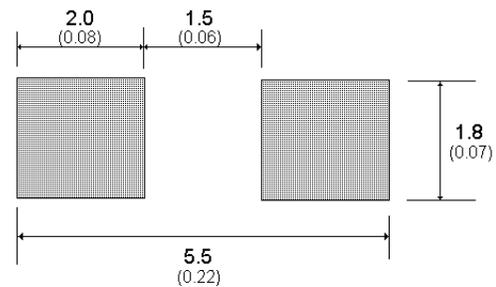


Dimensions - mm (in)

Drawing Not to Scale



Recommended Pad Layout - mm (in)



Description

- 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

- **UL** 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

Ordering

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

Soldering Method

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

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

Product Code	Current Rating Amps	Voltage Rating		Interrupting Rating (Amps)*		Typical Resistance (Ω)**	Typical Melt I ² t†† DC	Typical Voltage Drop (mV)‡
		Vac	Vdc	AC	DC			
		3216TD6.3-R	6.3	32	32			
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)

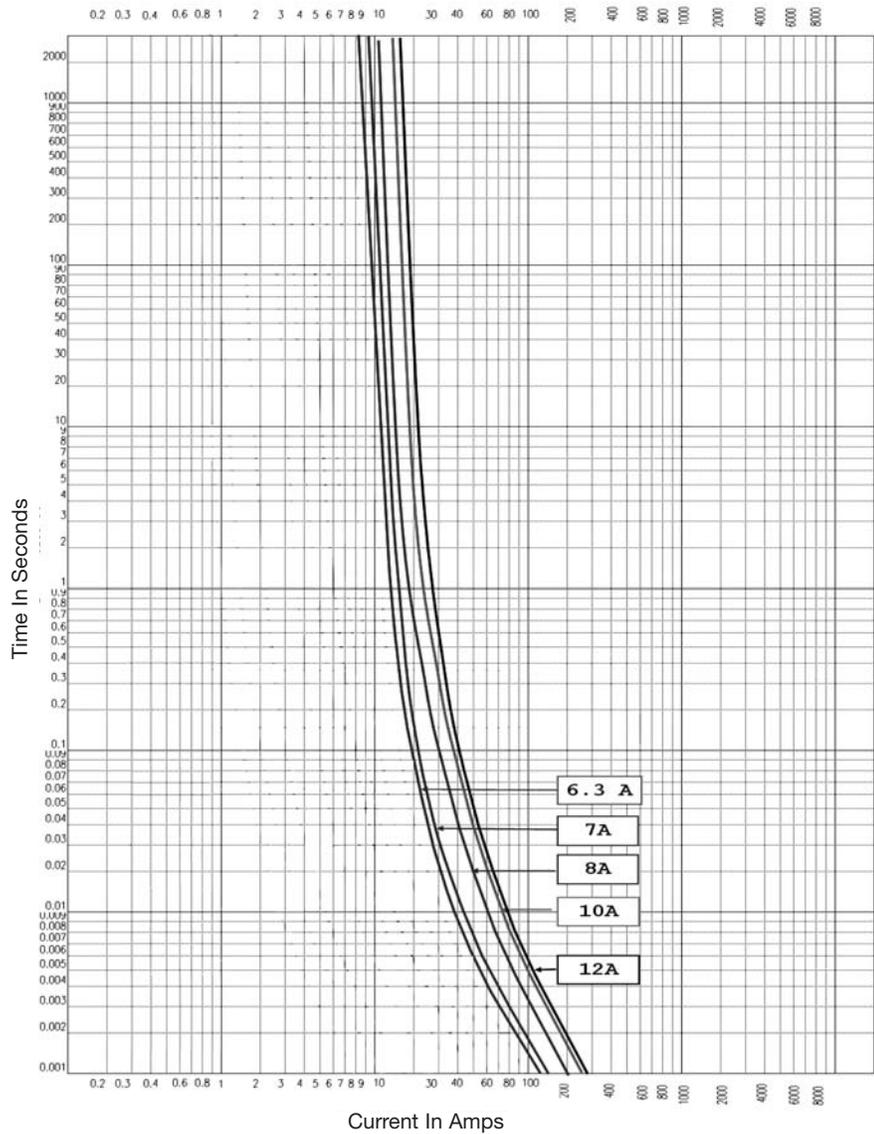
** DC Cold Resistance (Measured at 10% of rated current)

† Typical Melting I²t (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 temperatures.

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

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Life Support Policy: Cooper Bussmann 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.

© 2010 Cooper Bussmann
St. Louis, MO 63178
www.cooperbussmann.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Eaton:

[TR-3216TD500-R](#) [TR-3216TD750-R](#) [TR-3216TD800-R](#) [TR-3216TD8-R](#) [TR/3216TD6.3-R](#) [TR/3216TD2-R](#)
[TR/3216TD12-R](#) [TR/3216TD3-R](#) [TR/3216TD7-R](#) [TR/3216TD5-R](#) [TR/3216TD10-R](#) [TR/3216TD1-R](#) [TR/3216TD2.5-R](#)
[TR/3216TD4-R](#) [TR/3216TD1.5-R](#) [TR/3216TD8-R](#)