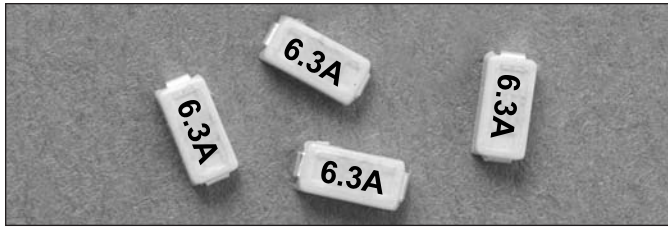


Time-Delay Chip™ Fuses 3216TD Series



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

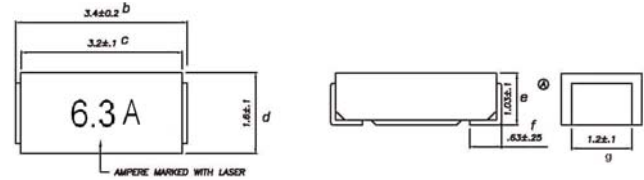
- Specify packaging and product code (i.e., TR/3216TD1-R)

Soldering Method

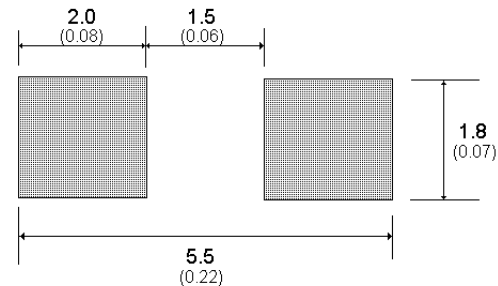
- Wave immersion: 260°C, 10 Sec. max.
- Infrared reflow: 260°C, 30 Sec. max.
- Hand solder: 350°C, 3 Sec. max.

Dimensions - mm (in)

Drawing Not to Scale



Recommended Pad Layout - mm (in)



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 ² t† 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)

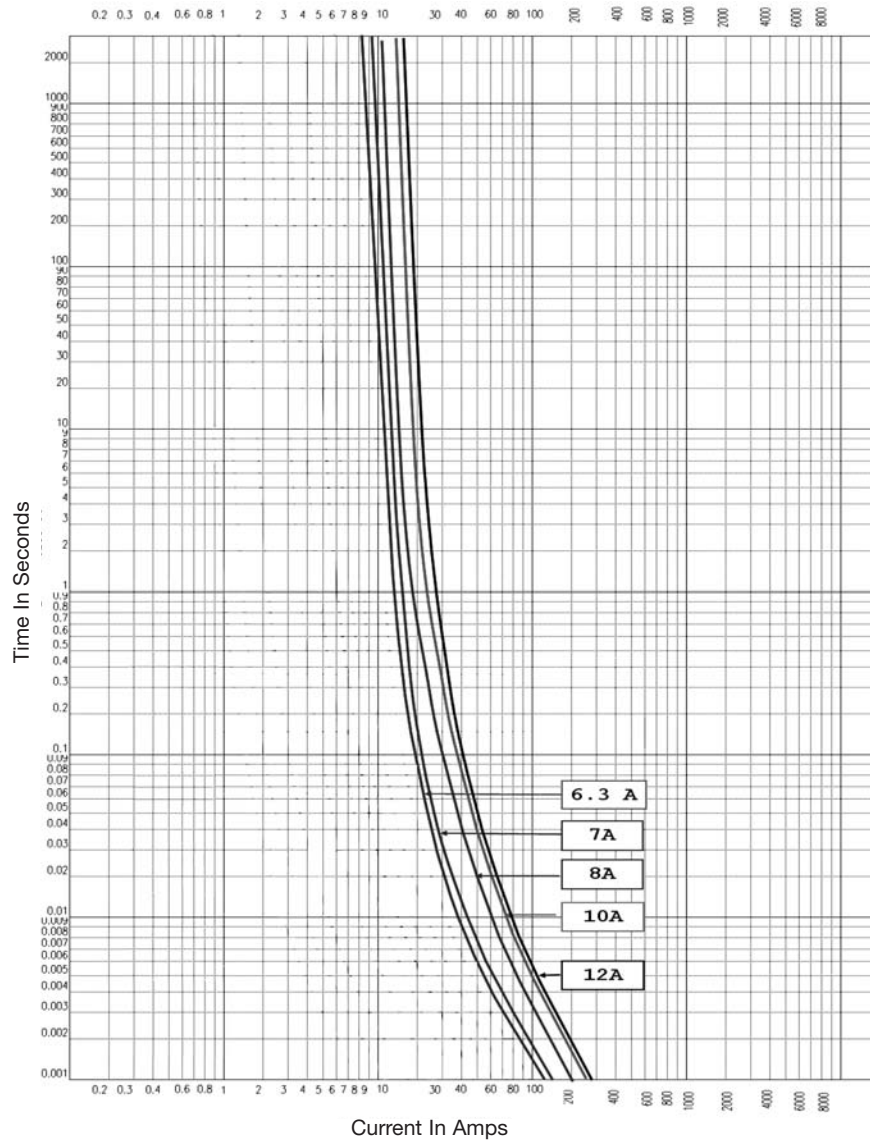
** DC Cold Resistance (Measured at 10% of rated current)

† Typical Melting 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

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