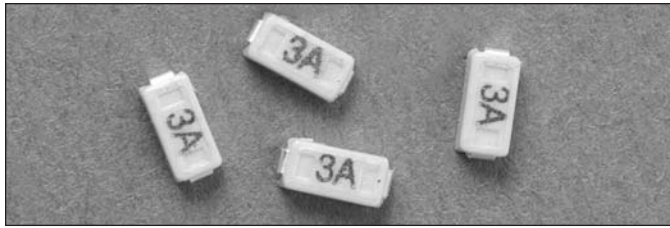


# Chip™ Fuses

## 3216TD Series, Time-Delay



### Description

- Time-delay, surface mount fuse
- Protects against harmful overcurrents in secondary applications
- 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, Volume 13

### Environmental Data

- Thermal shock: Withstands 5 cycles of -55°C & 125°C
- Vibration: MIL-STD-202G, Method 201A, Method 204D Condition D
- Solderability: ANSI/J-STD-002C, Test B

### Ordering

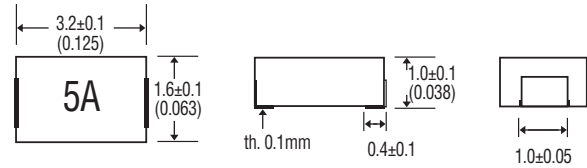
- Specify packaging and product code (i.e. TR/3216TD1-R)

### Soldering Method

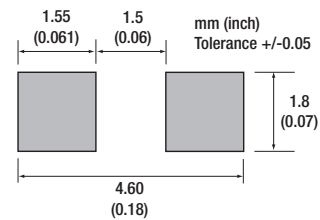
- Wave immersion: 260°C, 10 Sec. max.
- Infrared reflow: 260°C, 30 Sec. max.
- Hand solder: 350°C, 3 Sec. max.

### 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)* AC/DC	Resistance (Ω)** Typ.	Typical Melt I <sup>††</sup> DC	Typical Voltage Drop (V)‡
3216TD500-R	0.5	63Vac/dc	50	0.150± 20%	0.064	75
3216TD750-R	0.75	63Vac/dc	50	0.100	0.12	75
3216TD800-R	0.8	63Vac/dc	50	0.087	0.16	75
3216TD1-R	1	63Vac/dc	50	0.075	0.32	75
3216TD1.5-R	1.5	32Vac/dc	35	0.050	0.62	75
3216TD2-R	2	32Vac/dc	35	0.030	1.30	60
3216TD2.5-R	2.5	32Vac/dc	35	0.022	2.25	55
3216TD3-R	3	32Vac/dc	35	0.018	3.30	55
3216TD4-R	4	32Vac/dc	35	0.0165	5.20	56
3216TD5-R	5	32Vac/dc	35	0.015	8.40	66
3216TD6.3-R	6.3	32Vac/dc	35	0.0120	13.8	75
3216TD7-R	7	32Vac/dc	35	0.0095	18.0	67
3216TD8-R	8	32Vac/dc	35	0.0083	38.0	65
3216TD10-R	10	32Vac/dc	35	0.006	54.4	65
3216TD12-R	12	32Vac/dc	35	0.005	64.0	65

\* 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)

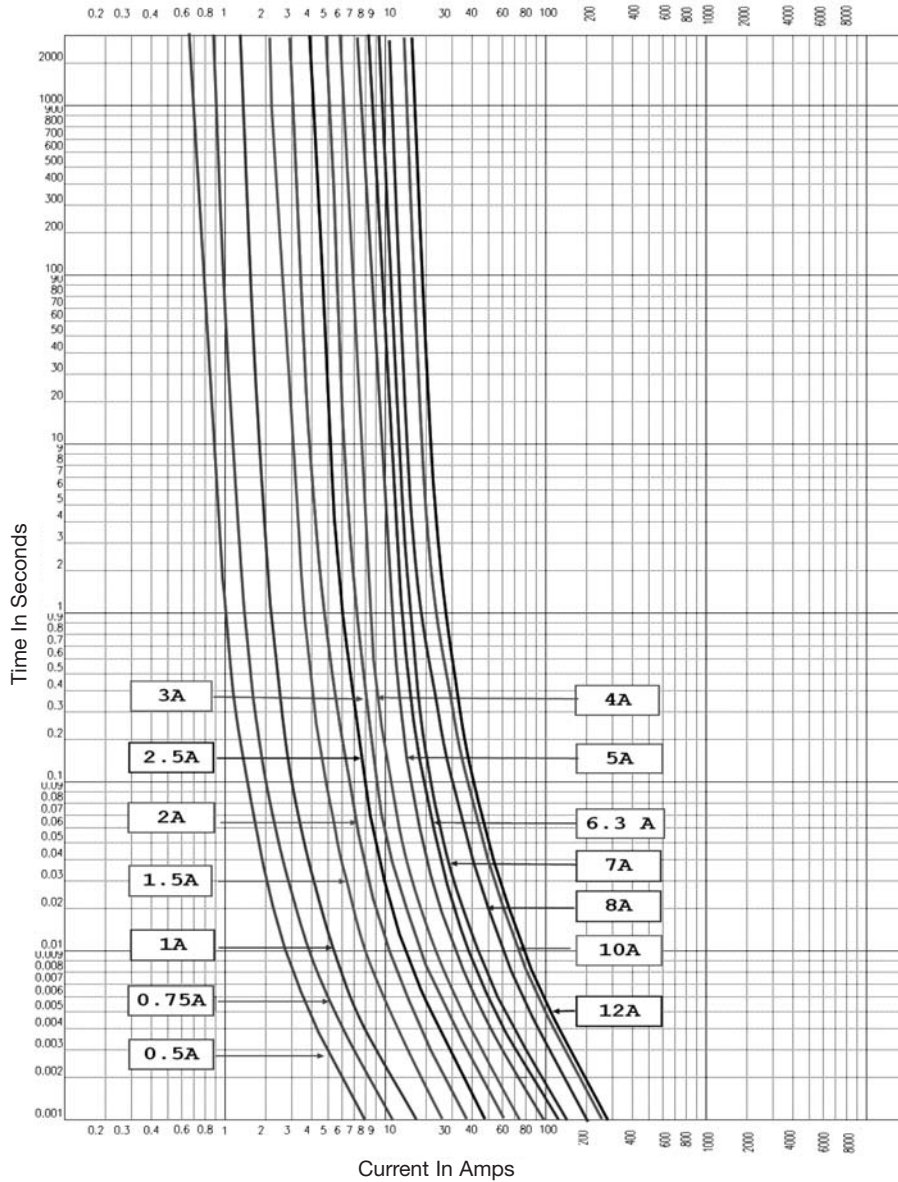
\*\* DC Cold Resistance (Measured at 10% of rated current)

† Typical Melting I<sup>t</sup> (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



<b>Packaging</b>	
<b>Packaging Code Prefix</b>	<b>Description</b>
<b>TR</b>	2,500 fuses on 12mm tape-and-reel on a 180mm reel per EIA-481-A & IEC286-3

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