

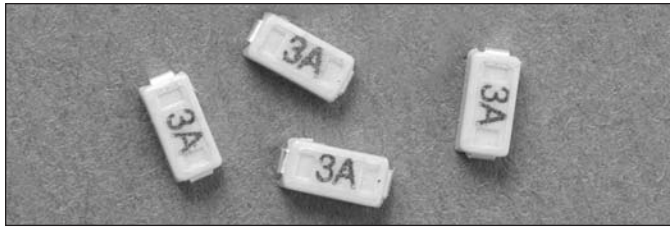


**THE DATASHEET OF
TR/3216TD2-R**



Chip™ Fuses

3216TD Series, Time-Delay



Description

- Time-delay, surface mount fuse
- RoHS compliant and Lead 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

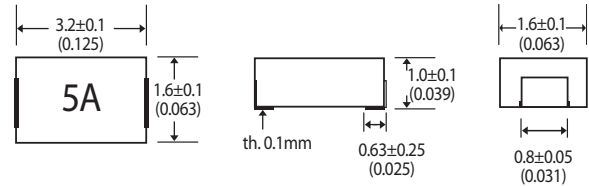
- Specify packaging and product code (i.e., TR/3216TD1-R)

Soldering Method

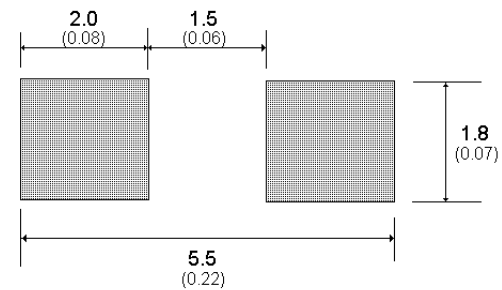
- Wave immersion: 260°C, 10 Sec. max.
- Infrared reflow: 260°C, 30 Sec. max.
- Hand solder: 350°C, 3 Sec. max.

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

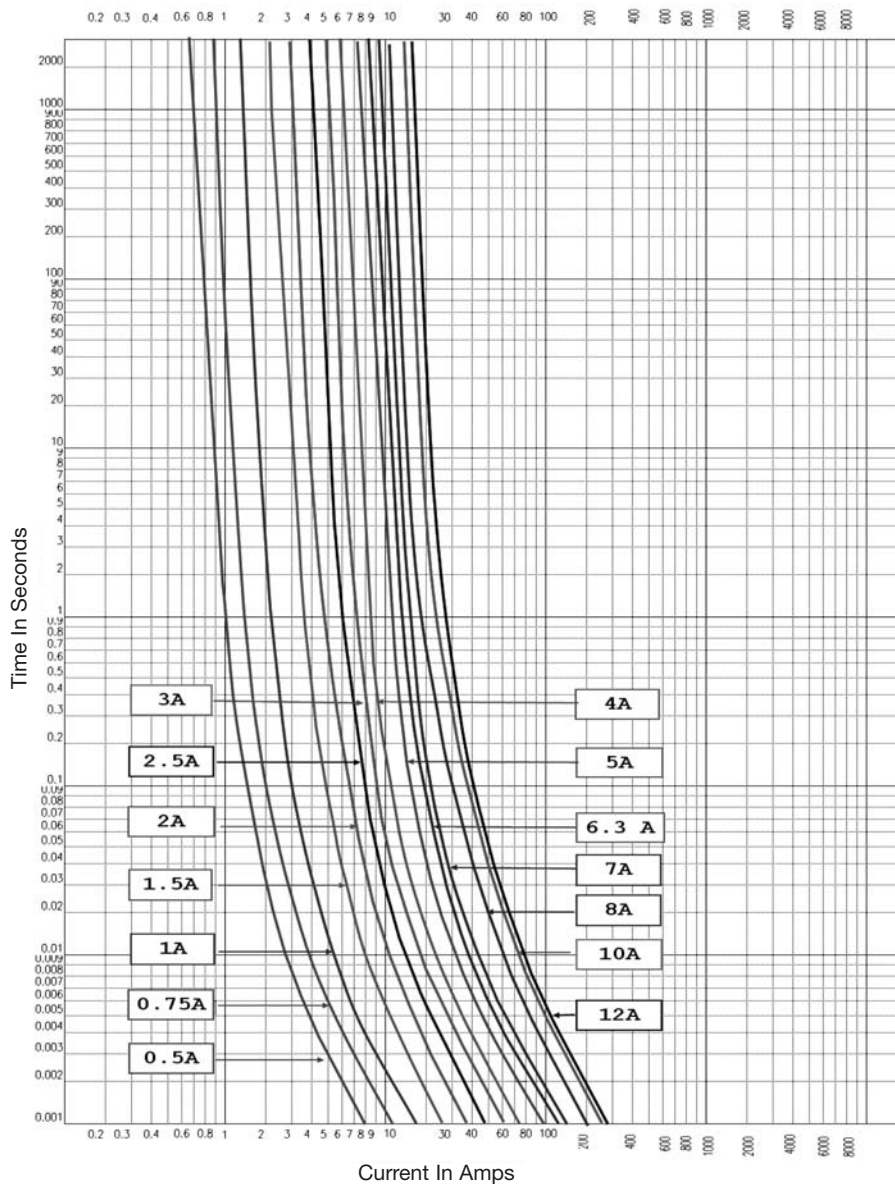
** DC Cold Resistance (Measured at 10% of rated current)

† Typical Melting I^t (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 | 2,500 fuses on 12mm tape-and-reel on a 180mm reel per EIA-481-A & IEC286-3 |

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