

# Chip<sup>™</sup> 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**

• c Nus 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**

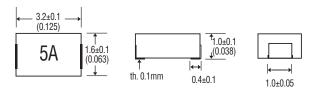
 Specify packaging and product code (i.e. TR/3216TD1-R)

#### **Soldering Method**

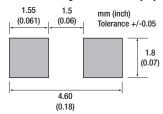
- Wave immersion: 260°C, 10 Sec. max.
  Infrared reflow: 260°C, 30 Sec. max.
- Hand solder: 350°C, 3 Sec. max.

# 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 I²t† 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	

<sup>\*</sup> 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)

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.



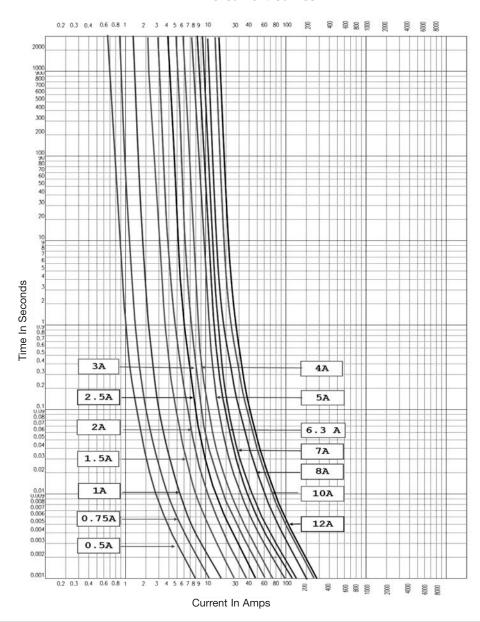
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<sup>\*\*</sup> DC Cold Resistance (Measured at 10% of rated current)

<sup>†</sup> 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.

<sup>‡</sup> Typical Voltage Drop (Measured at rated current after temperature stabilizes)

# **Time-Current Curves**



Packaging 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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