

2410 Time Delay SMD Fuses

2410TD Series

Descriptions

The 2410TD Series Time Delay SMD fuse has a ceramic body with wire-in-air design.



Electrical Characteristics

| Amp Rating | % of Amp Rating | Opening Time |
|------------|-----------------|---------------|
| 0.25~7.0A | 100% | 4 Hours Min. |
| | 200% | < 120 Seconds |



Key Features

- Rapid interruption of excessive current
- Compatible with reflow and wave soldering
- Ceramic body and silver plated copper terminal
- Excellent environmental integrity
- One time positive disconnect
- RoHS compliant
- Designed to UL 248-14

Specification

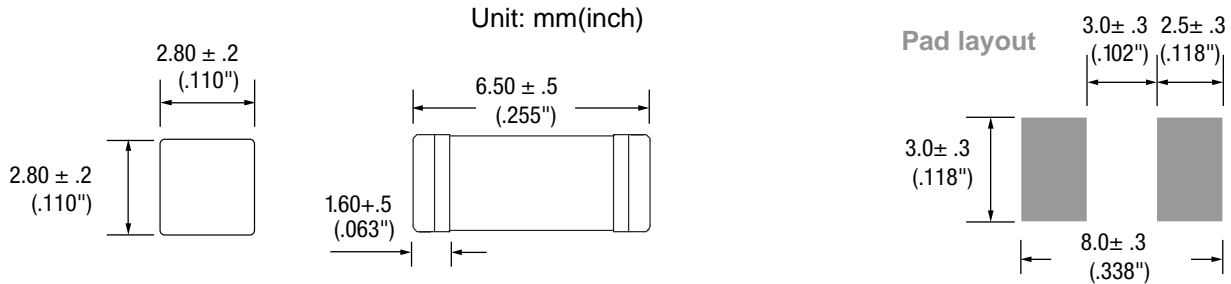
| Part No. | Rated Current (I _n) | Rated Voltage (V) | | Rated Voltage (V) | AC Interrupting Rating (kA _{AC}) | DC Interrupting Rating (kA _{DC}) | DC Cold Resistance (mΩ) | | | |
|--------------|---------------------------------|-------------------|------|--------------------------|--|--|-------------------------|-------|------|--------|
| | | 57 | 87 | | | | | | | |
| 2410TD-R250 | 250mA | 125V | 125V | 50A@125VAC 50A@125VDC | 0.770 | 0.06 | 280 mV | | | |
| 2410TD-R315 | 315mA | 125V | 125V | | | | | 0.630 | 0.12 | 275 mV |
| 2410TD-R400 | 400mA | 125V | 125V | | | | | 0.478 | 0.27 | 250 mV |
| 2410TD-R500 | 500mA | 125V | 125V | | | | | 0.285 | 1.20 | 190 mV |
| 2410TD-R630 | 630mA | 125V | 125V | | | | | 0.190 | 1.07 | 160 mV |
| 2410TD-R800 | 800mA | 125V | 125V | | | | | 0.154 | 3.00 | 155 mV |
| 2410TD-1A | 1.0A | 125V | 125V | | | | | 0.096 | 4.70 | 160 mV |
| 2410TD-1.25A | 1.25A | 125V | 125V | | | | | 0.054 | 7.66 | 105 mV |
| 2410TD-1.6A | 1.6A | 125V | 125V | | | | | 0.043 | 10.5 | 85 mV |
| 2410TD-2.0A | 2.0A | 125V | 125V | | | | | 0.040 | 16.5 | 150 mV |
| 2410TD-2.5A | 2.5A | 125V | 125V | | | | | 0.038 | 21.9 | 165 mV |
| 2410TD-3A | 3.0A | 125V | 125V | | | | | 0.029 | 21.7 | 135 mV |
| 2410TD-3.15A | 3.15A | 125V | 125V | | | | | 0.022 | 24.0 | 90 mV |
| 2410TD-3.5A | 3.5A | 125V | 125V | | | | | 0.017 | 32.5 | 90 mV |
| 2410TD-4A | 4.0A | 125V | 125V | | | | | 0.016 | 68.3 | 100mV |
| 2410TD-5A | 5.0A | 125V | 125V | | | | | 0.014 | 57.3 | 115 mV |
| 2410TD-7A | 7.0A | 125V | 125V | | | | | 0.009 | 93.1 | 95 mV |

- AC Interrupting Rating measured at designated voltage, 100% power factor; DC Interrupting Rating measured at designated voltage, time constant of less than 50 microseconds, battery source
- DC Cold Resistance are measured at <10% of rated current in the ambient temperature of 25 °C
- Typical Pre-arcing I₂t are measured at 10In Current

Time Delay SMD 125VAC/DC Fuses

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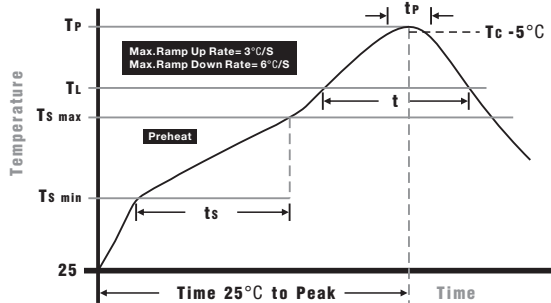
Dimension



Packaging

- Quantity: 1,000pcs
- 12mm wide tape on 178mm(7 inch) diameter reel -specification EIA Standard 481.

Soldering Parameters

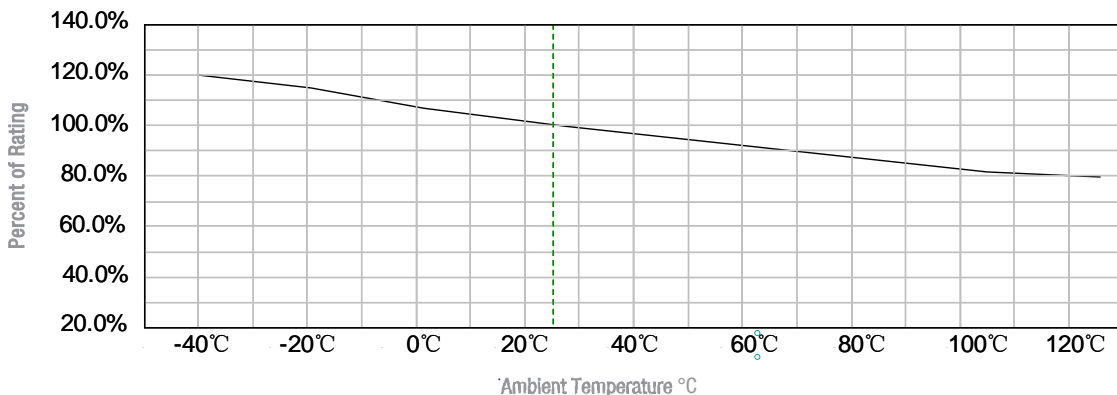


Wave Soldering: 260°C, 10 seconds max.
Infrared Reflow: 260°C, 30 seconds max.

IR Reflow Profile

| | |
|--|------------------|
| Preheat Heat | |
| Temperature min (T _{min}) | 150°C |
| Temperature max(T _{max}) | 200°C |
| Time (T _{min} to T _{max}) (ts) | 60 - 120 seconds |
| Average ramp-up rate (T_{max} to T_p) | 3°C/second max. |
| Liquidous temperature (T_l) | 217°C |
| Time at liquidous (t _l) | 60 - 150 seconds |
| Peak temperature(T_p) | 260+0/-5°C |
| Time within 5°C of actual peak Temperature (tp) | 10 - 30 seconds |
| Average ramp-down rate (T_p to T_{max}) | 6°C/second max. |
| Time 25 °C to peak temperature | 8 minutes max. |

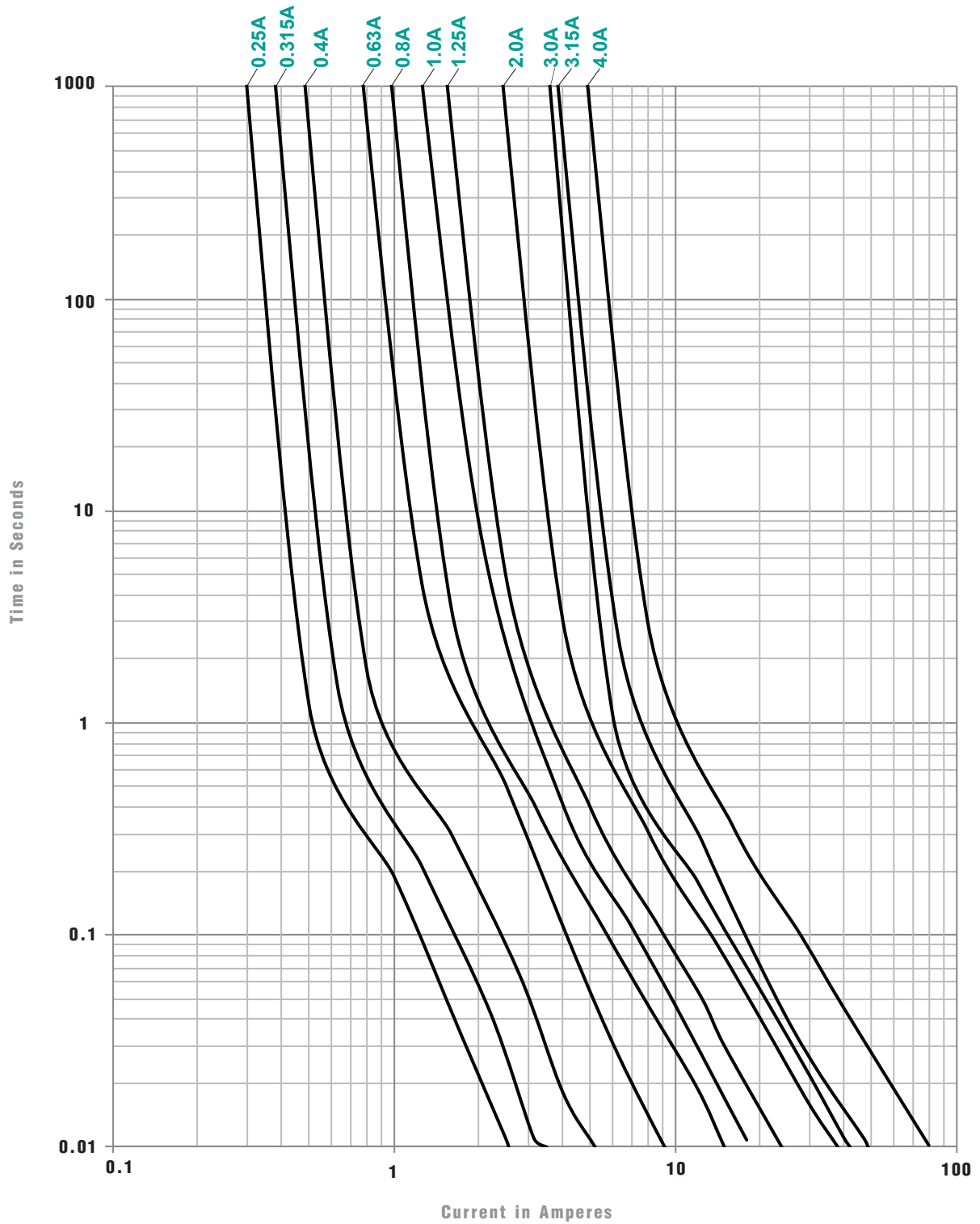
Temperature Derating Curve



- Normal ambient temperature: 23+/-3°C
- Operating temperature: -40°C ~ 125°C, with proper correction factor applied

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Time Current Curves



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