

# 1025TD

## Time-delay surface mount fuse

RoHS



### Product features

- Time-delay surface mount fuse
- Satisfies the EIA/IS-722 Standard
- Solder immersion compatible

### Agency information

- UL Recognition Guide & File numbers: JDYX2 & E19180 (250mA - 5A)
- CSA Component Acceptance: File # 053787 C000, Class # 1422 30

### Soldering method

- Wave immersion: 260°C, 10 Sec. max.
- Infrared reflow: 260°C, 30 Sec. max.

### Environmental data

- Life test: MIL-STD-202, Method 108A, Test Condition D
- Load humidity: MIL-STD-202, Method 103B
- Moisture resistance: MIL-STD-202, Method 106E
- Terminal strength: MIL-STD-202, Method 211A
- Thermal shock: MIL-STD-202, Method 107D, air-to-air
- Case resistance: EIA/IS-722
- Resistance to dissolution of metallization: ANSI J-STD-002, Test D
- Mechanical shock: MIL-STD-202, Method 213B with exceptions per EIA/IS-722 Standard
- High frequency vibration: MIL-STD-202, Method 204D, Test Condition D
- Resistance to solvents: MIL-STD-202, Method 215A

### Ordering

- Specify packaging and product code (i.e., TR2/1025TD250-R)

Electrical Characteristics	
% of Amp Rating	Opening Time
100%	4 Hours Minimum
200%	1 Second Minimum
200%	60 Seconds Maximum
250% *	10 Seconds Maximum

\* If fuse does not open @ 200% in 60 seconds, raise current to 250% and the fuse must open in 10 seconds maximum.

Product Code	Current Rating Amps	Voltage Rating		Specifications		DC Cold Resistance** (Ω) Typical	Typical Melting I <sup>†</sup>	Typical Voltage Drop‡
		AC	DC	Interrupting Rating* 250Vac	125Vdc			
1025TD250-R	250mA	250	125	50A	50A	4.200	0.128	1900 mV
1025TD500-R	500mA	250	125	50A	50A	0.5500	1.47	455 mV
1025TD750-R	750mA	250	125	50A	50A	0.317	0.93	400 mV
1025TD1-R	1	250	125	50A	50A	0.2030	9.91	387 mV
1025TD1.5-R	1.5	250	125	50A	50A	0.1025	11.79	310 mV
1025TD2-R	2	250	125	50A	50A	0.0680	17.27	250 mV
1025TD2.5-R	2.5	250	125	50A	50A	0.0420	16.51	201 mV
1025TD3-R	3	250	125	50A	50A	0.0330	42.74	184 mV
1025TD3.5-R	3.5	250	125	50A	50A	0.0270	43.33	180 mV
1025TD4-R	4	250	125	50A	50A	0.0220	66.96	152 mV
1025TD5-R	5	250	125	50A	50A	0.0160	88.38	145 mV

\* AC Interrupting Rating (Measured at designated voltage, 100% power factor random closing); DC Interrupting Rating (Measured at designated voltage, time constant of the calibrated circuit is less than 50 microseconds, battery source)

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

† Typical Melting I<sup>†</sup> (Measured with a battery bank at rated DC voltage, 10x-rated current, time constant of calibrated circuit less than 50 microseconds)

‡ Typical Voltage Drop (Measured at rated current after temperature stabilizes)

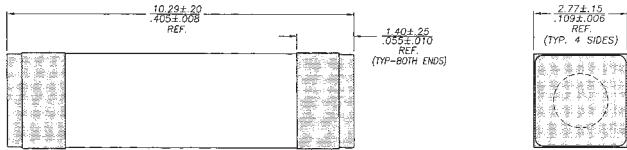
• Device designed to carry rated current for four hours minimum. An operating current of 80% or less of rated current is recommended, with further derating required at elevated ambient temperatures.



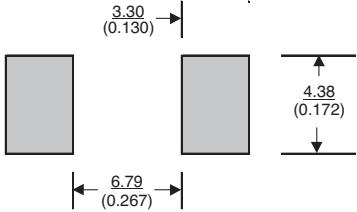
Powering Business Worldwide

### Dimensions – mm (in)

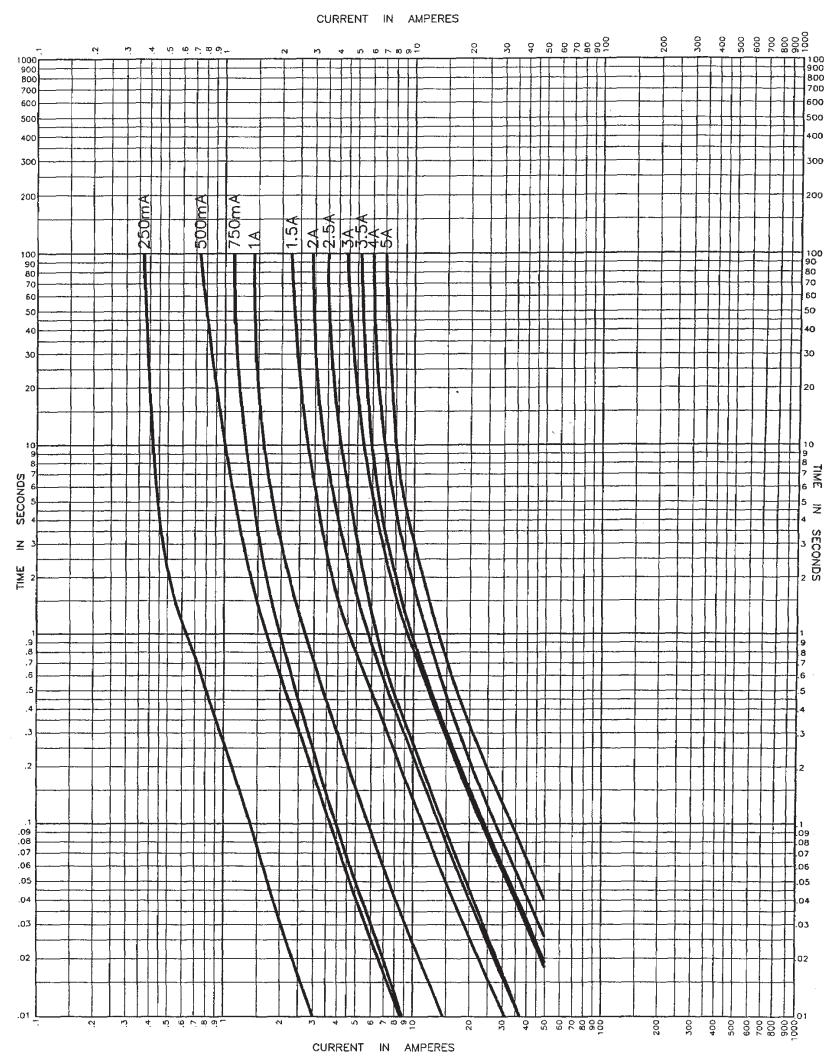
Drawing Not to Scale



### Recommended Pad Layout – mm (in)



### Time-Current Curve



Packaging Code	
Packaging Code Prefix	Description
TR2	2,500 fuses on 24mm tape-and-reel on 13 inch (330mm) reel per EIA Standard 481

**Life Support Policy:** Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

**Eaton**  
**Electronics Division**  
1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
[www.eaton.com/electronics](http://www.eaton.com/electronics)

© 2017 Eaton  
All Rights Reserved  
Printed in USA  
Publication No. 4344 BU-SB08288  
May 2017

Eaton is a registered trademark.

All other trademarks are property  
of their respective owners.