

# 1025TD

## Time-delay surface mount fuse



### 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 Interrupting Rating*		DC Cold Resistance** (Ω) Typical	Typical Melting I <sup>2</sup> t†	Typical Voltage Drop‡
		AC	DC	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 ≤10% of rated current)

† Typical Melting I<sup>2</sup>t (Measured with a battery bank at rated DC voltage, 10x-rated current, time constant of calibrated circuit less than 50 microseconds)

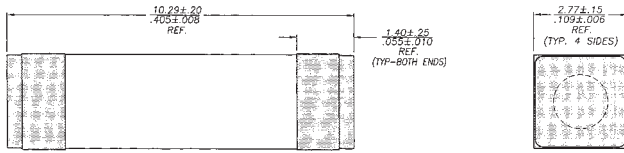
‡ Typical Voltage Drop (Measured at rated current after temperature stabilizes)

• 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.

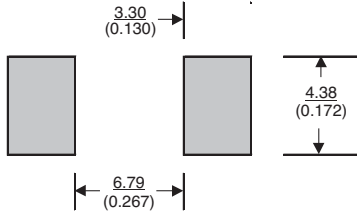


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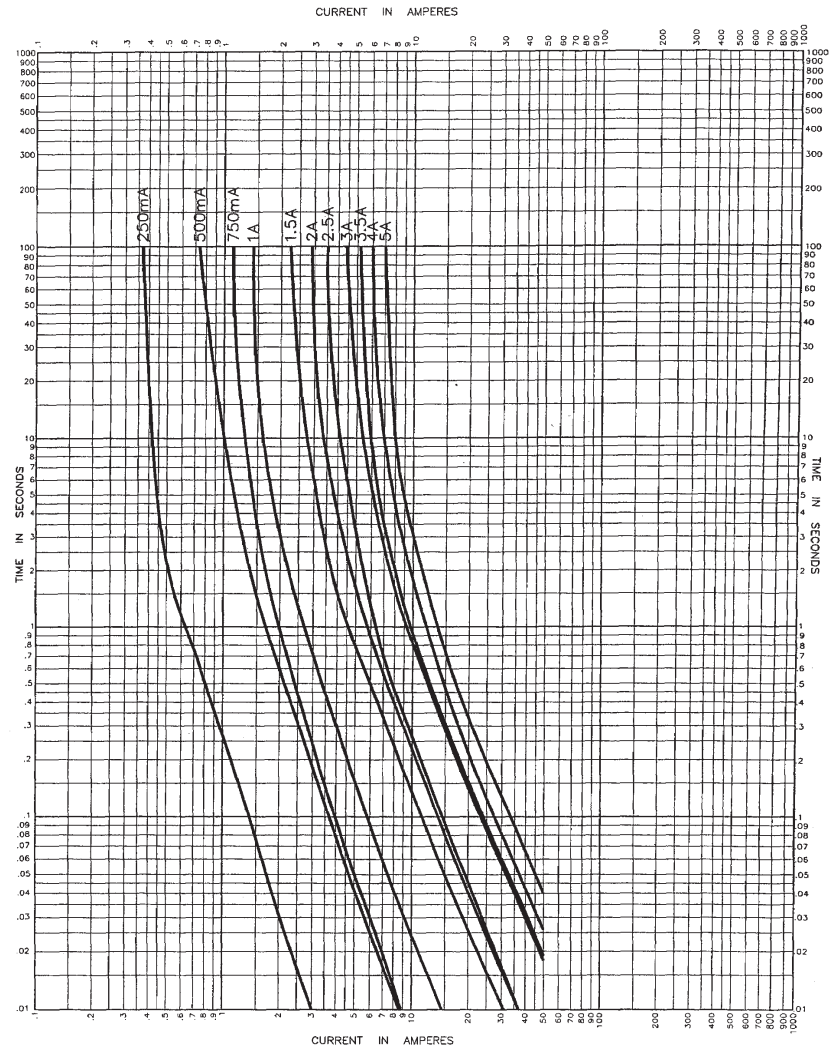
**Dimensions – mm (in)**  
Drawing Not to Scale



**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

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