

Brick™ Fuses

1025TD Series, Time-Delay

Description

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



| 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.

Agency Information

- UL Recognition Guide & File numbers:
JDXY2 & E19180 (250mA - 5A)
- CSA Component Acceptance:
File # 053787 C000, Class # 1422 30

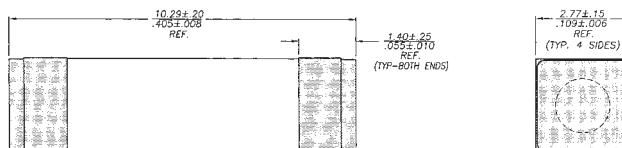
Environmental Data

- 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

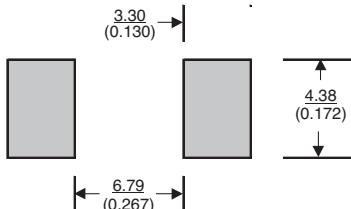


Dimensions – mm (in)

Drawing Not to Scale



Recommended Pad Layout – mm (in)



Ordering

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

Soldering Method

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

Specifications

| Product Code | Current Rating Amps | Voltage Rating | | Interrupting Rating* | | DC Cold Resistance** (Ω) Typical | Typical Melting I ² 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)

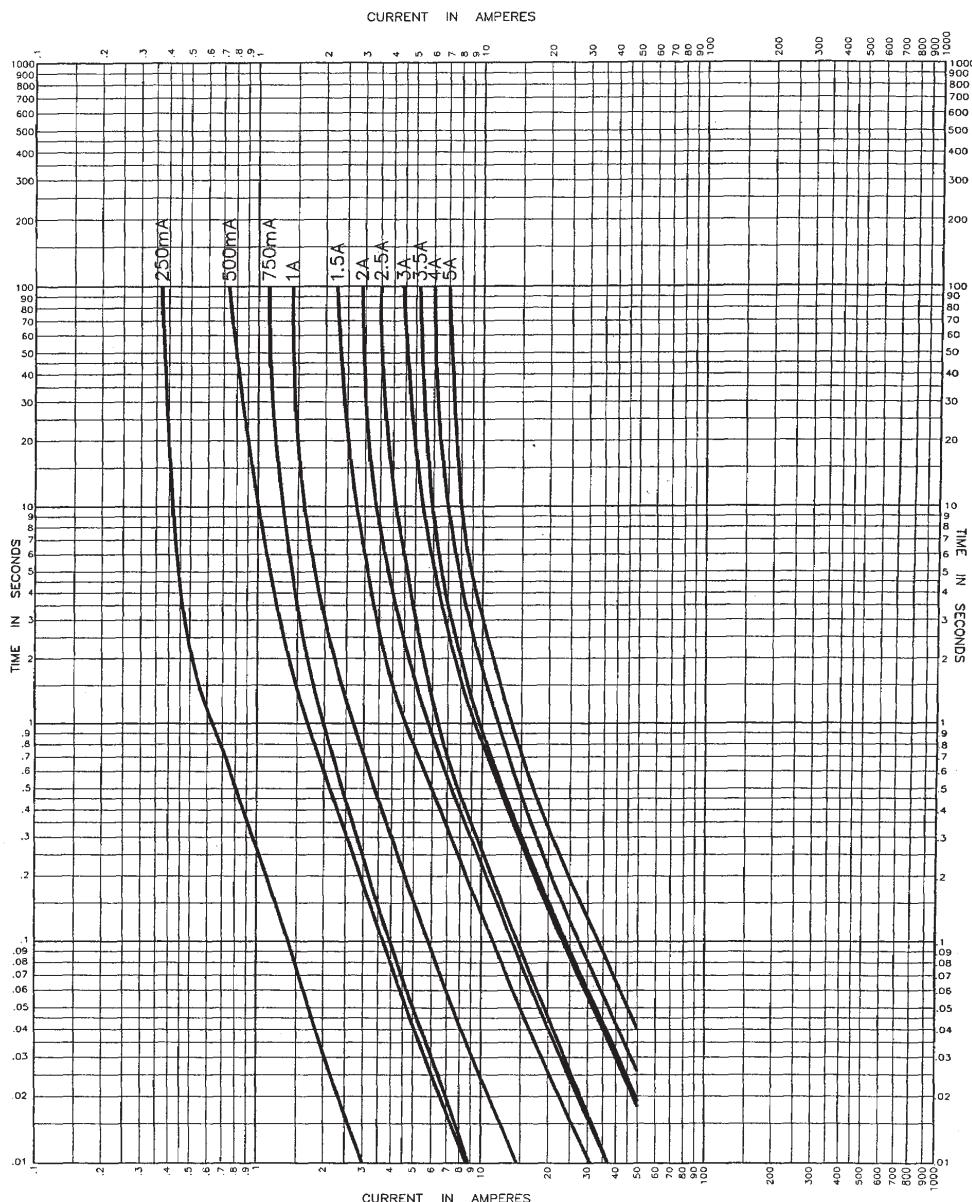
** DC Cold Resistance (Measured at $\leq 10\%$ of rated current)

† Typical Melting I²t (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.

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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