Technical Data 4344

Effective May 2017 Supersedes June 2008

1025TD Time-delay surface mount fuse



BUSSMANN SERIES



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, airto-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	Voltage Rating		Specifications Interrupting Rating*		DC Cold Resistance** (Ω)	Typical Melting	Typical Voltage
	Amps	AC	DC	250Vac	125Vdc	Typical	l ² t†	Drop‡
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 I²t (Measured with a battery bank at rated DC voltage, 10x-rated current, time constant of calibrated circuit less than 50 microseconds

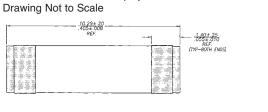
Typical Voltage Drop (Measured at rated current after temperature stabilizes)

• 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



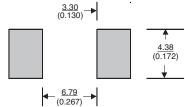
Dimensions – mm (in)

Time-Current Curve

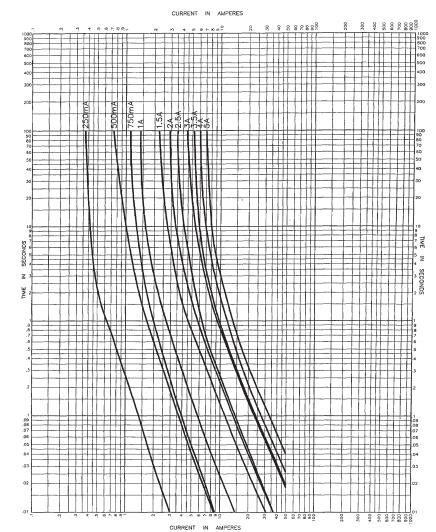


2.77±.15 .109±.006 REF. (TYP. 4 SIDES)

Recommended Pad Layout - mm (in)



Powerina Business Worldwide



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

© 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Eaton:

 TR2/1025TD3A
 TR2/1025TD1.5-R
 TR2/1025TD750-R
 TR2/1025TD1-R
 TR2/1025TD2A
 TR2/1025TD750MA

 TR2/1025TD4-R
 TR2/1025TD3.5A
 TR2/1025TD3.5-R
 TR2/1025TD5-R
 TR2/1025TD1.5A
 TR2/1025TD5A

 TR2/1025TD500-R
 TR2/1025TD4A
 TR2/1025TD500MA
 TR2/1025TD250MA
 TR2/1025TD2.5A
 TR2/1025TD250-R

 TR2/1025TD2.5-R
 TR2/1025TD3-R
 TR2/1025TD2-R
 TR2/1025TD2.5A
 TR2/1025TD250-R