## Technical Data 2530

Effective January 2023 Supersedes May 2017

# 6125TD 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.
- CSA Component Acceptance: 053787 C 000 & Class No: 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., TR1/6125TD500-R

ELECTRICAL CHARACTERISTICS				
% of Amp Rating	Opening Time			
100%	4 Hours Minimum			
200%	1 Second Minimum			
200%	6 2-4 Seconds Typical			
200%	60 Seconds Maximum			

SPECIFICATIONS								
Product	Current	Voltage Interrup		pting	Resistance	Typical	Typical	
Code	Rating	Rating		Rating*		(ohms)**	Melting	Voltage
		AC	DC	125VAC	60VDC	Тур.	l²t†	Drop‡
6125TD500-R	500mA	125V	60V	50A	50A	0.4025	0.716	245 mV
6125TD750-R	750mA	125V	60V	50A	50A	0.2350	1.07	250 mV
6125TD1-R	1A	125V	60V	50A	50A	0.1680	2.88	256 mV
6125TD1.5-R	1.5A	125V	60V	50A	50A	0.0630	2.35	125 mV
6125TD2-R	2A	125V	60V	50A	50A	0.0480	9.45	133 mV
6125TD2.5-R	2.5A	125V	60V	50A	50A	0.0350	16.2	130 mV
6125TD3-R	3A	125V	60V	50A	50A	0.0263	15.3	97 mV
6125TD3.5-R	3.5A	125V	60V	50A	50A	0.0195	14.5	95 mV
6125TD4-R	4A	125V	60V	50A	50A	0.0185	38.8	106 mV
6125TD5-R	5A	125V	60V	50A	50A	0.0133	34.4	100 mV
6125TD7-R	7A	125V	60V	50A	50A	0.0087	90.2	99 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 (Measured at 10% of rated current)

+ Typical Melting I<sup>3</sup>t (Measured with a battery bank at rated DC voltage, 10x-rated current (not to exceed IR), 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/(inches)

TIME CURRENT CURVE





PACKAGING CODE				
Packaging Code	Description			
TR1	1000 pieces of fuses on 12mm tape-and-reel on a 7 inch (177mm) reel per EIA Standard 481			

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Eaton Electronics Division 1000 Eaton Boulevard Cleveland, OH 44122 United States www.eaton.com/electronics

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