### **Bussmann**<sup>®</sup>

6125T

# **SMT Time-Lag Fuse** Subminiature Surface Mount Fuses



Catalog Symbol: 6125T Time-Lag Voltage Rating: 125V AC/DC Interrupting Rating: 50 Amp AC, Power Factor = 1.0

50 Amp DC, Battery Source

## **Physical Size:**

EIA SOCM-6125AA.  $6.1 \times 2.5 \times 2.5 \text{ mm} (L \times W \times H)$ 

### Agency Approvals:

Universal Modular Fuse, IEC127-4 UL Recognition, Std. 248-14, File E19180, Guide JDYX2 CSA Certified, C22.2 No. 248.14, File 53787, Class 1422-30 Additional Approvals Pending

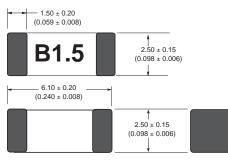
#### **General Information:**

- Surge resistant time-lag fuse.
- · Brazed seals: body to end plates.
- · Compatible with wave soldering.
- Excellent environmental integrity.
- Economical overcurrent protection.

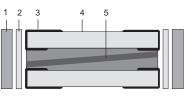
#### **Time Current Characteristics:**

125% of Rating: carry 1 hour min. 200%: Open within 2 minutes. 1000%: Open within 0.01 to 0.1 seconds.

#### **Dimensions - mm (inches)**



#### Construction



Brass end plate (one of two)\*. High temperature brazing alloy preform (one of two). Silver metallization\*. Ceramic body. Spiral wound fusible element.

- 3
- 5.

\*End terminations plated with Ni and 90/10 Sn/Pb after assembly.

#### **Packaging and Ordering Information:**

Tape and Reel: Standard 12mm tape, in compliance with EIA-RS481 (equivalent to IEC 286, Part 3).





#### Package Code

TR = 1,000 pieces on tape on a 178mm reel. SP = 50 pieces on tape in a plastic box. Contact Bussmann if other package quantities are required.

CE logo denotes compliance with European Union Low Voltage Directive (50-1000 VAC, 75-1500 VDC). Refer to BIF document #8002 or contact Bussmann Application Engineering at 314-527-1270 for more information.

#### **Electrical Characteristics**

Part Number (xx=Package Code)	Current Rating (Amperes)	Marking	Typ. Resistance @ ≤ 10% Rated Current (Ohms)	Max. Power Dissipation @ 125% of Rated Current (Milliwatts)					
					XX/6125T-250mA	.25	B.25	4.5	500
					XX/6125T-500mA	.5	B0.5	1.0	500
XX/6125T-1A	1	B1A	0.25	500					
XX/6125T-1.5A	1.5	B1.5	0.10	500					
XX/6125T-2A	2	B2A	0.06	500					
XX/6125T-3A	3	B3A	0.04	1000					
XX/6125T-4A	4	B4A	0.03	1200					
XX/6125T-5A	5	B5A	0.02	1200					

**General Notes:** 

1. Device designed to carry 125% of rated current for one hour minimum. An operating current of 80% or less of rated current is recommended, with further derating required at elevated ambient temperatures

2. All measurements made at 23 ± 3°C ambient temperature with the device mounted on a suitable circuit board trace



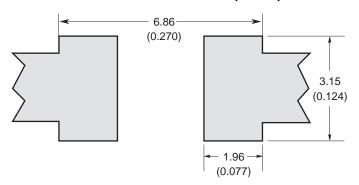
### **Bussmann**®

6125T

# **SMT Time-Lag Fuse** Subminiature Surface Mount Fuses



#### Recommended Land Pattern - mm (inches)



#### Environmental Specifications: Operating Temperature Range:

-65 to +125°C, with proper derating.

#### **Thermal Shock:**

MIL-STD-202, Method 107, Test Condition B (-65 to 125°C), 1000 cycles, fuses soldered to FR-4 glass-epoxy circuit board.

#### Vibration:

MIL-STD-202, Method 204, Test Condition C (55 to 2000 HZ, 10G).

#### Solderability:

Withstands 60 seconds above 200°C, 260°C maximum. **Moisture Resistance:** 

MIL-STD-202, Method 106, 10 day cycle.

#### Solder Leach Resistance & Terminal Adhesion:

EIA - 576 (30 seconds submersion in 260°C tin-lead solder).

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