

## Features

- For use in telecommunication circuit applications requiring low current protection with high surge tolerance
- Overcurrent protection to Telcordia GR-1089-CORE & UL 1950/60950
- Bourns® TISP® products are recommended for the overvoltage section of the circuit
- Agency recognition:  File: E198545

## Telefuse® SMD Power Cross Protection Fuse

### Electrical Characteristics

Model Number	Ampere Rating (A)	Voltage Rating (Vrms)	Typical Cold Resistance (ohms)	Volt-drop @ 100 % In (Volts) max.	Melting I <sup>2</sup> T < 10 msec (A <sup>2</sup> sec.)	Melting I <sup>2</sup> T @ 10 In (A <sup>2</sup> sec.)	Peak Surge Current (Amps) 50 Pulses @ 1 KV 10 s x 1000 s	Peak Surge Current (Amps) 10 Pulses @ 1 KV 10 s x 1000 s	Maximum Power Dissipation (W)
B0500T	0.500	600	0.350	0.28	1.4	1.8	25	35	0.25
B1250T	1.25	600	0.090	0.18	14	17	100	N/A	0.40

% of Amp Rating	Opening Time	
	Minimum	Maximum
100 %	4 hrs.	N/A
200 %	3 sec.	60 sec.
500 %	100 msec.	1.5 sec.
1000 %	30 msec.	300 msec.

Temperature Range.....-55 °C to +125 °C

### Environmental Characteristics

Thermal Shock .....MIL-STD-202, Method 107,  
Test Condition B (-65 °C to +125 °C)

Shock.....MIL-STD-202, Method 213,  
Test Condition I  
(100 Gs peak for 6 milliseconds)

Vibration.....MIL-STD-202, Method 201  
(10-55 Hz, 0.06 inch total excursion)

Salt Spray .....MIL-STD-202, Method 101,  
Test Condition B (48 hrs.)

Insulation Resistance.....MIL-STD-202, Method 302,  
Test Condition A (after opening)  
10,000 ohms minimum

Solderability .....MIL-STD-202, Method 208

Resistance to Solder Heat.....MIL-STD-202, Method 210,  
Test Condition J (235 °C, 30 sec.)

### Physical Characteristics

Body Material .....Ceramic with tin plated brass caps

Solder.....Lead free

Solder Reflow Temperature  
.....240 °C for 30 seconds  
260 °C for 3 seconds

Packaging.....2,000 pcs. per 13 " reel

### Surge Withstand Ratings (Model B1250T)

Voltage	Peak Surge Current	Maximum Rise/Duration Time	Repetitions
800 V	100 A	10 µs x 560 µs	4 Pulses (2 each polarity)
1000 V	100 A	10 µs x 1000 µs	100 Pulses (50 each polarity)
2500 V	500 A	2 µs x 10 µs	40 Pulses (20 each polarity)
5000 V	500 A	2 µs x 10 µs	4 Pulses (2 each polarity)

### Power Cross Rating

Overload Current	Voltage (VAC)	Clearing Time Limit	
		1.25 A	500 mA
200 % Fuse Rating	600 V	max. 60 sec.	max. 60 sec.
2.2 A	600 V	max. 15 min.	max. 2 min.
7 A	600 V	max. 1 sec.	max. 100 msec.
40 A	600 V	max. 50 msec.	max. 30 msec.
60 A	600 V	max. 20 msec.	max. 20 msec.

### Ordering Information

Part Number	Current Rating
B0500T	500 mA
B1250T	1.25 A



Circuit Protection Solutions

#### Asia-Pacific:

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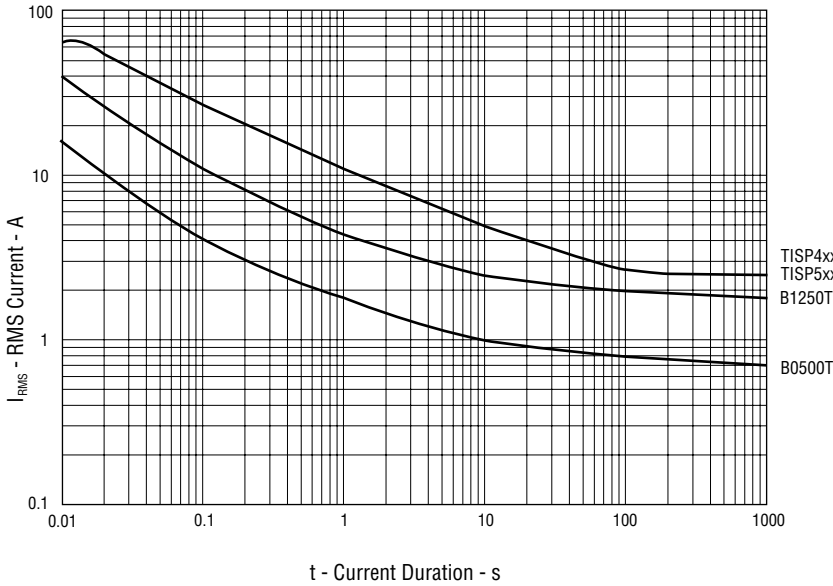
#### The Americas:

TEL +1-951 781-5500 • FAX +1-951 781-5700

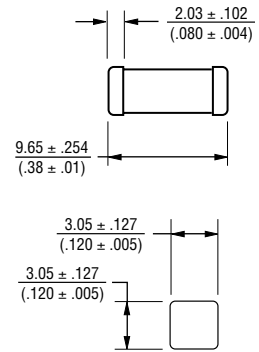
[www.bourns.com](http://www.bourns.com)

Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.

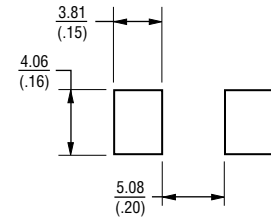
## Typical Current Withstand vs. Current Duration



## Product Dimensions

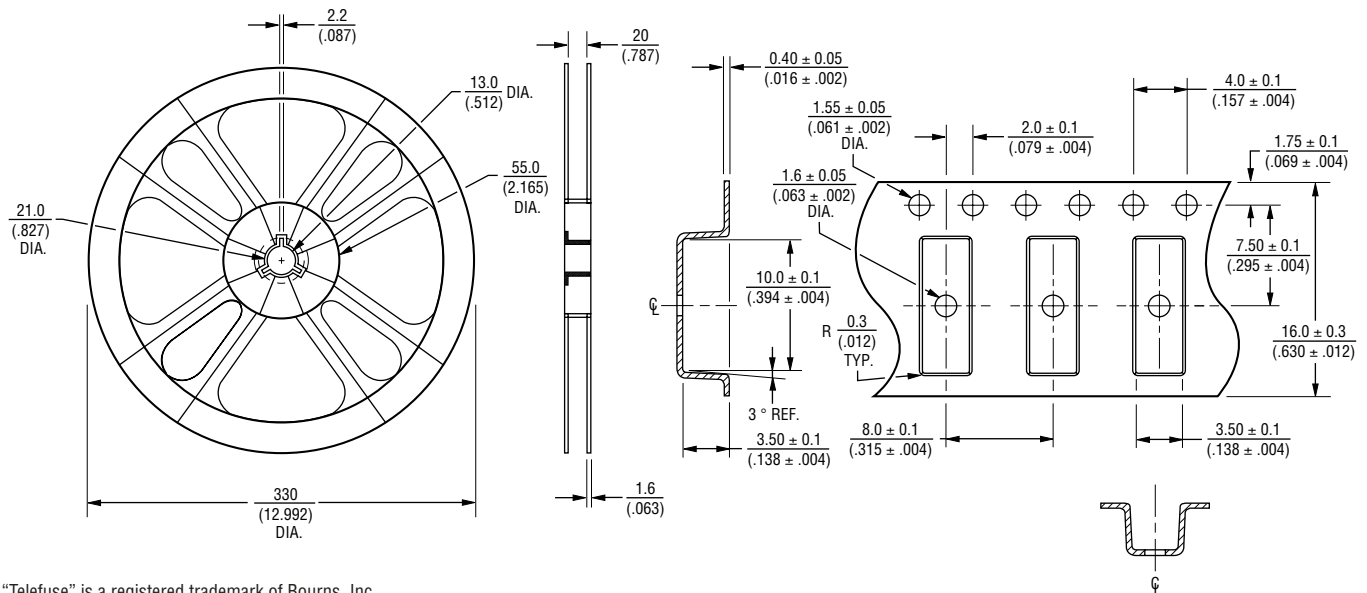


## Recommended Pad Layout



DIMENSIONS:  $\frac{\text{mm}}{\text{(INCHES)}}$

## Packaging Specifications



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