

Features

- Recommended for reflow soldering
- Rotor design compatible with pick and place and automatic adjustment equipment
- 3 mm size meets EIA/EIAJ standard trimmer footprint
- Available as bottom adjust only

- RoHS compliant* - see [processing information](#) on lead free surface mount trimmers

TC33 - 3 mm SMD Trimming Potentiometer

Electrical Characteristics

Standard Resistance Range100 ohms to 1 megohm (see standard resistance table)
 Resistance Tolerance±25 % std.
 Absolute Minimum Resistance
 ≤ 1 K Ohms20 ohms max.
 >1 K Ohms2 % max. of TR
 Contact Resistance Variation ..5 % max.
 ResolutionEssentially infinite
 Adjustment Angle200 ° min.

Environmental Characteristics

Power Rating (50 VDC max.)
 70 °C0.1 watt
 Temperature Range-40 °C to +100 °C
 Temperature Coefficient±250 ppm/°C
 Humidity-40 °C, 95 %RH
 TRS max.±5 %
 Load Life
@ 70 °C rated power 1000 hours
 TRS ±5 %
 Rotational Cycling20 cycles
 TRS ±5 %

Physical Characteristics

Torque0.98-11.76 mN-m max.
 Mechanical Angle*
Continuous; 270 ° ±20 °
 MarkingPart marking code
 Standard Packaging ...2000 pcs./7 " reel
 Adjustment ToolH-90

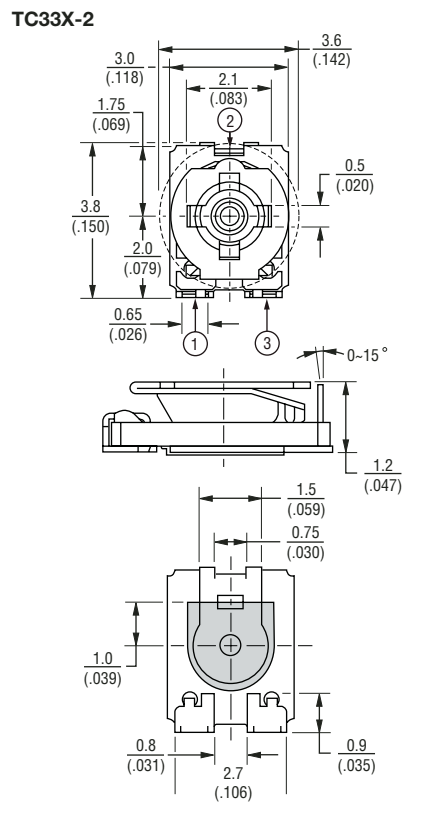
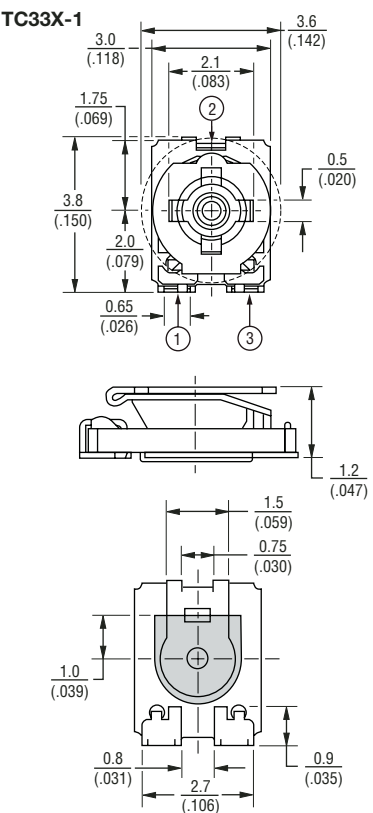
*The lower limit of the rotational angle standard is 250 °, but there is non-valid rotational range of 10 % or less on each end.

How To Order

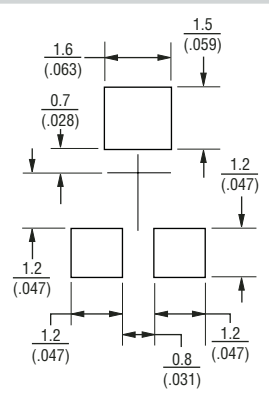
TC33 B - 1 - 103 E

Model _____
 Style _____
 Standard Product Indicator _____
 TC33B:
 -1 = Single Slot Bottom Adjust
 TC33X:
 -1 = Continuous Rotation
 -2 = Rotational Stop
 Resistance Code _____
 Embossed Tape Designator _____
 E = 2000 pcs./7 " Reel (B Style)
 E = 2500 pcs./7 " Reel (X Style)
 G = 9000 pcs./13 " Reel (X Style)

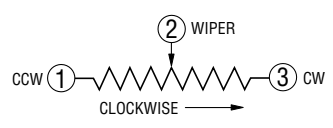
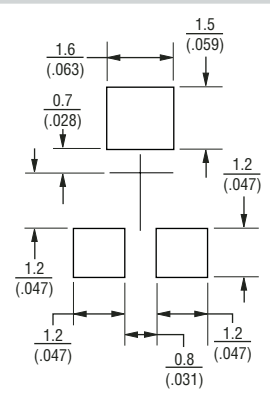
Product Dimensions



Recommended Land Pattern



Recommended Land Pattern



TOLERANCES: ± $\frac{0.3}{(.010)}$ EXCEPT WHERE NOTED
 DIMENSIONS: $\frac{MM}{(INCHES)}$

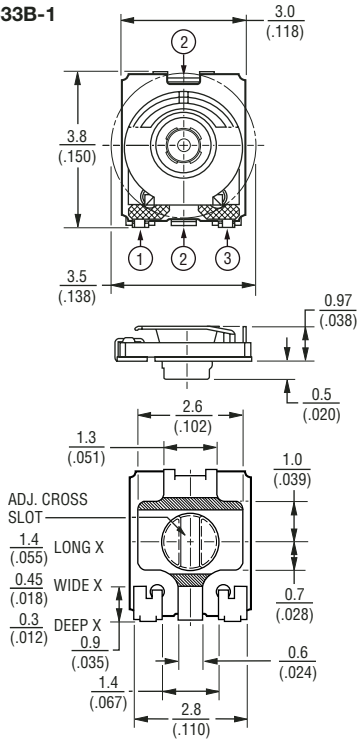
*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

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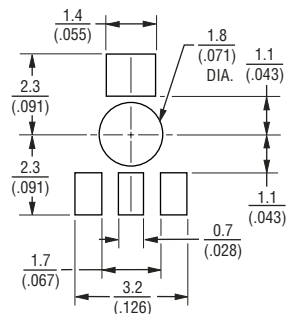
BOURNS®

Product Dimensions (Continued)

TC33B-1



Recommended Land Pattern



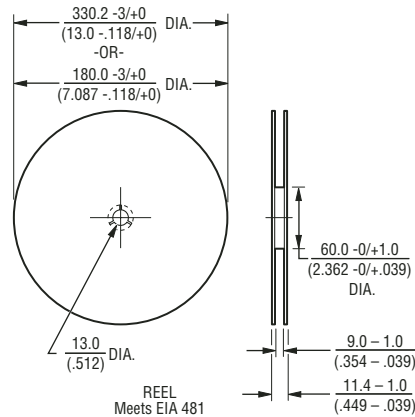
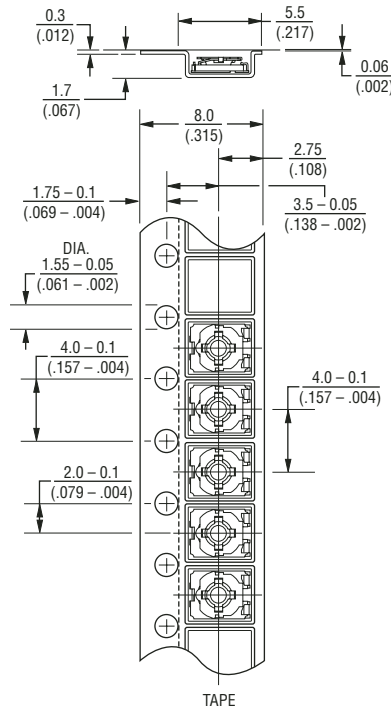
Standard Resistance Table

Resistance (Ohms)	Resistance Code
100	101
200	201
500	501
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

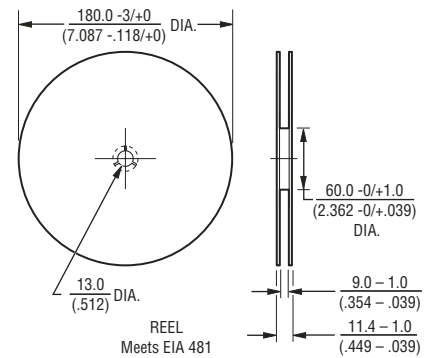
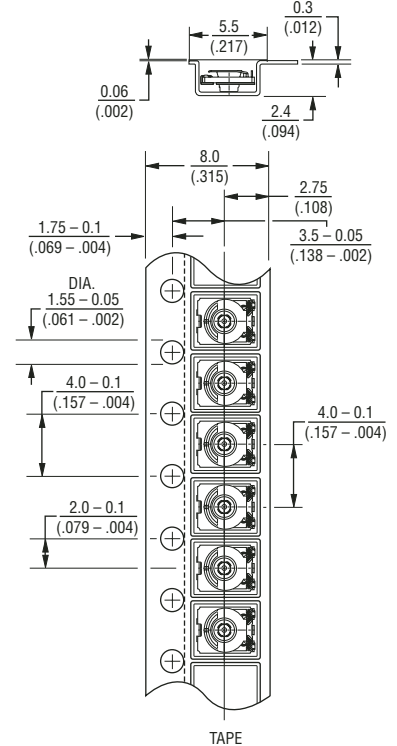
Popular distribution resistance values listed in boldface.

Packaging Specifications

TC33X-1, -2



TC33B-1



TOLERANCES: $\pm \frac{0.3}{(.010)}$ EXCEPT WHERE NOTED

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

REV. 05/08

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