

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 Range
100 ohms to 1 megohm
 (see standard resistance table)
 Resistance Tolerance ±25 % std.
 Absolute Minimum Resistance
 ≤ 1 K Ohms 20 ohms max.
 > 1 K Ohms 2 % max. of TR
 Contact Resistance Variation .. 5 % max.
 Resolution Essentially infinite
 Adjustment Angle 200 ° min.

Environmental Characteristics

Power Rating (50 VDC max.)
 70 °C 0.1 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 Cycling 20 cycles
 TRS ±5 %

Physical Characteristics

Torque..... 0.98-11.76 mN-m max.
 Mechanical Angle*
 Continuous; 270 ° ±20 °
 Marking..... Part marking code
 Standard Packaging.. 2000 pcs./7 " reel
 Adjustment Tool..... H-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.

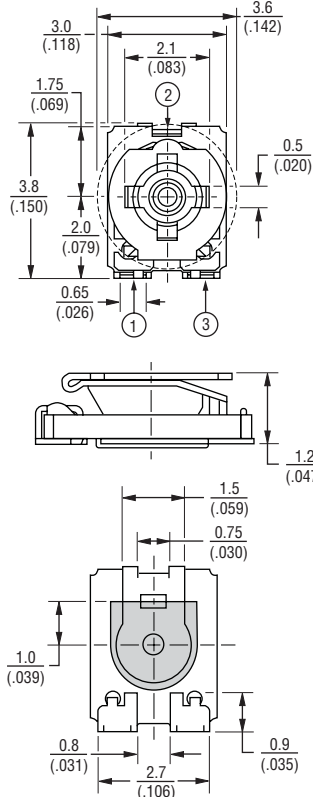
How To Order

TC33 B - 1 - 103 E

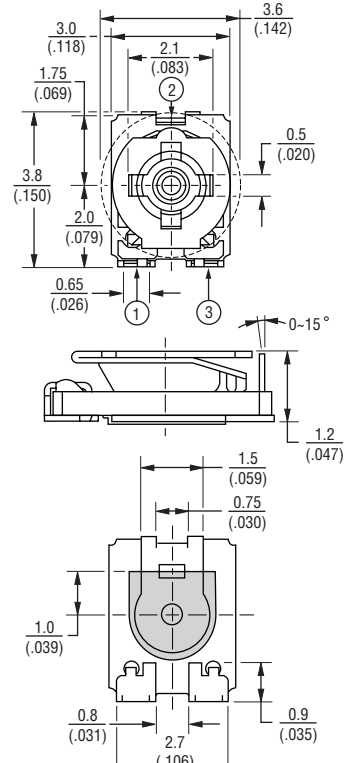
Model _____
 Style _____
 Standard Product Indicator _____
 TC33B:
 -1 = Single Slot Bottom Adjust
 TC33X:
 -1 = Continuous Rotation
 -2 = Rotational Stop
 Resistance Code _____
 Embossed Tape Designator _____
 E = 2000 pcs./7 " Reel (B Style)
 X = 2500 pcs./7 " Reel (X Style)
 G = 9000 pcs./13 " Reel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

Product Dimensions

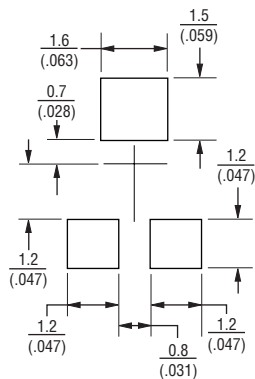
TC33X-1



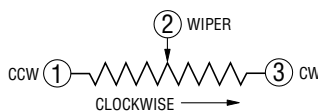
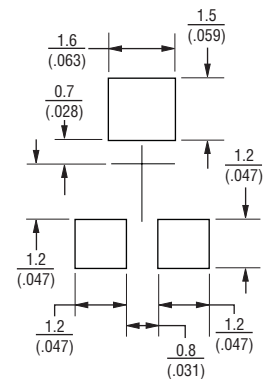
TC33X-2



Recommended Land Pattern



Recommended Land Pattern



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$
 TOLERANCES: ± $\frac{0.3}{(0.010)}$ EXCEPT WHERE NOTED

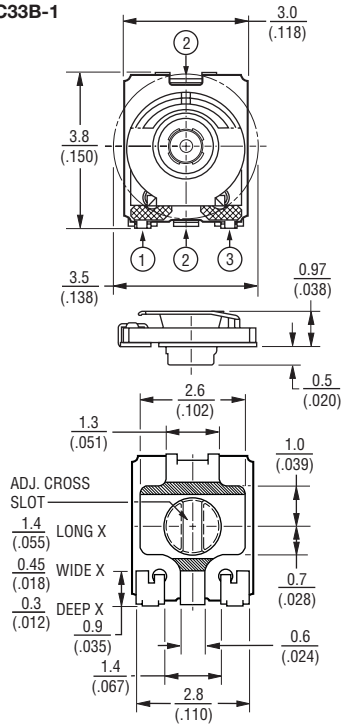
*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.
 Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications

TC33 - 3 mm SMD Trimming Potentiometer

BOURNS®

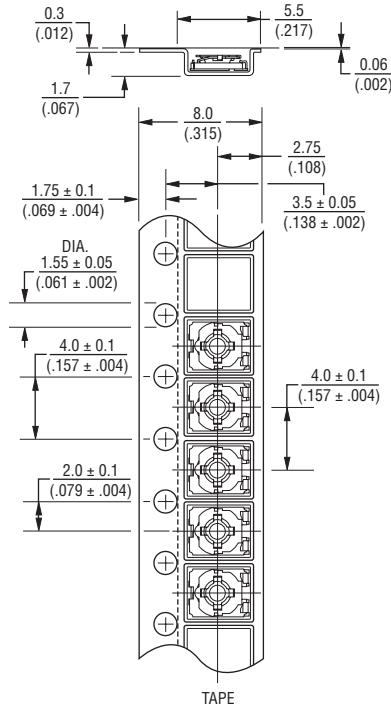
Product Dimensions (Continued)

TC33B-1

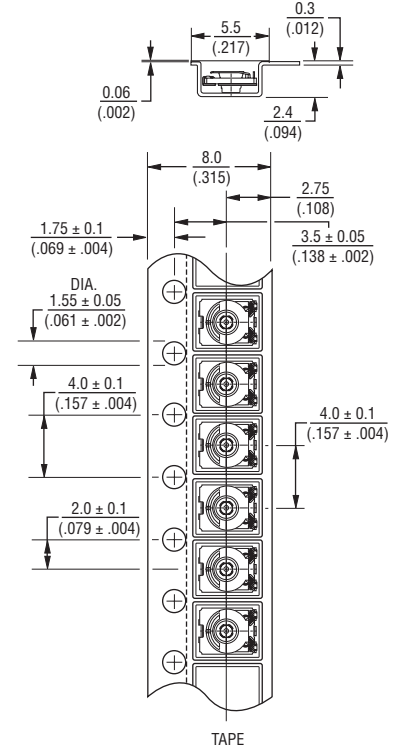


Packaging Specifications

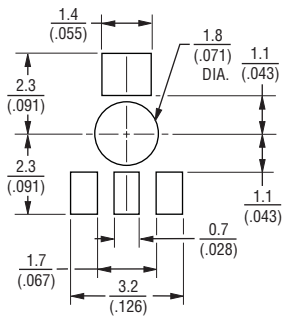
TC33X-1, -2



TC33B-1



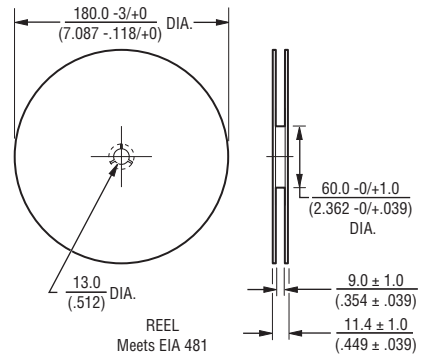
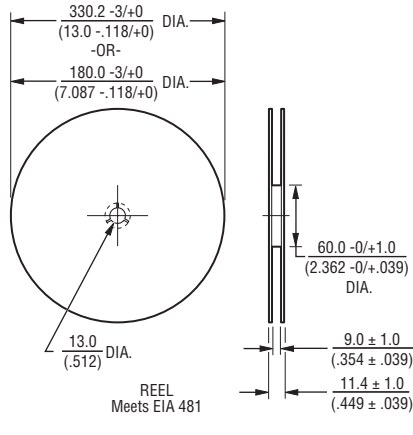
Recommended Land Pattern



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.



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

TOLERANCES: $\pm \frac{0.3}{(.012)}$ EXCEPT WHERE NOTED