



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 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

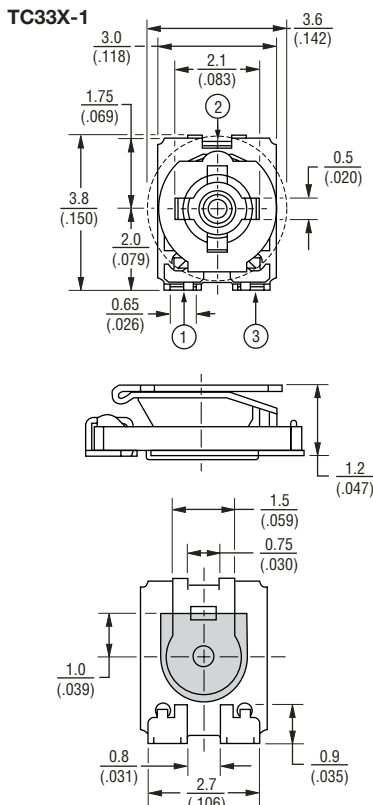
*The lower limit of the rotational angle standard is 250 °, but there is non-valid rotational range of 10 % or less on each end.

How To Order

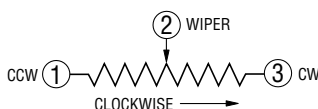
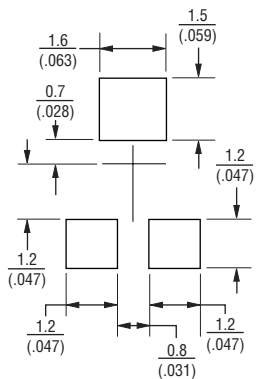
TC33 B - 1 - 103 E

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)

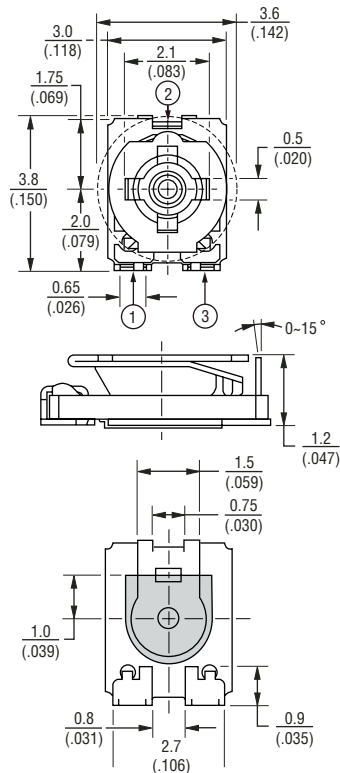
Product Dimensions



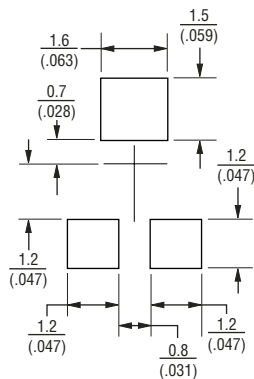
Recommended Land Pattern



TC33X-2



Recommended Land Pattern



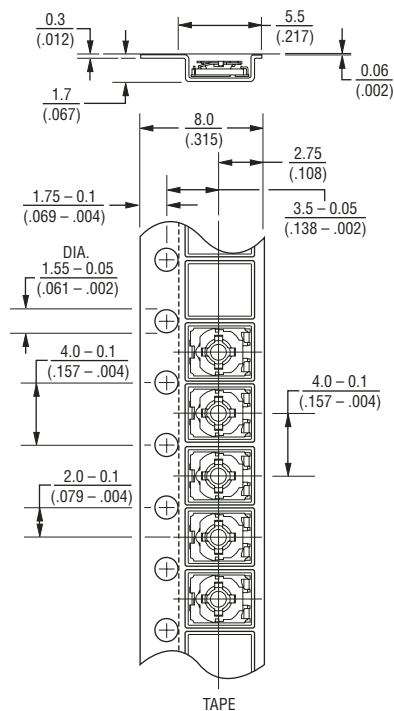
TOLERANCES: ± 0.3 (.010) EXCEPT WHERE NOTED

DIMENSIONS: MM (INCHES)

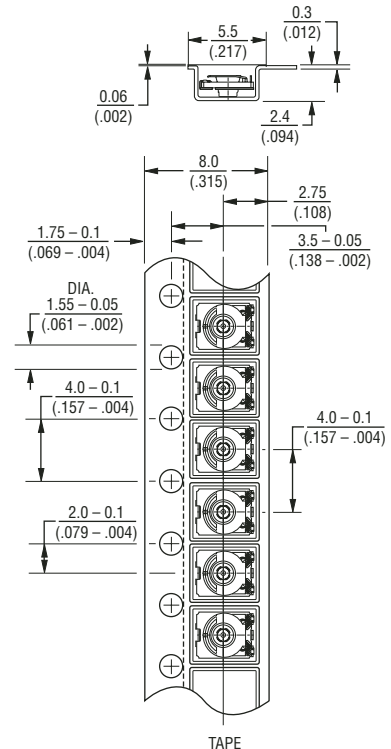
BOURNS®

Packaging Specifications

TC33X-1, -2



TC33B-1



Technical drawing of a reel assembly, showing front and side views with dimensions.

Front View Dimensions:

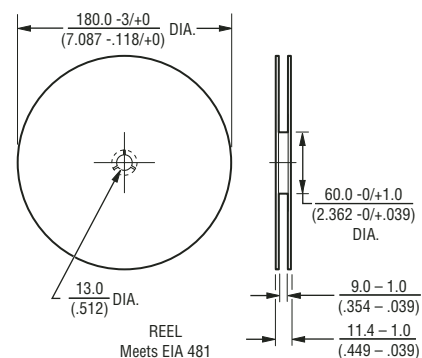
- Overall width: $330.2 \text{ } ^{-3/+0}$ DIA.
- Overall width (Alternative): $180.0 \text{ } ^{-3/+0}$ DIA.
- Inner diameter: $13.0 \text{ } ^{(.512)}$ DIA.

Side View Dimensions:

- Overall height: $60.0 \text{ } ^{-0/+1.0}$ DIA.
- Top section height: $9.0 \text{ } ^{-1.0}$ DIA.
- Bottom section height: $11.4 \text{ } ^{-1.0}$ DIA.

Labels:

- REEL
- Meets EIA 481



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

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

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

Popular distribution resistance values listed in boldface.

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

REV. 05/08