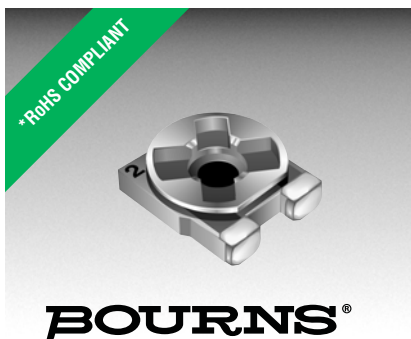




Features

- Recommended for reflow soldering
- Rotor design compatible with pick and place and automatic adjustment equipment
- 3 mm size meets EIA/EIAJ standard trimmer footprint
- RoHS compliant* - see [processing information](#) on RoHS compliant surface mount trimmers

- For trimmer applications/processing guidelines, [click here](#)

TC33 - 3 mm SMD Trimpot® 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.

Aqueous cleaning not recommended.

How To Order

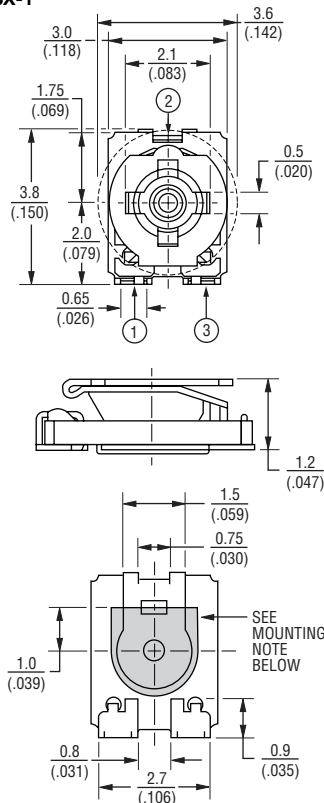
TC33 B - 1 - 103 E

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)

*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.

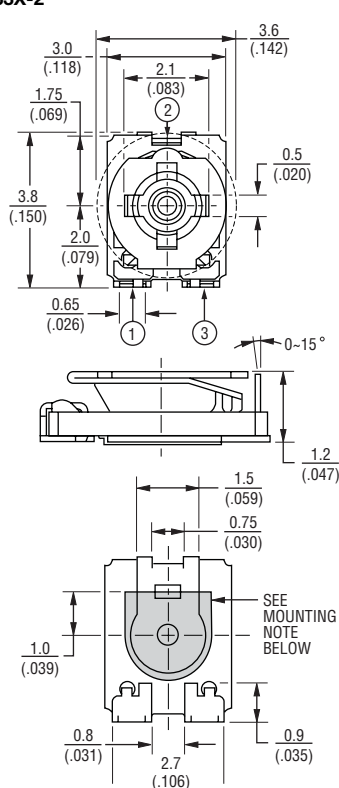
Product Dimensions

TC33X-1



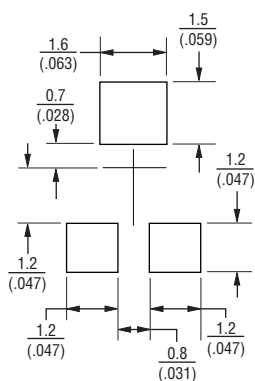
Mounting Note:
The gray area can be used to apply cement to hold the unit in place during board processing, if required.

TC33X-2

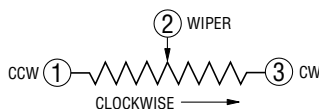
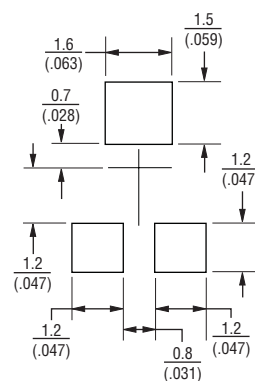


Mounting Note:
The gray area can be used to apply cement to hold the unit in place during board processing, if required.

Recommended Land Pattern



Recommended Land Pattern



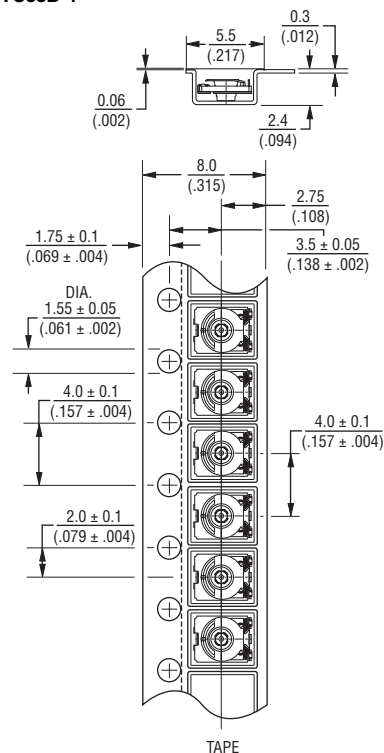
DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

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

BOURNS®

Packaging Specifications

TC33X-1, -2



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

Front View Dimensions:

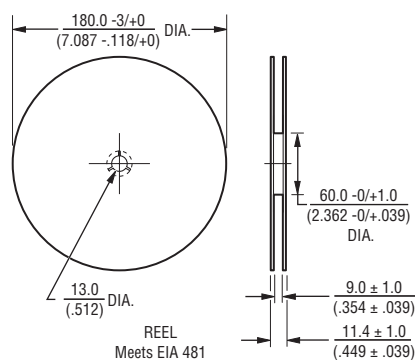
- Overall Diameter: $330.2 \text{ } ^{-3/+0}_{-0R}$ DIA.
- Inner Diameter: $180.0 \text{ } ^{-3/+0}_{(7.087 \text{ } ^{-.118/+0})}$ DIA.
- Central Hole Diameter: $13.0 \text{ } ^{-.512}_{(512)}$ DIA.

Side View Dimensions:

- Top Flange Thickness: $60.0 \text{ } ^{-0/+1.0}_{(2.362 \text{ } ^{-0/+0.039})}$ DIA.
- Shaft Diameter: $9.0 \pm 1.0 \text{ } ^{-.039}_{(354 \pm .039)}$
- Bottom Flange Thickness: $11.4 \pm 1.0 \text{ } ^{-.039}_{(449 \pm .039)}$

Text:

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

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

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

"Trimpot" is a registered trademark of Bourns, Inc.
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.