

*RoHS COMPLIANT



BOURNS®

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 Range100 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



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

*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 Trimpot® 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

REV. 06/11

"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.