

#### **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 Oams ...... 20 ohms max. K Obrths ...... 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** 

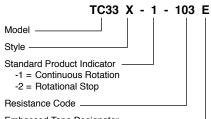
.....20 cycles, TRS ±10 %

#### **Physical Characteristics**

Torque............ 0.98-11.76 mN-m max. Mechanical Angle ......Continuous Marking.....Part marking code Standard Packaging ... 2000 pcs./7 " reel Adjustment Tool ...... H-90

Aqueous cleaning not recommended.

#### **How To Order**



Embossed Tape Designator

E = 2500 pcs./7 " Reel

G = 9000 pcs./13 " Reel

Tape and reel material meets Antistatic ANSI/ ESD 5541-2003 packaging standards.



#### WARNING **Cancer and Reproductive Harm** www.P65Warnings.ca.gov

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at

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#### **Product Dimensions**

TC33X-1 3.0 (.118) (.083)1.75 (.069)(.150)(.079) (.059)0.75 (.030)SEE MOUNTING NOTE BELOW

Mounting Note:

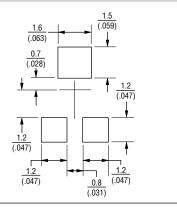
The gray area can be used to apply cement to hold the unit in place during board processing, if required

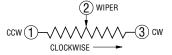
(.106)

0.9

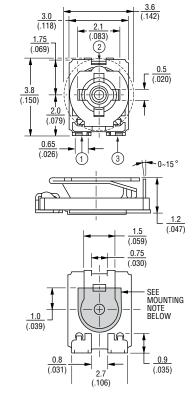
(.035)

#### **Recommended Land Pattern**





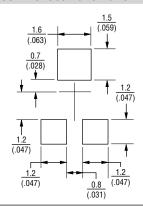
#### TC33X-2



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**



DIMENSIONS: (INCHES)

TOLERANCES: ± **EXCEPT WHERE NOTED** (.010)

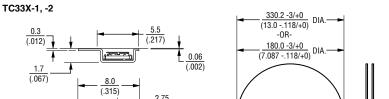
## TC33 - 3 mm SMD Trimpot® Trimming Potentiometer

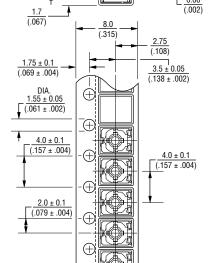
**Packaging Specifications** 

#### **Standard Resistance Table**

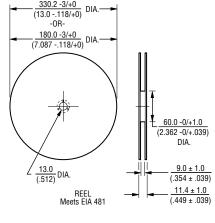
Resistance	Resistance		
(Ohms)	Code		
100	101		
200	201		
500	501		
1,000	102		
2,000	202		
5,000	502		
10,000	103		
20,000	203		
50,000	503		
100,000	104		
200,000	204		
500,000	504		
1,000,000	105		

Popular distribution resistance values listed in boldface.





TAPE



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

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TC33X-2-503E	TC33X-2-504G	TC33X-2-503G	TC33X-2-501E	TC33X-2-501G	TC33X-2-202E	TC33X-2-203G
TC33X-2-203E	TC33X-2-204G	TC33X-2-201E	TC33X-2-201G	TC33X-2-204E	TC33X-2-202G	TC33X-2-302G
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TC33X-1-103E	TC33X-1-501E	TC33B-1-104E	TC33X-1-504E	TC33B-1-202E	TC33X-1-101E	TC33B-1-503E
TC33X-1-204E	TC33X-1-201E	TC33X-1-105E	TC33X-1-202E	TC33B-1-203E	TC33X-2-474E	TC33X-1-102E
TC33X-1-503E	TC33B-1-504E	TC33B-1-102E	TC33X-1-104E	TC33X-1-502E	TC33X-2-333E	TC33B-1-204E
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