

## Features

- Surface Mount 3 mm Square Single-Turn Cermet / Sealed
- Compatible with surface mount manufacturing processes
- Rotor stop for "in-circuit" adjustment
- 100 cycle rotational and seal life
- Plastic housing for RF applications
- Reverse pin layout option (Model 3313X)
- RoHS compliant\* - see [processing information](#) on RoHS compliant surface mount trimmers
- For trimmer applications/processing guidelines, [click here](#)

## 3313 - 3 mm Trimpot® Trimming Potentiometer

### Electrical Characteristics

Standard Resistance Range ..... 10 ohms to 2 megohms  
 (see standard resistance table)  
 Resistance Tolerance ..... ±20 % std.  
 End Resistance ..... 1 % or 3 ohms max.  
 (whichever is greater)  
 Contact Resistance Variation ..... 3 % or 3 ohms  
 Adjustability  
 Voltage Divider ..... ±0.1 %  
 Rheostat ..... ±0.2 %  
 Resolution ..... Infinite  
 Insulation Resistance ..... 500 vdc.  
 100 megohms min.  
 Dielectric Strength  
 Sea Level ..... 500 vac  
 70,000 Feet ..... 350 vac  
 Adjustment Angle ..... 220° nom.

### Environmental Characteristics

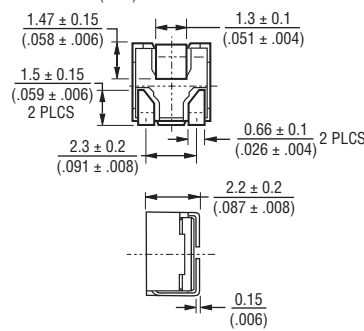
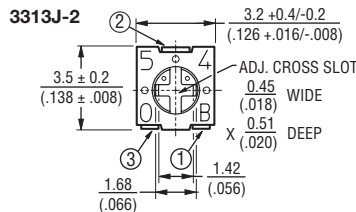
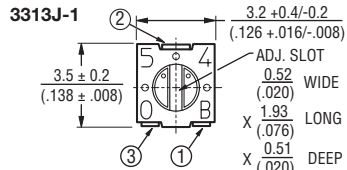
Max. Soldering Exposure ..... 260 °C/5 seconds  
 Power Rating (200 volts max.)  
 70 °C ..... 0.125 watt  
 125 °C ..... 0 watt  
 Operating Temp. Range ..... -55 °C to +125 °C  
 Temperature Coefficient  
 ..... ≤100 ohms ±150 ppm/°C;  
 ..... >100 ohms ±100 ppm/°C  
 Seal Test ..... 85 °C Fluorinert†  
 Humidity ..... MIL-STD 202, Method 106  
 (no vibration) TRS ±3 %;  
 IR 10 megohms  
 Vibration ..... 20 G TRS ±1 %; VRS ±1 %  
 Shock ..... 100 G TRS ±1 %; VRS ±1 %  
 Load Life ..... 1000 hours  
 @ 70 °C Rated Power; TRS ±3 %  
 Rotational Life ..... 100 cycles TRS ±3 %  
 Thermal Shock ..... 5 cycles  
 TRS ±2 %; VRS ±1 %

### Physical Characteristics

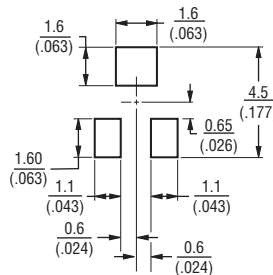
Mechanical Angle ..... 250 ° nom.  
 Torque ..... 50 g-cm max.  
 Stop Strength ..... 200 g-cm min.  
 Pushover Strength ("S" Style only)  
 ..... 1.6 Kilograms (3.5 lbs) minimum  
 Flammability ..... U.L. 94V-0  
 Weight ..... Approx. 0.01 oz.  
 Marking ..... Resistance code  
 and date code  
 Wiper ..... 50 % (Actual TR) ±10 %  
 Standard Packaging  
 J, X Styles ..... 1000 pcs./7 " reel  
 S Style ..... 200 pcs./7 " reel  
 Adjustment Tool ..... H-91

\*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.  
 †"Fluorinert" is a registered trademark of 3M Co.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

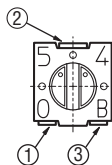
### Product Dimensions



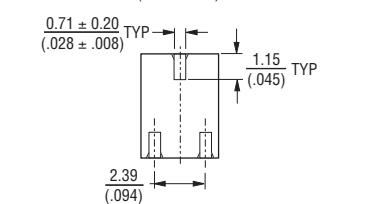
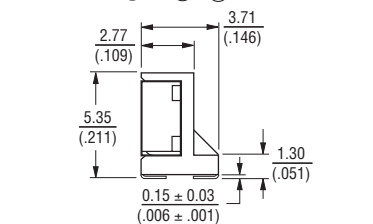
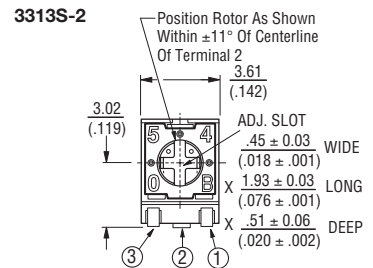
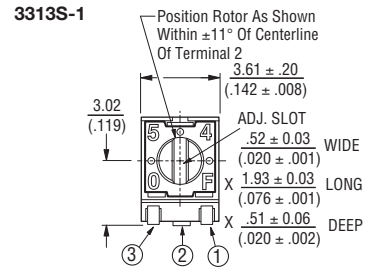
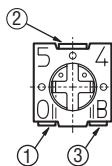
#### RECOMMENDED LAND PATTERN



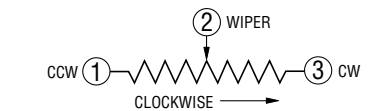
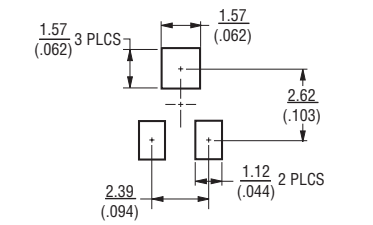
#### 3313X-1 (Reverse Pin Layout)



#### 3313X-2 (Reverse Pin Layout)



#### RECOMMENDED LAND PATTERN

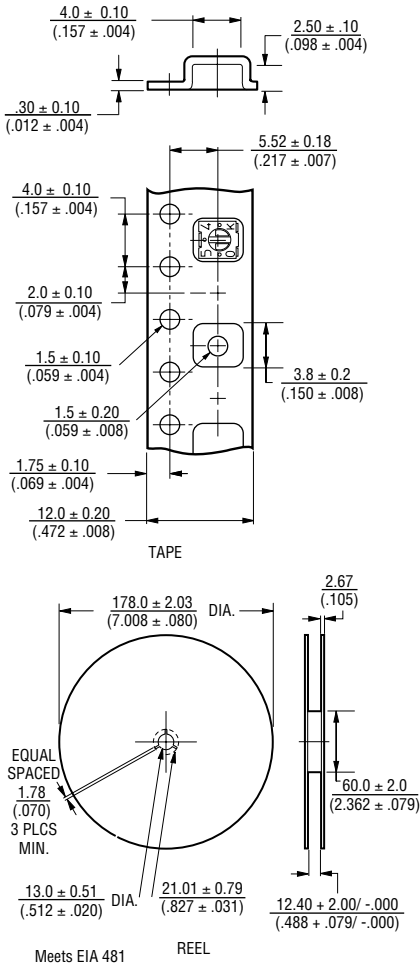


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$   
 TOLERANCES: ±  $\frac{0.25}{(0.010)}$  EXCEPT WHERE NOTED

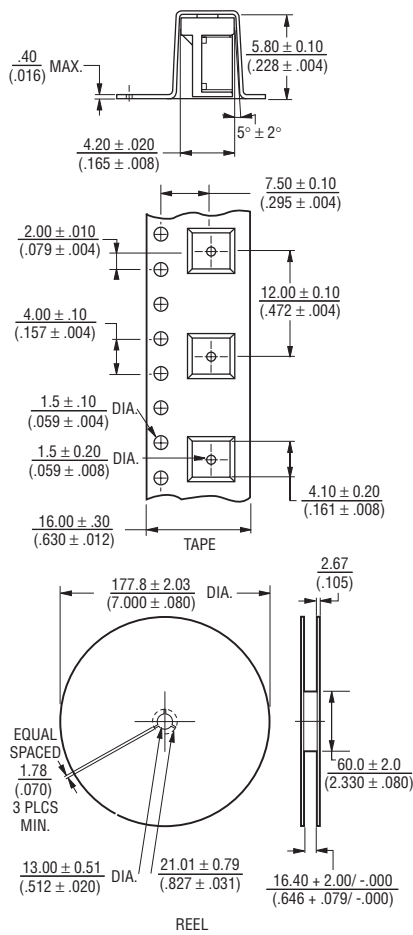
# 3313 - 3 mm Trimpot® Trimming Potentiometer

# BOURNS®

## 3313J, X Packaging Specifications



## 3313S Packaging Specifications



## Standard Resistance Table

Resistance (Ohms)	Part Marking Code	Resistance Code
10	A1	100
20	21	200
50	51	500
100	A2	101
200	22	201
500	52	501
1,000	A3	102
2,000	23	202
5,000	53	502
10,000	A4	103
20,000	24	203
50,000	54	503
100,000	A5	104
200,000	25	204
500,000	55	504
1,000,000	A6	105
2,000,000	26	205

Popular distribution resistance values listed in boldface. Special resistances available.

## How To Order

**3313 J - 1 - 502 E**

Model \_\_\_\_\_

Style \_\_\_\_\_

Standard or Modified \_\_\_\_\_

Product Indicator \_\_\_\_\_

-1 = Single Slot

-2 = Cross Slot

Resistance Code \_\_\_\_\_

Embossed Tape \_\_\_\_\_

1000 pcs. / 7" Reel (J, X Styles)

200 pcs. / 7" Reel (S Style)

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

TOLERANCES:  $\pm \frac{0.25}{(.010)}$  EXCEPT WHERE NOTED