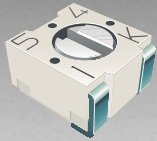


RoHS COMPLIANT



**BOURNS®**

## 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
- Patent #5043695 assembly for seal integrity
- Plastic housing for RF applications
- RoHS compliant\* - see processing information on lead free surface mount trimmers

## 3313 - 3 mm 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

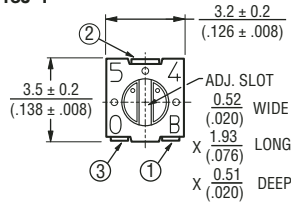
Max. Soldering Exposure  
 .....260 °C/5 seconds  
 Power Rating (200 volts max.)  
 70 °C .....0.125 watt  
 125 °C .....0 watt  
 Operating Temp. Range  
 .....-55 °C to +125 °C  
 Temperature Coefficient  
 .....≤100 ohms ±150 ppm/°C;  
 >100 ohms ±100 ppm/°C  
 Seal Test.....85 °C Fluorinert†  
 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

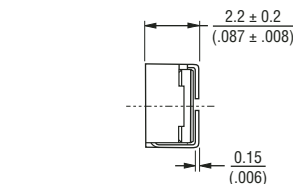
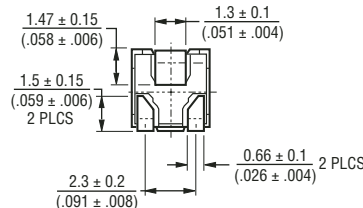
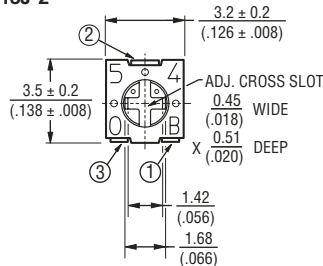
Mechanical Angle .....250 ° nom.  
 Torque .....50 g-cm max.  
 Stop Strength.....200 g-cm min.  
 Pushover Strength ("S" only)  
 .....1.6 Kilograms (3.5 lbs) minimum  
 Flammability .....U.L. 94V-0  
 Weight.....Approx. 0.01 oz.  
 Marking .....Resistance code  
 and date code  
 Wiper.....50 % (Actual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

### Product Dimensions

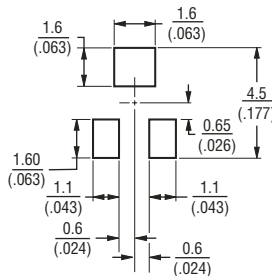
3313J-1



3313J-2



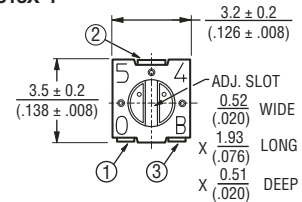
### RECOMMENDED LAND PATTERN



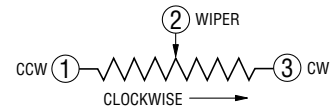
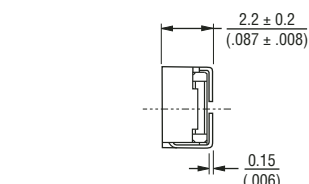
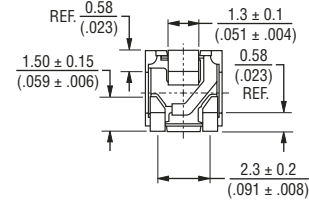
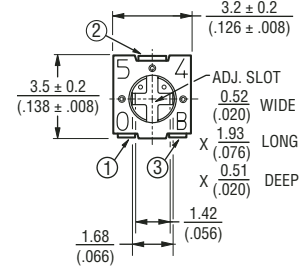
TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

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

3313X-1



3313X-2



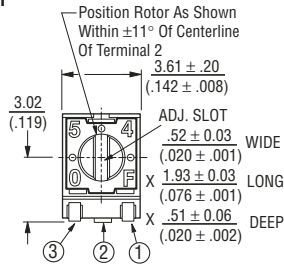
\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.  
 †"Fluorinert" is a registered trademark of 3M Co.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

# 3313 - 3 mm Trimming Potentiometer

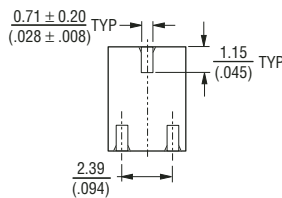
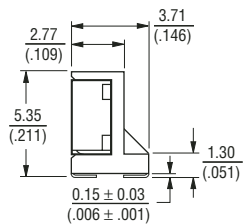
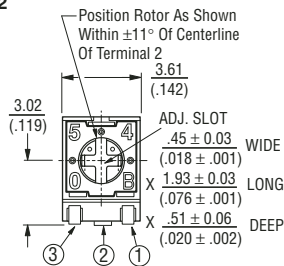


## Product Dimensions

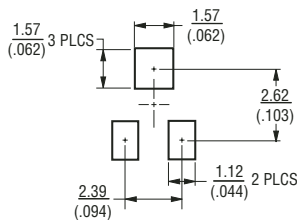
3313S-1



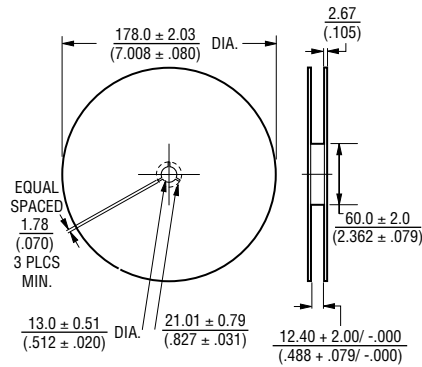
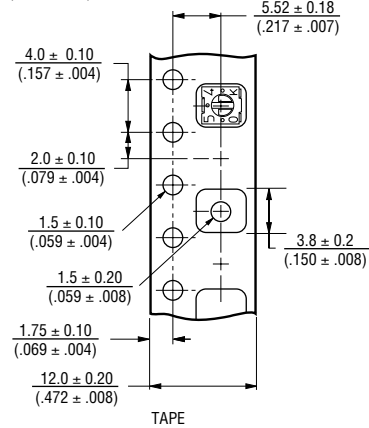
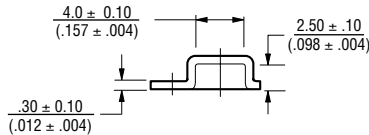
3313S-2



### RECOMMENDED LAND PATTERN



## 3313J/X Packaging Specifications



Meets EIA 481 REEL

TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

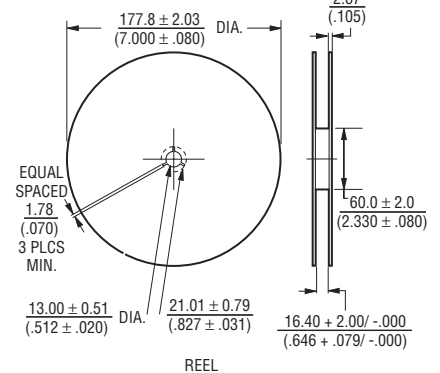
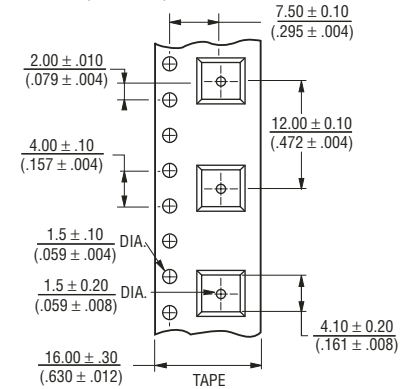
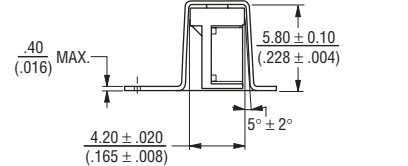
DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

## 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 Style)  
 200 pcs. / 7" Reel (S Style)

## 3313S Packaging Specifications



## Standard Resistance Table

Resistance (Ohms)	Part Marking Code	Resistance Code
10	A1	100
20	21	200
50	51	500
<b>100</b>	<b>A2</b>	<b>101</b>
<b>200</b>	<b>22</b>	<b>201</b>
<b>500</b>	<b>52</b>	<b>501</b>
<b>1,000</b>	<b>A3</b>	<b>102</b>
<b>2,000</b>	<b>23</b>	<b>202</b>
<b>5,000</b>	<b>53</b>	<b>502</b>
<b>10,000</b>	<b>A4</b>	<b>103</b>
<b>20,000</b>	<b>24</b>	<b>203</b>
<b>50,000</b>	<b>54</b>	<b>503</b>
<b>100,000</b>	<b>A5</b>	<b>104</b>
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.