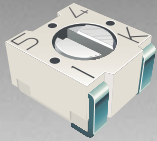


\*RoHS COMPLIANT



**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**

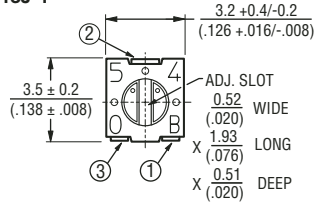
Max. Soldering Exposure .....260 °C/5 seconds  
 Power Rating (200 volts max.)  
 70 °C .....0.125 watt  
 125 °C .....0 watt  
 Operating Temp. Range .....-55 °C to +125 °C  
 Temperature Coefficient  
 .....≤100 ohms ±150 ppm/°C;  
 >100 ohms ±100 ppm/°C  
 Seal Test.....85 °C Fluorinert†  
 Humidity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

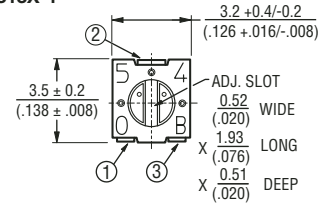
Mechanical Angle .....250 ° nom.  
 Torque .....50 g-cm max.  
 Stop Strength.....200 g-cm min.  
 Pushover Strength ("S" only) .....1.6 Kilograms (3.5 lbs) minimum  
 Flammability .....U.L. 94V-0  
 Weight.....Approx. 0.01 oz.  
 Marking .....Resistance code and date code  
 Wiper.....50 % (Actual TR)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

**Product Dimensions**

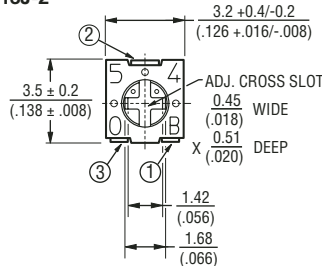
3313J-1



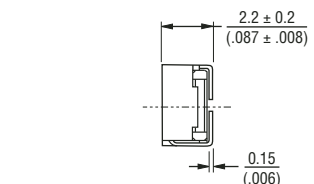
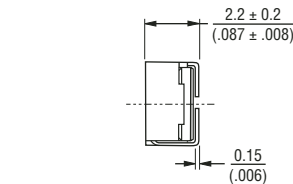
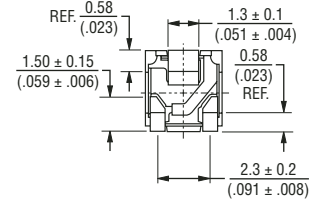
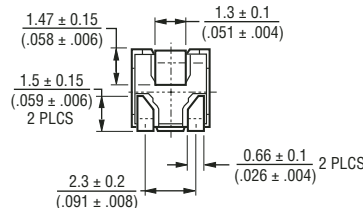
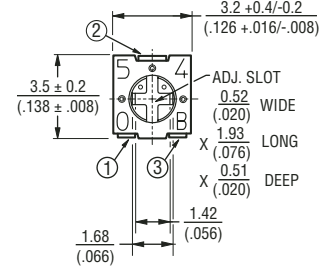
3313X-1



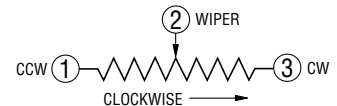
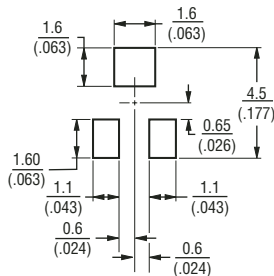
3313J-2



3313X-2



**RECOMMENDED LAND PATTERN**



TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

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

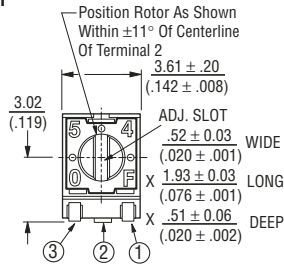
\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.  
 †"Fluorinert" is a registered trademark of 3M Co.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

# 3313 - 3 mm Trimming Potentiometer

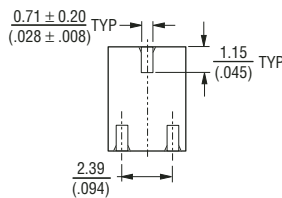
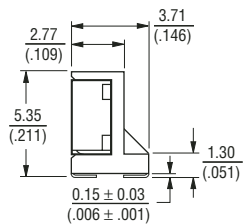
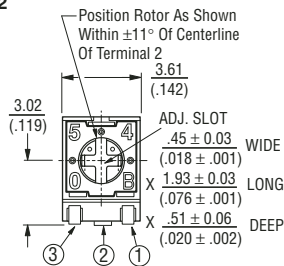


## Product Dimensions

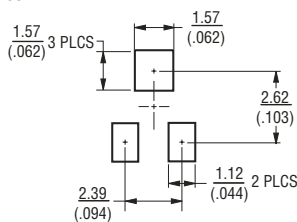
3313S-1



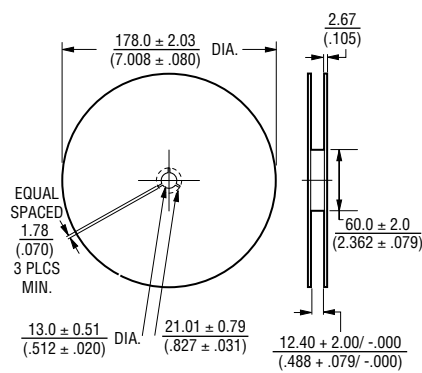
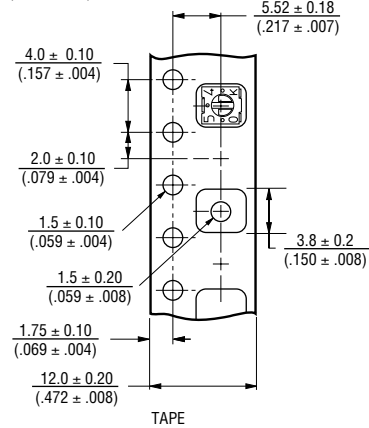
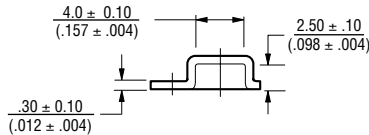
3313S-2



### RECOMMENDED LAND PATTERN



## 3313J/X Packaging Specifications



Meets EIA 481 REEL

TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

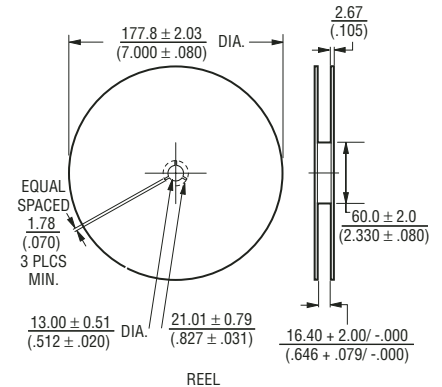
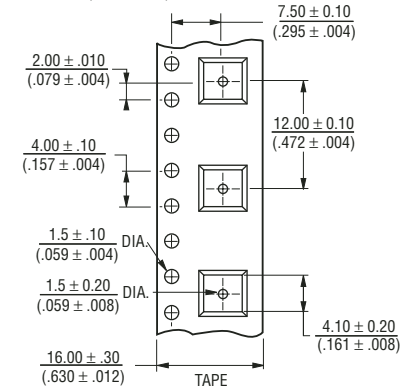
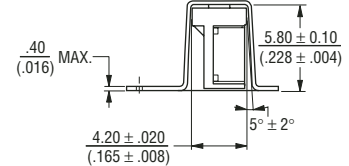
DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

## 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.