

## 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 .....  $\pm 20\%$  std.  
 End Resistance ..... 1 % or 3 ohms max.  
 (whichever is greater)  
 Contact Resistance Variation ..... 3 % or 3 ohms  
 Adjustability  
 Voltage Divider .....  $\pm 0.1\%$   
 Rheostat .....  $\pm 0.2\%$   
 Resolution ..... Infinite  
 Insulation Resistance ..... 500 vdc.  
 100 megohms min.  
 Dielectric Strength  
 Sea Level ..... 500 vac  
 70,000 Feet ..... 350 vac  
 Adjustment Angle .....  $220^\circ$  nom.

### Environmental Characteristics

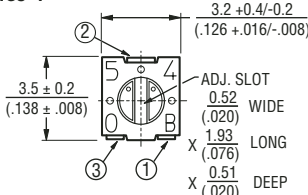
Max. Soldering Exposure .....  $260^\circ\text{C}/5$  seconds  
 Power Rating (200 volts max.)  
 $70^\circ\text{C}$  ..... 0.125 watt  
 $125^\circ\text{C}$  ..... 0 watt  
 Operating Temp. Range .....  $-55^\circ\text{C}$  to  $+125^\circ\text{C}$   
 Temperature Coefficient  
 .....  $\leq 100$  ohms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

### Physical Characteristics

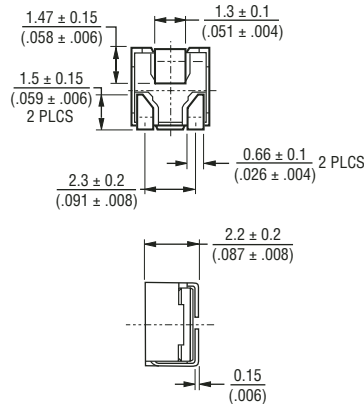
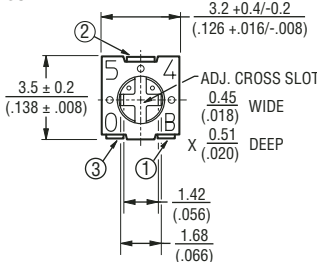
Mechanical Angle .....  $250^\circ$  nom.  
 Torque ..... 50 g-cm max.  
 Stop Strength ..... 200 g-cm min.  
 Pushover Strength ("S" only)  
 ..... 1.6 Kilograms (3.5 lbs) minimum  
 Flammability ..... U.L. 94V-0  
 Weight ..... Approx. 0.01 oz.  
 Marking ..... Resistance code  
 and date code  
 Wiper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

### Product Dimensions

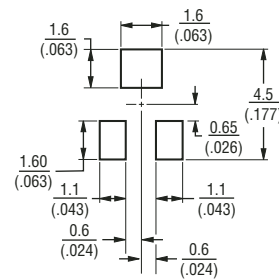
3313J-1



3313J-2



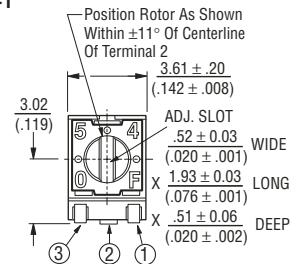
#### RECOMMENDED LAND PATTERN



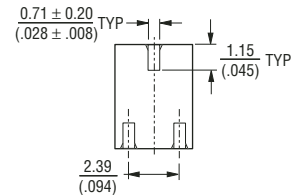
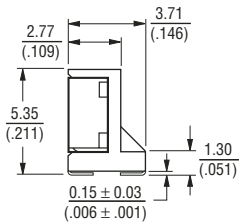
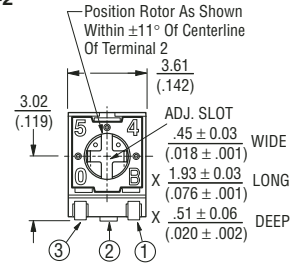
DIMENSIONS: MM (INCHES)

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

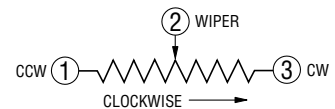
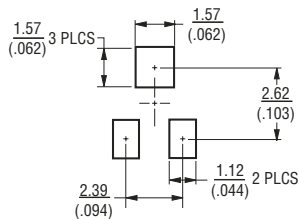
3313S-1



3313S-2



#### RECOMMENDED LAND PATTERN

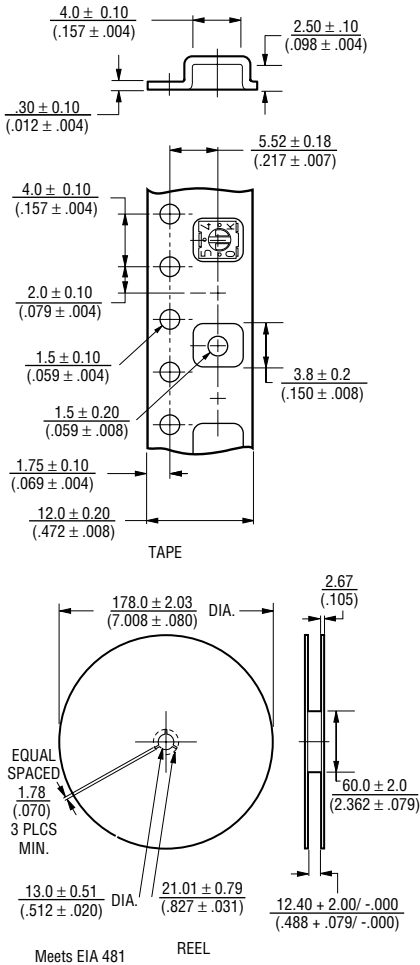


\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.  
 †"Fluorinert" is a registered trademark of 3M Co.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications

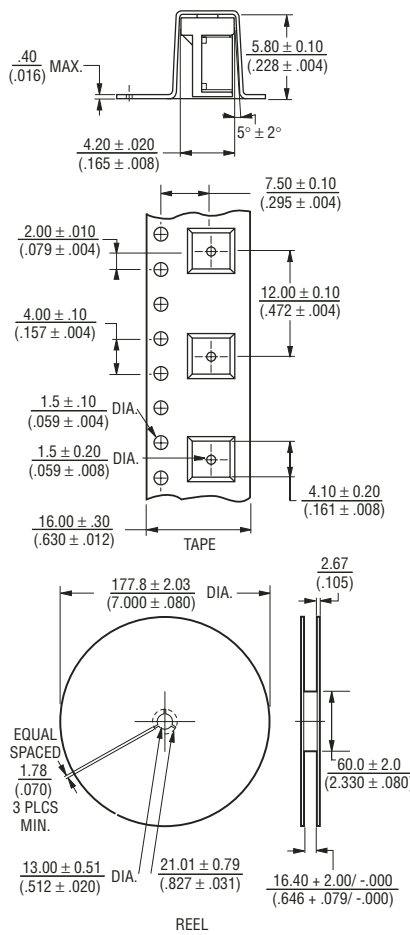
# 3313 - 3 mm Trimming Potentiometer

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## 3313J Packaging Specifications



## 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.

## 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)

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

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