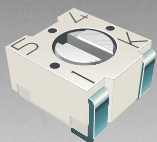


\*RoHS COMPLIANT



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## 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

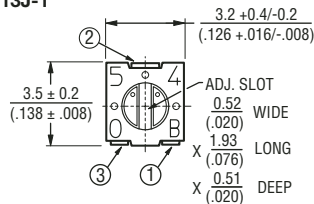
Max. Soldering Exposure  
.....260 °C/5 seconds  
Power Rating (200 volts max.)  
70 °C .....0.125 watt  
125 °C .....0 watt  
Operating Temp. Range  
.....-55 °C to +125 °C  
Temperature Coefficient  
.....≤100 ohms ±150 ppm/°C;  
>100 ohms ±100 ppm/°C  
Seal Test.....85 °C Fluorinert†  
Humidity .....MIL-STD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

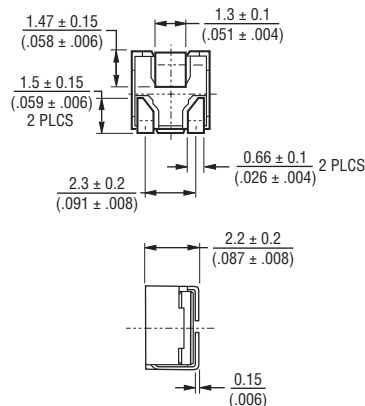
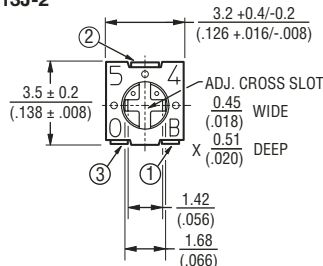
Mechanical Angle .....250 ° nom.  
Torque .....50 g-cm max.  
Stop Strength.....200 g-cm min.  
Pushover Strength ("S" only)  
.....1.6 Kilograms (3.5 lbs) minimum  
Flammability .....U.L. 94V-0  
Weight.....Approx. 0.01 oz.  
Marking .....Resistance code  
and date code  
Wiper.....50 % (Actual TR)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

### Product Dimensions

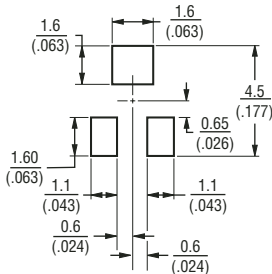
3313J-1



3313J-2



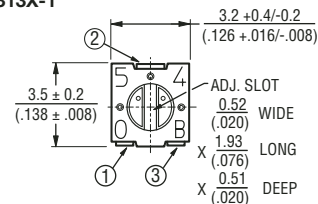
### RECOMMENDED LAND PATTERN



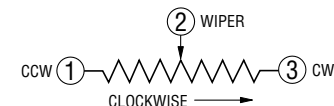
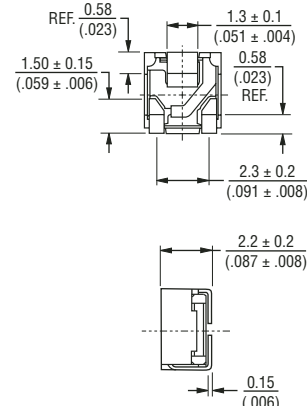
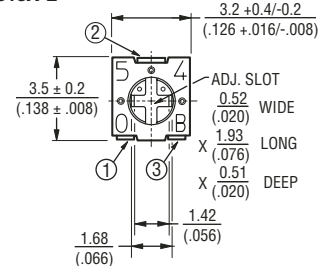
TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

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

3313X-1



3313X-2



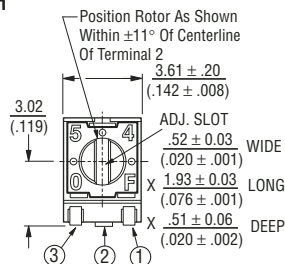
\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.  
†"Fluorinert" is a registered trademark of 3M Co.  
Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.

# 3313 - 3 mm Trimming Potentiometer

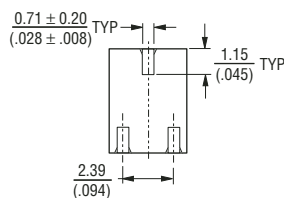
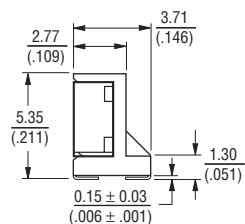
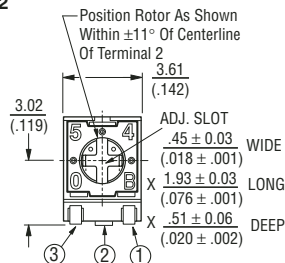
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## Product Dimensions

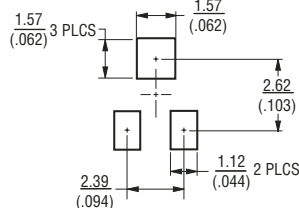
### 3313S-1



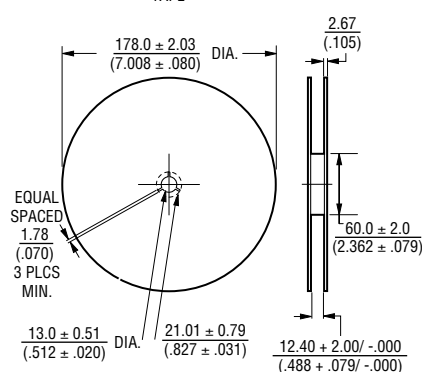
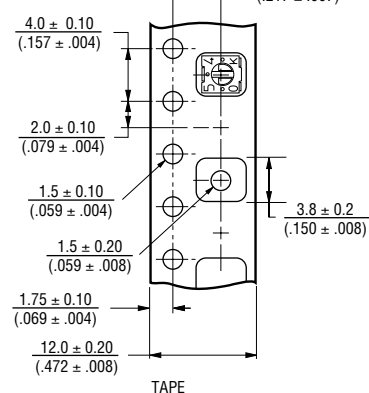
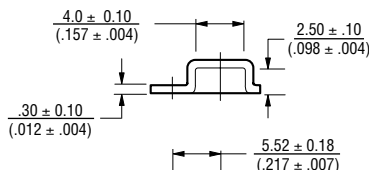
### 3313S-2



### RECOMMENDED LAND PATTERN



## 3313J/X Packaging Specifications



Meets EIA 481

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

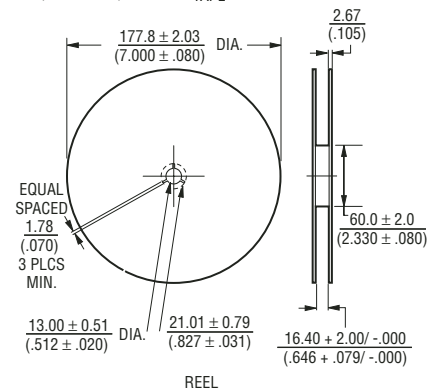
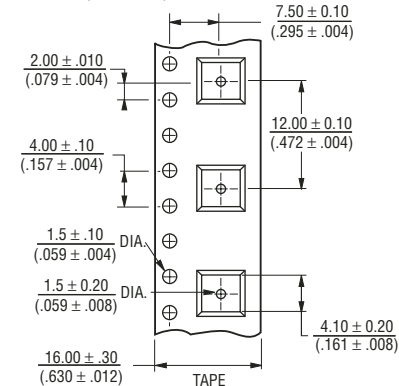
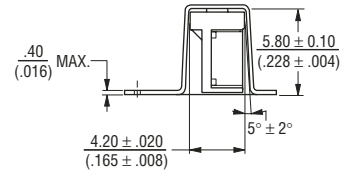
DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

## 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.