

RoHS COMPLIANT



# BOURNS®

## Features

- Surface Mount / Single Turn / Cermet Industrial / Sealed
- Compatible with surface mount manufacturing processes
- Compatible with popular vacuum pick-and-place equipment

- J-hook, gull-wing and pinned configurations
- Side adjust available
- Meets EIA/EIAJ/IPC/VECI SMD standard trimmer designs
- RoHS compliant\* - see [processing information](#) on lead free surface mount trimmers

# 3314 - 4 mm Square Trimming Potentiometer

## Electrical Characteristics

Standard Resistance Range .....10 ohms to 2 megohms (see standard resistance table)  
 Resistance Tolerance .....±20 % std. (tighter tolerance available)  
 End Resistance.....1 % or 2 ohms max. (whichever is greater)  
 Contact Resistance Variation .....3 % or 3 ohms  
 Resolution.....Infinite  
 Insulation Resistance .....500 vdc. 100 megohms min.  
 Dielectric Strength  
 Sea Level.....500 vac (1 minute)  
 Adjustment Angle .....210 ° nom.

## Environmental Characteristics

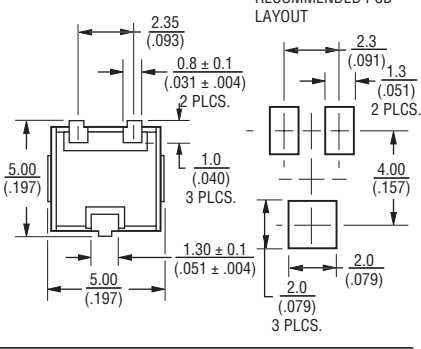
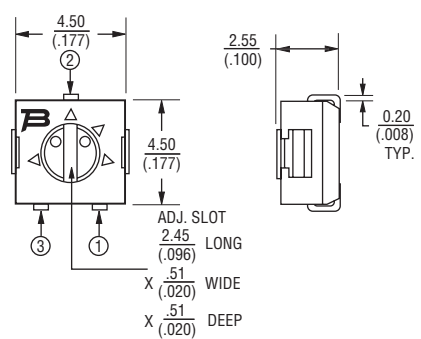
Power Rating (300 volts max.)  
 70 °C.....0.25 watt  
 125 °C.....0 watt  
 Temperature Range ....-55 °C to +125 °C  
 Temperature Coefficient ....±100 ppm/°C  
 Humidity .....90-98 % RH, 10 cycles, 240 hours  
 TRS ±2 %; IR 10 megohms  
 Vibration .....20 G TRS ±1 %; VRS ±1 %  
 Shock.....100 G TRS ±1 %; VRS ±1 %  
 Load Life  
 ....(@ 70 °C Rated Power 1000 Hours)  
 TRS ±3 %  
 Rotational Life .....100 cycles  
 TRS ±3 %  
 Thermal Shock .....5 cycles  
 TRS ±2 %; VRS ±1 %

## Physical Characteristics

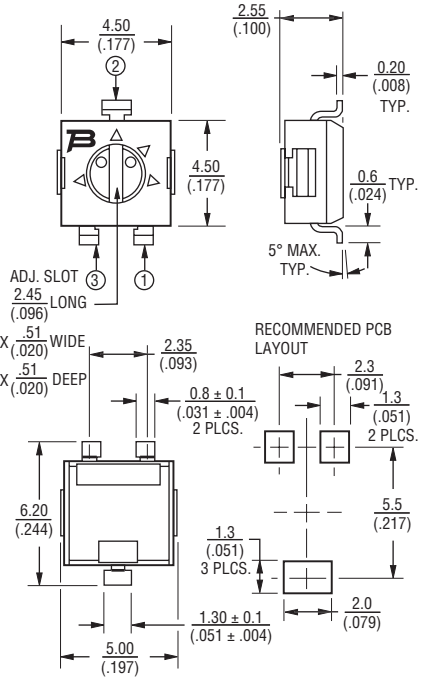
Mechanical Angle .....240 ° nom.  
 Torque .....180 g-cm typical  
 Stop Strength.....300 g-cm typical  
 Pushover Strength (Z Style) .....2 kilograms (4.4 lbs.) minimum  
 Weight .....Approximately 0.01 oz.  
 Marking .....Manufacturer's code, resistance code and date code  
 Wiper.....50 % (Actual TR) ±10 %  
 Flammability.....U.L. 94V-0  
 Standard Packaging  
 J, G and R .....500 pcs./7 " reel  
 S and Z.....200 pcs./7 " reel  
 H.....100 pcs./tube  
 Adjustment Tool .....H-90

## Product Dimensions

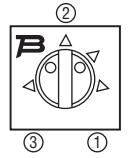
3314J-1



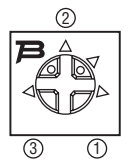
3314G-1



3314J-1, G-1, R-1, H-1 (Bourns Marking, Straight Slot)



3314J-2, G-2, R-2, H-2 (Bourns Marking, Cross Slot)



3314J-3, G-3, R-3, H-3 (Reverse Marking, Straight Slot)



## How To Order

**3314 J - 1 - 502 E**

Model \_\_\_\_\_  
 Style \_\_\_\_\_  
 Standard or Modified Product Indicator (Styles J, G, R, H & S)  
 -1 = Single Slot  
 -2 = Cross Slot  
 -3 = Single Slot w/Reverse Marking  
 Product Indicator (Style Z only)  
 -GA4 = Single Slot  
 -1 = Cross Slot  
 -3 = Single Slot w/Reverse Marking  
 Resistance Code \_\_\_\_\_  
 Embossed Tape Designator\*\*  
 E = Styles J, G and R: 500 pcs./7 " reel  
 Styles S and Z: 200 pcs./7 " reel  
 G = Styles J and G: 3000 pcs./13 " reel  
 Style R: 2500 pcs./13 " reel  
 Styles S and Z: 1000 pcs./13 " reel  
 \*\*Style H is available in tube packaging only.

## Standard Resistance Table

Resistance (Ohms)	Resistance Code
10	100
20	200
50	500
<b>100</b>	<b>101</b>
<b>200</b>	<b>201</b>
<b>500</b>	<b>501</b>
<b>1,000</b>	<b>102</b>
<b>2,000</b>	<b>202</b>
<b>5,000</b>	<b>502</b>
<b>10,000</b>	<b>103</b>
<b>20,000</b>	<b>203</b>
<b>50,000</b>	<b>503</b>
<b>100,000</b>	<b>104</b>
200,000	204
250,000	254
500,000	504
1,000,000	105
2,000,000	205

TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED  
 DIMENSIONS ARE: MM (INCHES)

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

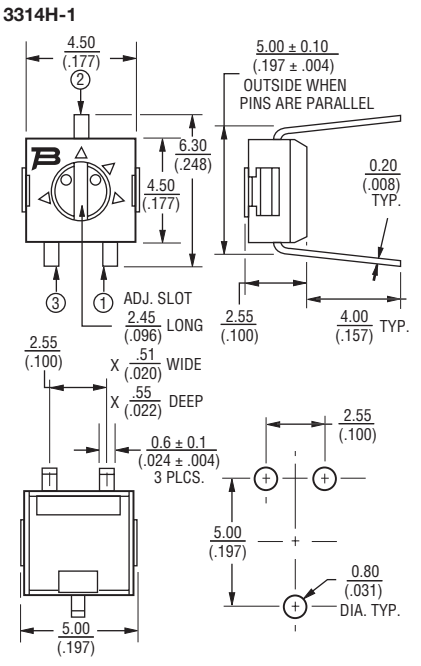
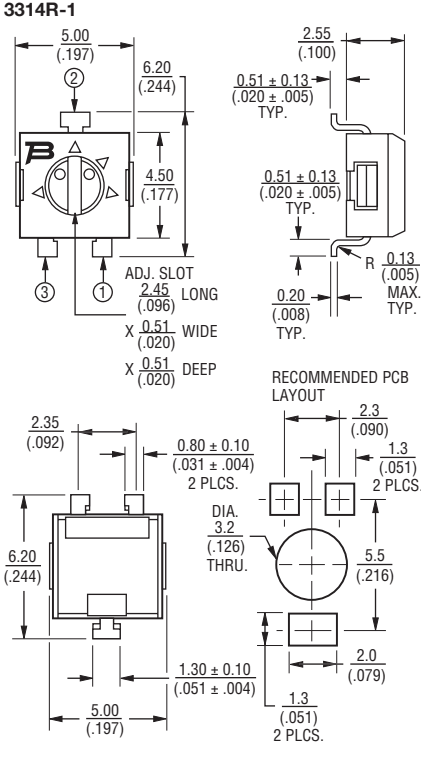
Popular distribution resistance values listed in boldface. Special resistances available.

## Additional Features

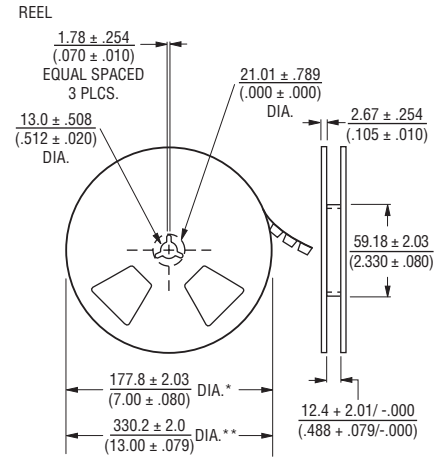
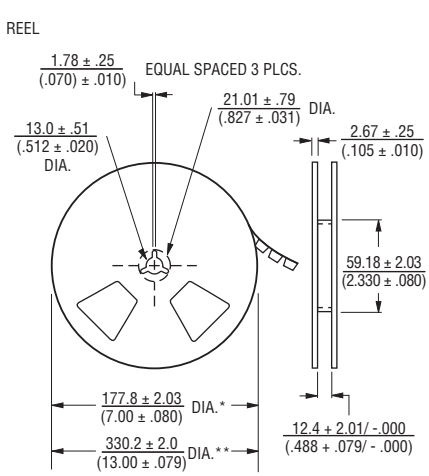
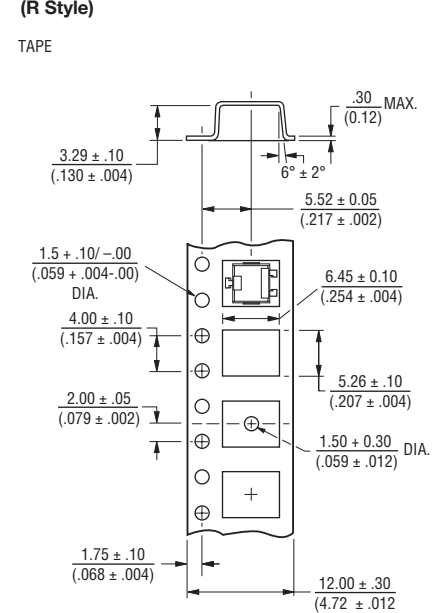
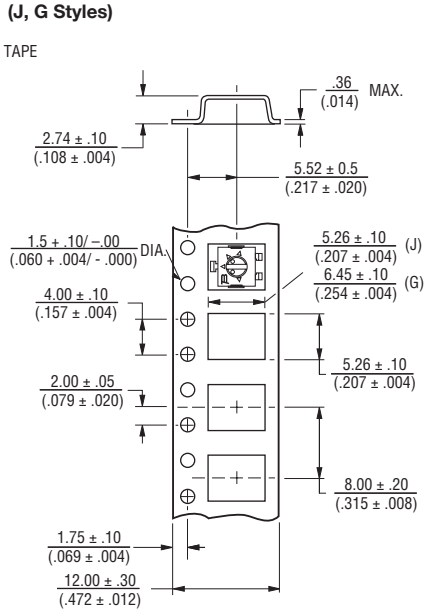
- Model 3314 has been approved for use by DESC on drawings 88039 (3314J) and 90027 (3314G)

# 3314 - 4 mm Square Trimming Potentiometer BOURNS®

### Product Dimensions

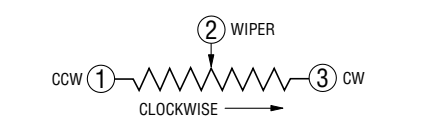


### Packaging Specifications - J, G and R Styles



\* Embossed Tape Designator "E"  
\*\* Embossed Tape Designator "G"  
(See How To Order chart for further information.)  
Meets EIA specification 481.

\* Embossed Tape Designator "E"  
\*\* Embossed Tape Designator "G"  
(See How To Order chart for further information.)  
Meets EIA specification 481.



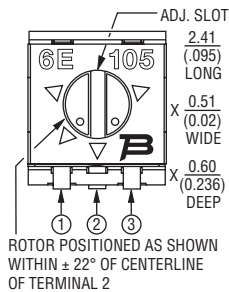
TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED  
DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

# 3314 - 4 mm Square Trimming Potentiometer

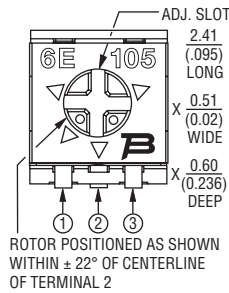
**BOURNS®**

## Product Dimensions

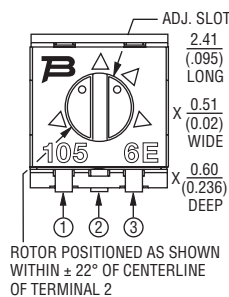
**3314S-1**  
(Bourns Marking, Straight Slot)



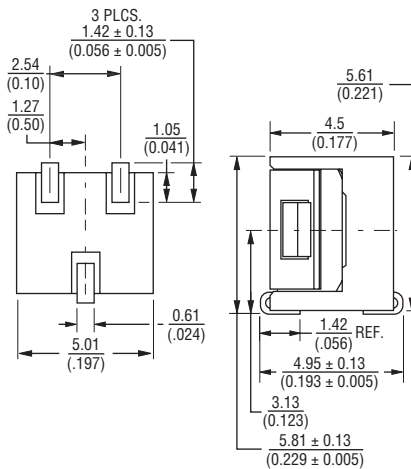
**3314S-2**  
(Bourns Marking, Cross Slot)



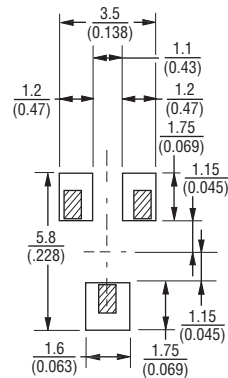
**3314S-3**  
(Reverse Marking, Straight Slot)



**3314S**  
Common Dimensions

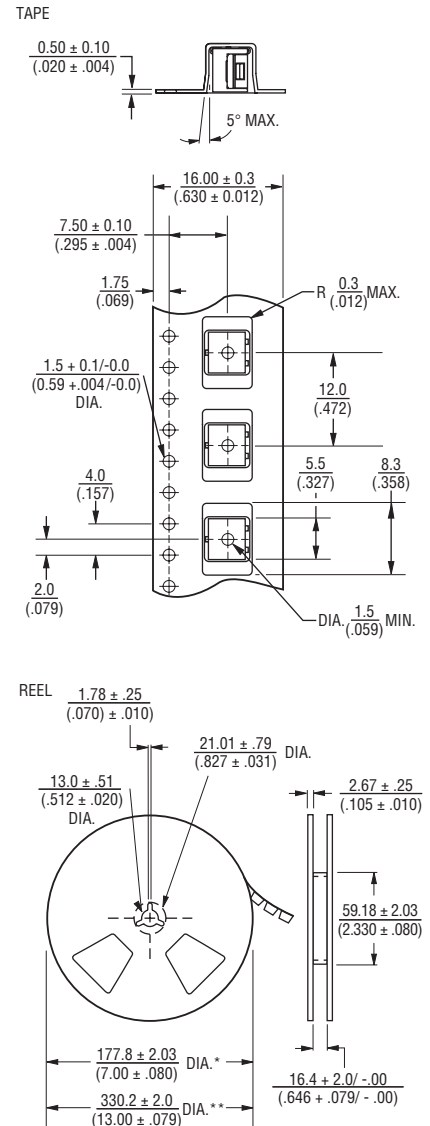


RECOMMENDED PCB LAYOUT



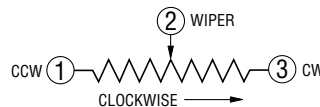
## Packaging Specifications

(S Style)



\* Embossed Tape Designator "E"  
\*\* Embossed Tape Designator "G"  
(See How To Order chart for further information.)

Meets EIA specification 481.



TOLERANCES: ± 0.30 (.012) EXCEPT WHERE NOTED

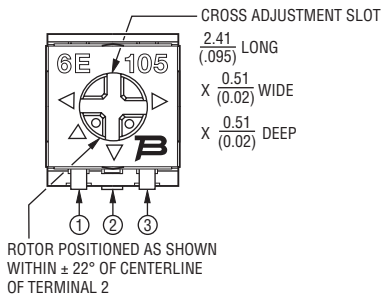
DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

# 3314 - 4 mm Square Trimming Potentiometer

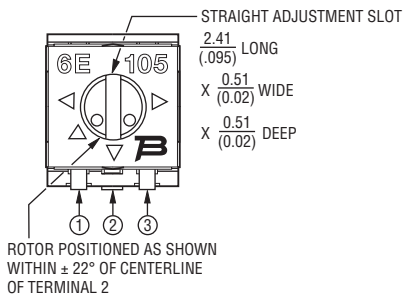
**BOURNS®**

## Product Dimensions

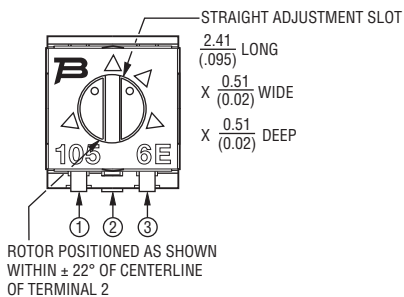
### 3314Z-1-(RC) E (Cross Slot)



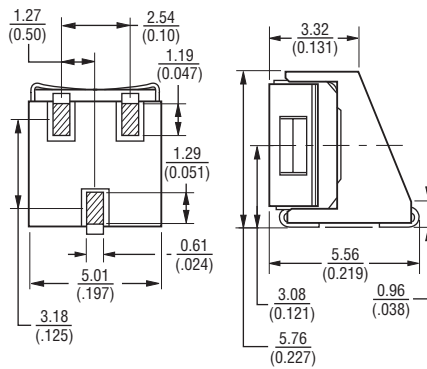
### 3314Z-GA4-(RC) E (Straight Slot)



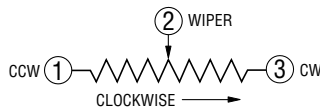
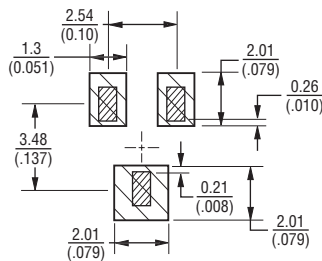
### 3314Z-3 (Reverse Marking, Straight Slot)



### 3314Z Common Dimensions



### RECOMMENDED PCB LAYOUT

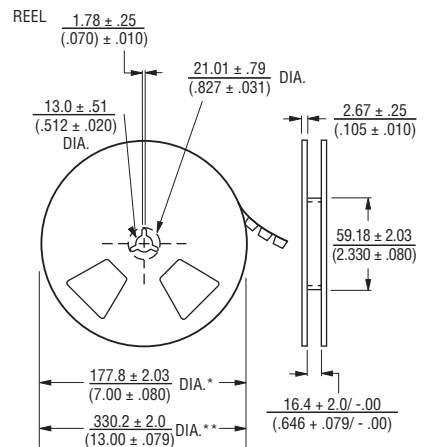
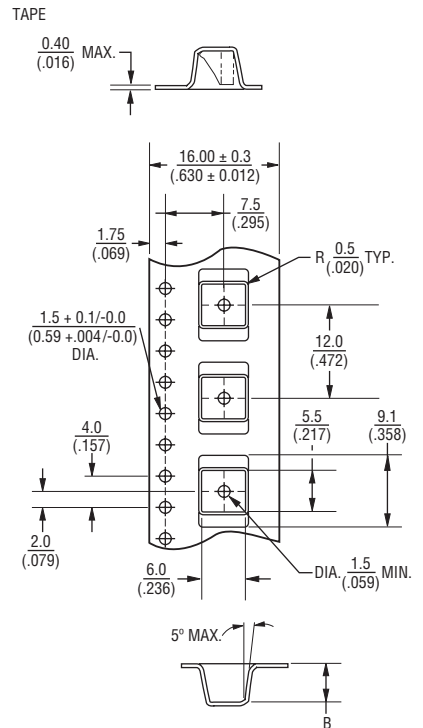


TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

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

## Packaging Specifications

### (Z Style)



\* Embossed Tape Designator "E"

\*\* Embossed Tape Designator "G"

(See How To Order chart for further information.)

Meets EIA specification 481.