

\*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

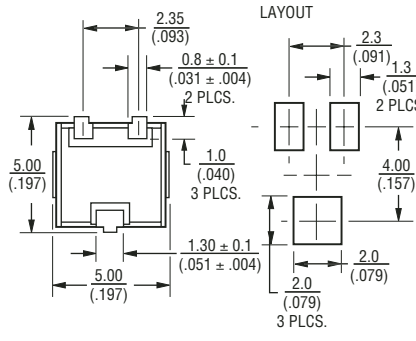
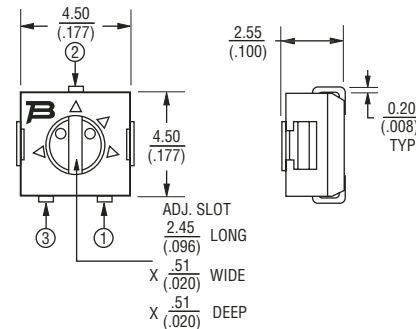
Mechanical Angle .....240 ° nom.  
 Torque .....180 g-cm typical  
 Stop Strength.....300 g-cm typical  
 Pushover Strength (Z Style)  
 .....2 kilograms (4.4 lbs.) minimum  
 Weight .....Approximately 0.01 oz.  
 Marking .....Manufacturer's code,  
 resistance code and date code  
 Wiper.....50 % (Actual 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

TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

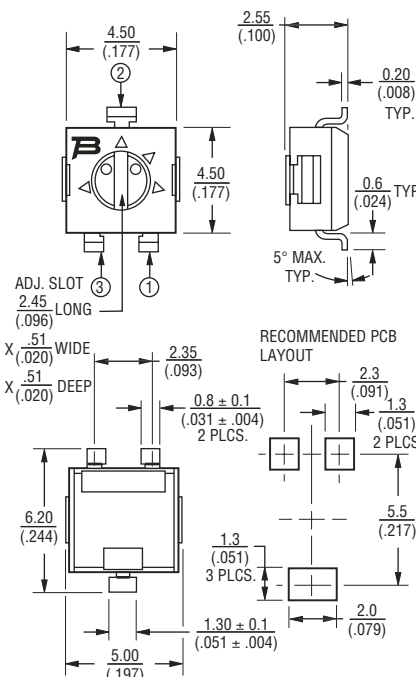
DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Product Dimensions

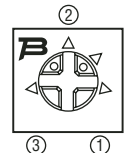
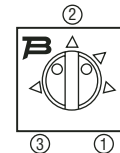
3314J-1



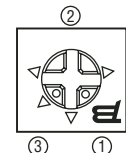
3314G-1



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)      3314J-4, G-4, R-4, H-4 (Reverse Marking, Cross 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  
 -4 = Cross Slot w/Reverse Marking  
 Product Indicator (Style Z only)  
 -GA4 = Single Slot  
 -1 = Cross Slot  
 -3 = Single Slot w/Reverse Marking  
 -4 = Cross 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

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

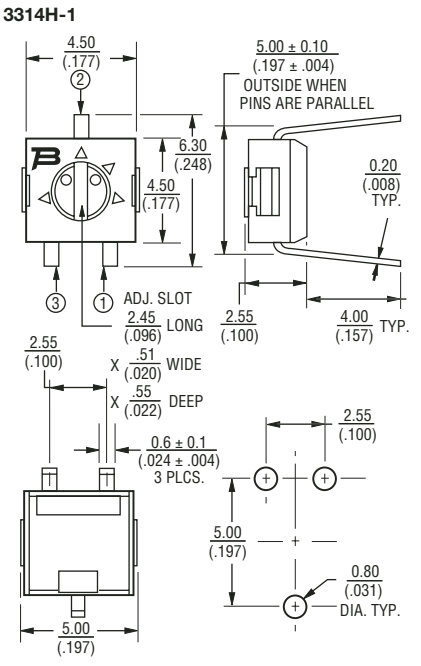
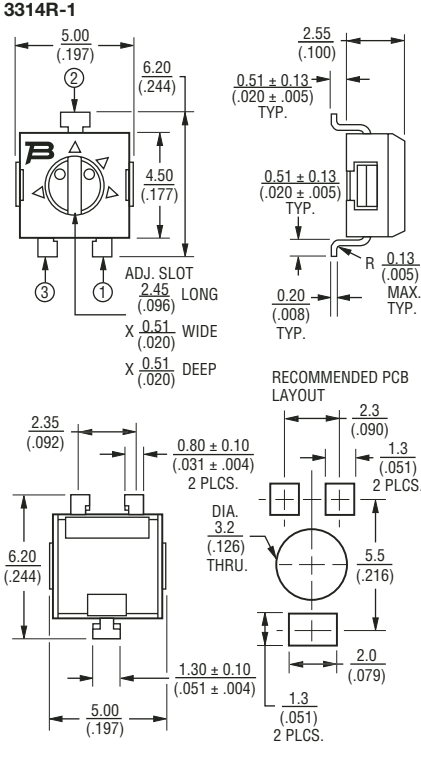
\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

## Additional Features

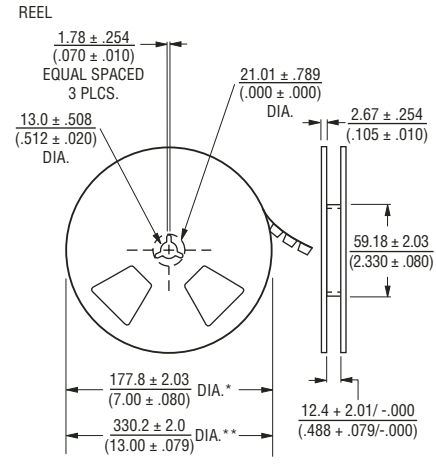
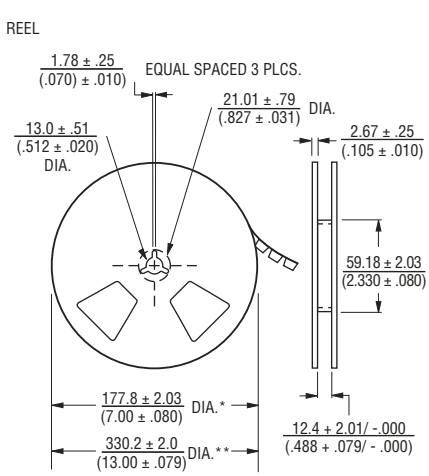
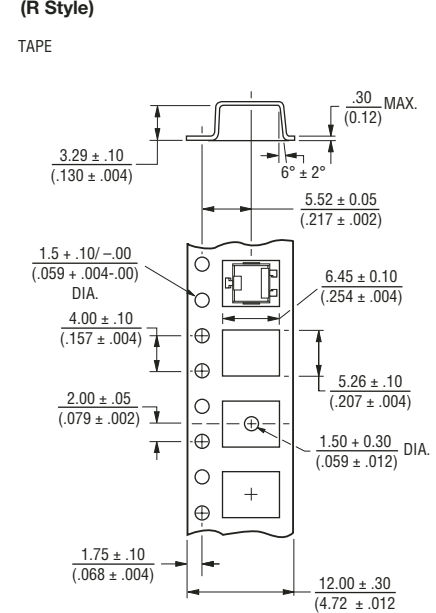
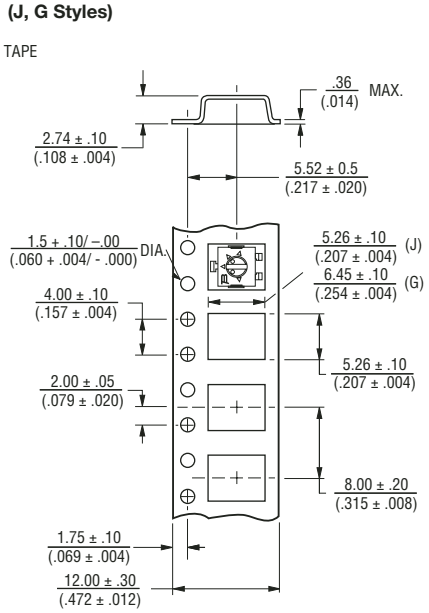
- Model 3314 has been approved for use by DESC on drawings 88039 (3314J) and 90027 (3314G)

# 3314 - 4 mm Square Trimming Potentiometer BOURNS®

### Product Dimensions

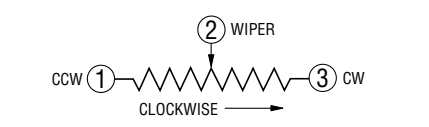


### Packaging Specifications - J, G and R Styles



\* 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.



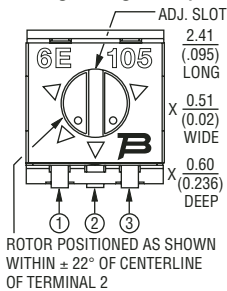
TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED  
DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

# 3314 - 4 mm Square Trimming Potentiometer

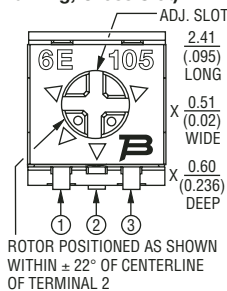
**BOURNS®**

## Product Dimensions

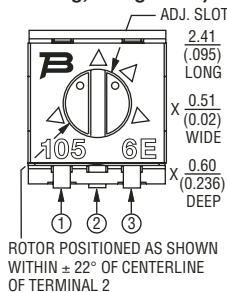
**3314S-1**  
(Bourns Marking, Straight Slot)



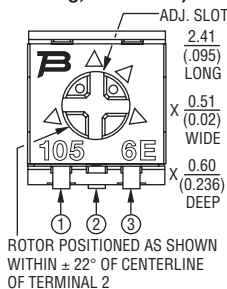
**3314S-2**  
(Bourns Marking, Cross Slot)



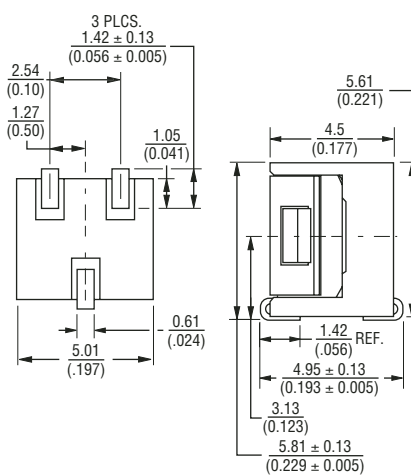
**3314S-3**  
(Reverse Marking, Straight Slot)



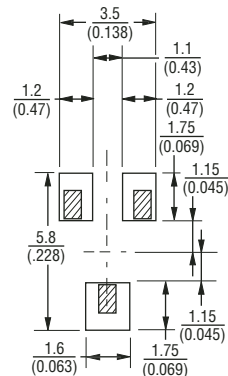
**3314S-4**  
(Reverse Marking, Cross Slot)



**3314S**  
Common Dimensions

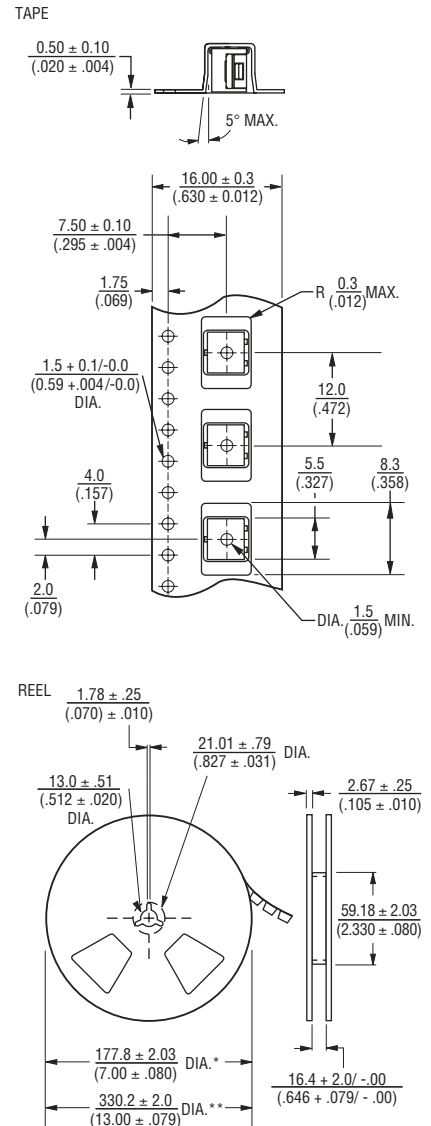


RECOMMENDED PCB LAYOUT



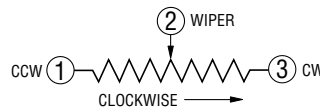
## Packaging Specifications

(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

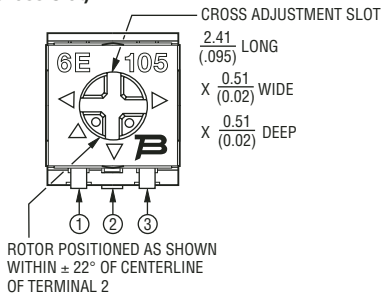
DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

# 3314 - 4 mm Square Trimming Potentiometer

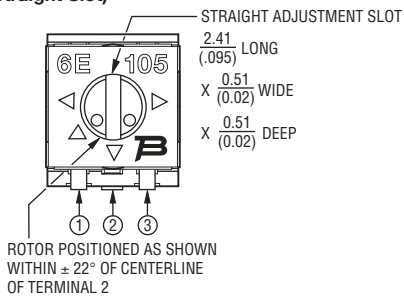
**BOURNS®**

## Product Dimensions

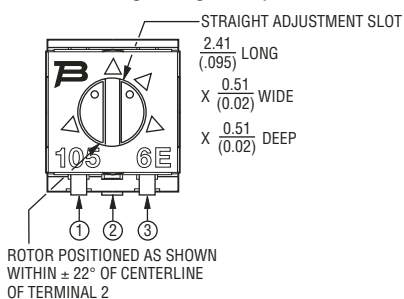
### 3314Z-1-(RC) E (Cross Slot)



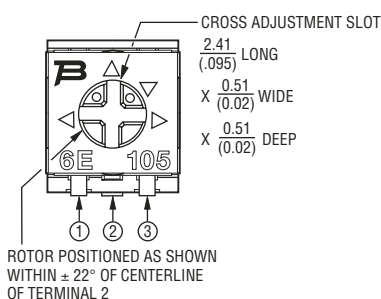
### 3314Z-GA4-(RC) E (Straight Slot)



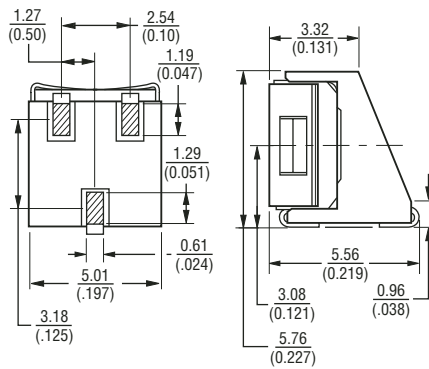
### 3314Z-3 (Reverse Marking, Straight Slot)



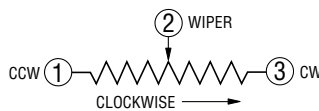
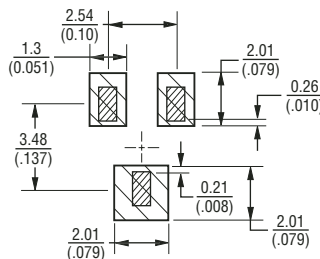
### 3314Z-4-(RC) E (Reverse Marking, Cross Slot)



### 3314Z Common Dimensions



### RECOMMENDED PCB LAYOUT

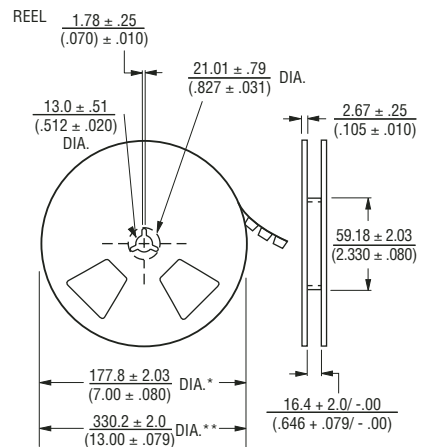
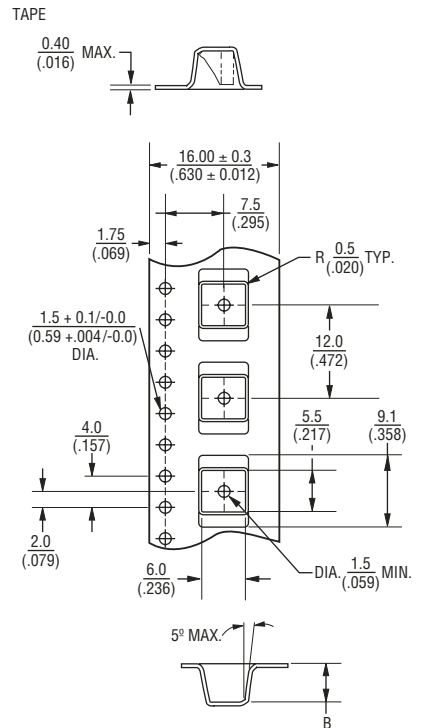


TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

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.