

## 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 .....  $\pm 20\%$  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

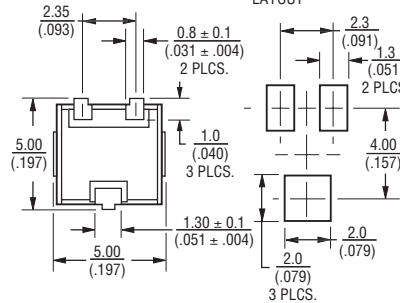
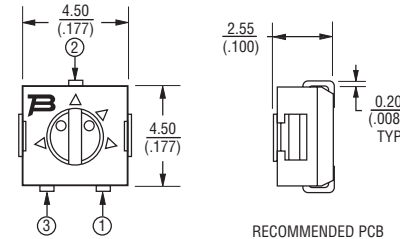
Power Rating (300 volts max.)  
 70 °C ..... 0.25 watt  
 125 °C ..... 0 watt  
 Temperature Range ... -55 °C to +125 °C  
 Temperature Coefficient ...  $\pm 100$  ppm/°C  
 Humidity ..... 90-98 % RH, 10 cycles, 240 hours  
 TRS  $\pm 2\%$ ; IR 10 megohms  
 Vibration ..... 20 G TRS  $\pm 1\%$ ; VRS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

## Physical Characteristics

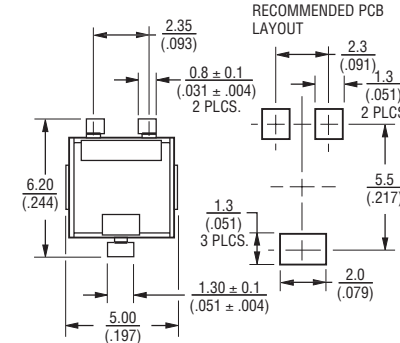
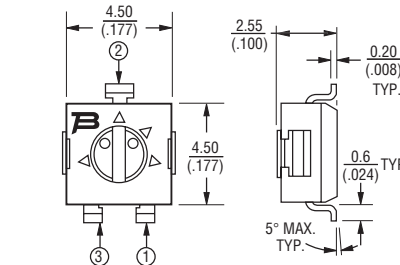
Mechanical Angle ..... 240 ° nom.  
 Torque ..... 180 g-cm typical  
 Stop Strength ..... 300 g-cm typical  
 Pushover Strength (Z Style) ..... 2 kilograms (4.4 lbs.) minimum  
 Weight ..... Approximately 0.01 oz.  
 Marking ..... Manufacturer's code, resistance code and date code  
 Wiper ..... 50 % (Actual TR)  $\pm 10\%$   
 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

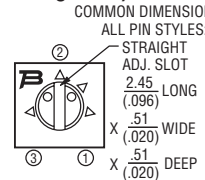
3314J-1



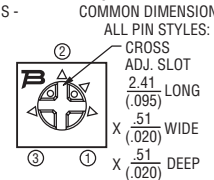
3314G-1



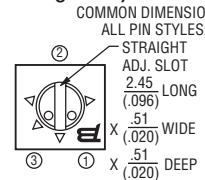
3314J-1, G-1, R-1, H-1 (Bourns Marking, Straight Slot)



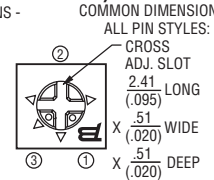
3314J-2, G-2, R-2, H-2 (Bourns Marking, Cross Slot)



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



3314J-4, G-4, R-4, H-4 (Reverse Marking, Cross Slot)



## How To Order

Model 3314 J - 1 - 502 E  
 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 values listed in boldface. Special resistances available.

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

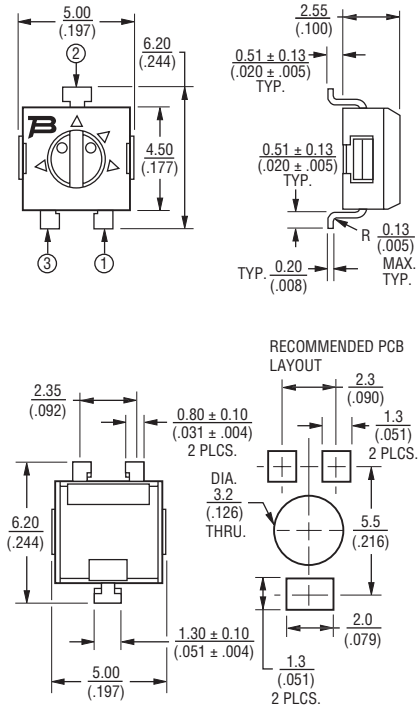
\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications

# 3314 - 4 mm Square Trimming Potentiometer

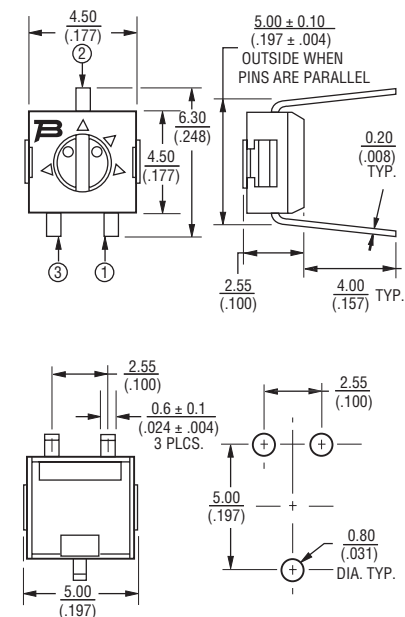
**BOURNS®**

## Product Dimensions

3314R-1

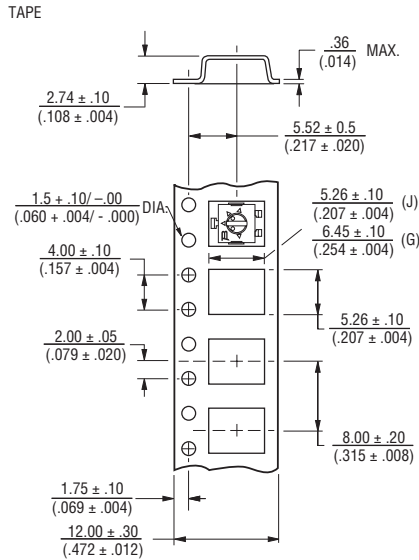


3314H-1

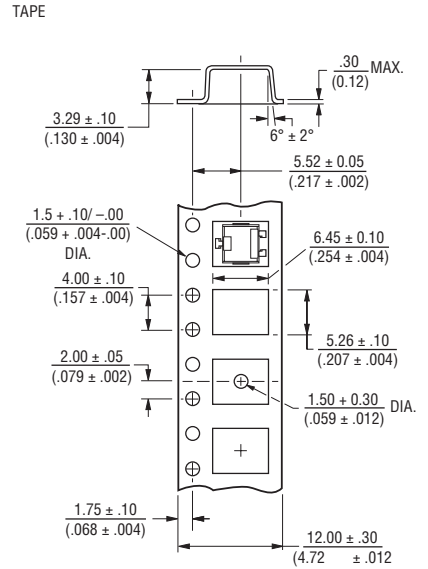


## Packaging Specifications - J, G and R Styles

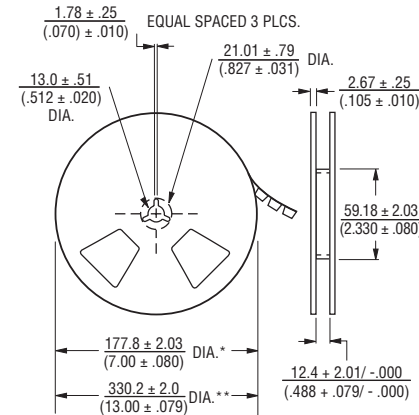
(J, G Styles)



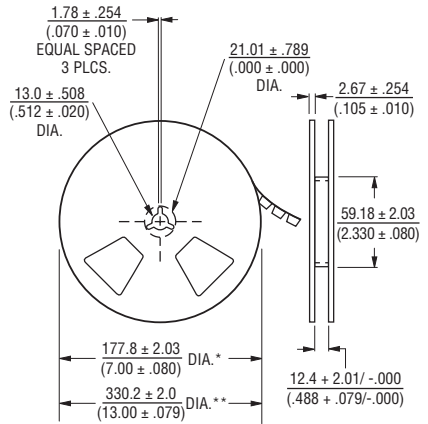
(R Style)



REEL



REEL

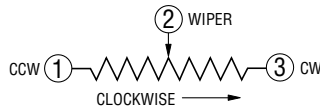


\* Embossed Tape Designator "E"  
 \*\* Embossed Tape Designator "G"  
 (See How To Order chart for further information.)

Meets EIA specification 481.

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

Meets EIA specification 481.



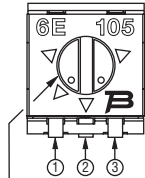
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$   
 TOLERANCES:  $\pm \frac{0.25}{(.010)}$  EXCEPT WHERE NOTED

# 3314 - 4 mm Square Trimming Potentiometer

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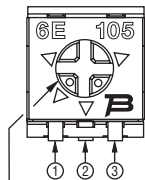
## Product Dimensions

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



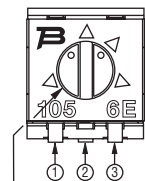
ROTOR POSITIONED AS SHOWN WITHIN  $\pm 22^\circ$  OF CENTERLINE OF TERMINAL 2

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



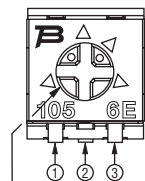
ROTOR POSITIONED AS SHOWN WITHIN  $\pm 22^\circ$  OF CENTERLINE OF TERMINAL 2

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



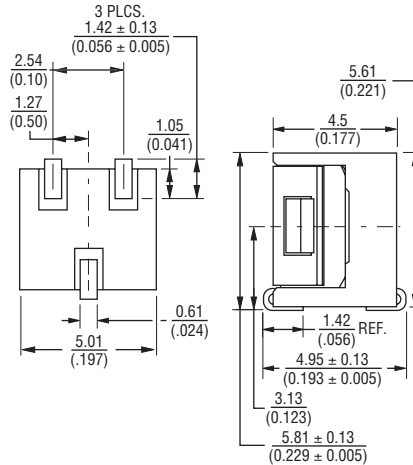
ROTOR POSITIONED AS SHOWN WITHIN  $\pm 22^\circ$  OF CENTERLINE OF TERMINAL 2

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

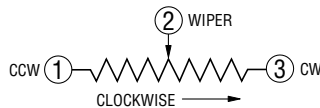
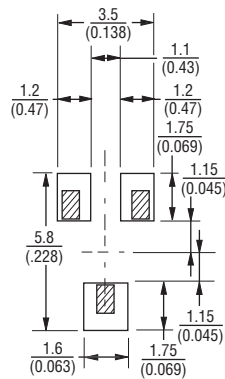


ROTOR POSITIONED AS SHOWN WITHIN  $\pm 22^\circ$  OF CENTERLINE OF TERMINAL 2

### 3314S Common Dimensions



### RECOMMENDED PCB LAYOUT



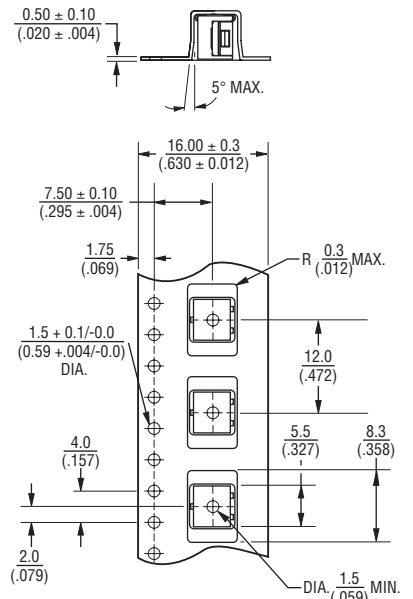
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

TOLERANCES:  $\pm \frac{0.30}{(0.12)}$  EXCEPT WHERE NOTED

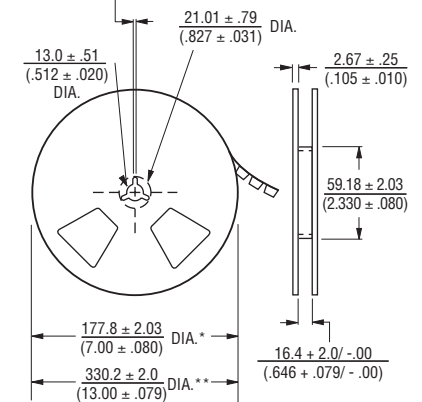
## Packaging Specifications

### (S Style)

#### TAPE



#### REEL



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

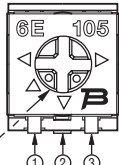
Meets EIA specification 481.

# 3314 - 4 mm Square Trimming Potentiometer

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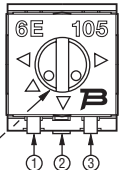
## Product Dimensions

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



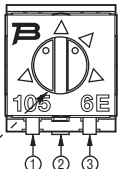
ROTOR POSITIONED AS SHOWN  
WITHIN ± 22° OF CENTERLINE  
OF TERMINAL 2

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



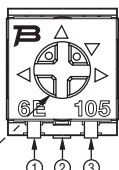
ROTOR POSITIONED AS SHOWN  
WITHIN ± 22° OF CENTERLINE  
OF TERMINAL 2

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



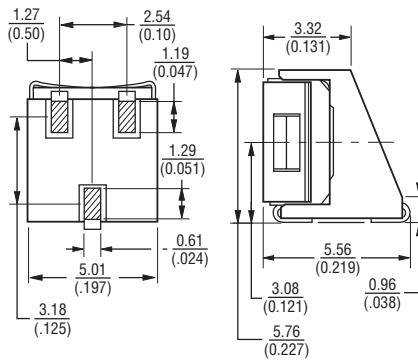
ROTOR POSITIONED AS SHOWN  
WITHIN ± 22° OF CENTERLINE  
OF TERMINAL 2

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

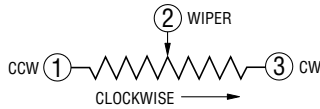
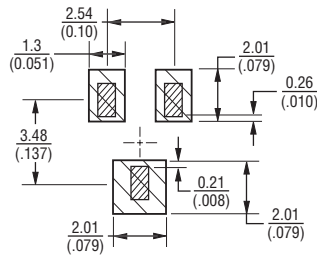


ROTOR POSITIONED AS SHOWN  
WITHIN ± 22° OF CENTERLINE  
OF TERMINAL 2

**3314Z  
Common Dimensions**



**RECOMMENDED PCB LAYOUT**

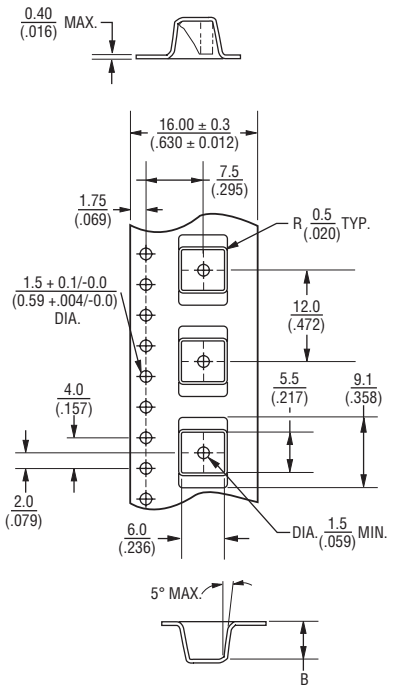


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$   
TOLERANCES: ± 0.25 (0.010) EXCEPT WHERE NOTED

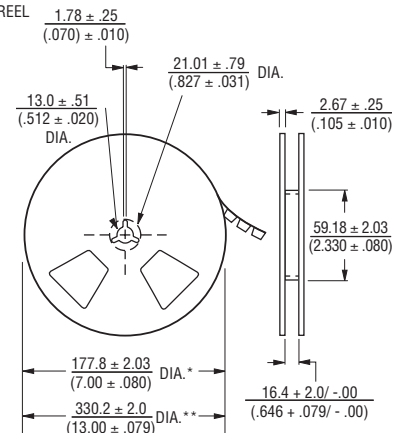
## Packaging Specifications

**(Z Style)**

TAPE



REEL



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

Meets EIA specification 481.