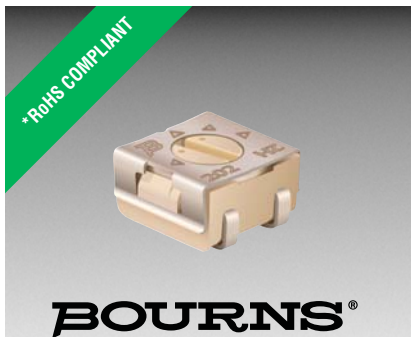




## Features

- 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
- For trimmer applications/processing guidelines, [click here](#)

## 3314 - 4 mm Square Trimpot® 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 .....  $210^\circ$  nom.

### Environmental Characteristics

Power Rating (300 volts max. for Style G, J & H; 50 volts max. for Style R)  
 $70^\circ\text{C}$  ..... 0.25 watt  
 $125^\circ\text{C}$  ..... 0 watt  
Temperature Range ...  $-55^\circ\text{C}$  to  $+125^\circ\text{C}$   
Temperature Coefficient ...  $\pm 100$  ppm/ $^\circ\text{C}$   
Seal Test ..  $85^\circ\text{C}$  Fluorinert<sup>†</sup>/60 seconds  
Humidity ..... 90-98 % RH,  
10 cycles, 240 hours  
Vibration ..... 20 G TRS  $\pm 1\%$ ; VRS  $\pm 1\%$   
Shock ..... 100 G TRS  $\pm 1\%$ ; VRS  $\pm 1\%$   
Load Life  
..... (@  $70^\circ\text{C}$  Rated Power 1000 Hours)  
Rotational Life ..... 100 cycles  
Thermal Shock ..... 5 cycles  
TRS  $\pm 2\%$ ; VRS  $\pm 1\%$

### Physical Characteristics

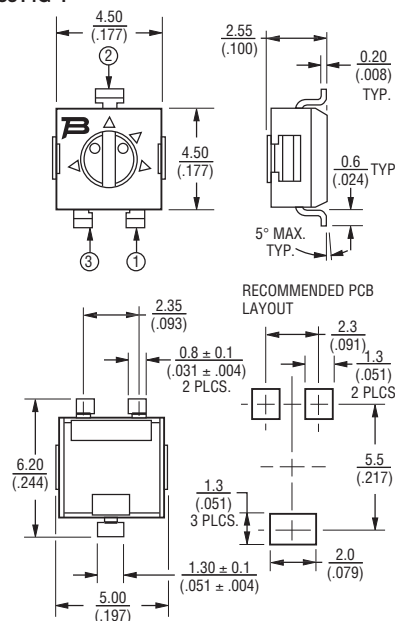
Mechanical Angle .....  $240^\circ$  nom.  
Torque ..... 180 g-cm max.  
Stop Strength ..... 300 g-cm min.  
Pushover Strength (S & Z Style)  
..... 1.6 kilograms (3.5 lbs.) min.  
Weight ..... Approximately 0.01 oz.  
Marking ..... Manufacturer's code,  
resistance code and date code  
Wiper ..... 50 % (Actual TR)  $\pm 10\%$   
Flammability ..... U.L. 94V-0  
Standard Packaging  
J, G and R ... 500 pcs./7 " reel (MSL-1)  
S and Z ..... 200 pcs./7 " reel (MSL-1)  
H ..... 100 pcs./tube  
Adjustment Tool ..... H-90

### Product Dimensions

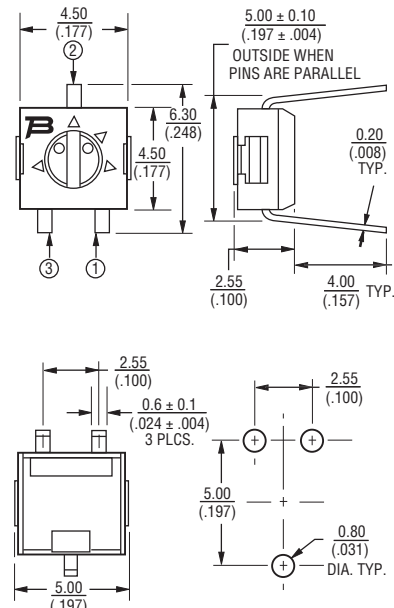
3314J-1



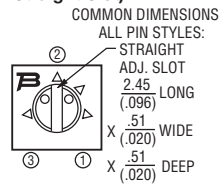
3314G-1



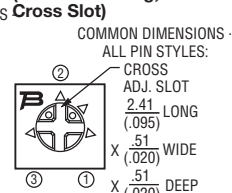
3314H-1



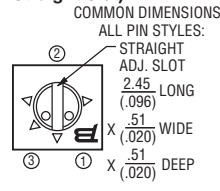
3314J-1, G-1, R-1, H-1  
(Bourns Marking,  
Straight Slot)



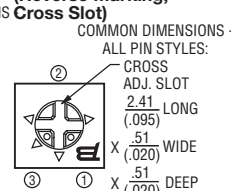
3314J-2, G-2, R-2, H-2,  
R-GM5  
(Bourns Marking,  
Cross Slot)



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



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



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 and RoHS Recast 2011/65/EU June 8, 2011.

<sup>†</sup>Fluorinert<sup>™</sup> is a registered trademark of 3M Co.

Specifications are subject to change without notice.

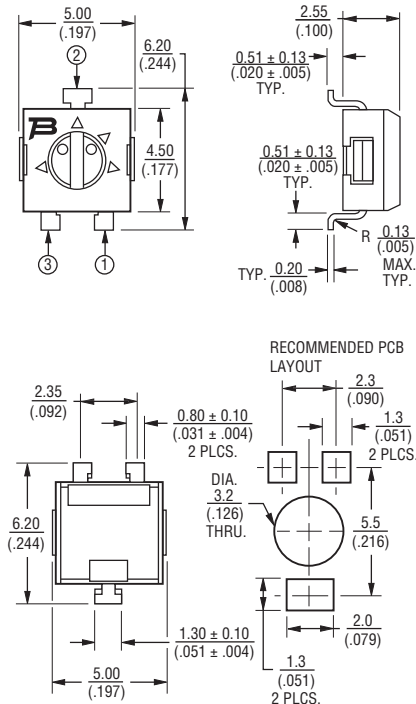
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

# 3314 - 4 mm Square Trimpot® Trimming Potentiometer

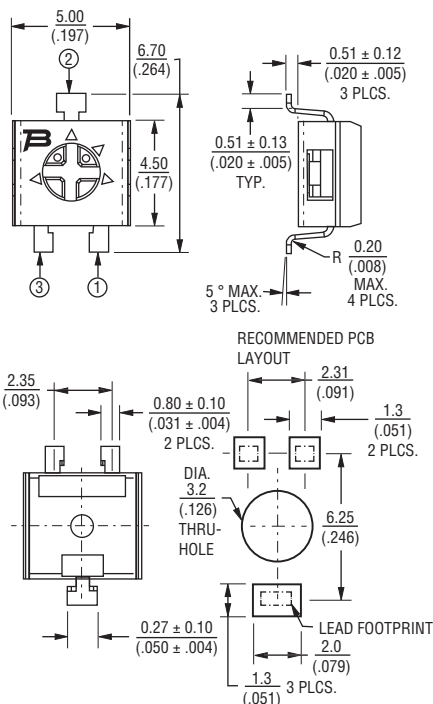
**BOURNS®**

## Product Dimensions

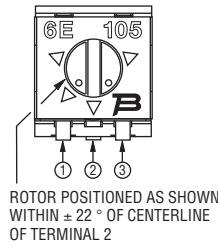
### 3314R-1



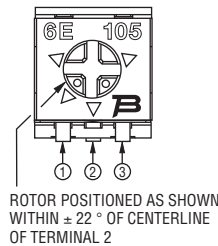
### 3314R-GM5



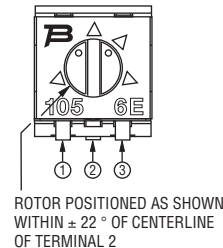
### 3314S-1 (Bourns Marking, Straight Slot)



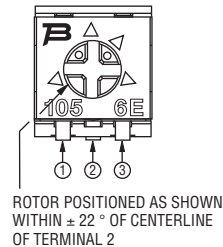
### 3314S-2 (Bourns Marking, Cross Slot)



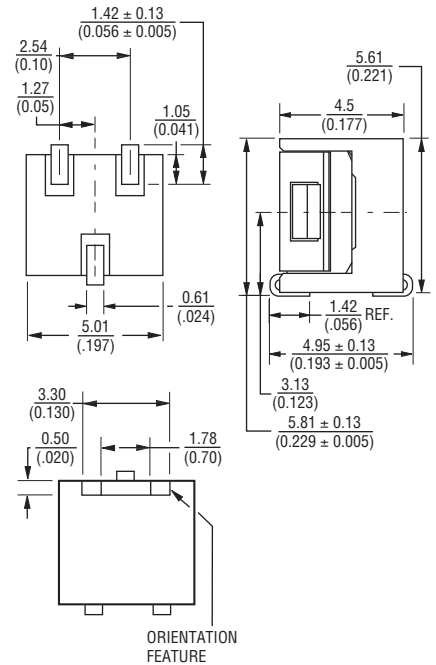
### 3314S-3 (Reverse Marking, Straight Slot)



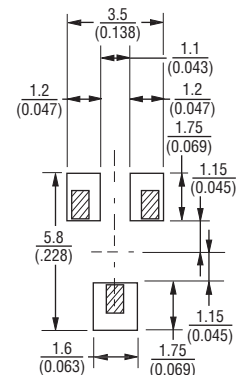
### 3314S-4 (Reverse Marking, Cross Slot)



### 3314S Common Dimensions



### RECOMMENDED PCB LAYOUT



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

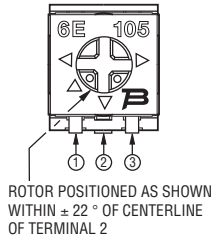
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# 3314 - 4 mm Square Trimpot® Trimming Potentiometer

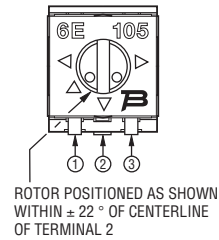
**BOURNS®**

## Product Dimensions

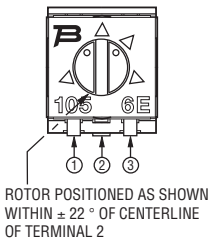
**3314Z-1-(RC) E**  
(Cross Slot)



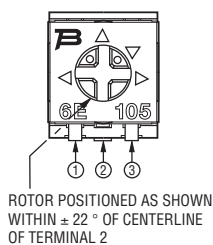
**3314Z-GA4-(RC) E**  
(Straight Slot)



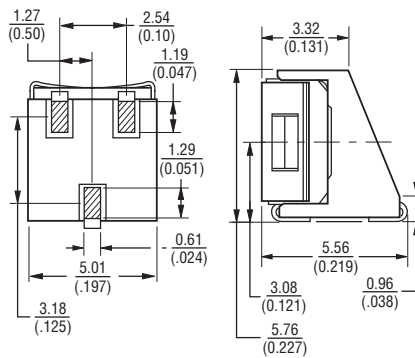
**3314Z-3**  
(Reverse Marking, Straight Slot)



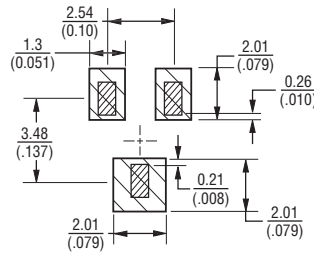
**3314Z-4-(RC) E**  
(Reverse Marking, Cross Slot)



**3314Z**  
Common Dimensions



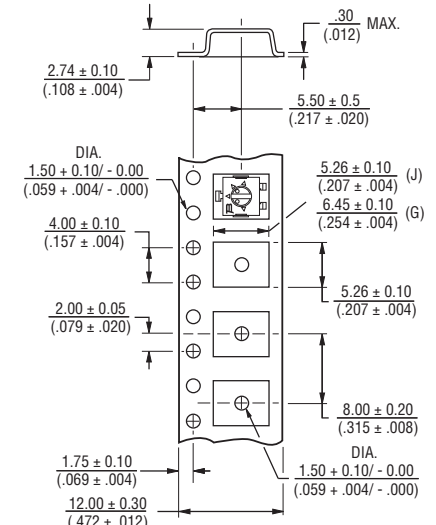
RECOMMENDED PCB LAYOUT



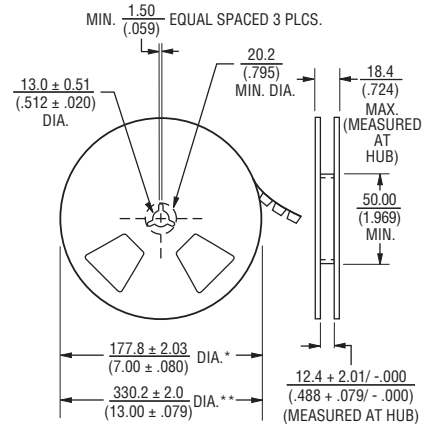
## Packaging Specifications

(J, G Styles)

TAPE



REEL



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

Meets EIA specification 481.

| DIMENSIONS:       | MM<br>(INCHES)                     |
|-------------------|------------------------------------|
| TOLERANCES: $\pm$ | 0.25<br>(0.010) EXCEPT WHERE NOTED |

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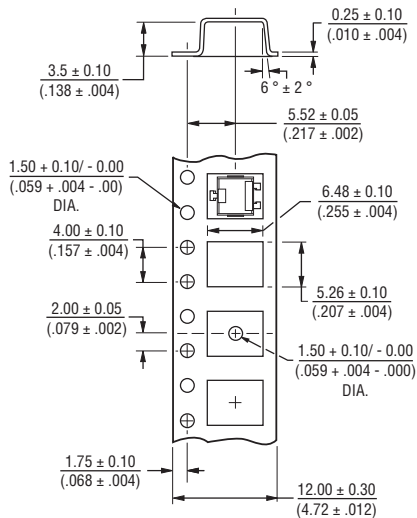
# 3314 - 4 mm Square Trimpot® Trimming Potentiometer

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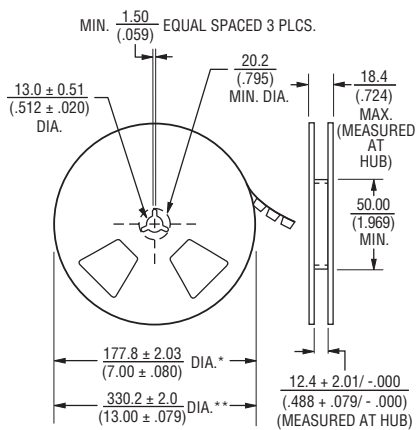
## Packaging Specifications

### (R Style)

TAPE



REEL



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

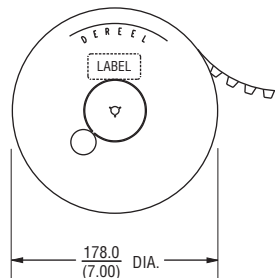
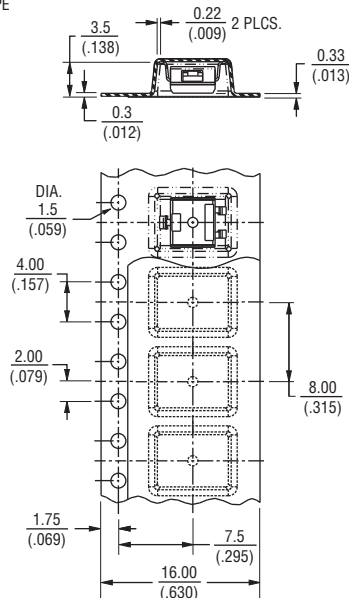
Meets EIA specification 481.

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

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

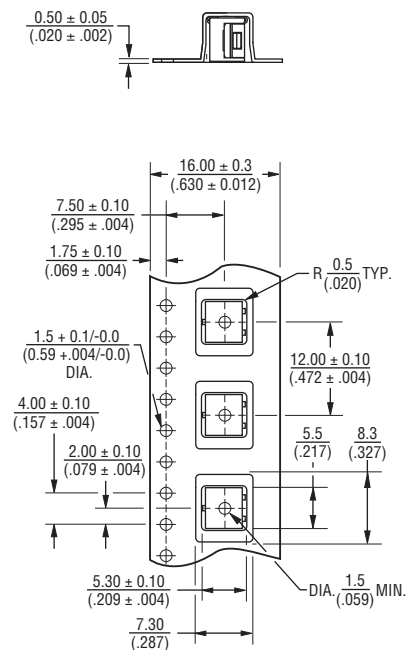
### (R-GM5 Style)

TAPE

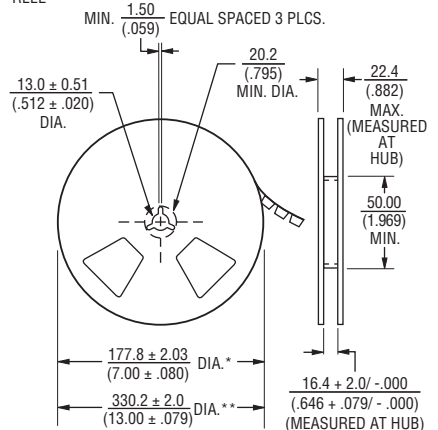


### (S Style)

TAPE



REEL



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

Meets EIA specification 481.

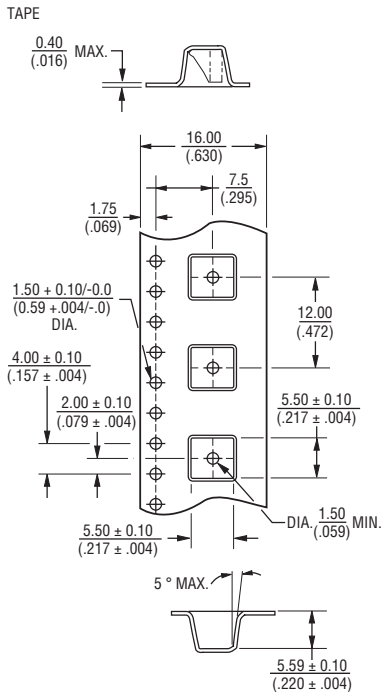
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# 3314 - 4 mm Square Trimpot® Trimming Potentiometer

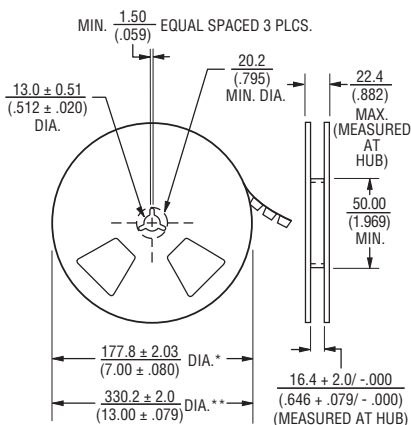
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## Packaging Specifications

(Z Style)



REEL



\* Embossed Tape Designator "E"

\*\* Embossed Tape Designator "G"

(See How To Order chart for further information.)

Meets EIA specification 481.

## How To Order

Model **3314 J - 1 - 502 E**

Style \_\_\_\_\_

Standard or Modified Product Indicator (Styles J, G, H & S) \_\_\_\_\_

-1 = Single Slot  
-2 = Cross Slot  
-3 = Single Slot w/Reverse Marking  
-4 = Cross Slot w/Reverse Marking

Product Indicator (Style R only)  
-GM5 = Cross Slot w/Extended Lead Frame

-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 (MSL-1)\*\*  
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.

**BOURNS®**

Asia-Pacific: Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116

EMEA: Tel: +36 88 520 390 • Fax: +36 88 520 211

The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700

[www.bourns.com](http://www.bourns.com)

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

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

REV. 08/14

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