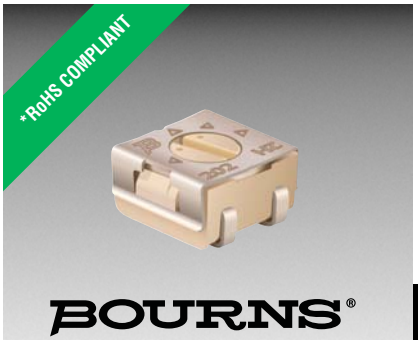



## Features

- 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 ..... ±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

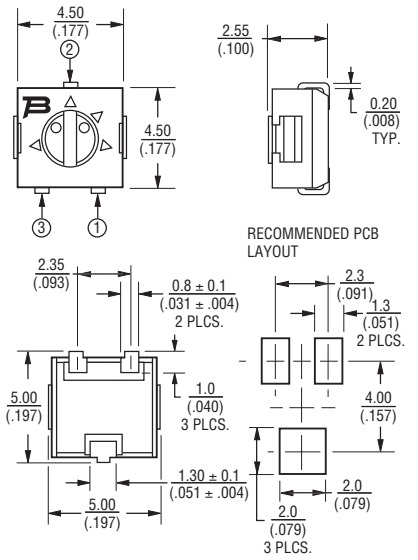
Power Rating (300 volts max. for Style G, J & H; 50 volts max. for Style R)
70 °C .....0.25 watt
125 °C .....0 watt
Temperature Range ... -55 °C to +125 °C
Temperature Coefficient ... ±100 ppm/°C
Seal Test ..85 °C Fluorinert†/60 seconds
Humidity .....90-98 % RH,
10 cycles, 240 hours
TRS ±2 %; IR 10 megohms
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

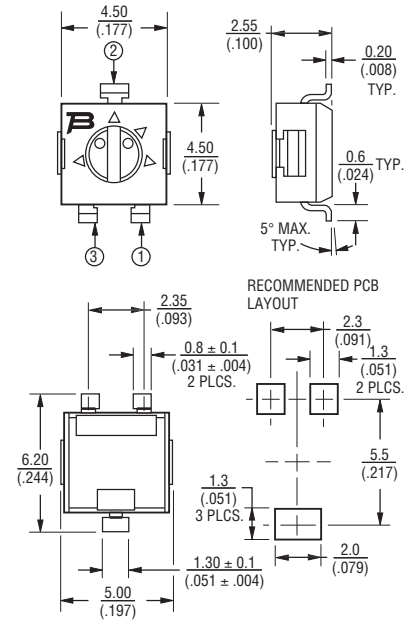
Mechanical Angle ..... 240 ° nom.
Torque.....180 g-cm max.
Stop Strength .....300 g-cm min.
Pushover Strength (S & Z Style)
.....1.6 kilograms (3.5 lbs.) min.
Weight .....Approximately 0.01 oz.
Marking.....Manufacturer's code,
resistance code and date code
Wiper .....50 % (Actual TR) ±10 %
Flammability .....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

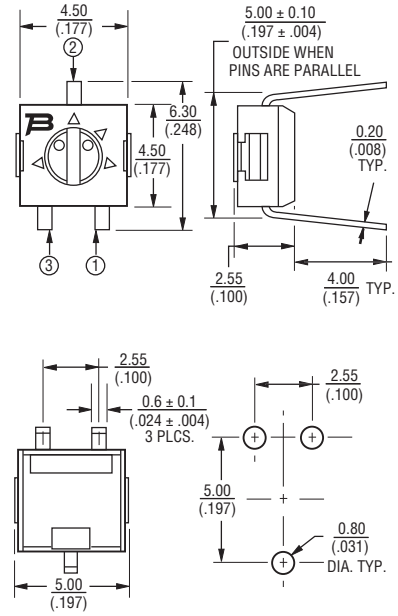
**3314J-1**



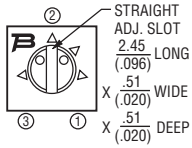

**3314G-1**



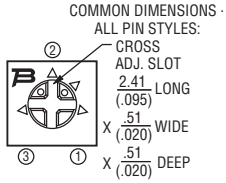

**3314H-1**



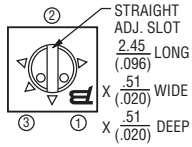

**3314J-1, G-1, R-1, H-1 (Bourns Marking, Straight Slot)**



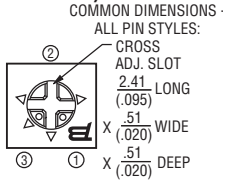

**3314J-2, G-2, R-2, H-2, R-GM5 (Bourns Marking, Cross Slot)**




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




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



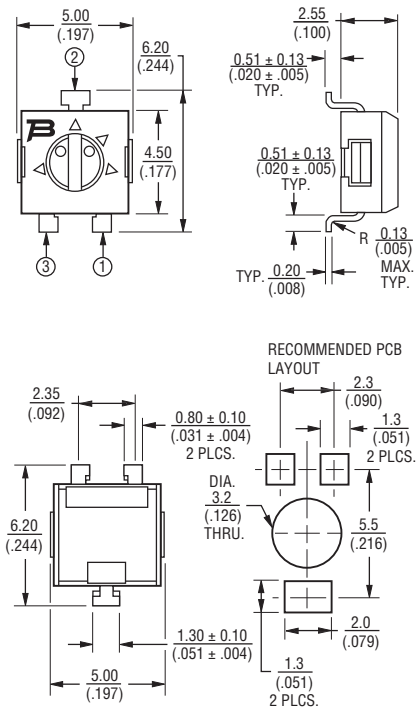

DIMENSIONS: MM (INCHES)

TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

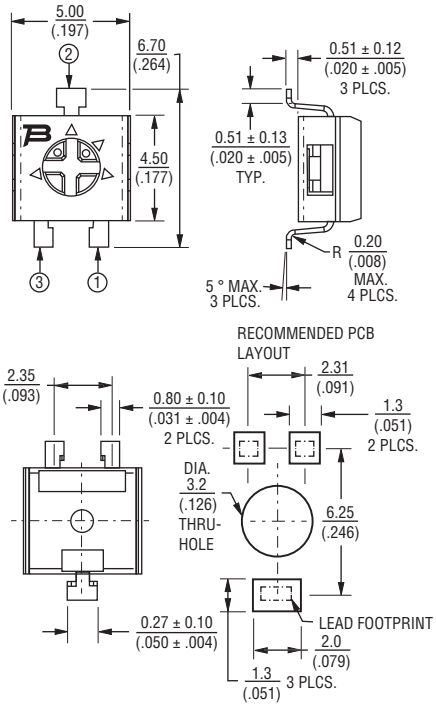
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
†"Fluorinert" is a registered trademark of 3M Co.
Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.

## Product Dimensions

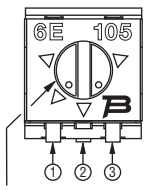
**3314R-1**




**3314R-GM5**

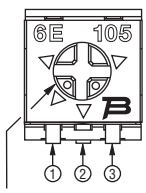



**3314S-1**
**(Bourns Marking, Straight Slot)**



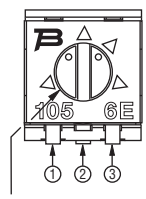

ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

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



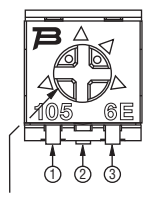

ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

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



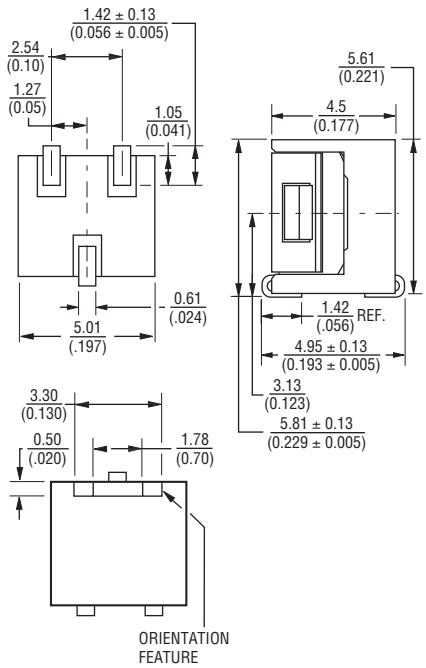

ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

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

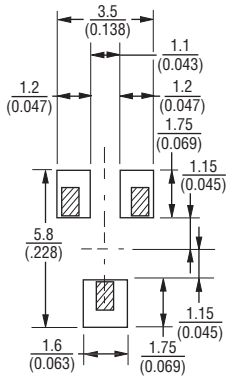



ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

**3314S**
**Common Dimensions**




RECOMMENDED PCB LAYOUT




DIMENSIONS: MM / (INCHES)

TOLERANCES: ± 0.25 / (.010) EXCEPT WHERE NOTED

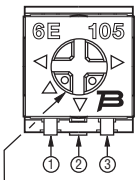
Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.

# 3314 - 4 mm Square Trimpot® Trimming Potentiometer

BOURNS®

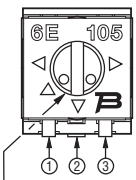
## Product Dimensions

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



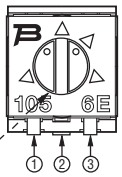

ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

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



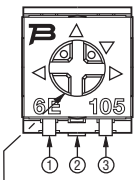

ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

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



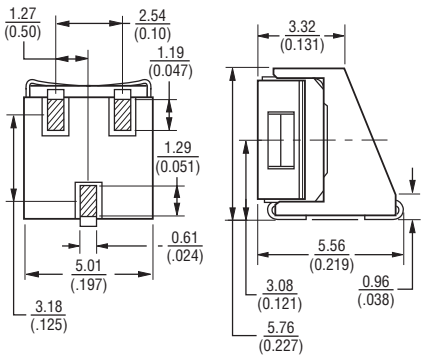

ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

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

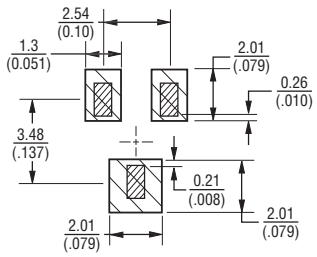


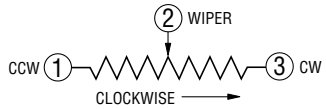

ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

**3314Z**
**Common Dimensions**




RECOMMENDED PCB LAYOUT

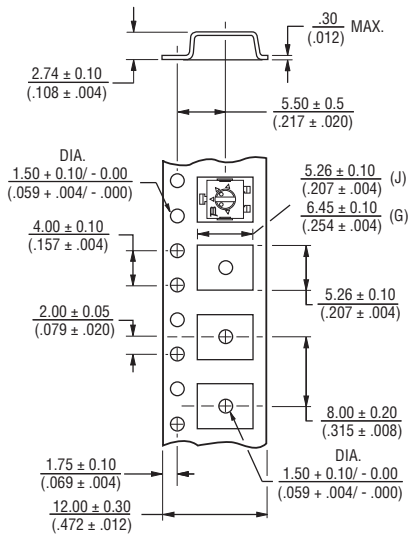


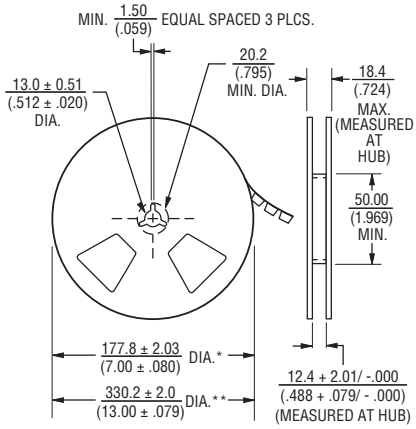

## Packaging Specifications

**(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 (INCHES)

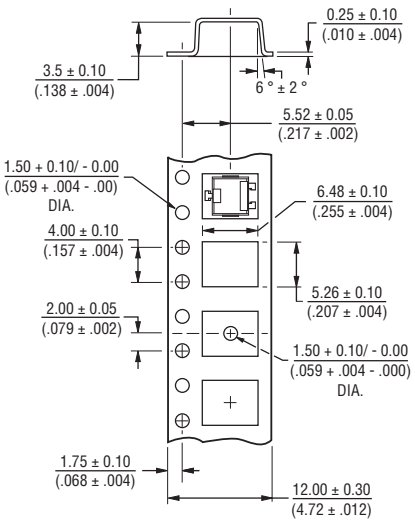
TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

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.

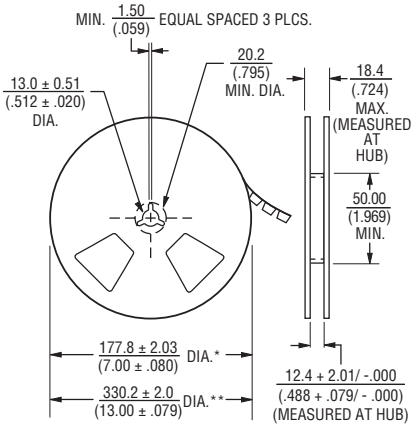
## Packaging Specifications

**(R Style)**

TAPE




REEL




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

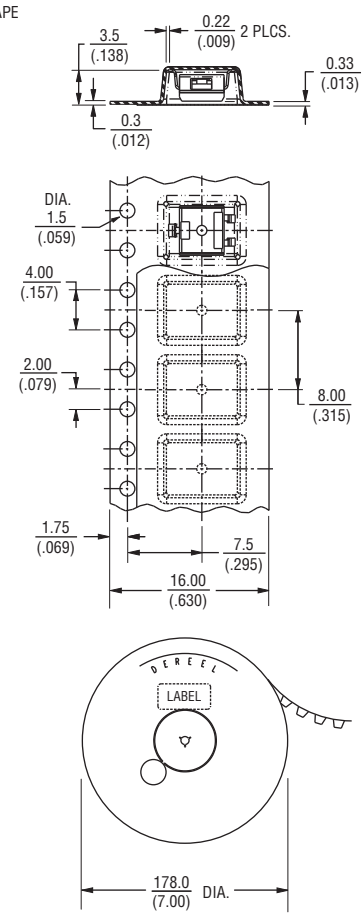
Meets EIA specification 481.

DIMENSIONS: MM (INCHES)

TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

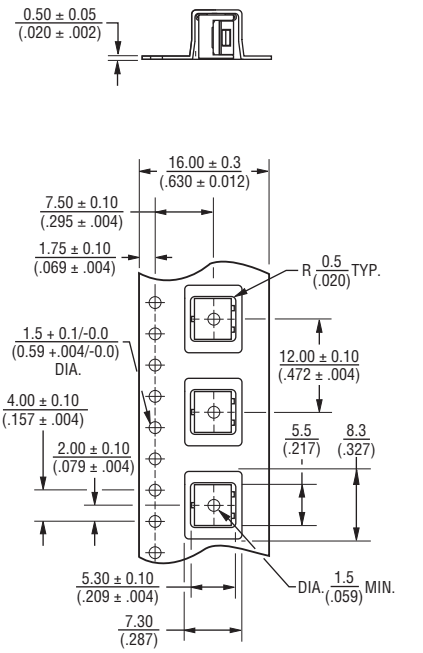
**(R-GM5 Style)**

TAPE

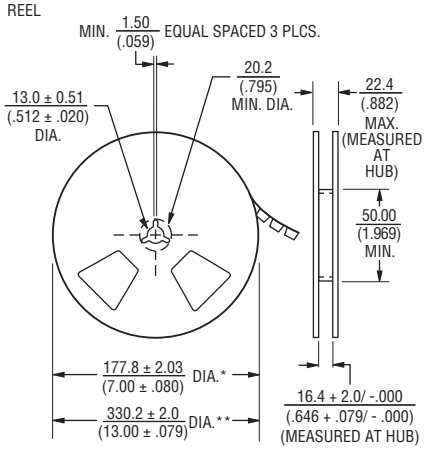



**(S Style)**

TAPE




REEL




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

Meets EIA specification 481.

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.

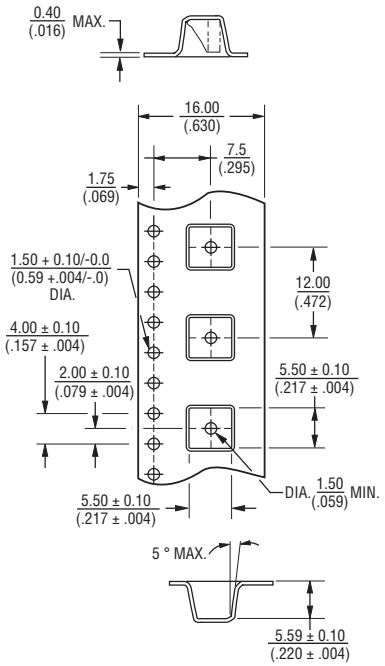
# 3314 - 4 mm Square Trimpot® Trimming Potentiometer

BOURNS®

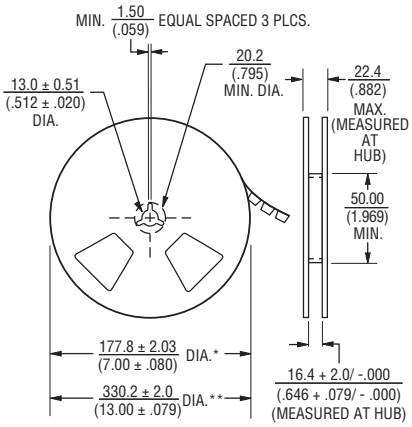
## Packaging Specifications

**(Z Style)**

TAPE




REEL




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

Meets EIA specification 481.

DIMENSIONS: MM / (INCHES)

TOLERANCES: ± 0.25 / (.010) EXCEPT WHERE NOTED

## How To Order

**3314 J - 1 - 502 E**

Model
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 |
| **100** | **101** |
| **200** | **201** |
| **500** | **501** |
| **1,000** | **102** |
| **2,000** | **202** |
| **5,000** | **502** |
| **10,000** | **103** |
| **20,000** | **203** |
| **50,000** | **503** |
| **100,000** | **104** |
| 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**


REV. 08/14


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.