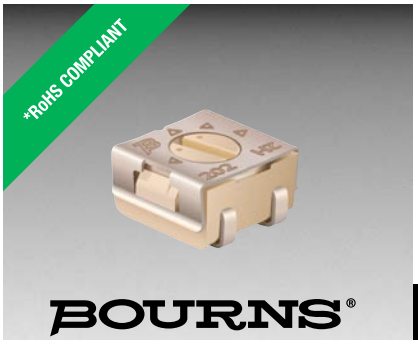
THE DATASHEET OF

3314G-2-503E



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 & 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

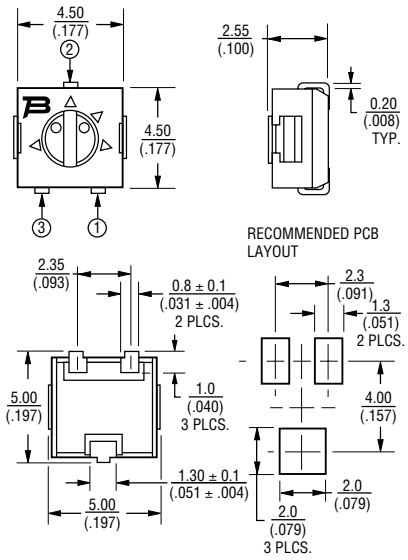
Power Rating (300 volts max. for Style G, J & H; 50 volts max. for Style R)
70 °C .....0.25 watt
125 °C .....0 watt
Temperature Range ... -55 °C to +125 °C
Temperature Coefficient ... ±100 ppm/°C
Seal Test ..85 °C Fluorinert†/60 seconds
Humidity .....90-98 % RH,
10 cycles, 240 hours
TRS ±2 %; IR 10 megohms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

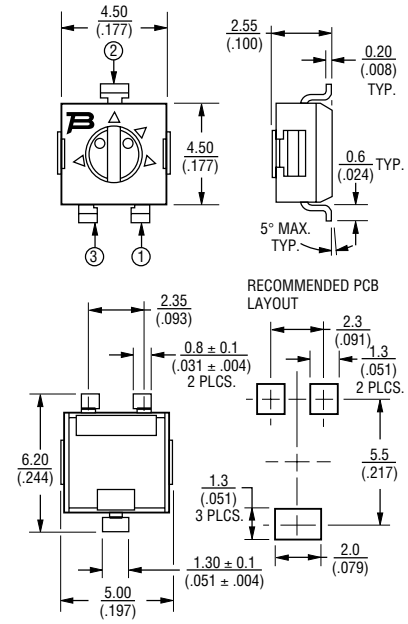
Mechanical Angle ..... 240 ° nom.
Torque.....180 g-cm max.
Stop Strength .....300 g-cm min.
Pushover Strength (S & Z Style)
.....1.6 kilograms (3.5 lbs.) min.
Weight .....Approximately 0.01 oz.
Marking.....Manufacturer's code,
resistance code and date code
Wiper .....50 % (Actual TR) ±10 %
Flammability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

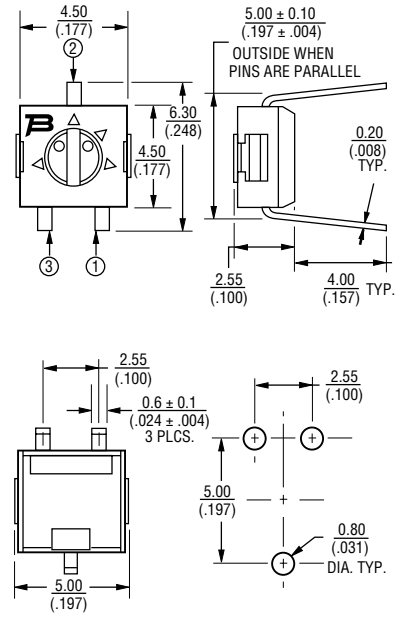
3314J-1



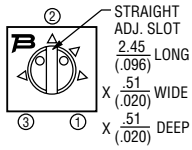
3314G-1



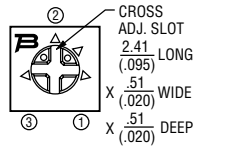
3314H-1



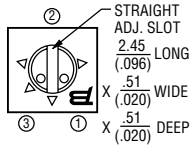
3314J-1, G-1, R-1, H-1 (Bourns Marking, Straight Slot)



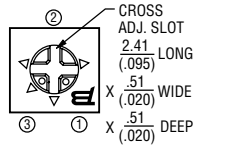
3314J-2, G-2, R-2, H-2 (Bourns Marking, Cross Slot)



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: ± 0.30 (.012) EXCEPT WHERE NOTED

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*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.
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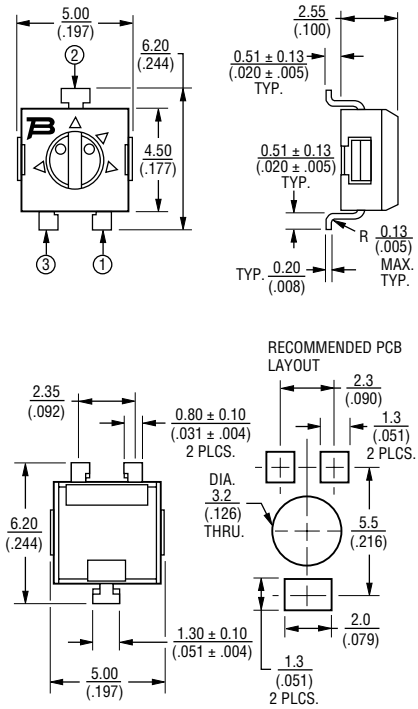
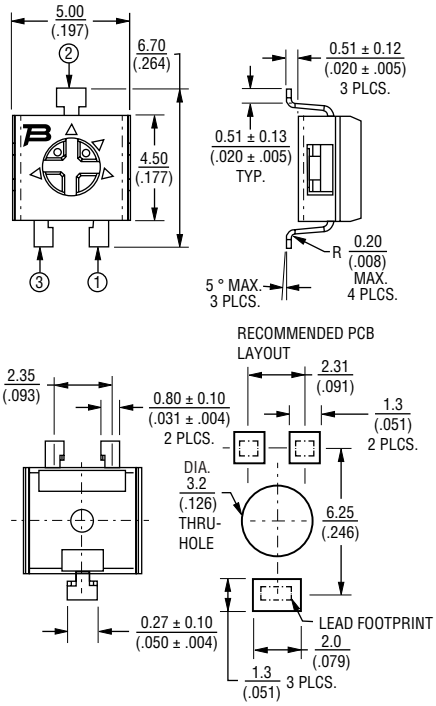
Product Dimensions

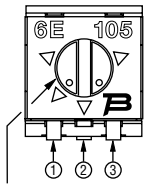
3314R-1



3314R-GM5

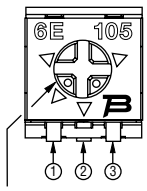


3314S-1
(Bourns Marking, Straight Slot)



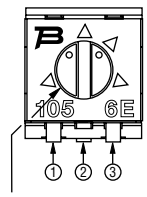
ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

3314S-2
(Bourns Marking, Cross Slot)



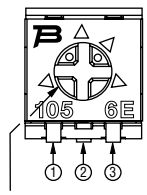
ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

3314S-3
(Reverse Marking, Straight Slot)



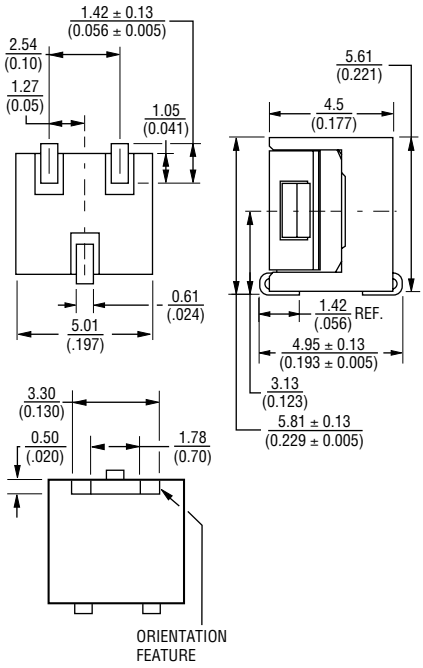
ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

3314S-4
(Reverse Marking, Cross Slot)

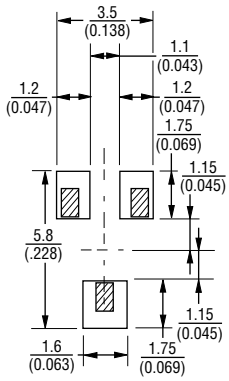


ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

3314S
Common Dimensions



RECOMMENDED PCB LAYOUT



DIMENSIONS: MM (INCHES)

TOLERANCES: ± 0.30 (.012) EXCEPT WHERE NOTED

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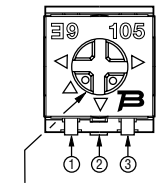
3314 - 4 mm Square Trimpot® Trimming Potentiometer

BOURNS®

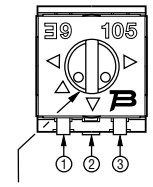
Product Dimensions

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



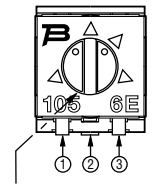
ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

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



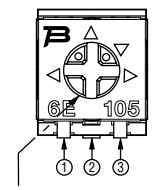
ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

3314Z-3
(Reverse Marking, Straight Slot)



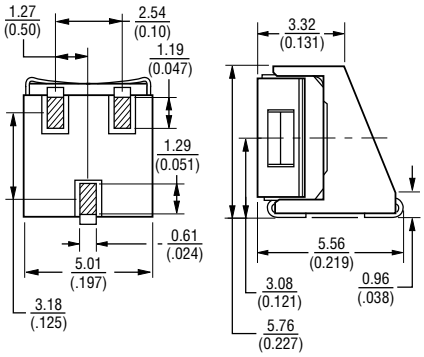
ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

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

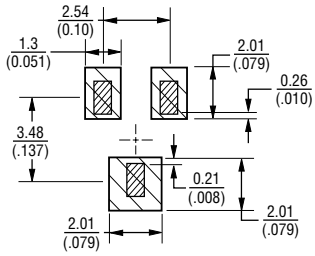


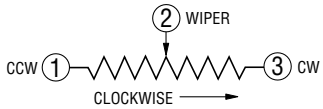
ROTOR POSITIONED AS SHOWN WITHIN ± 22 ° OF CENTERLINE OF TERMINAL 2

3314Z
Common Dimensions



RECOMMENDED PCB LAYOUT

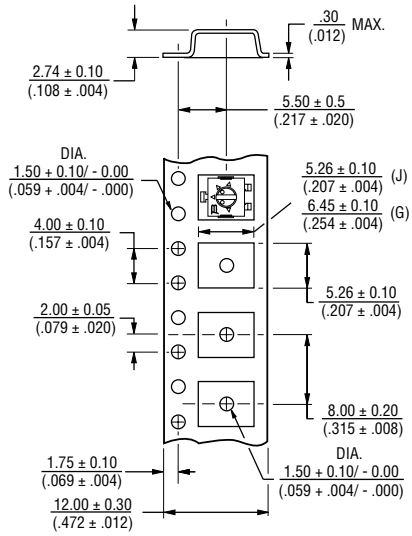




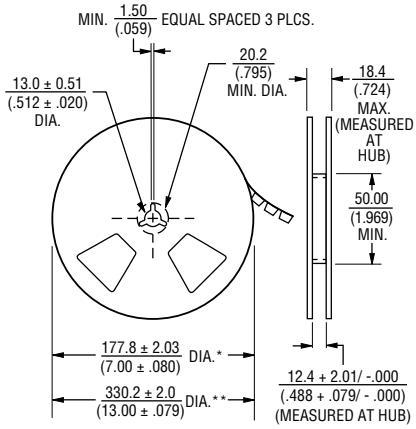
Packaging Specifications

(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: ± 0.30 / (.012) EXCEPT WHERE NOTED

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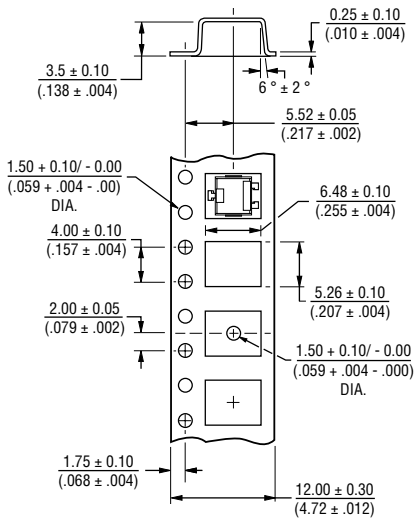
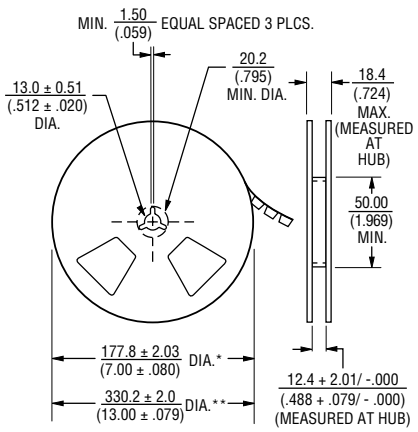
Packaging Specifications

(R Style)

TAPE



REEL



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

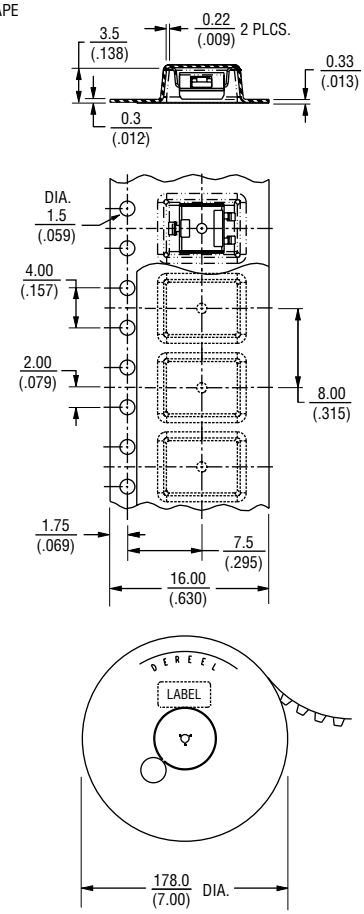
Meets EIA specification 481.

DIMENSIONS: MM (INCHES)

TOLERANCES: ± 0.30 (.012) EXCEPT WHERE NOTED

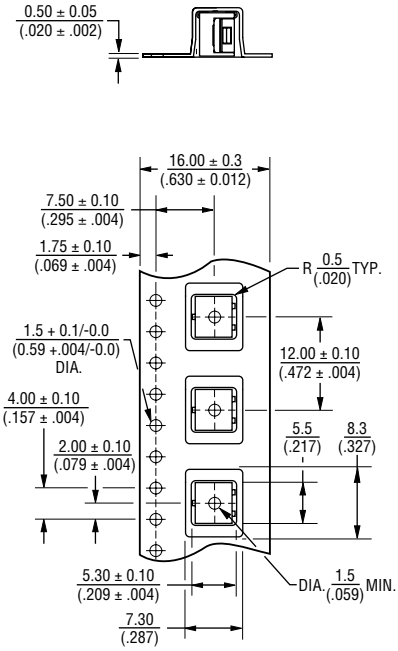
(R-GM5 Style)

TAPE

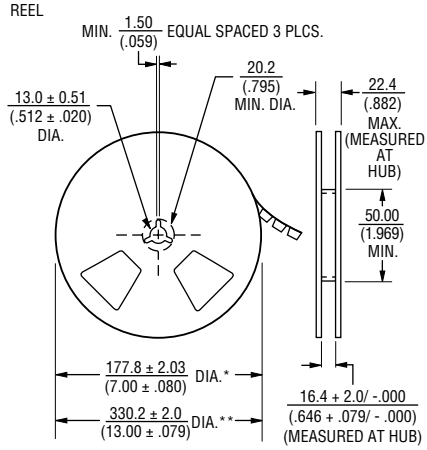


(S Style)

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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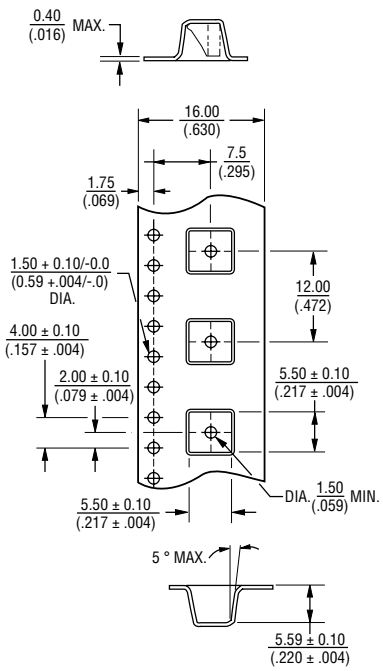
3314 - 4 mm Square Trimpot® Trimming Potentiometer

BOURNS®

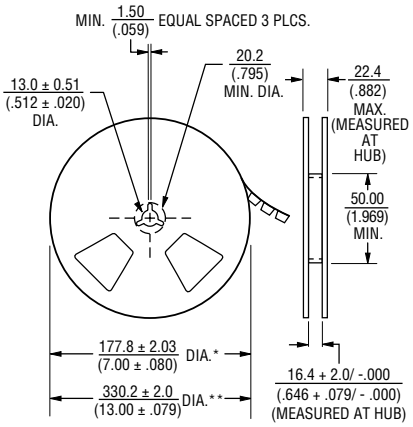
Packaging Specifications

(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: ± 0.30 / (.012) 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.

Tape and reel material meets Antistatic ANSI/ ESD 5541-2003 packaging standards.

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.

REV. 05/19

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