

*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 Resistance500 vdc.
100 megohms min.
Dielectric Strength
Sea Level.....500 vac (1 minute)
Adjustment Angle210 ° 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
Humidity90-98 % RH,
10 cycles, 240 hours
TRRS ±2 %; IR 10 megohms
Vibration20 G TRRS ±1 %; VRS ±1 %
Shock.....100 G TRRS ±1 %; VRS ±1 %
Load Life
.....(@ 70 °C Rated Power 1000 Hours)
TRRS ±3 %
Rotational Life100 cycles
TRRS ±3 %
Thermal Shock5 cycles
TRRS ±2 %; VRS ±1 %

Physical Characteristics

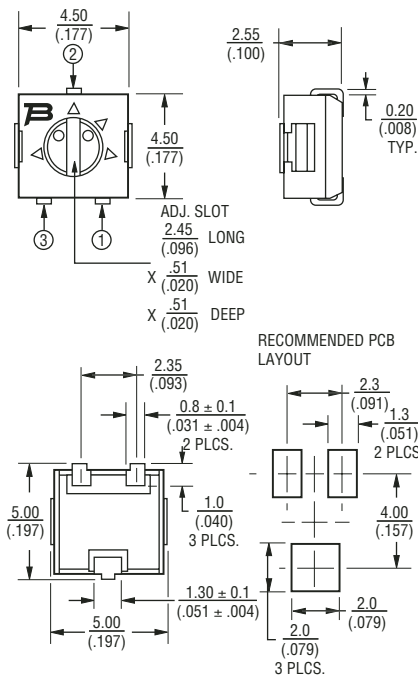
Mechanical Angle240 ° nom.
Torque180 g-cm typical
Stop Strength.....300 g-cm typical
Pushover Strength (Z Style)
.....2 kilograms (4.4 lbs.) minimum
WeightApproximately 0.01 oz.
MarkingManufacturer's code,
resistance code and date code
Wiper.....50 % (Actual TR) ±10 %
Flammability.....U.L. 94V-0
Standard Packaging
J, G and R500 pcs./7 " reel
S and Z.....200 pcs./7 " reel
H.....100 pcs./tube
Adjustment ToolH-90

TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

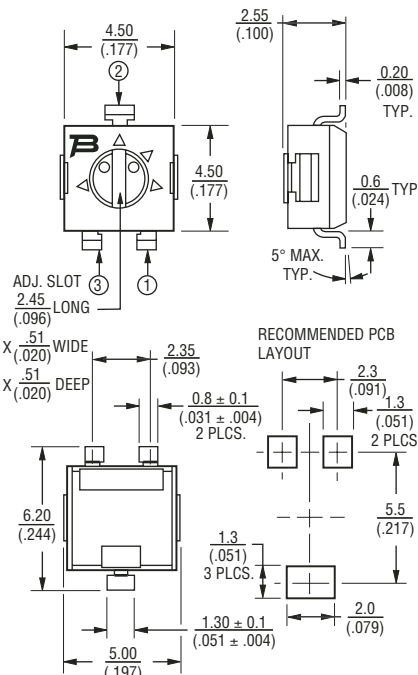
DIMENSIONS ARE: $\frac{\text{MM}}{(\text{INCHES})}$

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
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 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.

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

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Packaging Specifications - J, G and R Styles

Front View:

- Total width: 5.00 (.197)
- Top mounting hole center-to-center distance: 6.20 (.244)
- Bottom mounting hole center-to-center distance: 4.50 (.177)
- Mounting holes are numbered 1, 2, and 3.

Side View:

- Overall height: 2.45 (.096) LONG
- Flange thickness: X 0.51 (.020) WIDE
- Internal cavity depth: X 0.51 (.020) DEEP

Recommended PCB Layout:

- PCB pad diameter: DIA. 3.2 (.126) THRU.
- Pad-to-pad spacing: 0.80 ± 0.10 (.031 ± .004) 2 PLCS.
- Pad-to-hole spacing: 1.30 ± 0.10 (.051 ± .004)
- Hole diameter: 2.35 (.092)
- Flange thickness: 0.20 (.008) TYP.
- Radius: R 0.13 (.005) MAX. TYP.
- Reference dimensions: 2.35 (.092), 2.3 (.090), 1.3 (.051) 2 PLCS., 5.5 (.216), 2.0 (.079), 1.3 (.051) 2 PLCS.

[illegible]

Technical drawing of a mechanical part with dimensions in inches and millimeters. The drawing includes a top view and a side view. The top view shows a rectangular part with a central circular feature and four corner features. The side view shows a cross-section of the part with a central circular feature and four corner features. The dimensions are as follows:

- Top view:
 - Overall width: $2.74 \pm .10$ (69.0 ± .004)
 - Overall height: $1.5 \pm .10 / -.00$ (38.1 ± .004 / -.000)
 - Central circular feature diameter: $1.5 \pm .10 / -.00$ (38.1 ± .004 / -.000)
 - Central circular feature depth: $4.00 \pm .10$ (101.6 ± .004)
 - Central circular feature width: $2.00 \pm .05$ (50.8 ± .012)
 - Central circular feature height: $1.75 \pm .10$ (44.3 ± .004)
 - Central circular feature width: $12.00 \pm .30$ (304.8 ± .012)
- Side view:
 - Overall width: $2.74 \pm .10$ (69.0 ± .004)
 - Overall height: $1.5 \pm .10 / -.00$ (38.1 ± .004 / -.000)
 - Central circular feature diameter: $1.5 \pm .10 / -.00$ (38.1 ± .004 / -.000)
 - Central circular feature depth: $4.00 \pm .10$ (101.6 ± .004)
 - Central circular feature width: $2.00 \pm .05$ (50.8 ± .012)
 - Central circular feature height: $1.75 \pm .10$ (44.3 ± .004)
 - Central circular feature width: $12.00 \pm .30$ (304.8 ± .012)

1.78 ± .25
(.070 ± .010)

EQUAL SPACED 3 PLCS.

21.01 ± .79
(.827 ± .031)

13.0 ± .51
(.512 ± .020)
DIA.

2.67 ± .25
(.105 ± .010)

59.18 ± 2.03
(2.330 ± .080)

177.8 ± 2.03
(7.00 ± .080) DIA. *

330.2 ± 2.0
(13.00 ± .079) DIA. **

12.4 ± 2.01 / -.000
(.488 ± .079 / -.000)

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

Technical drawing of a mechanical part, likely a connector or plug, showing front and side views with dimensions in inches and millimeters.

Top View Dimensions:

- Overall width: $3.29 \pm .10$ (78.94 ± .004)
- Top flange width: $1.30 \pm .004$
- Top flange height: $.30$ MAX. (0.12)
- Top flange thickness: $6^\circ \pm 2^\circ$
- Internal feature width: $5.52 \pm .05$ (217 ± .002)

Front View Dimensions:

- Overall height: $12.00 \pm .30$ (4.72 ± .012)
- Top section height: $1.5 \pm .10 / -.00$ (.059 ± .004-.00) DIA.
- Second section height: $4.00 \pm .10$ (.157 ± .004)
- Third section height: $2.00 \pm .05$ (.079 ± .002)
- Fourth section height: $1.75 \pm .10$ (.068 ± .004)
- Internal feature width: $6.45 \pm .010$ (.254 ± .004)
- Internal feature height: $5.26 \pm .10$ (.207 ± .004)
- Internal feature diameter: 1.50 ± 0.30 (.059 ± .012) DIA.

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

TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

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

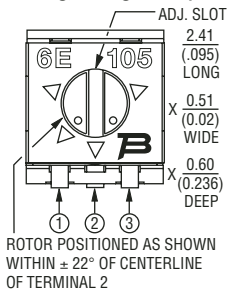
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

3314 - 4 mm Square Trimming Potentiometer

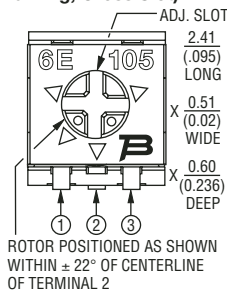
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Product Dimensions

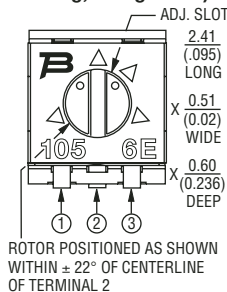
3314S-1 (Bourns Marking, Straight Slot)



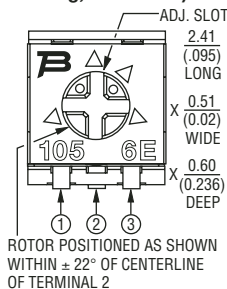
3314S-2 (Bourns Marking, Cross Slot)



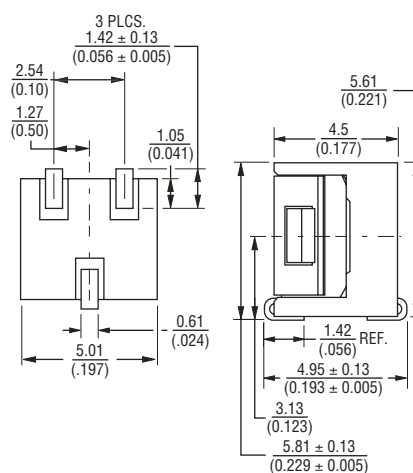
3314S-3 (Reverse Marking, Straight Slot)



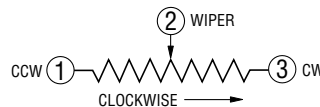
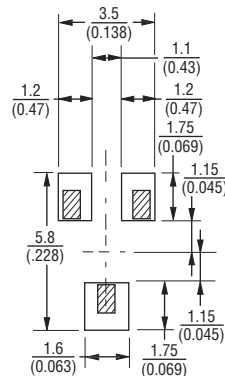
3314S-4 (Reverse Marking, Cross Slot)



3314S Common Dimensions



RECOMMENDED PCB LAYOUT

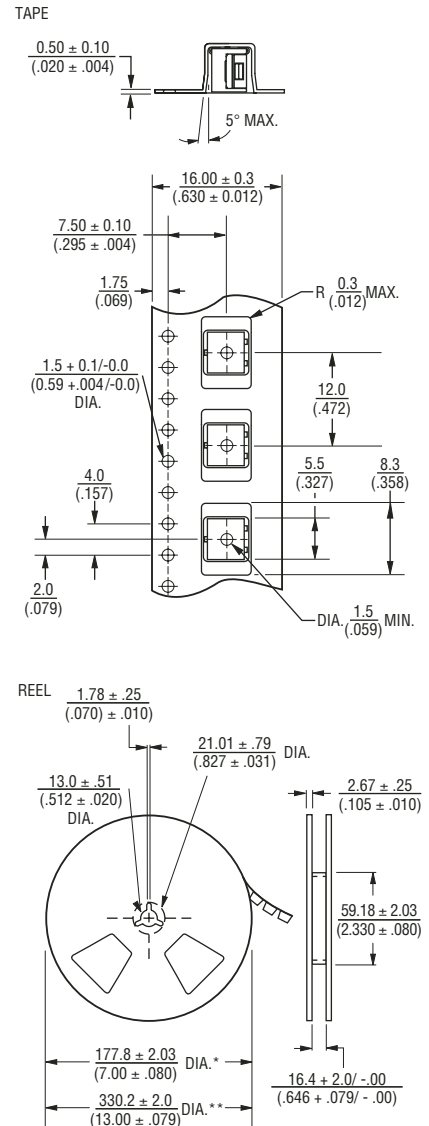


TOLERANCES: ± 0.30 (.012) EXCEPT WHERE NOTED

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

Packaging Specifications

(S Style)



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

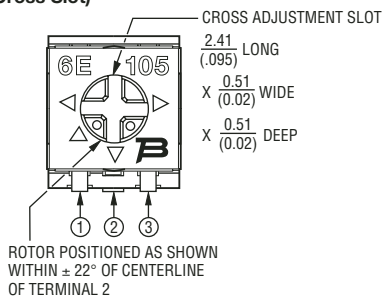
Meets EIA specification 481.

3314 - 4 mm Square Trimming Potentiometer

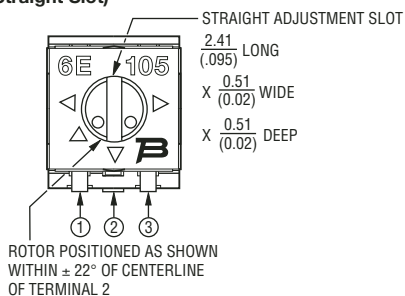
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Product Dimensions

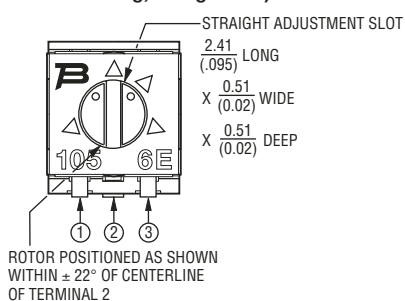
3314Z-1-(RC) E (Cross Slot)



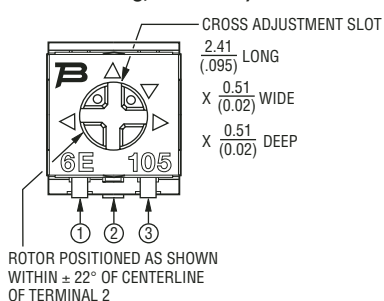
3314Z-GA4-(RC) E (Straight Slot)



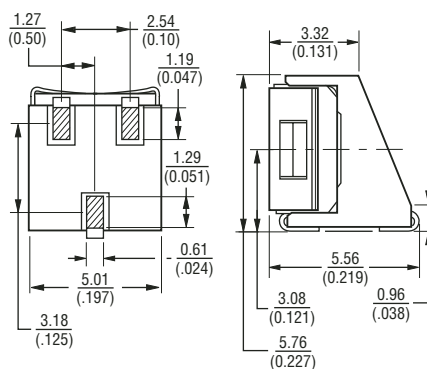
3314Z-3 (Reverse Marking, Straight Slot)



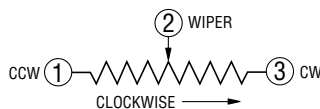
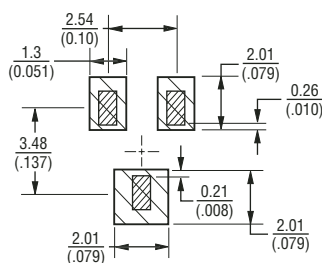
3314Z-4-(RC) E (Reverse Marking, Cross Slot)



3314Z Common Dimensions



RECOMMENDED PCB LAYOUT



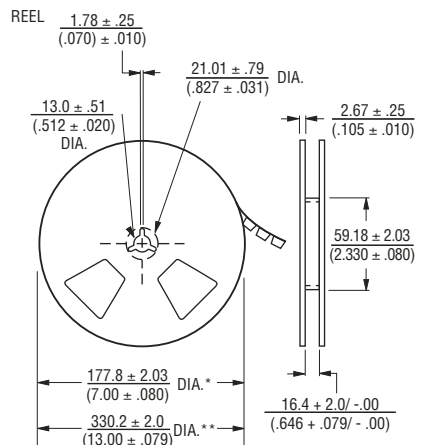
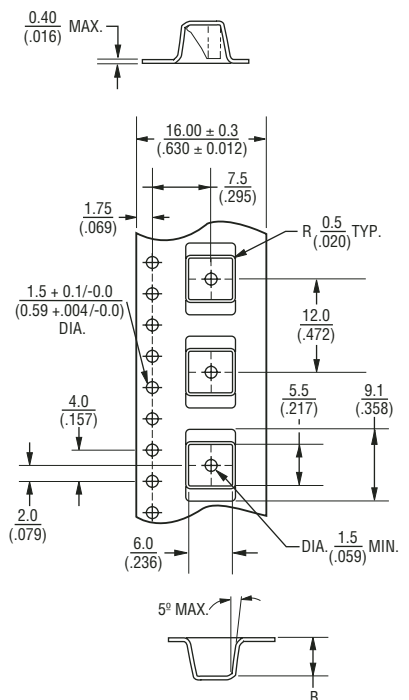
TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

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

Packaging Specifications

(Z Style)

TAPE



* Embossed Tape Designator "E"

** Embossed Tape Designator "G"

(See How To Order chart for further information.)

Meets EIA specification 481.

REV. 08/05

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