



## Features

- Surface Mount 3 mm Square Single-Turn Cermet / Sealed
- Compatible with surface mount manufacturing processes (not recommended for wave soldering)
- Rotor stop for "in-circuit" adjustment
- 100 cycle rotational and seal life
- Plastic housing for RF applications
- Reverse pin layout option (Model 3313X)
- RoHS compliant\*
- Halogen free models available
- AEC-Q200 Qualified Grade 1

## 3313 - 3 mm TrimPot® Trimming Potentiometer

### Electrical Characteristics

Standard Resistance Range	..... 10 ohms to 2 megohms
	(see standard resistance table)
Resistance Tolerance	..... ±20 % std.
End Resistance	..... 1 % or 3 ohms max.
	(whichever is greater)
Contact Resistance Variation	..... 3 % or 3 ohms
Adjustability	
Voltage Divider	..... ±0.1 %
Rheostat	..... ±0.2 %
Resolution	..... Infinite
Insulation Resistance	..... 500 vdc.
	100 megohms min.
Dielectric Strength	
Sea Level	..... 500 vac
70,000 Feet	..... 350 vac
Adjustment Angle	..... 220° nom.

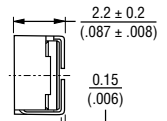
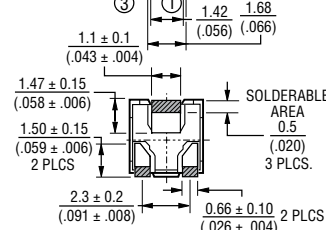
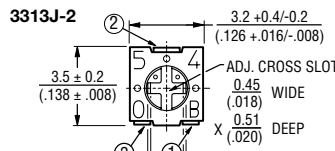
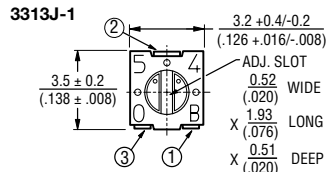
### Environmental Characteristics

Max. Soldering Exposure	..... 250 °C/10 seconds
Power Rating (200 volts max.)	
70 °C	..... 0.125 watt
125 °C	..... 0 watt
Operating Temp. Range	..... -55 °C to +125 °C
Temperature Coefficient	
..... ≤100 ohms	±150 ppm/°C;
..... >100 ohms	±100 ppm/°C
Seal Test	..85 °C Fluorinert <sup>†</sup> /60 seconds
Humidity	..... MIL-STD 202, Method 106
	(no vibration) TRS ±3 %;
	IR 10 megohms
Vibration	..... 20 G TRS ±1 %; VRS ±1 %
Shock	..... 100 G TRS ±1 %; VRS ±1 %
Load Life	..... 1000 hours
	@ 70 °C Rated Power; TRS ±3 %
Rotational Life	..... 100 cycles TRS ±3 %
Thermal Shock	..... 5 cycles
	TRS ±2 %; VRS ±1 %

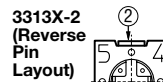
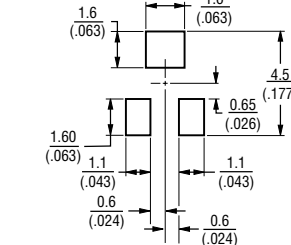
### Physical Characteristics

Mechanical Angle	..... 250 ° nom.
Torque	..... 50 g-cm max.
Stop Strength	..... 200 g-cm min.
Pushover Strength ("S" Style only)	
.....	1.6 Kilograms (3.5 lbs) minimum
Flammability	..... U.L. 94V-0
Weight	..... Approx. 0.01 oz.
Marking	..... Resistance code and date code
Wiper	..... 50 % (Actual TR) ±10 %
Standard Packaging	
J, X Styles (MSL-1)	..... 1000 pcs./7 " reel
S Style (MSL-1)	..... 200 pcs./7 " reel
Adjustment Tool	..... H-91

### Product Dimensions



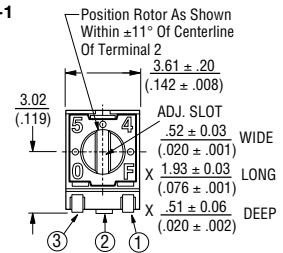
#### RECOMMENDED LAND PATTERN



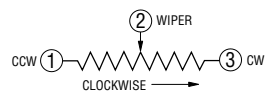
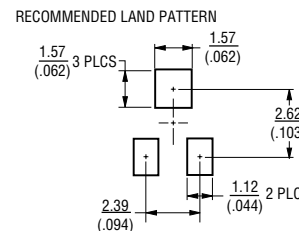
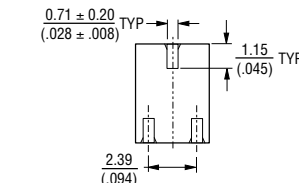
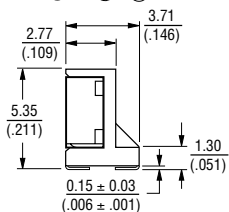
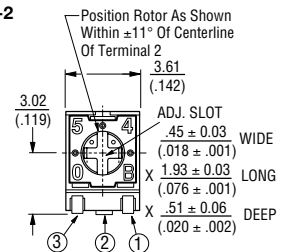
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

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

### 3313S-1



### 3313S-2



\* RoHS Directive 2015/863, Mar. 31, 2015 and Annex.

\*\* Halogen free product is identified by a black housing color. Bourns follows the prevailing definition of "halogen free" in the industry. Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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**WARNING Cancer and Reproductive Harm**

[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Features (Continued)

- See [processing information](#) on RoHS compliant surface mount trimmers
- For trimmer applications/processing guidelines, [click here](#)

# 3313 - 3 mm Trimpot® Trimming Potentiometer

# BOURNS®

### Standard Resistance Table

Resistance (Ohms)	Part Marking Code	Resistance Code
10	A1	100
20	21	200
50	51	500
<b>100</b>	<b>A2</b>	<b>101</b>
<b>200</b>	<b>22</b>	<b>201</b>
<b>500</b>	<b>52</b>	<b>501</b>
<b>1,000</b>	<b>A3</b>	<b>102</b>
<b>2,000</b>	<b>23</b>	<b>202</b>
<b>5,000</b>	<b>53</b>	<b>502</b>
<b>10,000</b>	<b>A4</b>	<b>103</b>
<b>20,000</b>	<b>24</b>	<b>203</b>
<b>50,000</b>	<b>54</b>	<b>503</b>
<b>100,000</b>	<b>A5</b>	<b>104</b>
200,000	25	204
500,000	55	504
1,000,000	A6	105
2,000,000	26	205

Popular distribution resistance values listed in boldface. Special resistances available.

### How To Order

**3313 J - 1 - 502 E**

Model \_\_\_\_\_

Style \_\_\_\_\_

Standard or Modified Product Indicator \_\_\_\_\_

- 1 = Standard Single Slot
- 2 = Standard Cross Slot
- GK2 = Halogen Free Single Slot (Black Housing Color)
- GL5 = Halogen Free Cross Slot (Black Housing Color)

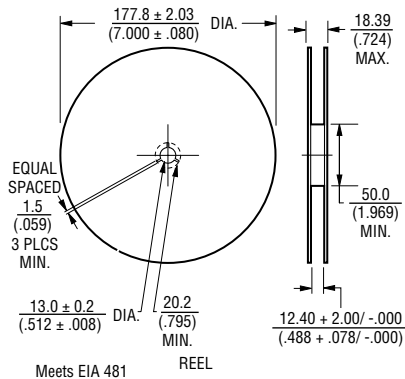
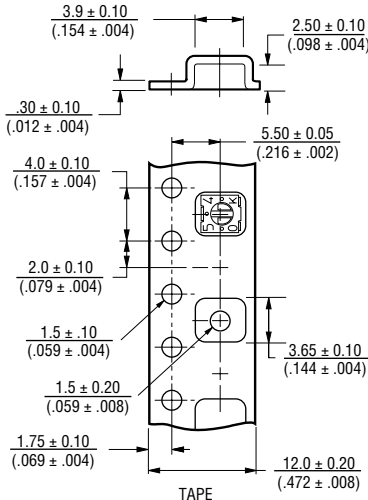
Resistance Code \_\_\_\_\_

Embossed Tape \_\_\_\_\_

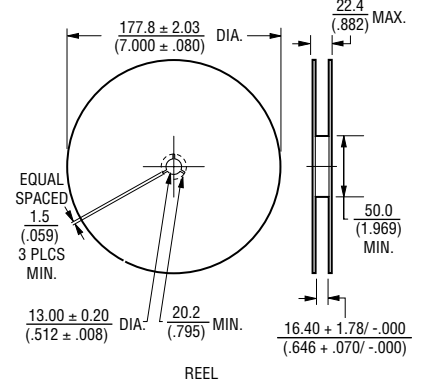
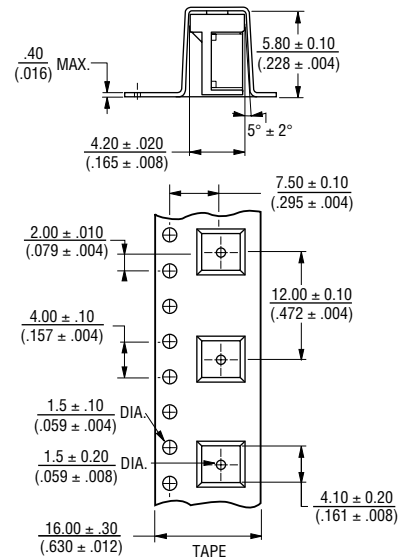
- 1000 pcs. / 7" Reel (J, X Styles - MSL-1)
- 200 pcs. / 7" Reel (S Style - MSL-1)

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

### 3313J, X Packaging Specifications



### 3313S Packaging Specifications



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

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

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REV. 08/19

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