

\*ROHS COMPLIANT  
\*\*HALOGEN FREE MODELS  
AVAILABLE



**BOURNS®**

## Features

- Surface Mount 3 mm Square Single-Turn Cermet / Sealed
- Compatible with surface mount manufacturing processes
- 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\* - see [processing information](#) on RoHS compliant surface mount trimmers
- For trimmer applications/processing guidelines, [click here](#)
- Halogen free models available\*\*

# 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.

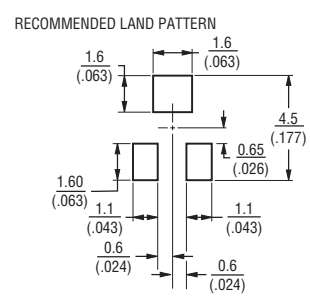
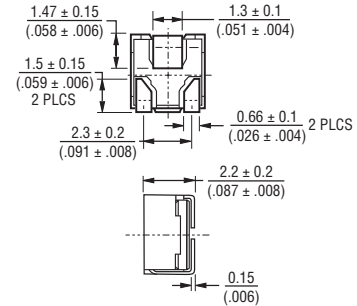
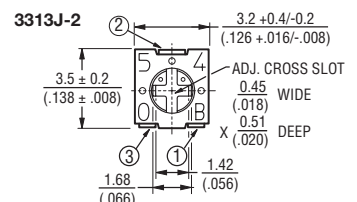
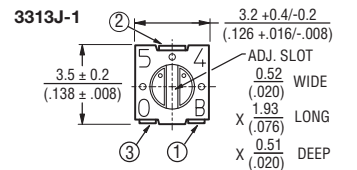
## Environmental Characteristics

Max. Soldering Exposure ..... 260 °C/5 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†  
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 %

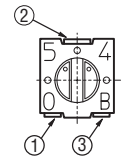
## Physical Characteristics

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 ..... 1000 pcs./7 ” reel  
S Style ..... 200 pcs./7 ” reel  
Adjustment Tool ..... H-91

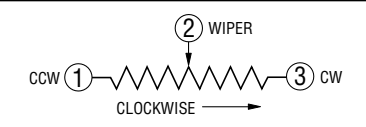
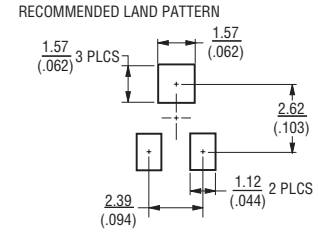
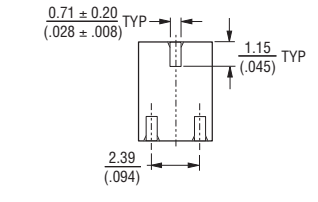
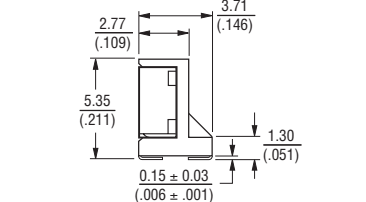
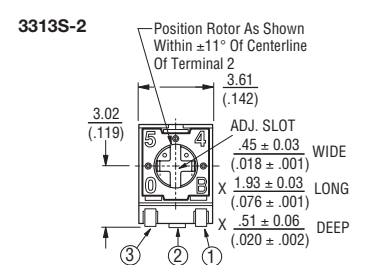
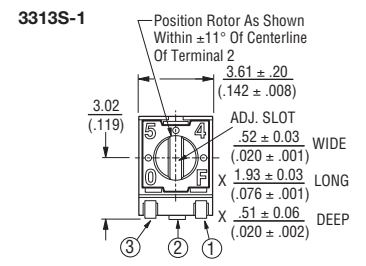
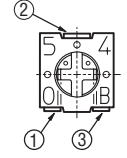
## Product Dimensions



### 3313X-1 (Reverse Pin Layout)



### 3313X-2 (Reverse Pin Layout)



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

†“Fluorinert” is a registered trademark of 3M Co.  
Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.  
\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
\*\* 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.

# 3313 - 3 mm Trimpot® Trimming Potentiometer

# BOURNS®

## 3313J, X Packaging Specifications



## 3313S Packaging Specifications



## 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)
- 200 pcs. / 7 " Reel (S Style)

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

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

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

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