



## 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.            |

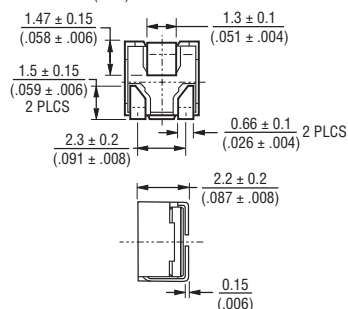
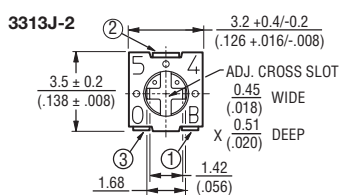
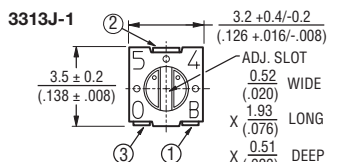
### Environmental Characteristics

|                               |                               |
|-------------------------------|-------------------------------|
| 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 %            |

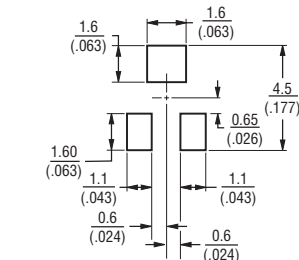
### Physical Characteristics

|                                    |                                 |
|------------------------------------|---------------------------------|
| 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                            |

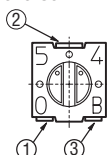
### Product Dimensions



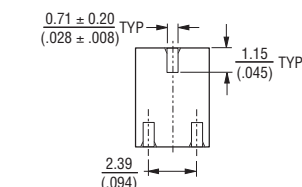
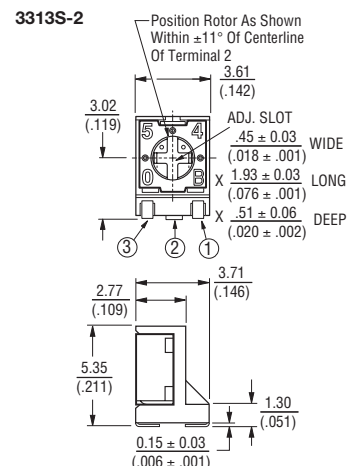
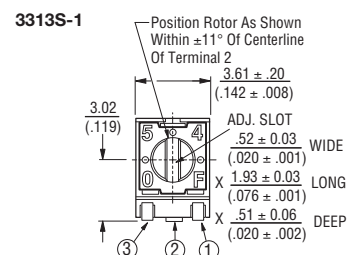
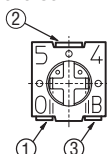
#### RECOMMENDED LAND PATTERN



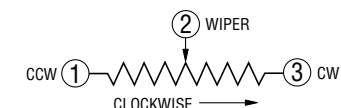
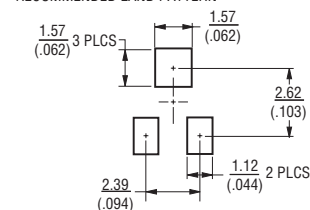
#### 3313X-1 (Reverse Pin Layout)



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



#### RECOMMENDED LAND PATTERN



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

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

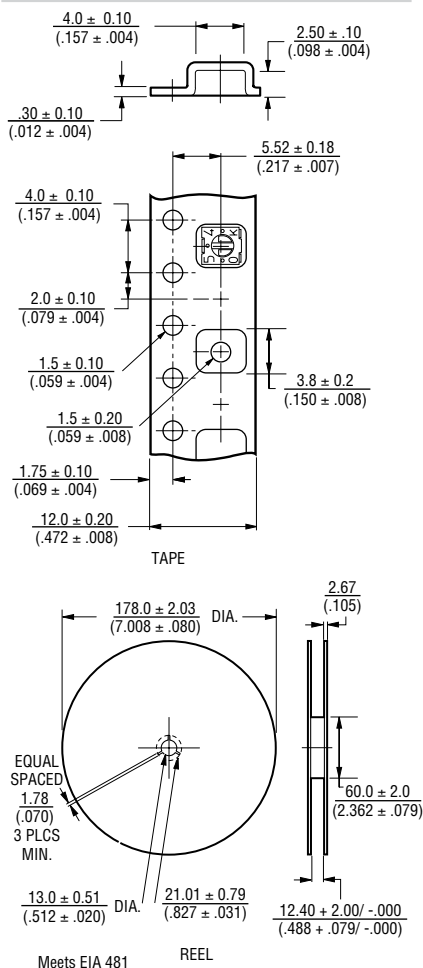
\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

\*\* 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.

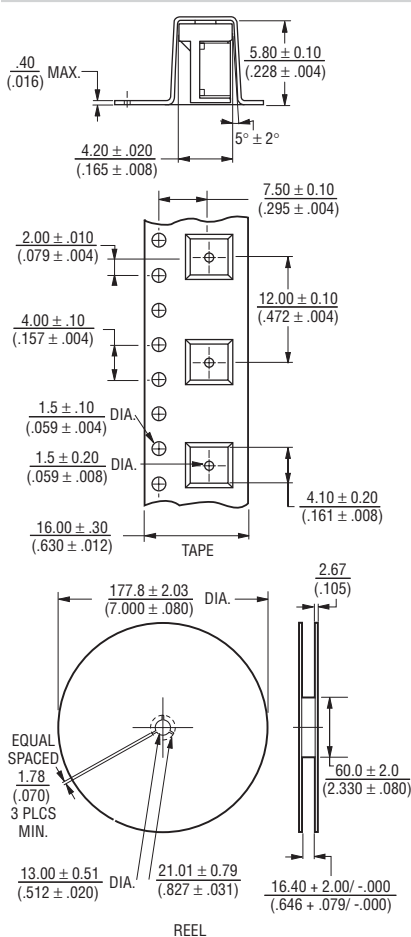
# 3313 - 3 mm Trimpot® Trimming Potentiometer

**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             |
| 100               | A2                | 101             |
| 200               | 22                | 201             |
| 500               | 52                | 501             |
| 1,000             | A3                | 102             |
| 2,000             | 23                | 202             |
| 5,000             | 53                | 502             |
| 10,000            | A4                | 103             |
| 20,000            | 24                | 203             |
| 50,000            | 54                | 503             |
| 100,000           | A5                | 104             |
| 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: ±  $\frac{0.25}{(.010)}$  EXCEPT WHERE NOTED

REV. 05/12

"Trimpot" is a registered trademark of Bourns, Inc.  
Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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