



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 (MSL-1)	1000 pcs./7 " reel
S Style (MSL-1)	200 pcs./7 " reel
Adjustment Tool	H-91

†"Fluorinert" is a registered trademark of 3M Co.

Specifications are subject to change without notice.

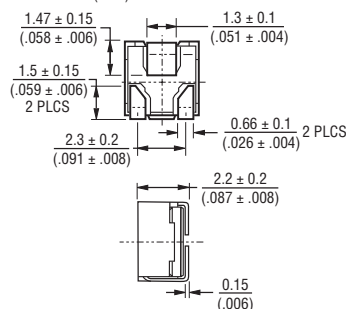
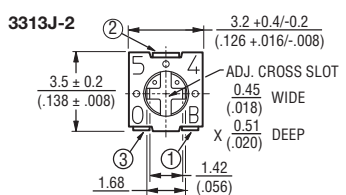
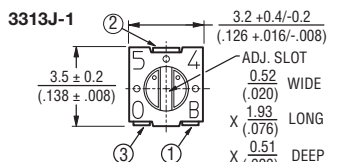
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

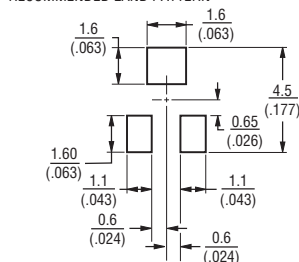
* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

** 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.

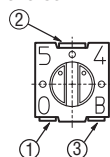
Product Dimensions



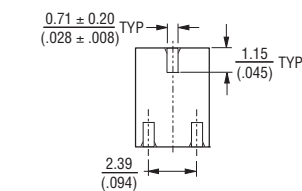
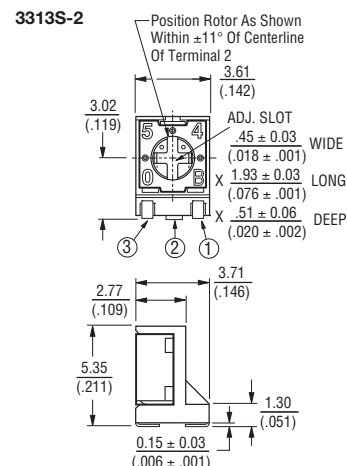
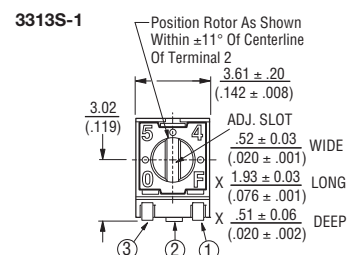
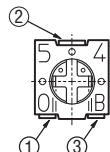
RECOMMENDED LAND PATTERN



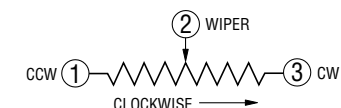
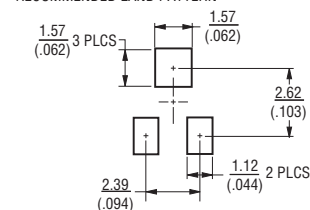
3313X-1 (Reverse Pin Layout)



3313X-2 (Reverse Pin Layout)



RECOMMENDED LAND PATTERN



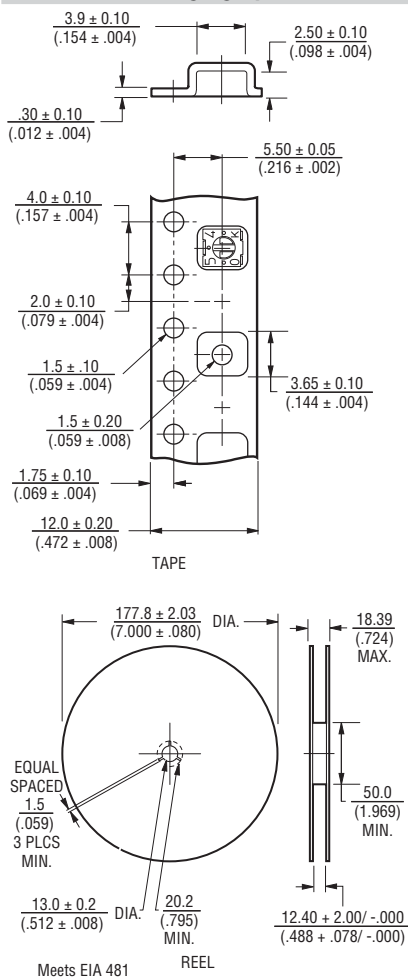
DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

TOLERANCES: $\pm \frac{0.25}{(0.010)}$ EXCEPT WHERE NOTED

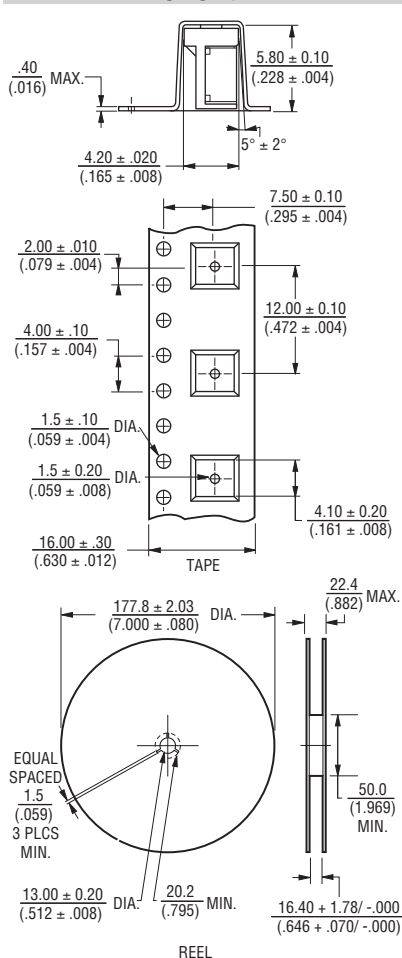
3313 - 3 mm Trimpot® Trimming Potentiometer

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 - MSL-1)

200 pcs. / 7 " Reel (S Style - MSL-1)

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

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