



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.

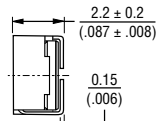
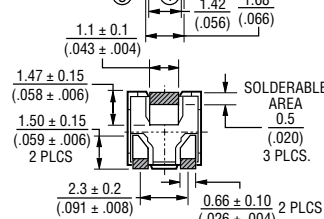
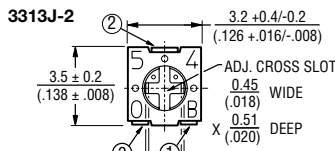
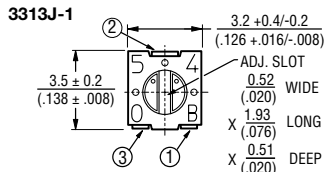
Environmental Characteristics

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 [†] /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 %

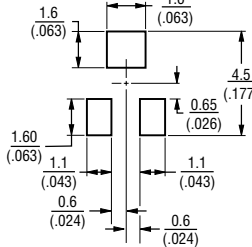
Physical Characteristics

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



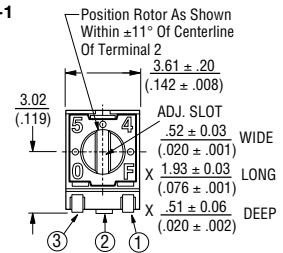
RECOMMENDED LAND PATTERN



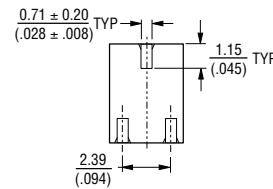
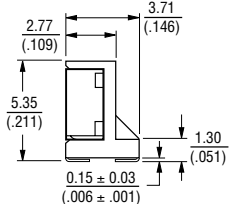
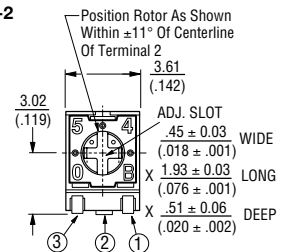
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

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

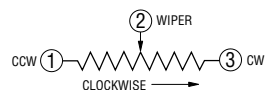
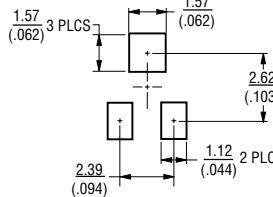
3313S-1



3313S-2



RECOMMENDED LAND PATTERN



* 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.

[†]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.

The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.



WARNING Cancer and Reproductive Harm
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
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)

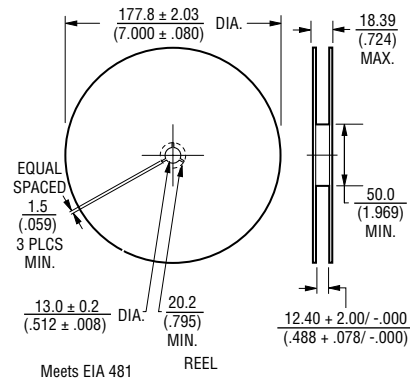
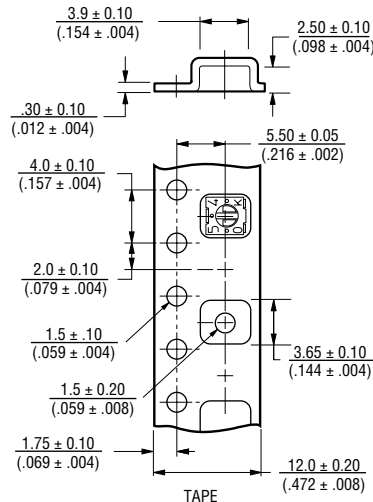
Resistance Code _____

Embossed Tape _____

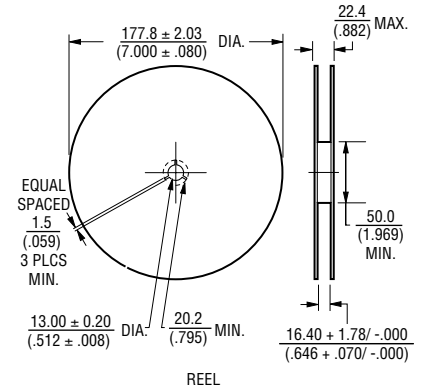
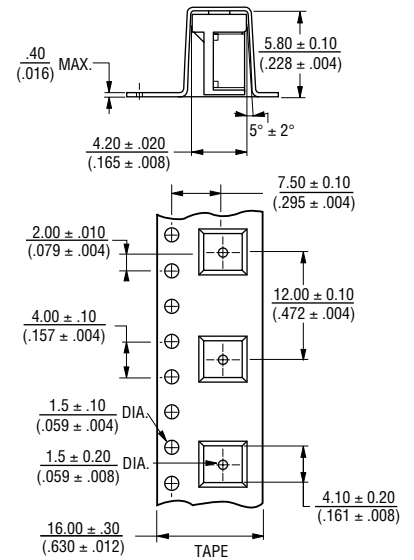
- 1000 pcs. / 7" Reel (J, X Styles - MSL-1)
- 200 pcs. / 7" Reel (S Style - MSL-1)

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

BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

Europe: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

www.bourns.com

REV. 08/19

"Trimpot" is a registered trademark of Bourns, Inc. Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.