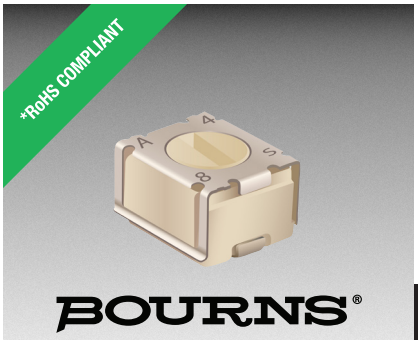


Features

- Surface mount 2 mm Square / Single-turn / Cermet / Sealed
- Compatible with surface mount manufacturing processes
- Miniature design for flexibility
- RoHS compliant*
- For trimmer applications/processing guidelines, click here

3312 – 2 mm SMD 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 2 ohms max.
(whichever is greater)
Contact Resistance Variation
.....5 % or 3 ohms max.
(whichever is greater)
Adjustability
Voltage Divider.....±0.4 %
Rheostat.....±0.8 %
Resolution..... Essentially infinite
Insulation Resistance ..... 500 VDC
100 megohms min.
Dielectric Strength
Sea Level .....500 VAC
70,000 Feet.....350 VAC
Adjustment Angle..... 255 ° nom.

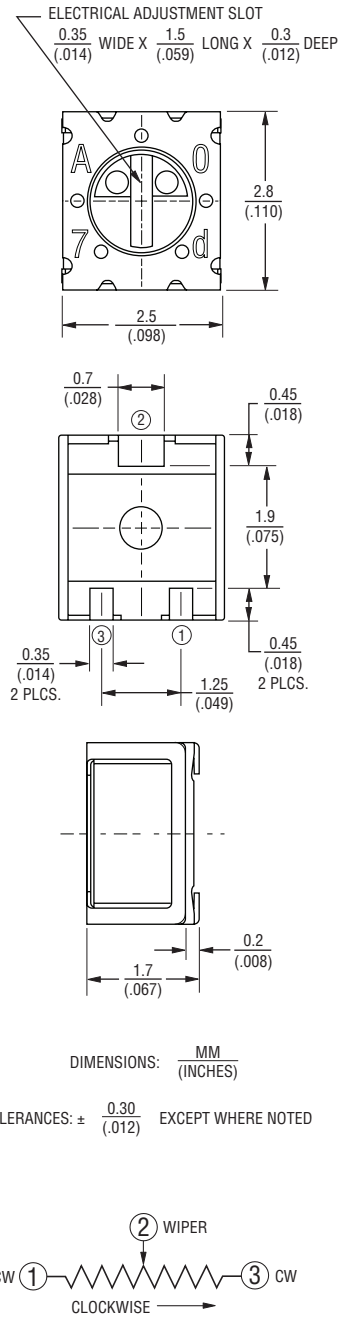
Environmental Characteristics

Power Rating (50 volts max.)
70 °C ..... 0.1 watt
125 °C ..... 0 watt
Operating Temperature Range
..... -55 °C to +125 °C
Temperature Coefficient ....±100 PPM/°C
Seal Test..... 85 °C / 60 seconds
Humidity..... MIL-STD-202 Method 106
TRS ±5 %; IR 10 megohms
Vibration ..... 20 G TRS ±1 %; VRS ±1 %
Shock..... 100 G TRS ±1 %; VRS ±1 %
Load Life @ 70 °C Rated Power
..... TRS ±3 %
Rotational Life..... 25 cycles TRS ±3 %
Thermal Shock .....5 cycles
TRS ±2 %; VRS ±4 %

Physical Characteristics

Mechanical Stop ..... 285 ° nom.
Torque..... 0.7 oz-in. max
Stop Strength..... 0.7 oz-in. nom.
Weight .....Approximately 0.0321 g
Marking
..... Resistance code and date code
Standard Packaging .... 1000 pcs./7 ″ reel
(MSL-1)
Storage Condition
.....40 °C max. / 70 % R.H. max.

Product Dimensions

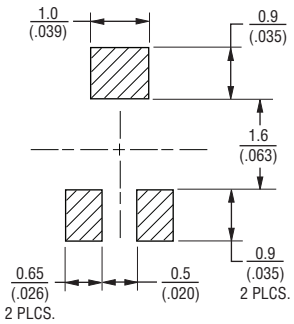


Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

Recommended Land Pattern



Standard Resistance Table

Resistance (Ohms)	Part Marking Code	Resistance Code
10	A1	100
20	U1	200
50	V1	500
100	A2	101
200	U2	201
500	V2	501
1,000	A3	102
2,000	U3	202
5,000	V3	502
10,000	A4	103
20,000	U4	203
50,000	V4	503
100,000	A5	104
200,000	U5	204
500,000	V5	504
1,000,000	A6	105
2,000,000	U6	205

Popular values listed in boldface. Consult factory for special resistances.

How To Order

3312 J - 1 - 502 E

Model
Style
Standard Product Indicator
-1 = Standard Product
Resistance Code
Embossed Tape Designator
E = 1000 pcs./7 ″ Reel (MSL-1)

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

WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

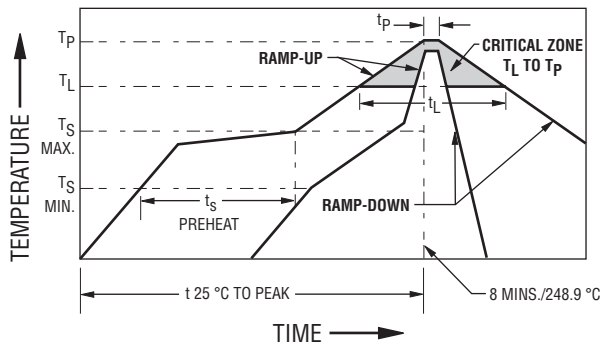
*RoHS Directive 2015/863, Mar. 31, 2015 and Annex
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Processing Information

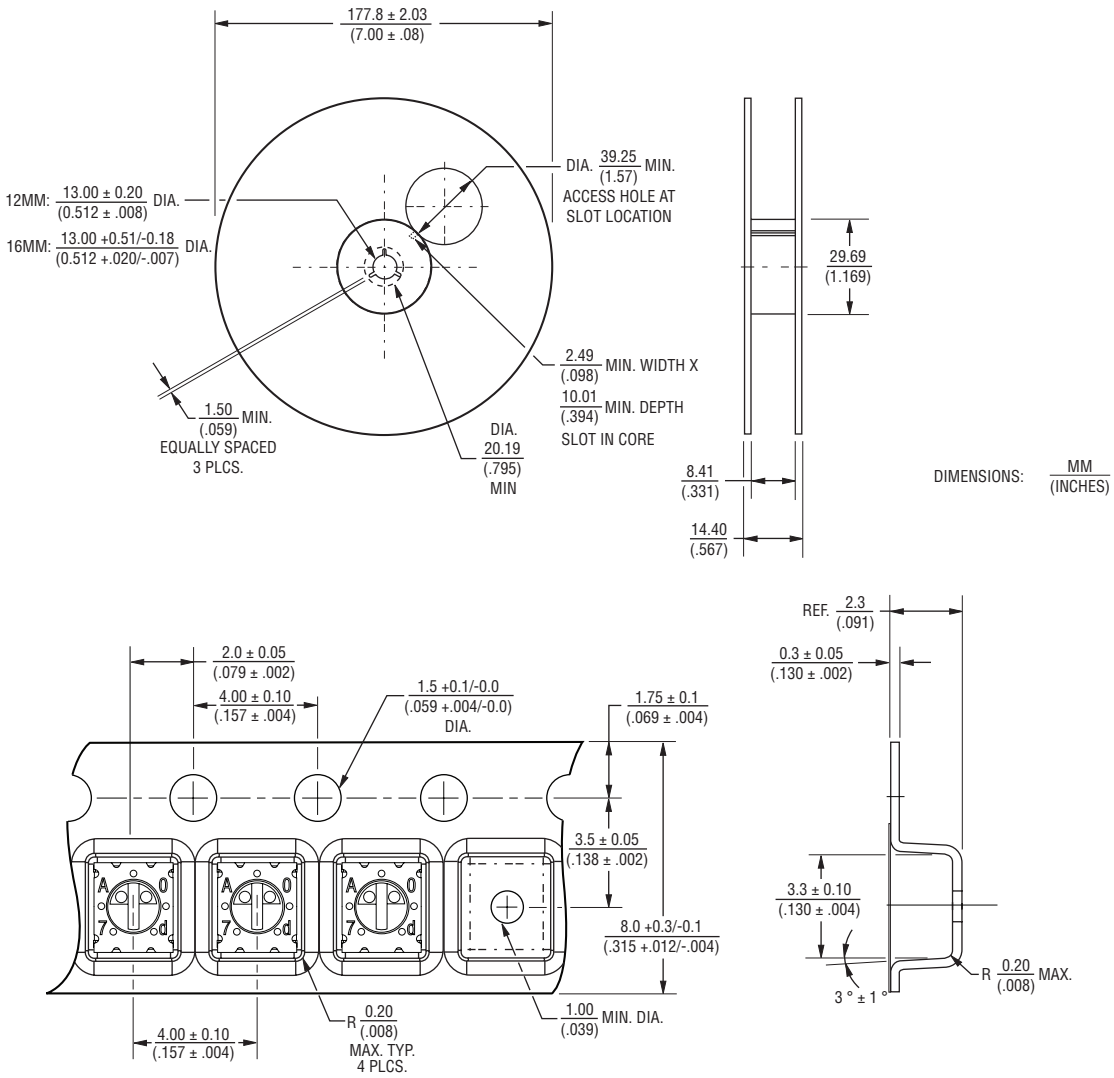
Process Description	Materials	Temperature	Time Interval
1. Apply solder paste to test board (8 - 10 mil thick)	• Sn 96.5/Ag 3.0/Cu 0.5 Alloy water soluble or no clean solder paste • Single sided epoxy glass (G10) (UL approved) • PC board approx. 4x4x.06 in.	Room temperature	
2. Place test units onto board	6 units/board		
3. Ramp up	Convection oven		2.5 °C ±0.5 °/second
4. Preheat (T_S)		150 °C to 190 °C	90 ±30 seconds
5. Time above liquidus (T_L)		220 °C	60-90 seconds
6. Peak temperature (T_P)			250 °C +0 °/-5 ° 10-20 sec. within 5 °C of peak
7. Ramp down		Room temperature	3 °C ±0.5 °C/second
8. Cleaning water clean profile	High pressure deionized water 65 PSI maximum	72 °F to 160 °F (22 °C to 71 °C)	As required



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Packaging Specifications



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www.bourns.com

REV. 07/25

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