

Features

- Surface mount 2 mm Square / Single-turn / Sealed
- Compatible with surface mount manufacturing processes
- Miniature design for flexibility
- RoHS compliant* - see [processing information](#) on lead free surface mount trimmers

3312 - 2 mm SMD Trimming Potentiometer

Electrical Characteristics

Standard Resistance Range
 10 ohms to 1 megohm
 (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.

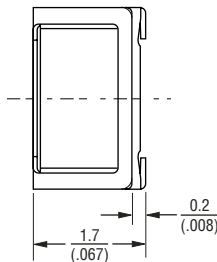
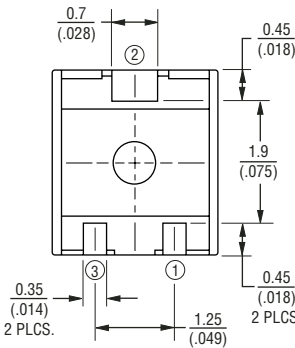
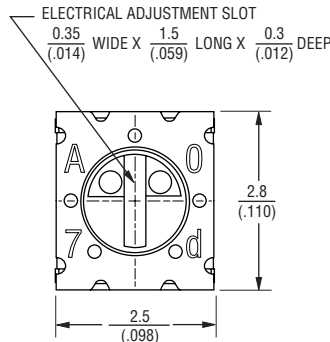
Environmental Characteristics

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
 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 %

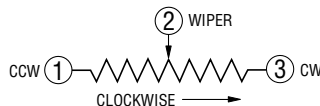
Physical Characteristics

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.....500 pcs./7 " reel

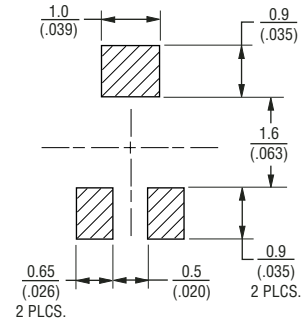
Product Dimensions



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



Recommended Land Pattern



Standard Resistance Table

Resistance (Ohms)	Resistance Code
10	100
20	200
50	500
100	101
200	201
500	501
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105
2,000,000	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 = 500 pcs./7 " Reel

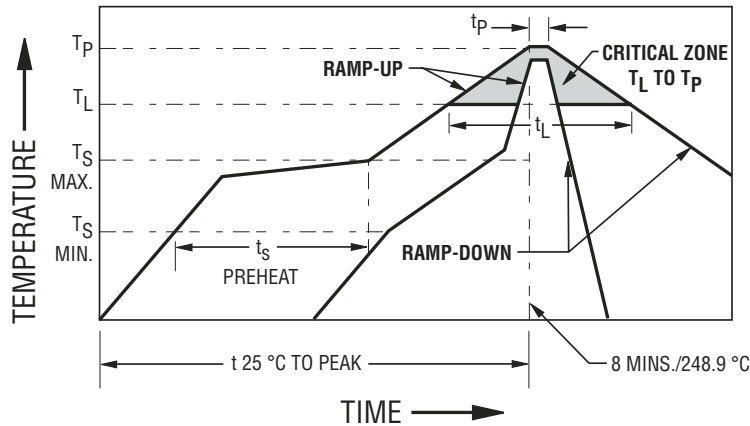
*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

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Processing Information

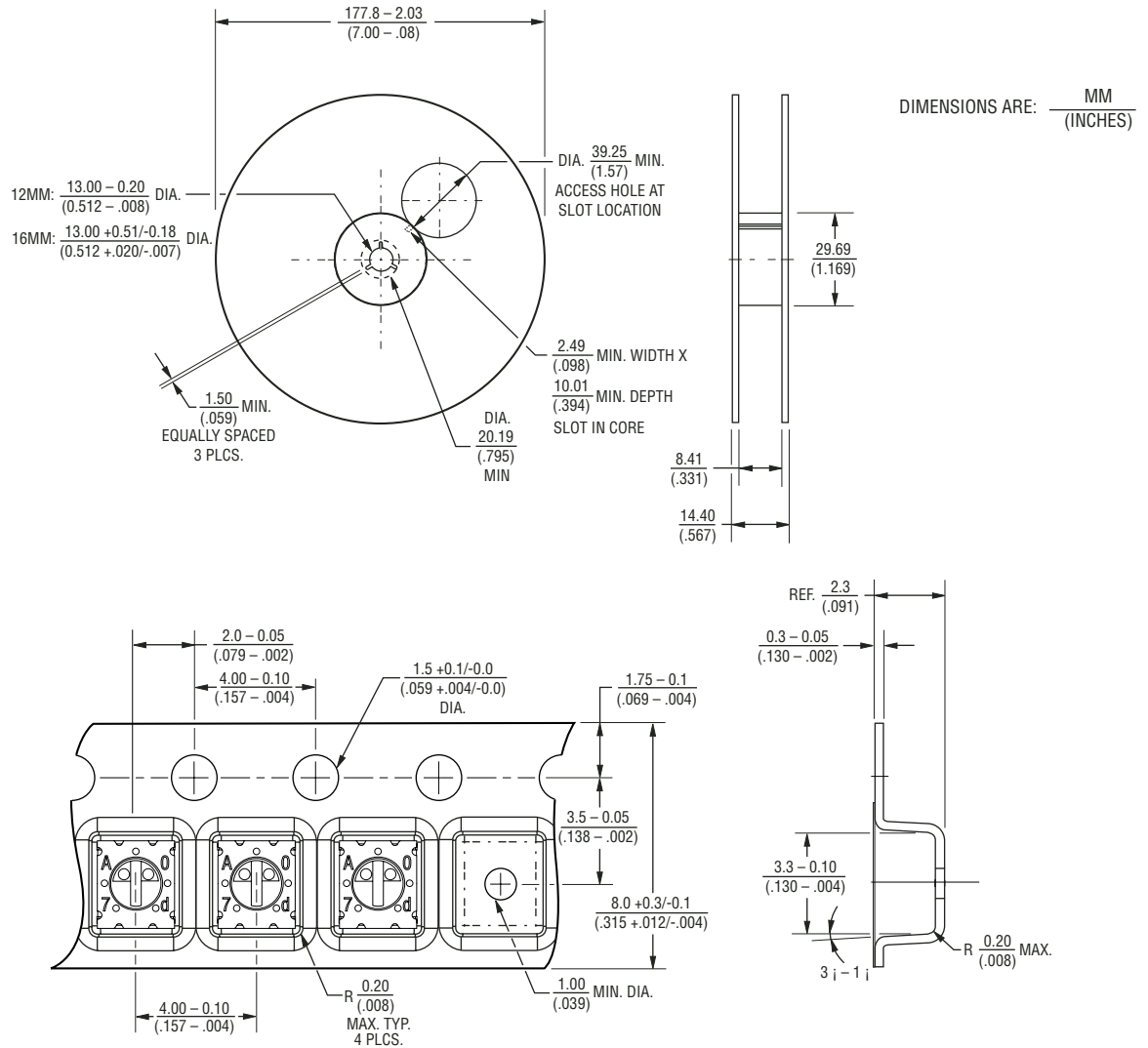
Process Description	Materials	Temperature	Time Interval
1. Apply solder paste to test board (8 - 10 mil thick)	<ul style="list-style-type: none"> • Sn 96.5/Ag 3.0/Cu 0.5 Alloy water soluble or no clean solder paste • Single sided epoxy glass (G10) (UL approved) • PC board approx. 4x4x.06 in. 	Room temperature	
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 +5 °/-0 ° 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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BOURNS®

Packaging Specifications



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