

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.

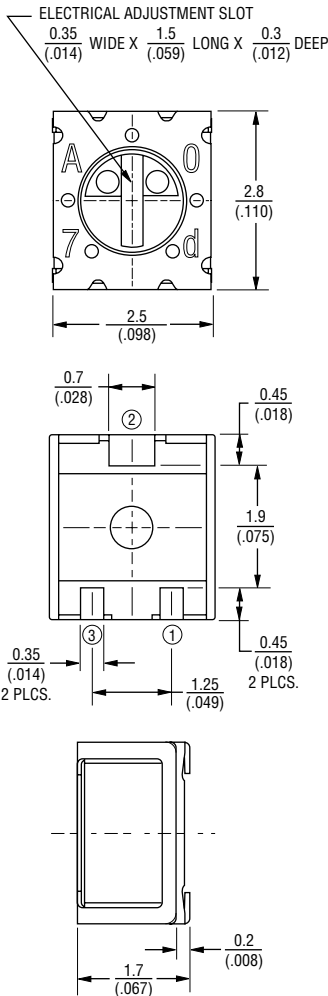
Environmental Characteristics

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 Fluorinert†/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 %

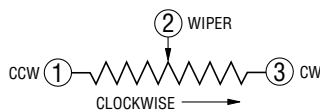
Physical Characteristics

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 500 pcs./7 " reel
 (MSL-1)

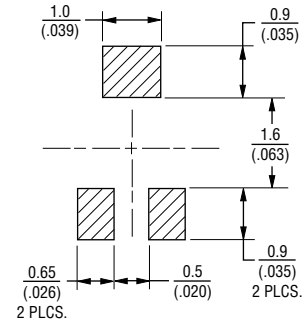
Product Dimensions



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$
 TOLERANCE: $\frac{\pm 0.30}{(\pm .012)}$



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 = 500 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

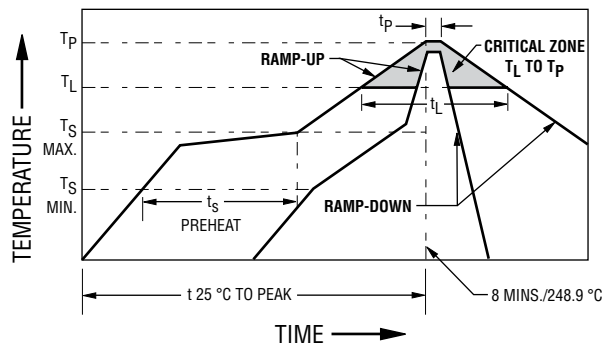
*RoHS Directive 2015/863, Mar. 31, 2015 and Annex
 †"Fluorinert" is a registered trademark of 3M Co.
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Processing Information

| 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 +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 |



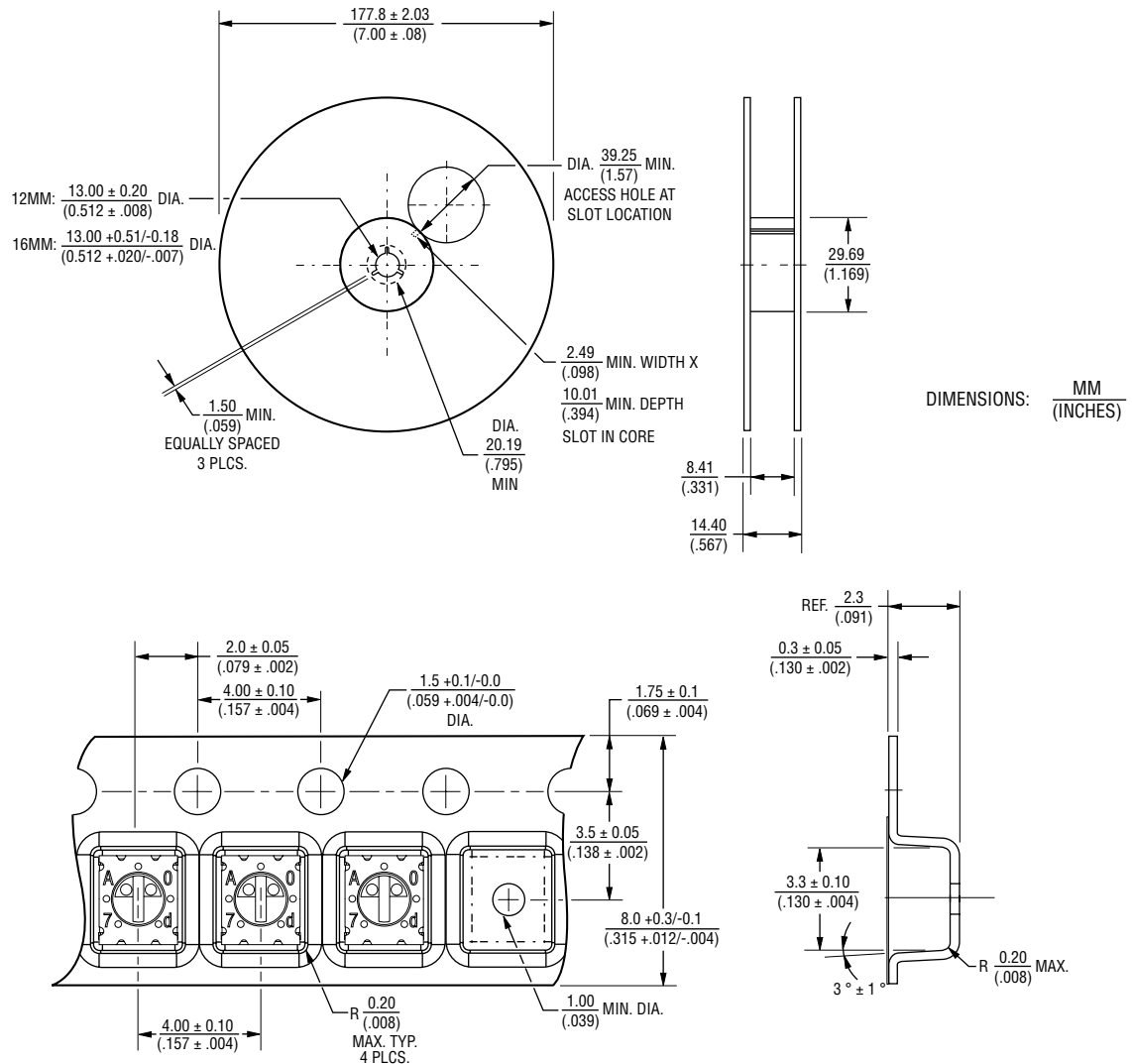
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Packaging Specifications



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