



Features

- Surface mount and through-hole versions
- 12 mm Square / Dustproof
- One million rotational cycles
- Thin profile
- RoHS compliant*
- AEC-Q200 compliant

Applications

- Volume control on audio equipment
- Motion controllers
- Dishwasher control systems
- Temperature range

3382 - 12 mm Rotary Position Sensor

Electrical Characteristics

Standard Resistance Range
 2.5K to 100K ohms
 Resistance Tolerance ±30 % std.
 Linearity ±2 %
 Resolution Essentially infinite
 Insulation Resistance @ 500 VDC
 100 megohms min.

Dielectric Strength
 Sea Level 500 VAC
 70,000 Feet 350 VAC
 Adjustment Angle 330 ° nom.

Environmental Characteristics

Power Rating (16 volts max.)
 50 °C 0.05 watt
 120 °C 0 watt

Operating Temperature Range
 -40 °C to +120 °C

Temperature Coefficient ±500 ppm/°C
 Humidity TRS ±20 %
 Shock 20 G TRS ±10 %; VRS ±10 %
 Load Life @ 50 °C Rated Power
 TRS ±10/-20 %
 Rotational Life 1,000,000 cycles
 TRS ±20 %
 Thermal Shock 5 cycles
 TRS ±20 %; VRS ±10 %
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

Physical Characteristics

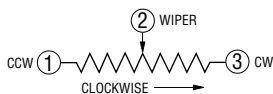
Mechanical Angle Continuous rotation
 Torque 30 gf-cm max.
 Weight Approximately 0.0321 g
 Marking Resistance code
 and date code

Standard Packaging

G Style 1000 pcs./13" reel
 H Style 50 pcs./tube
 IP Rating IP40

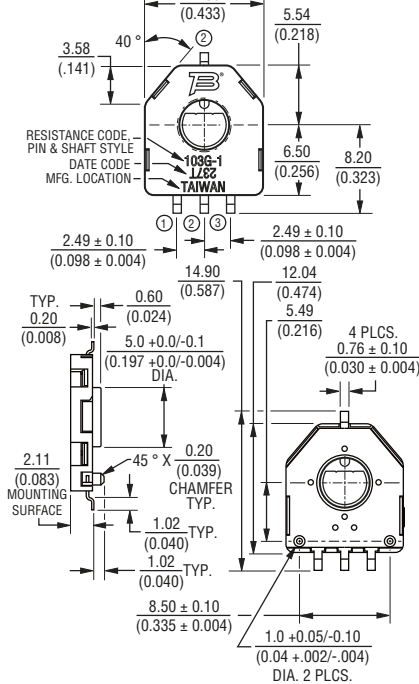
Standard Resistance Table

Resistance (Ohms)	Resistance Code
2,500	252
5,000	502
10,000	103
25,000	253
50,000	503
100,000	104



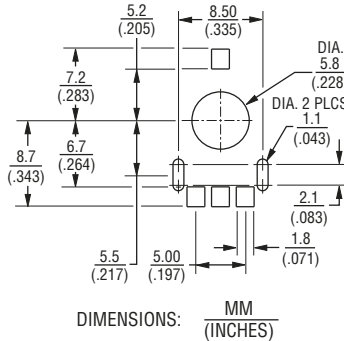
Product Dimensions

3382G

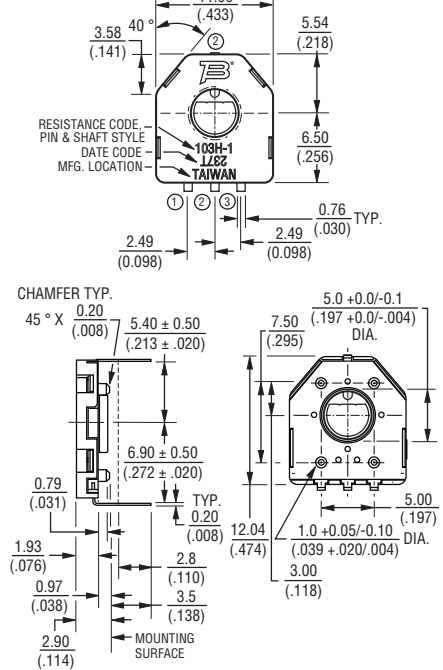


NOTE: ALL TERMINATIONS TO BE COPLANAR WITHIN $\frac{0.1}{(0.001)}$

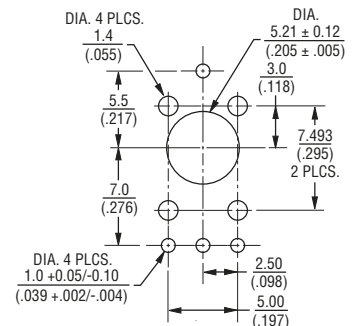
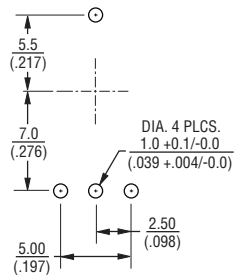
Recommended Land Pattern



3382H



Recommended Land Patterns



TOLERANCES: ± 0.30 UNLESS OTHERWISE NOTED
 $\pm (0.12)$



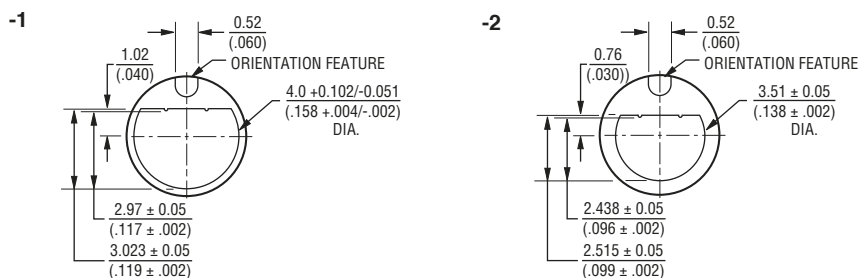
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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

3382 - 12 mm Rotary Position Sensor

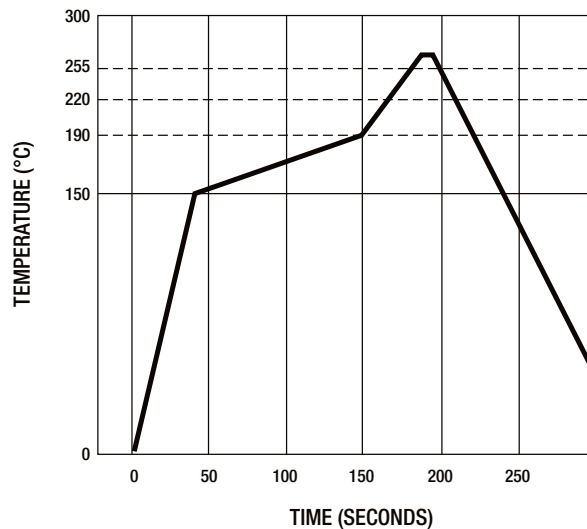
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Rotor Dimensions



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/Ag/Cu 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		150 °C to 190 °C	90 ±30 seconds
5. Time above liquidus		220 °C	60-90 seconds
6. Peak temperature			260 °C +0 °/-5 ° 10-20 sec. within 5 °C of peak
7. Ramp down		Room temperature	3 °C ±0.5 °C/second



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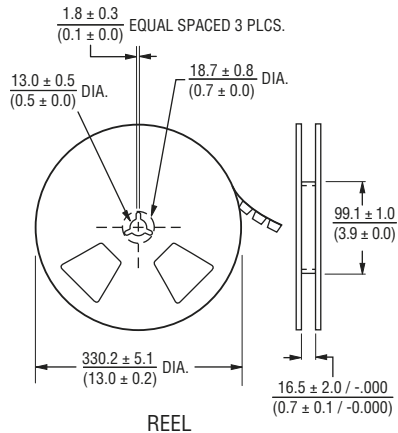
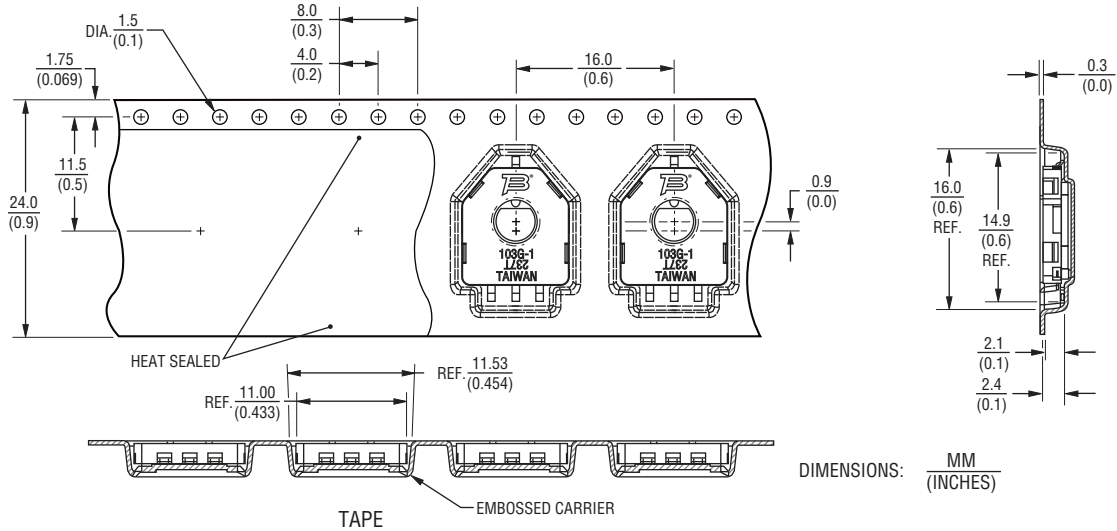
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3382 - 12 mm Rotary Position Sensor

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Packaging Specifications



How To Order

3382 G - 1 - 103 G

Model _____
 Style _____
 G = SMD with 8.5 mm Locator Pin Spacing
 H = Through-hole with 5 mm x 7.5 mm
 Locator Pin Spacing
 Standard Product Indicator _____
 -1 = 4 mm Shaft Diameter
 -2 = 3.5 mm Shaft Diameter
 Resistance Code _____
 Packaging Designator _____
 G = 1000 pcs./13" Reel (G Style)
 Blank = 50 pcs./Tube (H Style)

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REV. 11/18

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