

Features

- Surface Mount 12 mm Square / Dustproof
- One million rotational cycles
- Thin profile
- RoHS compliant*

Applications

- Volume control on audio equipment
- Motion controllers
- Dishwasher control systems
- Automotive temperature range

3382 - 12 mm Rotary Position Sensor

Electrical Characteristics

Standard Resistance Range10K ohms
 Resistance Tolerance $\pm 30\%$ std.
 Linearity $\pm 2\%$
 Resolution Essentially infinite
 Insulation Resistance @ 500 VDC 100 megohms min.
 Dielectric Strength
 Sea Level 500 VAC
 70,000 Feet 350 VAC
 Adjustment Angle 328° nom.

Environmental Characteristics

Power Rating (16 volts max.)
 50°C 0.05 watt
 120°C 0 watt
 Operating Temperature Range -40°C to $+120^\circ\text{C}$
 Temperature Coefficient ... ± 500 ppm/ $^\circ\text{C}$
 Humidity TRS $\pm 20\%$
 Shock 20 G TRS $\pm 10\%$; VRS $\pm 10\%$
 Load Life @ 50°C Rated Power TRS $\pm 10\%$ / -20 %
 Rotational Life 1,000,000 cycles TRS $\pm 20\%$
 Thermal Shock 5 cycles TRS $\pm 20\%$; VRS $\pm 10\%$

Physical Characteristics

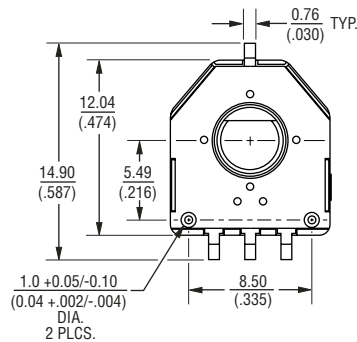
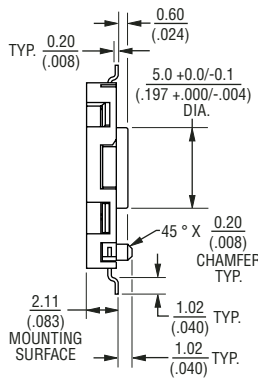
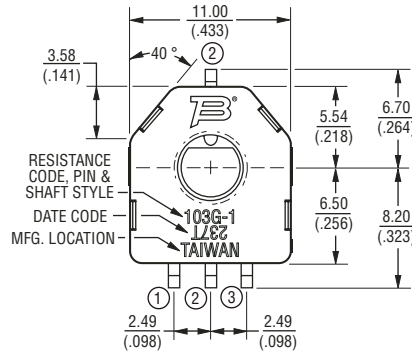
Mechanical Angle ... Continuous rotation
 Torque 30 gf-cm max.
 Weight Approximately 0.0321 g
 Marking Resistance code and date code
 Standard Packaging 1000 pcs./13 " reel
 IP Rating IP40

How To Order

3382 G - 1 - 103 G

Model _____
 Style _____
 Standard Product Indicator _____
 -1 = Standard Product
 Resistance Code _____
 Embossed Tape Designator _____
 G = 1000 pcs./13 " Reel

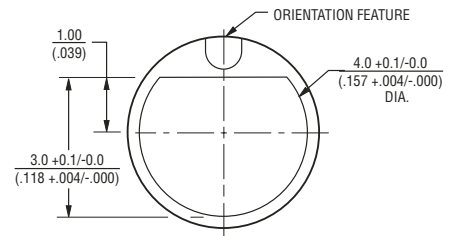
Product Dimensions



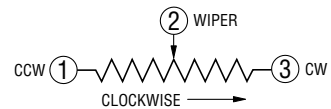
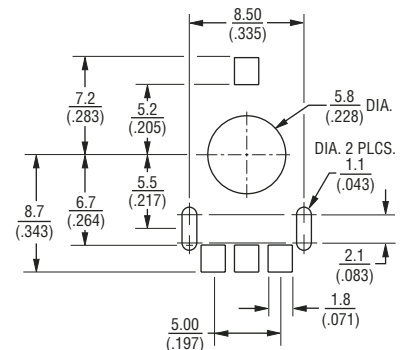
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

TOLERANCES: $\frac{\pm 0.30}{\pm (.012)}$ UNLESS OTHERWISE NOTED

Shaft Hole



Recommended Land Pattern



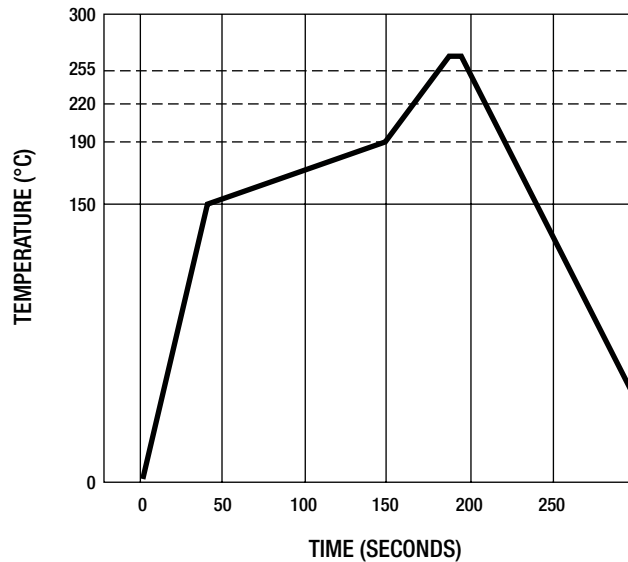
*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications

3382 - 12 mm Rotary Position Sensor

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Processing Information

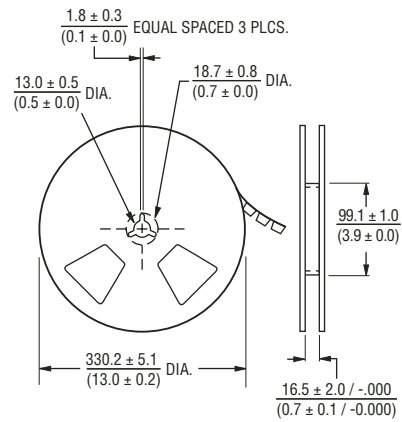
Process Description	Materials	Temperature	Time Interval
1. Apply solder paste to test board (8 - 10 mil thick)	<ul style="list-style-type: none"> • Sn/Ag/Cu Alloy water soluble or no clean solder paste • Single sided epoxy glass (G10) (UL approved) • PC board approx. 4x4x.06 in. 	Room temperature	
2. 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
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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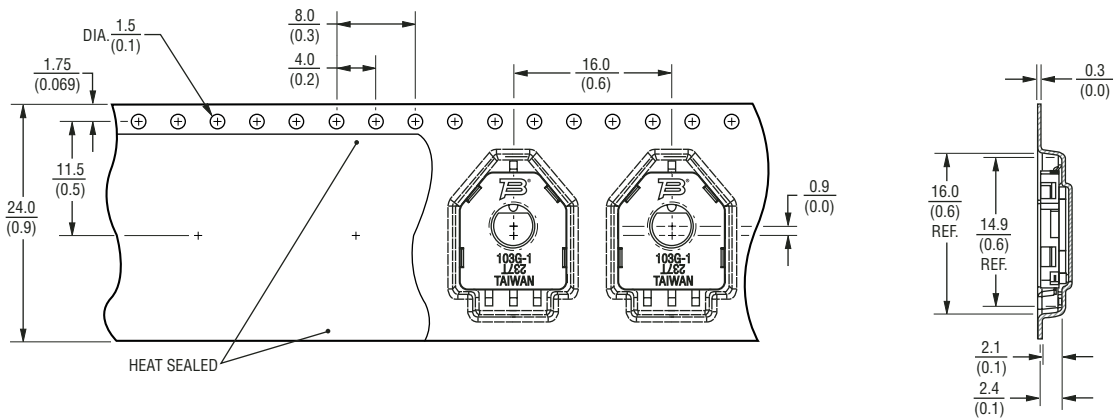
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Packaging Specifications



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

REEL



REV. 09/08

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