

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
- Automotive 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

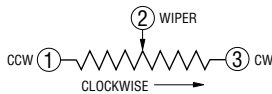
Physical Characteristics

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

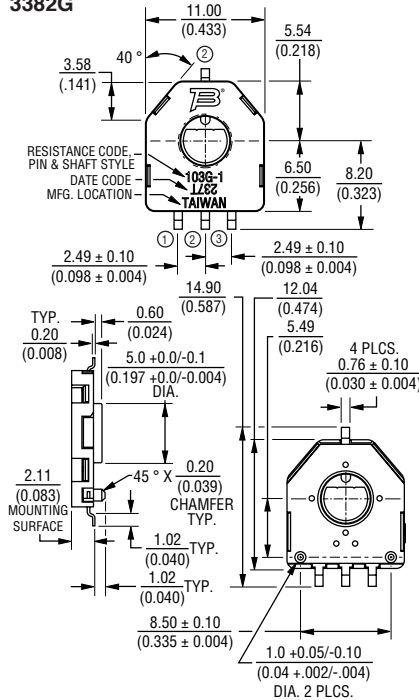
Standard Resistance Table

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

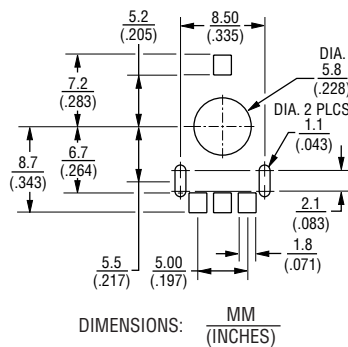


Product Dimensions

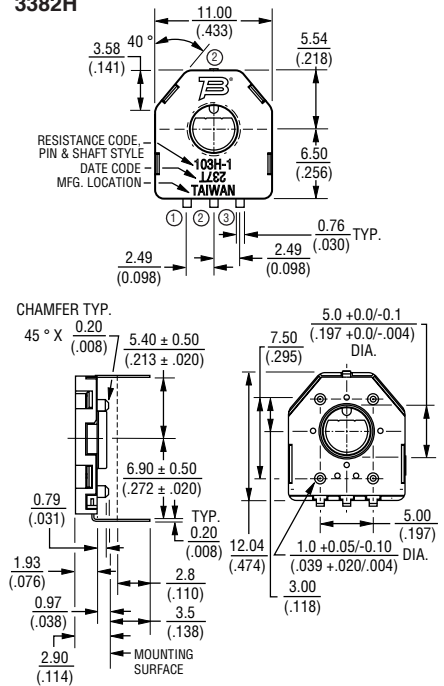
3382G



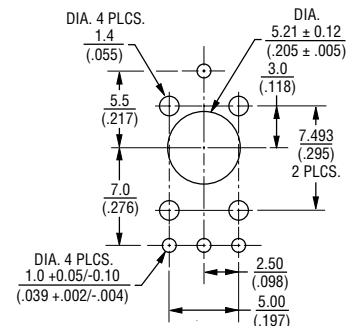
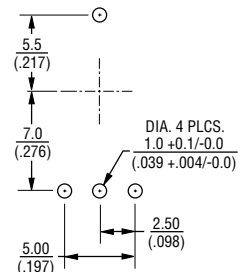
Recommended Land Pattern



3382H



Recommended Land Patterns



TOLERANCES: ±0.30 UNLESS OTHERWISE NOTED
±(0.12)



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

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

Specifications are subject to change without notice.

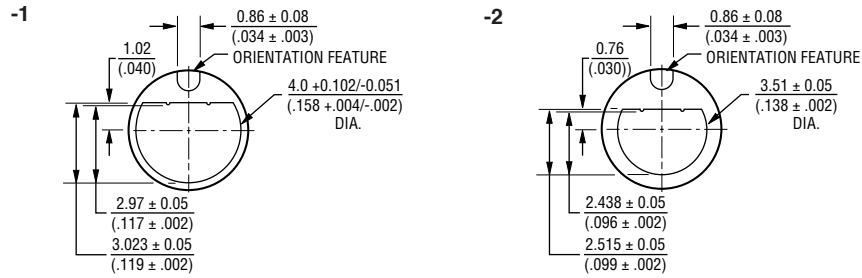
Users should verify actual device performance in their specific applications.

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3382 - 12 mm Rotary Position Sensor

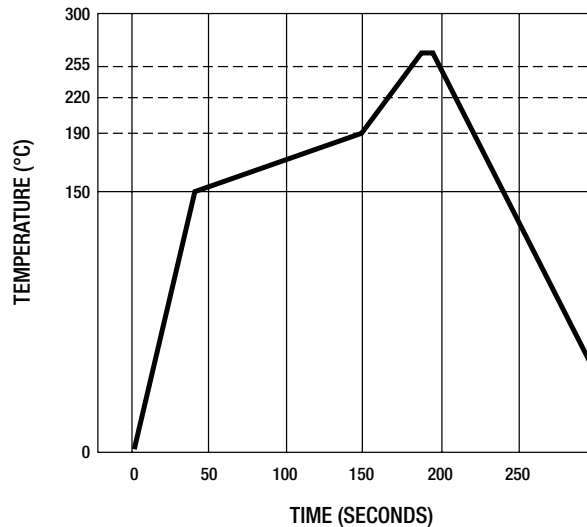
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Rotor Dimensions



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		$2.5 \text{ }^\circ\text{C} \pm 0.5 \text{ }^\circ\text{/second}$
4. Preheat		$150 \text{ }^\circ\text{C}$ to $190 \text{ }^\circ\text{C}$	90 ± 30 seconds
5. Time above liquidus		$220 \text{ }^\circ\text{C}$	60-90 seconds
6. Peak temperature			$260 \text{ }^\circ\text{C} +0 \text{ }^\circ\text{-}5 \text{ }^\circ$ 10-20 sec. within $5 \text{ }^\circ\text{C}$ of peak
7. Ramp down		Room temperature	$3 \text{ }^\circ\text{C} \pm 0.5 \text{ }^\circ\text{C/second}$



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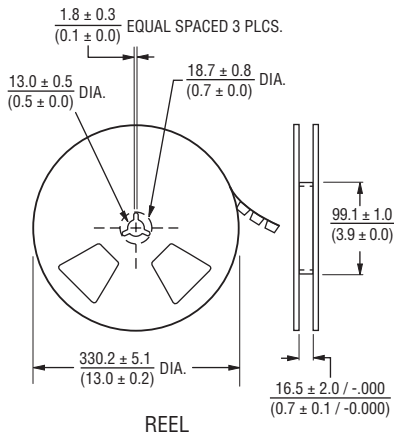
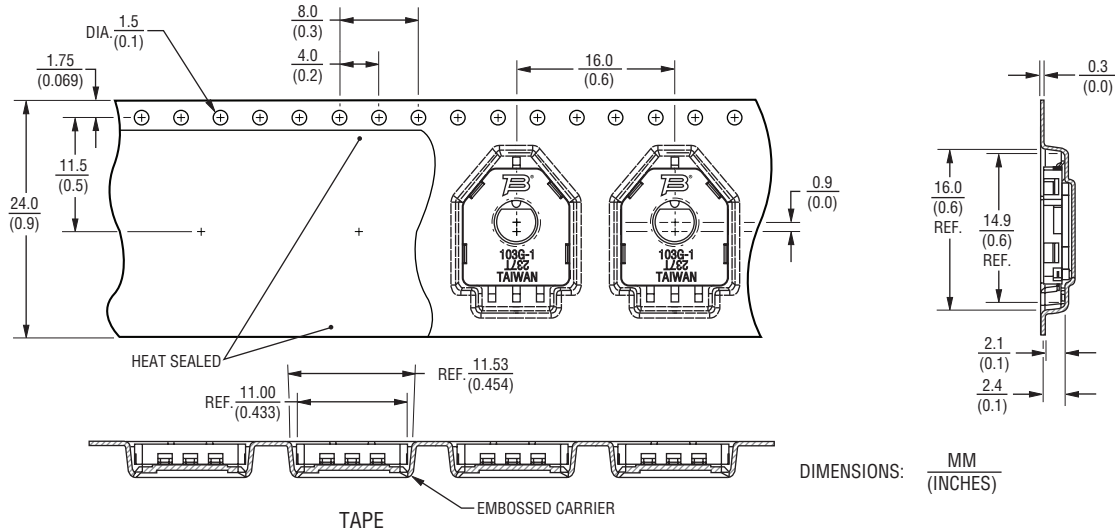
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3382 - 12 mm Rotary Position Sensor

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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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