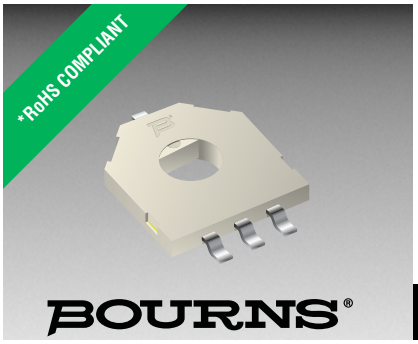


Features

- Surface mount and through-hole versions
- 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 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

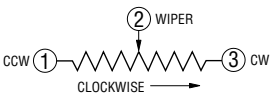
Power Rating (16 volts max.)
50 °C ..... 0.05 watt
120 °C ..... 0 watt
Operating Temperature Range ..... -40 °C to +120 °C
Temperature Coefficient ..... ±500 ppm/°C
Humidity ..... TRS ±20 %
Shock ..... 20 G TRS ±10 %; VRS ±10 %
Load Life @ 50 °C Rated Power ..... TRS +10/-20 %
Rotational Life ..... 1,000,000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

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



*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.
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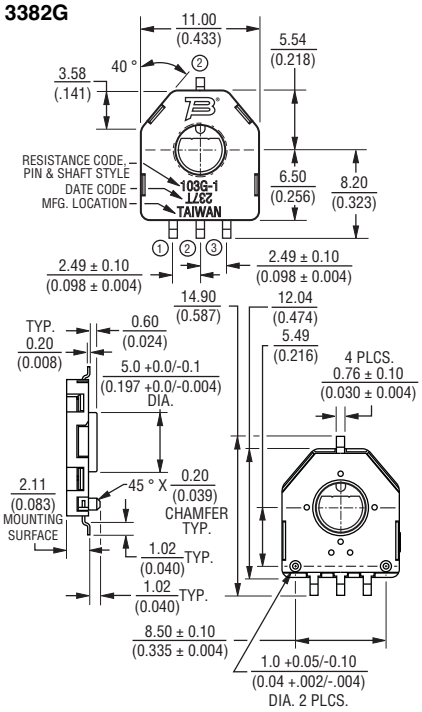
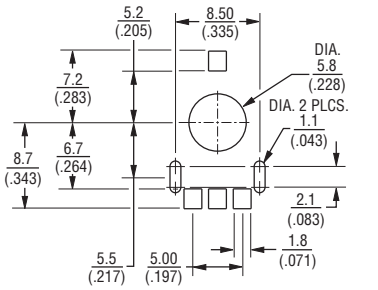
Product Dimensions

3382G



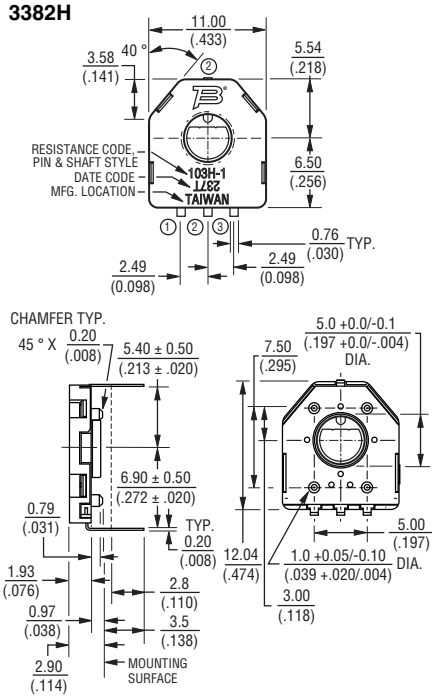
NOTE: ALL TERMINATIONS TO BE COPLANAR WITHIN 0.1 (0.001)

Recommended Land Pattern

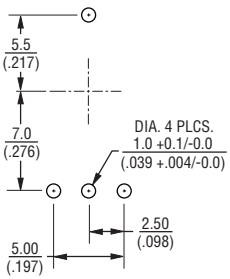


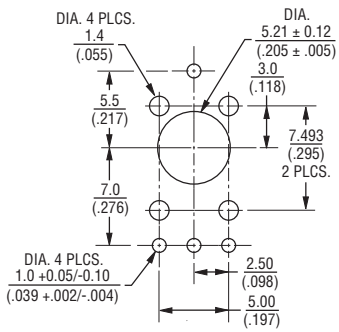
DIMENSIONS: MM / (INCHES)

3382H



Recommended Land Patterns

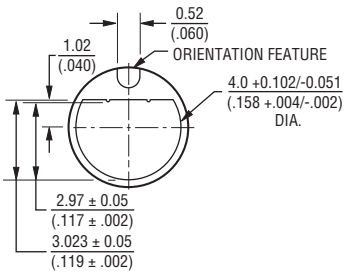




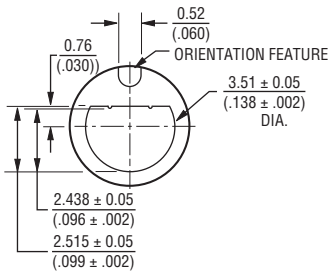
TOLERANCES: ±0.30 / ±(.012) UNLESS OTHERWISE NOTED

Rotor Dimensions

-1

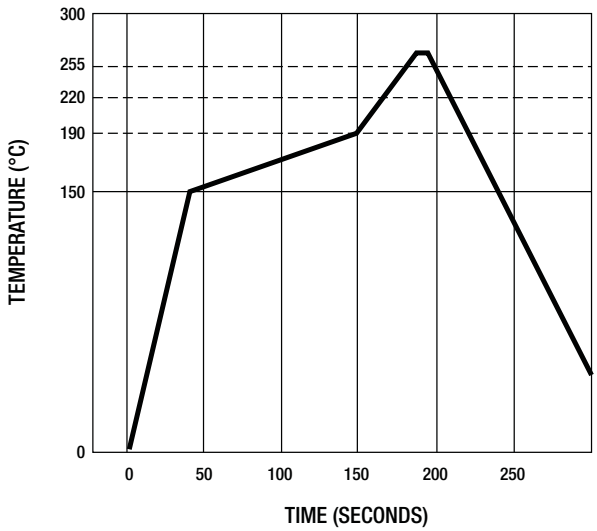


-2



Processing Information

Process Description	Materials	Temperature	Time Interval
1. Apply solder paste to test board (8 - 10 mil thick)	• 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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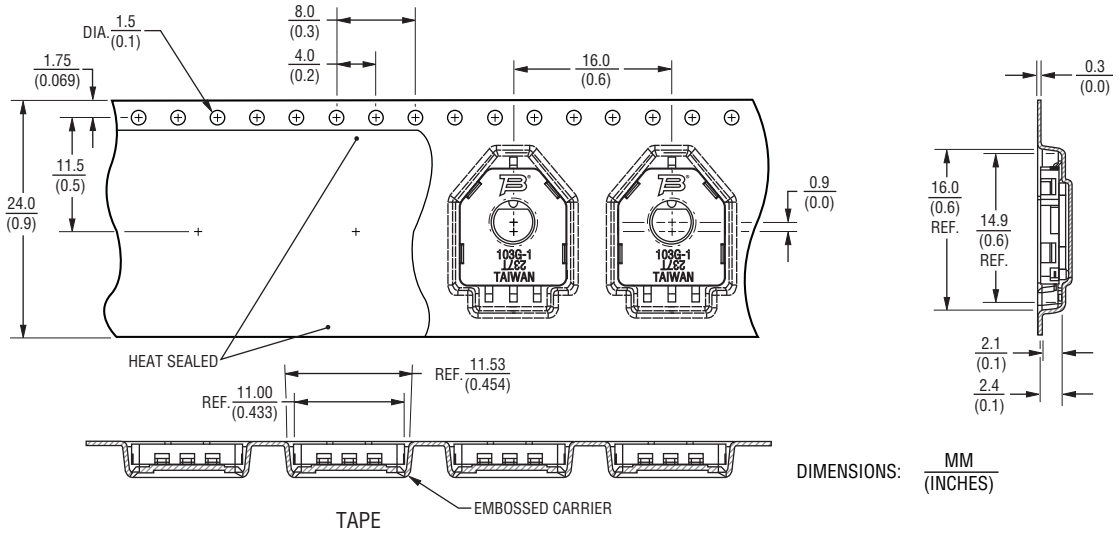
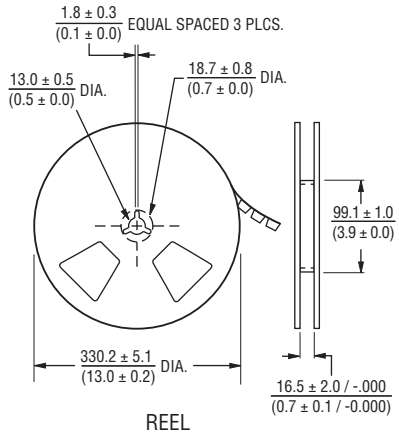
Packaging Specifications





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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