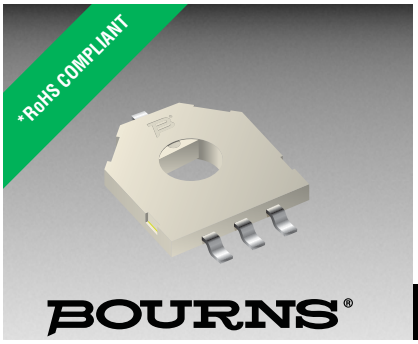


Features

- 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

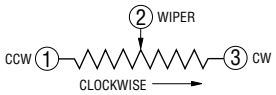
Power Rating (16 volts max.)
50 °C ..... 0.05 watt
120 °C ..... 0 watt
Operating Temperature Range ..... -40 °C to +120 °C
Temperature Coefficient ..... ±500 ppm/°C
Humidity ..... TRS ±20 %
Shock ..... 20 G TRS ±10 %; VRS ±10 %
Load Life @ 50 °C Rated Power ..... TRS +10/-20 %
Rotational Life ..... 1,000,000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

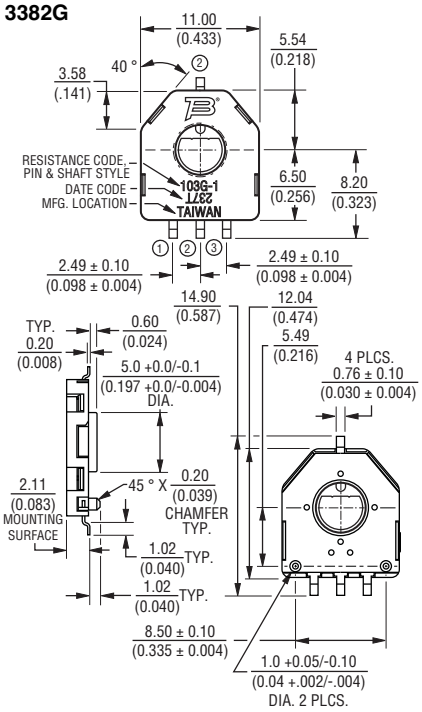
Resistance (Ohms)	Resistance Code
2,500	252
5,000	502
10,000	103
25,000	253
50,000	503
100,000	104



*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.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.

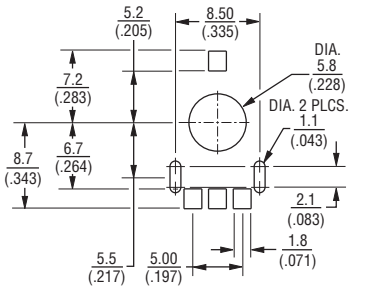
Product Dimensions

3382G



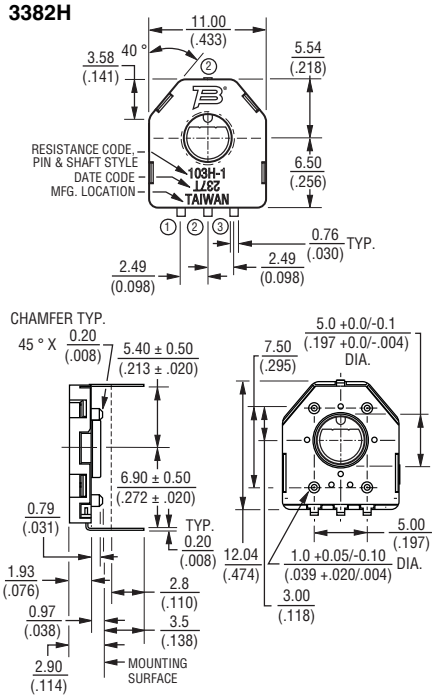
NOTE: ALL TERMINATIONS TO BE COPLANAR WITHIN 0.1 (0.001)

Recommended Land Pattern

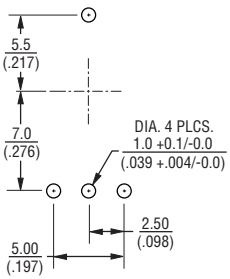


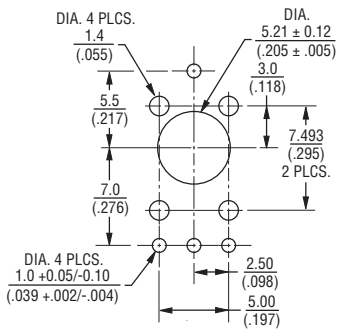
DIMENSIONS: MM / (INCHES)

3382H



Recommended Land Patterns

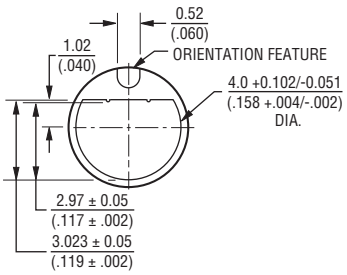




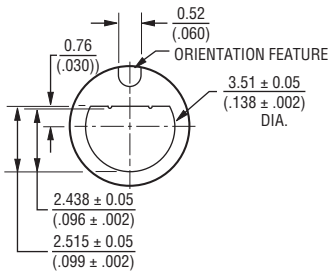
TOLERANCES: ±0.30 / ±(.012) UNLESS OTHERWISE NOTED

Rotor Dimensions

-1

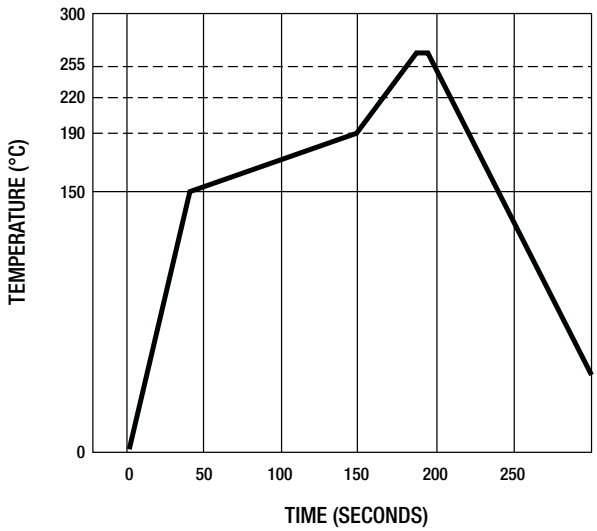


-2



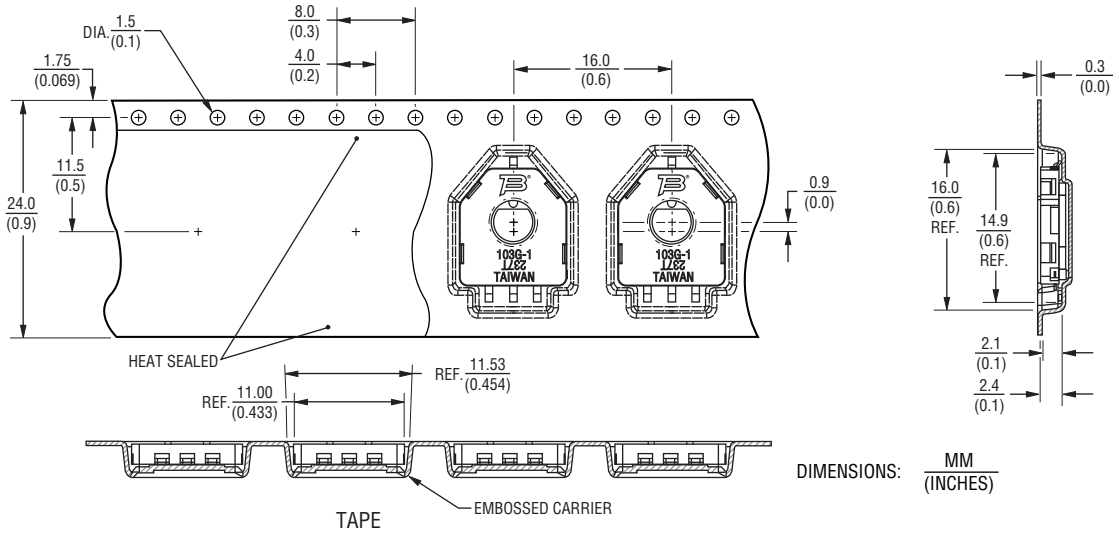
Processing Information

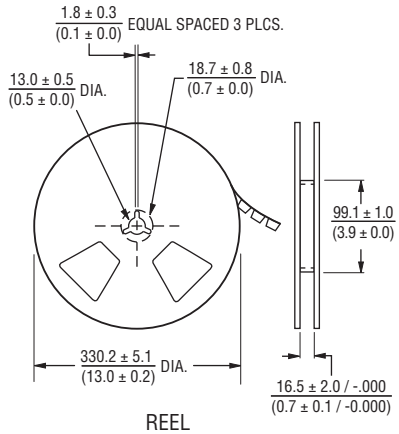
Process Description	Materials	Temperature	Time Interval
1. Apply solder paste to test board (8 - 10 mil thick)	• Sn/Ag/Cu Alloy water soluble or no clean solder paste • Single sided epoxy glass (G10) (UL approved) • PC board approx. 4x4x.06 in.	Room temperature	
2. Place test units onto board	6 units/board		
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



Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.

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)

BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116
EMEA: Tel: +36 88 520 390 • Fax: +36 88 520 211
The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700
www.bourns.com

REV. 12/14

Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.