**Electrical Characteristics**

Standard Resistance Range
- ±2.5K to 100K ohms
- ±50 ohms max.
- ±30 % std.
- ±2 %
- Resolution: Essentially infinite
- Insulation Resistance @ 500 VDC: 100 megohms min.

Dielectric Strength
- Sea Level: 500 VAC
- 70,000 Feet: 350 VAC

**Environmental Characteristics**

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

Operating Temperature Range
- -40 °C to +125 °C
- Temperature Coefficient: ±500 ppm/°C
- Humidity: TRS ±20 %
- Shock: 20 G TRS ±10 %, VRS ±10 %
- Load Life: @ 50 °C Rated Power
- Rotational Life: 1,000,000 cycles
- TRS ±20 %
- Thermal Shock: 5 cycles
- Moisture Sensitivity Level: Level 1
- ESD Classification (HBM): N/A

**Physical Characteristics**

Mechanical Angle: Continuous rotation
- Torque: 30 gf-cm max.
- Weight: Approximately 0.033 g
- Marking: Resistance code and date code
- Standard Packaging: G Style: 1000 pcs./13" reel
- H Style: 50 pcs./tube
- IP Rating: IP40

**Recommended Land Patterns**

**Product Dimensions**

### 3382G

- 11.90 (0.433)
- 5.54 (0.218)
- 8.20 (0.323)
- 2.49 ± 0.10 (0.098 ± 0.004)

### 3382H

- 11.90 (0.433)
- 5.54 (0.218)
- 8.20 (0.323)
- 2.49 ± 0.10 (0.098 ± 0.004)

**Applications**

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

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**Features**

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

**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. 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.
### Processing Information

<table>
<thead>
<tr>
<th>Process Description</th>
<th>Materials</th>
<th>Temperature</th>
<th>Time Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Apply solder paste to test board</td>
<td>• Sn/Ag/Cu Alloy water soluble or no clean solder paste&lt;br&gt;• Single sided epoxy glass (G10) (UL approved)&lt;br&gt;• PC board approx. 4x4x0.06 in.</td>
<td>Room temperature</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Place test units onto board</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Ramp up</td>
<td>Convection oven</td>
<td></td>
<td>2.5 °C ± 0.5 °/second</td>
</tr>
<tr>
<td>4. Preheat</td>
<td></td>
<td>150 °C to 190 °C</td>
<td>90 ±30 seconds</td>
</tr>
<tr>
<td>5. Time above liquidus</td>
<td></td>
<td>220 °C</td>
<td>60-90 seconds</td>
</tr>
<tr>
<td>6. Peak temperature</td>
<td></td>
<td>260 °C +0 °/-5 °</td>
<td>10-20 sec. within 5 °C of peak</td>
</tr>
<tr>
<td>7. Ramp down</td>
<td></td>
<td>Room temperature</td>
<td>3 °C ± 0.5 °/second</td>
</tr>
</tbody>
</table>

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3382 - 12 mm Rotary Position Sensor

Packaging Specifications

DIMENSIONS: MM (INCHES)

How To Order

Model
3382 G - 1 - 103 G

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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