Features

- Servo mount style
- Shaft supported by front and rear precision ball bearings
- Non-standard features and specifications available
- Gangable up to 10 cups

**BOURNS'**

**6574 - Precision Potentiometer**

**Electrical Characteristics**

- Standard Resistance Range: 1 K to 100 K ohms
- Total Resistance Tolerance: ±10%
- Independent Linearity: ±0.25%
- Effective Electrical Angle: 350 ±2°
- End Voltage: 0.1% maximum (0.2% at 2 K ohms, 0.4% at 1 K ohms)
- Output Smoothness: 0.1% ±10%
- Dielectric Withstanding Voltage (MIL-STD-202, Method 301)
  - Sea Level: 1,000 VAC minimum
  - Power Rating (Voltage Limited By Power Dissipation or 350 VAC, Whichever is Less)
    - +70 °C: 2 watts
    - +125 °C: 0 watt
- Insulation Resistance (500 VDC): 1,000 megohms minimum
- Resolution: Essentially infinite

**Environmental Characteristics**

- Operating Temperature Range: -40 °C to +125 °C
- Storage Temperature Range: -65 °C to +125 °C
- Temperature Coefficient Over Storage Temperature Range: ±500 ppm/°C maximum
- Vibration: 15 G
- Shock: 60 G
- Wiper Bounce: 0.1 millisecond maximum
- Load Life: 1,000 hours, 1.5 watts
- Total Resistance Shift: ±2% maximum
- Total Resistance Shift: ±2% maximum
- Total Resistance Shift: ±10% maximum
- Total Resistance Shift: ±10% maximum
- IP Rating: IP 40

**Mechanical Characteristics**

- Mechanical Angle: 350 ° ±2 °
- Continuous
- Torque (Starting & Running): 0.53 N-cm (0.75 oz.-in.) maximum
- Shaft Runout: 0.025 mm (0.001 in.) T.I.R.
- Shaft End Play: 0.08 mm (0.003 in.) T.I.R.
- Shaft Radial Play: 0.08 mm (0.003 in.) T.I.R.
- Pilot Diameter Runout: 0.025 mm (0.001 in.) T.I.R.
- Lateral Runout: 0.08 mm (0.003 in.) T.I.R.
- Backlash: 0.1 ° maximum
- Weight: 89 gm
- Terminals: Side exit turret terminals

**Soldering Condition**

- Manual Soldering: 96.5Sn/3.0Ag/0.5Cu solid wire or no-clean rosin cored wire
- Wave Soldering: 96.5Sn/3.0Ag/0.5Cu solder with no-clean flux
- Wash processes: Not recommended

**Ganging (Multiple Section Potentiometers)**

- Gangable up to 10 cups maximum
- No hardware included

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At room ambient: +25 °C nominal and 50 % relative humidity nominal, except as noted.

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**Recommended Part Numbers**

<table>
<thead>
<tr>
<th>Part Number*</th>
<th>Resistance (Ω)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6574S-1-102</td>
<td>1,000</td>
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<tr>
<td>6574S-1-502</td>
<td>5,000</td>
</tr>
<tr>
<td>6574S-1-103</td>
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</tr>
</tbody>
</table>

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.