Features
- Bushing mount
- Shaft supported by front sleeve bearing
- Non-standard features and specifications available

BOURNS®
6657 - Precision Potentiometer

Electrical Characteristics
- Standard Resistance Range: 1 K to 100 K ohms
- Total Resistance Tolerance: ±10 %
- Independent Linearity: ±1 %
- Effective Electrical Angle: 340° ±3 °
- End Voltage: 0.5 % maximum
- Output Smoothness: 0.1 %
- Dielectric Withstanding Voltage (MIL-STD-202, Method 301)
  - Sea Level: 750 VAC minimum
- Power Rating (Voltage Limited By Power Dissipation or 300 VAC, Whichever is Less)
  - +70°C: 1.5 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
- Total Resistance Shift: ±15 % maximum
- Voltage Ratio Shift: ±10 % maximum
- Shock: 50 G
- Total Resistance Shift: ±10 % maximum
- Voltage Ratio Shift: ±10 % maximum
- Load Life: 10,000,000 shaft revolutions
- Rotational Life (No Load): 1,000,000 shaft revolutions
- Moisture Resistance (MIL-STD-202, Method 106)
  - Total Resistance Shift: ±15 % maximum
- IP Rating: IP 40

Mechanical Characteristics
- Mechanical Angle: 30° ±2° (1/8)
- Torque (Starting & Running): 0.40 N-cm (0.5 oz.-in.) maximum
- Mounting: 170-200 N-cm (15-18 lb.-in.) maximum
- Shaft Runout: ±0.025 mm (0.001 in.) T.I.R.
- Shaft End Play: ±0.013 mm (0.0005 in.) T.I.R.
- Shaft Radial Play: ±0.013 mm (0.0005 in.) T.I.R.
- Backlash: 0.1 ° maximum
- Weight: 32 gm
- Terminals: Rear turret type
- 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
- Marking: Manufacturer’s name and part number, resistance value and tolerance, linearity tolerance, wiring diagram, and date code.
- Ganging (Multiple Section Potentiometers): 1 cup maximum
- Hardware: One lockwasher (H-37-2) and one mounting nut (H-38-2) is shipped with each potentiometer.

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

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Recommended Part Numbers
- Part Number: 6657S-1-102, Resistance: 1.000
- 6657S-1-202, 2.000
- 6657S-1-502, 5.000
- 6657S-1-103, 10.000

BOLDFACE LISTINGS ARE IN STOCK AND READY AVAILABLE THROUGH DISTRIBUTION.
FOR OTHER OPTIONS CONSULT FACTORY.
Panel Thickness Dimensions

Panel thickness and hole diameters are recommended for best fit. However, customers may adjust the dimensions to suit their specific application.

**DIMENSIONS** | **MM (INCHES)** | **TOLERANCES:** ± 0.127 (±.005)
---|---|---

Panel thickness: 2.46 - 3.81 (0.97 - 1.50)

PANEL

HEX NUT

LOCK WASHER

POT
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