BOURNS®

Features

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

6574 - Precision Potentiometer

Electrical Characteristics[1]

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 %
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[1]

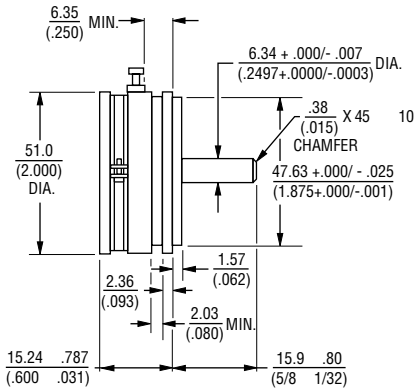
Operating Temperature Range	-40 °C to +125 °C
Storage Temperature Range	-65 °C to +125 °C
Temperature Coefficient Over Storage Temperature Range	±500 ppm/°C maximum
Vibration	15 G
Wiper Bounce	0.1 millisecond maximum
Total Resistance Shift	±2 % maximum
Shock	60 G
Wiper Bounce	0.1 millisecond maximum
Load Life	1,000 hours, 1.5 watts
Total Resistance Shift	±10 % maximum
Rotational Life (No Load)	25,000,000 shaft revolutions
Total Resistance Shift	±10 % maximum
Moisture Resistance (MIL-STD-202, Method 103, Condition B)	
Total Resistance Shift	±10 % maximum
IP Rating	IP 40

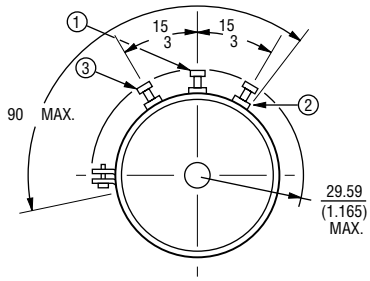
Mechanical Characteristics[1]

Mechanical Angle	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 370 °C (700 °F) max. for 3 seconds
Wave Soldering	96.5Sn/3.0Ag/0.5Cu solder with no-clean flux 260 °C (500 °F) max. for 5 seconds
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)	10 cup maximum
Hardware	No hardware included

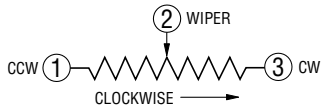
[1]At room ambient: +25 °C nominal and 50 % relative humidity nominal, except as noted.

Product Dimensions





TOLERANCES: EXCEPT WHERE NOTED
DECIMALS: .XX .51 (.02), .XXX .13 (.005)
FRACTIONS: 1/64
DIMENSIONS: MM (IN.)



Recommended Part Numbers

Part Number*	Resistance (Ω)
6574S-1-102	**1,000**
6574S-1-502	**5,000**
6574S-1-103	**10,000**

BOLDFACE LISTINGS ARE IN STOCK AND READILY AVAILABLE THROUGH DISTRIBUTION.

FOR OTHER OPTIONS CONSULT FACTORY.

REV. 08/10

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.