



Features

- Bushing mount
- Excellent resolution
- High rotational life
- Non-standard features and specifications available

6637 - Precision Potentiometer

Electrical Characteristics¹

Standard Resistance Range 1K to 100K ohms
 1K to 100K ohms
 Resistance Tolerance ±10%
 Independent Linearity ±1%
 Effective Electrical Angle 340° + 3°
 End Voltage 0.5% maximum
 Output Smoothness 0.1% maximum
 Resolution Essentially infinite
 Power Rating (Voltage Limited
 By Power Dissipation or
 300 VAC, Whichever is Less)
 +70°C 1 watt
 +125°C 0 watt
 Dielectric Withstanding Voltage
 MIL-STD-202, Method 301
 Sea Level 750 VAC minimum
 Insulation Resistance
 (500 VDC) 1,000 megohms minimum

Environmental Characteristics¹

Operating Temperature
 Static Operation Temp Range
 -65°C to +125°C
 Dynamic Temp Range
 +1°C to +125°C
 Temperature Coefficient
 ±500ppm/°C maximum
 Moisture Resistance
 MIL-STD-202, Method 106
 Total Resistance Shift
 ±10% maximum
 Vibration 15G
 Wiper Bounce
 0.1 millisecond maximum
 Total Resistance Shift ... ±5% maximum
 Voltage Ratio Shift ±0.5% maximum
 Shock 50G
 Wiper Bounce
 0.1 millisecond maximum
 Total Resistance Shift ... ±5% maximum
 Voltage Ratio Shift ±0.5% maximum
 Rotational Life (No Load)
 10,000,000 shaft revolutions
 Total Resistance Shift
 ±10% maximum
 Load Life 1,000 hours, 1 watt
 Total Resistance Shift .±10% maximum

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

Mechanical Characteristics¹

Mechanical Angle Continuous
 Backlash 0.1° maximum
 Shaft Runout
 0.001 in. (0.025mm) T.I.R.
 Shaft End Play
 0.005 in. (0.13mm) T.I.R.
 Shaft Radial Play
 0.005 in. (0.13mm) T.I.R.
 Torque (Starting & Running)
 0.5 oz.-in. (0.40 Ncm) max.

Recommended Part Numbers

| Part Numbers | Resistance (W) |
|--------------------|----------------|
| 6637S-1-102 | 1,000 |
| 6637S-1-502 | 5,000 |
| 6637S-1-103 | 10,000 |

BOLD-FACE LISTINGS ARE IN STOCK AND READILY AVAILABLE THROUGH DISTRIBUTION.
 FOR OTHER OPTIONS CONSULT FACTORY.

