

Features

- Infinite resolution element
- Standard linearity: 1.0 %
- Extended temperature range: -65 °C to +125 °C
- Extended life version (6538)
- Output smoothness: 0.1 % standard
- Molded-in rear terminals

 Non-standard features and specifications available

6537/6538 - 22 mm Precision Potentiometer

Electrical Characteristics ¹	6537	6538
Standard Resistance Range		
Total Resistance Tolerance		
Independent Linearity		
Effective Electrical Angle		
End Voltage		
Output Smoothness		
Dielectric Withstanding Voltage (MIL-	STD-202, Method 301)	
Sea Level		
Power Rating (Voltage Limited By Po	wer Dissipation or 300 VAC, Whi	chever is Less)
+70 °C		
+125 °C		
Insulation Resistance (500 VDC)		
Resolution	Essentially infinite	Essentially infinite

Environmental Characteristi	cs ¹	
Operating Temperature Range	40 °C to +125 °C 65 °C to +125 °C	40 °C to +125 °C 65 °C to +125 °C
Over Storage Temperature Range Vibration	15 G	15 G
Wiper Bounce Total Resistance Shift	±5 % maximum	±5 % maximum
Voltage Ratio Shift	50 G	50 G
Wiper Bounce Total Resistance Shift Voltage Ratio Shift	±5 % maximum	±5 % maximum
Load Life	1,000 hours, 1 watt	1,000 hours, 1 watt
Rotational Life (No Load)	10,000,000 shaft revolutions	20,000,000 shaft revolutions
Moisture Resistance (MIL-STD-202, Total Resistance Shift	Method 106) ±15 % maximum	±10 % maximum
IP Rating		

Mechanical Characteristics¹

Mechanical Angle Torque (Starting & Running) Shaft Runout. Lateral Runout Shaft End Play. Shaft Radial Play. Pilot Diameter Runout Backlash Weight	.0.40 N-cm (0.5 ozin.) max 0.025 mm (0.001 in.) T.I.R 0.08 mm (0.003 in.) T.I.R 0.13 mm (0.005 in.) T.I.R 0.13 mm (0.005 in.) T.I.R 0.06 mm (0.0025 in.) T.I.R 0.1° maximum	0.18 N-cm (0.25 ozin.) max. 0.025 mm (0.001 in.) T.I.R. 0.08 mm (0.003 in.) T.I.R. 0.13 mm (0.005 in.) T.I.R. 0.08 mm (0.003 in.) T.I.R. 0.06 mm (0.0025 in.) T.I.R. 0.1° maximum
Terminals		Molded-in rear turret type
Soldering Condition Manual Soldering	96 5Sn/3 0Ag/0 5Cu solid wir	re or no-clean rosin cored wire
Marida Goldering		C (700 °F) max. for 3 seconds
Wave Soldering		
	260 °	C (500 °F) max. for 5 seconds
Wash processes		Not recommended
Marking	Manufacturer's name and part	number, resistance value and
Consine (Multiple Coeties Date)	tolerance, linearity tolerance, v	
Ganging (Multiple Section Pots.) Hardware		No hardware included

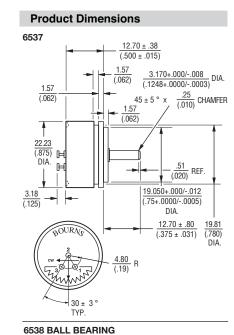
¹At room ambient: +25 °C nominal and 50 % relative humidity nominal, except as noted.

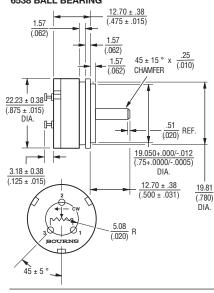
Recommended Part Numbers

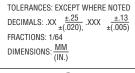
Part Number	Resistance (Ω)
6537S-1-102	1,000
6537S-1-502	5,000
6537S-1-103	10,000

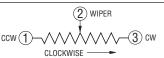
Part Number	Resistance (Ω)
6538S-1-102	1,000
6538\$-1-202	2,000
6538S-1-502	5,000
6538S-1-103	10,000

BOLDFACE LISTINGS ARE IN STOCK AND READILY AVAILABLE THROUGH DISTRIBUTION. FOR OTHER OPTIONS CONSULT FACTORY.









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