FEATuRES

- Stable infinite resolution PALIRIUM element.
- Available in resistances from 2Ω to 100Ω
- High operating temperature (175°C).
- Meets or exceeds the requirements of MIL-R-22097B.
- Low temperature coefficient: 0 to ±.04%/°C
- High power dissipation 0.5 watts at 70°C
- Excellent shock, vibration and acceleration stability.
- Wiper assembly idles at both ends of travel preventing damage from forced adjustments.
- 25-turn screwdriver adjustment.
- Outstanding Mil Spec humidity performance.
- Each instrument individually inspected for guaranteed electrical and physical characteristics.

Standard Resistances

<table>
<thead>
<tr>
<th>Resistance (Ohms)</th>
<th>Part Numbers</th>
<th>Stranded Insulated Lead Wires</th>
<th>Gold Plated Printed Circuit Pins</th>
<th>End Settings %Vr Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Not available</td>
<td>3053P-1-2K0</td>
<td></td>
<td>15.0</td>
</tr>
<tr>
<td>5</td>
<td>Not available</td>
<td>3053P-1-5K0</td>
<td></td>
<td>5.0</td>
</tr>
<tr>
<td>10</td>
<td>Not available</td>
<td>3053P-1-100</td>
<td></td>
<td>3.0</td>
</tr>
</tbody>
</table>

SPECIAL RESISTANCES AVAILABLE FROM 2Ω TO 100Ω

*The last three digits of the part number represent the resistance in standard code.

Panel Mount Model 3053 Available.®

When ordering Panel Mount Model, add "M" to part number. Example: 3053L-1-200M
Specifications

**ELECTRICAL CHARACTERISTICS**

- Resistance Values: 2Ω to 100Ω
- Resistance Tolerance*: ±15% standard, closer tolerances available
- 50Ω to 100Ω: ±10% Standard, closer tolerances available
- Continuity*: Maintained for full mechanical range
- Insulation Resistance, 500 VDC*: 1000 megohms minimum
- Contact resistance variation, Max.: 2Ω and 5Ω: 2.0%, 10Ω to 100Ω: 1.0%

**ENVIRONMENTAL CHARACTERISTICS**

- Power Ratings:
  - 70°C (158°F) Ambient: 0.5 watt
  - 125°C (257°F) Ambient: 0.25 watt
  - 175°C (347°F) Ambient: 0 watt
- Operating Temperature Range: -65 to 175°C (−85 to 347°F)
- Temperature coefficient of Potentiometer, Maximum: 2Ω and 5Ω: 0 to +0.04%/°C, 10Ω to 100Ω: 0 to +0.03%/°C
- Humidity: MIL-R-22097B 100 Megohms min. Insulation Resistance after removal from chamber

**PHYSICAL CHARACTERISTICS**

- Load Life: 1000 hours per MIL-R-22097B
- Resistance Shift, Maximum: 2.0%
- Mechanical Life: 200 cycles without discontinuity
- Dielectric Strength: MIL-R-22097B
- Room Conditions: 1500 VAC
- 80,000 feet (24 km) Hg: 500 VAC

**MARKINGS**

- Immersion Leak Test*: No leaks
- Shaft Torque*: 5.0 oz-in max.
- Markings*: Manufacturer's name, wiring diagram, date code, resistance, and manufacturer's part number (customer's part number optional)
- Appearance*: Legible markings, no physical defects
- Mechanical Adjustment: 25 turns nominal
- Mechanical Stops: Wiper assembly idle
- Weight: Approximately 0.1 oz.

**TERMINALS**

- Teflon Insulated Stranded Leads, 7 strands/36 AWG
- Gold Plated Grade A Nickel Printed Circuit Pins

**INSTRUCTION**

- Inspection Note: Applicable 100% and Statistical Sampling Performed to Insure Utmost Quality.
- Specification Note: Close performance tolerances can be supplied upon request.
- Specifications Subject to Change Without Notice.

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**Dimensions**

**3053L**

1.25
1.00
0.125
0.07
0.19 MOUNTING DIM.
0.18
0.180

3 ELECTRICAL INSULATED LEADS 11/16" MIN. LETH.

**3053P**

0.28 DIA.

WIPER LEAD

CCW
CW

BOTTOM VIEW

TOLERANCES: XX ±0.010
XXX = .005 EXCEPT WHERE NOTED

BOURNS, INC., TRIMPOT® DIVISION, 1200 COLUMBIA AVE., RIVERSIDE, CALIF.