TRIMPOT® Potentiometer
Model 3001
High Temperature, Humidity-Proof
Carbon Element

FEATURES

- Space saver: (.75 x .16 x .31).
- 15-turn screwdriver adjustment.
- Meets mil specs for humidity, shock, vibration, etc.
- High temperature all-plastic case for operation to 150°C.
- Outstanding electrical stability.
- Bourns exclusive RESISTON® carbon infinite resolution element.
- Wiper assembly idles to prevent damage from forced adjustment.

STANDARD RESISTANCES

<table>
<thead>
<tr>
<th>Resistance (ohms)</th>
<th>Part Number*</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000</td>
<td>3001P-1-203</td>
</tr>
<tr>
<td>50,000</td>
<td>3001P-1-503</td>
</tr>
<tr>
<td>100,000</td>
<td>3001P-1-104</td>
</tr>
<tr>
<td>200,000</td>
<td>3001P-1-204</td>
</tr>
</tbody>
</table>

SPECIAL RESISTANCES AVAILABLE FROM 20,000 TO 1,000,000 OHMS

<table>
<thead>
<tr>
<th>Resistance (ohms)</th>
<th>Part Number*</th>
</tr>
</thead>
<tbody>
<tr>
<td>500,000</td>
<td>3001P-1-504</td>
</tr>
<tr>
<td>750,000</td>
<td>3001P-1-754</td>
</tr>
<tr>
<td>1,000,000</td>
<td>3001P-1-105</td>
</tr>
</tbody>
</table>

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

**ELECTRICAL CHARACTERISTICS**
- Standard Resistance Range: 20,000 to 1,000,000 ohms
- Resistance Tolerance*: ±20%, standard, closer tolerances available
- Absolute Minimum Resistance*: 0 to 1.0% voltage ratio
- Continuity*: Maintained for full mechanical range
- Insulation Resistance, 500 volts DC*: 100 megohms minimum
- Contact Resistance Variation*: 1.8% maximum

**ENVIRONMENTAL CHARACTERISTICS**
- Power Ratings:
  - 70°C Ambient: 0.20 watt or 300 volts maximum
  - 110°C Ambient: 0.10 watt or 300 volts maximum
  - 150°C Ambient: 0 watt
- Operating Temperature Range: -65° to +150°C
- Temperature Coefficient, Maximum: ±400 ppm/°C
- Moisture Resistance MIL-R-22097, 100 megohms minimum insulation resistance after removal from chamber
- Vibration: MIL-R-22097, 30gs Contact Bounce: 0.1 millisecond maximum
- Shock: MIL-R-22097, 100gs Contact Bounce and Wiper Shift: Same as vibration
- Sand and Dust: Meets MIL-E-5272, Procedure 1

**PHYSICAL CHARACTERISTICS**
- Shaft Torque*: 5.0 oz.-in. maximum
- 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: 15 turns nominal
- Mechanical Stops*: Wiper assembly idles
- Weight: Approximately 0.08 oz.
- Terminals: P Gold plated printed circuit pins

*Inspection Note: Applicable 100% or statistical sampling inspection performed to ensure highest quality.

Specifications Note: Closer performance tolerances can be supplied upon request. Specifications are subject to change without notice.

---

**3001P**

![Diagram of 3001P Potentiometer](image-url)

TOLERANCES EXCEPT AS SHOWN

\[
\begin{align*}
\text{II} &\leq -0.01 \\
\text{III} &\leq 0.05
\end{align*}
\]