FEATURES

- Performance guaranteed by Bourns Reliability Assurance Program.
- SILVERWELD® termination eliminates vulnerable single wire termination.
- Space saving housing depth — ½ inch.
- Extended temperature performance −65°C to +125°C.
- Shaft supported front and rear by precision sleeve bearings.
- Gangable up to 24 cups within 6 inches.
- Outstanding resistance to humidity. Exceeds humidity cycling requirements of MIL-R-15294D.
- Housing: high temperature, moisture resistant, thermo setting plastic.
- Dual wiper pick-off assures outstanding vibration and shock performance.
- Individual inspection of each potentiometer to guaranteed electrical and physical characteristics.

STANDARD RESISTANCES

<table>
<thead>
<tr>
<th>Resistance (Ohms)</th>
<th>Part Number*</th>
<th>Max. Resolution (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>35395-1-250</td>
<td>.005</td>
</tr>
<tr>
<td>50</td>
<td>35395-1-500</td>
<td>.007</td>
</tr>
<tr>
<td>100</td>
<td>35395-1-100</td>
<td>.007</td>
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<tr>
<td>200</td>
<td>35395-1-200</td>
<td>.007</td>
</tr>
<tr>
<td>300</td>
<td>35395-1-300</td>
<td>.007</td>
</tr>
<tr>
<td>500</td>
<td>35395-1-500</td>
<td>.007</td>
</tr>
<tr>
<td>1,000</td>
<td>35395-1-100</td>
<td>.008</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resistance (Ohms)</th>
<th>Part Number*</th>
<th>Max. Resolution (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000</td>
<td>35395-2-002</td>
<td>.010</td>
</tr>
<tr>
<td>5,000</td>
<td>35395-5-002</td>
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<tr>
<td>10,000</td>
<td>35395-1-203</td>
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</tr>
<tr>
<td>50,000</td>
<td>35395-5-203</td>
<td>.007</td>
</tr>
</tbody>
</table>

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

ELECTRICAL CHARACTERISTICS

Resistance Range: 250 to 300 ohms
Resistance Tolerance*: 0.1%
Linearity (undetermined): 0.13% max.
Resolution: See Standard Resistance Table
Effective Electrical Angle*: 350° (10°)
Absolute Minimum Resistance: 10 or 0.1%, whichever is greater
Noise During Adjustment*: 1000 CEN max.
Power Rating: 75°C 1.0 watt
125°C 0.5 watt
Dielectric Strength: MIL-R-23934
Sea level 750 VAC max.
70,000 feet 250 VAC max.
Insulation Resistance, 500 VDC*: 1000 megohms min.

ENVIRONMENTAL CHARACTERISTICS

Operating Temperature Range: -65°C to +125°C
Temperature Coefficient Resistance of Wire*: 20 PPM/°C max.
Humidity: MIL-R-23934, Humidity Cycling
Vibration: MIL-R-23934, 150 G
Wiper Bounce: 0.1 millisecond max.
Wiper Stroke: 1.05 mm, max.
Shock: MIL-R-23934, 500 G
Wiper Bounce and Wiper Stroke: Same as vibration
Load Life: MIL-R-23934, 1,000 hours
Resistance Stabil: 2.05%, max.
Seed and Dust: MIL-C-5272

Fuses: MIL-E-5272
Sail Strip: MIL-STD-202, Method 101A

MECHANICAL AND PHYSICAL CHARACTERISTICS

Mechanical Angle: Continuous
Shaft Rotation*: 900 in. T.I.R.
Shaft Radial Play*: 0.005 in. T.I.R.
Rotational Life: 1,000,000 shaft revolutions
Terminals: Spring Terminals: 0.15 in. max. (Springing)
Contact Resistance: 24 uses max.
Top Location Tolerances: ±0.001 max.
Weight: Approximately 0.4 oz.
Receptacle: Gold plated contacts
Manufacturer's name and part number, resistance value and tolerance, tolerance, wiring diagram and date code

NOTES

*100% and statistical sampling performed to ensure frequent quality.
1General manufacturer for complete specification details for resistances below 30Ω.
Specifications are subject to change without notice.

BOURNS® Wirewound Precision Potentiometer Model 3530

Bourne, Inc., TRIMPH PRODUCTS DIVISION
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