FEATURES

- Unique INFINITRON® conductive plastic element provides essentially infinite resolution.
- Rotational life: 10,000,000 shaft revolutions.
- Standard linearity ±1.0% — special linearies available.
- Output smoothness: 0.1% standard.
- Outstanding resistance to humidity — exceeds moisture resistance requirements of MIL-R-3903
- Exclusive termination technique insures low end resistance and definite effective electrical angle.
- Custom design capability is available to satisfy your most demanding and difficult special requirements.

STANDARD RESISTANCES

<table>
<thead>
<tr>
<th>Resistance (ohms)</th>
<th>Part Number*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000</td>
<td>35615-1-101</td>
</tr>
<tr>
<td>2,000</td>
<td>35615-1-192</td>
</tr>
<tr>
<td>5,000</td>
<td>35615-1-502</td>
</tr>
<tr>
<td>10,000</td>
<td>35615-1-103</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resistance (ohms)</th>
<th>Part Number**</th>
</tr>
</thead>
<tbody>
<tr>
<td>15,000</td>
<td>35615-1-103</td>
</tr>
<tr>
<td>50,000</td>
<td>35615-1-203</td>
</tr>
<tr>
<td>100,000</td>
<td>35615-1-504</td>
</tr>
<tr>
<td>200,000</td>
<td>35615-1-204</td>
</tr>
</tbody>
</table>

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

TRIMPOT PRODUCTS DIVISION

W5 1976
5M15-78A/2
Model 3561 Conductive Plastic Element Potentiometer

**STANDARD SPECIFICATIONS**

*Specifications listed below are for standard model. Modifications of all types (mechanical, electrical, environmental) can be customized to your special requirements.*

### ELECTRICAL CHARACTERISTICS

- **Resistance Range**: 1000 ohms to 20M ohms
- **Resistance Tolerance**: ±10%
- **Linearity (Independently Standard)**: ±1.5% maximum
- **Repeatability**: ±0.1%
- **Resolution**: Essentially infinite
- **Effective Electrical Angle**: 180° (±10°, -2°)
- **Minimum Voltage**: 0.2% max/rms
- **Output Smoothness**: 0.1% minimum

Noise: 126 ohms or 1%; part minimum available as 356111-1201.

- **Power Rating (250 Volts Maximum)**
  - 10°C: 1.0 volt
  - 120°C: 0.5 volt
- **Dielectric Strength**: MIL-R-28223
  - Sea level: 1000 volts AC minimum 80,000 feet: 300 volts AC minimum
  - Insulation Resistance: 500 volts DC*: 1000 megohm minimum

### ENVIRONMENTAL CHARACTERISTICS

- **Operating Temperature Range**: -56 to +125°C
- **Temperature Coefficient**: Specific temperature coefficients limits vary depending on the resistance value of the potentiometer and the temperature range in which it will be used. In general, the temperature coefficient value of Bourns (MIL-P-26992) conductive plastic potentiometers is within ±0.6%/°C.

When requesting exact values, please specify the resistance value of the potentiometer to be used and the temperature range required for your application.

When potentiometers are used as voltage dividers, the resistance change due to temperature coefficient does not affect the output signal as a result of the total applied voltage. Therefore, temperature coefficient should not be considered a major or significant specification in this type application.

### Mechanical and Physical Characteristics

- **Mechanical Angle**: 180° (±10°, -2°)
- **Shaft Diameter**: .020 in.
- **Shaft End Play**: .002 in.
- **Flattened Area**: .035 in.
- **Nominal Length**: 1.000 in.
- **Nominal Length**: 1.000 in.
- **Rotation Life**: 12,000 arc/min revolutions
- **Slip Strength**: 90 oz./in. maximum
- **Torque**: 0.08 oz./in. maximum
- **Thermal expansion**: approximately 0.74°C/°C
- **Travel**: Graduated, 1676 in.

### Milestones

- **Wiring**: Manufacture's name and part number, resistance ideas and tolerance, finally tolerance, wiring diagram, and data code.

**NOTE:**

*100% X-ray inspection performed to ensure highest quality.

*From 1% to 15%, out of specification.*

*Specifications are subject to change without notice.*

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**3560 Series 25**

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**BOURNS INC. TRISUM PRODUCTS DIVISION**

1200 COLUMBUS AVENUE, RIVERSIDE, CALIFORNIA 92507