FEATURES

- Custom design capability is available to satisfy your most demanding and difficult special requirements.
- Extended Temperature Range: -65°C to +125°C
- Outstanding resistance to humidity
- Exceeds humidity cycling requirements of MIL-R-12934
- Dual collector pick-off assures outstanding vibration and shock performance
- Shaft supported front and rear by precision sleeve bearings
- Housing: high temperature, moisture resistant, thermosetting plastic

Performance of the Model 3445 is guaranteed by the Bourns Reliability Program, which includes individual inspection to published electrical and physical characteristics.

STANDARD RESISTANCES

<table>
<thead>
<tr>
<th>Resistance (Ohms)</th>
<th>Part Number*</th>
<th>Resolution (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>3405S-1-101</td>
<td>0.123</td>
</tr>
<tr>
<td>200</td>
<td>3405S-1-201</td>
<td>0.096</td>
</tr>
<tr>
<td>500</td>
<td>3405S-1-501</td>
<td>0.075</td>
</tr>
<tr>
<td>1,000</td>
<td>3405S-1-102</td>
<td>0.061</td>
</tr>
<tr>
<td>2,000</td>
<td>3405S-1-202</td>
<td>0.049</td>
</tr>
<tr>
<td>5,000</td>
<td>3405S-1-502</td>
<td>0.041</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Resistance (Ohms)</th>
<th>Part Number*</th>
<th>Resolution (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000</td>
<td>3405S-1-103</td>
<td>0.037</td>
</tr>
<tr>
<td>20,000</td>
<td>3405S-1-203</td>
<td>0.037</td>
</tr>
<tr>
<td>50,000</td>
<td>3405S-1-503</td>
<td>0.037</td>
</tr>
<tr>
<td>100,000</td>
<td>3405S-1-104</td>
<td>0.032</td>
</tr>
<tr>
<td>150,000</td>
<td>3405S-1-154</td>
<td>0.018</td>
</tr>
<tr>
<td>200,000</td>
<td>3405S-1-204</td>
<td>0.017</td>
</tr>
</tbody>
</table>

TRIMPOT PRODUCTS DIVISION

August 1982

No. 3445/7-126-6/3
STANDARD SPECIFICATIONS

THE SPECIFICATIONS LISTED BELOW ARE FOR THE STANDARD MODEL. MODIFICATIONS OF ALL TYPES (MECHANICAL, ELECTRICAL AND ENVIRONMENTAL) CAN BE CUSTOM ENGINEERED TO YOUR SPECIFIC REQUIREMENTS.

ELECTRICAL CHARACTERISTICS

Resistance Range........................................ 100Ω to 2000Ω ohms
Resistances Tolerance*.................................... ±0.25%
Linearly (Independent)*.................................... ±0.3%
Resolution.................................................. See Standard Resistances Table
Effective Mechanical Angle*.............................. 30° ±3°
Maximum Absolute Minimum Resistance*.............. 50 or 0.1%, whichever is greater
Zero.......................................................... 1000 max.
Power Rating
70°C......................................................... 5 watts
125°C....................................................... 0 watt
Dielectric Strength
WL-R-125°C .................................................. 1000 VAC MIN.
Sealed: 70,000 feet........................................ 200 VAC MIN.
Insulation Resistance, 500 VDC*........................ 1000 megohms MIN.

ENVIRONMENTAL CHARACTERISTICS

Operating Temperature Range.......................... -65°F to +125°F
Temperature Coefficient of Wire........................ 20 PPM/°F MAX.
Humidity.................................................. 85% RH-125°C, humidity cycling
Vibration.................................................. WL-R-125°C, 1.5G
Wiper Bounce............................................. 0.2 milliseconds max.
Wiper Shift............................................... 1.5% max.
Shock..................................................... WL-R-125°C, 5G
Wiper Bounce and Wiper Shift.......................... Same as vibration

MECHANICAL AND PHYSICAL CHARACTERISTICS

Mechanical Angle.......................................... Continuous
Shaft Rotation*............................................ 1°25' in 1.6°, max.
Shaft End Play*............................................ .005 in. T.I.R.
Shaft Radial Play*......................................... .004 in. T.I.R.
Relational Life........................................... 1,000,000 shaft revolutions
Target
Starting.................................................. 1.75 oz-in, min.
Running.................................................... 1.0 oz-in, min.

NOTES

* 100% or statistical sample inspection performed to insure highest quality.
Specifications are subject to change without notice.

3445