FEATURES

- Low cost linear position potentiometer.
- \( \frac{1}{2}'' \) mechanical travel .490 \( \pm .015'' \) electrical travel.
- \( \pm 2.5\% \) independent linearity.
- Excellent backlash: .002'' maximum.
- Low temperature coefficient: 100 ppm/°C over entire temperature range.
- Meets or exceeds environmental requirements of MIL-R-22097.
- 1W power rating at 70°C.

CLOSEST EQUIVALENT: 3048L-5-RC
WHERE RC = RESISTANCE CODE.

STANDARD RESISTANCES

<table>
<thead>
<tr>
<th>RESISTANCE (OHMS)</th>
<th>PART NUMBERS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>3049L-1-101</td>
</tr>
<tr>
<td>1,000</td>
<td>3049L-1-102</td>
</tr>
<tr>
<td>10,000</td>
<td>3049L-1-103</td>
</tr>
<tr>
<td>50,000</td>
<td>3049L-1-103</td>
</tr>
</tbody>
</table>

SPECIAL RESISTANCES AVAILABLE FROM 10 OHMS TO 2 MEGOHMS.

<table>
<thead>
<tr>
<th>RESISTANCE (OHMS)</th>
<th>PART NUMBERS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000</td>
<td>3049L-1-104</td>
</tr>
<tr>
<td>500,000</td>
<td>3049L-1-504</td>
</tr>
<tr>
<td>1,000,000</td>
<td>3049L-1-105</td>
</tr>
</tbody>
</table>

*The last three digits of the part number represent the resistance in standard code.
Model 3049 TRIMPOT® Potentiometer

SPECIFICATIONS

ELECTRICAL CHARACTERISTICS

Standard Resistance Range (see chart on front) 100 ohms to 1 megohm
Resistance Tolerance* 10%, Standard, closer tolerances available
Electrical Travel $0.490^\pm 0.015$
End Voltage 1% maximum
Independent Linearity* $\pm 2.5\%$ maximum
Continuity Throughout the mechanical travel
Insulation Resistance 100 megohms minimum

ENVIRONMENTAL CHARACTERISTICS

Power Ratings:
- 70°C Ambient 1 watt
- 175°C Ambient 0 watt
Load Life 1000 hours per MIL-R-22097
Operating Temperature Range $-65$ to $+175^\circ$C
Temperature Coefficient per MIL-R-22097 Maximum 100 ppm/°C
Dielectric Strength 1000 volts AC per MIL-R-22097
Mechanical Life* 20,000 cycles without discontinuity

Vibration Exceeds MIL-R-22097, 20G
Shock Exceeds MIL-R-22097, 50G
Humidity, MIL-STD-202, Method 106 10 megohms minimum insulation resistance after removal from chamber

PHYSICAL CHARACTERISTICS

Appearance Legible markings, no physical defects
Markings Manufacturer's name, wiring diagram, date code, resistance, and manufacturer's part number (customer's part number optional)
Actuation Force* 100 grams maximum
Backlash $0.002''$ maximum each end
Mechanical Overtravel $0.01''$ minimum
Terminals 3 Gold plated Grade A nickel .028'' diameter pins formed in a "J" hook pattern
- Teflon insulated stranded leads, 30 AWG (.024 O.D.) 7 strands/28 AWG
*Specification Note: Special performance requirements can be supplied upon request.

Specifications are subject to change without notice.