

Long-Life (500 000 Cycles) Panel Potentiometer



KEY BENEFITS

- Long life of 500 000 cycles
- Low temperature coefficient of ± 150 ppm/ $^{\circ}$ C typical
- Plastic shaft and bushing
- 1000 V_{RMS} dielectric strength
- Ultra-small 9.6 mm size
- Fully sealed IP67 package

APPLICATIONS

- Control panels
- Actuation proportional pedals
- Air conditioning units
- Hospital bed audio systems
- White goods
- Lighting controls/dimmers

RESOURCES

- Datasheet: P10L - <http://www.vishay.com/doc?51057>
- For technical questions contact sfer@vishay.com



Long-Life (500 000 Cycles) Panel Potentiometer

| ELECTRICAL SPECIFICATIONS | | | | | | | | | | | | | | | | |
|--|--|--------------------------|-------------------------|--------------------------|---|-----|----|---|-----|------|----|-----|------|----|-----|------|
| Resistive Element | Cermet | | | | | | | | | | | | | | | |
| Electrical Travel | 250° ± 15° | | | | | | | | | | | | | | | |
| Standard Resistance Values | 1 kΩ - 5 kΩ - 10 kΩ - 50 kΩ | | | | | | | | | | | | | | | |
| Tolerance | 20 % - 10 % on request | | | | | | | | | | | | | | | |
| Taper | Linear | | | | | | | | | | | | | | | |
| | A <div style="text-align: center;"> </div> | | | | | | | | | | | | | | | |
| Circuit Diagram | | | | | | | | | | | | | | | | |
| Power Rating | 0.1 W at 70 °C <div style="text-align: center;"> </div> | | | | | | | | | | | | | | | |
| Standard Resistance Element Data | <table border="1"> <thead> <tr> <th>Resistance Value (kΩ)</th> <th>Max. Power at 70 °C (W)</th> <th>Max. Working Voltage (V)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0.1</td> <td>10</td> </tr> <tr> <td>5</td> <td>0.1</td> <td>22.3</td> </tr> <tr> <td>10</td> <td>0.1</td> <td>31.6</td> </tr> <tr> <td>50</td> <td>0.1</td> <td>70.7</td> </tr> </tbody> </table> | Resistance Value (kΩ) | Max. Power at 70 °C (W) | Max. Working Voltage (V) | 1 | 0.1 | 10 | 5 | 0.1 | 22.3 | 10 | 0.1 | 31.6 | 50 | 0.1 | 70.7 |
| Resistance Value (kΩ) | Max. Power at 70 °C (W) | Max. Working Voltage (V) | | | | | | | | | | | | | | |
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| 10 | 0.1 | 31.6 | | | | | | | | | | | | | | |
| 50 | 0.1 | 70.7 | | | | | | | | | | | | | | |
| Temperature Coefficient (Typical) | ± 150 ppm/°C | | | | | | | | | | | | | | | |
| Limiting Element Voltage | 75 V | | | | | | | | | | | | | | | |
| End Resistance (Typical) | 1 Ω | | | | | | | | | | | | | | | |
| Dielectric Strength (RMS) | 1000 V | | | | | | | | | | | | | | | |
| Insulation Resistance (300 V _{DC}) | 10 ⁶ MΩ | | | | | | | | | | | | | | | |
| Independent Linearity (Typical) | ± 5 % | | | | | | | | | | | | | | | |

Revision 05-May-11

Resistors - Long Life of 500 000 Cycles