Dual Element Axial Vactrods

PACKAGE DIMENSIONS INCH (MM)

DESCRIPTION

VTL5C2/2 features a very steep slope, low temperature coefficient of resistance, and a small light history memory.
VTL5C3/2 has a steep slope, good dynamic range, a very low temperature coefficient of resistance, and a small light history memory.

ABSOLUTE MAXIMUM RATINGS @ 25°C

Maximum Temperatures
-40°C to 75°C

Cell Power:
175 mW

LED Current:
40 mA

LED Reverse Breakdown Voltage:
3.0 V

LED Forward Voltage Drop @ 20 mA:
2.0V (1.65V Typ.)

Min. Isolation Voltage @ 70% Rel. Humidity: 2500 VRMS

Output Cell Capacitance: 5.0 pF

Cell Voltage: 50V (VTL5C2/2), 100V (VTL5C3/2)

Input - Output Coupling Capacitance: 0.5 pF

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Material Type</th>
<th>ON Resistance</th>
<th>OFF Resistance</th>
<th>Slope</th>
<th>Dynamic Range</th>
<th>Response Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>@ 10 sec. (Min.)</td>
<td>@ 0.5 mA R @ 20 mA</td>
<td>(Typ.)</td>
<td>(Typ.)</td>
<td>Turn-on to 63% Final RON (Typ.)</td>
</tr>
<tr>
<td>VTL5C2/2</td>
<td>Ø</td>
<td>5 mA 40 mA</td>
<td>2.5 kΩ 700 Ω</td>
<td>1.0 MΩ</td>
<td>20</td>
<td>65 db</td>
</tr>
<tr>
<td>VTL5C3/2</td>
<td>3</td>
<td>1 mA 40 mA</td>
<td>55 kΩ 2 kΩ</td>
<td>10 MΩ</td>
<td>19</td>
<td>71 db</td>
</tr>
</tbody>
</table>

Refer to Specification Notes, page 41.
Typical Performance Curves

Output Resistance vs. Input Current
VTL5C2/2

Response Time
VTL5C2/2

Output Resistance vs. Input Current
VTL5C3/2

Response Time
VTL5C3/2

Input Characteristics

Notes:
1. At 1.0 mA and below, units may have substantially higher resistance than shown in the typical curves. Consult factory if closely controlled characteristics are required at low input currents.

2. Output resistance vs input current transfer curves are given for the following light adapt conditions:
   (1) 25°C — 24 hours @ no input
   (2) 25°C — 24 hours @ 40 mA input
   (3) +50°C — 24 hours @ 40 mA input
   (4) −20°C — 24 hours @ 40 mA input

3. Response time characteristics are based upon test following adapt condition (2) above.