# GDL-7050

**Key Features:**
- Mini Size
- Low Cost
- Auto Power Control Function
- High Reliability

**Applications:**
- Laser Display
- Surveying Equipment
- Laser Alignment & Pointing

<table>
<thead>
<tr>
<th>Model Number</th>
<th>GDL-7050</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Optical Parameters</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Wavelength</strong></td>
<td>Min</td>
</tr>
<tr>
<td></td>
<td>531nm</td>
</tr>
<tr>
<td><strong>Output Power</strong></td>
<td>40mW</td>
</tr>
<tr>
<td><strong>Power Stability</strong></td>
<td>2hours @ Constant Temp</td>
</tr>
<tr>
<td></td>
<td>Over Operating Temp Range</td>
</tr>
<tr>
<td><strong>Operating Temperature (Case)</strong></td>
<td>20~+30 °C</td>
</tr>
<tr>
<td><strong>Residual IR</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Beam Diameter</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Beam Divergence</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Roundness</strong></td>
<td>80%</td>
</tr>
<tr>
<td><strong>M-Square</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Electrical Parameters</strong></td>
<td></td>
</tr>
<tr>
<td><strong>LD Working Current</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>LD Working Voltage</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Monitor Current</strong></td>
<td>200μA</td>
</tr>
<tr>
<td><strong>GDL Power Consumption</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Mechanical Parameters</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Laser Head Dimensions</strong></td>
<td>Length</td>
</tr>
<tr>
<td></td>
<td>Diameter</td>
</tr>
<tr>
<td><strong>Beam Alignment Tolerance</strong></td>
<td>Position(Δr)</td>
</tr>
<tr>
<td></td>
<td>Angle</td>
</tr>
<tr>
<td><strong>Laser Weight</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Storage Humidity</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Storage Temperature</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Shock</strong></td>
<td>1500g, 0.5ms, 6 shocks, 3 axes, 2 shocks/axis</td>
</tr>
<tr>
<td><strong>Vibration</strong></td>
<td>20~2000Hz, 0.02g&lt;sup&gt;2&lt;/sup&gt;/Hz, 3 axes, 1hr/axis</td>
</tr>
<tr>
<td><strong>Expected Lifetime (MTTF)</strong></td>
<td>5000hrs</td>
</tr>
</tbody>
</table>

Note: <sup>①</sup>Tcase=25°C & P=50mW.<br><sup>②</sup>Non-condensing
Typical Output Performance

Power & Operating current vs Temperature

Power Stability

Dimensions and Pin Configuration (Unit: mm)

Pin Configuration: 1. LD Cathode 2. COM* 3. PD Anode
Note: * LD Anode and PD Cathode