# Key Features:
- Mini Size
- Mode Hopping Suppression
- Low Cost
- Auto Power Control Function
- High Reliability

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

## GDL-8-0100-00H-00-B

### Model Number

<table>
<thead>
<tr>
<th>Model Number</th>
<th>GDL-8-0100-00H-00-B</th>
</tr>
</thead>
</table>

### Optical Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength</td>
<td>531nm</td>
<td>532nm</td>
<td>533nm</td>
<td>At case temperature 25°C</td>
</tr>
<tr>
<td>Output Power</td>
<td>90mW</td>
<td>100mW</td>
<td>110mW</td>
<td>APC, 2 hours @ Constant Temp</td>
</tr>
<tr>
<td>Power Stability</td>
<td>-</td>
<td>+/-2%</td>
<td>+/-5%</td>
<td>Recommended temperature of data sheet</td>
</tr>
<tr>
<td>Operating Temperature (Case)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Within 15-30°C</td>
</tr>
<tr>
<td>Residual IR</td>
<td>-</td>
<td>-</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>Beam Diameter (At Output Window)</td>
<td>-</td>
<td>0.2mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beam Divergence (Full Angle, 1/e^2)</td>
<td>-</td>
<td>6mrad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roundness</td>
<td>80%</td>
<td>90%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>M-Square</td>
<td>-</td>
<td>1.1</td>
<td>1.3</td>
<td></td>
</tr>
</tbody>
</table>

### Electrical Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD Working Current</td>
<td>-</td>
<td>1300mA</td>
<td>2500mA</td>
<td>100mW at recommended temperature</td>
</tr>
<tr>
<td>LD Working Voltage</td>
<td>1.9V</td>
<td>2.2V</td>
<td>2.5V</td>
<td></td>
</tr>
<tr>
<td>Monitor Current</td>
<td>320μA</td>
<td>700μA</td>
<td>1250μA</td>
<td>100mW at recommended temperature</td>
</tr>
<tr>
<td>GDL Power Consumption</td>
<td>-</td>
<td>3.3W</td>
<td>6.25W</td>
<td></td>
</tr>
</tbody>
</table>

### Mechanical Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Length</th>
<th>Diameter</th>
<th>Off-axis Angle</th>
<th>Position(△r)</th>
<th>Laser Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Head Dimensions</td>
<td>22.0</td>
<td>11.98mm</td>
<td>10mrad</td>
<td>0.2mm</td>
<td>5.8g</td>
</tr>
<tr>
<td>Beam Alignment Tolerance</td>
<td></td>
<td></td>
<td>17.5mrad</td>
<td>0.3mm</td>
<td></td>
</tr>
</tbody>
</table>

### Reliability

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Humidity</td>
<td>5%~85% R.H. ①</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40 to +85 °C</td>
</tr>
<tr>
<td>Shock</td>
<td>1500g, 0.5ms, 6 shocks, 3 axes, 2 shocks/axis</td>
</tr>
<tr>
<td>Vibration</td>
<td>20~2000Hz, 0.02g/Hz, 3 axes, 1hr/axis</td>
</tr>
<tr>
<td>Expected Lifetime (MTTF)</td>
<td>10000hrs - -</td>
</tr>
</tbody>
</table>

Note: ①Non-condensing

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| Number | CPS-F-00064 | Version | B | Effective Date | 2018-12-30 |
Typical Output Performance

Dimensions and Pin Configuration (Unit: mm)