## FGPM-532-050-10-10-00-A

### Key Features:
- High Reliability
- High Stability
- High Polarization Extinction Ratio

### Applications:
- Laser Alignment
- Raman Spectrometer
- Biomedical Instrumentation
- Digital Printing

### Optical Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>FGPM-532-050-10-10-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wavelength</strong></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>531nm</td>
</tr>
<tr>
<td>Typ</td>
<td>532nm</td>
</tr>
<tr>
<td>Max</td>
<td>533nm</td>
</tr>
<tr>
<td><strong>Output Power</strong></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>45mW</td>
</tr>
<tr>
<td>Typ</td>
<td>50mW</td>
</tr>
<tr>
<td>Max</td>
<td>55mW</td>
</tr>
<tr>
<td><strong>LD Working Current</strong></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>-</td>
</tr>
<tr>
<td>Typ</td>
<td>1300 mA</td>
</tr>
<tr>
<td>Max</td>
<td>1700mA</td>
</tr>
<tr>
<td><strong>Monitor Current</strong></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>100μA</td>
</tr>
<tr>
<td>Typ</td>
<td>1000μA</td>
</tr>
<tr>
<td>Max</td>
<td>2500μA</td>
</tr>
<tr>
<td><strong>Polarization Extinction Ratio</strong></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>15dB</td>
</tr>
<tr>
<td>Typ</td>
<td>-</td>
</tr>
<tr>
<td>Max</td>
<td>-</td>
</tr>
<tr>
<td><strong>Power Stability @2hours</strong></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>-</td>
</tr>
<tr>
<td>Typ</td>
<td>-</td>
</tr>
<tr>
<td>Max</td>
<td>+/-5%</td>
</tr>
<tr>
<td><strong>LD Working Voltage</strong></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>-</td>
</tr>
<tr>
<td>Typ</td>
<td>2.5V</td>
</tr>
<tr>
<td>Max</td>
<td>3.0V</td>
</tr>
<tr>
<td><strong>M-Square</strong></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>-</td>
</tr>
<tr>
<td>Typ</td>
<td>-</td>
</tr>
<tr>
<td>Max</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Laser Operating Mode</strong></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>-</td>
</tr>
<tr>
<td>Typ</td>
<td>APC</td>
</tr>
<tr>
<td>Max</td>
<td>-</td>
</tr>
<tr>
<td><strong>Working Temperature</strong></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>10°C</td>
</tr>
<tr>
<td>Typ</td>
<td>25°C</td>
</tr>
<tr>
<td>Max</td>
<td>40°C</td>
</tr>
</tbody>
</table>

### Fiber Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>FGPM-532-050-10-10-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fiber Type</strong></td>
<td>3.3μm/125μm PM fiber</td>
</tr>
<tr>
<td><strong>Fiber Numerical Aperture</strong></td>
<td>0.12</td>
</tr>
<tr>
<td><strong>Fiber Length</strong></td>
<td>1m</td>
</tr>
<tr>
<td><strong>Fiber Jacket (diameter)</strong></td>
<td>900μm buffer</td>
</tr>
<tr>
<td><strong>Fiber Termination</strong></td>
<td>Without Connector</td>
</tr>
</tbody>
</table>

### Mechanical Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>FGPM-532-050-10-10-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Laser Head Length</strong></td>
<td>55mm</td>
</tr>
<tr>
<td><strong>Laser Head Diameter</strong></td>
<td>15mm</td>
</tr>
<tr>
<td><strong>Laser Wire Lead Length</strong></td>
<td>250mm</td>
</tr>
</tbody>
</table>

### Reliability

<table>
<thead>
<tr>
<th>Parameters</th>
<th>FGPM-532-050-10-10-00-A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storage Humidity</strong></td>
<td>5%~85% R.H.</td>
</tr>
<tr>
<td><strong>Storage Temperature</strong></td>
<td>-20 to +60°C</td>
</tr>
<tr>
<td><strong>Shock</strong></td>
<td>30g, 11ms, 3 times / axis, 6 axes tested</td>
</tr>
<tr>
<td><strong>Vibration</strong></td>
<td>2g, 5-500Hz, 10 cycles/axis, 4mins/cycles, 3 axes tested</td>
</tr>
<tr>
<td><strong>Expected Lifetime (MTTF)</strong></td>
<td>5000hrs@rated power &amp; Room Temperature</td>
</tr>
</tbody>
</table>

**Note:**
- 1. Output power from the fiber termination; 20~50mW is optional
- ☐ FC/APC, FC/PC or SMA905 is optional;
- ☐ Not including the fiber boot length
### Dimensions (Unit: mm)

![Dimensions Diagram](image)

<table>
<thead>
<tr>
<th>Wire Color</th>
<th>LD Pin</th>
<th>Wire Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED</td>
<td>LD Anode; PD Cathode</td>
<td>U1007 22AWG</td>
</tr>
<tr>
<td>BLACK</td>
<td>LD Cathode</td>
<td>U1007 22AWG</td>
</tr>
<tr>
<td>GREEN</td>
<td>PD Anode</td>
<td>UL10109 26AWG</td>
</tr>
</tbody>
</table>

Red: LD Anode (PD cathode)
Green: PD Anode
Black: LD Cathode