PD-LD offers Volume Bragg Grating (VBG®) elements based upon its patented technology and advanced manufacturing process. These elements can be used in many applications where stabilized wavelength and narrow line-width are needed, such as stabilizing and shaping the emission spectra of high power laser diodes. Many wavelengths are routinely stocked, including: 785 nm, 808 nm, 976 nm, and 1064 nm. Custom wavelengths between 400 nm and 2500 nm, and chirped wavelength are available upon request.

### Specification

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center wavelength</td>
<td>nm</td>
<td>400</td>
<td>2500</td>
<td></td>
</tr>
<tr>
<td>Center Wavelength Accuracy</td>
<td>nm</td>
<td>0.1</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Line-width (FWHM)</td>
<td>nm</td>
<td>0.2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Wavelength Drift Over Temp.</td>
<td>nm/°C</td>
<td></td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Polarization Dependent Loss</td>
<td>dB</td>
<td></td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>°C</td>
<td></td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>°C</td>
<td>-40</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Acceptance Angle</td>
<td>Degree</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Dimensions: Many sizes are available (see part number system below)

### Part Number System

**LML-**

- Wavelength  
- Customer Specific Reference  

**Dimension**

- E= Single Emitter (1.5mm x 2.0mm)  
- B= Diode Bar (1.5mm x 15mm)  
- S= 2D array (15mm x 15mm)  
- W= Wafer (30mm x 30mm)

### Features:

- Wide ranges of wavelength available
- Very narrow line width
- Ultra-low Temperature Drift
- Low optical power loss
- Robust and Compact
- Economical

### Applications:

- DPSS Laser
- Sensing
- Spectroscopy
- Medical
- Military