



785nm Single Mode VBG Stabilized Laser Diode



PD-LD presents a high power, VBG® wavelength stabilized single mode, single frequency laser diode, emitting at 785 nm. The PD-LD patented VBG® wavelength stabilization method offers a stable operation over a wide range of operational temperatures and power levels. The compact, low cost TO package makes this product applicable to many uses.

Superior Performance:

- Precise Wavelength ± 0.5 nm
- Narrow Line Width < 0.1 pm
- High Optical Power > 80 mW
- Low Temp. drift ~ 0.01 nm/ $^{\circ}$ C

Advantages:

- Compact
- Integrated Clean-up Filter
- Economical
- Ease of System Integration

Applications:

- Spectroscopy
- Sensing
- Medical
- Military

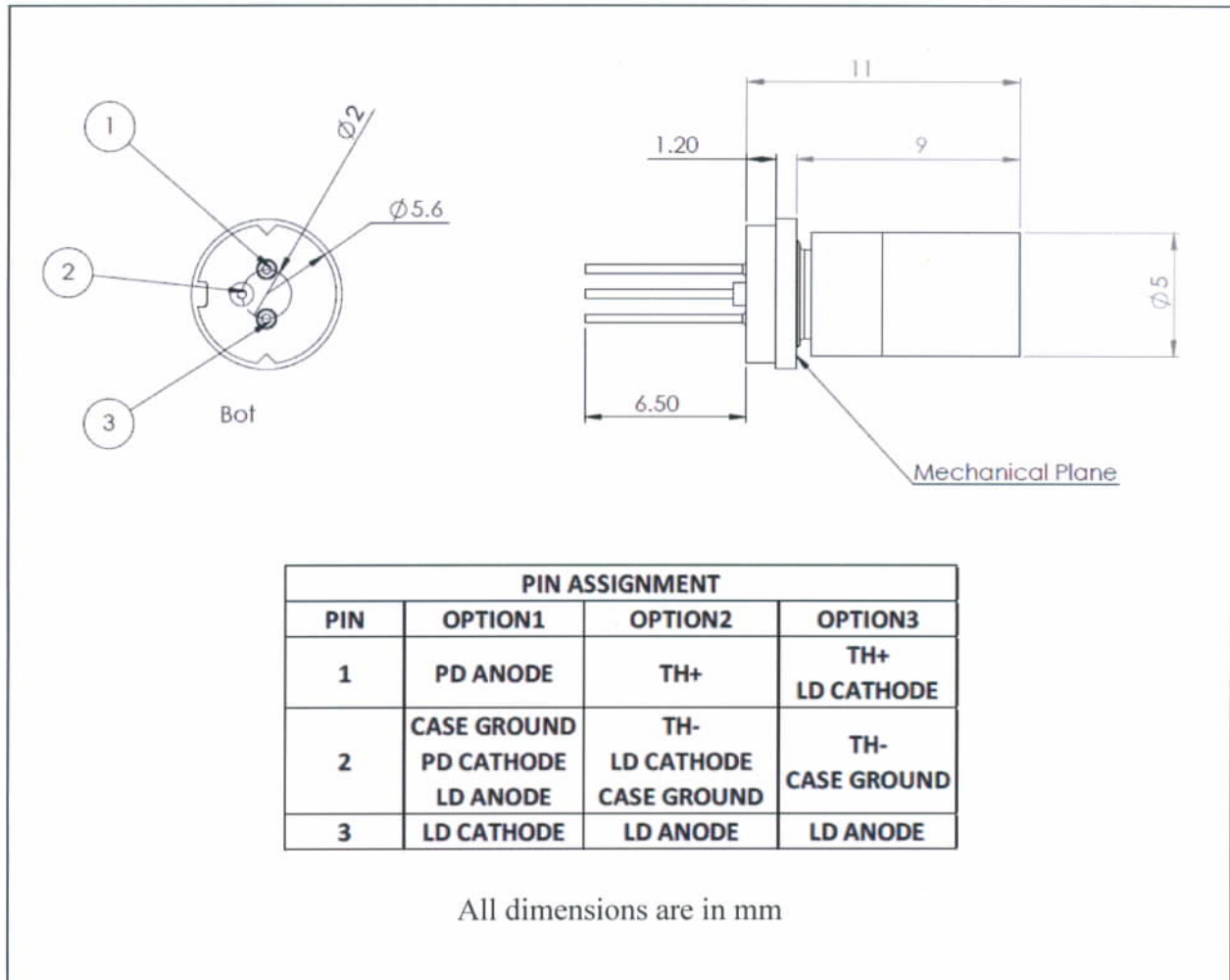
Operational Specifications

| Parameter | Unit | Minimum | Typical | Maximum |
|--|----------------|---------|---------|---------|
| Center Wavelength | nm | 784.5 | 785 | 785.5 |
| Spectral Linewidth | MHz | | | 50 |
| ASE Suppression | dB | 40 | | |
| Output Power | mW | 80 | - | - |
| Beam Quality - Vertical | M ² | | 1.2 | |
| Beam Quality - Horizontal | M ² | | 1.1 | |
| Beam Diameter | mm | | 1.0 | |
| Beam Aspect Ratio | | | | 1 : 1.5 |
| Beam Divergence - Vertical | mrad | | 0.8 | |
| Beam Divergence - Horizontal | mrad | | 1.3 | |
| Beam Stability (8-hour) | μ rad | | | 50 |
| Polarization Extinction Ratio | | | 100:1 | |
| Operating Voltage | Volts | | 2.6 | |
| Operating Current | mA | | 150 | 200 |
| Threshold Current | mA | | 60 | |
| Operating Temperature with Stabilization | $^{\circ}$ C | 10 | 25 | 40 |



785nm Single Mode VBG Stabilized Laser Diode

Dimensions and Pinout Options



Part Number System

LML-785.0-T5-XX

- T5 indicates TO-56 package.
- XX is a customer specific reference.

Note: Other wavelengths are also available. Please contact info@pd-ld.com for further information

