

HL6555G

Visible High Power Laser Diode for Measurement

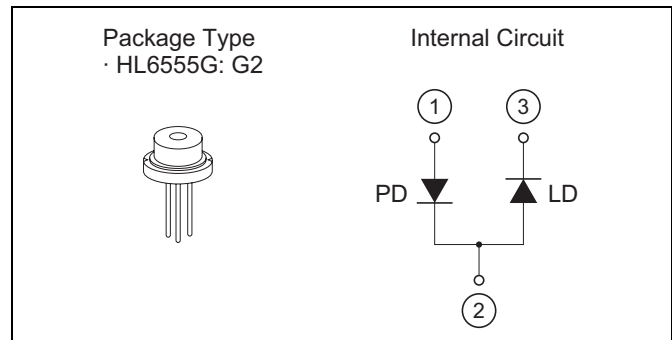
ODE-208-056 (Z)
Preliminary
Rev.0
Nov 15, 2005

Description

The HL6555G is a 0.65 μm band AlGaInP laser diode (LD) with a multi-quantum well (MQW) structure. It is suitable as a light source for various types of optical equipment.

Features

- Operating temperature: 60 Max
- High Power: 60mW CW
- Visible light output: $\lambda_p = 664 \text{ nm Typ}$
- Low Operating current:
 $I_{op} = 115 \text{ mA Typ (} P_o = 60 \text{ mW)}$



Absolute Maximum Ratings

($T_C = 25^\circ\text{C}$)

| Item | Symbol | Ratings | Unit |
|--------------------------|-------------|------------|------------------|
| Optical output power | P_O | 70 | mW |
| LD reverse voltage | $V_{R(LD)}$ | 2 | V |
| CW operating temperature | T_{opr} | -10 to +60 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -40 to +85 | $^\circ\text{C}$ |

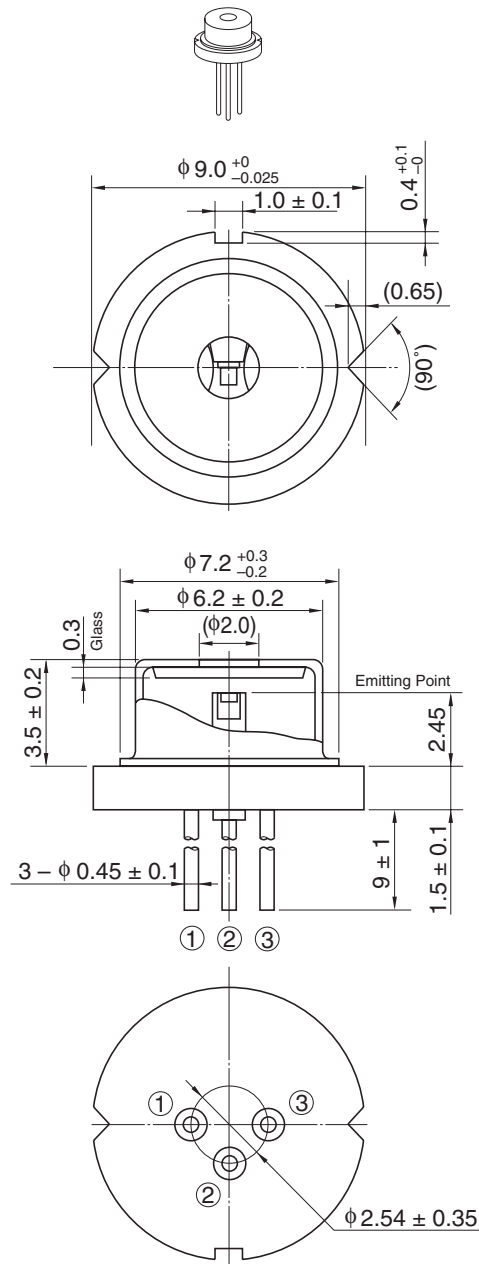
Electrical Characteristics

($T_C = 25^\circ\text{C}$)

| Item | Symbol | Min | Typ | Max | Unit | Test Conditions |
|--|------------------|-----|------|------|----------|--|
| Threshold current | I_{th} | — | 55 | 75 | mA | |
| Operating current | I_{OP} | — | 115 | 140 | mA | $P_O = 60 \text{ mW}$ |
| Operating voltage | V_{OP} | — | 2.45 | 3.0 | V | $P_O = 60 \text{ mW}$ |
| Lasing wavelength | λ_p | 662 | 664 | 666 | nm | $P_O = 60 \text{ mW}$ |
| Beam divergence parallel to the junction | $\theta_{//}$ | 6.0 | 10.0 | 13.0 | $^\circ$ | $P_O = 60 \text{ mW}$ |
| Beam divergence perpendicular to the junction | θ_{\perp} | 14 | 17 | 20 | $^\circ$ | $P_O = 60 \text{ mW}$ |
| Monitor current | I_s | — | TBD | — | mA | $P_O = 60 \text{ mW}, V_{R(PD)} = 5 \text{ V}$ |

Package Dimensions

As of July, 2002
Unit: mm



| | |
|------------------------|-------|
| OPJ Code | LD/G2 |
| JEDEC | — |
| JEITA | — |
| Mass (reference value) | 1.1 g |

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1. The laser light is harmful to human body especially to eye no matter what directly or indirectly. The laser beam shall be observed or adjusted through infrared camera or equivalent.
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3. Definition of items shown in this CAS is in accordance with that shown in Opto Device Databook issued by OPJ unless otherwise specified.

Sales Offices



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