

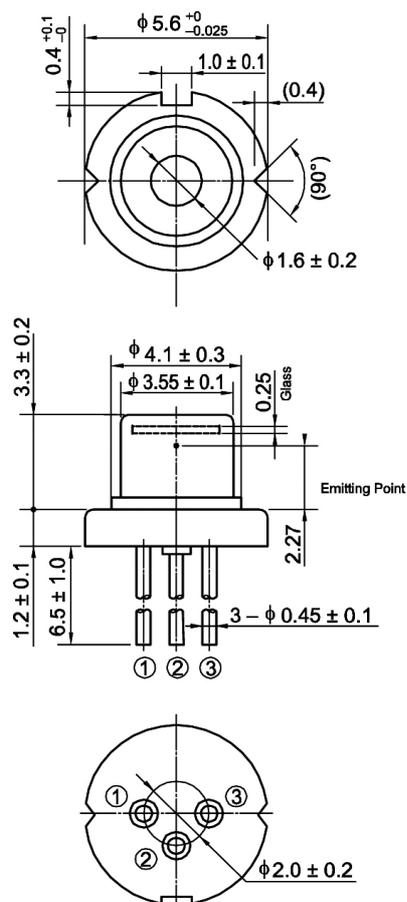
Data Sheet

HL63392DG (PRELIMINARY)

638nm / 200mW AlGaInP Laser Diode

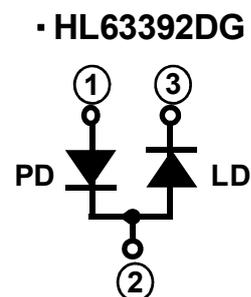
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Outline



(unit:mm)

Internal Circuit



Features

- Visible light output: 638nm Typ.
- Optical output power: 200mW (CW)
- Single transverse mode
- Low operating current: 245mA Typ.
- Low operating voltage: 3.0V Typ.
- Operating temperature: +60°C
- TE mode oscillation
- Built-in monitor PD

Application

- Laser module
- Leveller
- Measurement
- Light source of optical equipments

Absolute Maximum Ratings (Tc=25°C)

| Item | Symbol | Ratings | Unit |
|--------------------------------|--------------------|-----------|------|
| Optical output power (Tc=25°C) | Po | 200 | mW |
| (Tc=60°C) | Po | 120 | mW |
| LD Reverse Voltage | V _{R(LD)} | 2 | V |
| PD Reverse Voltage | V _{R(PD)} | 30 | V |
| Operating Temperature | Topr | -10 ~ +60 | °C |
| Storage Temperature | Tstg | -40 ~ +85 | °C |

Optical and Electrical Characteristics (Tc=25°C)

| Parameter | Symbol | Min | Typ | Max | Unit | Test Condition |
|--|-----------------|-----|-----|-----|------|-------------------------------------|
| Threshold current | I _{th} | - | 60 | 75 | mA | - |
| Operating current | I _{op} | - | 245 | 280 | mA | Po=200mW |
| Operating voltage | V _{op} | - | 3.0 | 3.3 | V | Po=200mW |
| Beam divergence Parallel to the junction | θ _{//} | 5 | 8.5 | 13 | ° | Po=200mW, FWHM |
| Beam divergence Perpendicular to the junction | θ _⊥ | 10 | 14 | 18 | ° | Po=200mW, FWHM |
| Lasing Wavelength | λ _p | 633 | 638 | 643 | nm | Po=200mW |
| Monitor Current | I _s | 0.4 | 0.8 | 1.3 | mA | Po=200mW, V _{R(PD)} =5V |

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