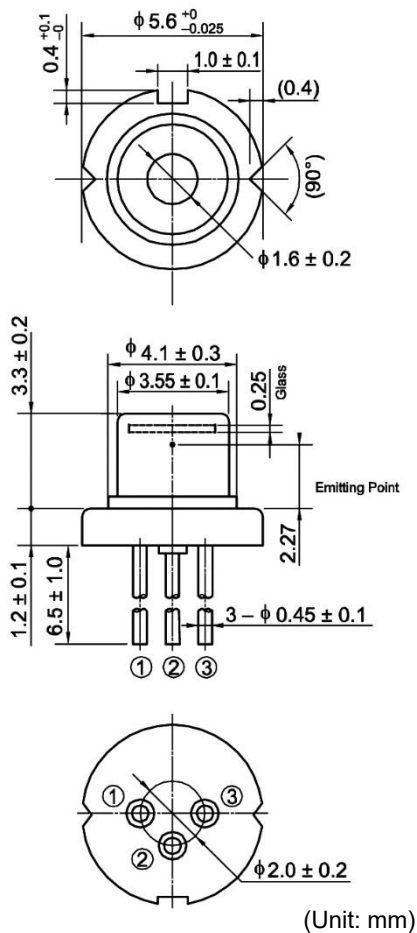


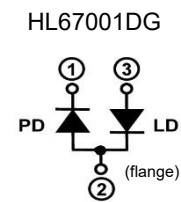
HL67001DG

675nm/210mW/Built-in monitor PD
AlGaInP Laser Diode

Outline



Internal Circuit



Features

- Visible light output: 675nm Typ.
- Optical output power: 210mW
- Low operating current: 215mA Typ.
- Built in monitor PD
- Operating temperature: +75°C
- Single transverse mode
- TE mode oscillation

Application

- Life science
- Bio-medical
- Quantum technology
- Light source of optical equipments

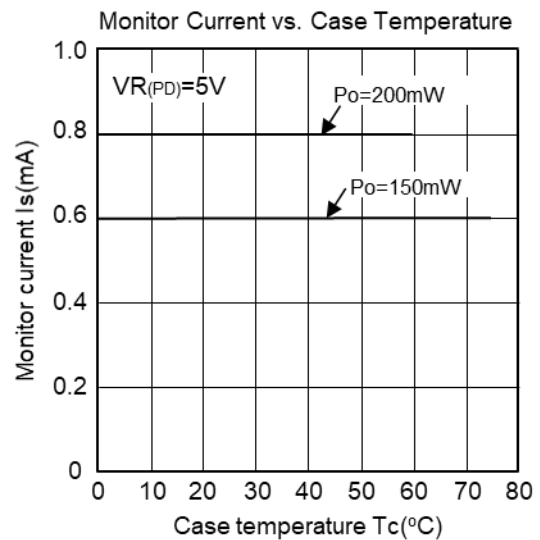
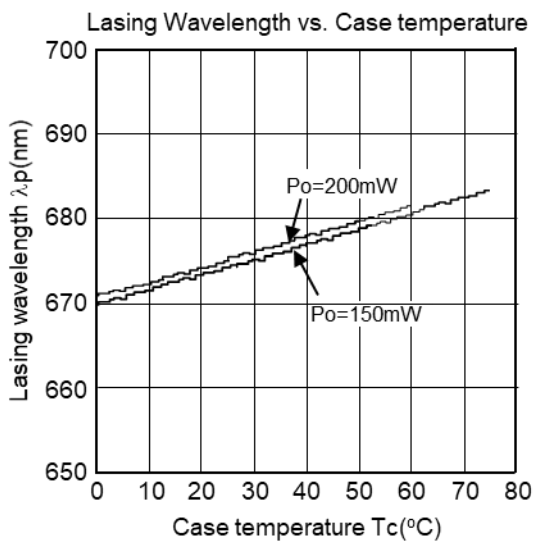
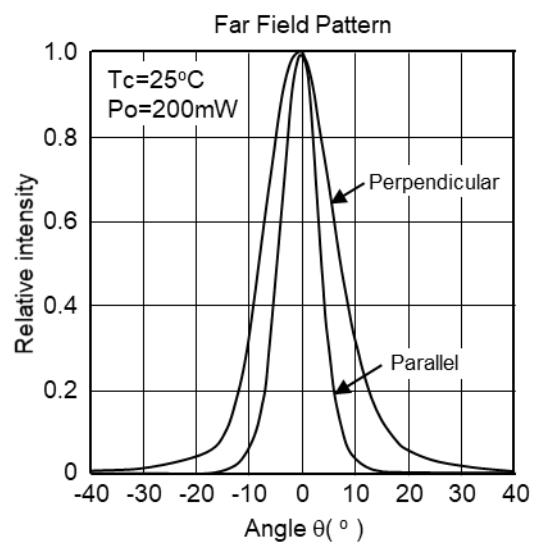
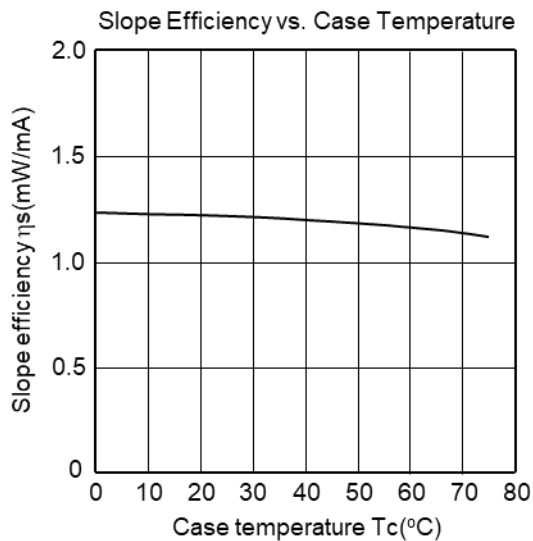
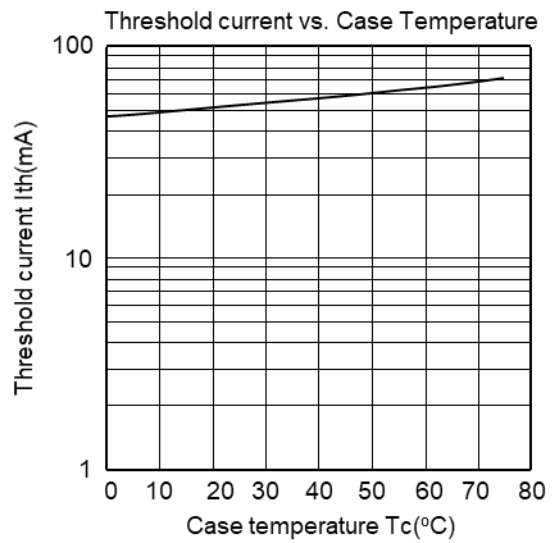
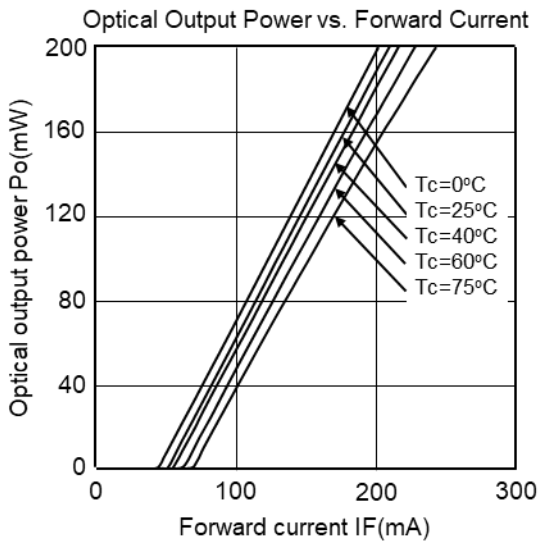
Absolute Maximum Ratings (Tc=25°C)

| Item | Symbol | Ratings | Unit |
|--|--------------------|-----------|------|
| Optical output power (1) (Tc=-10~60°C) | Po(1) | 210 | mW |
| Optical output power (2) (Tc=75°C) | Po(2) | 150 | mW |
| LD Reverse Voltage | V _{R(LD)} | 2 | V |
| PD Reverse Voltage | V _{R(PD)} | 30 | V |
| Operating Temperature | Topr | -10 ~ +75 | °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} | - | 55 | 85 | mA | - |
| Operating current | I _{op} | - | 215 | 265 | mA | Po=200mW |
| Operating voltage | V _{op} | - | 2.7 | 3.2 | V | Po=200mW |
| Beam divergence Parallel to the junction | θ _{//} | 5 | 8 | 11 | ° | Po=200mW, FWHM |
| Beam divergence Perpendicular to the junction | θ _⊥ | 11 | 15 | 19 | ° | Po=200mW, FWHM |
| Lasing Wavelength | λ _p | 670 | 675 | 680 | nm | Po=200mW |
| Monitor current | I _s | 0.1 | 0.8 | 1.8 | mA | Po=200mW, V _{R(PD)} =5V |

Typical Characteristic Curves



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2. This product (without violet laser diode) contains gallium arsenide (GaAs), which may seriously endanger your health even at very low doses. Please avoid treatment which may create GaAs powder or gas, such as disassembly or performing chemical experiments, when you handle the product. When disposing of the product, please follow the laws of your country and separate it from other waste such as industrial waste and household garbage.

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