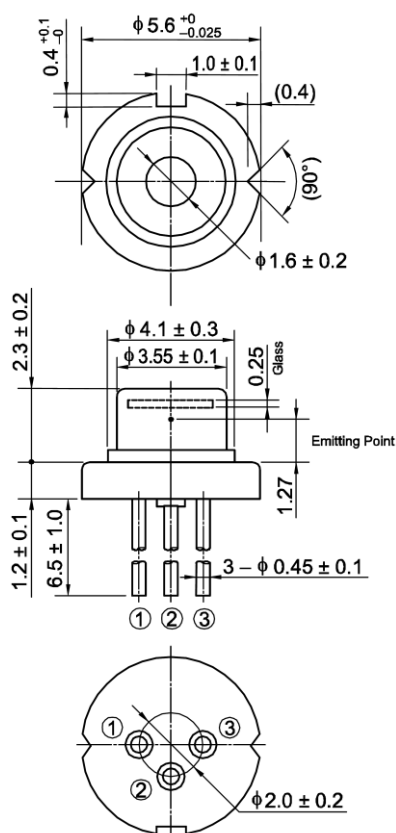


HL67192MG

670nm / 15mW (CW) / 30mW (Pulse)

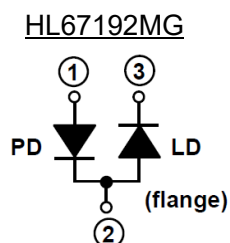
AlGaInP Laser Diode

Outline



(unit: mm)

Internal Circuit



Features

- Optical output power: 16mW (CW)
- 32mW (Pulse)
- Visible lasing: 670nm
- Wide operating temperature: 70°C max
- Single transverse mode
- TE mode oscillation
- Small package: $\phi 5.6$ mm CAN Package

Application

- Sensing
- Measurement

Absolute Maximum Ratings (Tc=25°C)

| Item | Symbol | Ratings | Unit |
|----------------------------------------------|-----------|-----------|------|
| Optical output power | Po | 16 | mW |
| Pulse optical output power ^{Note1)} | Po(Pulse) | 32 | mW |
| LD reverse voltage | VR(LD) | 2 | V |
| PD reverse voltage | VR(PD) | 20 | V |
| Operating temperature | Topr | -10 ~ +70 | °C |
| Storage temperature | Tstg | -40 ~ +85 | °C |

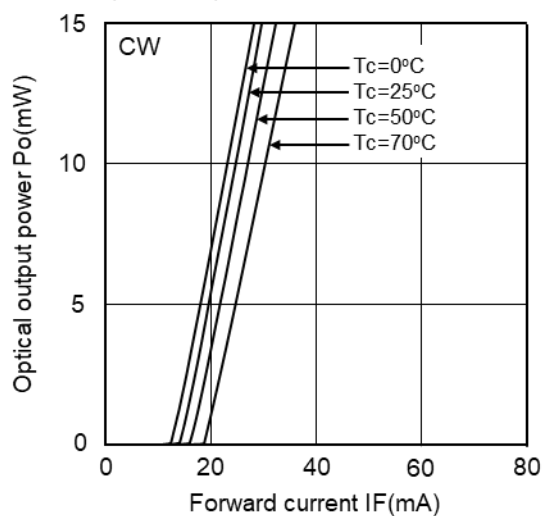
Note1) Pulse condition: Pulse width $\leq 50\text{ns}$, Duty $\leq 50\%$

Optical and Electrical Characteristics (Tc=25°C)

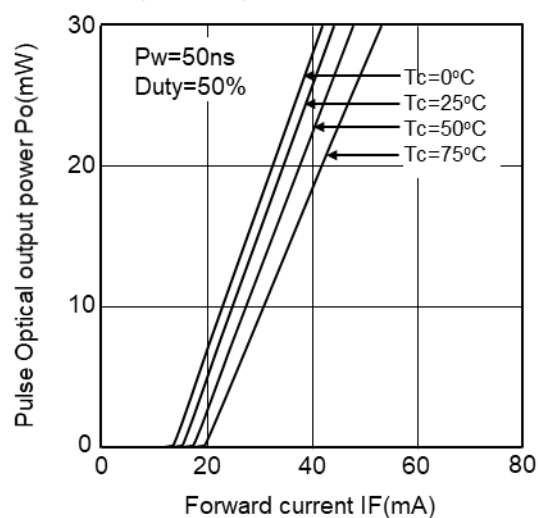
| Parameter | Symbol | Min | Typ | Max | Unit | Test Condition |
|--------------------------------------------------|------------------|-----|------|------|------|--------------------|
| Threshold current | Ith | - | 15 | 30 | mA | - |
| Operating current | Iop | - | 30 | 45 | mA | Po=15mW |
| Operating voltage | Vop | - | 2.25 | 2.70 | V | Po=15mW |
| Beam divergence Parallel to the junction | $\theta_{//}$ | 5 | 7.5 | 11 | ° | Po=15mW FWHM |
| Beam divergence Perpendicular to the junction | θ_{\perp} | 20 | 24 | 28 | ° | Po=15mW FWHM |
| Lasing Wavelength | λ_p | 660 | 670 | 680 | nm | Po=15mW |
| Monitor current | mA | 0.5 | 1.5 | 2.5 | mA | Po=15mW, VR(PD)=5V |

Typical Characteristic Curves

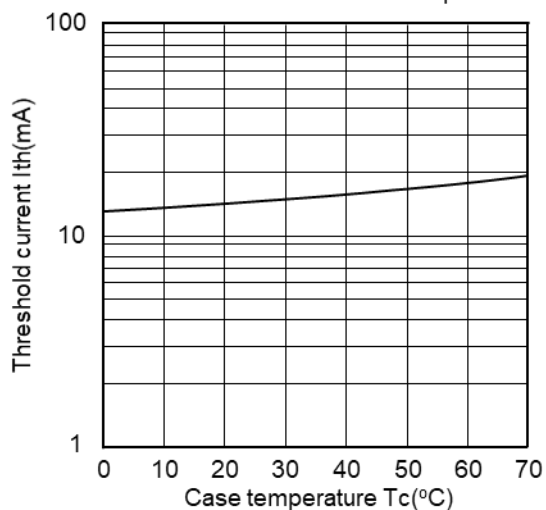
Optical Output Power vs. Forward Current



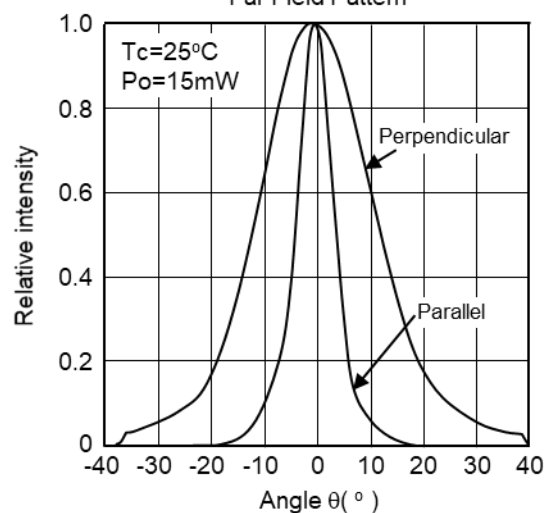
Pulse Optical Output Power vs. Forward Current



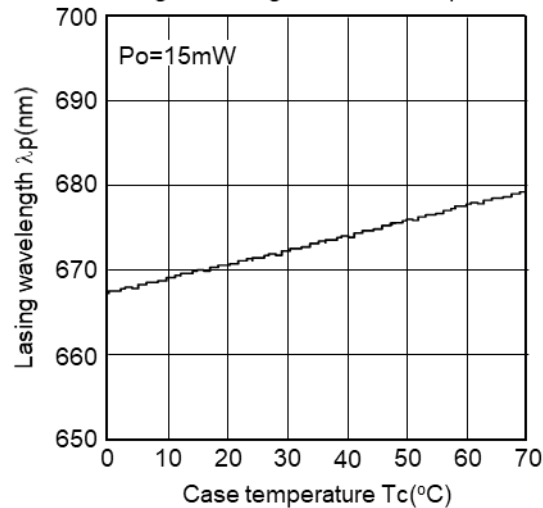
Threshold current vs. Case Temperature



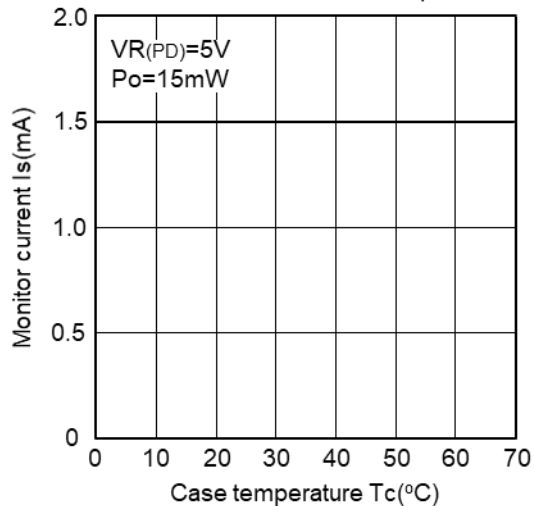
Far Field Pattern



Lasing Wavelength vs. Case temperature



Monitor Current vs. Case Temperature



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