

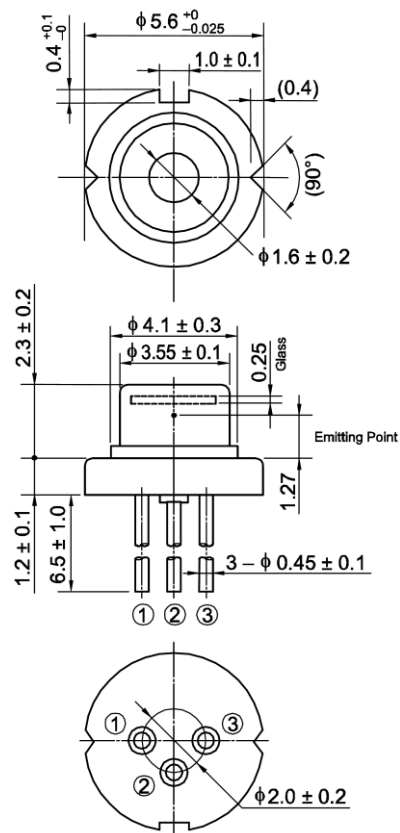


## HL65261MG/62MG/64MG

658nm/85mW (CW)/310mW (Pulse)

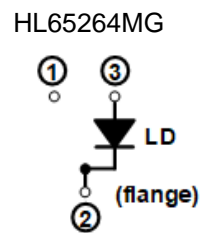
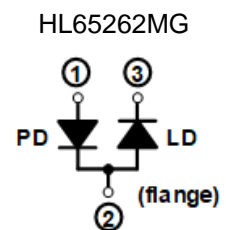
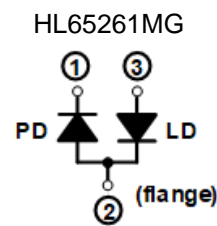
AlGaInP Laser Diode

### Outline



(Unit: mm)

### Internal Circuit



### Features

- Visible light output: 658nm Typ.
- Optical output power: 85mW (CW), 310mW (Pulse)
- Low operating current:
- 90mA Typ. (80mW (CW))
- 245mA Typ. (300mW (Pulse))
- Operating temperature: +60°C (CW), +75°C (Pulse)
- Single transverse mode
- TE mode oscillation

### Application

- Sensor application
- Light source of optical equipment

# HL65261MG/62MG/64MG

Preliminary Data Sheet

## Absolute Maximum Ratings (Tc=25°C)

| Item                       | Symbol      | Ratings   | Unit |
|----------------------------|-------------|-----------|------|
| Optical output power       | Po          | 85        | mW   |
| Pulse optical output power | Po(Pulse)   | 310       | mW   |
| LD reverse voltage         | VR(LD)      | 2         | V    |
| PD reverse voltage         | VR(PD)      | 30        | V    |
| Operating temperature      | Topr(CW)    | -10 ~ +60 | °C   |
| Operating temperature      | Topr(Pulse) | -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                                | Ith              | -   | 30  | 50  | mA   | -                         |
| Operating current                                | Iop              | -   | 90  | 120 | mA   | Po=80mW                   |
|  | Iop (Pulse)      | -   | 245 | -   | mA   | Po(Pulse)=300mW<br>Note 1 |
| Operating voltage                                | Vop              | -   | 2.6 | 3.3 | V    | Po=80mW                   |
| Beam divergence<br>Parallel to the junction      | $\theta_{//}$    | 4   | 7.5 | 11  | °    | Po=80mW,<br>FWHM          |
| Beam divergence<br>Perpendicular to the junction | $\theta_{\perp}$ | 11  | 15  | 19  | °    | Po=80mW,<br>FWHM          |
| Lasing wavelength                                | $\lambda_p$      | 652 | 658 | 665 | nm   | Po=80mW                   |
| Monitor current                                  | Is               | 0.1 | 0.6 | 1.5 | mA   | Po=80mW<br>VR(PD)=5V      |

Note1) Pulse condition: Pulse width = 10nsec, duty = 10%

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