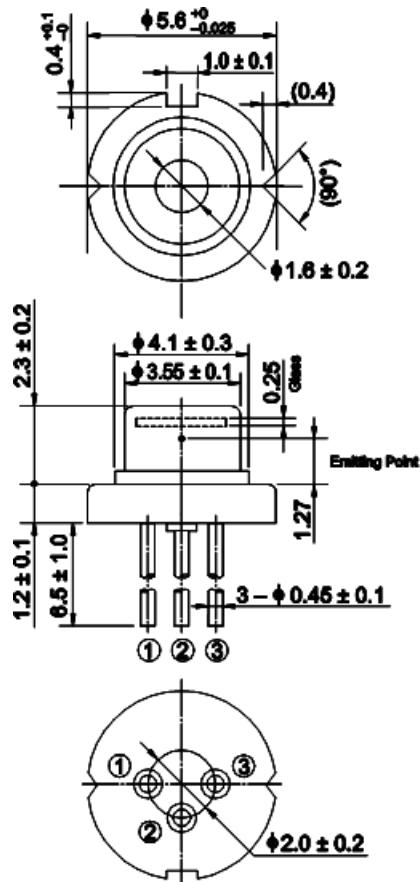




## HL63591MG/592MG

639nm / 5mW    AlGaInP Laser Diode

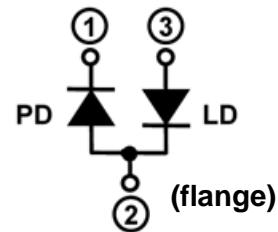
### Outline



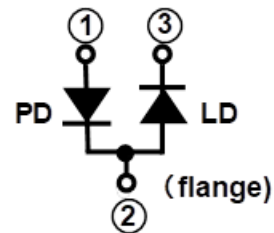
(Unit: mm)

### Internal Circuit

#### HL63591MG



#### HL63592MG



### Features

- Visible light output: 639 nm Typ.
- Optical output power: 5 mW (CW)
- Single transverse mode
- Low operating current: 35 mA Typ.
- Low operating voltage: 2.3 V Typ.
- Operating temperature: +60°C
- TE mode oscillation.

### Application

- Distance meter
- Laser leveler
- Laser scanner
- Light source of optical equipments

**Absolute Maximum Ratings (Tc=25°C)**

Item	Symbol	Ratings	Unit
Optical output power	Po	6	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	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 <sub>th</sub>	-	30	35	mA	-
Operating current	I <sub>op</sub>	-	35	45	mA	Po=5mW
Operating voltage	V <sub>op</sub>	-	2.3	2.5	V	Po=5mW
Beam divergence Parallel to the junction	θ <sub>//</sub>	6	8	11	°	Po=5mW, FWHM
Beam divergence Perpendicular to the junction	θ <sub>⊥</sub>	16	21	24	°	Po=5mW, FWHM
Lasing Wavelength	λ <sub>p</sub>	630	639	643	nm	Po=5mW
Monitor Current	I <sub>s</sub>	0.2	0.5	1.0	mA	Po=5mW, V <sub>R(PD)</sub> =5V

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