

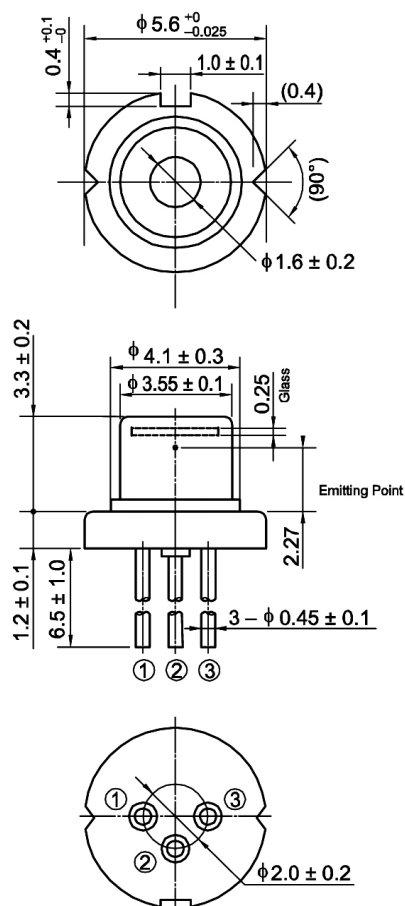
# Data Sheet

## HL63xx2DG (PRELIMINARY)

638nm / 200mW AlGaInP Laser Diode

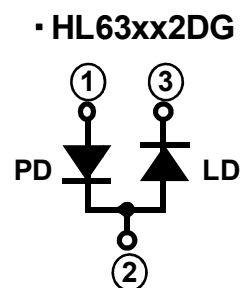
USHIO

### 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: 3.3V Max.
- Operating temperature: +50°C
- TE mode oscillation

### Application

- Laser module
- Light source of optical equipments

## Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	200	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 ~ +50	°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>	-	60	75	mA	-
Operating current	I <sub>op</sub>	-	245	280	mA	Po=200mW
Operating voltage	V <sub>op</sub>	-	3.0	3.3	V	Po=200mW
Beam divergence Parallel to the junction	θ <sub>//</sub>	5	8	13	°	Po=200mW, FWHM
Beam divergence Perpendicular to the junction	θ <sub>⊥</sub>	8	13	18	°	Po=200mW, FWHM
Lasing Wavelength	λ <sub>p</sub>	632	638	642	nm	Po=200mW
Monitor Current	I <sub>s</sub>	0.4	0.8	1.3	mA	Po=200mW, V <sub>R(PD)</sub> =5V

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