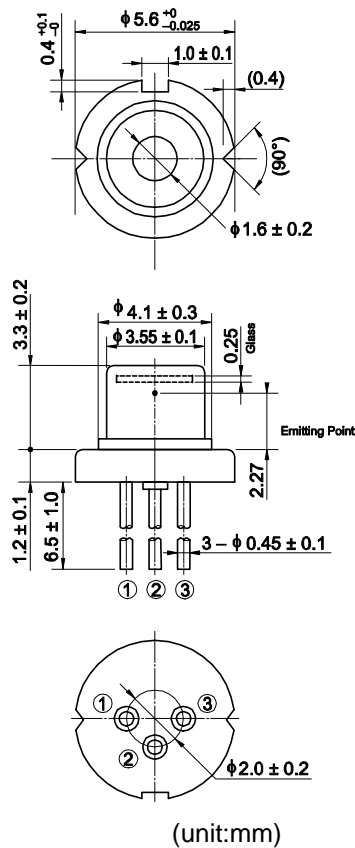


# HL63163DG

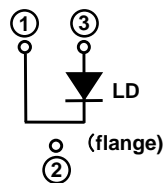
AlGaInP Laser Diode

633nm/100mW

## Outline



## Internal Circuit



## Features:

- Shorter wavelength: 633nm Typ.
- High optical output power: 100mW
- Low operating current: 170mA Typ.
- Small package:  $\phi 5.6$ mm
- Single transverse mode
- TE mode oscillation

## Applications:

- Medical
- Industry
- Light source of optical equipment

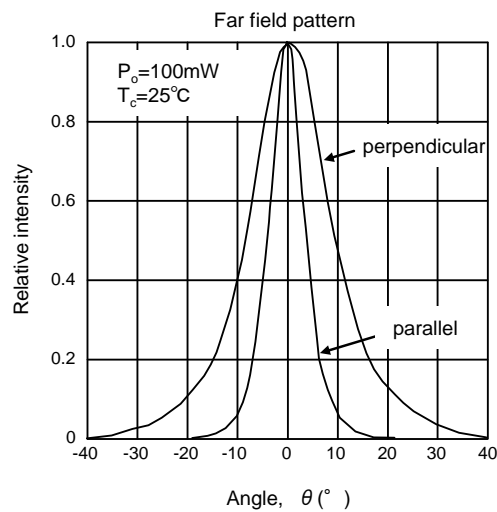
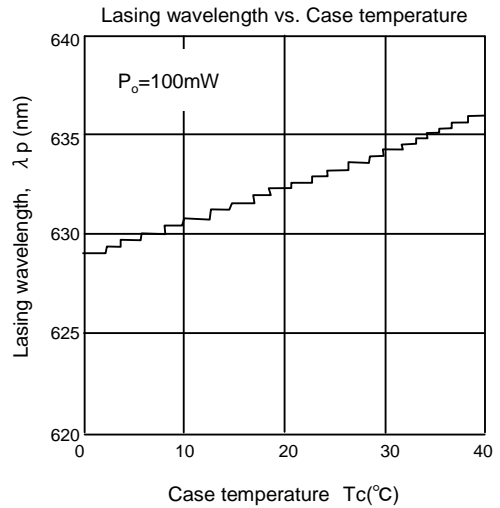
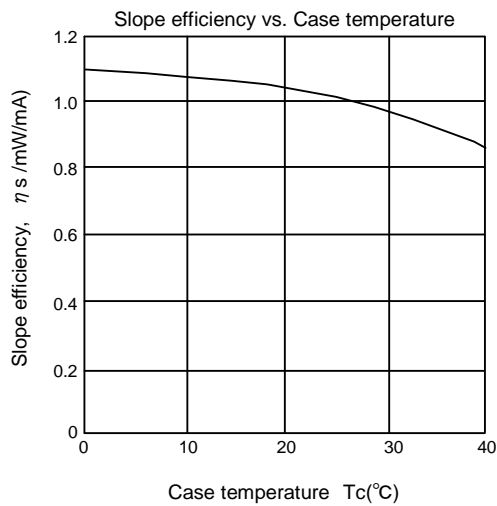
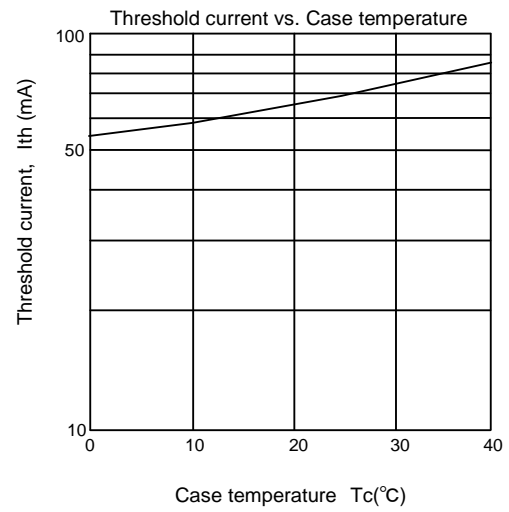
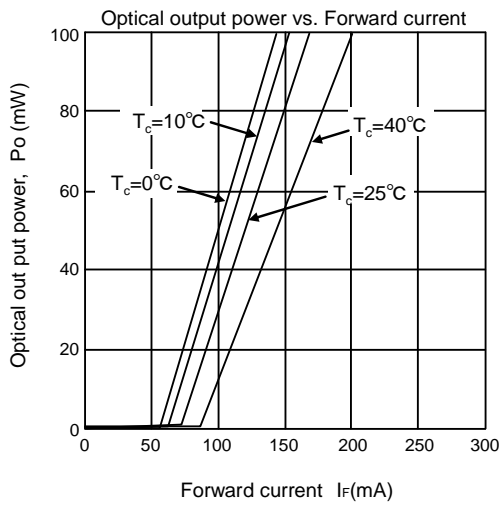
**Absolute Maximum Ratings (T<sub>c</sub>=25°C)**

Item	Symbol	Ratings	Unit
Optical output power	P <sub>o</sub>	100	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
Operating Temperature	T <sub>opr</sub>	-10 ~ +40	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	°C

**Optical and Electrical Characteristics (T<sub>c</sub>=25°C)**

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I <sub>th</sub>	-	70	100	mA	-
Operating current	I <sub>op</sub>	-	170	230	mA	P <sub>o</sub> =100mW
Operating voltage	V <sub>op</sub>	-	2.6	3.0	V	P <sub>o</sub> =100mW
Beam divergence Parallel to the junction	θ <sub>//</sub>	5	8.5	13	°	P <sub>o</sub> =100mW
Beam divergence Perpendicular to the junction	θ <sub>⊥</sub>	13	18	23	°	P <sub>o</sub> =100mW
Lasing Wavelength	λ <sub>p</sub>	630	633	636	nm	P <sub>o</sub> =100mW

Typical Characteristic Curves



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1. The laser light is harmful to human body especially to eye no matter what directly or indirectly. The laser beam shall be observed or adjusted through infrared camera or equivalent.

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.

## Contact Information

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