

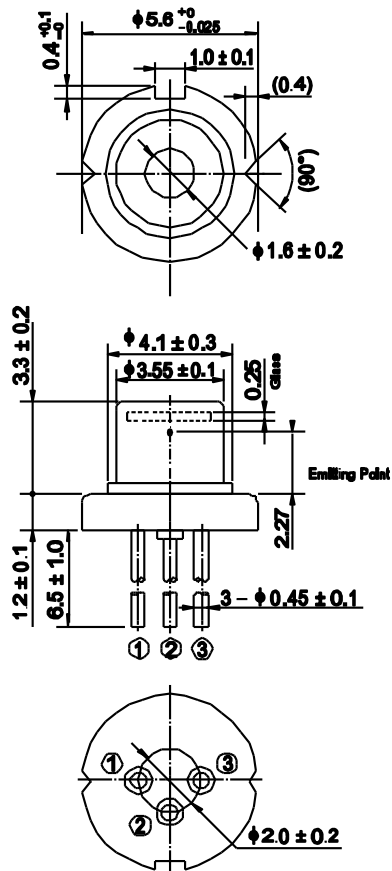
# Data Sheet

# HL63163DG

633nm / 100mW    AlGaInP Laser Diode

USHIO

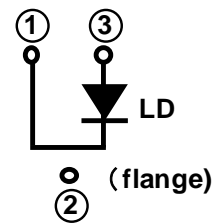
## Outline



(Unit: mm)

## Internal Circuit

• HL63163DG



## 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

## Application

- Medical
- Industry
- Light source of optical equipment

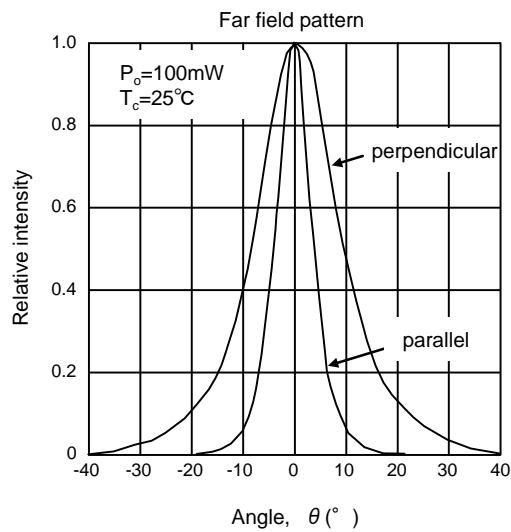
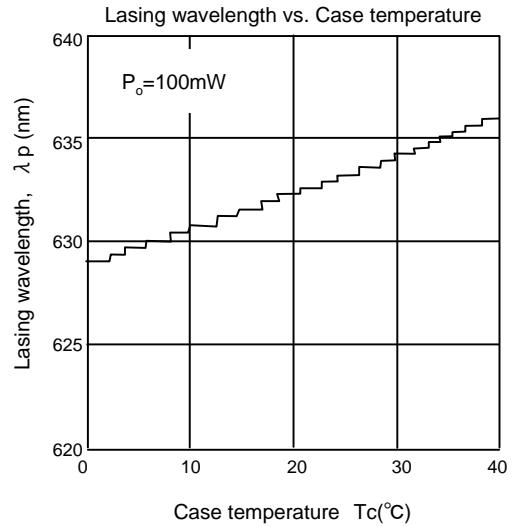
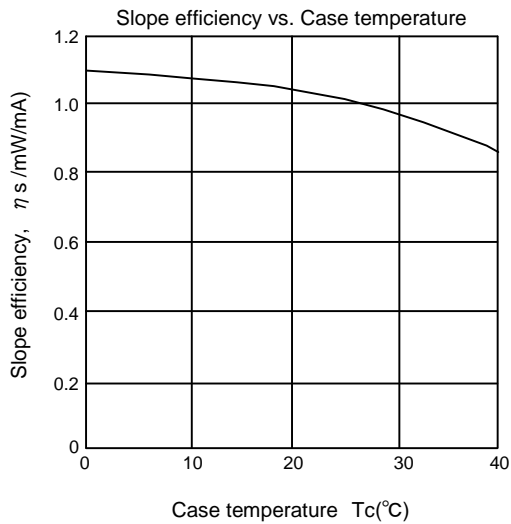
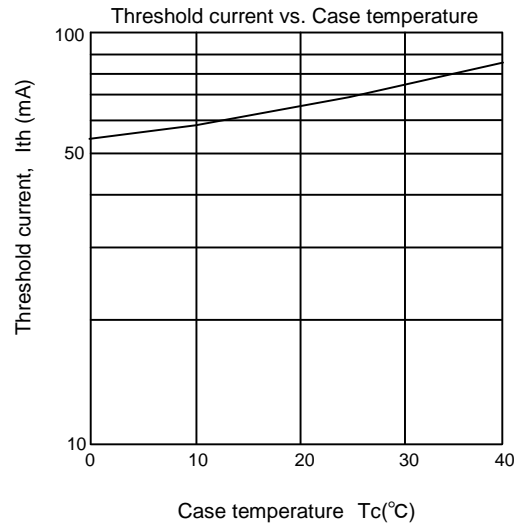
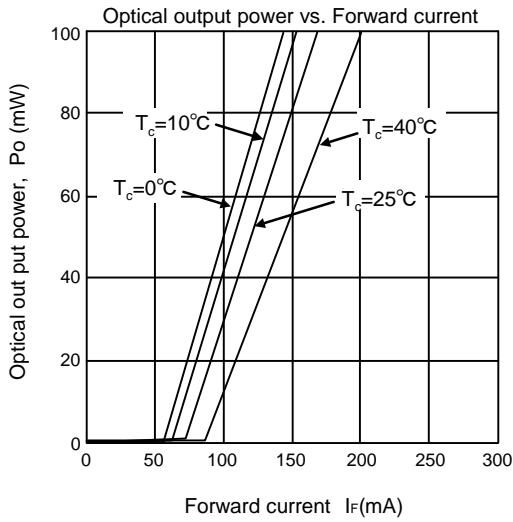
## Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	100	mW
LD Reverse Voltage	VR(LD)	2	V
Operating Temperature	Topr	-10 ~ +40	°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	-	60	75	mA	-
Operating current	Iop	-	175	210	mA	Po=120mW
Operating voltage	Vop	-	2.5	3.3	V	Po=120mW
Beam divergence Parallel to the junction	$\theta_{//}$	7	10	13	°	Po=120mW, FWHM
Beam divergence Perpendicular to the junction	$\theta_{\perp}$	15	17	21	°	Po=120mW, FWHM
Lasing Wavelength	$\lambda_p$	630	633	636	nm	Po=120mW

## Typical Characteristic Curves



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