

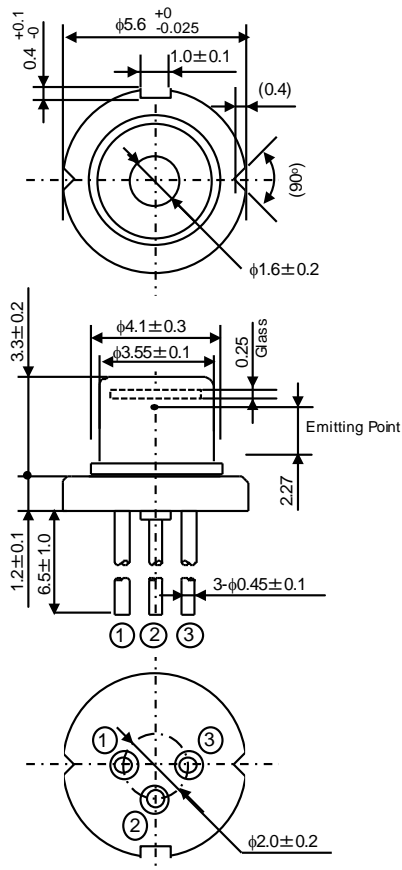
Data Sheet

HL63163DG

633nm / 100mW AlGaInP Laser Diode

USHIO

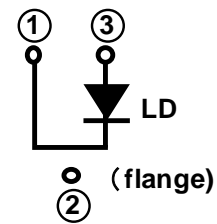
Outline



(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

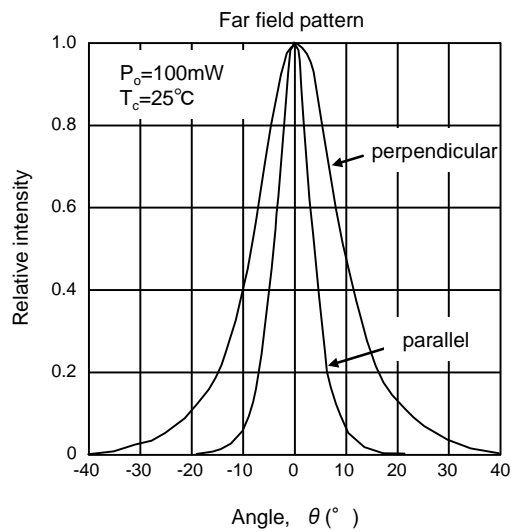
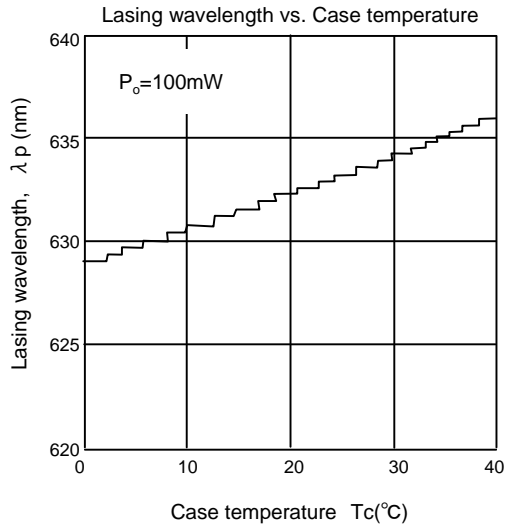
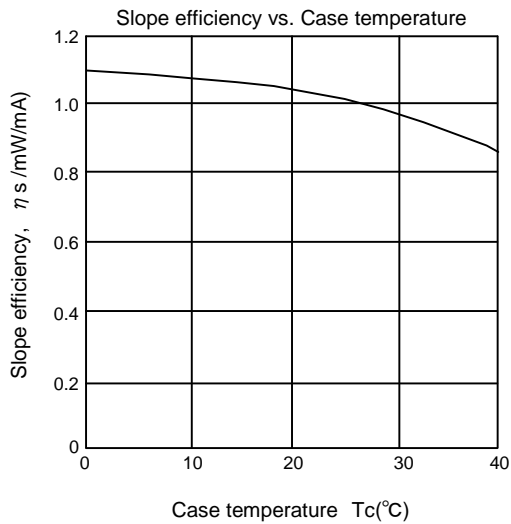
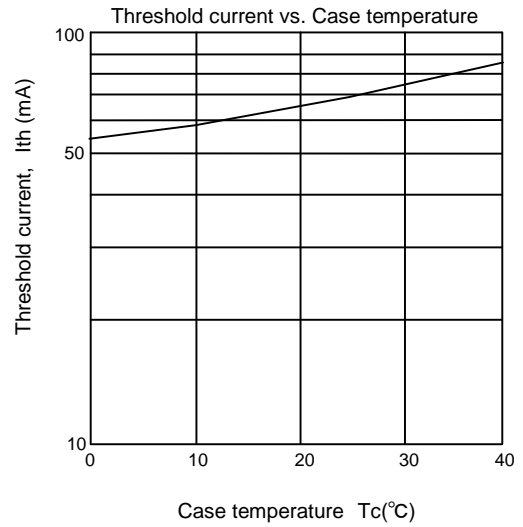
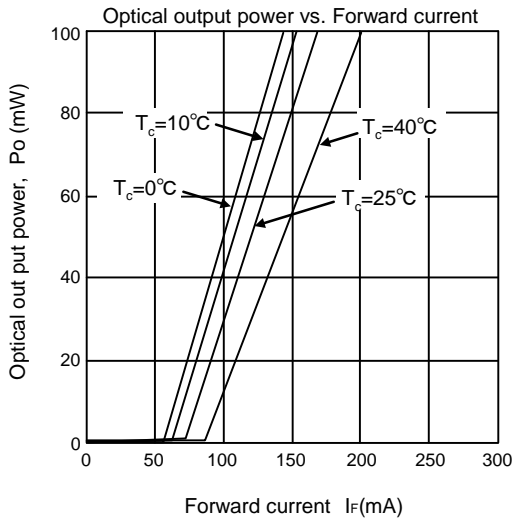
Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	100	mW
LD Reverse Voltage	V _{R(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	I _{th}	-	70	100	mA	-
Operating current	I _{op}	-	170	230	mA	Po=100mW
Operating voltage	V _{op}	-	2.6	3.0	V	Po=100mW
Beam divergence Parallel to the junction	θ _{//}	5	8.5	13	°	Po=100mW, FWHM
Beam divergence Perpendicular to the junction	θ _⊥	13	18	23	°	Po=100mW, FWHM
Lasing Wavelength	λ _p	630	633	636	nm	Po=100mW

Typical Characteristic Curves



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