Data Sheet

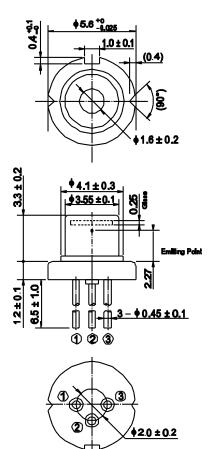
HL65051DG

660nm/130mW

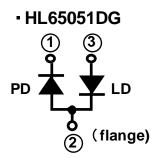
AlGaInP Laser Diode

USHIO

Outline



Internal Circuit



Features

(Unit: mm)

- Optical output power: 120mW (CW)
- Visible light output: 660nm Typ.
- Low operating current: 175mA Typ.
- Low operating voltage: 2.5V Typ.
- Small package: φ5.6mm
- Built-in monitor photodiode
- Single transverse mode
- TE mode oscillation

Application

- LIDAR (Laser Imaging Detection and Ranging)
- Laser module
- Sensing
- Medical



Absolute Maximum Ratings (Tc=25°C)

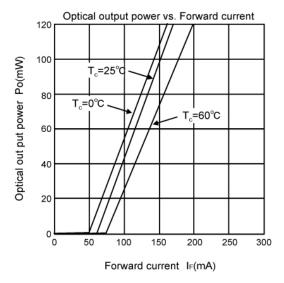
Item	Symbol	Ratings	Unit
Optical output power	Ро	130	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	Topr	-10 ~ +60	°C
Storage Temperature	Tstg	-40 ~ +85	°C

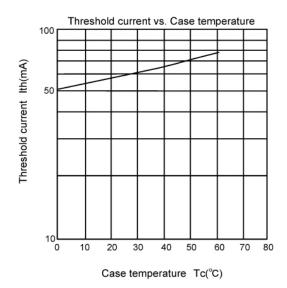
Optical and Electrical Characteristics (Tc=25°C)

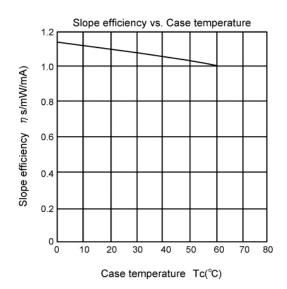
Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Threshold current	Ith	-	60	75	mA	-
Operating current	lop	-	175	210	mA	Po=120mW
Operating voltage	Vop	-	2.5	3.3	V	Po=120mW
Beam divergence Parallel to the junction	θ//	7	10	13	0	Po=120mW, FWHM
Beam divergence Perpendicular to the junction	θΤ	15	17	21	o	Po=120mW, FWHM
Lasing Wavelength	λр	652	660	665	nm	Po=120mW
Monitor current	ls	0.1	0.4	0.8	mA	Po=120mW, V _{R(PD)} =5V

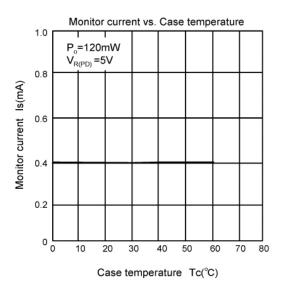


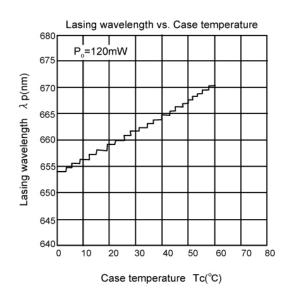
Typical Characteristic Curves

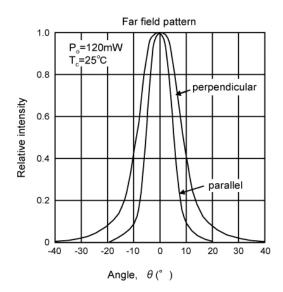














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