Data Sheet

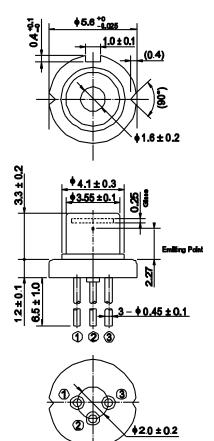
HL65051DG

660nm/130mW

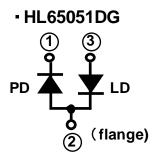
AlGaInP Laser Diode

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

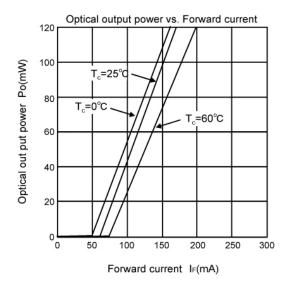
Optical and Electrical Characteristics (Tc=25°C)

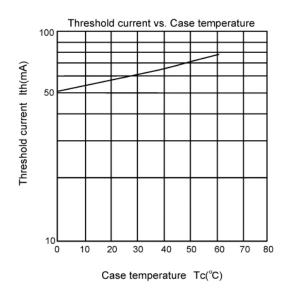
Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Threshold current	Ith	-	60	75	mA	-
Operating current	lop	-	175	210	mA	Po=120mW
Operating voltage	Vop	-	2.5	3.3	V	Po=120mW
Beam divergence Parallel to the junction	θ//	7	10	13	0	Po=120mW, FWHM
Beam divergence Perpendicular to the junction	θΤ	15	17	21	0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

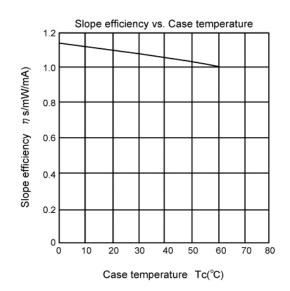
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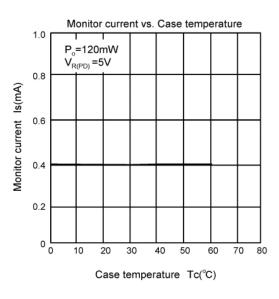


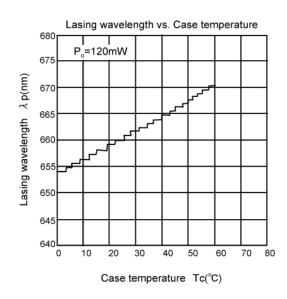
Typical Characteristic Curves

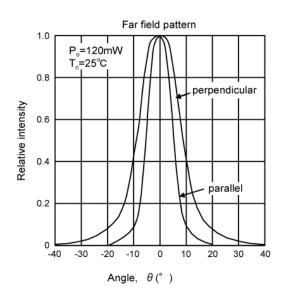












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 - 2. This product (without violet laser diode) contains gallium arsenide (GaAs), which may seriously endanger your health even at very low doses. Please avoid treatment which may create GaAs powder or gas, such as disassembly or performing chemical 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.

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