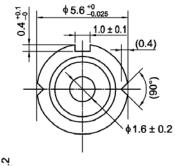
Data Sheet

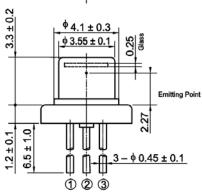
HL63142DG

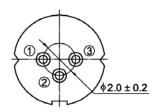
637nm / 120mW AlGaInP Laser Diode



Outline

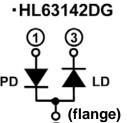






(unit:mm)

Internal Circuit



Features

- Visible light output: 637nm Typ.
- Optical output power: 120mW (CW)
- Single transverse mode
- Low operating current: 140mA Typ.
- Low operating voltage: 3.0V Max.
- Operating temperature: +50°C
- TE mode oscillation

Application

- Laser module
- Light source of optical equipments



Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Ро	120	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	Topr	-10 ~ +50	°C
Storage Temperature	Tstg	-40 ~ +85	°C

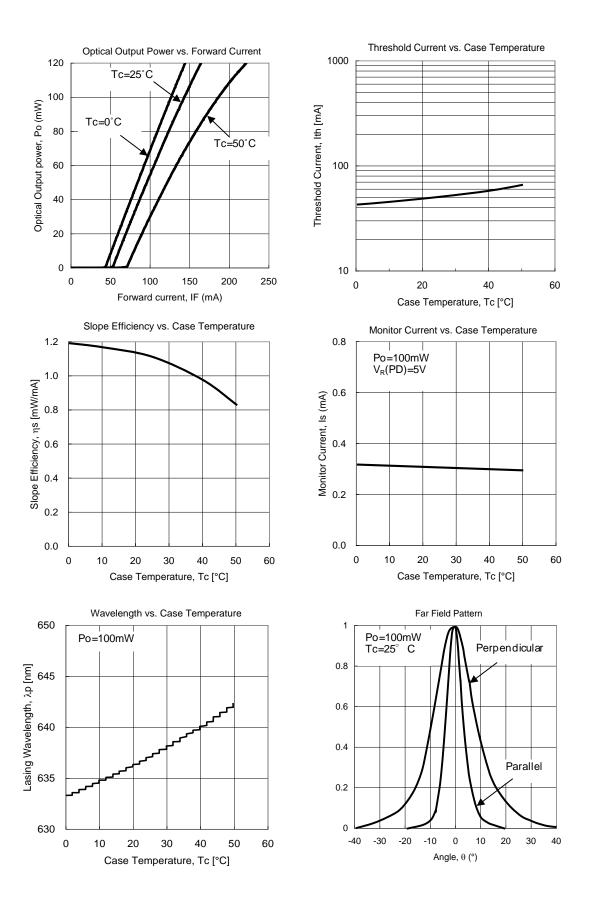
Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Threshold current	Ith	-	50	65	mA	-
Operating current	lop	-	140	180	mA	Po=100mW
Operating voltage	Vop	-	2.7	3.0	V	Po=100mW
Beam divergence Parallel to the junction	θ//	5	8	13	0	Po=100mW, FWHM
Beam divergence Perpendicular to the junction	θΤ	13	18	23	0	Po=100mW, FWHM
Lasing Wavelength	λр	632	637	642	nm	Po=100mW
Monitor Current	Is	0.1	0.3	0.6	mA	Po=100mW, VR(PD)=5V

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Typical Characteristic Curves



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