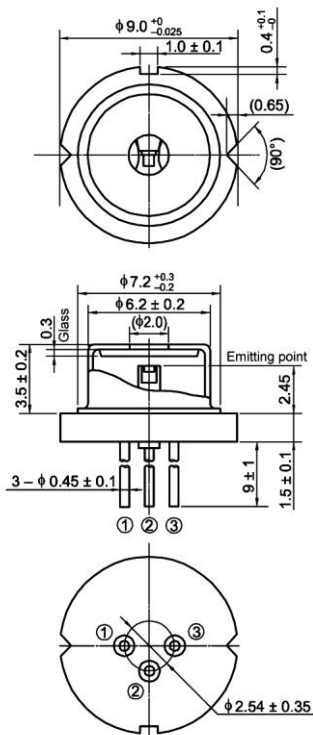


HL6321G/22G

638nm / 15mW AlGaInP Laser Diode

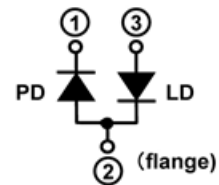
Outline



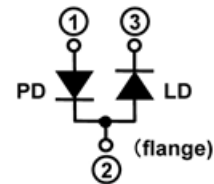
(unit: mm)

Internal Circuit

HL6321G



HL6322G



Features

- Optical output power: 15mW(CW)
- Visible light output: 638nm Typ.
- Low operating current: 100mA Max.
- Low operating voltage: 2.7V Max.
- TM mode oscillation
- Single transverse mode

Application

- Laser lever
- Laser module
- Optical equipment for measurement

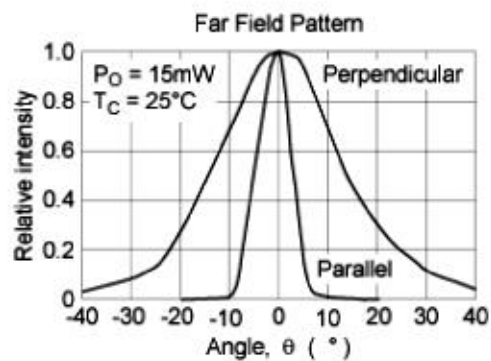
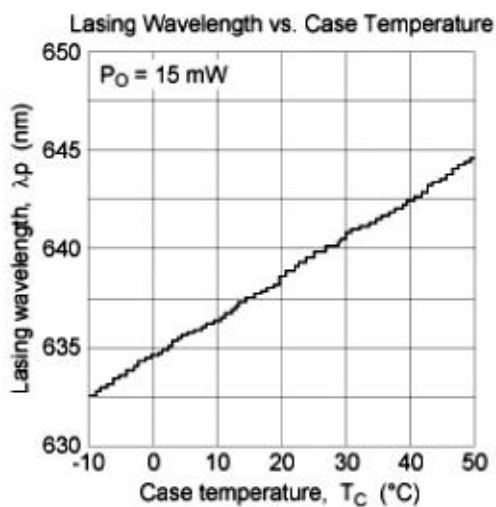
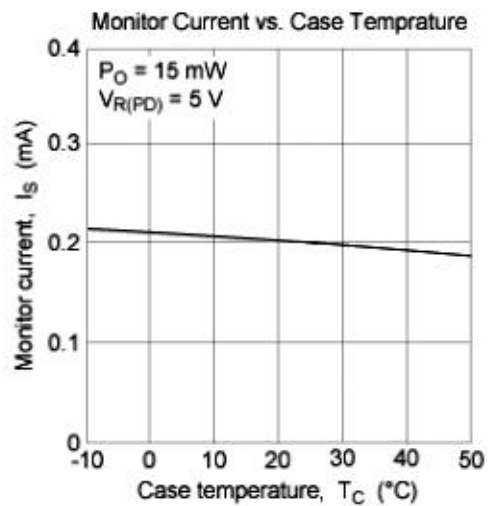
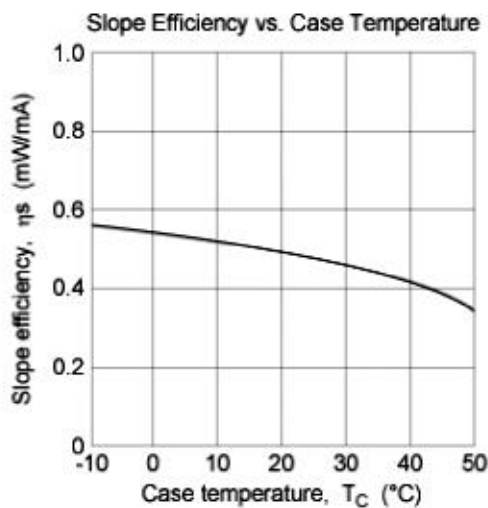
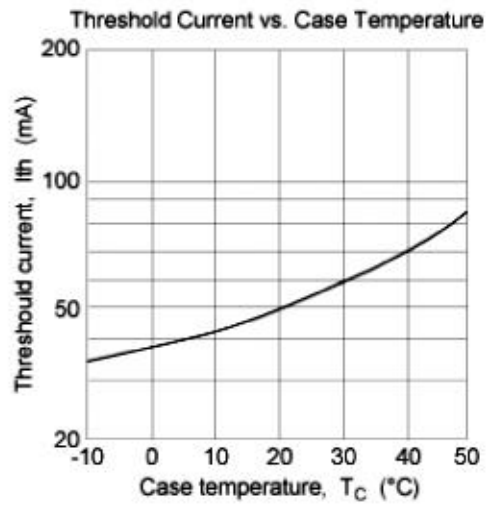
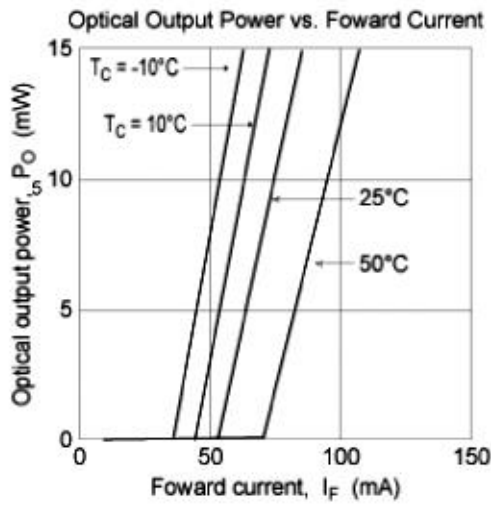
Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	P _o	15	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _{opr}	-10 ~ +50	°C
Storage Temperature	T _{stg}	-40 ~ +85	°C

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I _{th}	20	55	70	mA	-
Operating current	I _{op}	-	85	100	mA	P _o =15mW
Operating voltage	V _{op}	-	-	2.7	V	P _o =15mW
Slope efficiency	η _s	0.3	-	0.7	mW/mA	9(mW)/(I _(12mW) - I _(3mW))
Monitor current	I _s	0.1	0.2	0.4	mA	P _o =15mW, V _{R(PD)} =5V
Lasing Wavelength	λ _p	630	638	640	nm	P _o =15mW
Beam divergence Parallel to the junction	θ _{//}	6	8	11	°	P _o =15mW FWHM
Beam divergence Perpendicular to the junction	θ _⊥	25	30	36	°	P _o =15mW FWHM

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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