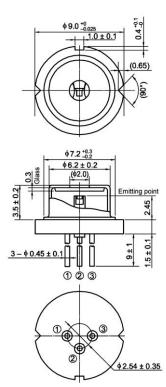


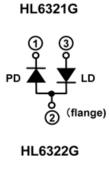
# HL6321G/22G

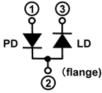
## 638nm / 15mW AlGaInP Laser Diode

#### Outline



**Internal Circuit** 





(unit: mm)

#### 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



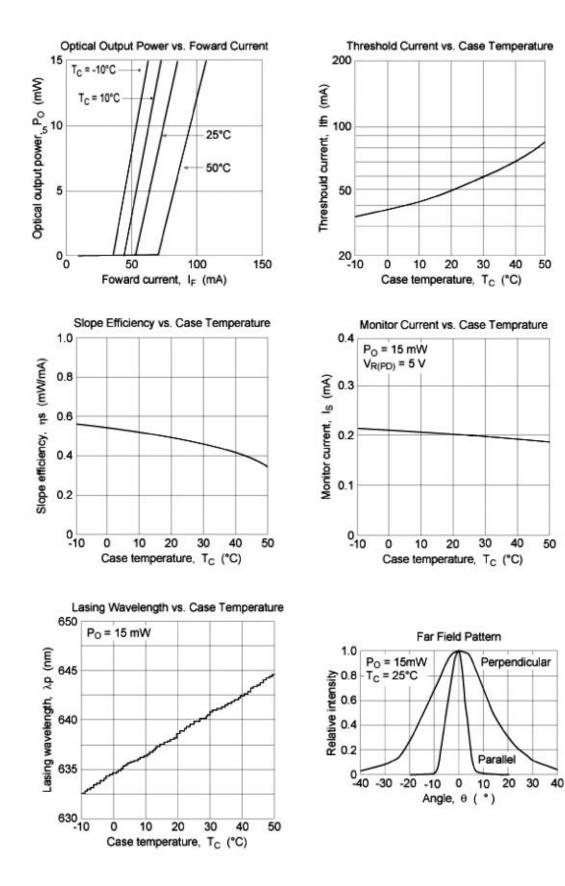
# Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Ро	15	mW
LD Reverse Voltage	VR(LD)	2	V
PD Reverse Voltage	VR(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	lth	20	55	70	mA	-
Operating current	Іор	-	85	100	mA	Po=15mW
Operating voltage	Vop	-	-	2.7	V	Po=15mW
Slope efficiency	ηs	0.3	-	0.7	mW/mA	9(mW)/(I (12mW)-I (3mW))
Monitor current	ls	0.1	0.2	0.4	mA	Po=15mW, VR(PD) =5V
Lasing Wavelength	λρ	630	638	640	nm	Po=15mW
Beam divergence Parallel to the junction	θ//	6	8	11	o	Po=15mW FWHM
Beam divergence Perpendicular to the junction	θ⊥	25	30	36	o	Po=15mW FWHM

### **Typical Characteristic Curves**



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