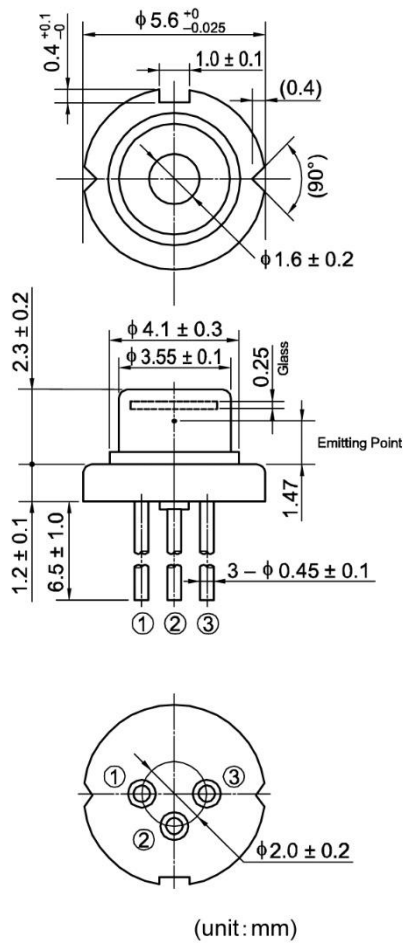




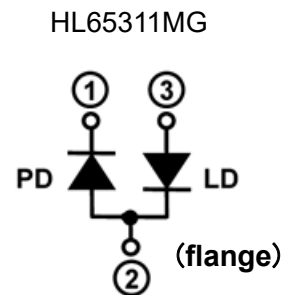
HL65311MG

662nm / 12mW AlGaInP Laser Diode

Outline



Internal Circuit



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Features

- Optical output power: 12mW
- Visible light output: 662nm at 10mW
- Low operating current: 20mA at 10mW
- Wide operating temperature: $-40 \sim +90^\circ\text{C}$
- Single transverse mode
- TE mode oscillation

Application

- Laser displacement meter
- Photoelectric sensor
- Light source of optical equipment

Absolute Maximum Ratings (Tc=25°C)

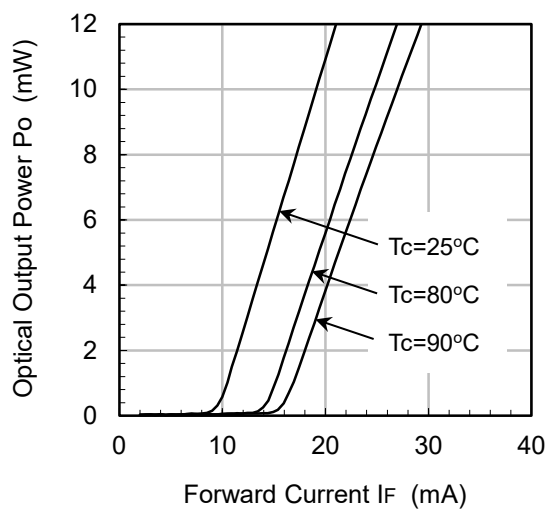
Item	Symbol	Ratings	Unit
Optical output power	Po	12	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	Topr	-40 ~ +90	°C
Storage Temperature	Tstg	-40 ~ +105	°C

Optical and Electrical Characteristics (Tc=25°C)

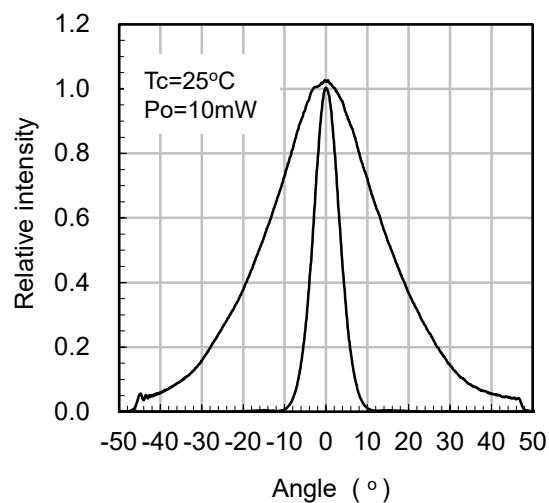
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I _{th}	-	10	20	mA	-
Operating current	I _{op}	-	20	50	mA	Po=10mW
Operating voltage	V _{op}	-	2.2	3.0	V	Po=10mW
Beam divergence Parallel to the junction	θ _{//}	4	7	10	°	Po=10mW, FWHM
Beam divergence Perpendicular to the junction	θ _⊥	26	30	34	°	Po=10mW, FWHM
Lasing Wavelength	λ _p	654	662	670	nm	Po=10mW
Monitor Current	I _s	0.1	0.4	1.0	mA	Po=10mW, V _{R(PD)} =5V

Typical Characteristic Curves

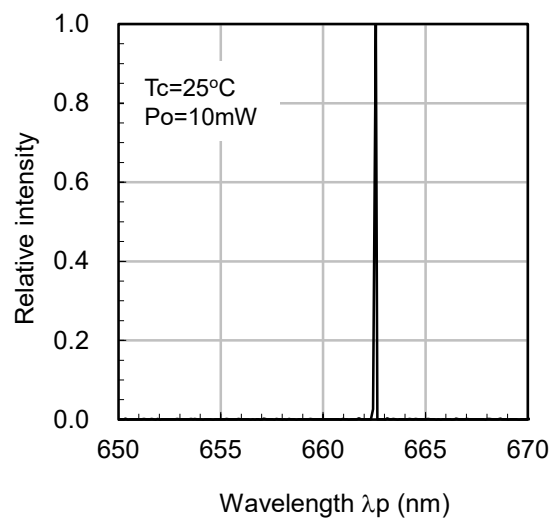
Optical Output Power vs Forward Current



Far Field Pattern



Spectrum



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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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