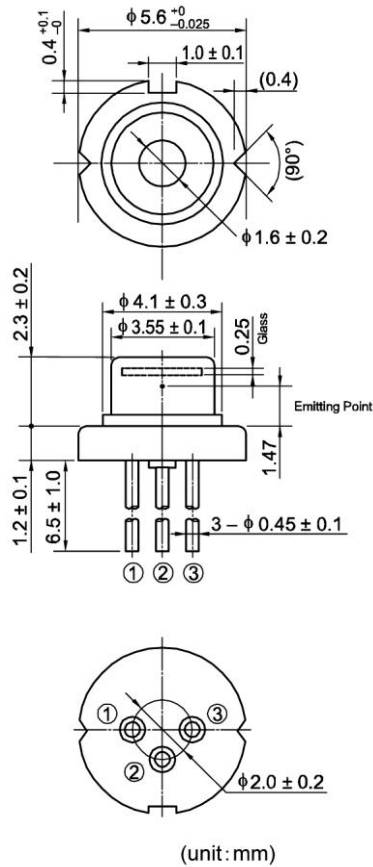


HL63101MG/102MG

AlGaInP Laser Diode

638nm/7mW

Outline



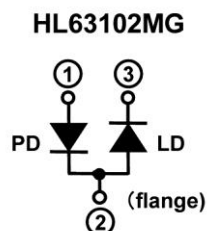
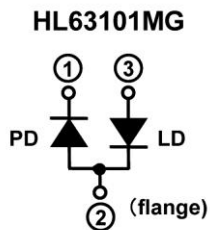
Features:

- Optical output power: 5mW(CW)
- Visible light output: 637nm Typ.
- Low operating current: 20mA Typ.
- Low operating voltage: 2.2V Typ.
- Operating temperature: +60°C
- TE mode oscillation
- Single transverse mode

Applications

- Laser leveler
- Laser pointer
- Distance meter
- Light source of optical equipment

Internal Circuit



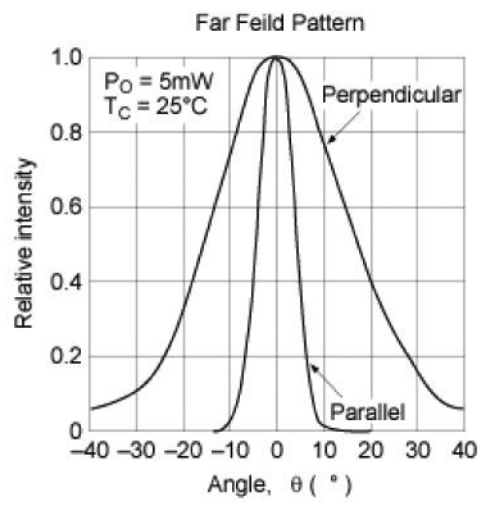
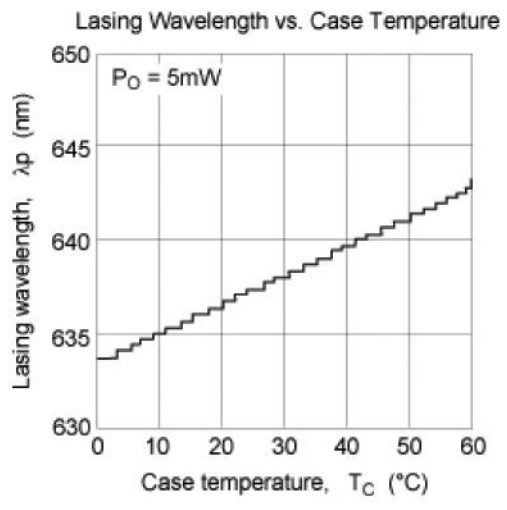
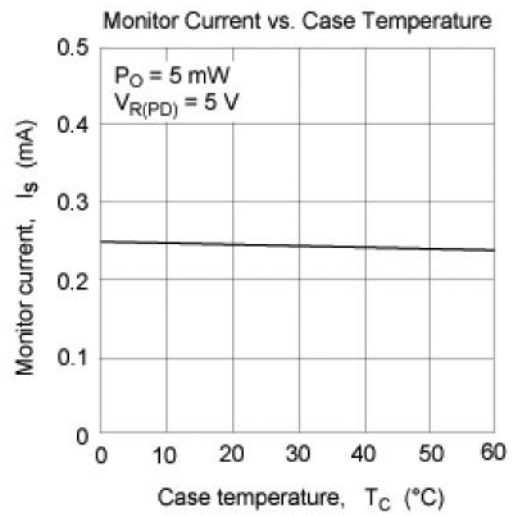
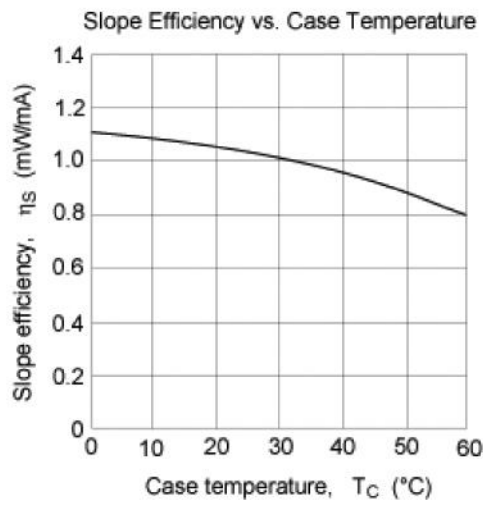
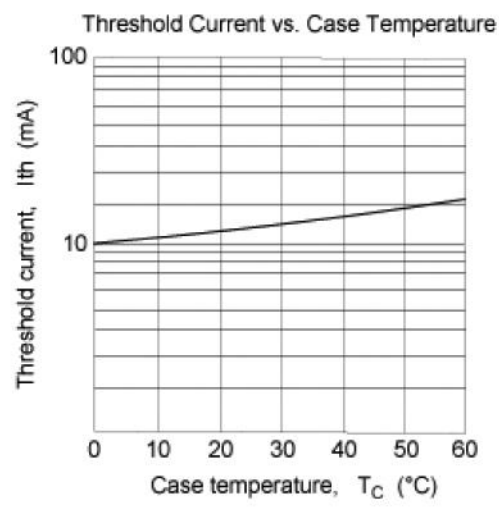
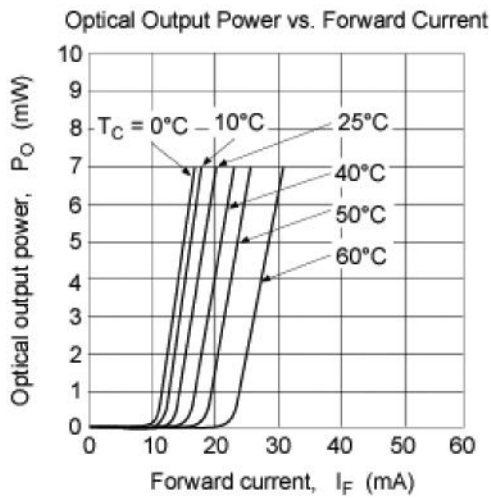
Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	7	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	Typ	Max	Unit	Test Condition
Threshold current	I _{th}	-	15	20	mA	-
Operating current	I _{op}	-	20	25	mA	Po=5mW
Operating voltage	V _{op}	-	2.2	2.4	V	Po=5mW
Lasing Wavelength	λ _p	630	637	640	nm	Po=5mW
Beam divergence Parallel to the junction	θ _{//}	5	8	11	°	Po=5mW
Beam divergence Perpendicular to the junction	θ _⊥	28	34	40	°	Po=5mW
Monitor current	I _s	0.1	0.2	0.5	mA	Po=5mW, V _{R(PD)} =5V

Typical Characteristic Curves



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- 3.OCJ makes every attempt to ensure that its products are of high quality and reliability. However, contact our sales office before using the product in an application that demands especially high quality and reliability or where its failure or malfunction may directly threaten human life or cause risk of bodily injury, such as aerospace, aeronautics, nuclear power, combustion control, transportation, traffic safety equipment or medical equipment for life support.
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- 7.Contact our sales office for any questions regarding this document or OCJ. products.

1.The laser light is harmful to human body especially to eye no matter what directly or indirectly. The laser beam shall be observed or adjusted through infrared camera or equivalent.

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.

Contact Information

www.oclaro.com

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Caution - use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

HL63101MG/102MG Rev.5 Mar. 08, 2013

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