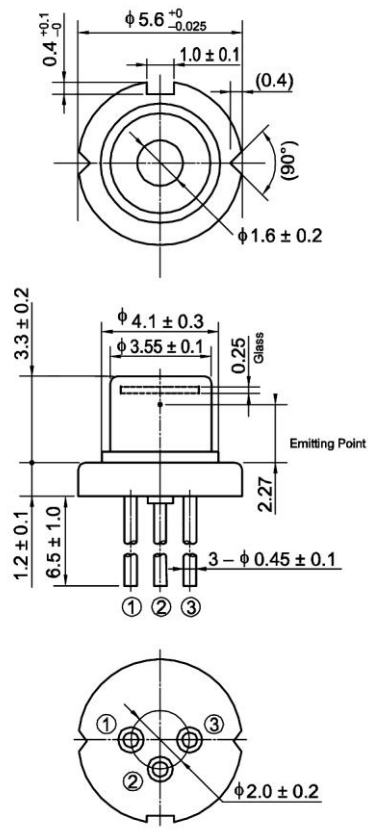


HL6378DG

AlGaInP Laser Diode

642nm/90mW

Outline



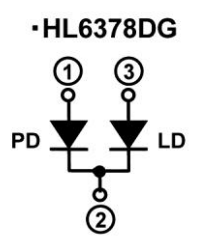
Features:

- Visible light output: 642nm Typ.
- Optical output power: 80mW (CW)
- Single transverse mode
- Low operating current: 155mA Typ.
- Low operating voltage: 2.7V Max.
- Operating temperature: +50°C
- TE mode oscillation

Applications

- Laser module
- Light source of optical equipments

Internal Circuit



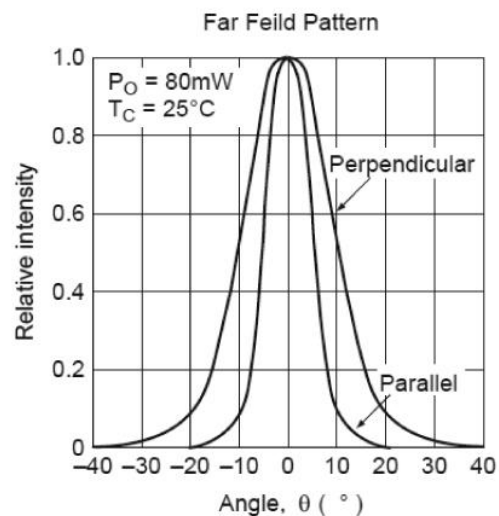
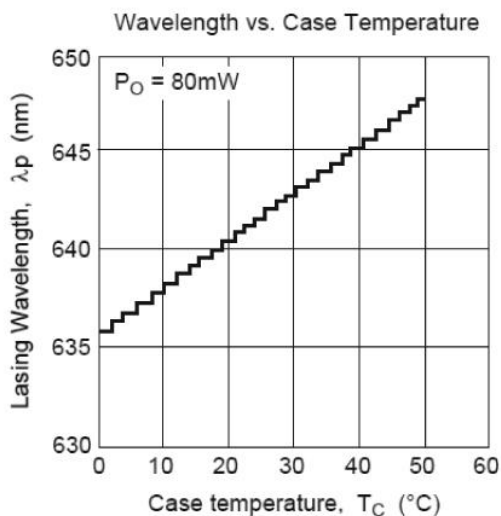
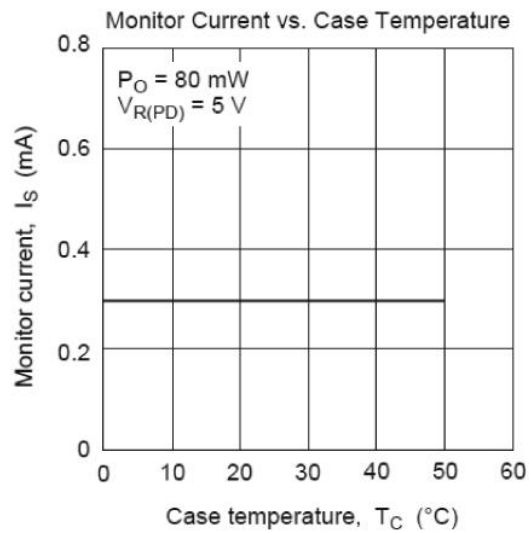
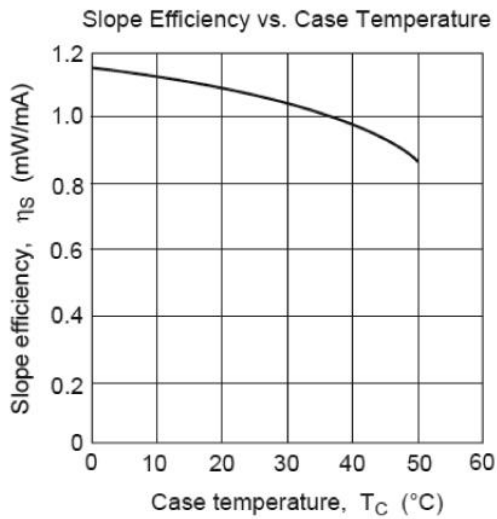
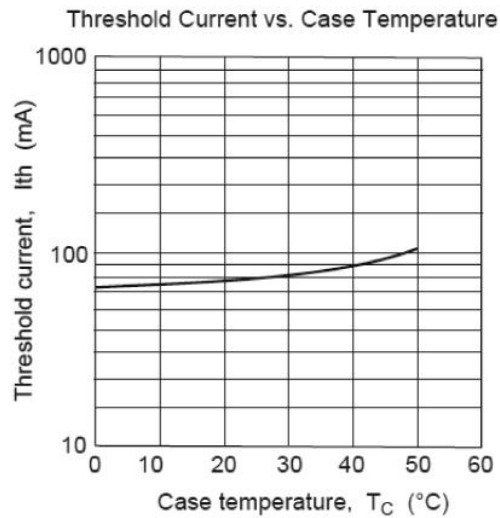
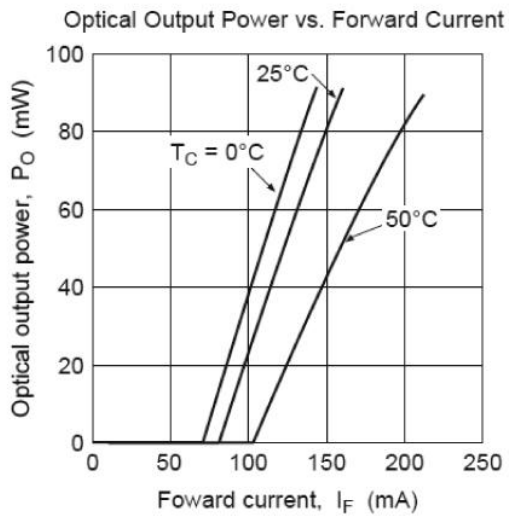
Absolute Maximum Ratings (T_c=25°C)

Item	Symbol	Ratings	Unit
Optical output power	P _o	90	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 (T_c=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I _{th}	-	80	95	mA	-
Operating current	I _{op}	-	155	175	mA	P _o =80mW
Operating voltage	V _{op}	-	2.5	2.7	V	P _o =80mW
Beam divergence Parallel to the junction	θ _{//}	7	10	13	°	P _o =80mW
Beam divergence Perpendicular to the junction	θ _⊥	16	21	24	°	P _o =80mW
Lasing Wavelength	λ _p	635	642	645	nm	P _o =80mW
Monitor current	I _s	0.1	0.3	0.5	mA	P _o =80mW, V _{R(PD)} =5V

Typical Characteristic Curves



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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.

HL6378DG Rev.2 Mar. 08, 2013

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