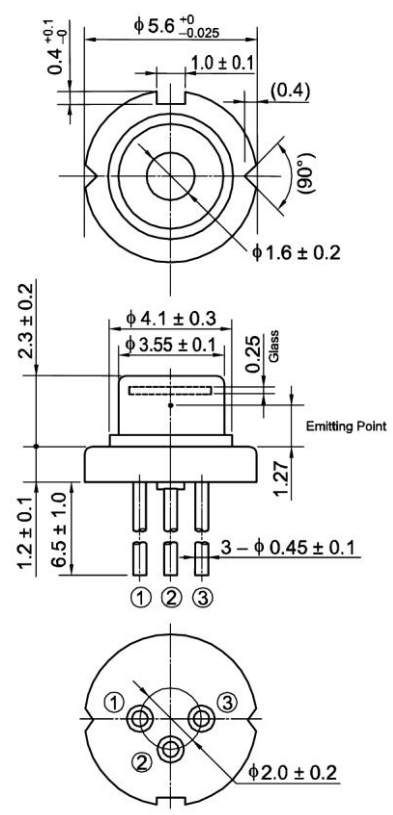


HL8342MG/43MG

GaAlAs Laser Diode

852nm/50mW

Outline



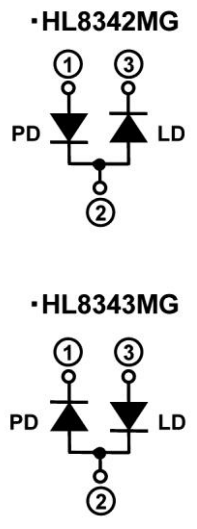
Features:

- Infrared light output: 848~856nm
- Single transverse mode
- Optical output power: 50mW (CW)
- Low operating current: 75mA Typ.
- Low operating voltage: 2.4V Max.
- Operating temperature: +60°C
- TE mode oscillation

Applications

- Sensor applications
- Night vision
- Machine vision
- Light source of optical equipments

Internal Circuit



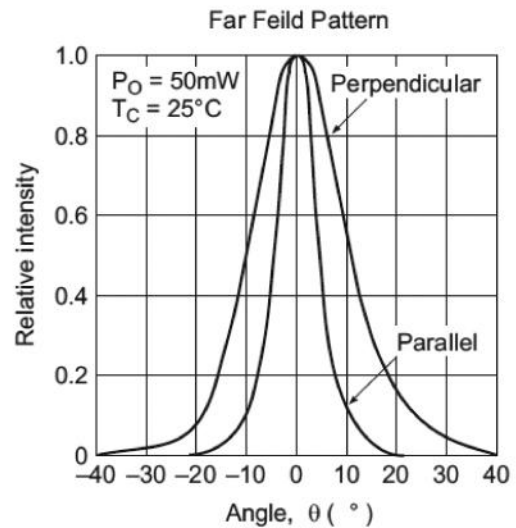
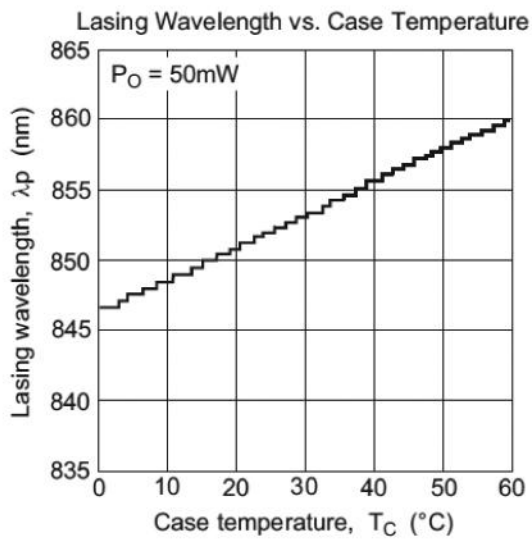
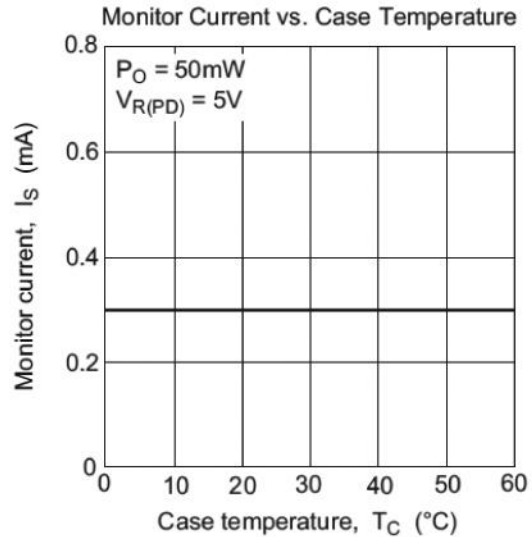
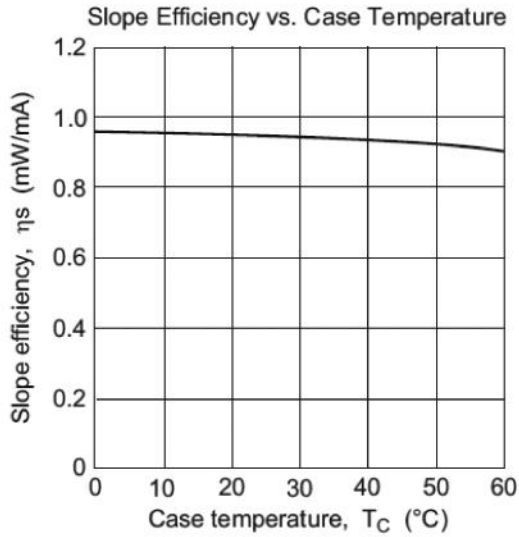
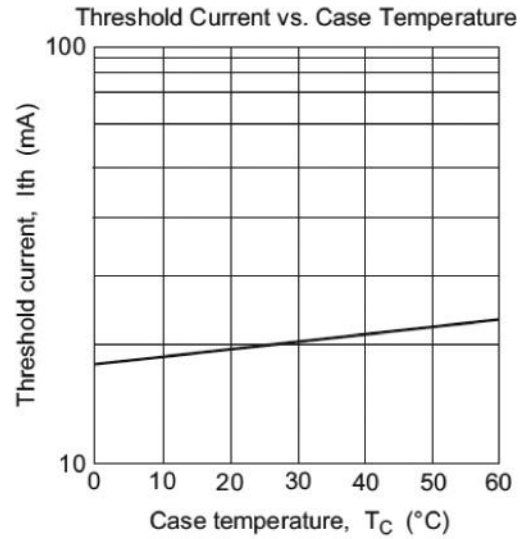
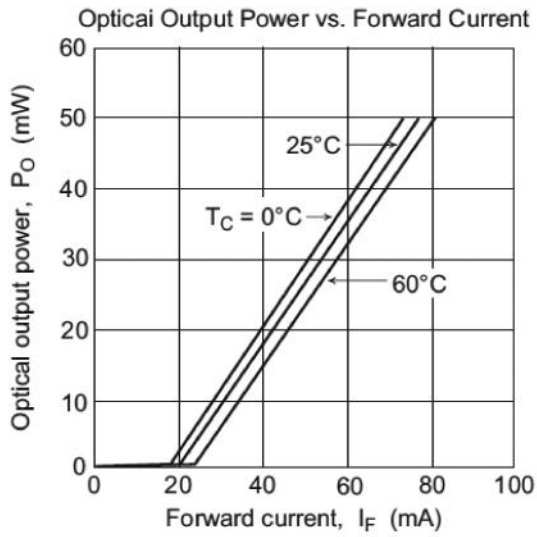
Absolute Maximum Ratings (T_c=25°C)

Item	Symbol	Ratings	Unit
Optical output power	P _o	50	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _{opr}	-10 ~ +60	°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}	-	20	40	mA	-
Operating current	I _{op}	-	75	100	mA	P _o =50mW
Operating voltage	V _{op}	-	1.9	2.4	V	P _o =50mW
Beam divergence Parallel to the junction	θ _{//}	6	9	12	°	P _o =50mW
Beam divergence Perpendicular to the junction	θ _⊥	18	22	26	°	P _o =50mW
Lasing Wavelength	λ _p	848	852	856	nm	P _o =50mW
Monitor current	I _s	0.1	0.25	0.5	mA	P _o =50mW, 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.

HL8342MG/43MG Rev.3 Mar. 08, 2013

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