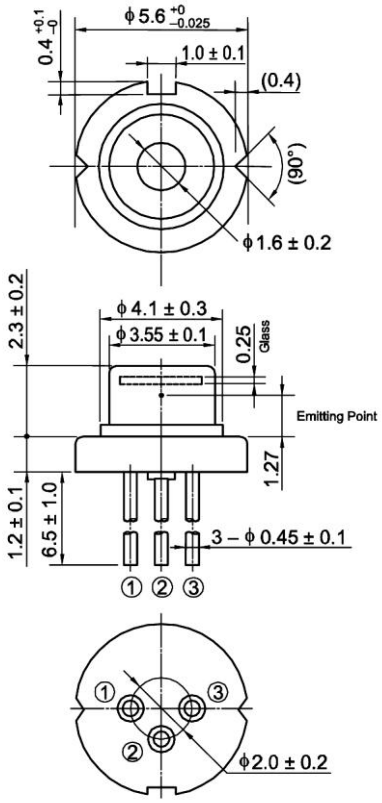
Data Sheet

HL6362MG/63MG

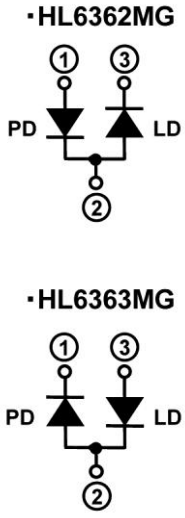
AlGaInP Laser Diode

640nm/45mW

Outline



Internal Circuit



Features:

- Visible light output: 640nm Typ.
- Optical output power: 40 mW (CW)
- Single transverse mode
- Low operating current: 90mA Typ.
- Low operating voltage: 2.6V Max.
- Operating temperature: +50°C
- TE mode oscillation

Applications

- Laser leveler
- Laser scanner
- Light source of optical equipments

Absolute Maximum Ratings (Tc=25°C)

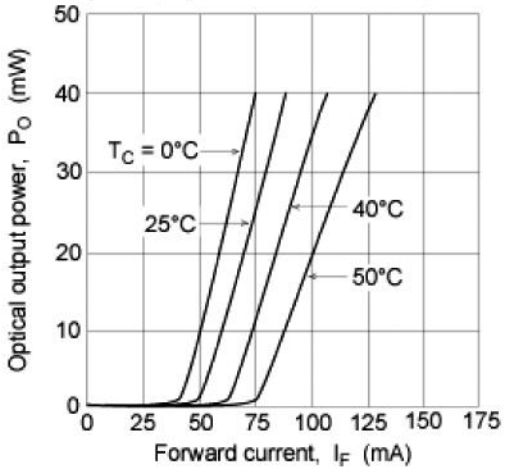
Item	Symbol	Ratings	Unit
Optical output power	Po	45	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operating Temperature	Topr	-10 ~ +50	^{o}C
Storage Temperature	Tstg	-40 ~ +85	^{o}C

Optical and Electrical Characteristics (Tc=25°C)

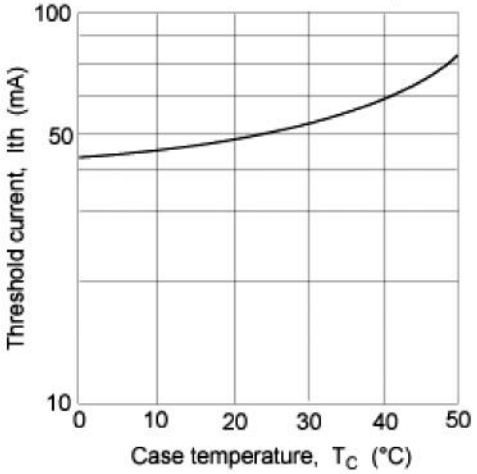
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	Ith	-	45	60	mA	-
Operating current	Iop	-	90	110	mA	Po=40mW
Operating voltage	Vop	-	2.4	2.6	V	Po=40mW
Beam divergence Parallel to the junction	θ//	7	10	13	^{o}	Po=40mW
Beam divergence Perpendicular to the junction	θ⊥	16	21	24	^{o}	Po=40mW
Lasing Wavelength	λp	-	640	643	nm	Po=40mW
Monitor current	Is	0.15	0.30	0.60	mA	Po=40mW, $V_{R(PD)}$=5V

Typical Characteristic Curves

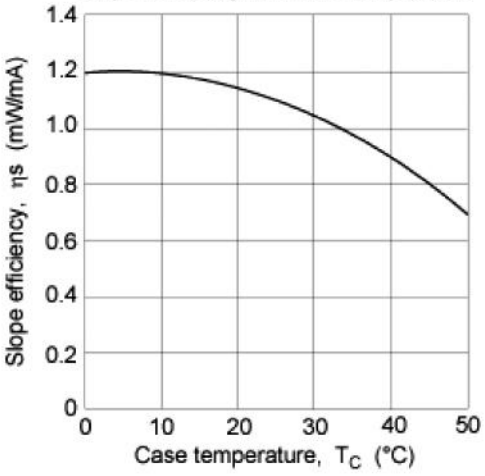
Optical Output Power vs. Forward Current



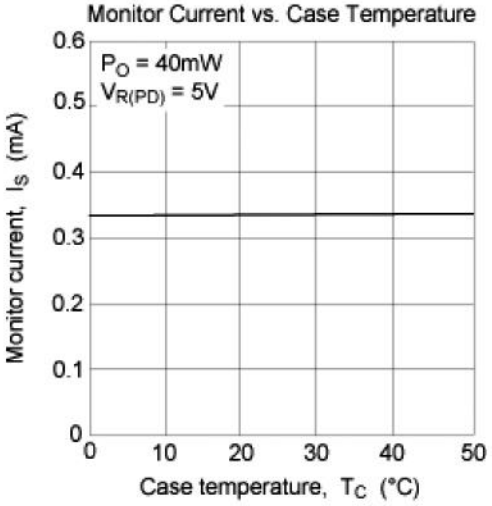
Threshold Current vs. Case Temperature



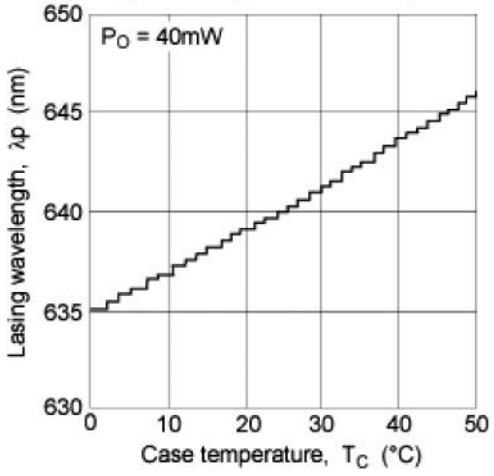
Slope Efficiency vs. Case Temperature



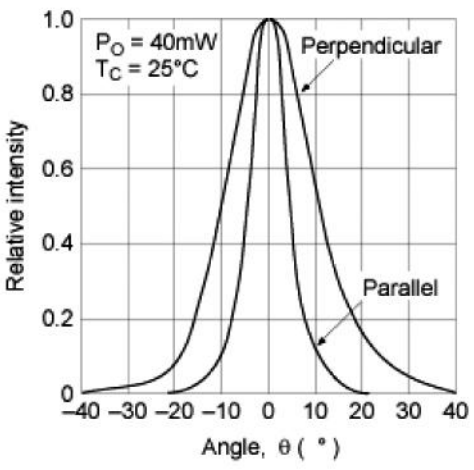
Monitor Current vs. Case Temperature



Lasing Wavelength vs. Case Temperature



Far Feild Pattern



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Contact Information

www.oclaro.com

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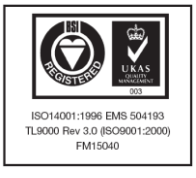

Caution - use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

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