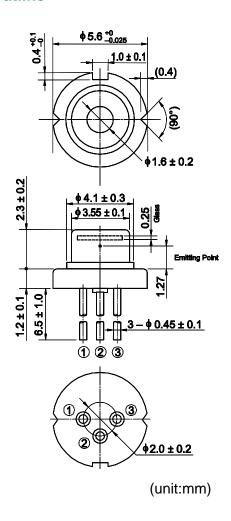
Data Sheet

HL6388MG

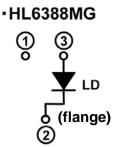
637nm/250mW AlGaInP Laser Diode



Outline



Internal Circuit



Features

- Visible light output: 637nm Typ.
- Optical output power: 250mW (CW)
- Multi transverse mode
- High operating temperature: +50°C
- Small package: \$5.6mm
- TM mode oscillation

Application

- Pico projector
- Laser module
- Light source of optical equipments



Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Ро	250	mW
LD Reverse Voltage	V _{R(LD)}	2	V
Operating Temperature	Topr	-10 ~ +50	°C
Storage Temperature	Tstg	-40 ~ +85	°C

Note: Operating temperature is defined by Case temperature "Tc". High increase in temperature of LD chip itself is expected during operation due to high current density. Thus, without proper heat dissipation, it is observed that no specific output power is achieved or it results to LD degration. It is advised that sufficient measure of heat dissipation should be taken so that LD's maximum operating temperature is not exceeded during actual operation.

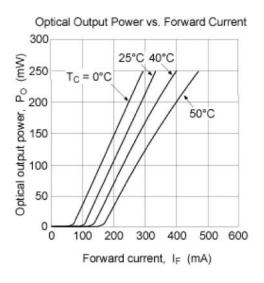
Optical and Electrical Characteristics (Tc=25°C)

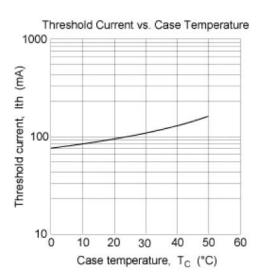
Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Threshold current	Ith	-	100	140	mA	-
Slope efficiency	ηѕ	0.7	1.05	-	mW/mA	-
Operating current	lop	-	340	430	mA	Po=250mW
Operating voltage	Vop	-	2.3	2.8	V	Po=250mW
Beam divergence Parallel to the junction	θ//	-	11	20	0	Po=250mW, FWHM
Beam divergence Perpendicular to the junction	θΤ	30	40	50	0	Po=250mW, FWHM
Lasing Wavelength	λρ	632	637	642	nm	Po=250mW

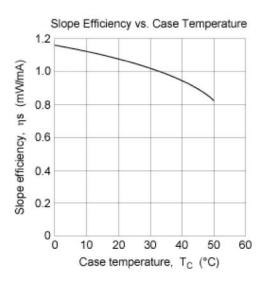
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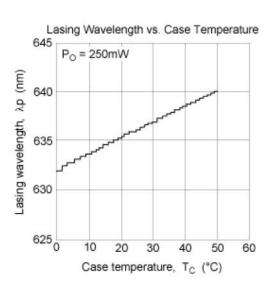


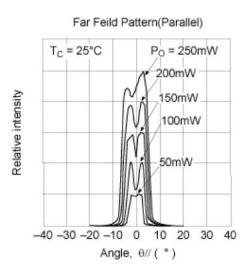
Typical Characteristic Curves

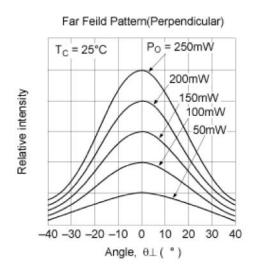












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