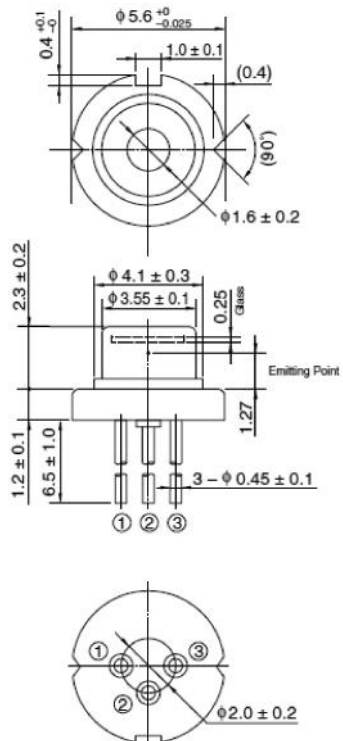


# HL6750MG

AlGaInP Laser Diode

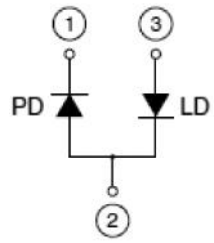
685nm/55mW

## Outline



(Unit:mm)

## Internal Circuit



## Features:

- Optical output power: 50mW (CW)
- Visible light output: 685nm  
Typ.(Po=50mW)
- Single transverse mode
- Low operation current : 75mA Typ  
(Po=50mW)
- TE mode oscillation
- Built-in monitor photodiode

## Applications

- Measurement
- Laser module
- Sensing

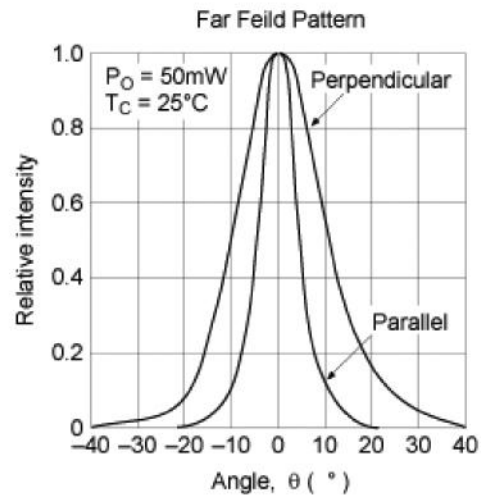
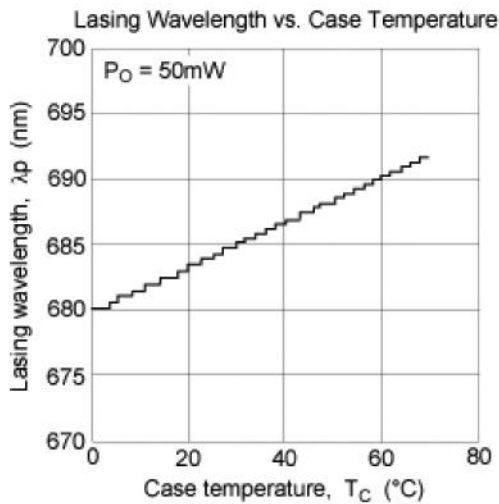
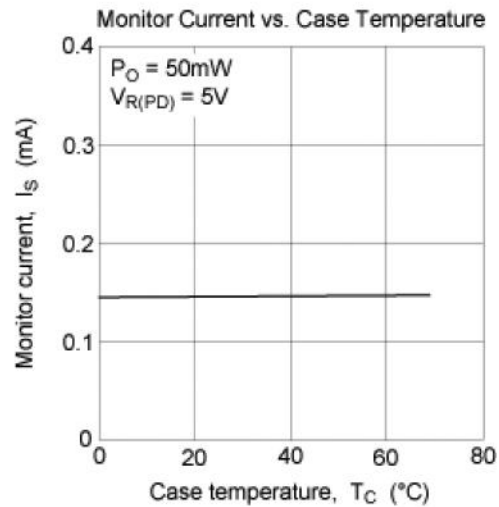
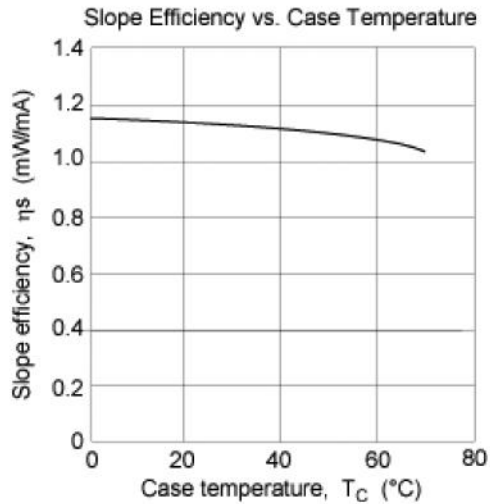
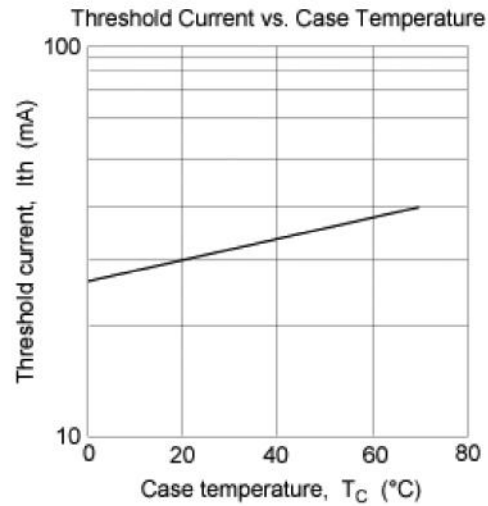
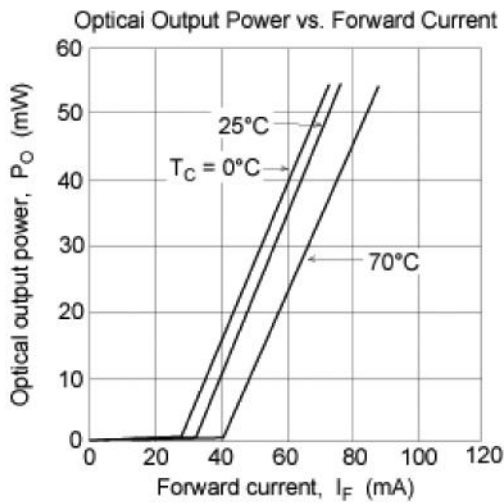
## Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	55	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	30	V
Operating Temperature	Topr	-10 ~ +70	°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 <sub>th</sub>	-	30	60	mA	-
Slope efficiency	η <sub>s</sub>	0.8	1.1	1.4	mW/mA	30(mW)/(I <sub>(40mW)</sub> - I <sub>(10mW)</sub> )
Operating voltage	V <sub>op</sub>	-	2.3	3.0	V	Po=50mW
Beam divergence Parallel to the junction	θ <sub>//</sub>	7	-	12	°	Po=50mW, FWHM
Beam divergence Perpendicular to the junction	θ <sub>⊥</sub>	18	-	25	°	Po=50mW, FWHM
Lasing Wavelength	λ <sub>p</sub>	675	685	695	nm	Po=50mW
Monitor current	I <sub>s</sub>	0.08	0.12	0.35	mA	Po=50mW, V <sub>R(PD)</sub> =5V

Typical Characteristic Curves



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- 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

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