

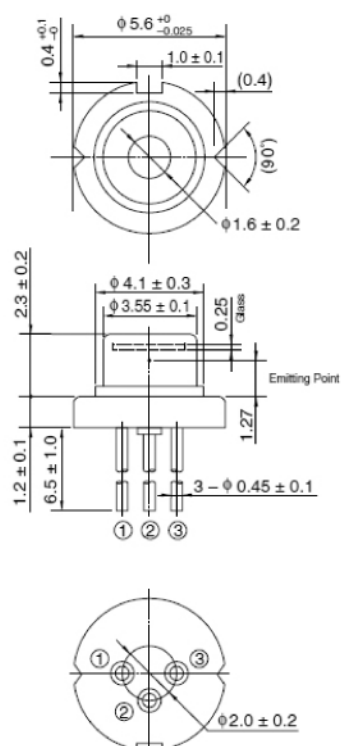
## Data Sheet

# HL6748MG

670nm / 10mW    AlGaInP Laser Diode

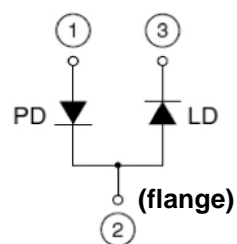
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### Outline



(Unit:mm)

### Internal Circuit



### Features

- Operation temperature: -10~+60°C
- Optical output power: 10mW(CW)
- Visible lasing: 670nm Typ.
- Low operating voltage: 2.7V Max.
- Package:  $\phi 5.6$ mm
- Single transverse mode
- TE mode oscillation

### Application

- Laser beam printer
- Measurement
- Sensing

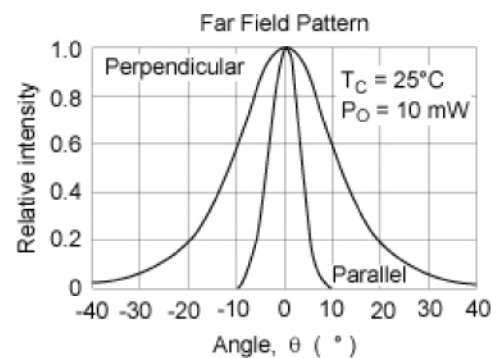
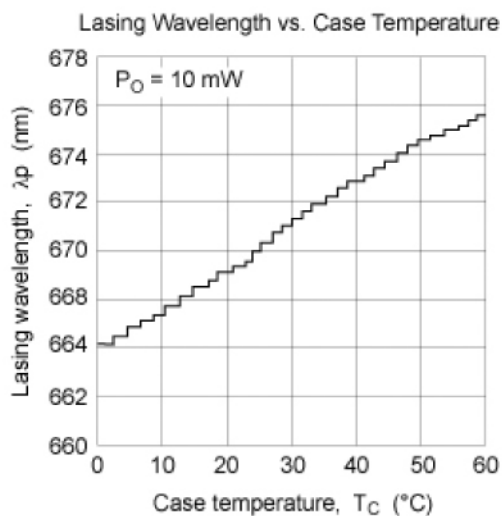
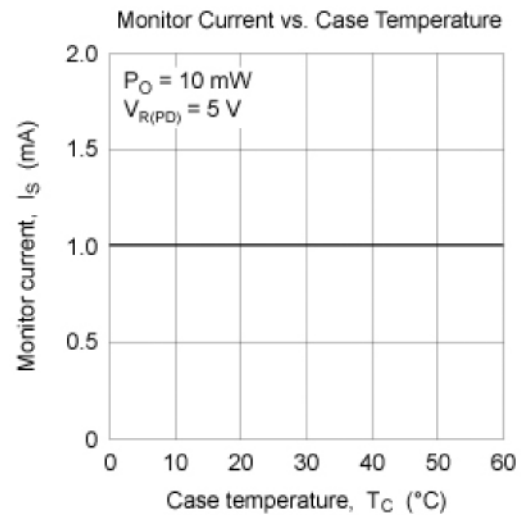
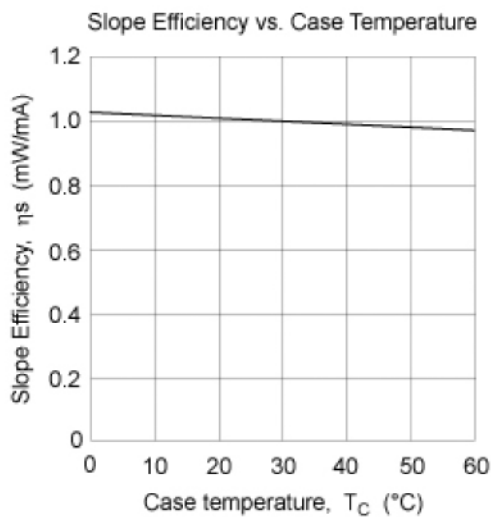
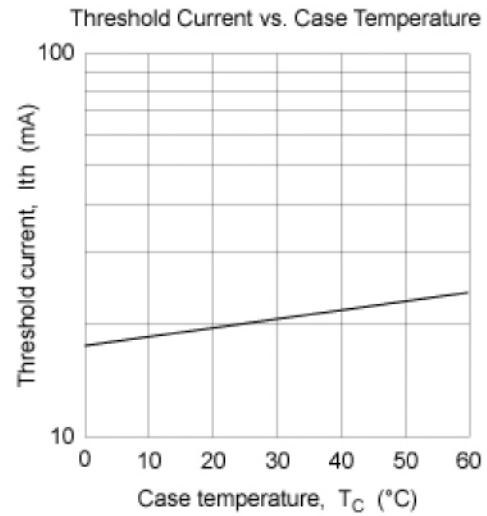
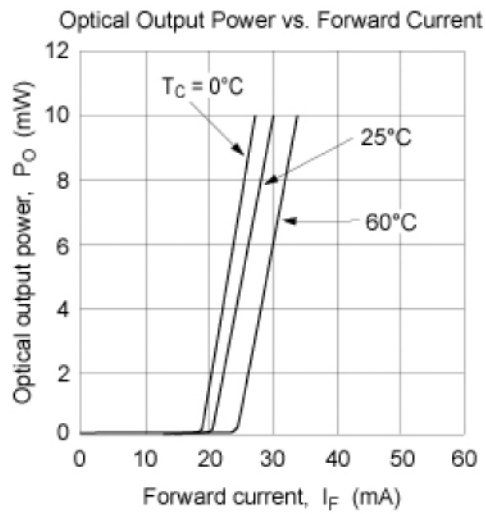
### Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	10	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	20	V
Operating Temperature	Topr	-10 ~ +60	°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>	-	20	30	mA	-
Operating current	I <sub>op</sub>	-	30	45	mA	Po=10mW
Operating voltage	V <sub>op</sub>	-	2.2	2.7	V	Po=10mW
Beam divergence Parallel to the junction	θ <sub>//</sub>	5	8	11	°	Po=10mW, FWHM
Beam divergence Perpendicular to the junction	θ <sub>⊥</sub>	18	25	30	°	Po=10mW, FWHM
Lasing Wavelength	λ <sub>p</sub>	660	670	680	nm	Po=10mW
Monitor Current	I <sub>s</sub>	0.6	1.0	1.8	mA	Po=10mW, V <sub>R(PD)</sub> =5V

## Typical Characteristic Curves



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