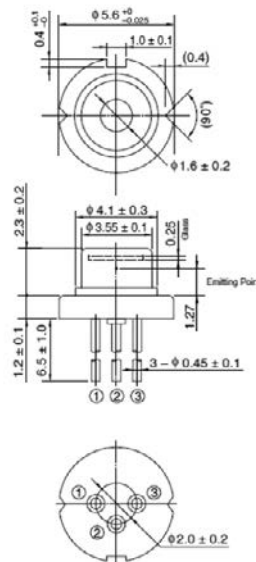


Data Sheet

HL6750MG

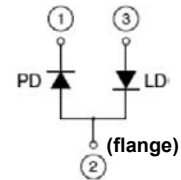
685nm / 55mW AlGaInP Laser Diode

Outline



(Unit:mm)

Internal Circuit



Features

- Operation temperature: $-10 \sim +70^\circ\text{C}$
- Optical output power: 50mW(CW)
- Visible lasing: 685nm Typ.(Po=50mW)
- Low operating voltage: 3.0V Max.
- Package: $\phi 5.6\text{mm}$
- Single transverse mode
- TE mode oscillation

Application

- Measurement
- Laser module
- Sensing

Absolute Maximum Ratings (Tc=25°C)

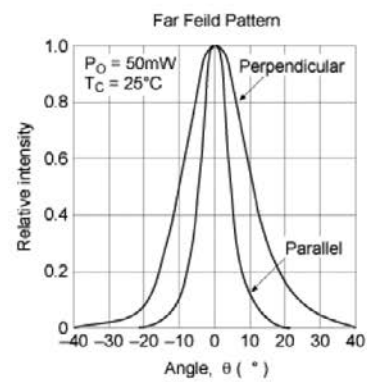
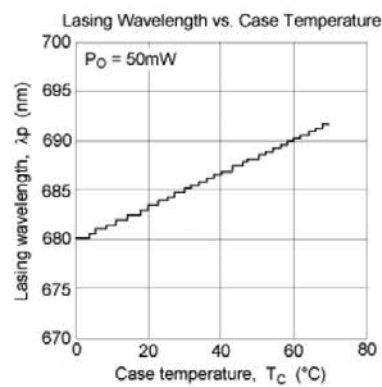
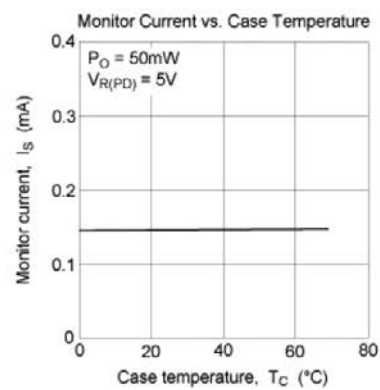
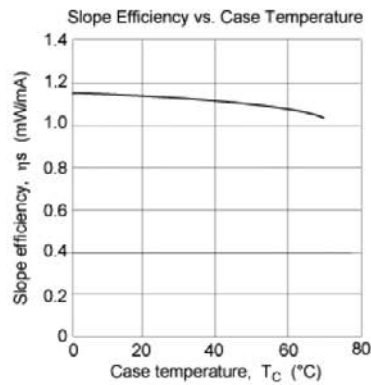
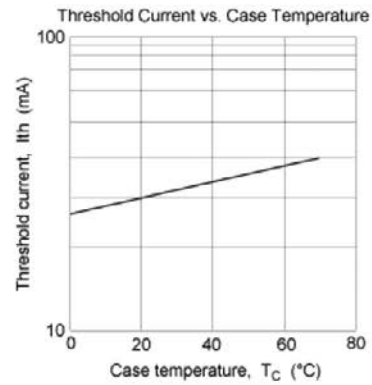
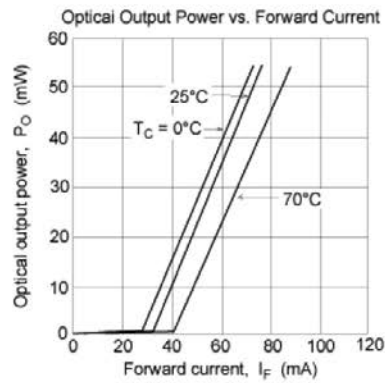
Item	Symbol	Ratings	Unit
Optical output power	P _o	55	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _{opr}	-10 ~ +70	°C
Storage Temperature	T _{stg}	-40 ~ +85	°C

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I _{th}	-	30	60	mA	-
Operating voltage	V _{op}	-	2.3	3.0	V	P _o =50mW
Slope efficiency	η _s	0.8	1.1	1.4	mW/mA	30(mW)/(I(40mW)-I(10mW))
Beam divergence Parallel to the junction	θ _{//}	7	-	12	°	P _o =50mW, FWHM
Beam divergence Perpendicular to the junction	θ _⊥	18	-	25	°	P _o =50mW, FWHM
Lasing Wavelength	λ _p	675	685	695	nm	P _o =50mW
Monitor Current	I _s	0.08	0.12	0.35	mA	P _o =50mW, V _{R(PD)} =5V

Data Sheet HL6755MG Rev0. Oct. 28. 2014

Typical Characteristic Curves



Data Sheet HL6755MG Rev0. Oct. 28. 2014

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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.

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Data Sheet HL6755MG Rev0. Oct. 28. 2014