

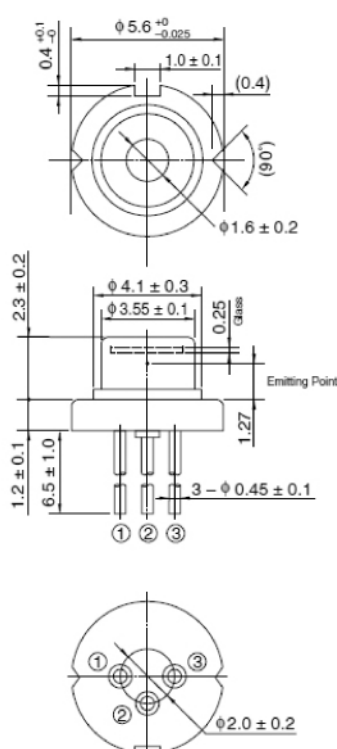
Data Sheet

HL6750MG

685nm / 55mW AlGaInP Laser Diode

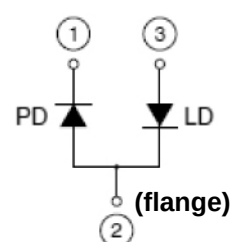
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Outline



(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)

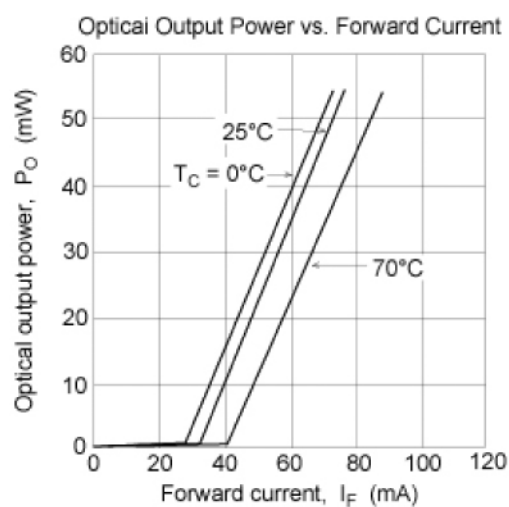
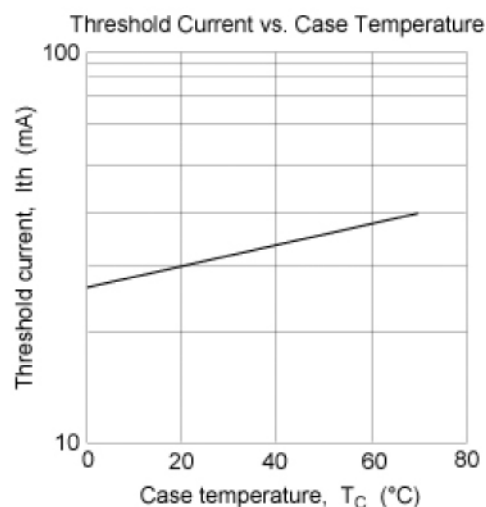
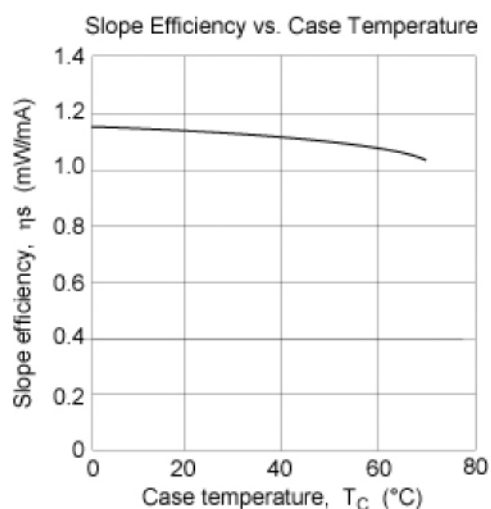
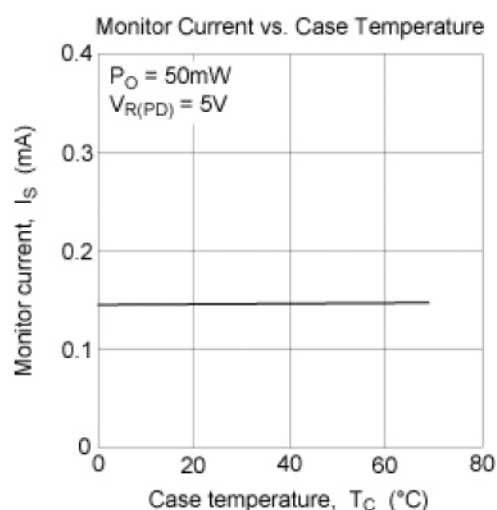
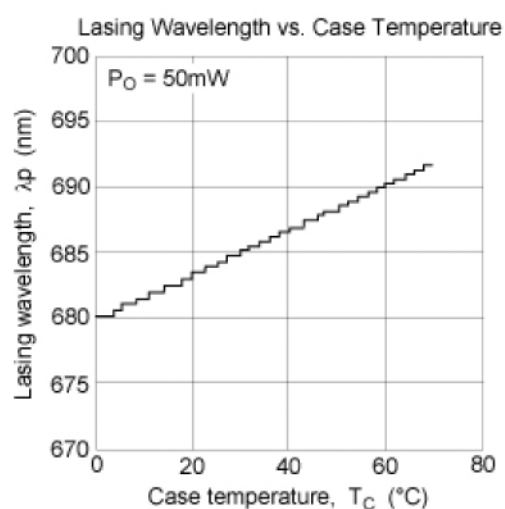
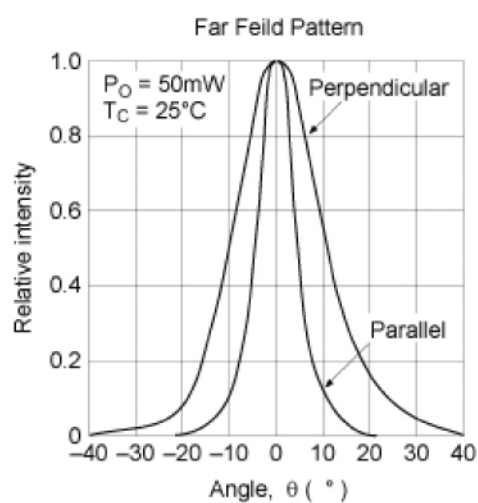
Item	Symbol	Ratings	Unit
Optical output power	Po	55	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	Topr	-10 ~ +70	°C
Storage Temperature	Tstg	-40 ~ +85	°C

Optical and Electrical Characteristics (Tc=25°C)

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

Operating current 70 mA
Operating voltage min 3.0 V

Typical Characteristic Curves



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