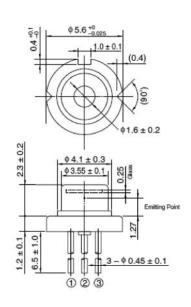
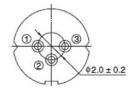
# HL6750MG-A

685nm/55mW

AlGaInP Laser Diode

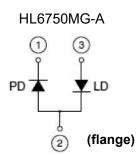
## **Outline**





(Unit:mm)

### **Internal Circuit**



#### **Features**

- Operation temperature: -10~+70°C
- Optical output power: 50mW(CW)
- Visible lasing: 685nm Typ.(Po=50mW)
- Low operating voltage: 3.0V Max.
- Package: φ5.6mm
- Single transverse mode
- TE mode oscillation

## **Application**

- Measurement
- Laser module
- Sensing



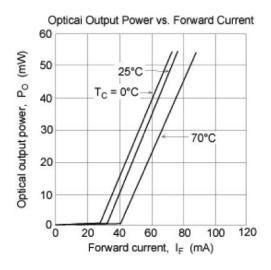
## **Absolute Maximum Ratings (Tc=25°C)**

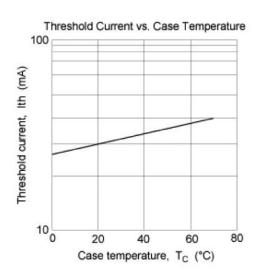
Item	Symbol	Ratings	Unit
Optical output power	Ро	55	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	30	V
Operating Temperature	Topr	-10 ~ +70	°C
Storage Temperature	Tstg	-40 ~ +85	°C

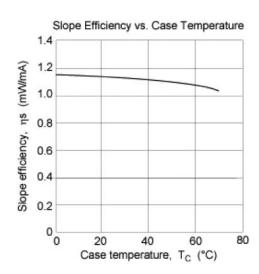
## Optical and Electrical Characteristics (Tc=25°C)

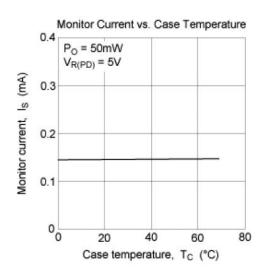
Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Threshold current	Ith	-	30	60	mA	-
Operating voltage	Vop	-	2.3	3.0	V	Po=50mW
Slope efficiency	ηѕ	0.8	1.1	1.4	mW/mA	30(mW)/(I <sub>(40mW)</sub> -I <sub>(10mW)</sub> )
Beam divergence Parallel to the junction	θ//	7	-	12	0	Po=50mW, FWHM
Beam divergence Perpendicular to the junction	θΤ	18	-	25	٥	Po=50mW, FWHM
Lasing Wavelength	λр	675	685	695	nm	Po=50mW
Monitor Current	ls	0.08	0.12	0.35	mA	Po=50mW, V <sub>R(PD)</sub> =5V

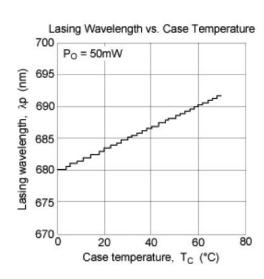
## **Typical Characteristic Curves**

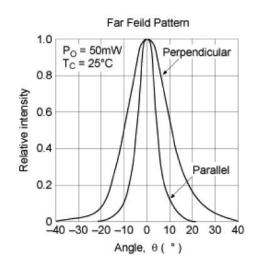














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