

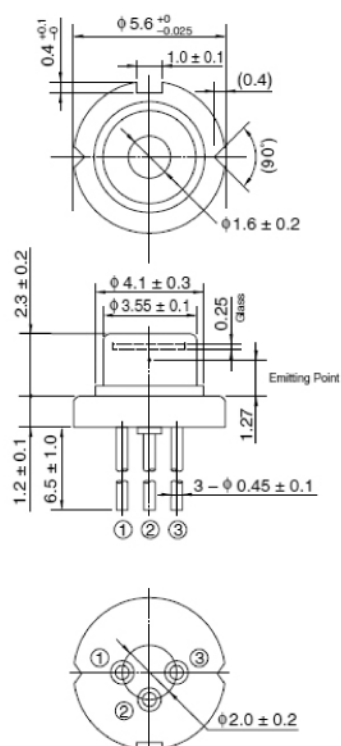
Data Sheet

HL6738MG

690nm / 35mW AlGaInP Laser Diode

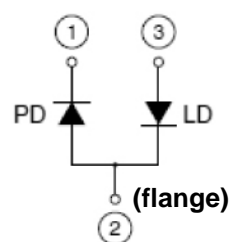
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Outline



(Unit:mm)

Internal Circuit



Features

- Operation temperature: -10~+70°C
- Optical output power: 30mW(CW)
- Visible lasing: 690nm Typ.(Po=30mW)
- Low operating voltage: 2.8V Max.
- Package: $\phi 5.6$ mm
- Single transverse mode
- TE mode oscillation

Application

- Measurement
- Laser Module
- Sensing

Absolute Maximum Ratings (Tc=25°C)

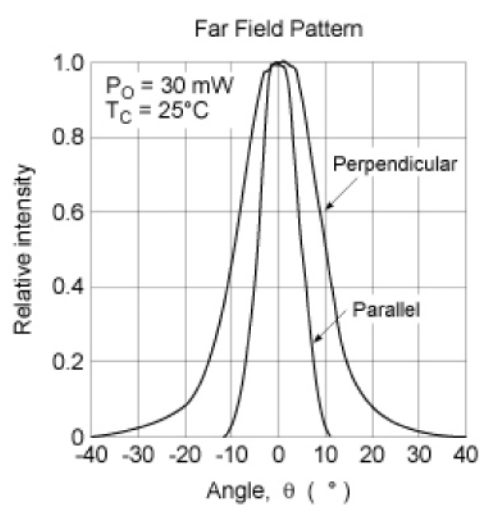
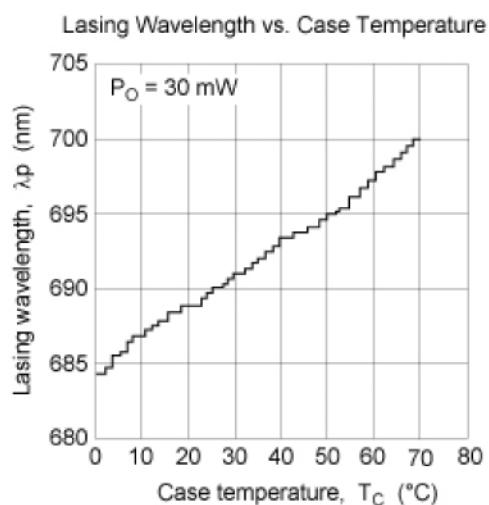
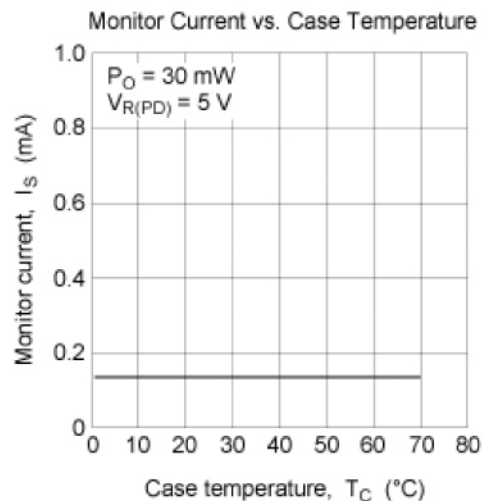
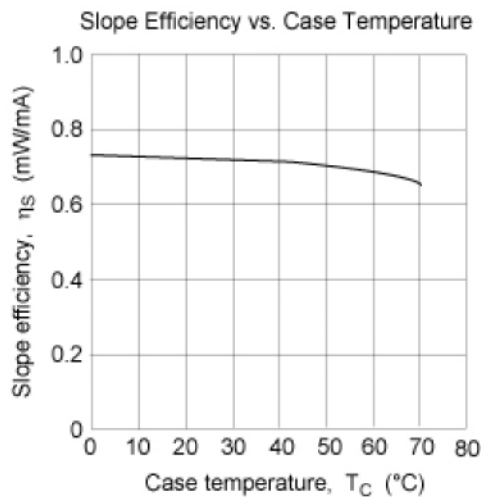
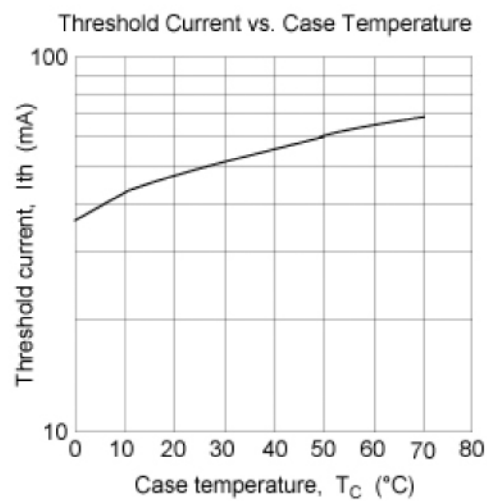
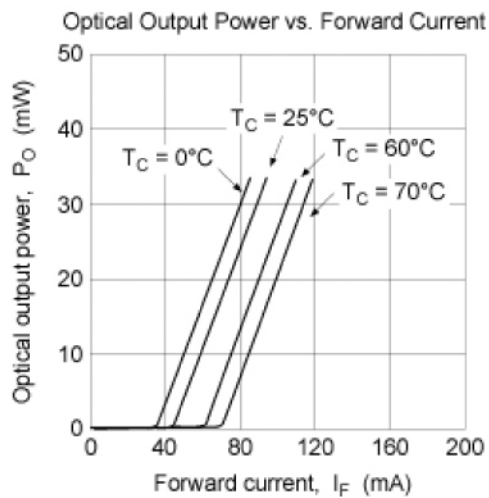
Item	Symbol	Ratings	Unit
Optical output power	Po	35	mW
Pulse optical output power	Po(pulse)	50*	mW
LD Reverse Voltage	VR(LD)	2	V
PD Reverse Voltage	VR(PD)	30	V
Operating Temperature	Topr	-10 ~ +70	°C
Storage Temperature	Tstg	-40 ~ +85	°C

* Pulse condition: Pulse width≤4μs, duty≤50%

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	Ith	30	45	70	mA	-
Operating voltage	Vop	2.1	2.5	2.8	V	Po=30mW
Slope efficiency	ηs	0.5	0.7	0.9	mW/mA	18(mW)/(I(24mW)-I(6mW))
Beam divergence Parallel to the junction	θ//	7	8.5	10.5	°	Po=30mW, FWHM
Beam divergence Perpendicular to the junction	θ⊥	17	19	23	°	Po=30mW , FWHM
Lasing Wavelength	λp	680	690	695	nm	Po=30mW
Monitor Current	Is	0.02	0.10	0.45	mA	Po=30mW, VR(PD)=5V

Typical Characteristic Curves



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