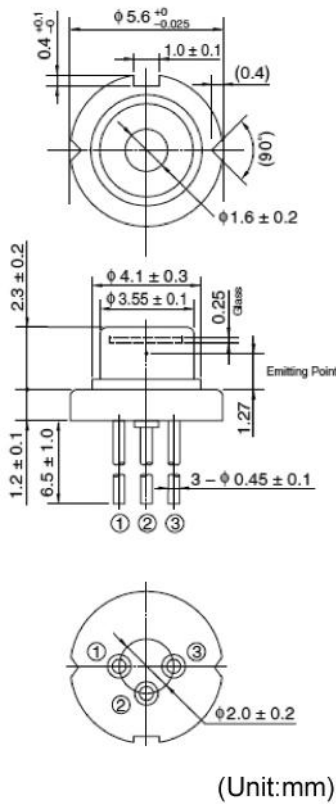


# HL6738MG

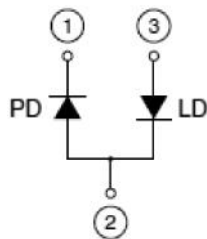
AlGaInP Laser Diode

690nm/30mW

## Outline



## Internal Circuit



## Features:

- Optical output power: 30mW (CW)
- Visible light output: 690nm  
Typ.(Po=30mW)
- Single transverse mode
- TE mode oscillation
- Built-in monitor photodiode

## Applications

- Measurement
- Laser module
- Sensing

Absolute Maximum Ratings (T<sub>c</sub>=25°C)

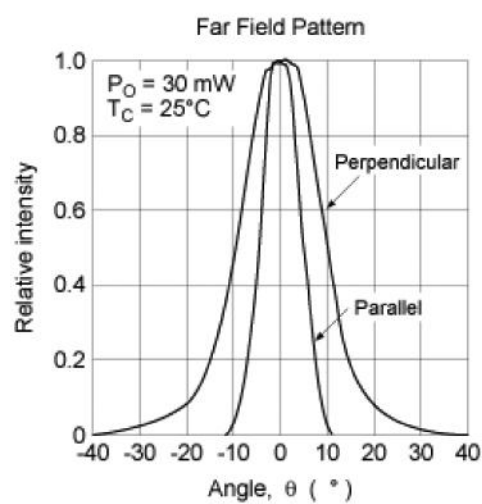
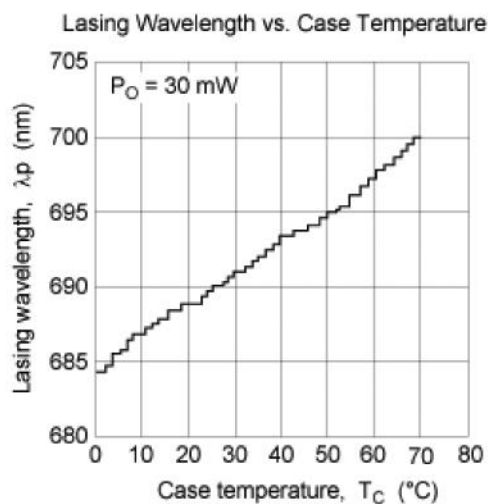
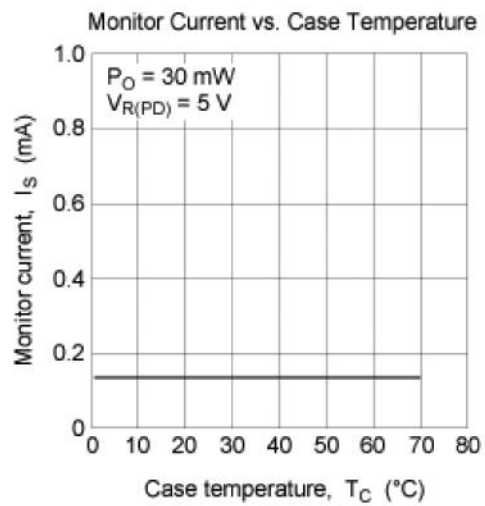
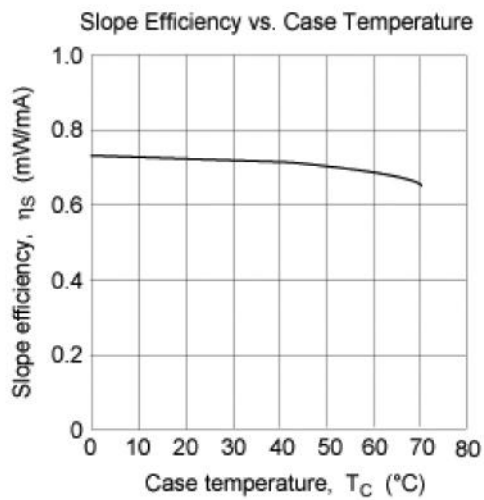
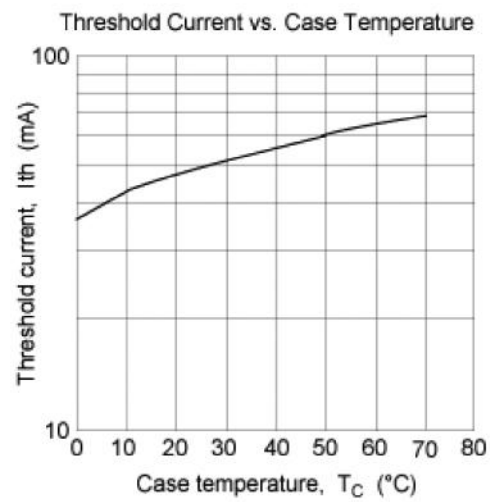
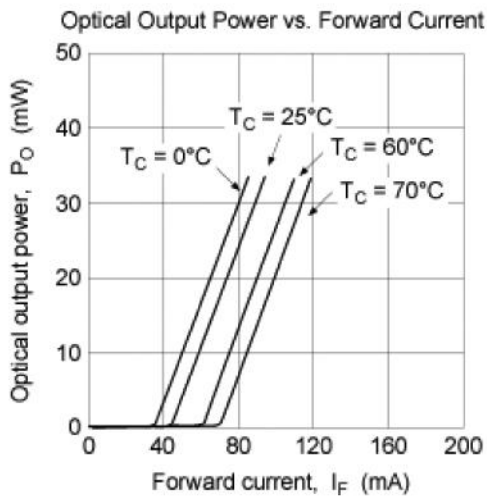
Item	Symbol	Ratings	Unit
Optical output power	P <sub>o</sub>	30	mW
Pulse Optical Output Power	P <sub>o</sub> (pulse)	50*	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	30	V
Operating Temperature	T <sub>opr</sub>	-10 ~ +70	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	°C

Note: Pulse condition : Pulse width=<4μs , duty=<50%

Optical and Electrical Characteristics (T<sub>c</sub>=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I <sub>th</sub>	30	45	70	mA	-
Slope efficiency	η <sub>s</sub>	0.5	0.7	0.9	mW/mA	18(mW)/(I <sub>(24mW)</sub> - I <sub>(6mW)</sub> )
Operating voltage	V <sub>op</sub>	2.1	2.5	2.8	V	P <sub>o</sub> =30mW
Beam divergence Parallel to the junction	θ <sub>//</sub>	7	8.5	10.5	°	P <sub>o</sub> =30mW, FWHM
Beam divergence Perpendicular to the junction	θ <sub>⊥</sub>	17	19	23	°	P <sub>o</sub> =30mW, FWHM
Lasing Wavelength	λ <sub>p</sub>	680	690	695	nm	P <sub>o</sub> =30mW
Monitor current	I <sub>s</sub>	0.02	0.1	0.45	mA	P <sub>o</sub> =30mW, V <sub>R(PD)</sub> =5V

Typical Characteristic Curves



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## Contact Information

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