

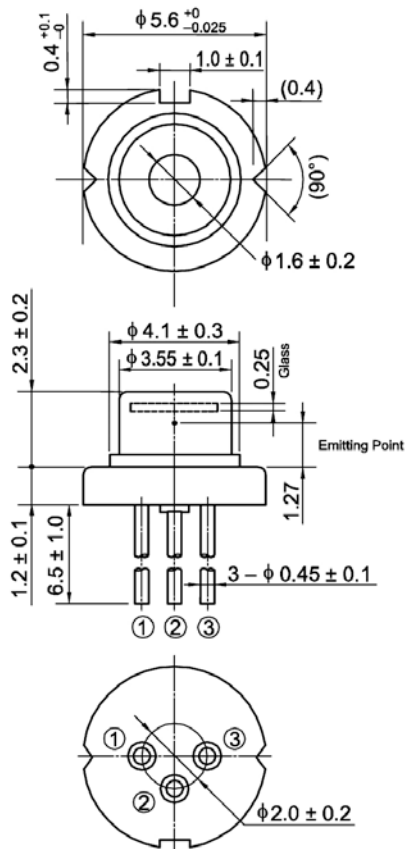
# Data Sheet

# HL6397MG/98MG

639nm / 25mW    AlGaInP Laser Diode



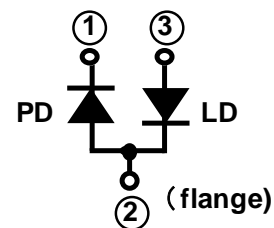
## Outline



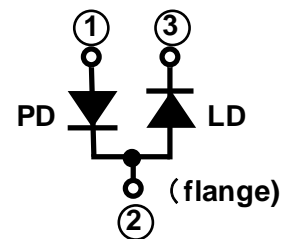
(Unit: mm)

## Internal Circuit

### • HL6397MG



### • HL6398MG



## Features

- Visible light output: 639nm Typ.
- Optical output power: 20mW (CW)
- Single transverse mode
- Low operating current: 65mA Typ.
- Low operating voltage: 2.5V Max.
- Operating temperature: +60°C
- TE mode oscillation

## Application

- Laser leveler
- Laser scanner
- Light source of optical equipments

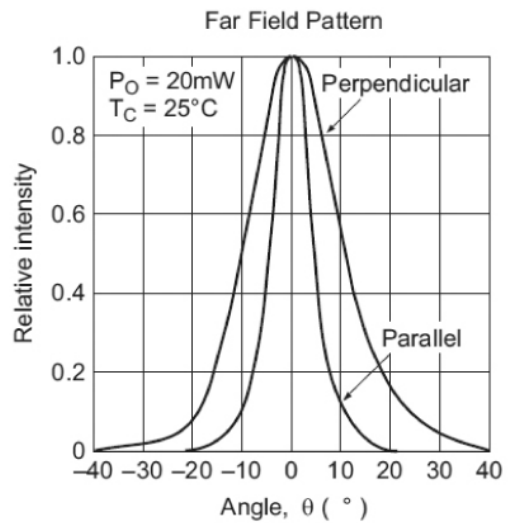
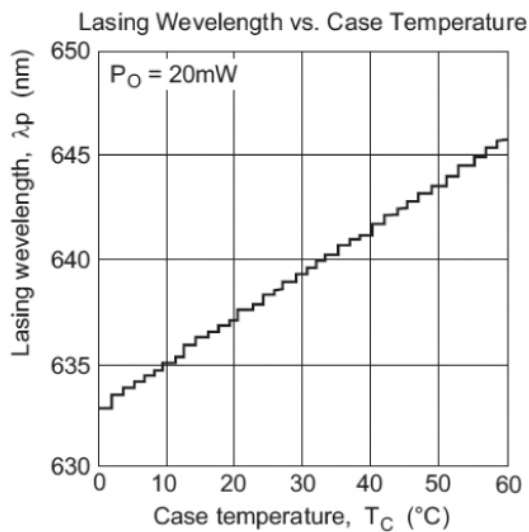
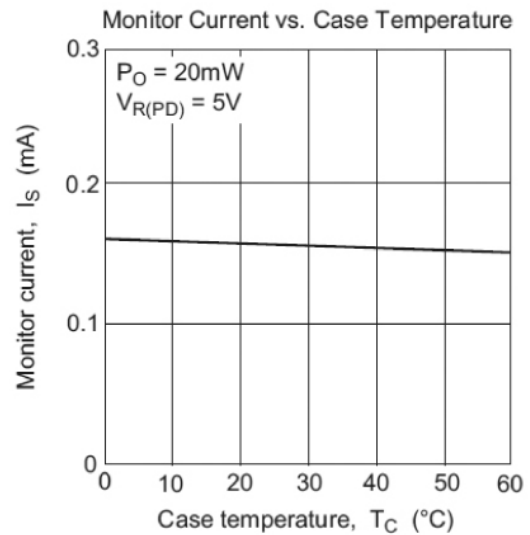
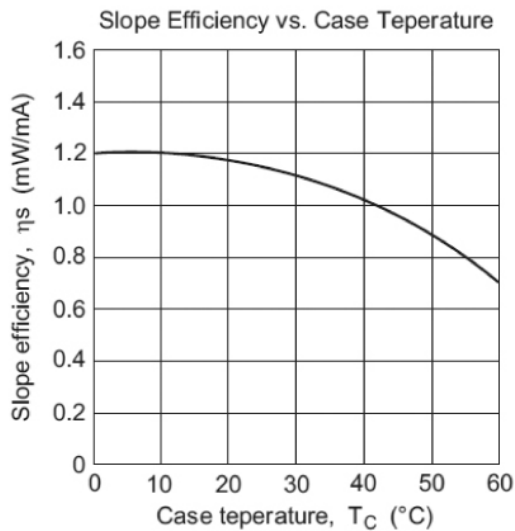
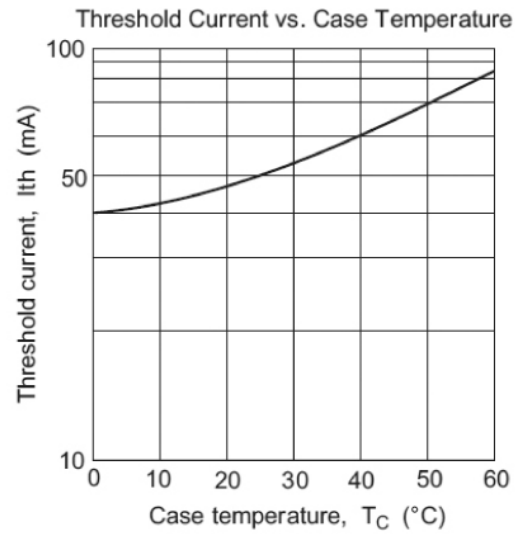
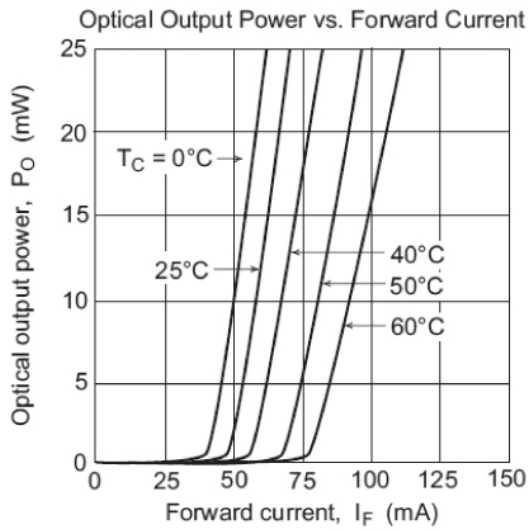
### Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	25	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 ~ +60	°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 <sub>th</sub>	-	45	60	mA	-
Operating current	I <sub>op</sub>	-	65	80	mA	Po=20mW
Operating voltage	V <sub>op</sub>	-	2.3	2.5	V	Po=20mW
Beam divergence Parallel to the junction	θ <sub>//</sub>	6	9	12	°	Po=20mW, FWHM
Beam divergence Perpendicular to the junction	θ <sub>⊥</sub>	16	21	24	°	Po=20mW, FWHM
Lasing Wavelength	λ <sub>p</sub>	630	639	643	nm	Po=20mW
Monitor Current	I <sub>s</sub>	0.1	0.2	0.4	mA	Po=20mW, V <sub>R(PD)</sub> =5V

## Typical Characteristic Curves



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