

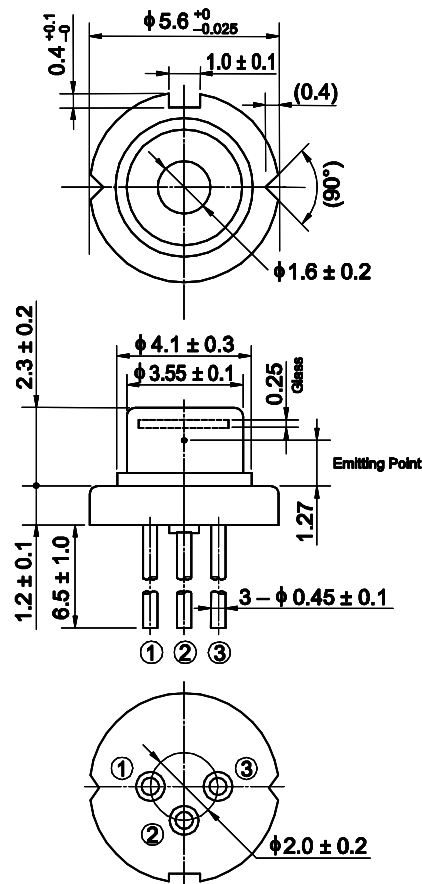
# Data Sheet

# HL6362MG/63MG

640nm / 45mW AlGaInP Laser Diode

USHIO

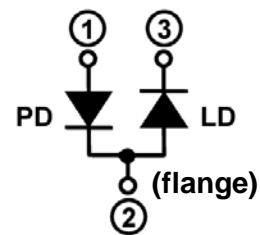
## Outline



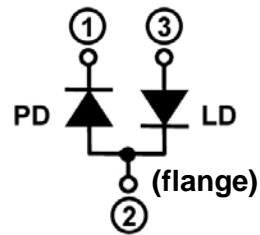
(unit:mm)

## Internal Circuit

### •HL6362MG



### •HL6363MG



## Features

- Visible light output: 640nm Typ.
- Optical output power: 40mW (CW)
- Single transverse mode
- Low operating current: 90mA Typ.
- Low operating voltage: 2.6V Max.
- Operating temperature: +50°C
- TE mode oscillation

## Application

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

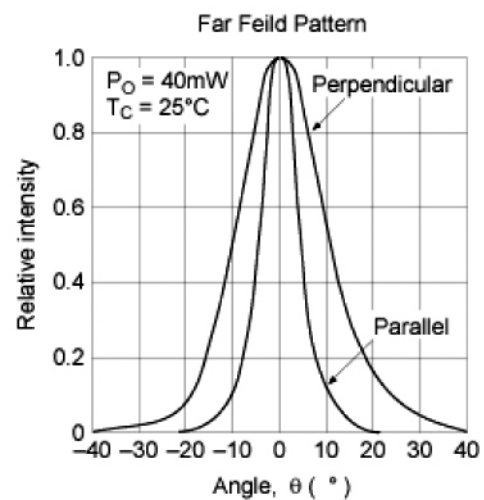
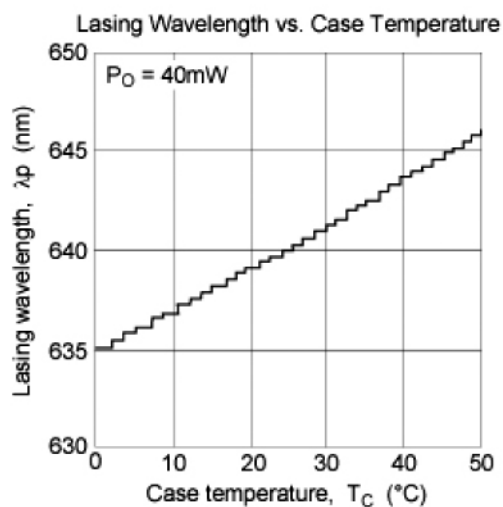
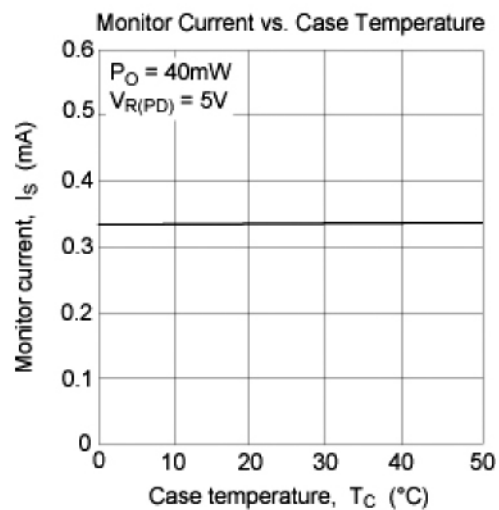
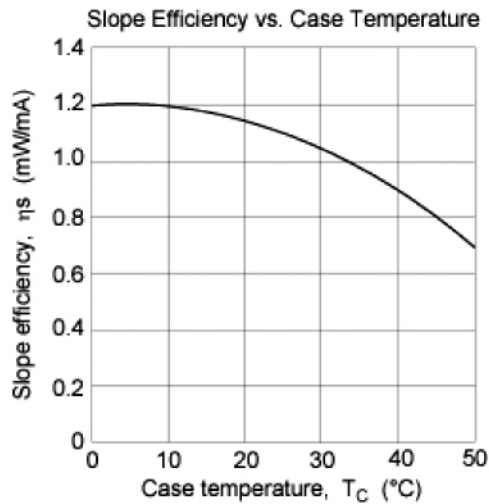
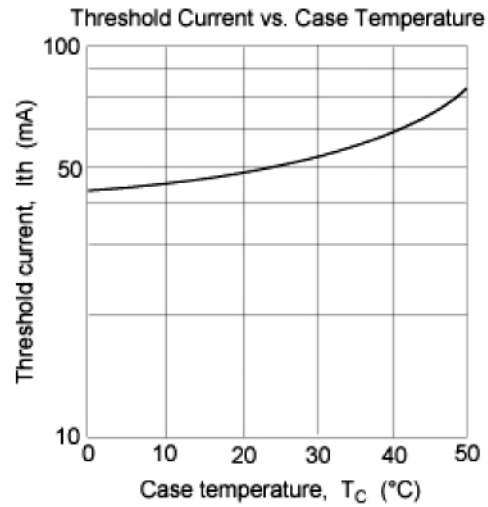
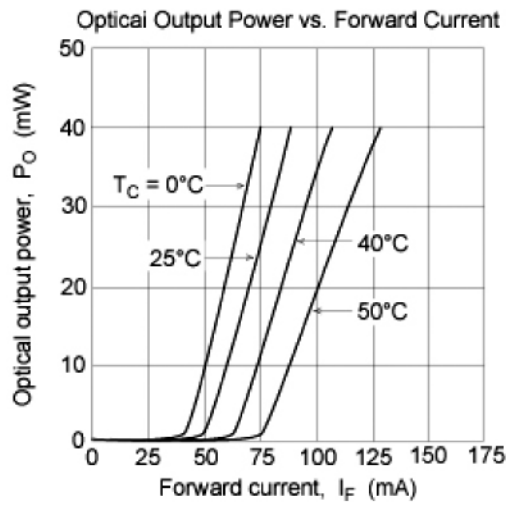
## Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	45	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 ~ +50	°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>	-	90	110	mA	Po=40mW
Operating voltage	V <sub>op</sub>	-	2.4	2.6	V	Po=40mW
Beam divergence Parallel to the junction	θ <sub>//</sub>	7	10	13	°	Po=40mW, FWHM
Beam divergence Perpendicular to the junction	θ <sub>⊥</sub>	16	21	24	°	Po=40mW, FWHM
Lasing Wavelength	λ <sub>p</sub>	-	640	643	nm	Po=40mW
Monitor Current	I <sub>s</sub>	0.15	0.30	0.60	mA	Po=40mW, V <sub>R(PD)</sub> =5V

## Typical Characteristic Curves



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