

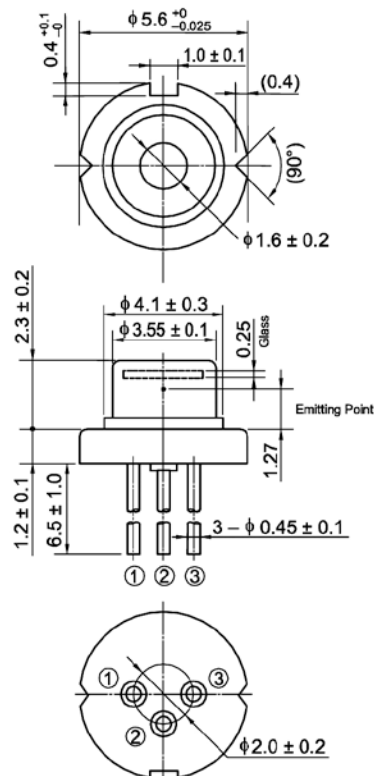
## Data Sheet

# HL6354MG/55MG

638nm / 7mW    AlGaInP Laser Diode

**USHIO**

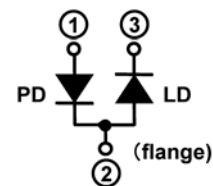
### Outline



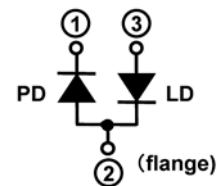
(unit: mm)

### Internal Circuit

#### HL6354MG



#### HL6355MG



### Features

- Optical output power: 5mW(CW)
- Visible light output: 638nm Typ.
- Low operating current: 27mA Typ.
- Low operating voltage: 2.4V Max.
- Operating temperature: 50°C
- TM mode oscillation
- Single transverse mode

### Application

- Laser leveler
- Laser pointer
- Distance meter
- Light source of optical equipment

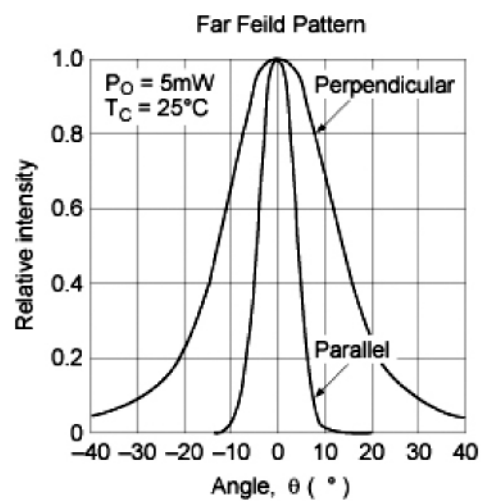
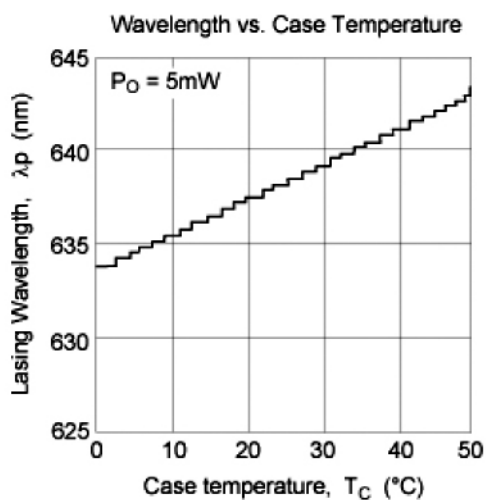
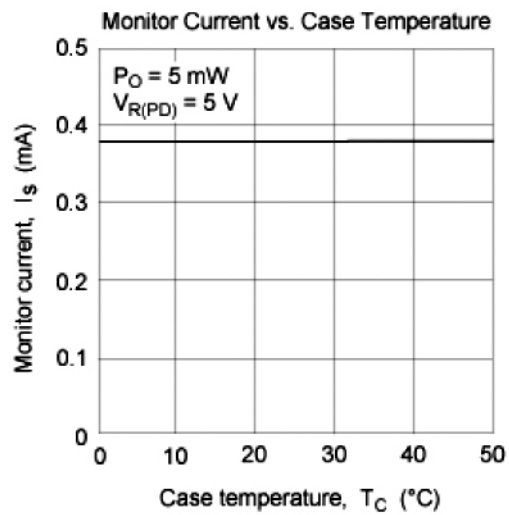
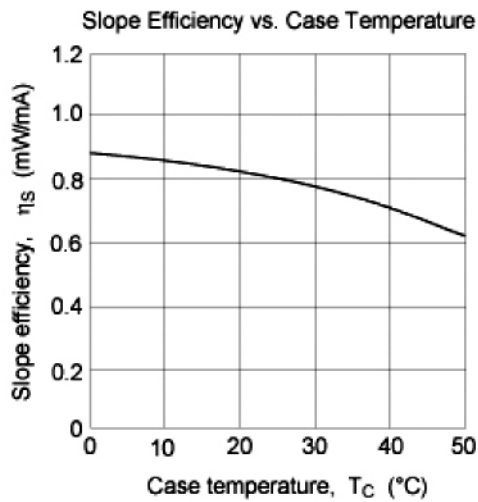
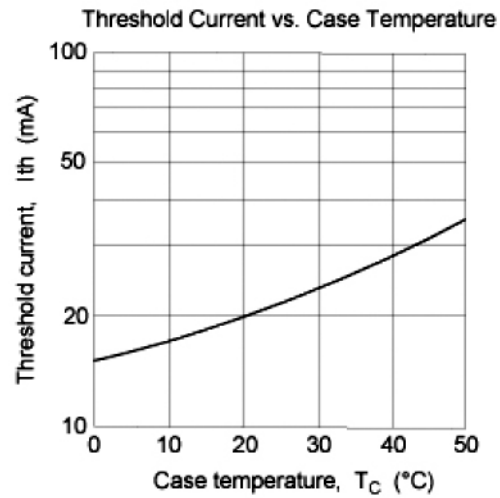
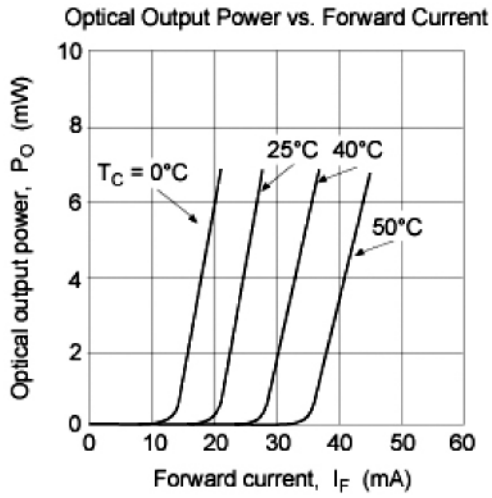
### Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	7	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)

	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I <sub>th</sub>	-	20	27	mA	-
Operating current	I <sub>op</sub>	-	27	36	mA	Po=5mW
Operating voltage	V <sub>op</sub>	-	2.2	2.4	V	Po=5mW
Lasing Wavelength	λ <sub>p</sub>	630	638	640	nm	Po=5mW
Beam divergence Parallel to the junction	θ <sub>//</sub>	6	8	10	°	Po=5mW FWHM
Beam divergence Perpendicular to the junction	θ <sub>⊥</sub>	20	25	30	°	Po=5mW FWHM
Monitor current	I <sub>s</sub>	0.15	0.40	0.60	mA	Po=5mW, V <sub>R(PD)</sub> =5V

## Typical Characteristic Curves



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