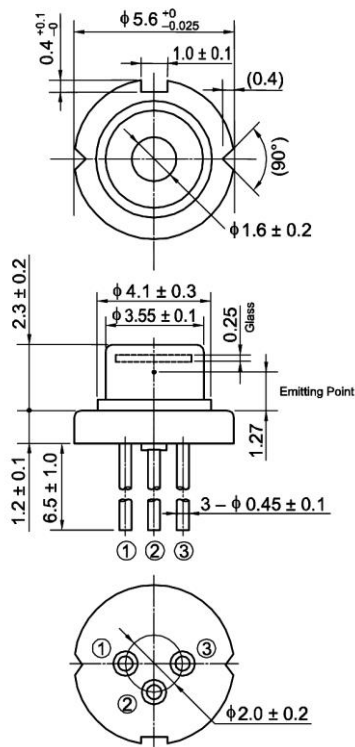


HL6323MG-A

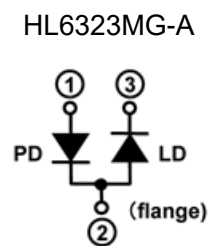
639nm / 30mW AlGaInP Laser Diode

Outline



(unit: mm)

Internal Circuit



Features

- Optical output power: 30mW(CW)*1
- Visible light output: 639nm Typ.
- Small package: $\phi 5.6$ mm
- TM mode oscillation
- Single transverse mode

Application

- Laser markers
- High speed sensors
- Medical
- Optical Equipment for Measurement

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	35*1	mW
Pulse Optical output power	Po (pulse)	50*2	mW
LD Reverse Voltage	VR(LD)	2	V
PD Reverse Voltage	VR(PD)	30	V
Operating Temperature	Topr	-10 ~ +50	°C
Storage Temperature	Tstg	-40 ~ +85	°C

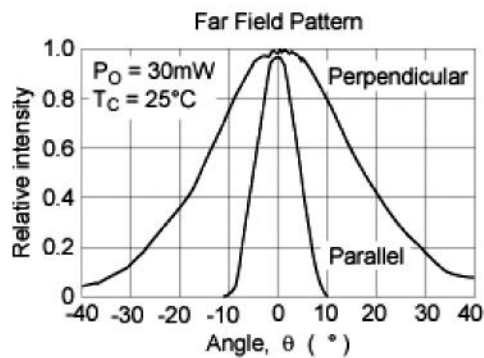
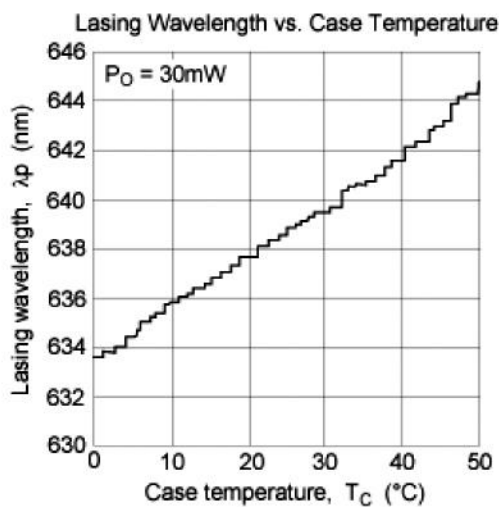
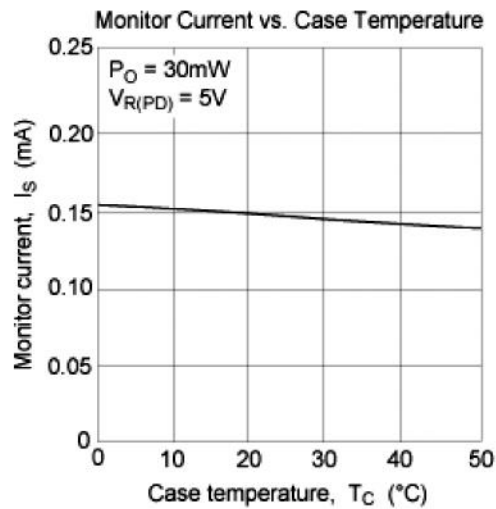
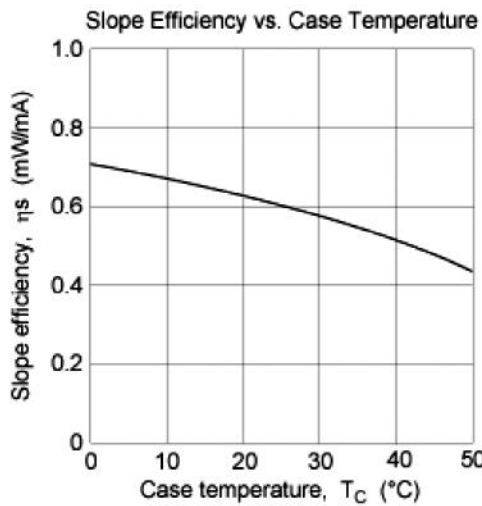
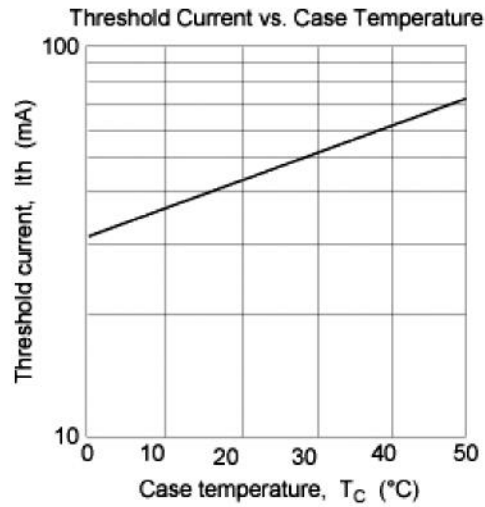
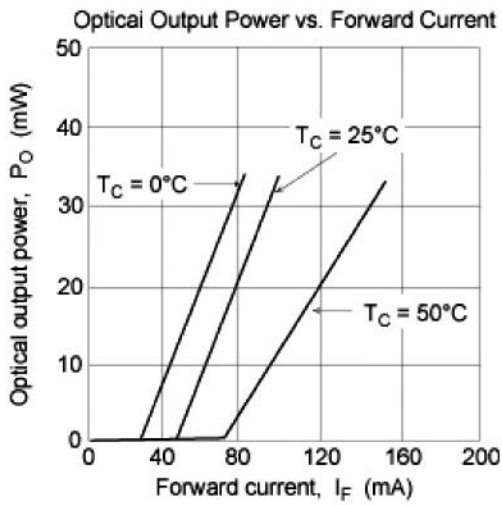
*1: This value is not the same as the specification for long term reliability, such as life time.

*2: Pulse condition: pulse width pw=100ns, duty =20%

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	Ith	30	45	65	mA	-
Slope efficiency	ηs	0.4	0.6	0.9	mW/mA	18(mW)/(I (24mW) - I (6mW))
Operating current	Iop	-	95	130	mA	Po=30mW
Operating voltage	Vop	-	2.3	2.8	V	Po=30mW
Lasing Wavelength	λp	635	639	642	nm	Po=30mW
Beam divergence Parallel to the junction	θ//	7	8.5	11	°	Po=30mW FWHM
Beam divergence Perpendicular to the junction	θ⊥	26	30	34	°	Po=30mW FWHM
Monitor current	Is	0.05	0.15	0.25	mA	Po=30mW, VR(PD) =5V

Typical Characteristic Curves



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2. This product (without violet laser diode) contains gallium arsenide (GaAs), which may seriously endanger your health even at very low doses. Please avoid treatment which may create GaAs powder or gas, such as disassembly or performing chemical experiments, when you handle the product. When disposing of the product, please follow the laws of your country and separate it from other waste such as industrial waste and household garbage.

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