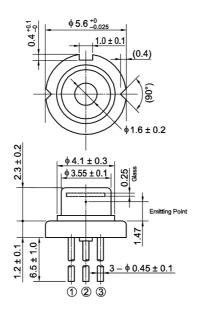
Data Sheet

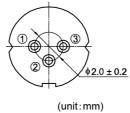
HL63101MG/102MG

638nm/7mW AlGaInP Laser Diode

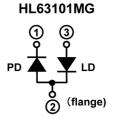
USHID

Outline

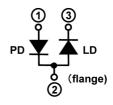




Internal Circuit



HL63102MG



Features

- Optical output power: 5mW(CW)
- Visible light output:637nm Typ.
- Low operating current: 20mA Typ.
- Low operating voltage: 2.4V Max.
- Operating temperature: 60°C
- TE 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	Ро	7	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	Topr	-10 ~ +60	°C
Storage Temperature	Tstg	-40 ~ +85	°C

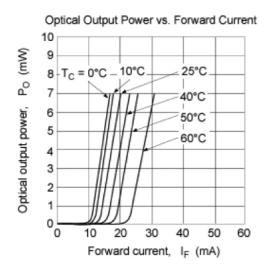
Optical and Electrical Characteristics (Tc=25°C)

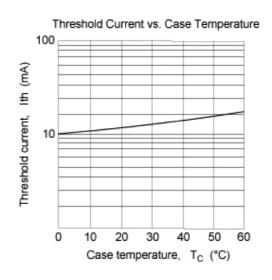
Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Threshold current	Ith	-	15	20	mA	-
Operating current	lop	-	20	25	mA	Po=5mW
Operating voltage	Vop	-	2.2	2.4	V	Po=5mW
Lasing Wavelength	λρ	630	637	640	nm	Po=5mW
Beam divergence Parallel to the junction	θ//	5	8	11	0	Po=5mW FWHM
Beam divergence Perpendicular to the junction	θ⊥	28	34	40	0	Po=5mW FWHM
Monitor current	Is	0.1	0.2	0.5	mA	Po=5mW, V _{R(PD)} =5V

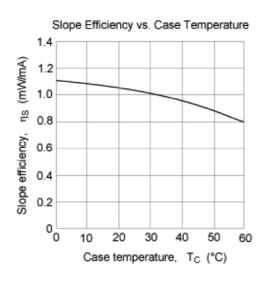
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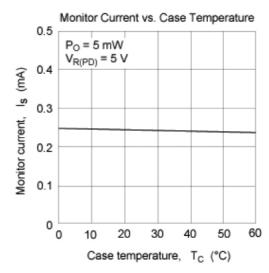


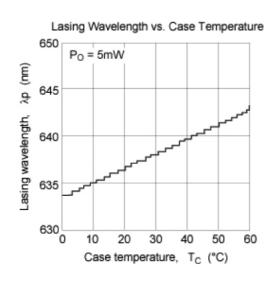
Typical Characteristic Curves

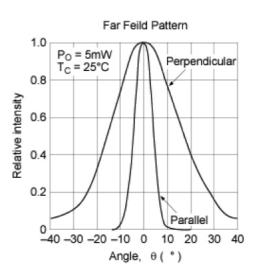












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