

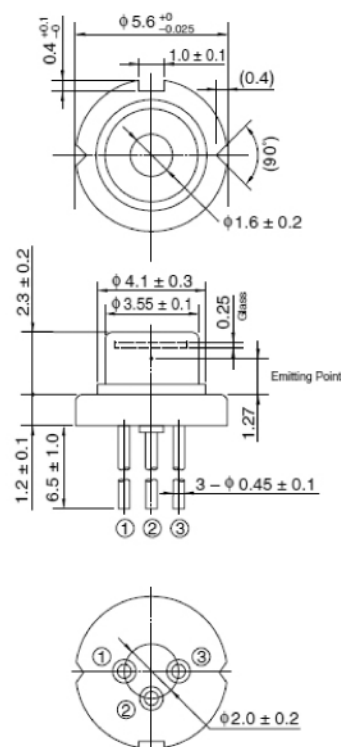
Data Sheet

HL6748MG

670nm / 10mW AlGaInP Laser Diode

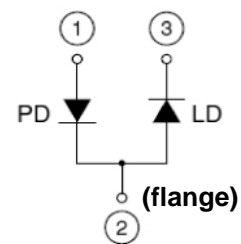
USHIO

Outline



(Unit:mm)

Internal Circuit



Features

- Operation temperature: $-10 \sim +60^\circ\text{C}$
- Optical output power: 10mW(CW)
- Visible lasing: 670nm Typ.
- Low operating voltage: 2.7V Max.
- Package: $\phi 5.6\text{mm}$
- Single transverse mode
- TE mode oscillation

Application

- Laser beam printer
- Measurement
- Sensing

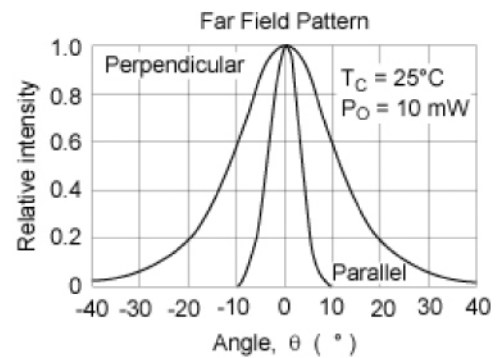
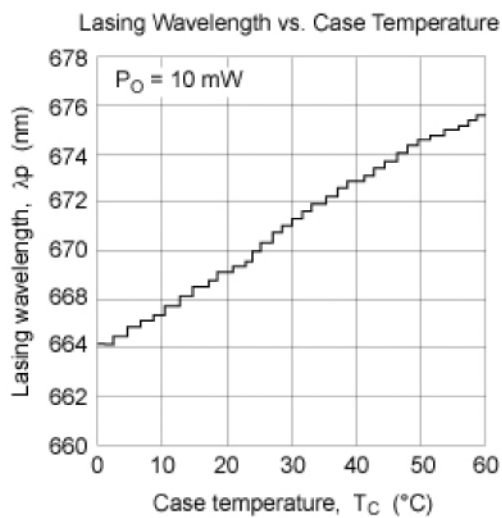
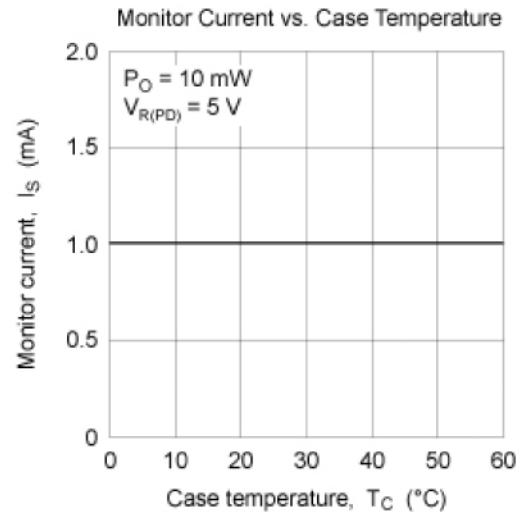
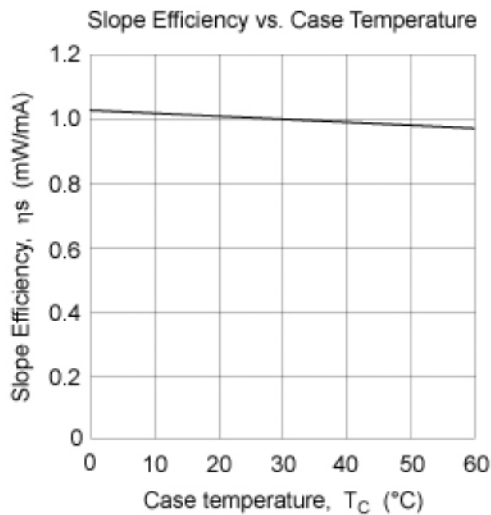
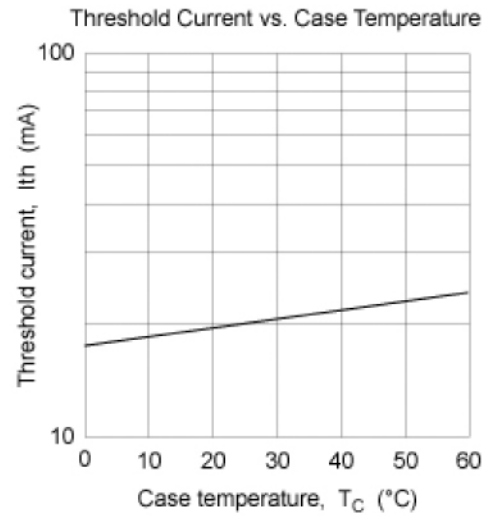
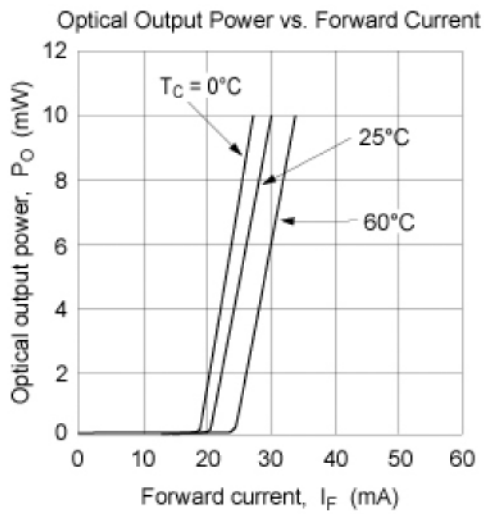
Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	10	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	20	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 _{th}	-	20	30	mA	-
Operating current	I _{op}	-	30	45	mA	Po=10mW
Operating voltage	V _{op}	-	2.2	2.7	V	Po=10mW
Beam divergence Parallel to the junction	θ _{//}	5	8	11	°	Po=10mW, FWHM
Beam divergence Perpendicular to the junction	θ _⊥	18	25	30	°	Po=10mW, FWHM
Lasing Wavelength	λ _p	660	670	680	nm	Po=10mW
Monitor Current	I _s	0.6	1.0	1.8	mA	Po=10mW, V _{R(PD)} =5V

Typical Characteristic Curves



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