

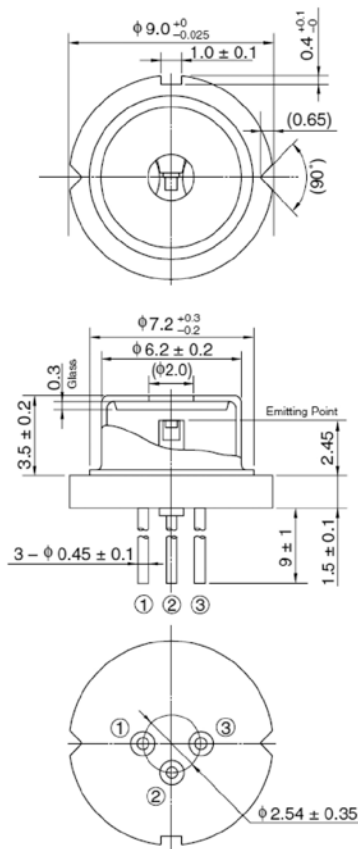
Data Sheet

HL6714G

670nm / 10mW AlGaInP Laser Diode

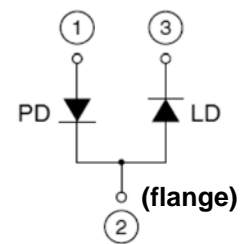
USHIO

Outline



(Unit:mm)

Internal Circuit



Features

- Operation temperature: $-10 \sim +50^\circ\text{C}$
- Optical output power: 10mW(CW)
- Visible lasing: 670nm Typ.
- Low operating voltage: 2.7V Max.
- Package: $\phi 9\text{mm}$
- Single transverse mode
- TE mode oscillation

Application

- Laser beam printer
- Measurement
- Sensing

Absolute Maximum Ratings (Tc=25°C)

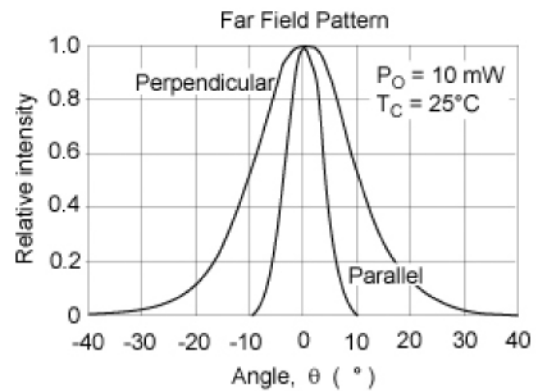
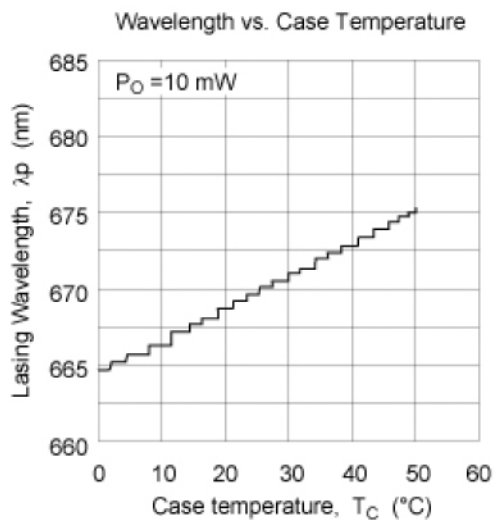
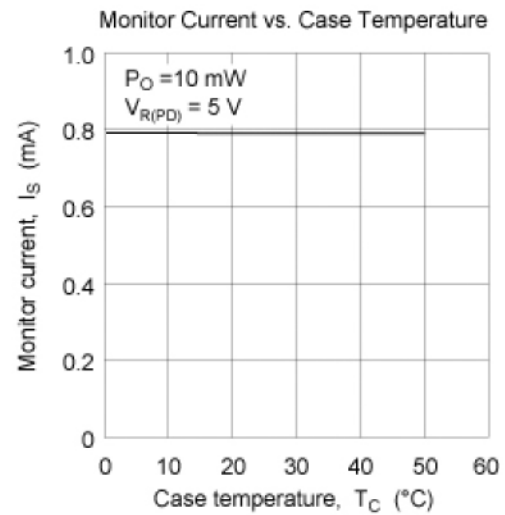
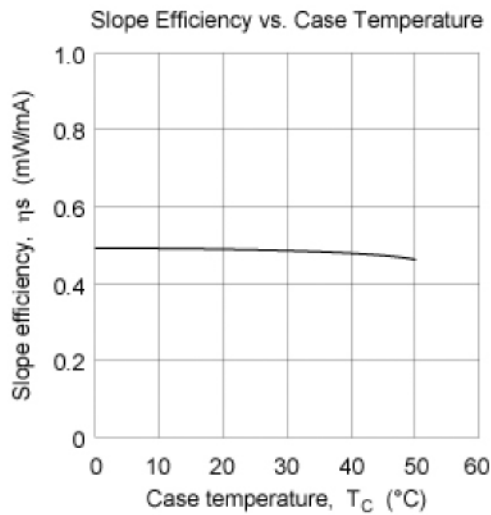
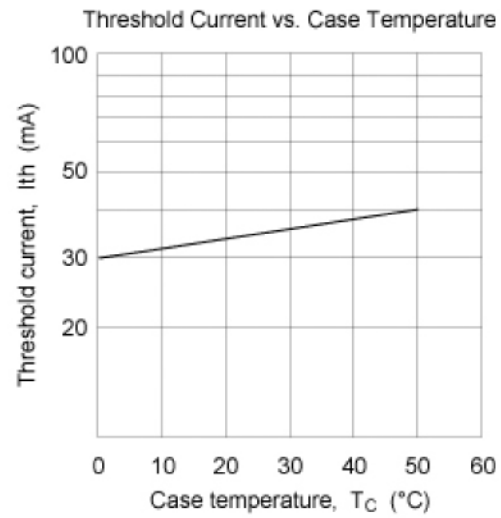
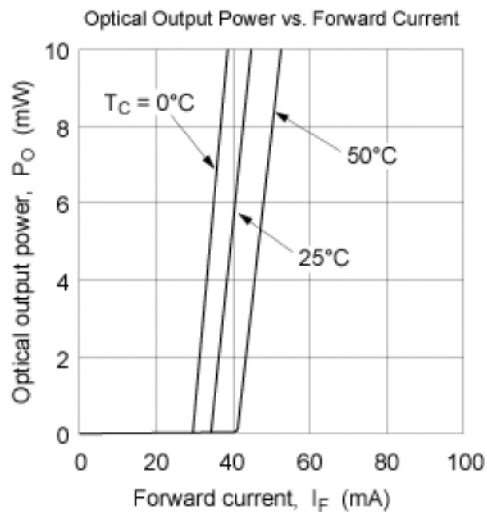
Item	Symbol	Ratings	Unit
Optical output power	Po	10	mW
Pulse optical output power	Po(pulse)	12*	mW
LD Reverse Voltage	VR(LD)	2	V
PD Reverse Voltage	VR(PD)	30	V
Operating Temperature	Topr	-10 ~ +50	°C
Storage Temperature	Tstg	-40 ~ +85	°C

* Pulse condition: Pulse width≤1μs, duty≤50%

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	Ith	20	30	60	mA	-
Operating voltage	Vop	-	-	2.7	V	Po=10mW
Slope efficiency	ηs	0.3	0.5	0.8	mW/mA	6(mW)/(I(8mW)-I(2mW))
Beam divergence Parallel to the junction	θ//	5	8	11	°	Po=10mW, FWHM
Beam divergence Perpendicular to the junction	θ⊥	18	22	30	°	Po=10mW, FWHM
Lasing Wavelength	λp	660	670	680	nm	Po=10mW
Monitor Current	Is	0.3	0.9	1.5	mA	Po=10mW, VR(PD)=5V

Typical Characteristic Curves



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