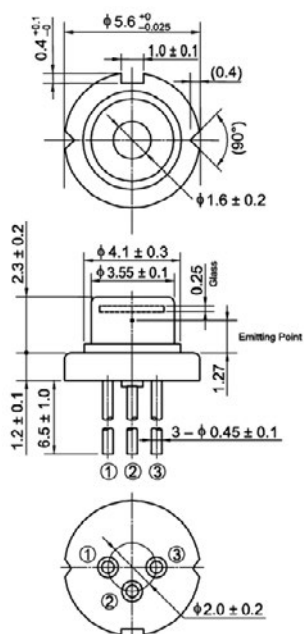


Data Sheet

HL6545MG

660nm / 130mW AlGaInP Laser Diode

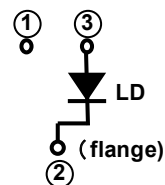
Outline



(Unit: mm)

Internal Circuit

• HL6545MG



Features

- Visible light output: 660nm Typ.
- Optical output power: 300mW (Pulse)
- Low operating current:
175mA Typ. (120mW (CW))
350mA Typ. (300mW (Pulse))
- Operating temperature: +75°C
- Single transverse mode
- TE mode oscillation

Application

- Sensor application
- Light source of optical equipments

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	P _o	130	mW
Pulse optical output power	P _{o(pulse)}	300*	mW
LD Reverse Voltage	V _{R(LD)}	2	V
Operating Temperature	T _{op(cw)}	-10 ~ +75	°C
Operating Temperature	T _{op(pulse)}	-10 ~ +75	°C
Storage Temperature	T _{stg}	-40 ~ +85	°C

Note: Pulse condition: Pulse width = 30nsec, duty = 35%

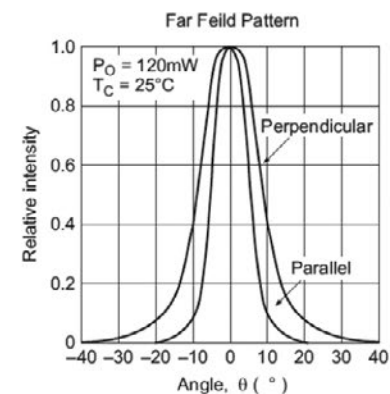
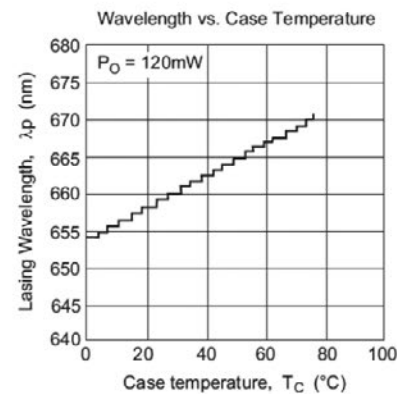
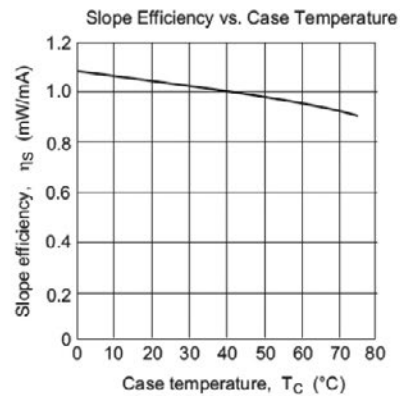
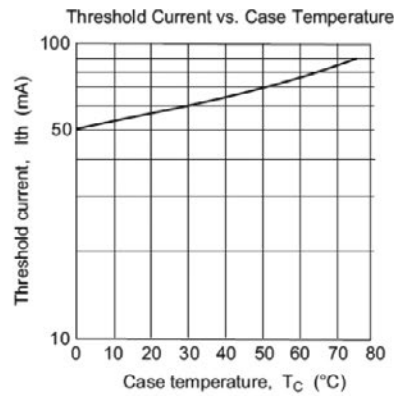
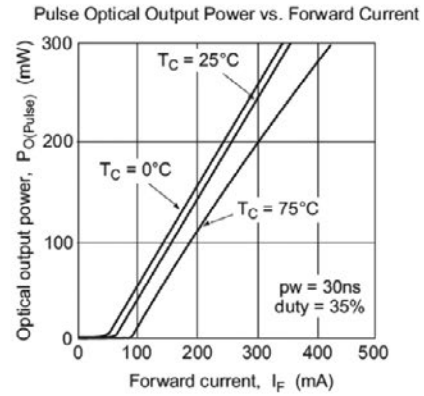
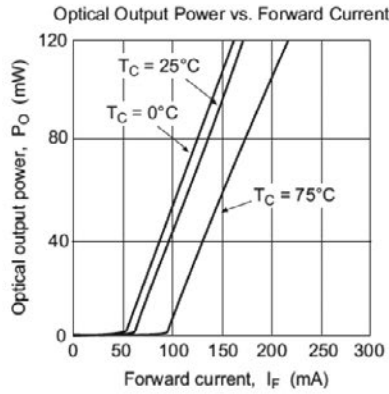
Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I _{th}	-	60	75	mA	-
Operating current	I _{op}	-	175	210	mA	P _o =120mW
	I _{op(pulse)}	-	350	-	mA	P _o =300mW (Pulse*)
Operating voltage	V _{op}	-	2.5	3.3	V	P _o =120mW
Beam divergence Parallel to the junction	θ _{//}	7.5	10	12	°	P _o =120mW, FWHM
Beam divergence Perpendicular to the junction	θ _⊥	15	17	19	°	P _o =120mW, FWHM
Lasing Wavelength	λ _p	652	660	664	nm	P _o =120mW

Note: Pulse condition: Pulse width = 30nsec, duty = 35%

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Typical Characteristic Curves



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