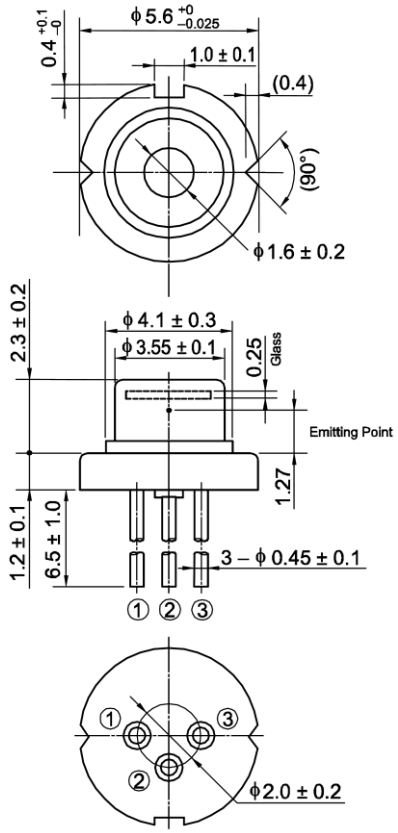
HL65261MG/262MG/263MG/264MG

658nm/85mW (CW)/310mW (Pulse) AlGaInP Laser Diode

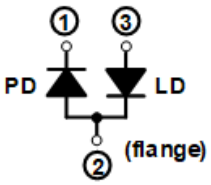
Outline



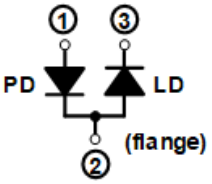
(Unit: mm)

Internal Circuit

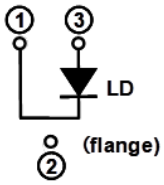
HL65261MG



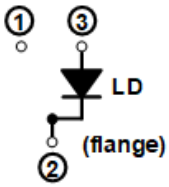
HL65262MG



HL65263MG



HL65264MG



Features

- Visible light output: 658nm Typ.
- Optical output power: 85mW (CW), 310mW (Pulse)
- Low operating current:
  90mA Typ. (80mW (CW))
  245mA Typ. (300mW (Pulse))
- Operating temperature: +60°C (CW), +75°C (Pulse)
- Single transverse mode
- TE mode oscillation

Application

- Sensor application
- Light source of optical equipment

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	85	mW
Pulse optical output power Note1)	Po(Pulse)	310	mW
LD reverse voltage	$V_{R(LD)}$	2	V
PD reverse voltage Note2)	$V_{R(PD)}$	30	V
Operating temperature	Topr(CW)	-10 ~ +60	°C
Pulse Operating temperature Note1)	Topr(Pulse)	-10 ~ +75	°C
Storage temperature	Tstg	-40 ~ +85	°C

Optical and Electrical Characteristics (Tc=25°C)

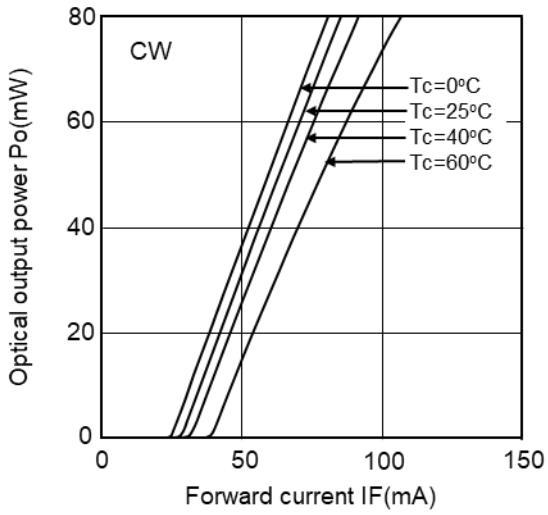
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	Ith	-	30	50	mA	-
Operating current	Iop	-	90	120	mA	Po=80mW
	Iop (Pulse)	-	245	-	mA	Po(Pulse)=300mW Note 1
Operating voltage	Vop	-	2.6	3.3	V	Po=80mW
Beam divergence Parallel to the junction	θ//	4	7.5	11	o	Po=80mW, FWHM
Beam divergence Perpendicular to the junction	θ⊥	11	15	19	o	Po=80mW, FWHM
Lasing wavelength	λp	652	658	665	nm	Po=80mW
Monitor current Note2)	Is	0.1	0.6	1.5	mA	Po=80mW $V_{R(PD)}$=5V

Note1) Pulse condition: Pulse width = 10nsec, duty = 10%

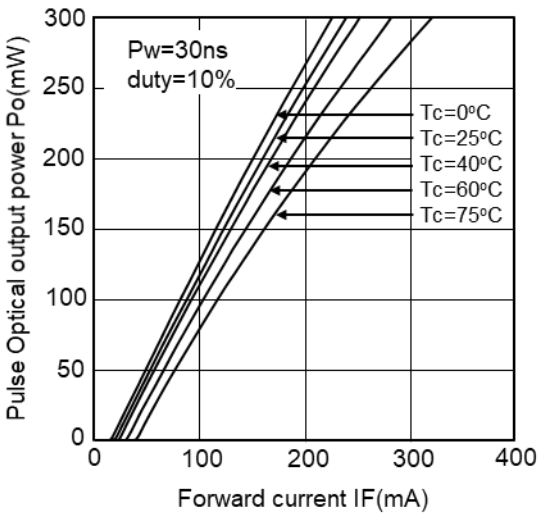
Note2) Not applicable to HL65263MG,HL65264MG.

Typical Characteristic Curves

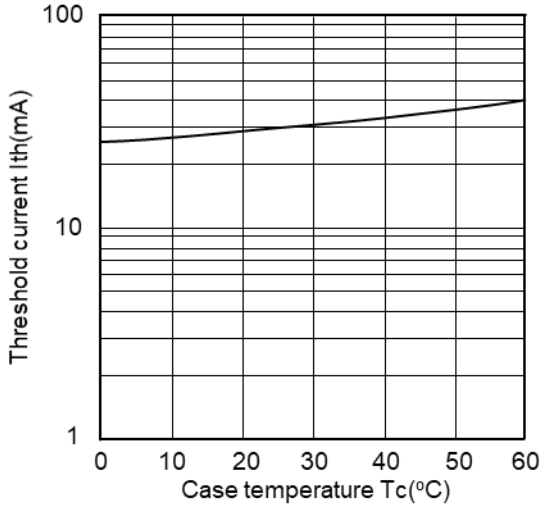
Optical Output Power vs. Forward Current



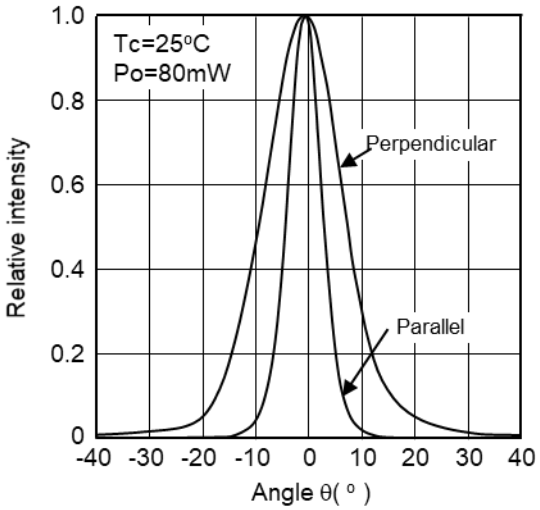
Pulse Optical Output Power vs. Forward Current



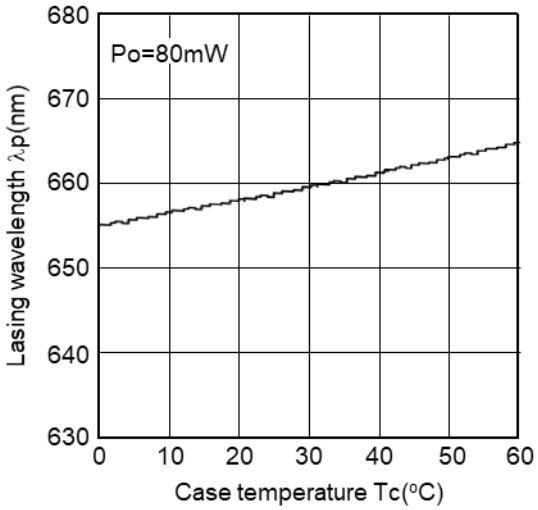
Threshold current vs. Case Temperature



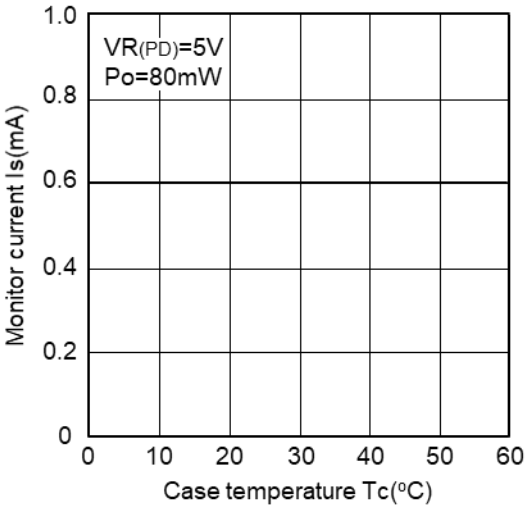
Far Field Pattern



Lasing Wavelength vs. Case temperature



Monitor Current vs. Case Temperature



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