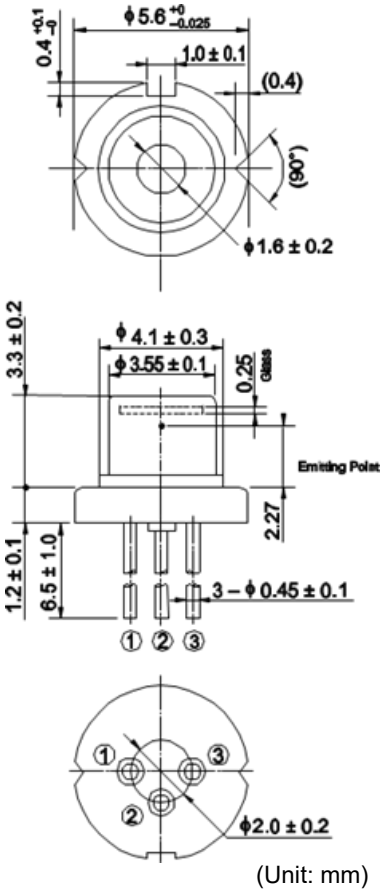
Data Sheet

HL65241DG/242DG/243DG

660nm/110mW(CW)/220mW(Pulse) AlGaInP Laser Diode

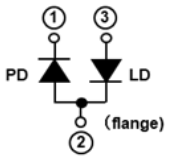
Outline



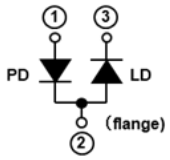
(Unit: mm)

Internal Circuit

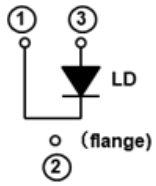
HL65241DG



HL65242DG



HL65243DG



Features

- Visible light output: 660nm Typ.
- Optical output power:
  110mW (CW), 220mW (Pulse)
- Low operating current:
  145mA Typ. (100mW (CW))
  225mA Typ. (200mW (Pulse))
- Operating temperature: +90°C
- 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	110	mW
Pulse optical output power Note1)	$Po_{(pulse)}$	220	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage Note2)	$V_{R(PD)}$	30	V
Operating Temperature	Topr	-10 ~ +90	°C
Storage Temperature	Tstg	-40 ~ +100	°C

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	Ith	-	60	90	mA	-
Operating current	Iop	-	145	180	mA	Po=100mW
	$Iop_{(pulse)}$	-	225	-	mA	Po(Pulse)=200mW, Note1
Operating voltage	Vop	-	2.45	3.0	V	Po=100mW
Beam divergence Parallel to the junction	θ//	4	7	10	o	Po=100mW, FWHM
Beam divergence Perpendicular to the junction	θ⊥	11	15	19	o	Po=100mW, FWHM
Lasing Wavelength	λp	652	660	665	nm	Po=100mW
Monitor current Note2)	Is	0.05	0.35	1.10	mA	Po=100mW, $V_{R(PD)}$=5V

Note1) Pulse condition: Pulse width = 30nsec, duty = 35%
Note2) Not applicable to HL65243DG.

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