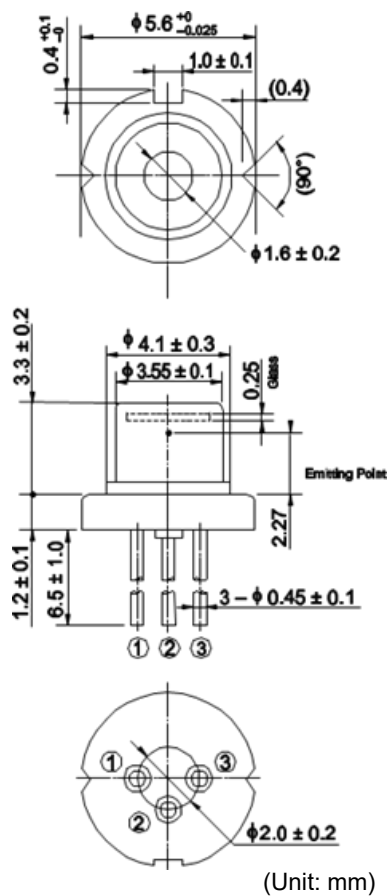


## HL65241DG/242DG/243DG

660nm/110mW(CW)/220mW(Pulse)

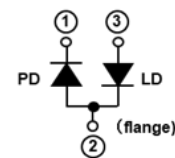
AlGaInP Laser Diode

### Outline

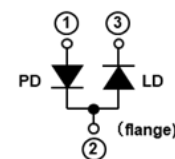


### Internal Circuit

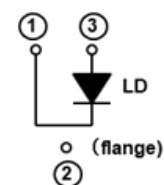
HL65241DG



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 <sup>Note1)</sup>	Po(pulse)	220	mW
LD Reverse Voltage	VR(LD)	2	V
PD Reverse Voltage <sup>Note2)</sup>	VR(PD)	30	V
Operating Temperature	Topr	-10 ~ +90	°C
Storage Temperature	Tstg	-40 ~ +100	°C

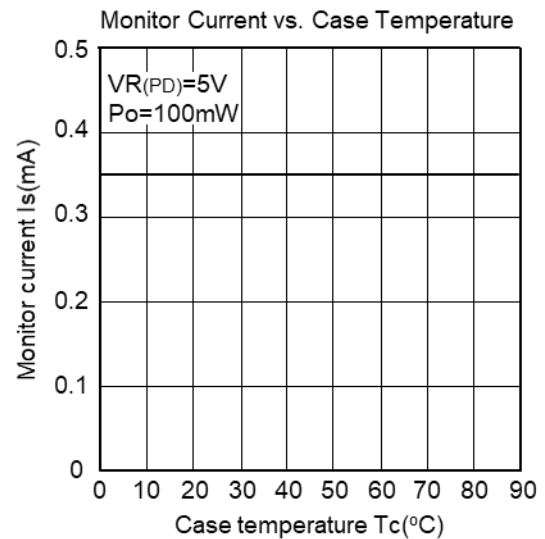
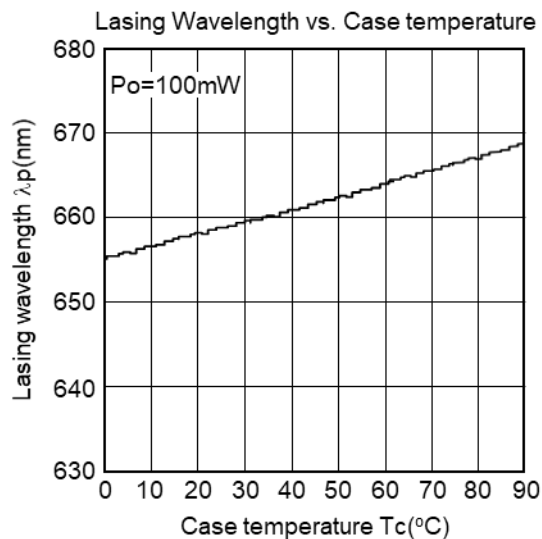
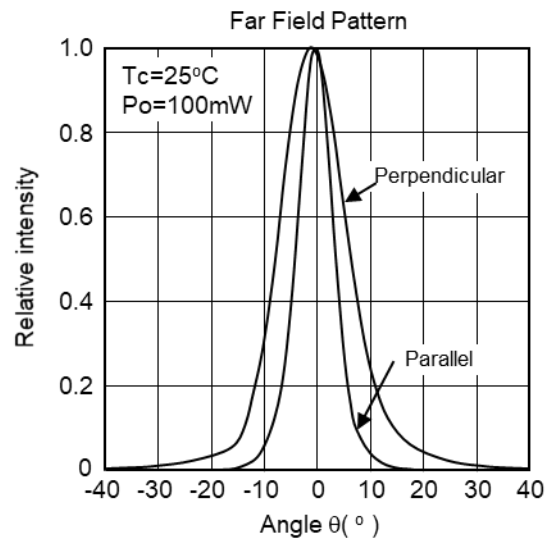
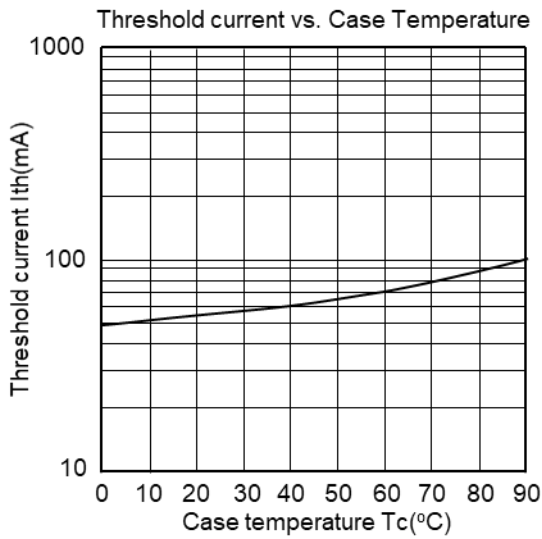
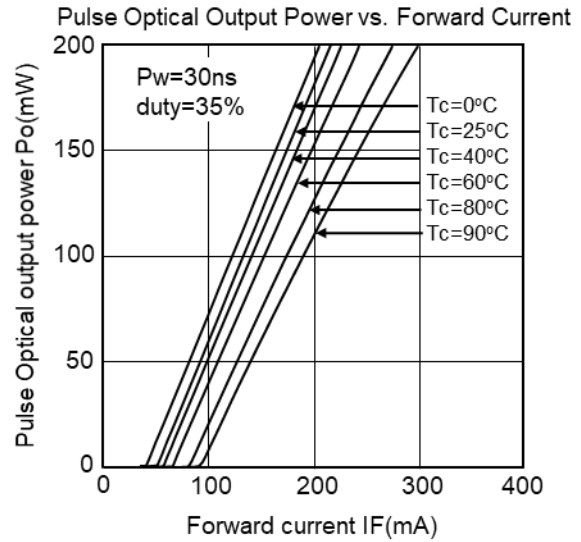
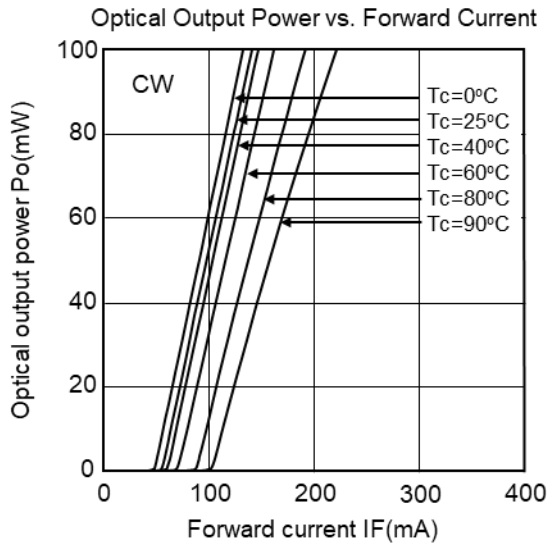
**Optical and Electrical Characteristics (Tc=25°C)**

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	$\theta_{//}$	4	7	10	°	Po=100mW, FWHM
Beam divergence Perpendicular to the junction	$\theta_{\perp}$	11	15	19	°	Po=100mW, FWHM
Lasing Wavelength	$\lambda_p$	652	660	665	nm	Po=100mW
Monitor current <sup>Note2)</sup>	Is	0.05	0.35	1.10	mA	Po=100mW, VR(PD)=5V

Note1) Pulse condition: Pulse width = 30nsec, duty = 35%

Note2) Not applicable to HL65243DG.

## Typical Characteristic Curves



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