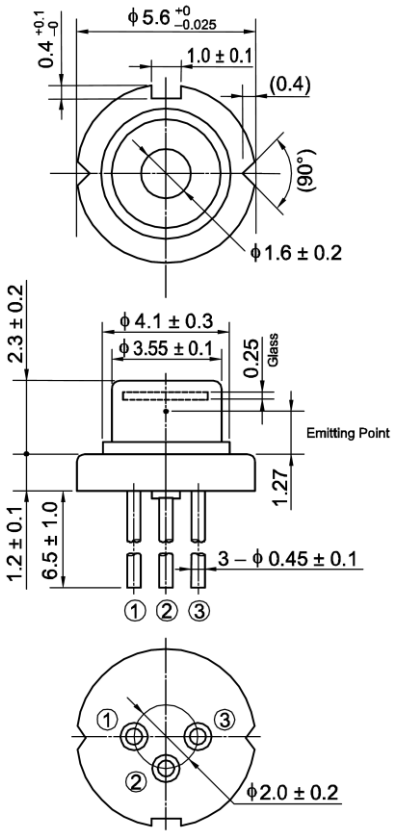
HL67191MG/192MG

670nm/15mW (CW)/30mW (Pulse) AlGaInP Laser Diode

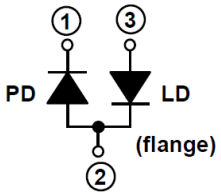
Outline



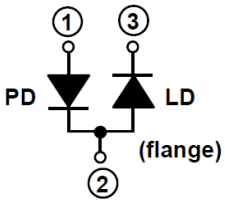
(unit: mm)

Internal Circuit

HL67191MG



HL67192MG



Features

- Optical output power: 16mW (CW)
- 32mW (Pulse)
- Visible lasing: 670nm
- Wide operating temperature: 70ºC max
- Single transverse mode
- TE mode oscillation
- Small package: φ5.6mm CAN Package

Application

- Sensing
- Measurement

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	16	mW
Pulse optical output power Note1)	Po(Pulse)	32	mW
LD reverse voltage	$V_{R(LD)}$	2	V
PD reverse voltage	$V_{R(PD)}$	20	V
Operating temperature	Topr	-10 ~ +70	°C
Storage temperature	Tstg	-40 ~ +85	°C

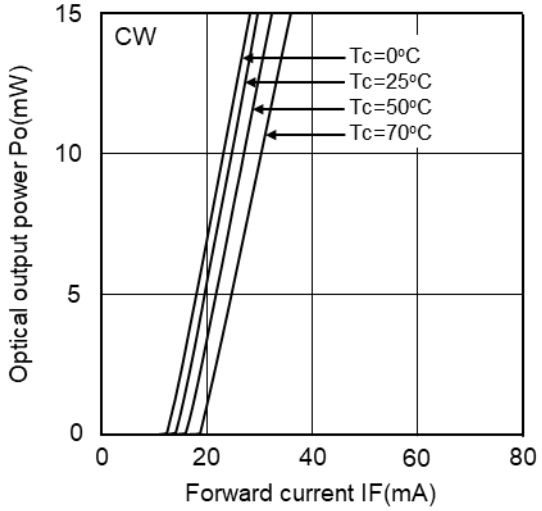
Note1) Pulse condition: Pulse width≦50ns, Duty≦50%

Optical and Electrical Characteristics (Tc=25°C)

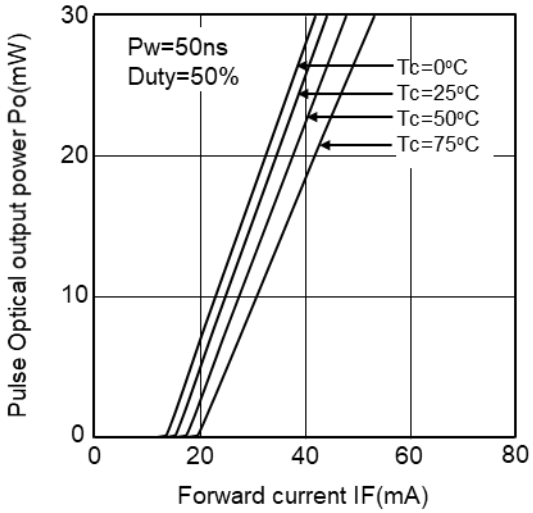
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	Ith	-	15	30	mA	-
Operating current	Iop	-	30	45	mA	Po=15mW
Operating voltage	Vop	-	2.25	2.70	V	Po=15mW
Beam divergence Parallel to the junction	θ//	5	7.5	11	°	Po=15mW FWHM
Beam divergence Perpendicular to the junction	θ⊥	20	24	28	°	Po=15mW FWHM
Lasing Wavelength	λp	660	670	680	nm	Po=15mW
Monitor current	mA	0.5	1.5	2.5	mA	Po=15mW,$V_{R(PD)}$=5V

Typical Characteristic Curves

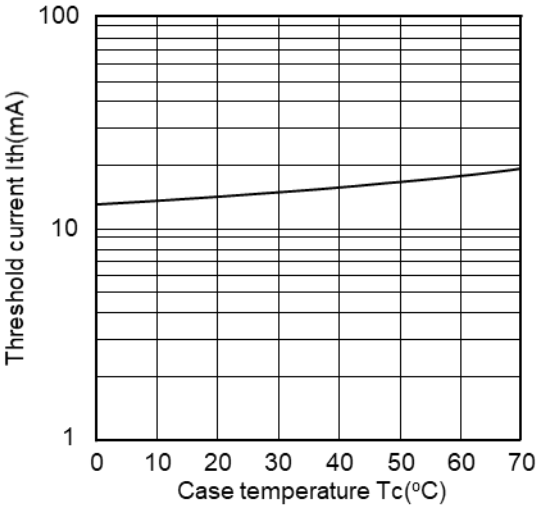
Optical Output Power vs. Forward Current



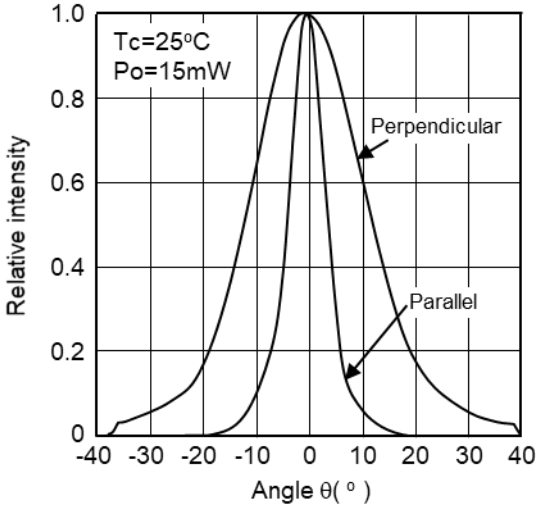
Pulse Optical Output Power vs. Forward Current



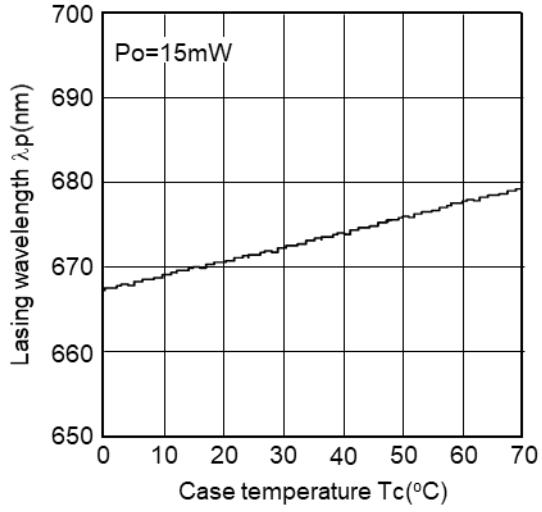
Threshold current vs. Case Temperature



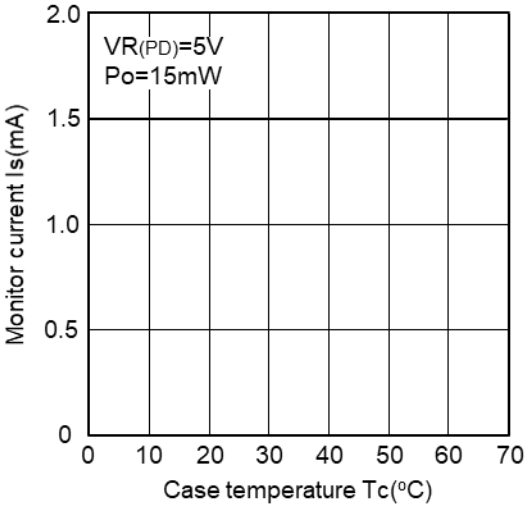
Far Field Pattern



Lasing Wavelength vs. Case temperature



Monitor Current vs. Case Temperature



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