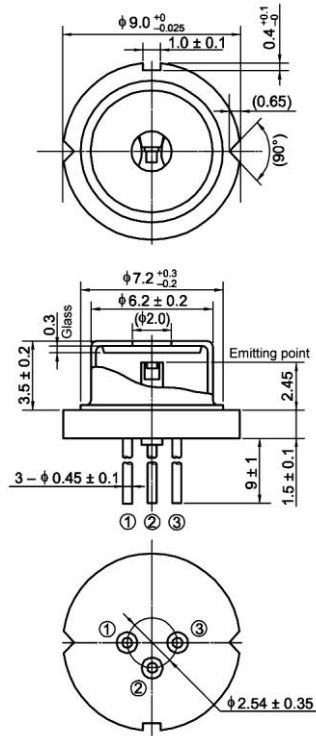


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AlGaInP Laser Diode

638nm/10mW

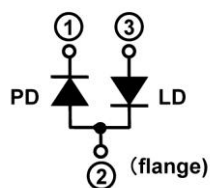
Outline



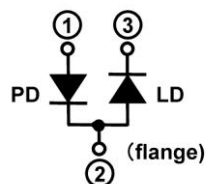
(unit: mm)

Internal Circuit

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Features:

- Optical output powr: 10mW(CW)
- Visible light output:638nm Typ.
- Low operating current: 95mA Max.
- Low operating voltage: 2.7V Max.
- Single transverse mode
- TM mode oscillation

Applications

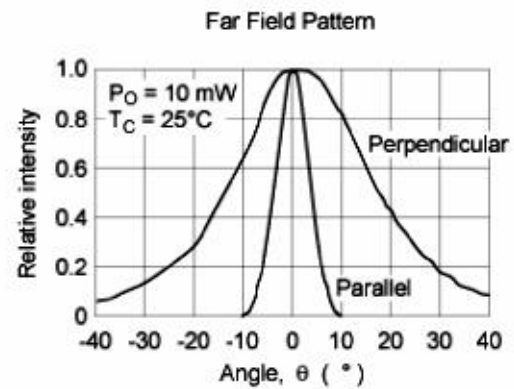
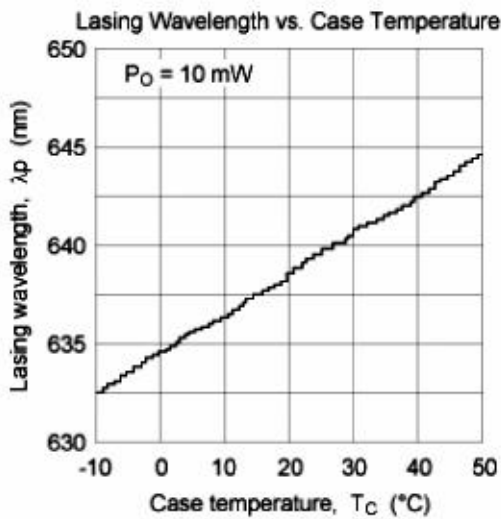
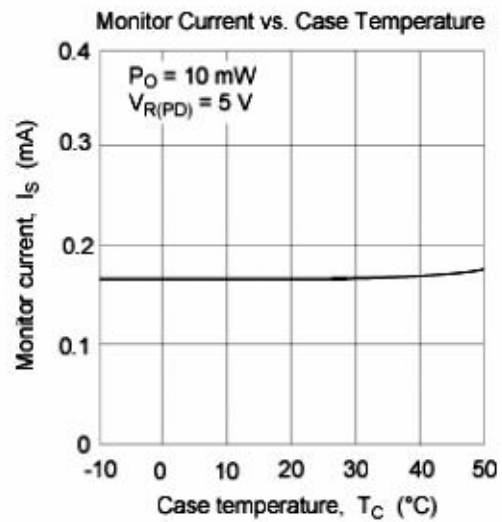
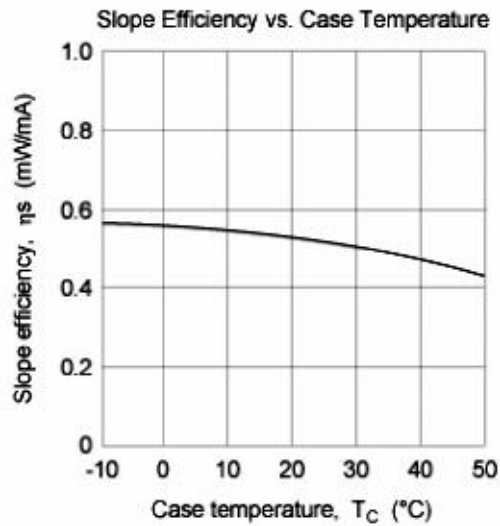
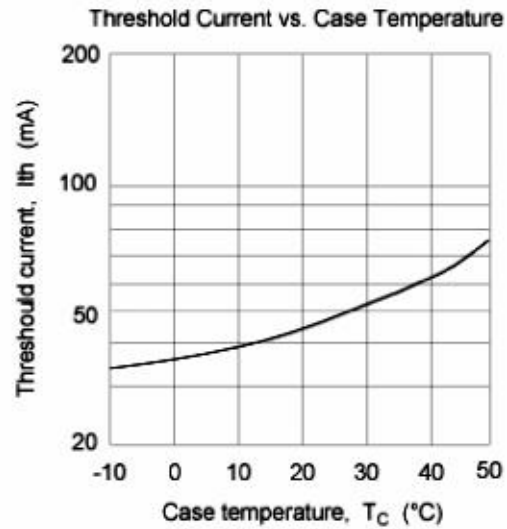
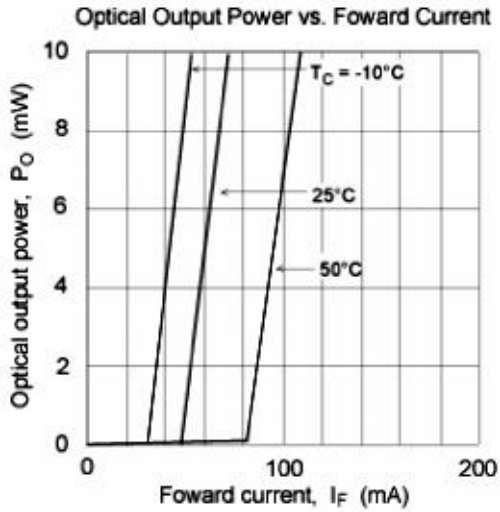
- Laser lever
- Laser module
- Optical equipment for measurement

Absolute Maximum Ratings (T_c=25°C)

Item	Symbol	Ratings	Unit
Optical output power	P _o	10	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _{opr}	-10 ~ +50	°C
Storage Temperature	T _{stg}	-40 ~ +85	°C

Optical and Electrical Characteristics (T_c=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I _{th}	20	50	75	mA	-
Operating current	I _{op}	-	70	95	mA	P _o =10mW
Operating voltage	V _{op}	-	-	2.7	V	P _o =10mW
Slope efficiency	η _s	0.3	0.5	0.7	mW/mA	6(mW)/(I _(8mW) - I _(2mW))
Monitor current	I _s	0.05	0.17	0.30	mA	P _o =10mW, V _{R(PD)} =5V
Lasing Wavelength	λ _p	625	638	640	nm	P _o =10mW
Beam divergence Parallel to the junction	θ _{//}	5	8	11	°	P _o =10mW
Beam divergence Perpendicular to the junction	θ _⊥	25	31	37	°	P _o =10mW
Astigmatism	As	-	5	-	μm	P _o =10mW, NA=0.55



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Contact Information

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