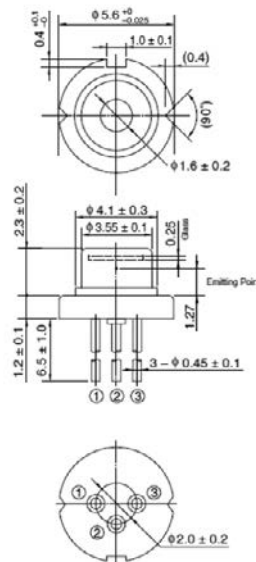


Data Sheet

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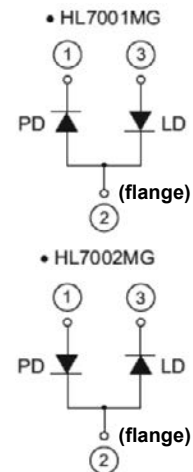
705nm / 50mW InGaAsP Laser Diode

Outline



(Unit:mm)

Internal Circuit



Features

- Operation temperature: -10~+60°C
- Optical output power: 40mW(CW)
- Infrared lasing: 705nm Typ. (Po=40mW)
- Low operating voltage: 2.5V Typ. (Po=40mW)
- Package: ϕ 5.6mm
- Single transverse mode
- TE mode oscillation

Application

- Medical
- Measurement
- Laser module
- Sensing

Absolute Maximum Ratings (Tc=25°C)

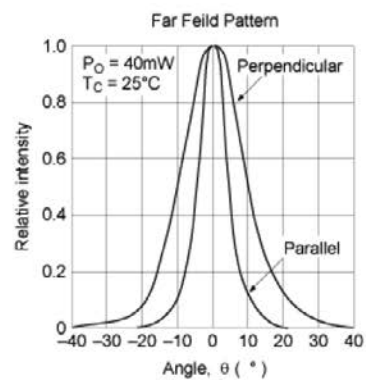
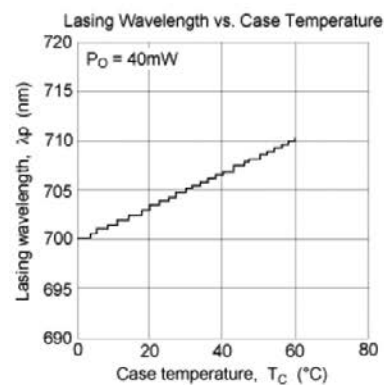
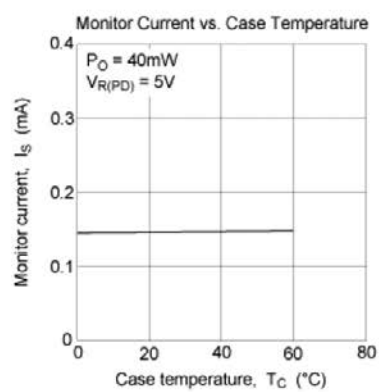
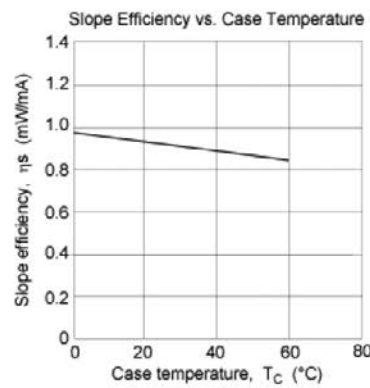
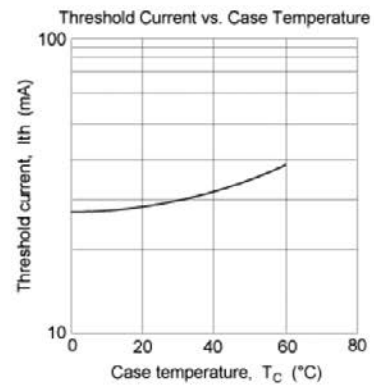
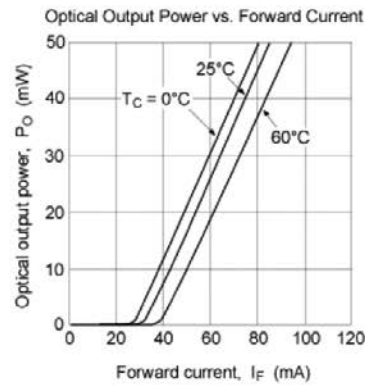
Item	Symbol	Ratings	Unit
Optical output power	Po	50	mW
LD Reverse Voltage	VR(LD)	2	V
PD Reverse Voltage	VR(PD)	30	V
Operating Temperature	Topr	-10 ~ +60	°C
Storage Temperature	Tstg	-40 ~ +85	°C

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	Ith	-	30	60	mA	-
Operating current	Iop	-	75	100	mA	Po=40mW
Operating voltage	Vop	-	2.5	-	V	Po=40mW
Beam divergence Parallel to the junction	$\theta_{//}$	7	9	14	°	Po=40mW, FWHM
Beam divergence Perpendicular to the junction	θ_{\perp}	14	18	25	°	Po=40mW, FWHM
Lasing Wavelength	λ_p	695	705	715	nm	Po=40mW
Monitor Current	I _s	0.15	0.30	0.60	mA	Po=40mW, VR(PD)=5V

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Typical Characteristic Curves



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- 2.This product (without violet laser diode) contains gallium arsenide (GaAs), which may seriously endanger your health even at very low doses. Please avoid treatment which may create GaAs powder or gas, such as disassembly or performing chemical experiments, when you handle the product. When disposing of the product, please follow the laws of your country and separate it from other waste such as industrial waste and household garbage.

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