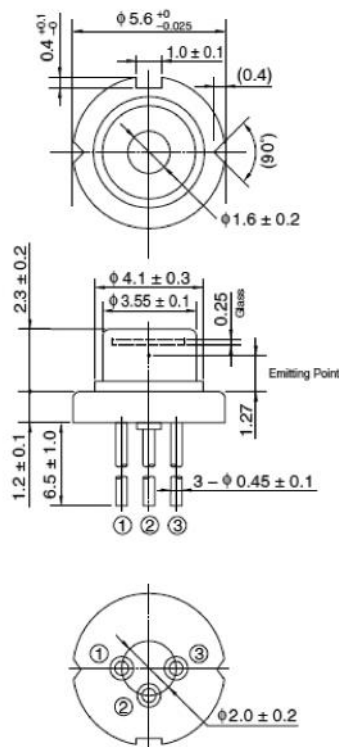


HL7001MG/02MG

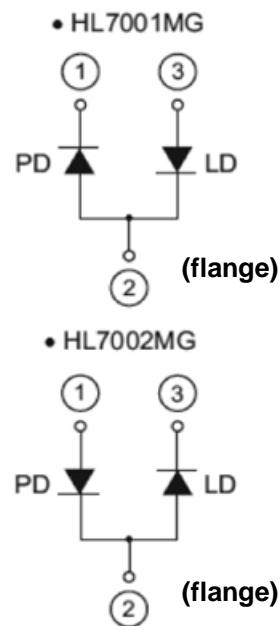
705nm / 50mW InGaAsP Laser Diode

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

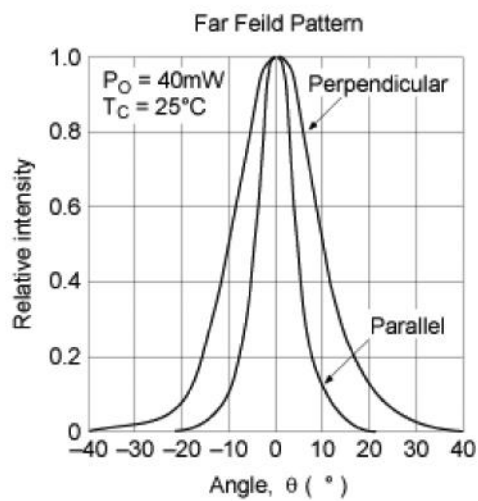
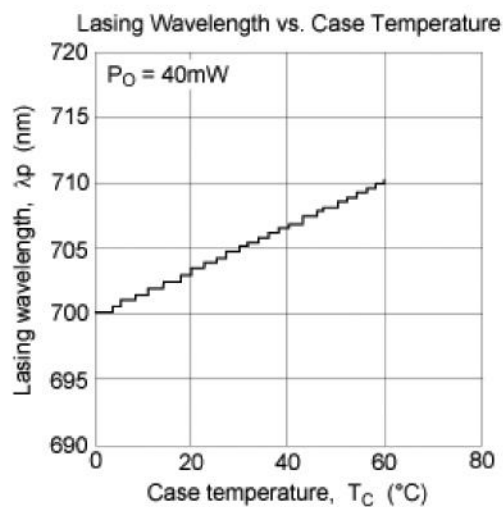
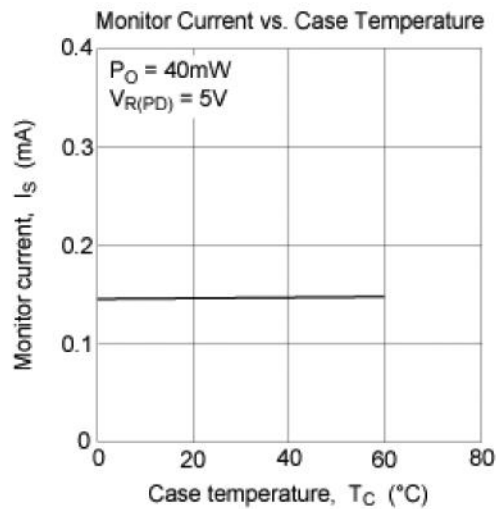
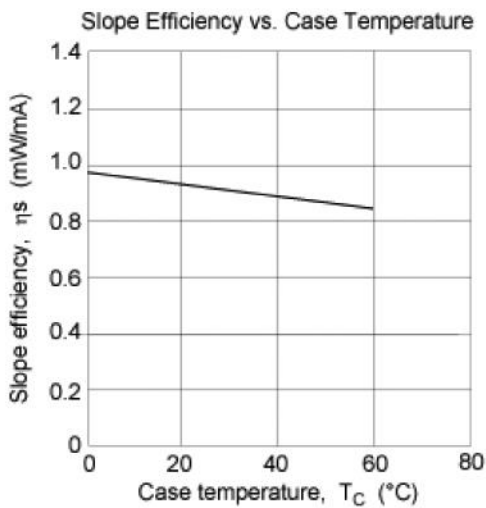
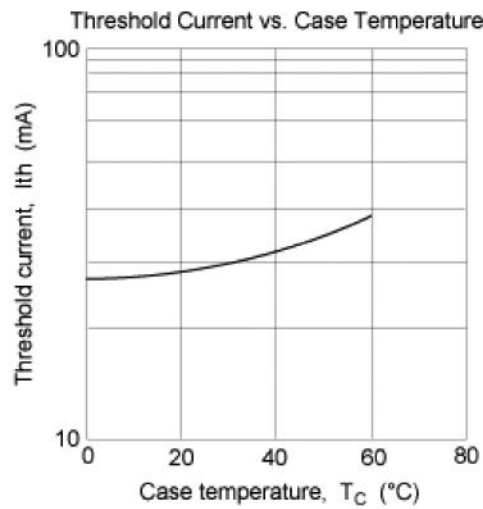
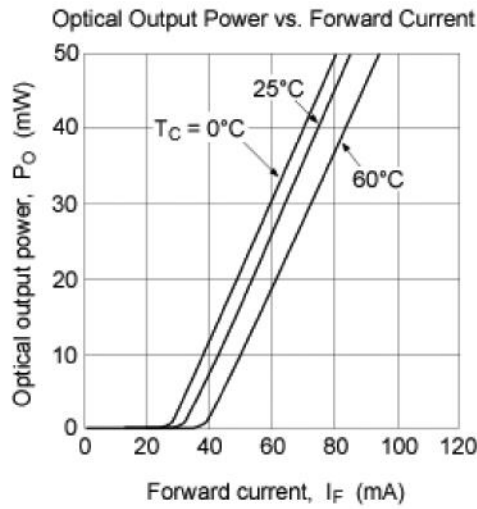
Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	50	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _{opr}	-10 ~ +60	°C
Storage Temperature	T _{stg}	-40 ~ +85	°C

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I _{th}	-	30	60	mA	-
Operating current	I _{op}	-	75	100	mA	Po=40mW
Operating voltage	V _{op}	-	2.5	-	V	Po=40mW
Beam divergence Parallel to the junction	θ _{//}	7	9	14	°	Po=40mW, FWHM
Beam divergence Perpendicular to the junction	θ _⊥	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, V _{R(PD)} =5V

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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