Data Sheet

# HL7001MG/02MG

705nm/50mW

InGaAsP Laser Diode

**Internal Circuit** 

• HL7001MG

2

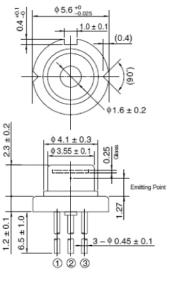
3)

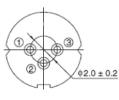
🦕 (flange)

LD

# USHIO

Outline





• HL7002MG

PD 7

(Unit:mm)

## **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:  $\phi$ 5.6mm
- Single transverse mode
- TE mode oscillation

## **Application**

- Medical
- Measurement
- Laser module
- Sensing



#### Absolute Maximum Ratings (Tc=25°C)

ltem	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

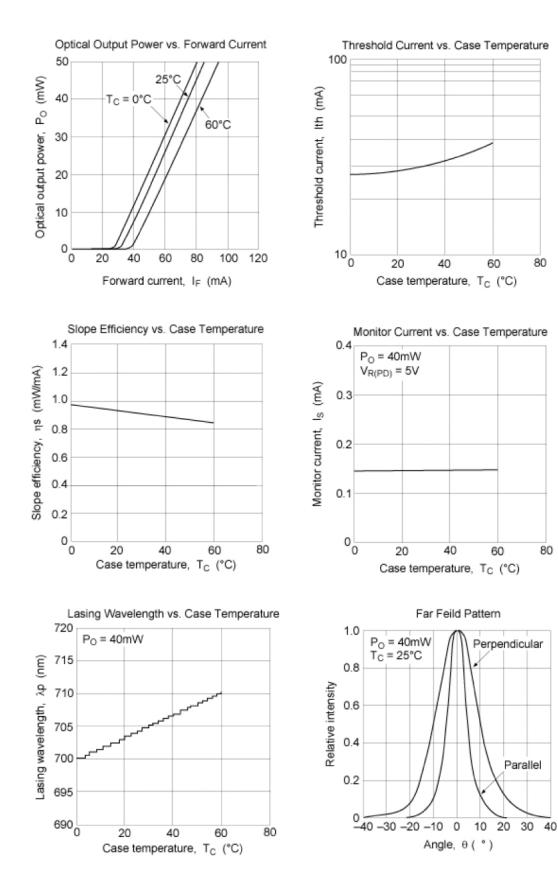
# **Optical and Electrical Characteristics (Tc=25°C)**

Parameter	Symbol	Min	Тур	Мах	Unit	Test Condition
Threshold current	lth	-	30	60	mA	-
Operating current	Іор	-	75	100	mA	Po=40mW
Operating voltage	Vop	-	2.5	-	V	Po=40mW
Beam divergence Parallel to the junction	θ//	7	9	14	o	Po=40mW, FWHM
Beam divergence Perpendicular to the junction	θ⊥	14	18	25	o	Po=40mW, FWHM
Lasing Wavelength	λρ	695	705	715	nm	Po=40mW
Monitor Current	ls	0.15	0.30	0.60	mA	Po=40mW, V <sub>R(PD)</sub> =5V

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### **Typical Characteristic Curves**



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