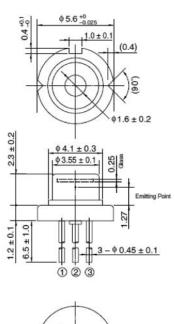
# HL7301MG-A/02MG-A

730nm/50mW

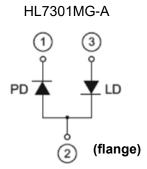
InGaAsP Laser Diode

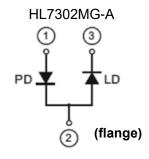
### **Outline**





### **Internal Circuit**





#### **Features**

- Operation temperature: -10~+60°C
- Optical output power: 40mW(CW)
- Infrared lasing: 730nm Typ. (Po=40mW)
- Low operating voltage: 2.5V Typ. (Po=40mW)
- Package: φ5.6mm
- Single transverse mode
- TE mode oscillation

### **Application**

- Medical
- Measurement
- Laser module
- Sensing

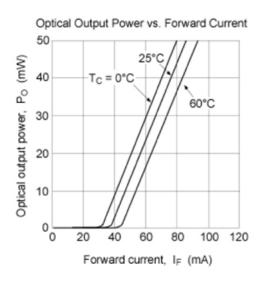
## **Absolute Maximum Ratings (Tc=25°C)**

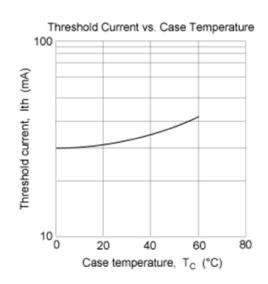
Item	Symbol	Ratings	Unit
Optical output power	Ро	50	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	30	V
Operating Temperature	Topr	-10 ~ +60	°C
Storage Temperature	Tstg	-40 ~ +85	°C

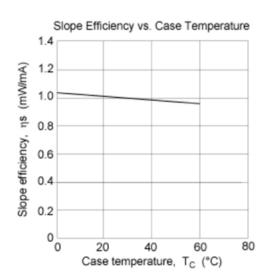
## Optical and Electrical Characteristics (Tc=25°C)

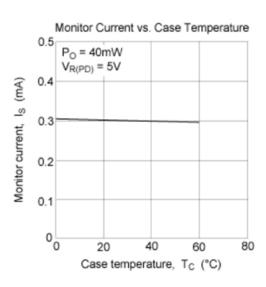
Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Threshold current	Ith	-	30	60	mA	-
Operating current	lop	-	75	100	mA	Po=40mW
Operating voltage	Vop	-	2.5	-	V	Po=40mW
Beam divergence Parallel to the junction	θ//	7	9	14	0	Po=40mW, FWHM
Beam divergence Perpendicular to the junction	θ⊥	14	18	25	0	Po=40mW, FWHM
Lasing Wavelength	λр	720	730	740	nm	Po=40mW
Monitor Current	Is	0.15	0.30	0.60	mA	Po=40mW, V <sub>R(PD)</sub> =5V

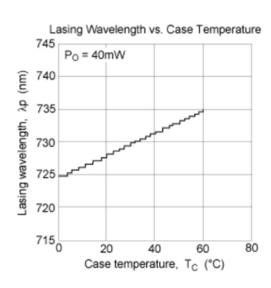
### **Typical Characteristic Curves**

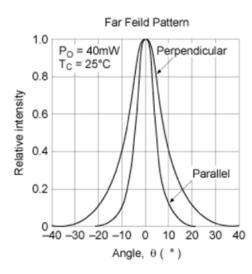












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## HL7301MG-A/02MG-A

Data Sheet

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Email: info@symphotony.com Web: https://www.symphotony.com/