## Data Sheet

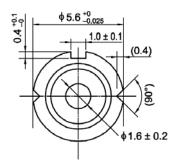
## HL6364DG/65DG

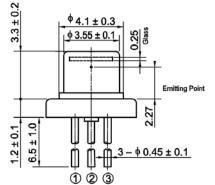
642nm/65mW

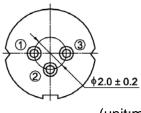
AlGaInP Laser Diode

# USHIO

#### Outline







(unit:mm)

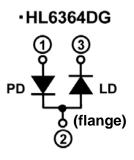
#### **Features**

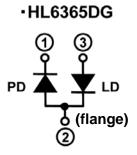
- Visible light output: 642nm Typ.
- Optical output power: 60mW (CW)
- Single transverse mode
- Low operating current: 125mA Typ.
- Low operating voltage: 2.7V Max.
- Operating temperature: +50°C
- TE mode oscillation

### Application

- Laser leveler
- Laser scanner
- Light source of optical equipments

**Internal Circuit** 







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

Item	Symbol	Ratings	Unit	
Optical output power	Po	65	mW	
LD Reverse Voltage	VR(LD)	2	V	
PD Reverse Voltage	Vr(pd)	30	V	
Operating Temperature	Topr	-10 ~ +50	°C	
Storage Temperature	Tstg	-40 ~ +85	°C	

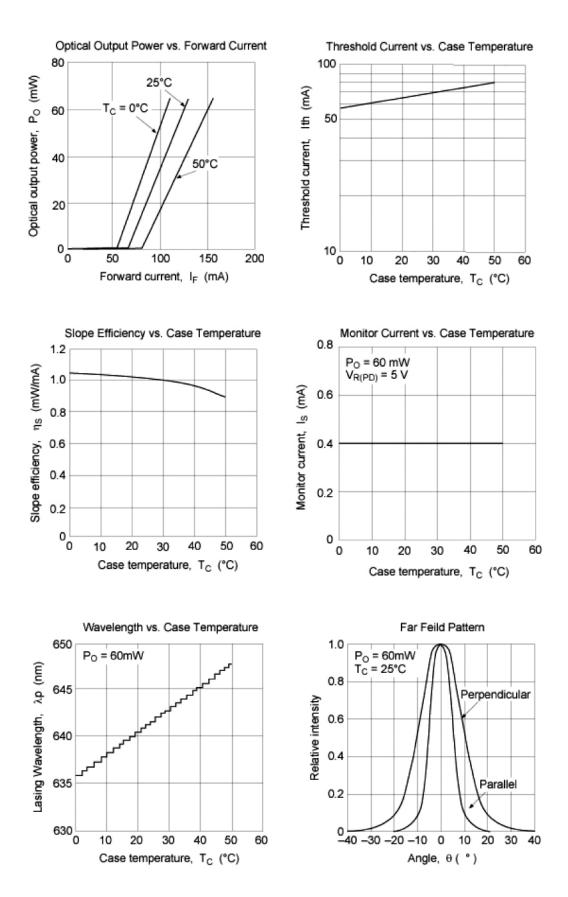
### **Optical and Electrical Characteristics (Tc=25°C)**

Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Threshold current	lth	-	65	80	mA	-
Operating current	Іор	-	125	155	mA	Po=60mW
Operating voltage	Vop	-	2.5	2.7	V	Po=60mW
Beam divergence Parallel to the junction	θ//	7	10	13	0	Po=60mW, FWHM
Beam divergence Perpendicular to the junction	θ⊥	16	21	24	0	Po=60mW, FWHM
Lasing Wavelength	λρ	635	642	645	nm	Po=60mW
Monitor Current	ls	0.2	0.4	0.8	mA	Po=60mW, V <sub>R(PD)</sub> =5V

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#### **Typical Characteristic Curves**



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1. The laser light is harmful to human body especially to eye no matter what directly or indirectly. The laser beam shall be observed or adjusted through infrared camera or equivalent.

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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