



## Product Status Information

HL6364DG-A/65DG-A are Not Recommended for New Design (NRND) status. Please refer to successor product below for new designs and adoptions.

NRND Product	Successor Product
HL6364DG-A	HL6366DG-A
<a href="https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL6364DG.pdf">https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL6364DG.pdf</a>	<a href="https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL6366DG.pdf">https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL6366DG.pdf</a>

NRND Product	Successor Product
HL6365DG-A	HL6367DG-A
<a href="https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL6365DG.pdf">https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL6365DG.pdf</a>	<a href="https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL6367DG.pdf">https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL6367DG.pdf</a>

For the “Product Life Cycle” definition, please refer to below link.

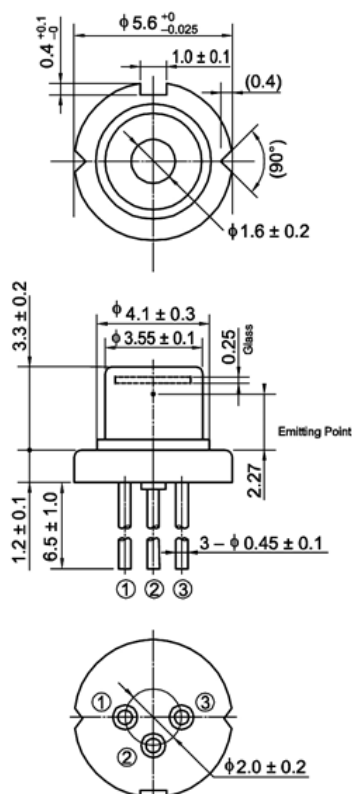
Japanese; <https://www.ushio.co.jp/jp/laser/news/500958.html>

English; <https://www.ushio.co.jp/en/laser/news/500958.html>

## HL6364DG-A/65DG-A

642nm / 65mW AlGaInP Laser Diode

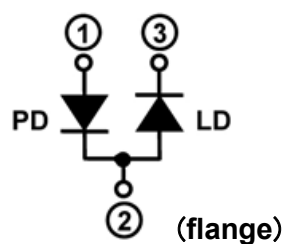
### Outline



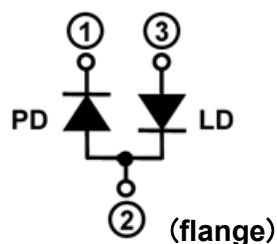
(unit:mm)

### Internal Circuit

HL6364DG-A



HL6365DG-A



### 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

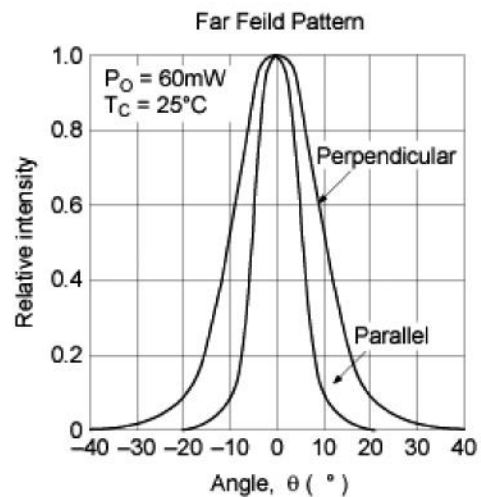
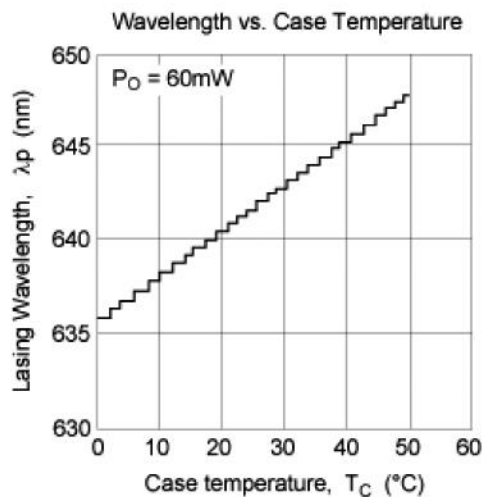
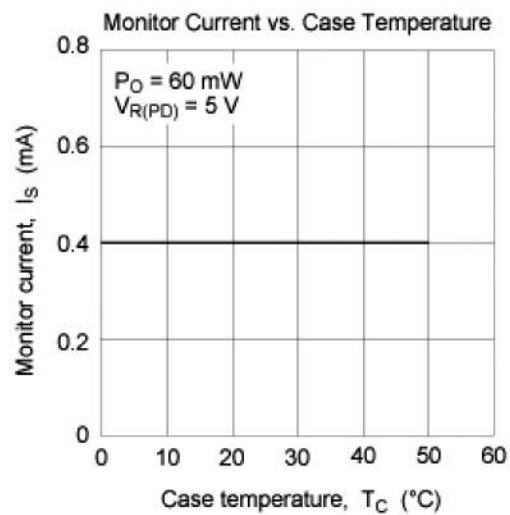
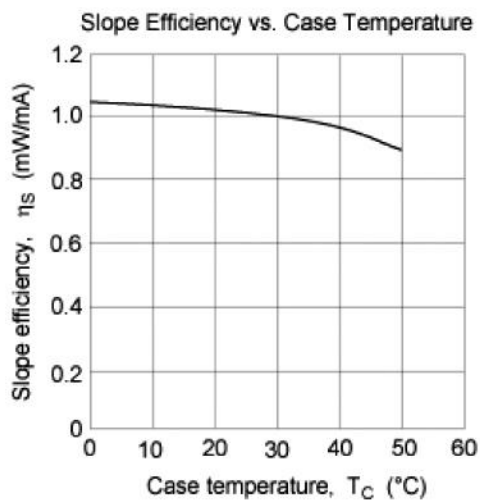
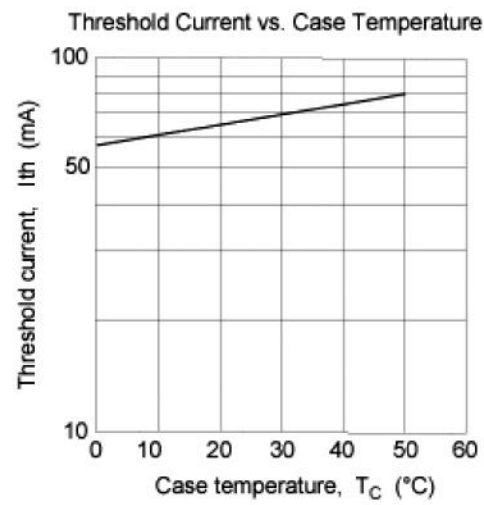
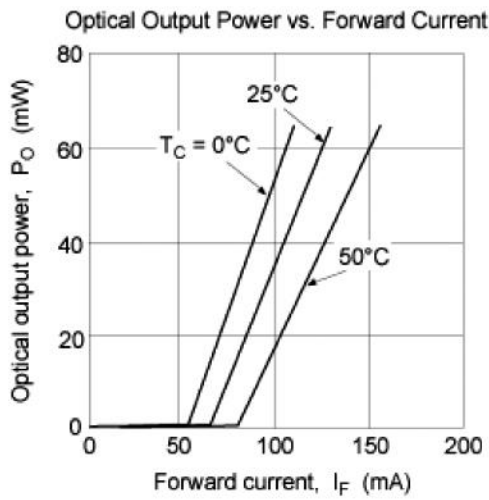
**Absolute Maximum Ratings (Tc=25°C)**

Item	Symbol	Ratings	Unit
Optical output power	Po	65	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	30	V
Operating Temperature	T <sub>opr</sub>	-10 ~ +50	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	°C

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

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

## Typical Characteristic Curves



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