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
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_HL6366DG.pdf

NRND Product	Successor Product
HL6365DG-A	HL6367DG-A
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_HL6367DG.pdf

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

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

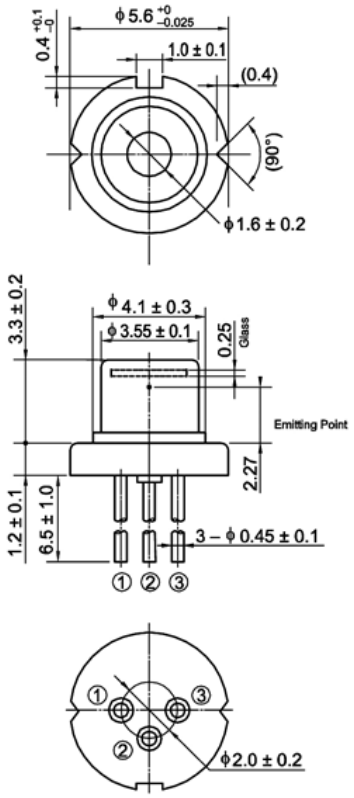
English; https://www.ushio.co.jp/en/laser/news/500958.html

Data Sheet

HL6364DG-A/65DG-A

642nm / 65mW AlGaInP Laser Diode

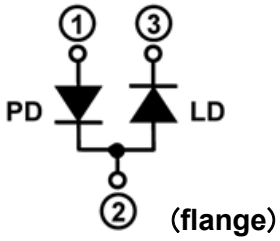
Outline



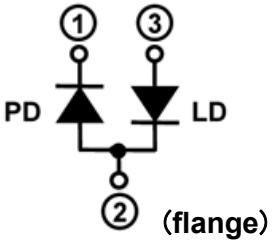
(unit:mm)

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: +50ºC
- TE mode oscillation

Application

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

Absolute Maximum Ratings (Tc=25°C)

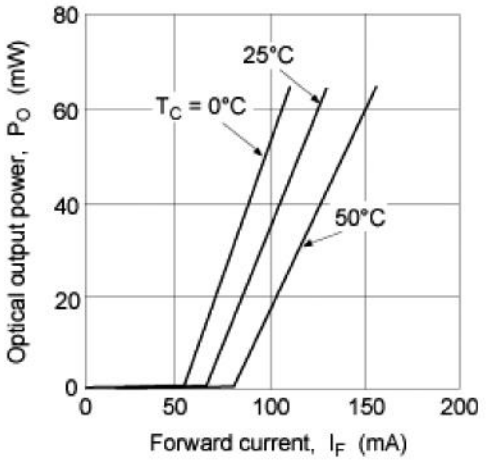
Item	Symbol	Ratings	Unit
Optical output power	Po	65	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operating Temperature	Topr	-10 ~ +50	°C
Storage Temperature	Tstg	-40 ~ +85	°C

Optical and Electrical Characteristics (Tc=25°C)

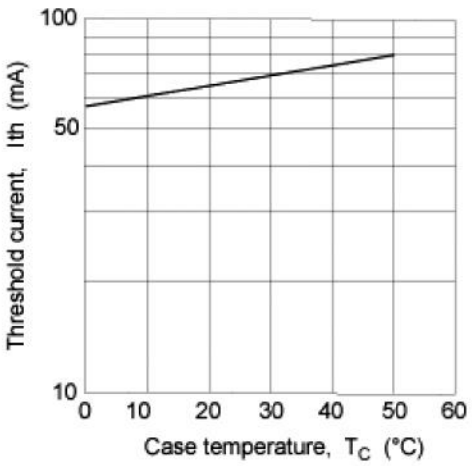
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	Ith	-	65	80	mA	-
Operating current	Iop	-	125	155	mA	Po=60mW
Operating voltage	Vop	-	2.5	2.7	V	Po=60mW
Beam divergence Parallel to the junction	θ//	7	10	13	°	Po=60mW, FWHM
Beam divergence Perpendicular to the junction	θ⊥	16	21	24	°	Po=60mW, FWHM
Lasing Wavelength	λp	635	642	645	nm	Po=60mW
Monitor Current	Is	0.2	0.4	0.8	mA	Po=60mW, $V_{R(PD)}$=5V

Typical Characteristic Curves

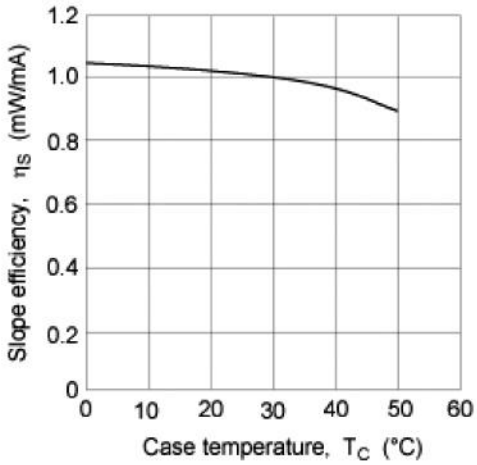
Optical Output Power vs. Forward Current



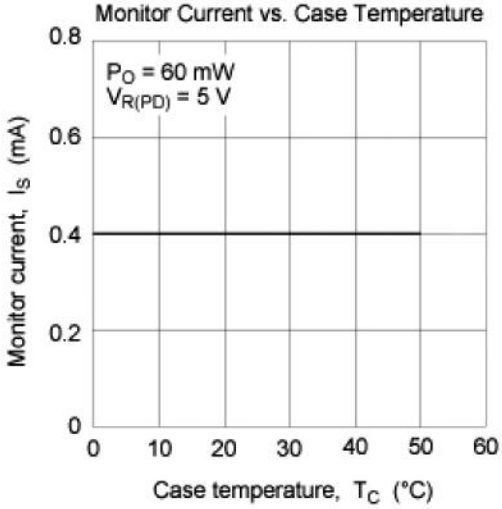
Threshold Current vs. Case Temperature



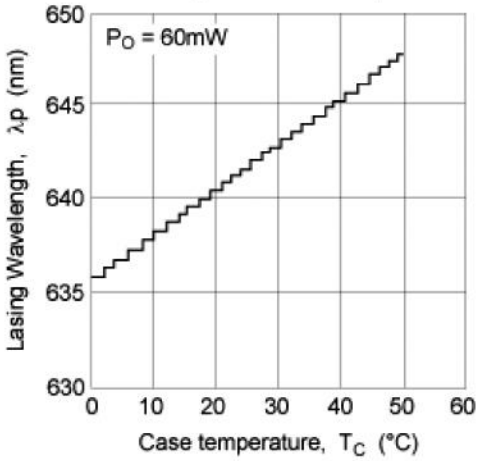
Slope Efficiency vs. Case Temperature



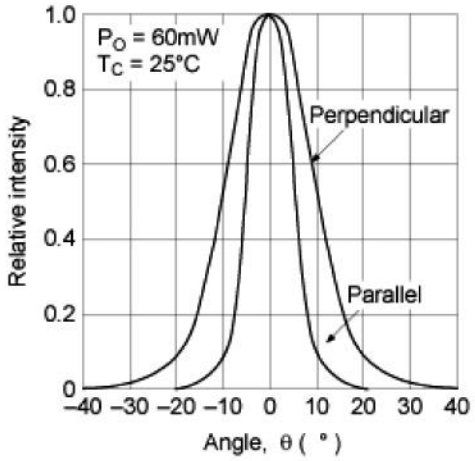
Monitor Current vs. Case Temperature



Wavelength vs. Case Temperature



Far Feild Pattern



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