



Product Status Information

HL6322G-A is Not Recommended for New Design (NRND) status. Please refer to successor product below for new design and adoption.

NRND Product	Successor Product
HL6322G-A	HL6360MG-A
https://www.ushio.co.jp/products/product_file/file/UIE_DS_HL6322G.pdf	https://www.ushio.co.jp/products/product_file/file/UIE_DS_HL6360MG.pdf

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

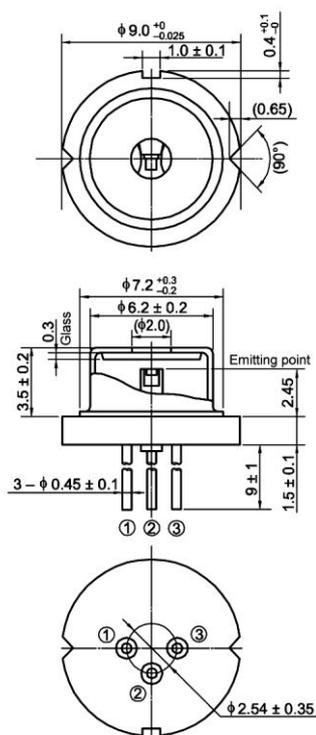
Japanese; <https://www.ushio.co.jp/laser/news/500958.html>

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

HL6321G-A/22G-A

638nm / 15mW AlGaInP Laser Diode

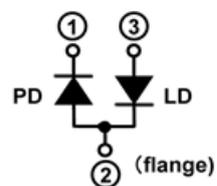
Outline



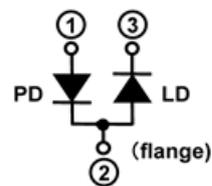
(unit: mm)

Internal Circuit

HL6321G-A



HL6322G-A



Features

- Optical output power: 15mW(CW)
- Visible light output: 638nm Typ.
- Low operating current: 100mA Max.
- Low operating voltage: 2.7V Max.
- TM mode oscillation
- Single transverse mode

Application

- Laser lever
- Laser module
- Optical equipment for measurement

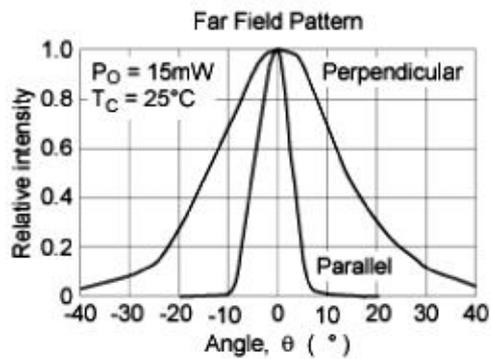
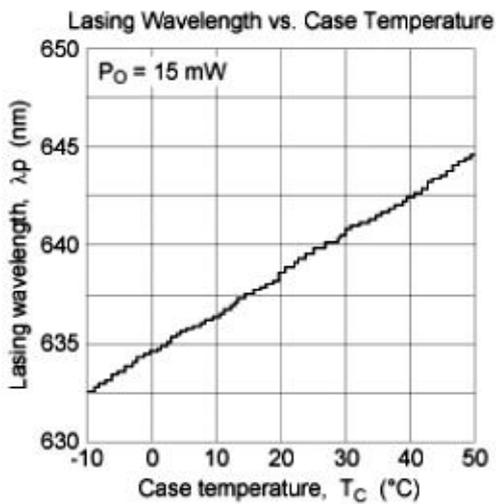
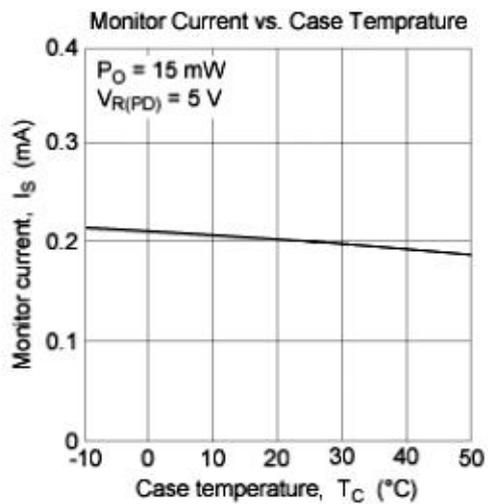
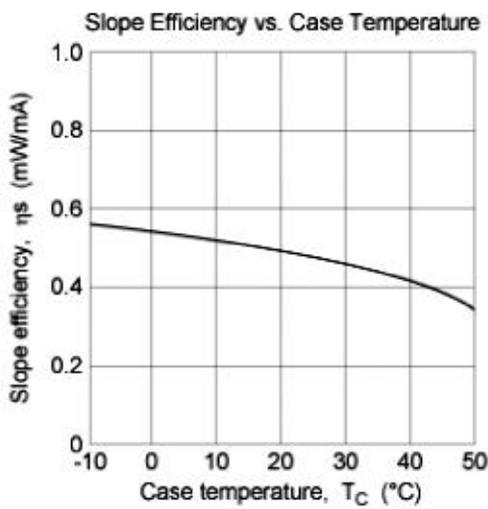
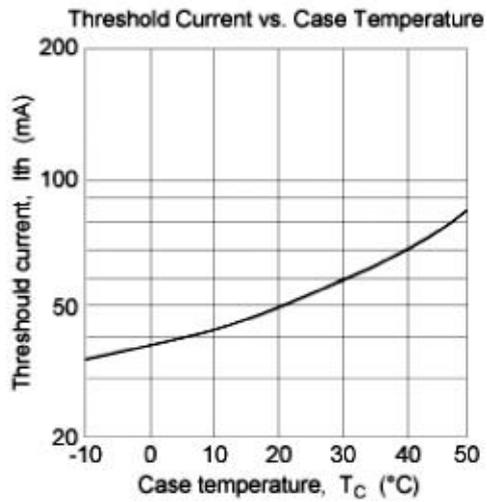
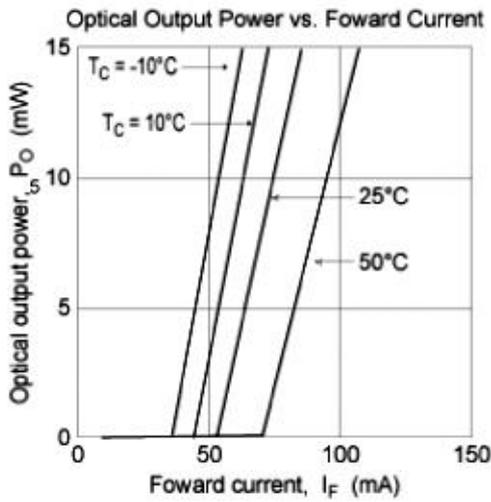
Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	15	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	I _{th}	20	55	70	mA	-
Operating current	I _{op}	-	85	100	mA	Po=15mW
Operating voltage	V _{op}	-	-	2.7	V	Po=15mW
Slope efficiency	η _s	0.3	-	0.7	mW/mA	9(mW)/(I _(12mW) - I _(3mW))
Monitor current	I _s	0.1	0.2	0.4	mA	Po=15mW, V _{R(PD)} =5V
Lasing Wavelength	λ _p	630	638	640	nm	Po=15mW
Beam divergence Parallel to the junction	θ _{//}	6	8	11	°	Po=15mW FWHM
Beam divergence Perpendicular to the junction	θ _⊥	25	30	36	°	Po=15mW FWHM

Typical Characteristic Curves



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