



Product Status Information

HL6359MG-A is Not Recommended for New Design (NRND) status. Please refer to successor product below for new design and adoption.

NRND Product	Successor Product
HL6359MG-A	HL6358MG-A
https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL6359MG.pdf	https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL6358MG.pdf

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

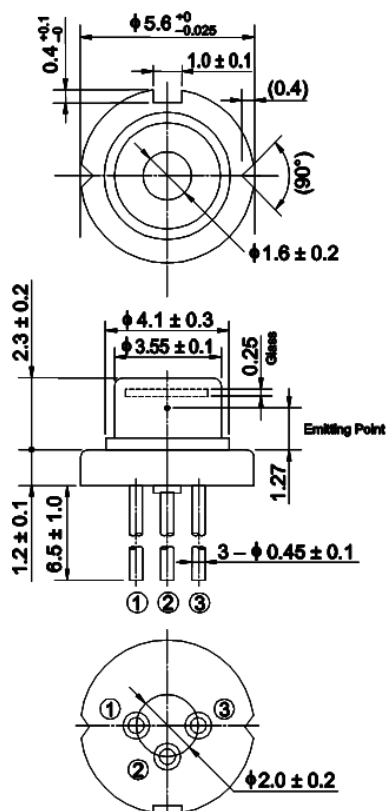
Japanese; <https://www.ushio.co.jp/jp/laser/news/500958.html>

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

HL6358MG-A/59MG-A

639nm / 12mW AlGaInP Laser Diode

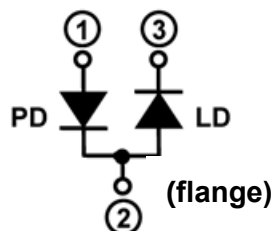
Outline



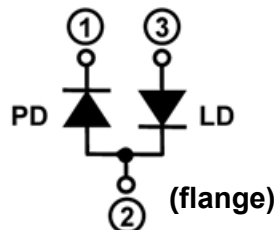
(unit:mm)

Internal Circuit

HL6358MG-A



HL6359MG-A



Features

- Visible light output: 639 nm Typ.
- Optical output power: 10 mW (CW)
- Single transverse mode
- Low operating current: 40 mA Typ.
- Low operating voltage: 2.5 V Max.
- Operating temperature: +50°C
- TE mode oscillation

Application

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

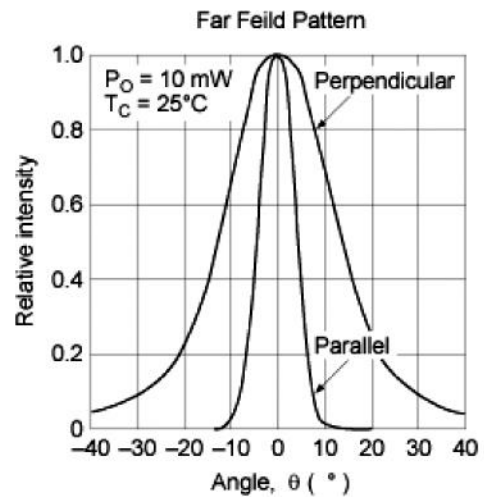
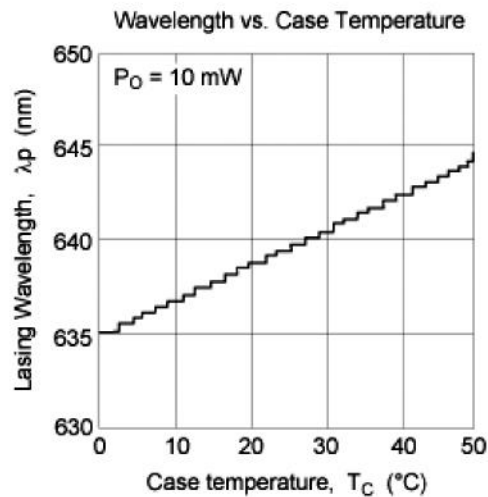
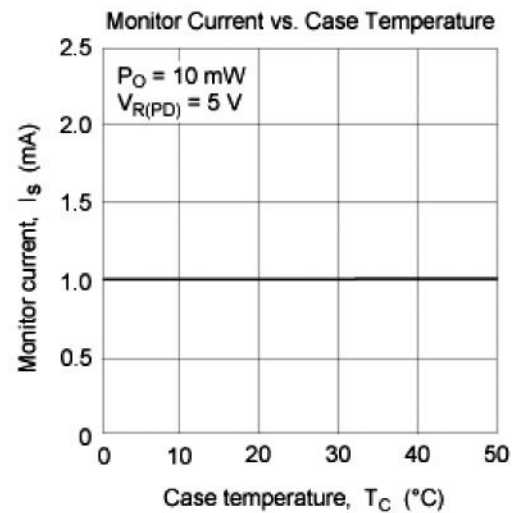
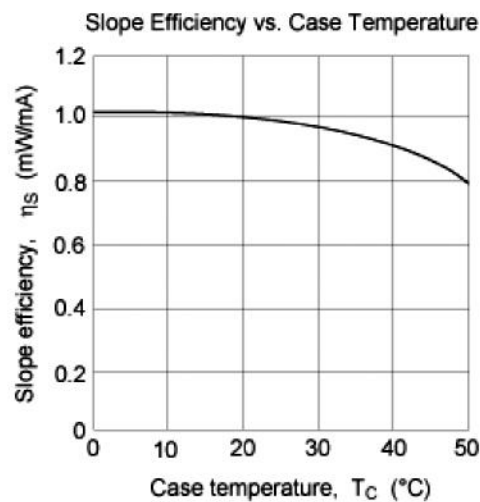
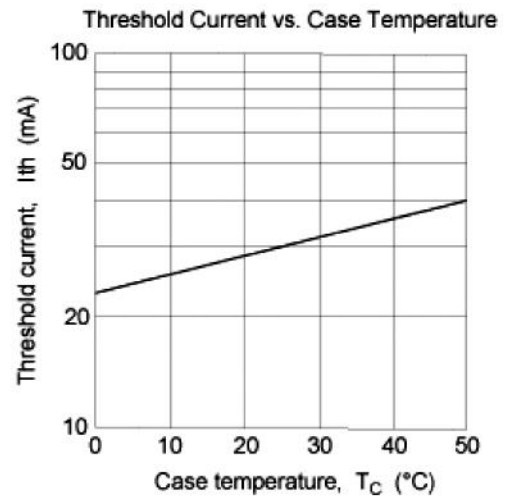
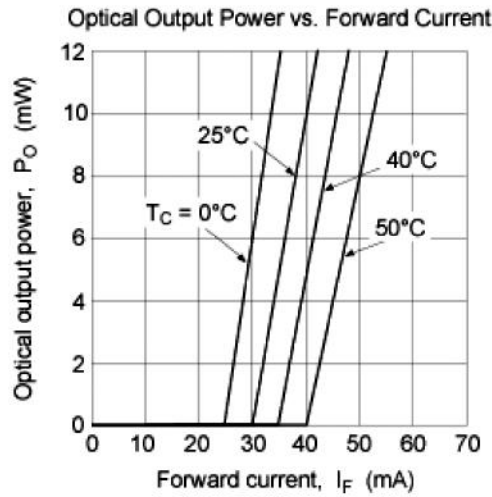
Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	P _o	12	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _{opr}	-10 ~ +50	°C
Storage Temperature	T _{stg}	-40 ~ +85	°C

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I _{th}	-	30	35	mA	-
Operating current	I _{op}	-	40	50	mA	P _o =10mW
Operating voltage	V _{op}	-	2.3	2.5	V	P _o =10mW
Beam divergence Parallel to the junction	θ _{//}	6	8	11	°	P _o =10mW, FWHM
Beam divergence Perpendicular to the junction	θ _⊥	16	21	24	°	P _o =10mW, FWHM
Lasing Wavelength	λ _p	630	639	643	nm	P _o =10mW
Monitor Current	I _s	0.5	1.0	2.0	mA	P _o =10mW, V _{R(PD)} =5V

Typical Characteristic Curves



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