



Product Status Information

HL6544FM-A is Not Recommended for New Design (NRND) status. Please refer to successor product below for new designs and adoptions.

NRND Product	Successor Product
HL6544FM-A	HL65263MG
https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL6544FM.pdf	https://www.ushio.co.jp/jp/products/product_file/file/UIE_DS_HL65263MG.pdf

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

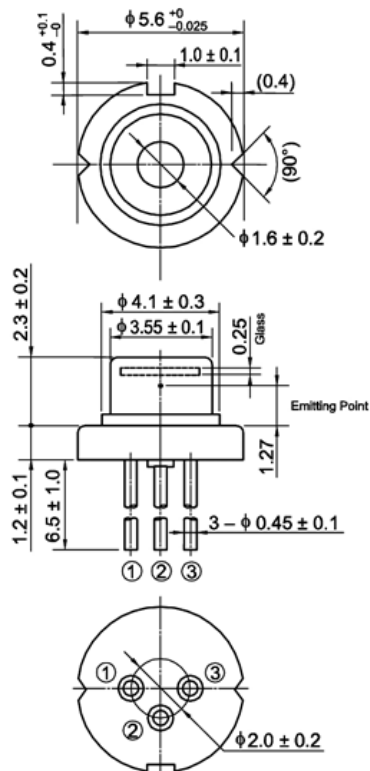
Japanese; <https://www.ushio.co.jp/jp/laser/news/500958.html>

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

HL6544FM-A

660nm / 130mW AlGaInP Laser Diode

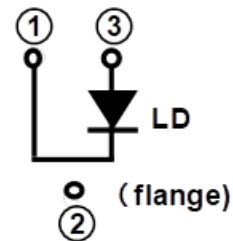
Outline



(unit:mm)

Internal Circuit

HL6544FM-A



Features

- Visible light output: 660nm Typ.
- Optical output power: 50mW (CW)
- Low operating current: 115mA Typ
- Operating temperature: +75°C
- Single transverse mode
- TE mode oscillation

Application

- Sensor application
- Light source of optical equipments

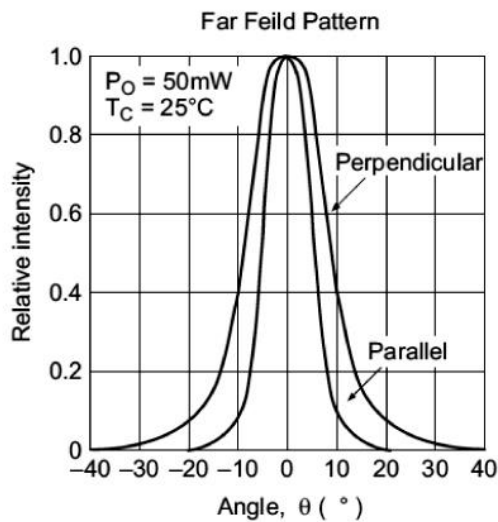
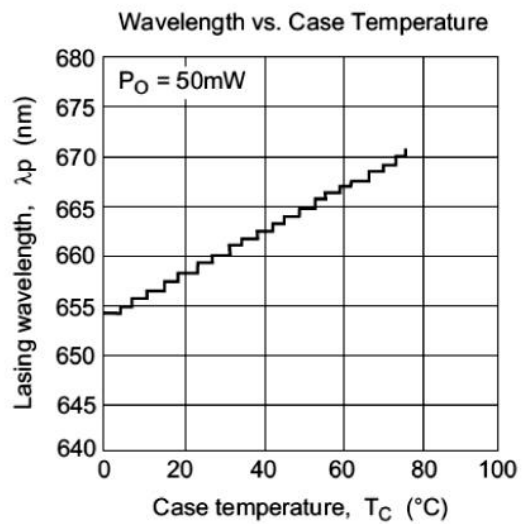
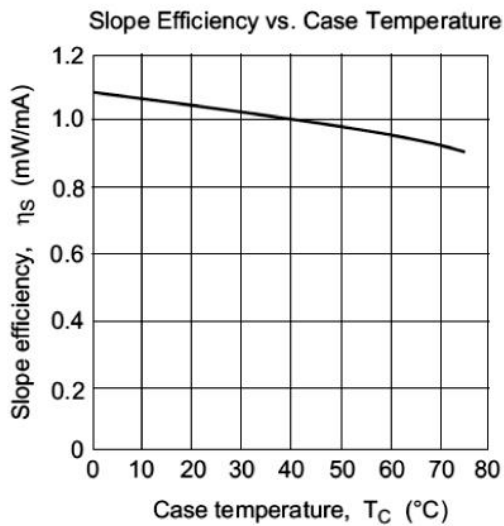
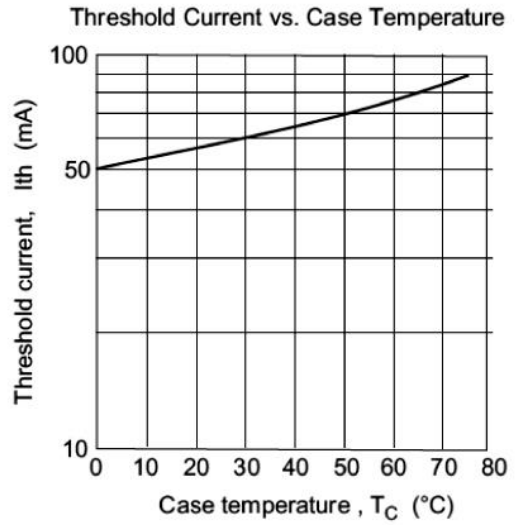
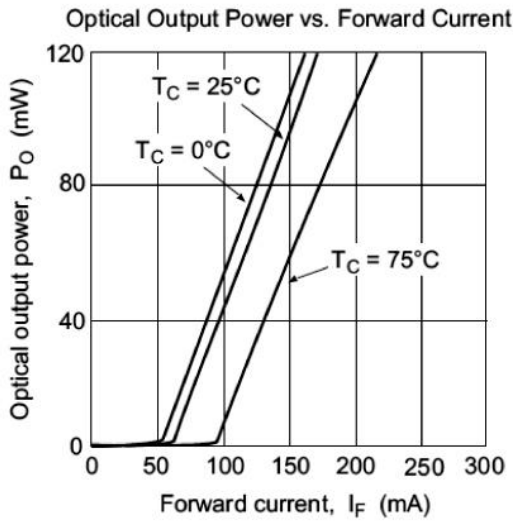
Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	130	mW
LD Reverse Voltage	V _{R(LD)}	2	V
Operating Temperature	Topr	-10 ~ +75	°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}	-	60	75	mA	-
Operating current	I _{op}	-	115	135	mA	Po=50mW
Operating voltage	V _{op}	-	2.3	2.8	V	Po=50mW
Beam divergence Parallel to the junction	θ _{//}	7	10	12	°	Po=50mW, FWHM
Beam divergence Perpendicular to the junction	θ _⊥	15	17	21	°	Po=50mW, FWHM
Lasing Wavelength	λ _p	654	660	666	nm	Po=50mW

Typical Characteristic Curves



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