Data Sheet

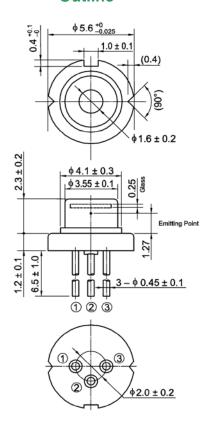
HL40053MG

404nm/500mW

Violet Laser Diode

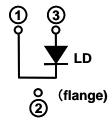


Outline



Internal Circuit

·HL40053MG



(Unit: mm)

Features

- Optical output power: 400mW (CW)
- Violet Lasing: 398~410nm
- Low operating current: 370mA Typ.
- Low operating voltage: 4.9V Max.
- Package: φ5.6mm
- Multiple transverse mode
- TE mode oscillation

Application

- Bio & Medical
- Measurement



Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Ро	500	mW
LD Reverse Voltage	V _{R(LD)}	5	V
Operating Temperature	Topr	0 ~ +30	°C
Storage Temperature	Tstg	-35 ~ +85	°C

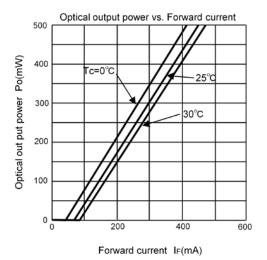
Optical and Electrical Characteristics (Tc=25°C)

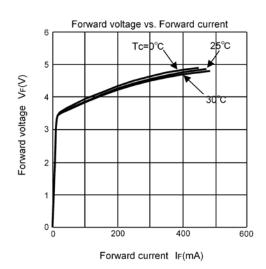
Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Threshold current	Ith	-	110	130	mA	-
Operating current	lop	-	370	410	mA	Po=400mW
Operating voltage	Vop	-	-	4.9	V	Po=400mW
Beam divergence Parallel to the junction	θ//	5	13	25	0	Po=400mW, Full angle 1/e ²
Beam divergence Perpendicular to the junction	θΤ	30	42	50	0	Po=400mW, Full angle 1/e ²
Lasing Wavelength	λр	398	404	410	nm	Po=400mW

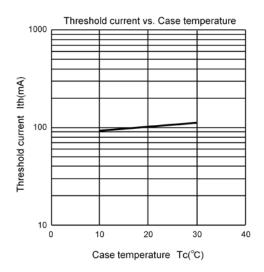
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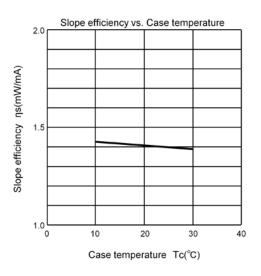


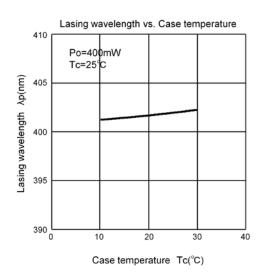
Typical Characteristic Curves

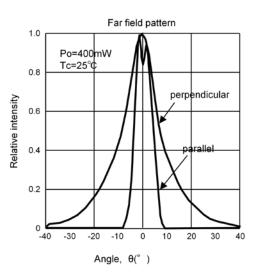












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