Data Sheet

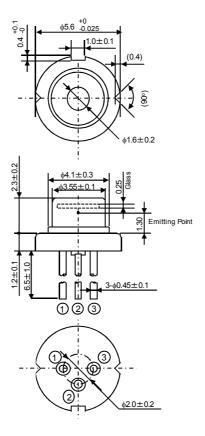
HL40065MG

405nm/600mW

Violet Laser Diode

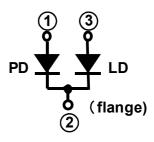


Outline



Internal Circuit

- HL40065MG



(Unit: mm)

Features

- Optical output power: 600mW (CW)
- Violet Lasing: 400~410nm
- Low operating current: 600mA Typ.
- Low operating voltage: 4.2V Typ.
- Built-in Monitor PD
- Package: φ5.6mm
- Multiple transverse mode
- TE mode oscillation

Application

- Direct Imaging for PCB
- Industry
- Bio & Medical
- Measurement



Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Ро	700	mW
LD Reverse Voltage	V _{R(LD)}	5	V
PD Reverse Voltage	V _{R(PD)}	20	V
Operating Temperature	Topr	0 ~ +30	°C
Storage Temperature	Tstg	-40 ~ +85	°C

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Threshold current	Ith	100	140	180	mA	-
Operating current	lop	450	600	700	mA	Po=600mW
Operating voltage	Vop	3.8	4.2	4.7	V	Po=600mW
Beam divergence Parallel to the junction	θ//	5	13	25	0	Po=600mW, Full angle 1/e ²
Beam divergence Perpendicular to the junction	θΤ	30	42	50	0	Po=600mW, Full angle 1/e ²
Lasing Wavelength	λр	400	405	410	nm	Po=600mW
Monitor Current (*1)	Is	1	2	5	mA	Po=600mW, V _{R(PD)} =5V

^{*1} for only initial checking

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