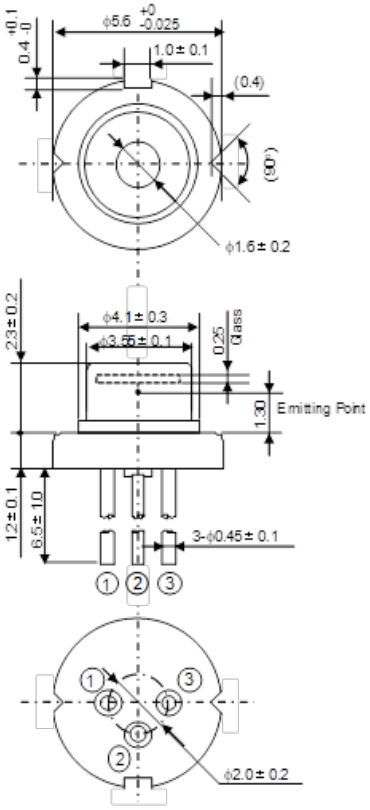
HL40113MG

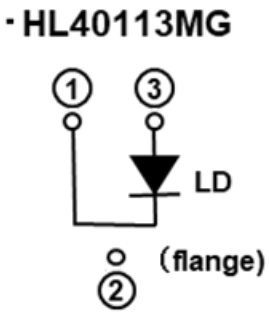
405 nm / 600 mW　Violet Laser Diode

Outline



(Unit: mm)

Internal Circuit



Features

- Optical Output Power: 600 mW (CW)
- Violet Lasing: 400 ~ 410 nm
- Low Operating Current: 500 mA Typ.
- Low Operating Voltage: 4.2 V Typ.
- Package: ϕ5.6 mm
- 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	Po	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	Typ	Max	Unit	Test Condition
Threshold Current	Ith	70	110	180	mA	-
Operating Current	Iop	450	500	650	mA	Po=600 mW
Operating Voltage	Vop	3.8	4.2	4.6	V	Po=600 mW
Beam Divergence Parallel to the Junction	θ//	5	13	25	°	Po=600 mW, Full angle $1/e^2$
Beam Divergence Perpendicular to the Junction	θ⊥	30	45	50	°	Po=600 mW, Full angle $1/e^2$
Lasing Wavelength	λp	400	405	410	nm	Po=600 mW

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