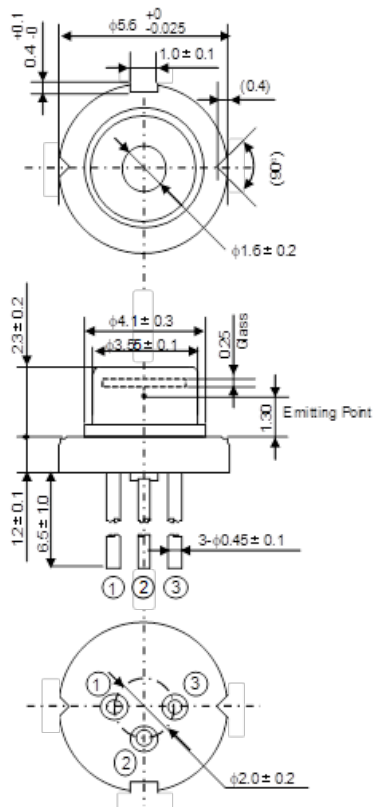




HL40115MG

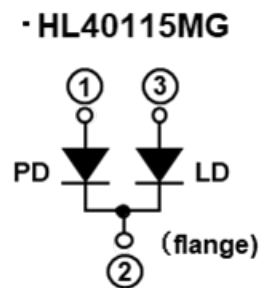
405 nm / 600 mW Violet Laser Diode

Outline



(Unit: mm)

Internal Circuit



Features

- Optical Output Power: 600 mW (CW)
- Violet Lasing: 400 ~ 410 nm
- Low Operating Current: 550 mA Typ.
- Low Operating Voltage: 4.2 V Typ.
- Built-in Monitor PD
- Package: $\phi 5.6$ 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	I _{th}	70	110	180	mA	-
Operating Current	I _{op}	450	500	650	mA	Po=600 mW
Operating Voltage	V _{op}	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	λ _p	400	405	410	nm	Po=600 mW
Monitor Current (*1)	I _m	1	2	5	mA	Po=600 mW, V _{R(PD)} =5V

*1 for only initial checking

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