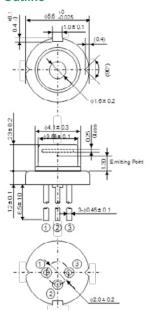




# HL40113MG

405 nm / 600 mW Violet Laser Diode

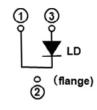
### **Outline**



(Unit: mm)

## **Internal Circuit**

# - HL40113MG



# **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:  $\phi$ 5.6 mm
- Multiple transverse mode
- TE mode oscillation.

# **Application**

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

12/20 / V1 / MaH4F / ushio/hl40113mg

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# Absolute Maximum Ratings (Tc=25°C)

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Item	Symbol	Ratings	Unit				
Optical Output Power	Ро	700	mW				
LD Reverse Voltage	V <sub>R(LD)</sub>	5	V				
PD Reverse Voltage	V <sub>R(PD)</sub>	20	V				
Operating Temperature	Topr	0 ~ +30	°C				
Storage Temperature	Tstg	-40 ~ +85	°C				

# Optical and Electrical Characteristics (Tc=25°C)

Optical and Electrical Onal acteristics (10-23-0)							
Parameter	Symbol	Min	Тур	Max	Unit	Test Condition	
Threshold Current	Ith	70	110	180	mA	-	
Operating Current	lop	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	0	Po=600 mW, Full angle 1/e <sup>2</sup>	
Beam Divergence Perpendicular to the Junction	θ⊥	30	45	50	0	Po=600 mW, Full angle 1/e <sup>2</sup>	
Lasing Wavelength	λр	400	405	410	nm	Po=600 mW	



### HL40113MG

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# HL40113MG

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