

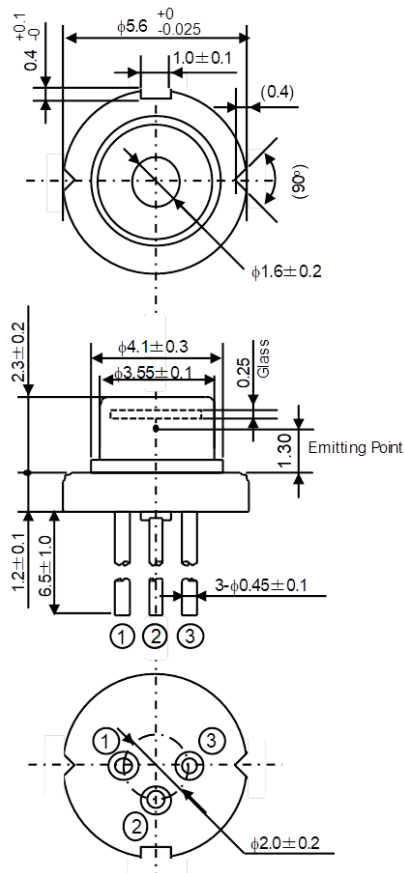
Preliminary Data Sheet

HL37013MG

375nm/200mW [CW] Ultra Violet Laser Diode

USHIO

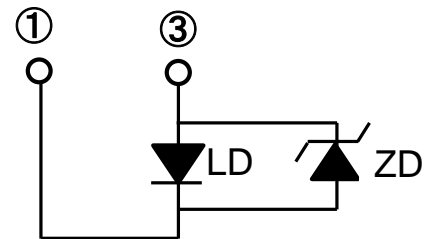
Outline



(Unit: mm)

Internal Circuit

HL37013MG



①
②

Internal Circuit

ZD: Zener Diode

Features

- Optical output power: 200mW (CW)
- Violet Lasing: 375nm Typ.
- Low operating current: 370mA Typ.
- Package: $\phi 5.6$ mm
- Multiple transverse mode
- TE mode oscillation
- Built in Zener Diode

Application

- Direct imaging
- Industry
- Bio & Medical

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power (CW)	Po	250	mW
LD Reverse Voltage	V _{R(LD)}	T.B.D	V
PD Reverse Voltage	V _{R(PD)}	20	V
Operating Temperature *1	Topr	20 ~ +30	°C
Storage Temperature	Tstg	-40 ~ +85	°C

*1. Operating temperature “Topr” is defined by Case temperature “Tc”.

Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I _{th}	-	160	-	mA	-
Operating current	I _{op}	-	370	-	mA	Po=200mW
Operating voltage	V _{op}	-	5.0	-	V	Po=200mW
Beam divergence Parallel to the junction	θ _{//}	-	14	-	°	Po=200mW, Full angle 1/e ²
Beam divergence Perpendicular to the junction	θ _⊥	-	50	-	°	Po=200mW, Full angle 1/e ²
Lasing Wavelength	λ _p	370	375	380	nm	Po=200mW

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