

BLUE LASER DIODE

YL-Φ5.6LD-405nm(C)

YL-Φ5.6LD-405nm(C)_V0.0

405nm/500mW HIGH POWER OPERATION

Dimension

◆ Features

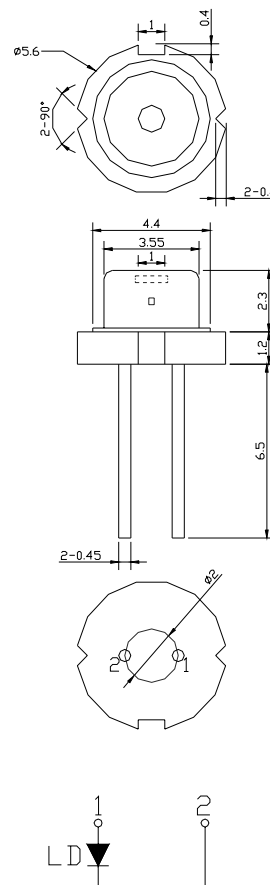
- High output power up to 500mW CW mode
- Multimode
- Single transverse mode semiconductor laser diode
- Stable wavelength

◆ Applications

- CTP Printing
- Light source of SLA 3D printing
- Phosphor pumping
- Bio-medical / Dental

◆ Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_0	CW	500	mW
Reverse voltage (LD)	V_R	-	2	V
Case Temperature	T_C	-	0~+40	°C
Storage temperature	T_S	-	-40~+85	°C



◆ Electrical and optical characteristics

(TC=25°C)

Parameter	Symbol	Min	Typ.	Max.	Unit	Condition (CW)
Peak wavelength	λ	400	406	413	nm	Po = 500mW
Threshold current	I_{th}	-	135	160	mA	
Operating current	I_{op}	-	430	500	mA	
Operating voltage	V_{op}	-	4.7	5.0	V	
Differential efficiency		-	1.7	-	mW/mA	Po = 100~500mW
Parallel FFP deviation angle		-5	-	+5	deg	Po = 50mW
Perpendicular FFP deviation angle		600	0.0	0.0	0	NA=0.13

●Precautions

- * Do not operate the device above maximum ratings. Doing so may cause unexpected and permanent damage to the device.
- * Take precautions to avoid electrostatic discharge and / or momentary power spikes. A change in the characteristics of the laser or premature failure may result.
- * Proper heat sinking of the device assures stability and lifetime. Always ensure the maximum operating temperatures are not exceeded.
- * Observing visible or invisible laser beams with the human eye directly, or indirectly, can cause permanent damage. Use a camera to observe the laser.
- * No laser device should be used in any application or situation where life or property is at risk in event of device failure.
- * Specifications are subject to change without notice. Ensure that you have the laser specification by contacting us prior to purchase or use of the product.

**For reference only. Contents above are subject to change without notice.*