

# Blue-violet Laser Diode

Part No: LD-405-2A-70-E-2



## Features

- ※ Short wavelength:  $\lambda=405\text{nm}$ (Type)
- ※ Threshold current:  $I_{th}=60\text{mA}$ (Type)
- ※ Output optical power: 200mW
- ※ Package: T0-18( $\Phi 5.6\text{mm}$ )

## Applications

- ※ Blu-ray Disc/HD DVD RW
- ※ Industrial Use

## Absolute Maximum Rating at $T_c=25^\circ\text{C}$

Items	Symbols	Values	Unit
Optical Output Power	$P_o$	200	mW
Laser Diode Reverse Voltage	$V_r$	5	V
Operating Temperature	$T_{op}$	$-10\sim+70$	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	$-40\sim+80$	$^\circ\text{C}$

## Electrical and Optical Characteristics at $T_c=25^\circ\text{C}$

Items	Symbols	Min	Type	Max.	Unit	Condition
Optical Output Power	$P_o$	-	200	-	mW	CW
Threshold Current	$I_{th}$	-	60	80	mA	CW
Operating Current	$I_{op}$	-	200	220	mA	$P_o=200\text{mW}$
Slope Efficiency	$\eta$	-	1.3	1.6	mW/mA	CW
Operating Voltage	$V_{op}$	-	4.7	5.5	V	$P_o=200\text{mW}$
Lasing Wavelength	$\lambda$	400	406	415	nm	$P_o=200\text{mW}$
Beam Divergence	//	6	10	14	$^\circ$	$P_o=200\text{mW}$
	$\perp$	16	20	24	$^\circ$	$P_o=200\text{mW}$
Beam Angle	$\Delta//$	-	-	$\pm 3$	$^\circ$	$P_o=200\text{mW}$
	$\Delta\perp$	-	-	$\pm 3$	$^\circ$	$P_o=200\text{mW}$

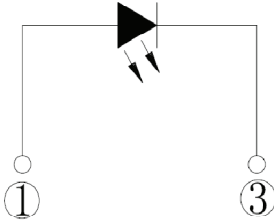
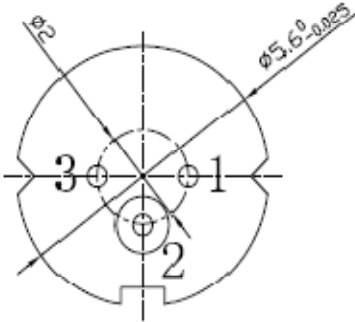
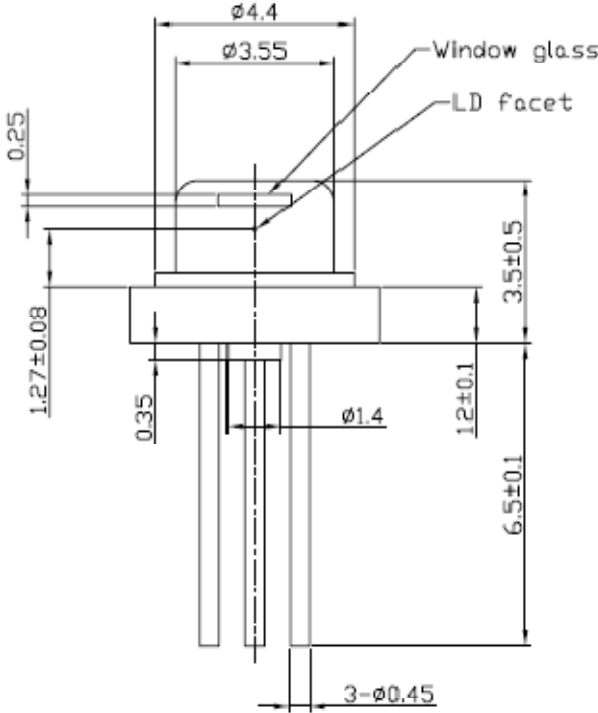
1) Measurement condition: CW

2) Full angle at half maximum.

3) All the above values are measured by OPELUS method.

# Blue-violet Laser Diode

## Package and Electrical connection



E-type