

# Blue-Violet Laser Diode

Part No: LD-405-20-70-M-2



## Features

- ※ Short wavelength:  $\lambda=405\text{nm}$ (Type)
- ※ Low threshold current:  $I_{\text{th}}=26\text{mA}$ (Type)
- ※ Output optical power: 20mW (CW)
- ※ Package: T0-18( $\Phi 5.6\text{mm}$ )

## Applications

- ※ Disc/HD DVD driver
- ※ Industrial Use

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

Items	Symbols	Values	Unit
Optical Output Power	$P_o$	20	mW
Laser Diode Reverse Voltage	V	5	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	$T_{opr}$	$0\sim+70$	$^\circ\text{C}$
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	$P_o$	-	20	-	mW	CW
Threshold Current	$I_{\text{th}}$	-	26	50	mA	CW
Operating Current	$I_{op}$	-	33	60	mA	$P_o=10\text{mW}$
Slope Efficiency	$\eta$	0.8	1.3	-	mW/mA	$P_o=10\text{mW}$
Operating Voltage	$V_{op}$	-	4.8	5.6	V	$P_o=10\text{mW}$
Monitor Current	$I_m$	0.1	0.2	1	mA	$P_o=10\text{mW}$
Lasing Wavelength	$\lambda$	395	405	415	nm	$P_o=10\text{mW}$
Beam Divergence	//	6	8.5	12	$^\circ$	$P_o=10\text{mW}$
	$\perp$	16	20	24	$^\circ$	$P_o=10\text{mW}$
Beam Angle	$\Delta$ //	-	-	$\pm 3$	$^\circ$	$P_o=10\text{mW}$
	$\Delta\perp$	-	-	$\pm 2$	$^\circ$	$P_o=10\text{mW}$

1) Measurement condition: CW

2) Full angle at half maximum.

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

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## Package and Electrical connection

