

BLUE-CYAN LASER DIODE

SDL-488-60-511M



SEMICOM
VISUAL

Features

- Short Wavelength: 488nm (Typ.)
- Low threshold current: $I_{th} = 28\text{mA}$ (Typ.)
- Optical Power: $P_o = 60\text{mW}$ (Typ.)
- Package: $\phi 5.6\text{mm}$

Applications

- Industrial use
- Medical use

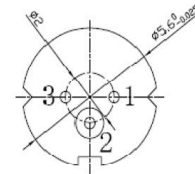
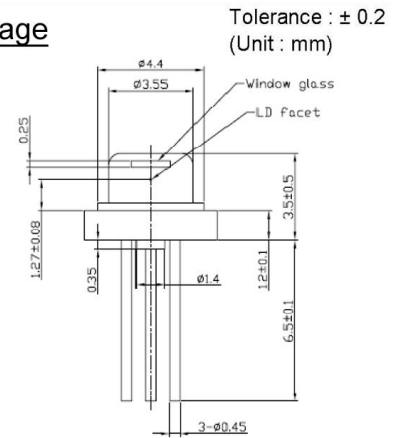
Absolute Maximum Ratings

($T_c=25^\circ\text{C}$)

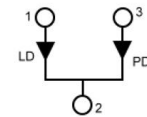
Items	Symbols	Values	Unit
Optical Output Power	P_o	60	mW
Laser Diode Reverse Voltage	V	5	V
Photo Diode Reverse Voltage	V	20	V
Operating Temperature	T_{opr}	$0 \sim +60$	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-40 \sim +80$	$^\circ\text{C}$

1) Case Temperature

Package



Pin Connection



M type (M,R)

Electrical and Optical Characteristics

($T_c=25^\circ\text{C}$)

Items	Symbols	Min	Type	Max.	Unit	Condition
Optical Output Power	P_o	-	60	-	mW	CW
Threshold Current	I_{th}	-	28	55	mA	CW
Operating Current	I_{op}	-	110	130	mA	$P_o=50\text{mW}$
Slope Efficiency	η	-	0.7	0.92	mW/mA	$P_o=50\text{mW}$
Operating Voltage	V_{op}	-	5.5	6.3	V	$P_o=50\text{mW}$
Monitor Current	I_m	0.5	1.1	1.5	mA	$P_o=50\text{mW}$
Lasing Wavelength	λ	482	488	494	nm	$P_o=50\text{mW}$
Beam Divergence	//	6	9	13	$^\circ$	$P_o=50\text{mW}$
	\perp	20	24	28	$^\circ$	$P_o=50\text{mW}$
Beam Angle	$\Delta //$	-	-	± 3	$^\circ$	$P_o=50\text{mW}$
	$\Delta \perp$	-	-	± 4	$^\circ$	$P_o=50\text{mW}$

* Angle at 50% peak intensity (full-width at half-maximum)

Note: The above specification is subject to change without notice