

BLUE-VIOLET LASER DIODE

SDL-405-5-511M



SEMICOM
VISUAL

Features

Short Wavelength: 405nm (Typ.)
Low threshold current: I_{th} = 20mA (Typ.)
Optical Power: P_o = 5mW (Typ.)
Package: ø5.6mm

Applications

Industrial use
BluRay/HDDVD drive

Absolute Maximum Ratings

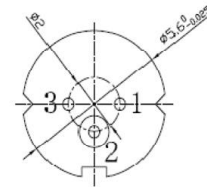
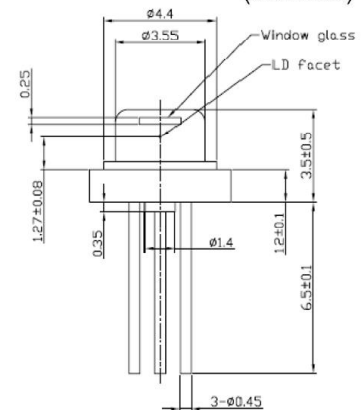
(T_c=25°C)

Items	Symbols	Values	Unit
Optical Output Power	P _o	8	mW
Laser Diode Reverse Voltage	V	5	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	T _{opr}	0~+70	°C
Storage Temperature	T _{stg}	-40~+80	°C

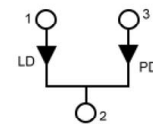
1) Case Temperature

Package

Tolerance : ± 0.2
(Unit : mm)



Pin Connection



M type (M,R)

Electrical and Optical Characteristics

(T_c=25°C)

Items	Symbols	Min	Type	Max.	Unit	Condition
Optical Output Power	P _o	-	8	-	mW	CW
Threshold Current	I _{th}	-	20	40	mA	CW
Operating Current	I _{op}	-	25	45	mA	P _o =5mW
Slope Efficiency	η	-	1.3	-	mW/mA	P _o =5mW
Operating Voltage	V _{op}	-	4.8	5.6	V	P _o =5mW
Monitor Current	I _m	0.1	0.2	1	mA	P _o =5mW
Lasing Wavelength	λ	400	405	410	nm	P _o =5mW
Beam Divergence	//	6	9	12	°	P _o =5mW
	⊥	16	20	24	°	P _o =5mW
Beam Angle	△//	-	-	±3	°	P _o =5mW
	△⊥	-	-	±2	°	P _o =5mW

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

Note: The above specification is subject to change without notice