

BLUE-VIOLET LASER DIODE

SDL-405-120-512M



SEMICOM
VISUAL

Features

Wavelength: 405nm (Typ.)
Optical power: Po = 120mW (Typ.)
Package: TO-18, Φ5.6mm (RoHS compliant)

Applications

Industrial Applications

Absolute Maximum Ratings

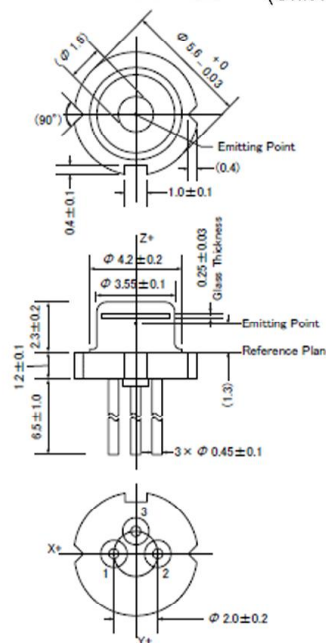
(Tc=25°C)

Parameter	Symbol	Rating	Unit
Optical Output	Po	140	mW
Reverse Voltage	Vr	5	V
Operating Temperature	Top	-10~+70	°C
Storage Temperature	Tstg	-40~+85	°C

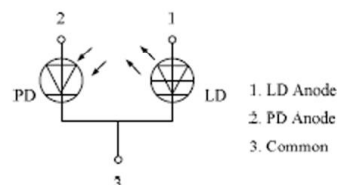
* Case Temperature

Package

Tolerance : ± 0.2
(Unit : mm)



Pin Connection



Electrical and Optical Characteristics

(Tc=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	Ith	-	-	35	50	mA
Operating Current	Iop	Po=120W	-	120	150	mA
Operating Voltage	Vop	-	-	4.8	5.5	Volt
Slope Efficiency	η	Po=120W	1.2	1.4	1.9	mW/mA
Monitor Current	Im	Po=120W	0.2	0.4	0.7	mA
Beam Divergence (FWHM)	Parallel	$\theta //$	7	9	12	deg.
	Perpendicular	$\theta \perp$	15	19.5	23	deg.
Lasing Wavelength	λ		400	405	410	nm
Beam Angle (Parallel)	$\Delta //$		-	±2	-	nm
Beam Angle (Perpendicular)	$\Delta \perp$		-	±2.5	-	mA

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

Note: The above specification is subject to change without notice