

BLUE-VIOLET LASER DIODE

SDL-405-120-502E



SEMICOM
VISUAL

Features

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

Applications

Industrial Applications

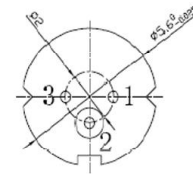
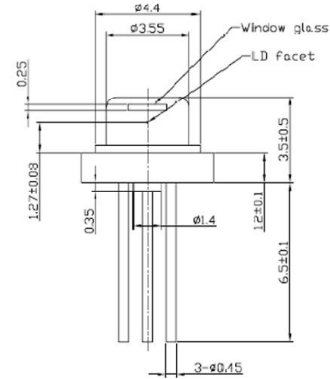
Absolute Maximum Ratings

(Tc=25°C)

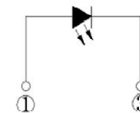
Parameter	Symbol	Rating	Unit
Optical Output (CW)	Po	120	mW
Optical Output (Pulse)	Po	200	mW
Reverse Voltage	Vr	2	V
Operating Temperature	Top	-10~+80	°C
Storage Temperature	Tstg	-40~+85	°C

* Case Temperature

Package



Pin Connection



E-type

Electrical and Optical Characteristics

(Tc=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	Ith	-	-	35	50	mA	
Operating Current	Iop	Po=100W	-	100	130	mA	
Operating Voltage	Vop	-	-	4.6	5.5	Volt	
Slope Efficiency	η	Po=100W	1.2	1.4	1.9	mW/mA	
LD Reverse Voltage		-	-	-	-	V	
Beam Divergence (FWHM)	Parallel	$\theta //$	Po=100W	7	9	12	deg.
	Perpendicular	$\theta \perp$	Po=100W	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