

BLUE-VIOLET LASER DIODE

SDL-405-150-302F



SEMICOM
VISUAL

Features

Wavelength: 405nm (Typ.)
Optical power: Po = 150mW CW (Typ.)
Package: TO-38, Φ3.8mm (RoHS compliant)

Applications

Industrial Applications
BluRay Recorder

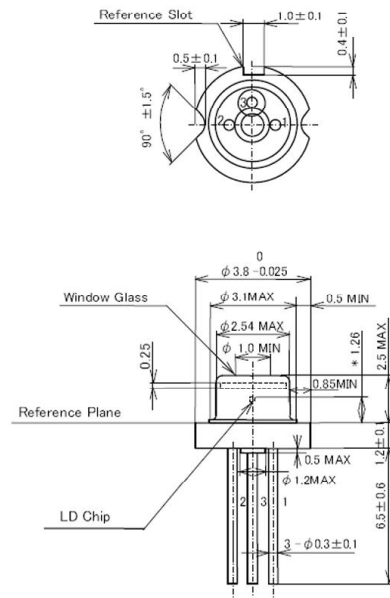
Absolute Maximum Ratings

(T_c=25°C)

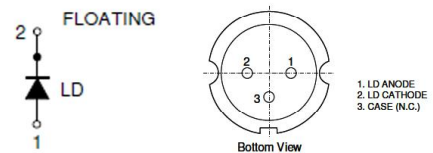
Parameter	Symbol	Rating	Unit
Optical Output (CW)	P _o	150	mW
Optical Output (Pulse)	P _o	280	mW
Reverse Voltage	V _r	2	V
Operating Temperature	T _{op}	-10~+80	°C
Storage Temperature	T _{stg}	-40~+85	°C

* Case Temperature

Package



Pin Connection



Electrical and Optical Characteristics

(T_c=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	I _{th}	-	-	45	60	mA
Operating Current	I _{op}	P _o =120W	-	120	150	mA
Operating Voltage	V _{op}	-	-	5.0	6.0	Volt
Slope Efficiency	η	P _o =120W	1.0	1.6	1.9	mW/mA
LD Reverse Voltage		-	-	-	-	V
Beam Divergence (FWHM)	Parallel	θ //	6.5	8.5	11	deg.
	Perpendicular	θ ⊥	16	19	24	deg.
Lasing Wavelength	λ		400	405	410	nm
Beam Angle (Parallel)	Δ //		-	±2	-	nm
Beam Angle (Perpendicular)	Δ ⊥		-	±2.5	-	mA

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

Note: The above specification is subject to change without notice