

VIOLET LASER DIODE

SDL-375-70-511G



SEMICOM
VISUAL

Features

- Wavelength: 375nm (Typ.)
- Optical power: $P_o = 70\text{mW}$ (Typ.)
- Package: TO-18, $\Phi 5.6\text{mm}$ (RoHS compliant)

Applications

Industrial Applications

Absolute Maximum Ratings

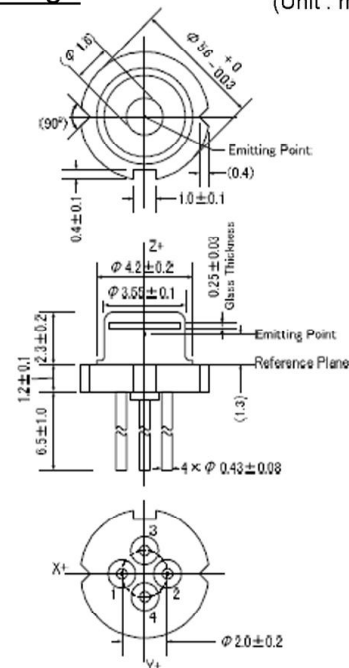
($T_c=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Optical Output	P_o	85	mW
Reverse Voltage (PD)	V_r	5	V
Operating Temperature	T_{op}	+10~+40	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40~+85	$^\circ\text{C}$

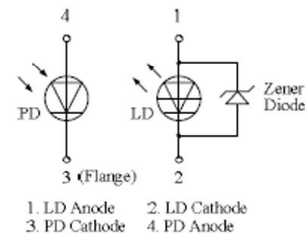
* Case Temperature

Package

Tolerance : ± 0.2
(Unit : mm)



Pin Connection



Electrical and Optical Characteristics

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	I_{th}	-	30	50	75	mA
Operating Current	I_{op}	$P_o=70\text{W}$	80	110	140	mA
Operating Voltage	V_{op}	-	4.6	5.4	6.0	Volt
Slope Efficiency	η	$P_o=70\text{W}$	0.9	1.2	1.6	mW/mA
Monitor Current	I_m	$P_o=70\text{W}$	0.05	0.2	2.0	mA
Beam Divergence (FWHM)	Parallel	$\theta_{//}$	6	9	11	deg.
	Perpendicular	θ_{\perp}	19	22.5	26	deg.
Lasing Wavelength	λ		370	375	380	nm
Beam Angle (Parallel)	$\Delta_{//}$		-	± 3	-	nm
Beam Angle (Perpendicular)	Δ_{\perp}		-	± 3	-	mA

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

Note: The above specification is subject to change without notice