

RED LASER DIODE

SDL-658-160-511B



SEMICOM
VISUAL

Features

- Wavelength: 658nm (Typ.)
- Optical power: $P_o = 160\text{mW}$ (Typ.)
- Package: $\varnothing 5.6\text{mm}$ (glass lens, RoHS compliant)

Applications

- Industrial use
- DVD-RW drives

Absolute Maximum Ratings

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

Parameter		Symbol	Ratings	Unit
Light Output	CW	P_o (CW)	80	mW
Light Output	Pulse ^{*1}	P_o (pulse)	160	mW
LD Reverse Voltage		V_r	+2	V
Operating Temperature		T_{opr}	-10 to +75	$^\circ\text{C}$
Storage Temperature		T_{stg}	-40 to +100	$^\circ\text{C}$

* Case Temperature *1 Duty Cycle <50%, Pulse Width < 50ns

Electrical and Optical Characteristics

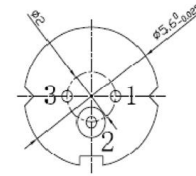
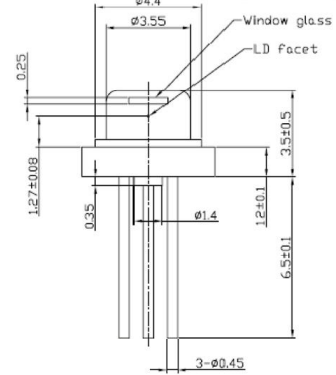
($T_c=25^\circ\text{C}$)

Parameter	Symbol	Test conditions	Min.	Typ.	Max	Unit
Threshold current	I_{th}	CW	-	60	-	mA
Operating current	I_{op}	CW, $P_o=80\text{mW}$	-	130	-	mA
Operating voltage	V_{op}	CW, $P_o=80\text{mW}$	-	2.4	3.0	V
Slope efficiency	η	CW, $P_o=80\text{mW}$	-	1.0	-	mW/mA
Peak wavelength	λ_p	CW, $P_o=80\text{mW}$	654	660	662	nm
Beam divergence angle (parallel)	$\theta_{//}$	CW, $P_o=80\text{mW}$	7	9.5	12	$^\circ$
Beam divergence angle (perpendicular)	θ_{\perp}	CW, $P_o=80\text{mW}$	14	17	20	$^\circ$

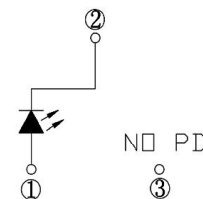
* Angle at 50% peak intensity (full-width at half-maximum)

Package

Tolerance : ± 0.2
(Unit : mm)



Pin Connection



Note: The above specification is subject to change without notice