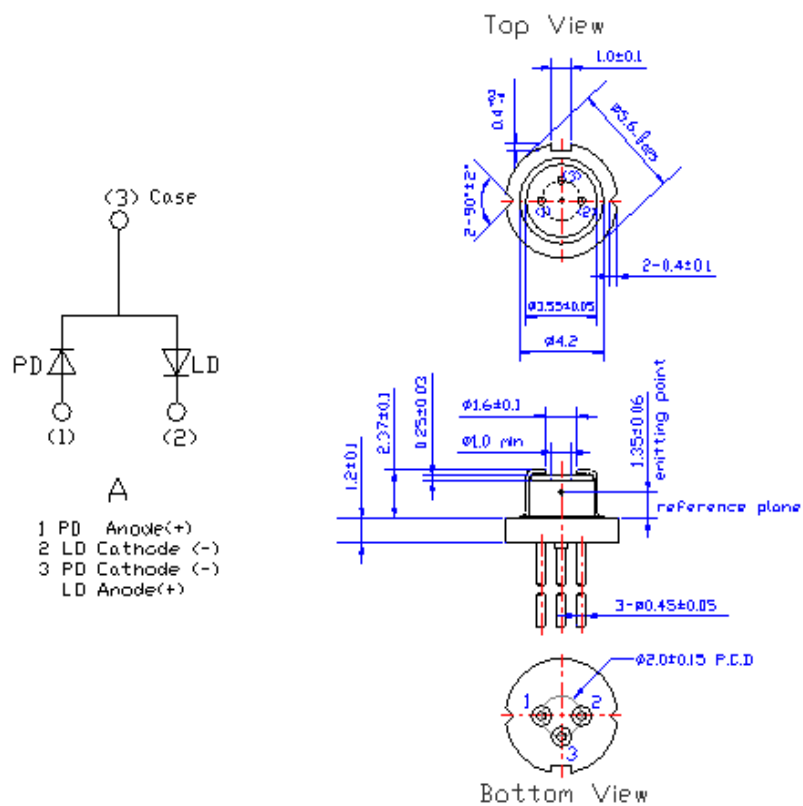


635nm Red Laser Diode LCU632051A-preliminary

■ Specifications

- (1) Device: Laser Diode
 (2) Structure: TO-18(ϕ 5.6mm), With Pb free glass cap, PD

■ External dimensions(Unit : mm)



■ Absolute Maximum Ratings($T_c=25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Optical Output	P_o	20	mW
Reverse Voltage	Laser	2	V
	PIN PD	30	V
Operating Temperature	T_{op}	-10 ~ +50	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ~ +85	$^\circ\text{C}$

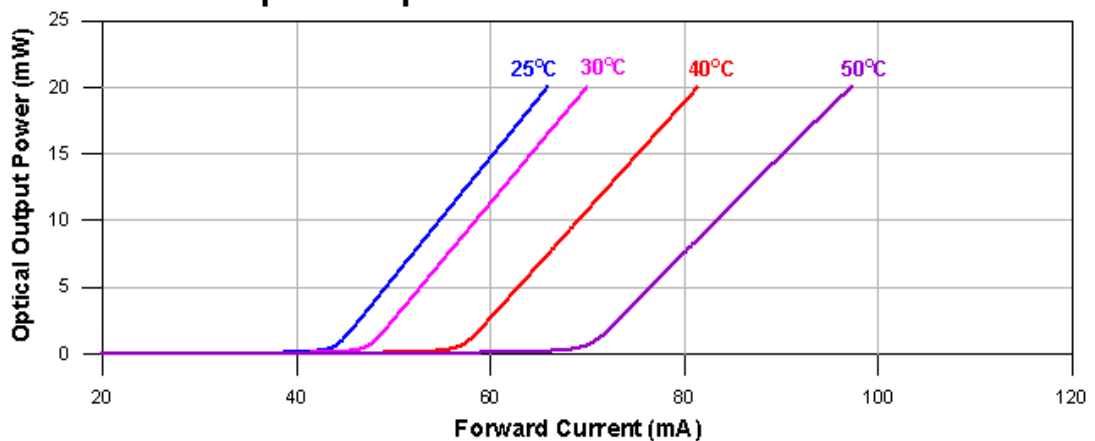
■ Electrical and Optical Characteristics(Tc=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	I _{th}	P _o =20mW	-	50	55	mA	
Operating Current	I _{op}	P _o =20mW	-	70	85	mA	
Operating Voltage	V _{op}	-	-	2.3	2.4	Volts	
Slope Efficiency	η	15mW-5mW	0.5	0.8	-	mW	
		I _{15mW} -I _{5mW}				mA	
Monitor Current	I _m	P _o =20mW	0.1	0.2	1.0	mA	
Beam Divergence (FWHM)	Parallel	$\theta //$	P _o =20mW	5	7.5	9.5	deg.
	Perpendicular	$\theta \perp$	P _o =20mW	-	33	35	deg.
Lasing Wavelength	λ	P _o =20mW	630	639	645	nm	

© $\theta //$ and $\theta \perp$ are defined as the angle within which the intensity is 50% of the peak value.

■ Typical characteristic curves

Optical Output Power v.s. Forward Current



Forward Voltage v.s. Forward Current

