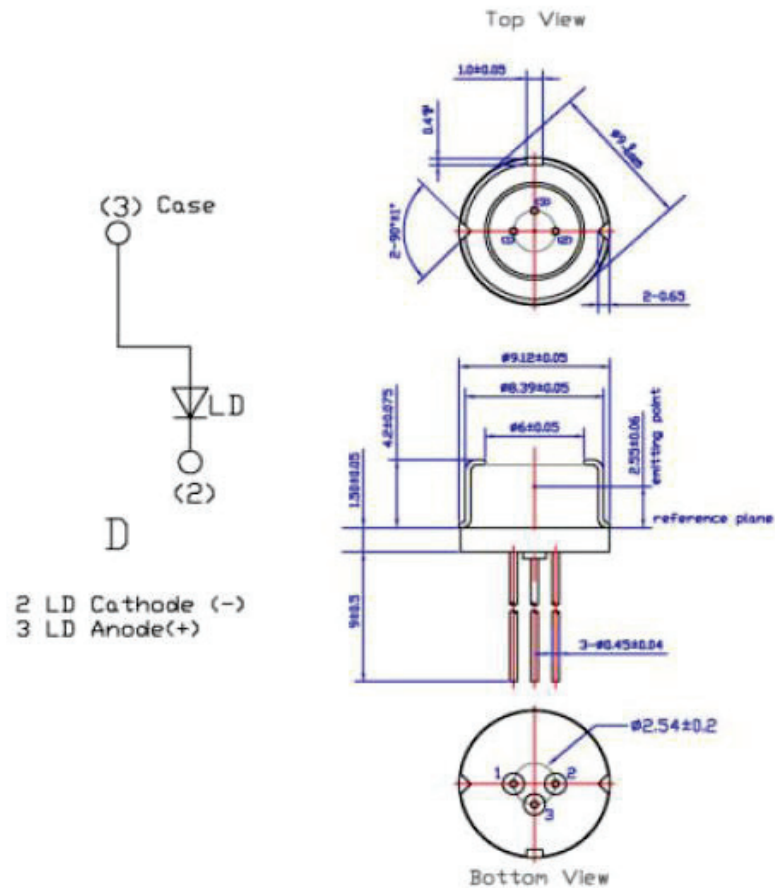


808nm IR Laser Diode LCU80J044D-preliminary

■ Specifications

- (1) Device: Laser Diode
- (2) Structure: TO-5 ($\phi 9.0\text{mm}$), With no glass cap, no PD
- (3) Power Output: 1W

■ External dimensions (Unit : mm)



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

Parameter	Symbols	Ratings	Units
Optical Output	Po	1000	mW
Reverse Voltage	Vr	2	V
Operating Temperature	Top	-10 ~ +40	$^\circ\text{C}$
Storage Temperature	Tstg	-10 ~ +85	$^\circ\text{C}$

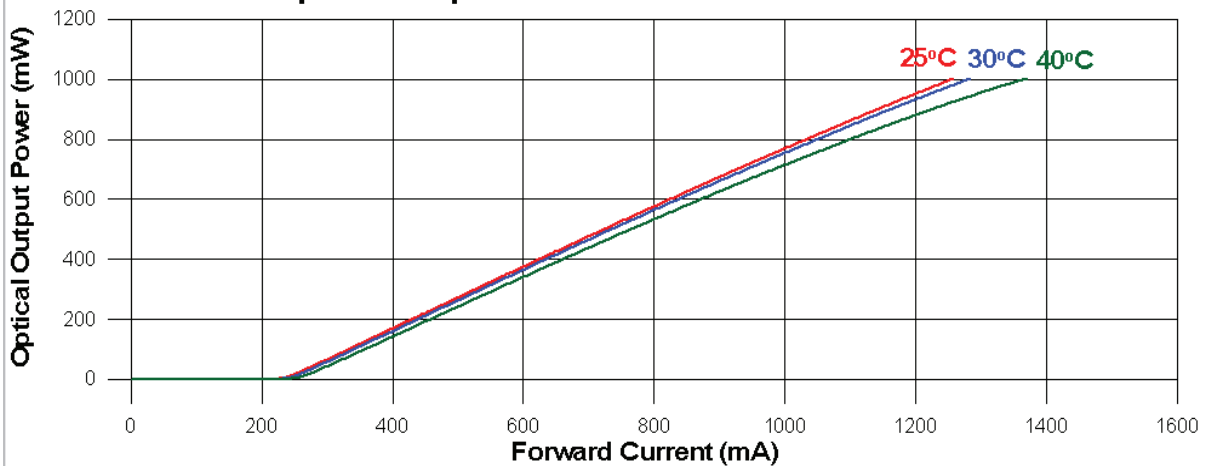
■ Electrical and Optical Characteristics(Tc=25°C)

Parameter	Symbols	Conditions	Min.	Typ.	Max.	Units	
Threshold Current	I _{th}	P _o =1W	-	220	300	mA	
Operating Current	I _{op}	P _o =1W	-	1250	1500	mA	
Operating Voltage	V _{op}	P _o =1W	1.8	2.1	2.4	Volts	
Slope Efficiency	η	750mW-250mW	0.8	1	-	mW/mA	
		I _{750mW} -I _{250mW}					
Beam Divergence (FWHM)	Parallel	θ //	P _o =1W	7	12	15	deg.
	Perpendicular	θ ⊥	P _o =1W	28	38	42	deg.
Lasing Wavelength*	λ	P _o =1W	798	808	818	nm	

◎θ // and θ ⊥ 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

