

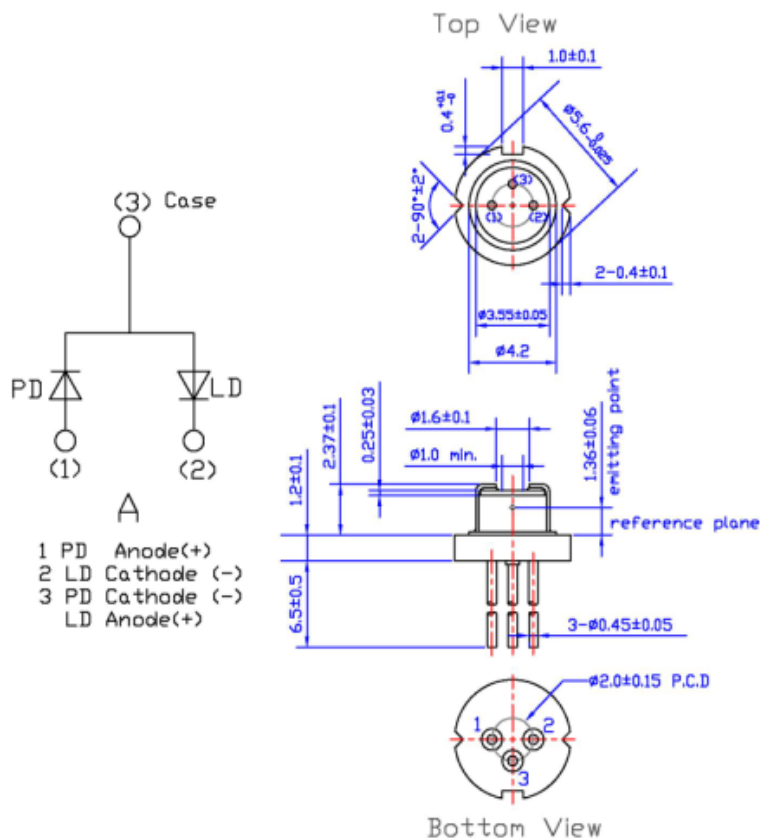
880nm Laser Diode

880nm IR Laser Diode
LCU-881061A-preliminary

■ Specifications

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

■ External dimensions(Unit : mm)



■ Features

- 1x5 micron ridge width.
- Single mode, CW, Edge emitting

■ Absolute Maximum Ratings(Tc=25°C)

Parameter	Symbol	Value	Unit	
Optical Output	Po	10	mW	
Reverse Voltage	Laser	Vr	2	V
	PIN PD	Vr(PIN)	30	V
Operating Temperature	Top	-10~+60	°C	
Storage Temperature	Tstg	-10~+85	°C	

880nm Laser Diode

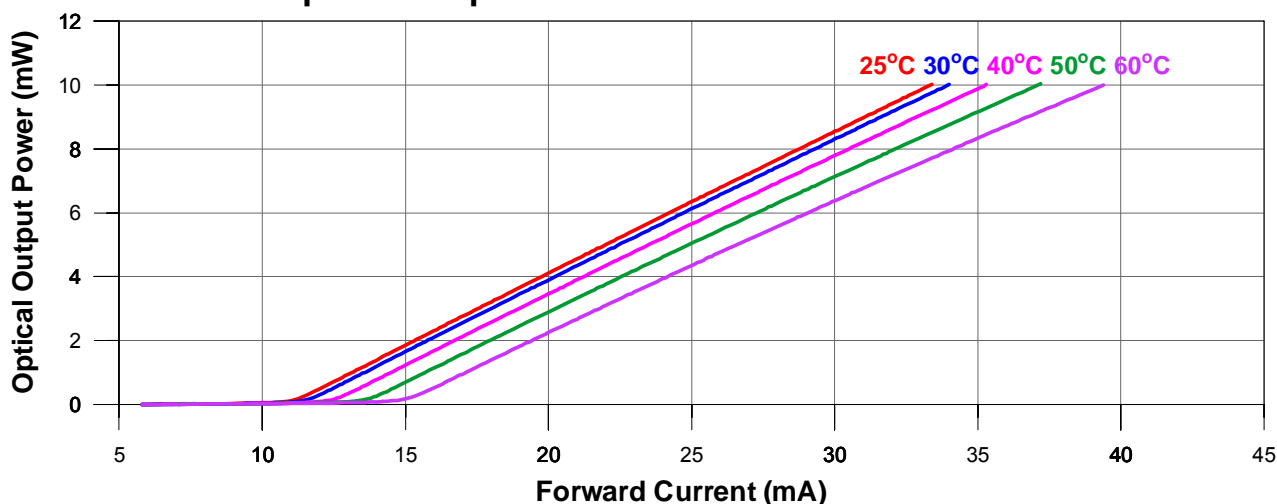
■ Electrical and Optical Characteristics(Tc=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	I _{th}	CW	-	10	15	mA	
Operating Current	I _{op}	P _o =10mW	-	29	35	mA	
Operating Voltage	V _{op}	P _o =10mW	-	2.2	2.5	Volt	
Slope Efficiency	η	7.5mW-2.5mW	0.3	0.5	-	mW/mA	
		I _{7.5mW} -I _{2.5mW}					
Monitor Current	I _m	P _o =10mW	0.2	-	0.6	mA	
Beam Divergence (FWHM)	Parallel	$\theta //$	P _o =10mW	8	12	15	deg.
	Perpendicular	$\theta \perp$	P _o =10mW	28	32	38	deg.
Lasing Wavelength	λ	P _o =10mW	870	880	890	nm	

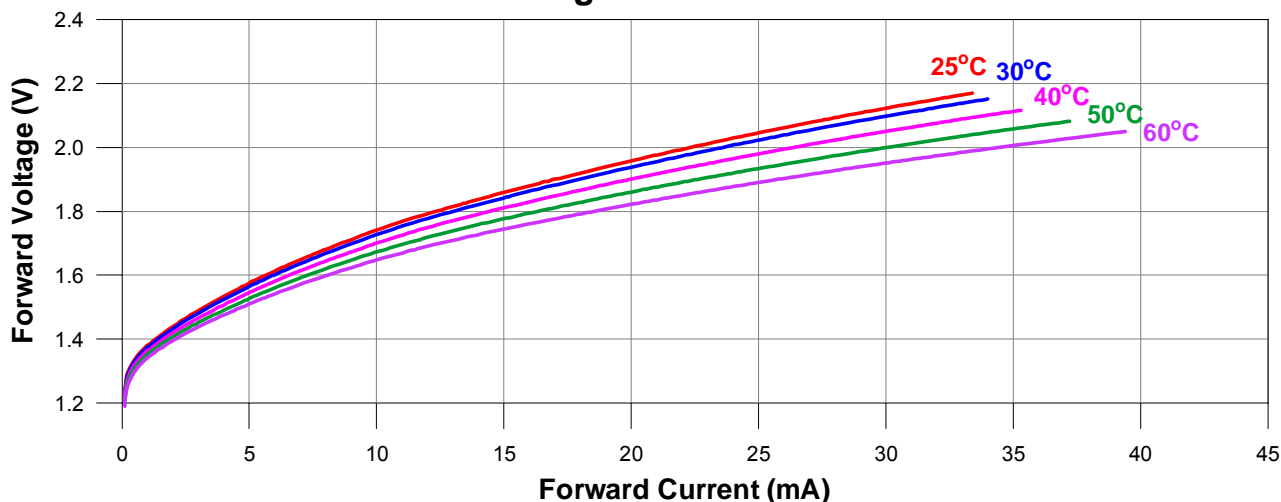
© $\theta //$ and $\theta \perp$ are defined as the angle within which the intensity is 50% of the peak value.

■ Typical characteristic curves

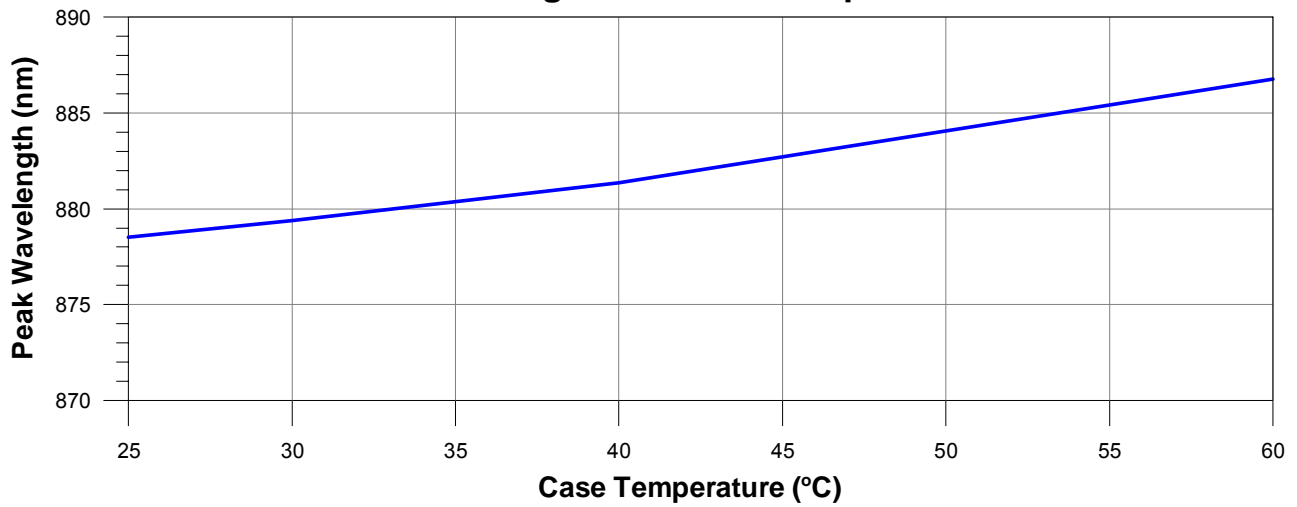
Optical Output Power v.s. Forward Current



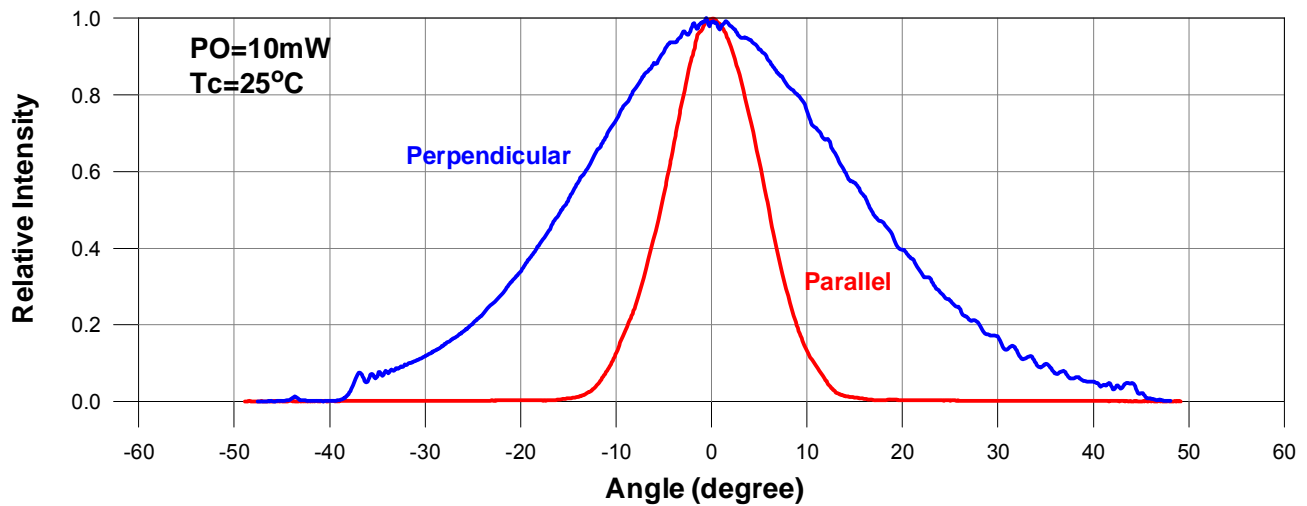
Forward Voltage v.s. Forward Current



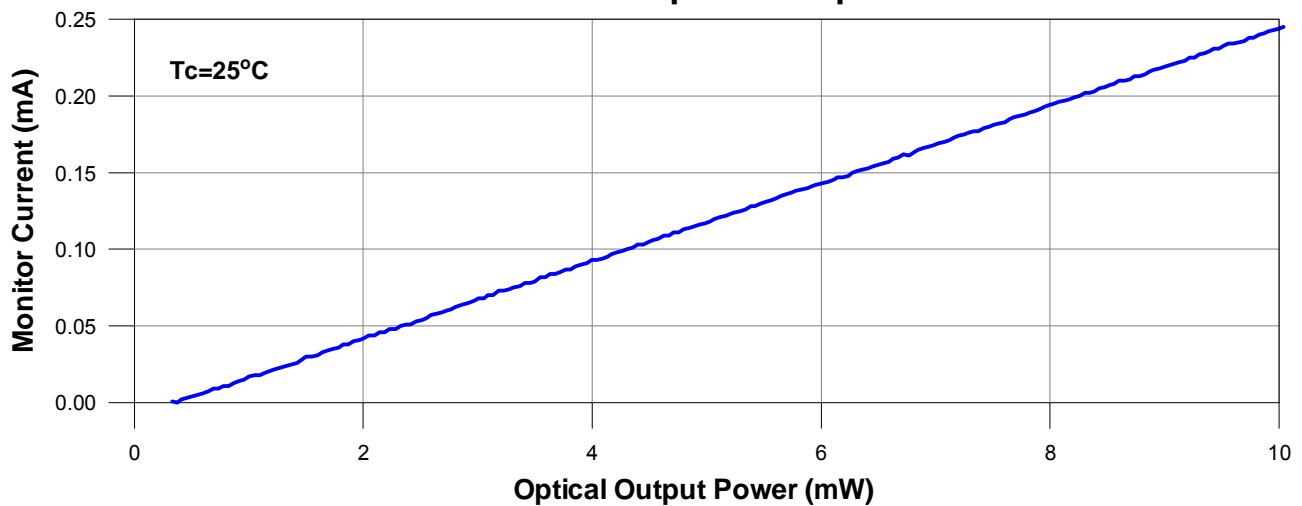
Peak Wavelength v.s. Case Temperature



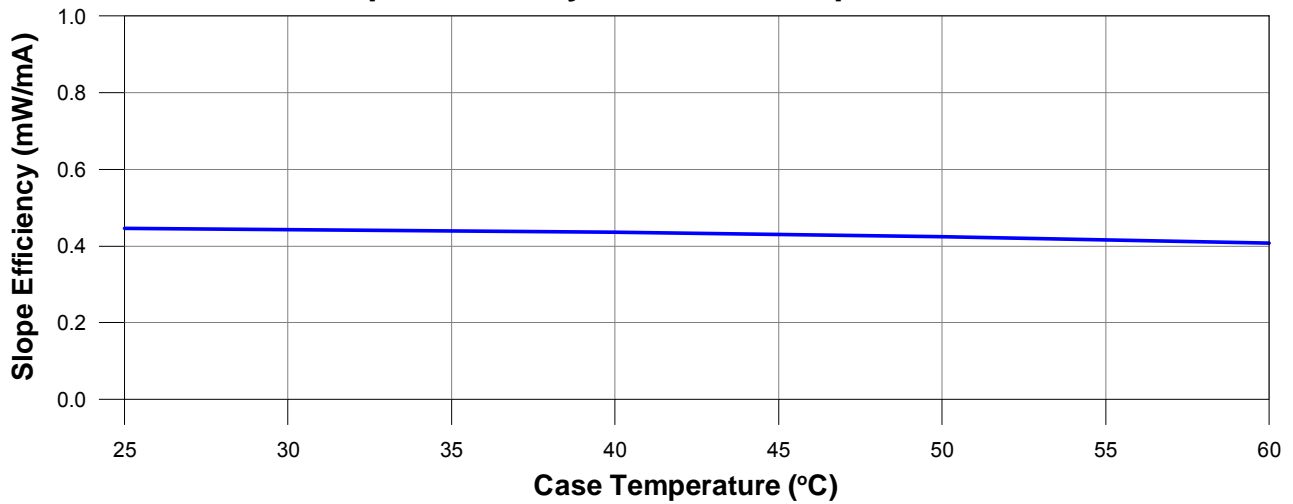
Far-Field Pattern



Monitor Current v.s. Optical Output Power



Slope Efficiency v.s. Case Temperature



Threshold Current v.s. Case Temperature

