

LCU80B071A/D

LCU808 SERIES LASER DIODE

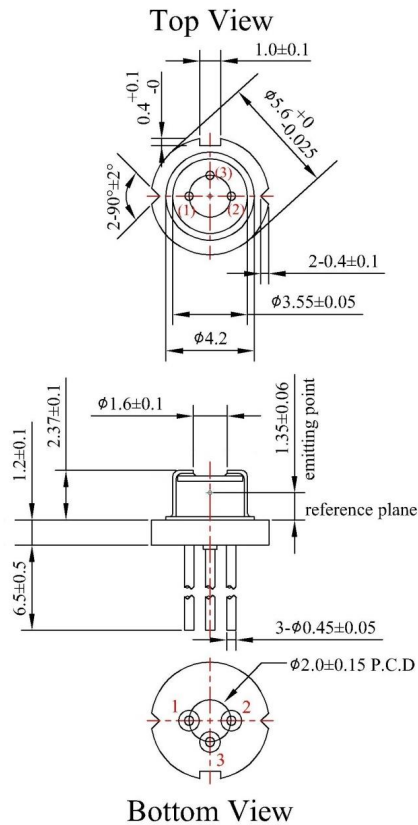
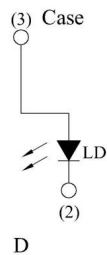
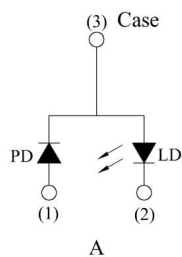
■ Features

1. Low operation current
2. High reliability
3. Low divergence angle
4. Standard optical power output : 200mW (CW)
5. TO-56 (ϕ 5.6mm) Package, with Pb-free window cap.

■ Applications

1. Motion sensor
2. Medical application
3. Pumping source for solid state laser
4. Infrared illumination
5. Industrial application

■ External dimensions(Unit : mm)



Ver.02

LCU80B071A/D

LCU808 SERIES LASER DIODE

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Optical Output (Tc=25°C)	Po	220	mW
LD Reverse Voltage (Tc=25°C)	Vr_LD	2	V
PD Reverse Voltage (Tc=25°C)	Vr_PD	30	V
Operating Temperature (Case)	Top	-10~+70	°C
Storage Temperature	Tstg	-40~+85	°C

Electrical and Optical Characteristics(Tc=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	Ith	-	-	50	-	mA	
Operating Current	Iop	Po=200mW	-	230	250	mA	
Operating Voltage	Vop	Po=200mW	-	1.8	2.0	V	
Slope Efficiency	η	Po=50-150mW	0.95	1.1	-	mW/mA	
Monitor Current	Im	Po=200mW	-	0.3	2.0	mA	
Beam Divergence (FWHM)	Parallel	$\theta_{//}$	Po=200mW	-	10	-	deg.
	Perpendicular	θ_{\perp}	Po=200mW	-	28	-	deg.
Lasing Wavelength	λ	Po=200mW	803	808	813	nm	

⊙ $\theta_{//}$ and θ_{\perp} are defined as the angle within which the intensity is 50% of the peak value.

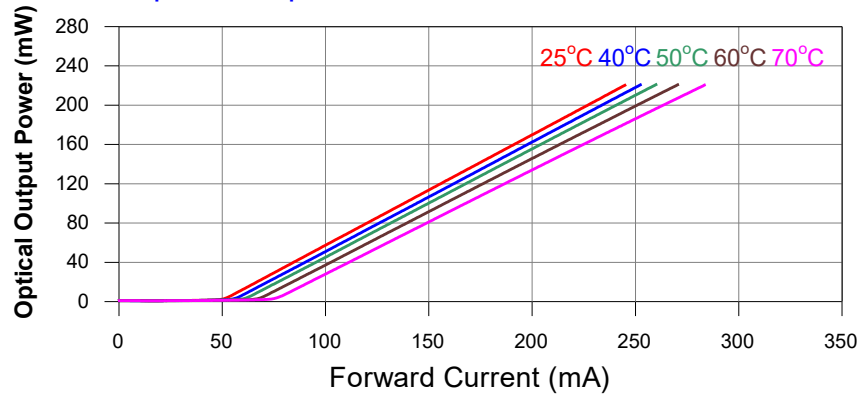
Ver.02

LCU80B071A/D

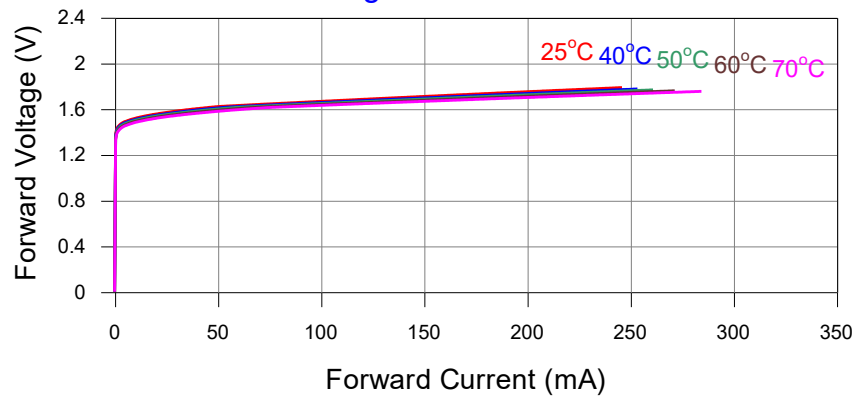
LCU808 SERIES LASER DIODE

■ Typical characteristic curves

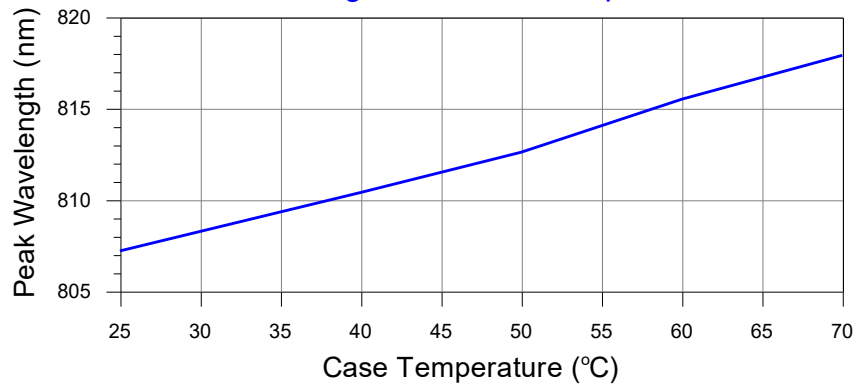
Optical Output Power v.s. Forward Current



Forward Voltage v.s. Forward Current



Peak Wavelength v.s. Case Temperature

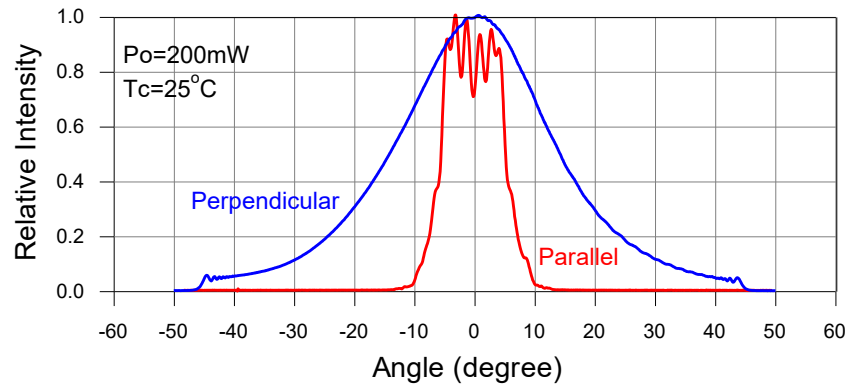


Ver.02

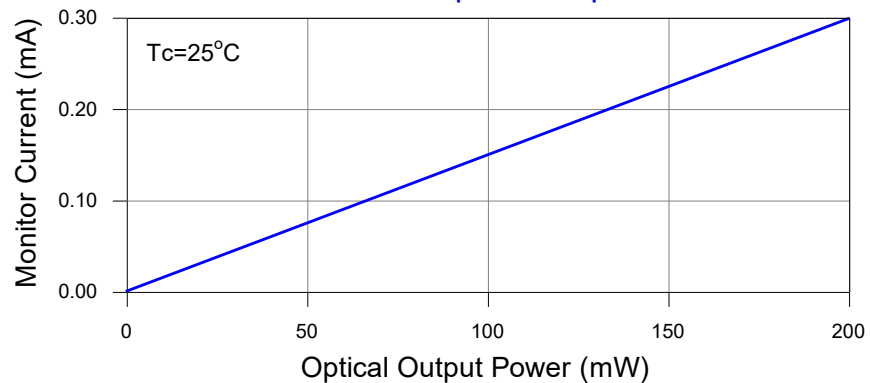
LCU80B071A/D

LCU808 SERIES LASER DIODE

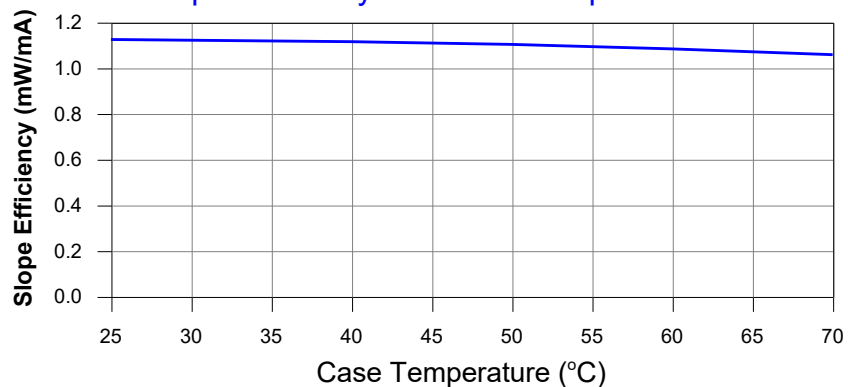
Far-Field Pattern



Monitor Current v.s. Optical Output Power



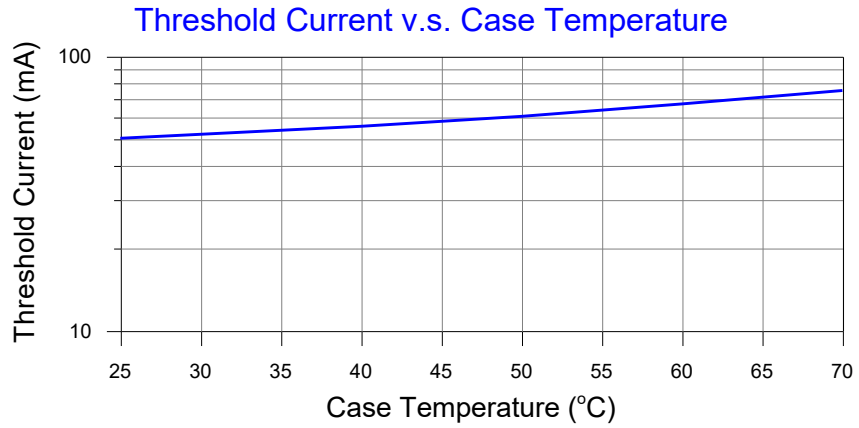
Slope Efficiency v.s. Case Temperature



Ver.02

LCU80B071A/D

LCU808 SERIES LASER DIODE



SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Ver.02