

LCU80E053A/D

LCU808 SERIES LASER DIODE

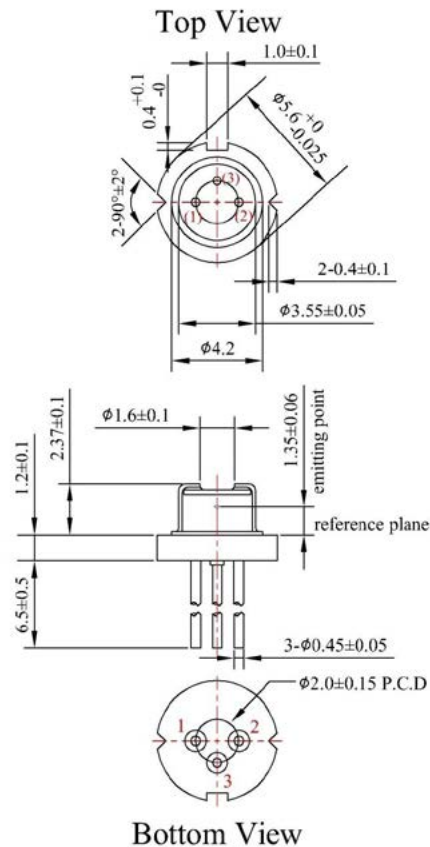
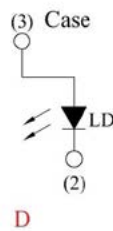
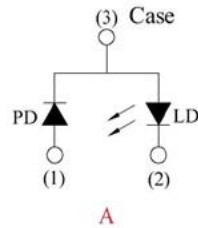
■ Features

1. Low operation current
2. High reliability
3. Low divergence angle
4. Standard optical power output : 500mW (CW)
5. TO-56 (ϕ 5.6mm) packaged, 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)



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Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Optical Output (Tc=25°C)	Po	600	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	-10~+85	°C

Electrical and Optical Characteristics(Tc=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	Ith	Po=125-250mW	-	70	-	mA	
Operating Current	Iop	Po=500mW	-	520	550	mA	
Operating Voltage	Vop	Po=500mW	-	1.92	2.1	V	
Slope Efficiency	η	Po=125-375mW	0.95	1.1	-	mW/mA	
Monitor Current	Im	Po=500mW	-	0.6	2.5	mA	
Beam Divergence (FWHM)	Parallel	$\theta_{//}$	Po=500mW	-	8	-	deg.
	Perpendicular	θ_{\perp}	Po=500mW	-	28	-	deg.
Lasing Wavelength	λ	Po=500mW	805	808	811	nm	

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

Quality Notice

This device is still under product development.

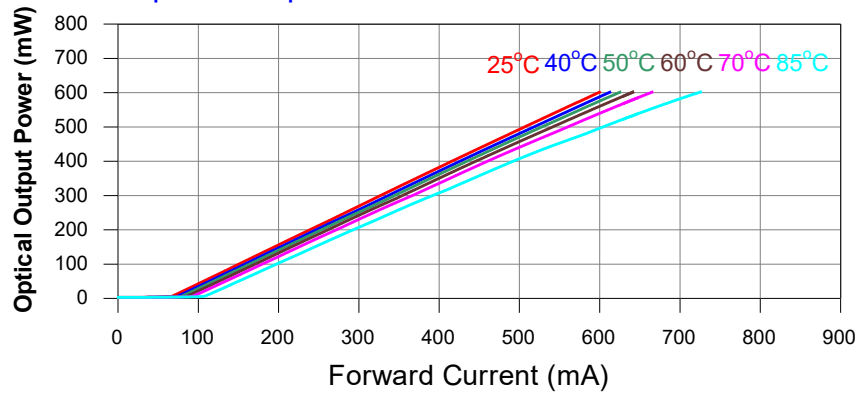
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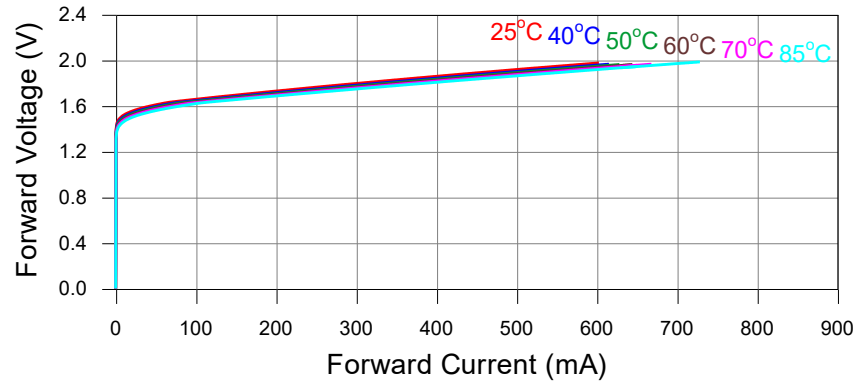
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■ Typical characteristic curves

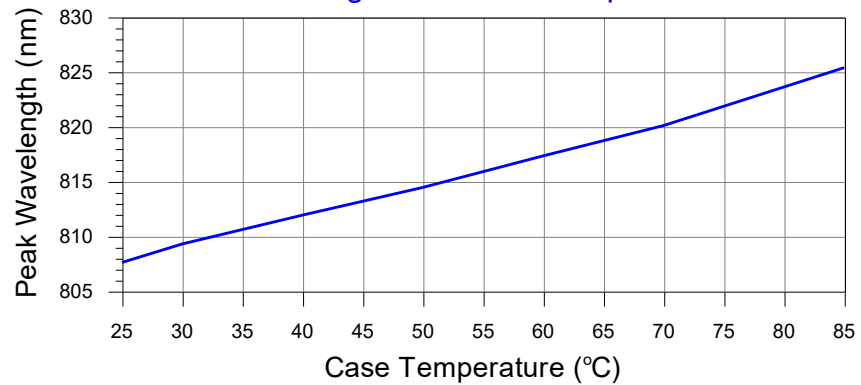
Optical Output Power v.s. Forward Current



Forward Voltage v.s. Forward Current



Peak Wavelength v.s. Case Temperature

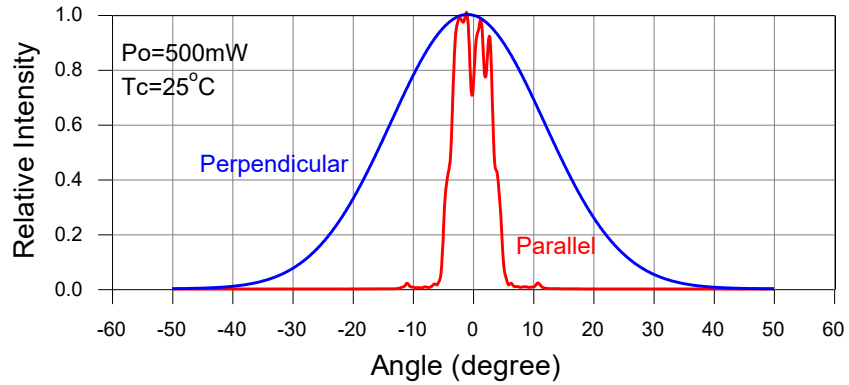


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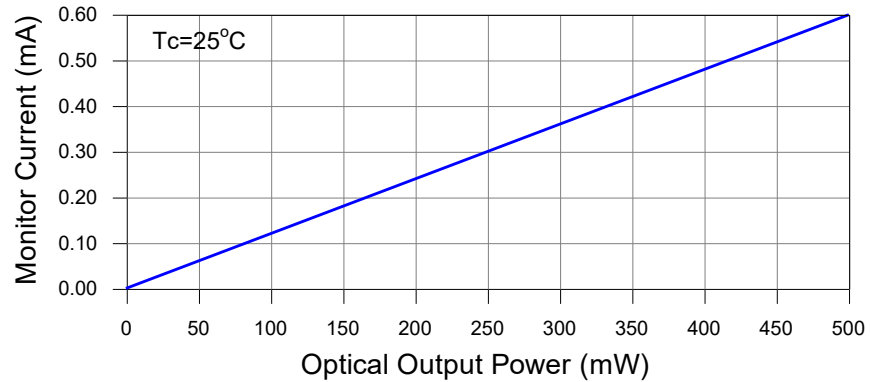
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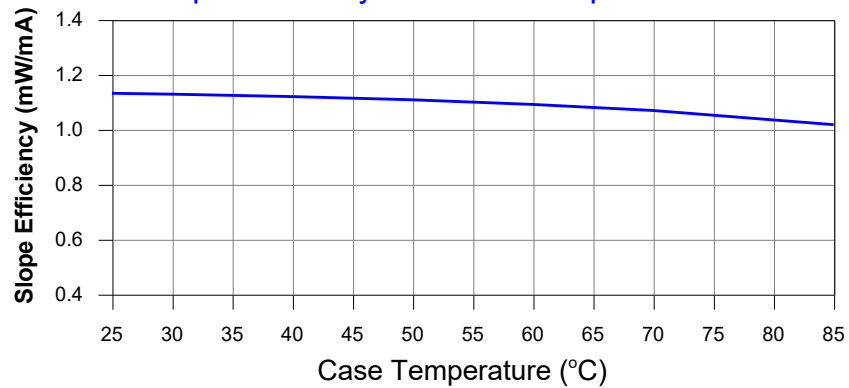
Far-Field Pattern



Monitor Current v.s. Optical Output Power



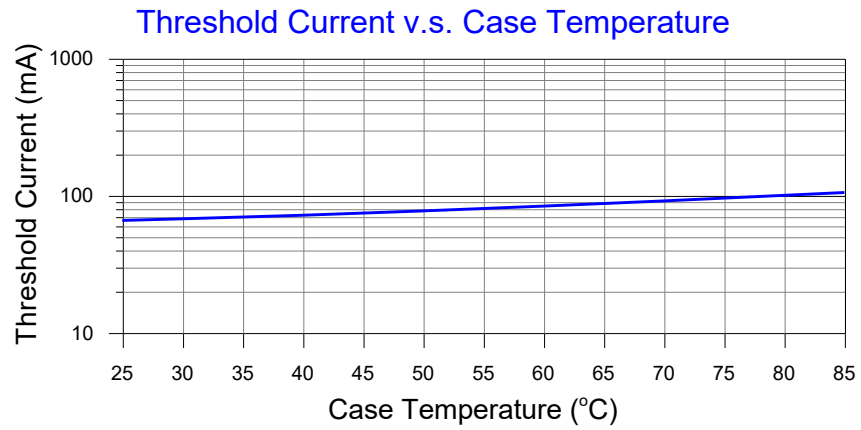
Slope Efficiency v.s. Case Temperature



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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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