LCU85A060Ap

LCU85xx SERIES LASER DIODE

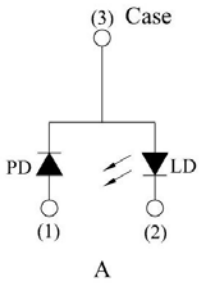
■ Features

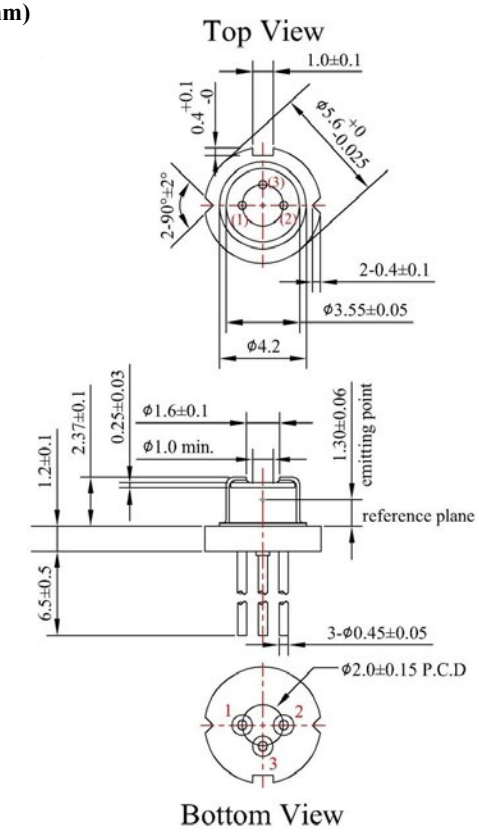
1. Small perpendicular divergence angle
2. Lateral single mode lasing
3. Standard optical power output：100mW (CW)
4. TO-56 (ϕ 5.6mm) Packaged, with Pb-free window cap.
5. Built-in Photo Diode for monitoring laser diode.

■ Applications

1. Motion sensor
2. 3D depth sensor
3. Illumination
4. Industry
5. Medical application

■ External dimensions(Unit : mm)





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■ Absolute Maximum Ratings(Tc=25℃)

Parameter	Symbol	Rating	Unit
Optical Output	Po	**100**	mW
Reverse Voltage	Vr	**2**	V
Operating Temperature（Case）	Top	-10～+60	℃
Storage Temperature	Tstg	-40～+85	℃

■ Electrical and Optical Characteristics(Tc=25℃)

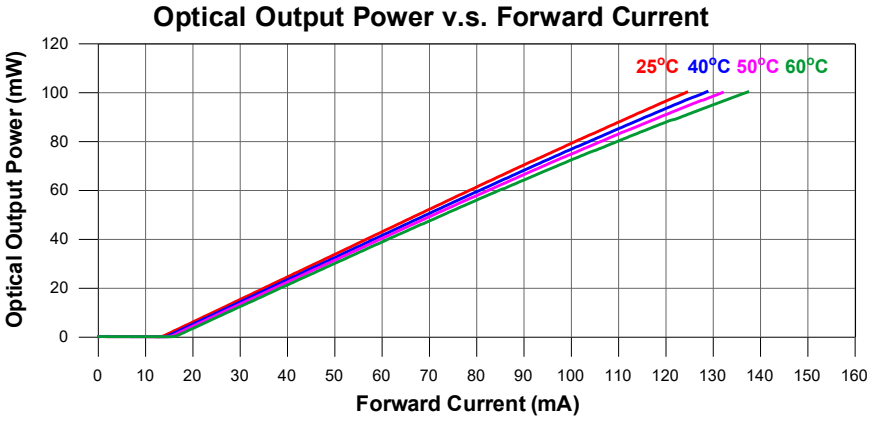
Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	Po=100mW	-	**14**	**25**	mA
Operating Current		Iop	Po=100mW	-	**125**	**140**	mA
Operating Voltage		Vop	Po=100mW	-	**2.3**	**2.6**	V
Slope Efficiency		η	Po=25-75mW	-	**0.90**	-	mW/mA
Monitor Current		Im	Po=100mW	**0.1**	**0.25**	**1.0**	mA
Beam Divergence	Parallel	$\theta_{//}$	Po=100mW	-	**10**	**15**	deg.
(FWHM)	Perpendicular	$\theta_{\perp}$	Po=100mW	-	**20**	**25**	deg.
Lasing Wavelength		λ	Po=100mW	**840**	**850**	**860**	nm

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

■ Quality Notice

This device is still under product development.

■ Typical characteristic curves



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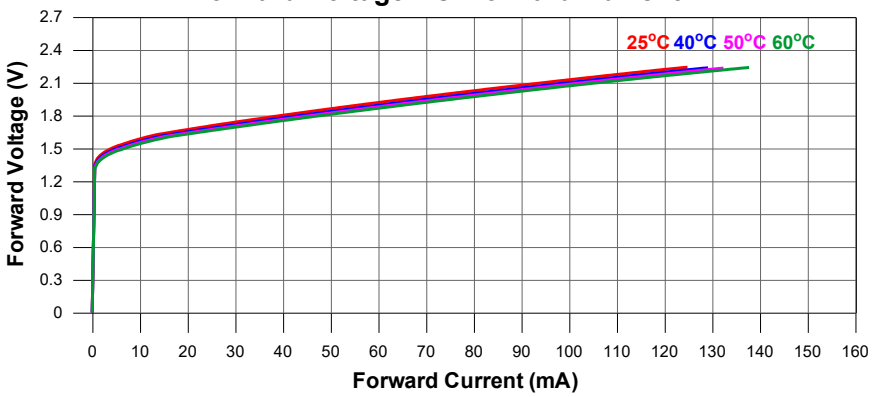
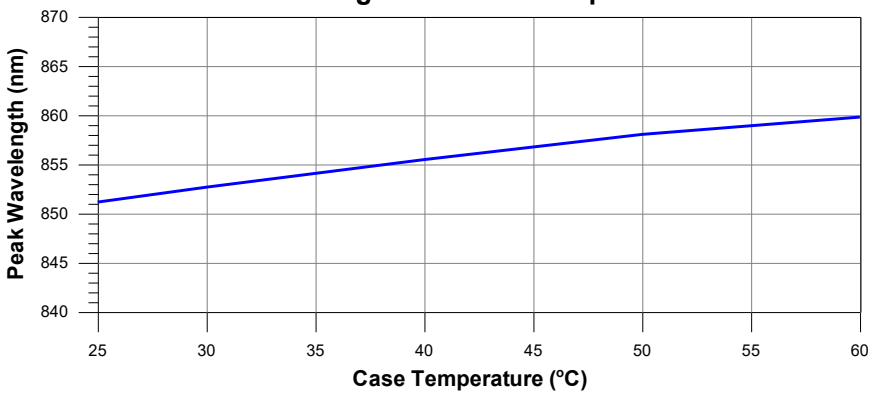
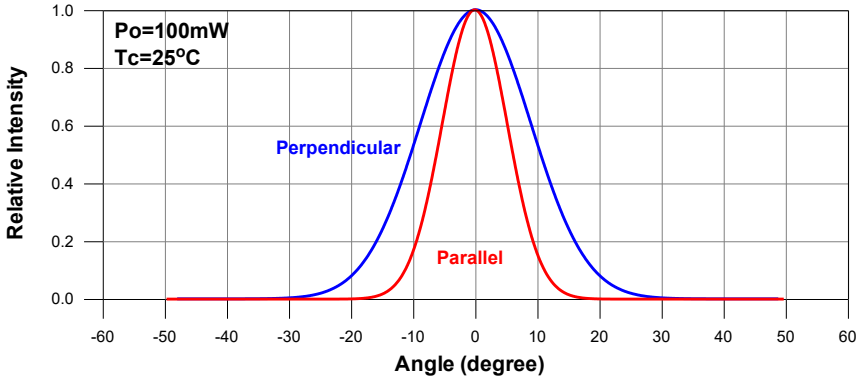
Forward Voltage v.s. Forward Current



Peak Wavelength v.s. Case Temperature



Far-Field Pattern



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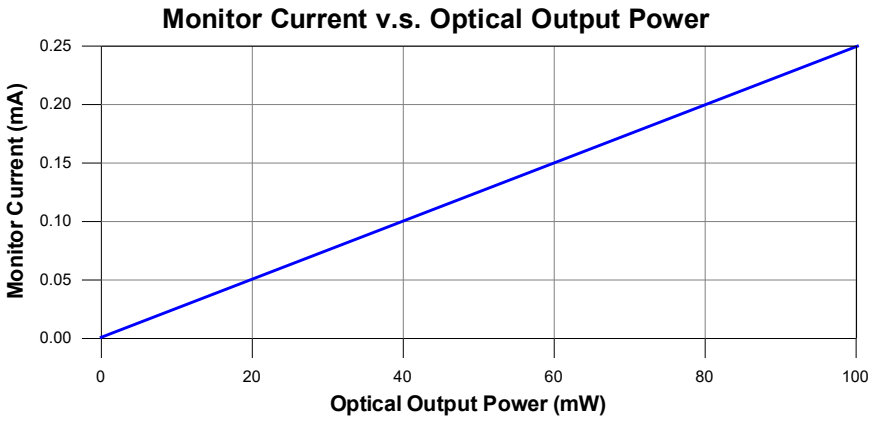

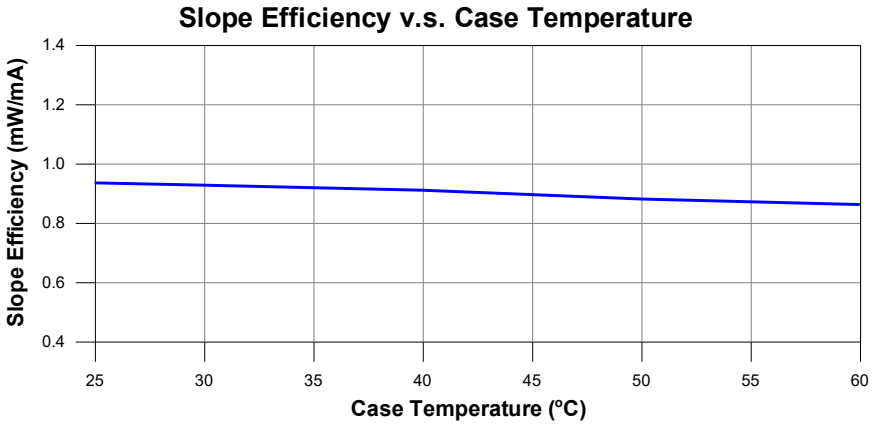

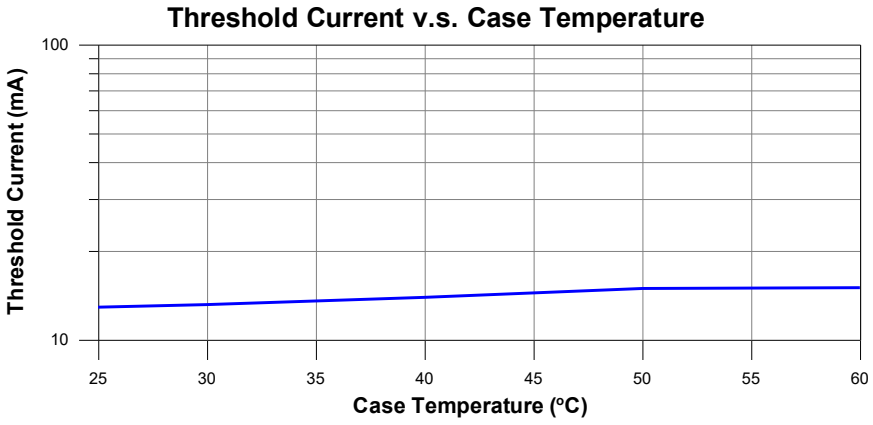

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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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