LCU80G051Ap

LCU80xx SERIES LASER DIODE

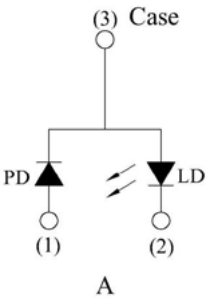
■ Features

1. Low operation current
2. Low divergence angle
3. High reliability
4. Standard optical power output：700mW (CW)
5. TO-56 (ϕ 5.6mm) Packaged, with Pb-free window cap.
6. Built-in Photo Diode for monitoring laser diode.

■ 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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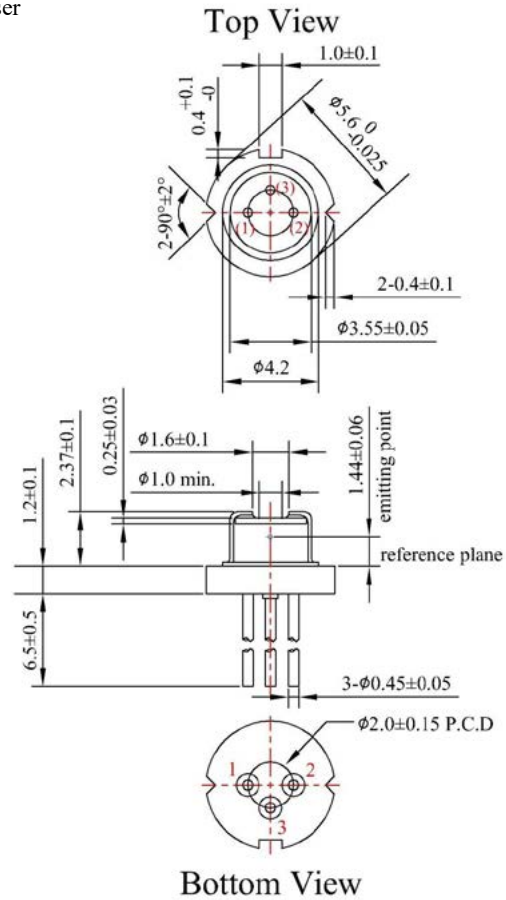

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■ Absolute Maximum Ratings(Tc=25℃)

Parameter	Symbol	Rating	Unit
Optical Output	Po	**700**	mW
Reverse Voltage	Vr	**2**	V
Operating Temperature（Case）	Top	-10～+50	℃
Storage Temperature	Tstg	-10～+85	℃

■ Electrical and Optical Characteristics(Tc=25℃)

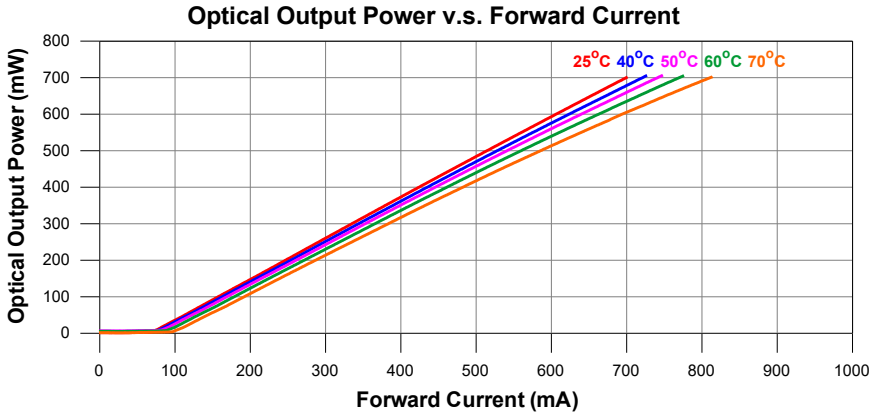
Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	Po=700mW	-	**70**	**100**	mA
Operating Current		Iop	Po=700mW	-	**700**	**750**	mA
Operating Voltage		Vop	Po=700mW	-	**2.0**	**2.3**	Volt
Slope Efficiency		η	Po=175-525mW	-	**1.12**	-	mW/mA
Monitor Current		Im	Po=700mW	-	**1.0**	-	mA
Beam Divergence	Parallel	$\theta_{//}$	Po=700mW	-	**10**	-	deg.
(FWHM)	Perpendicular	$\theta_{\perp}$	Po=700mW	-	**28**	-	deg.
Lasing Wavelength		λ	Po=700mW	**803**	**808**	**813**	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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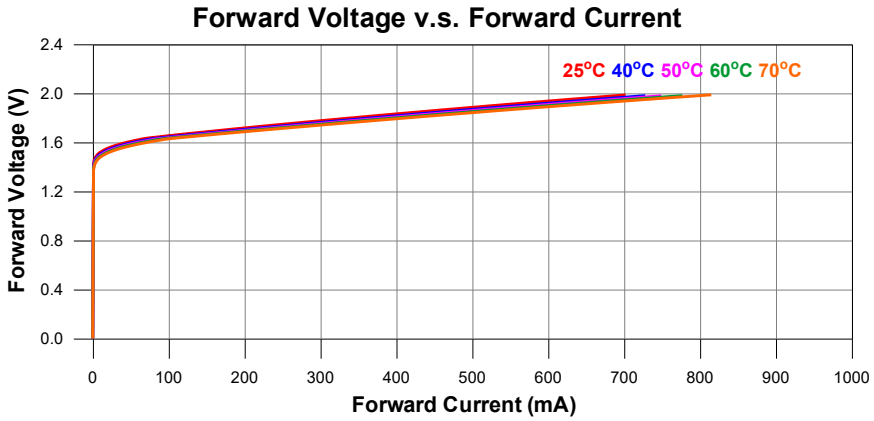

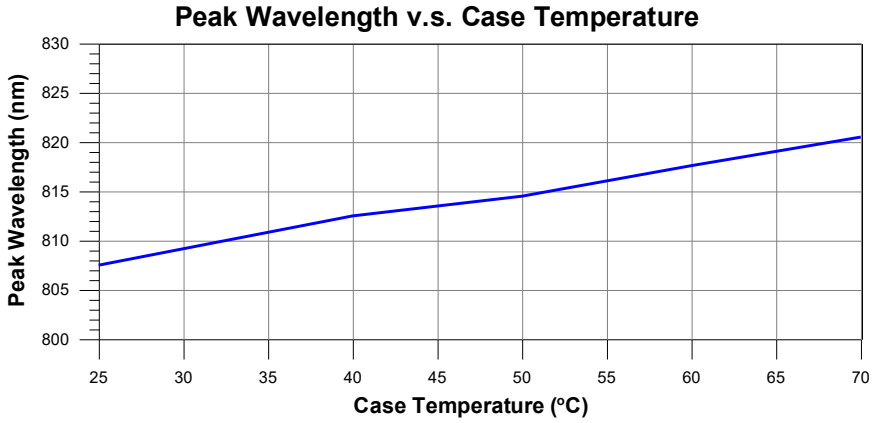

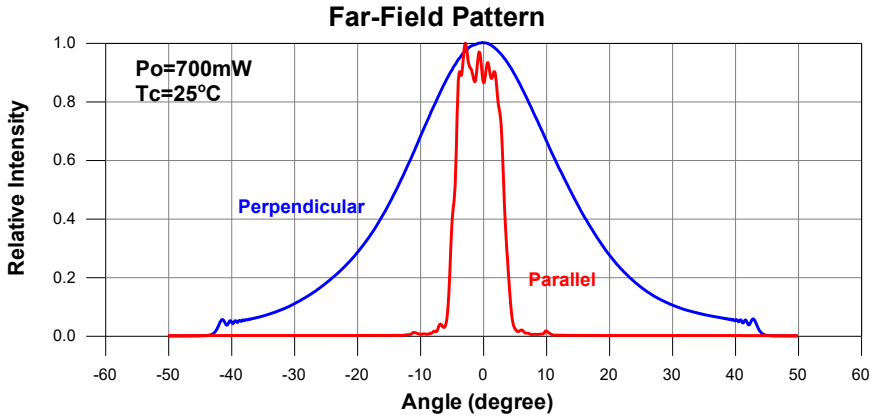

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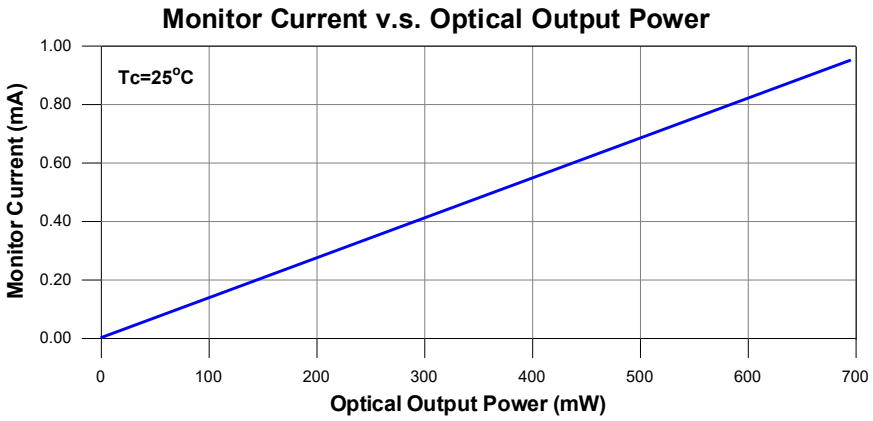

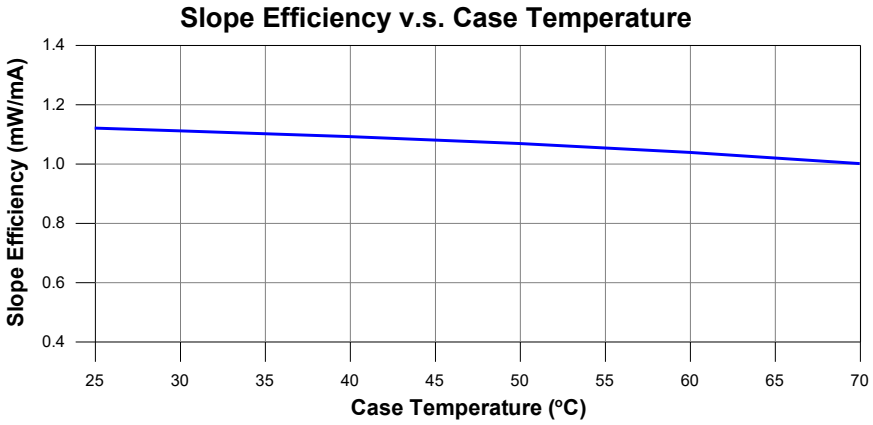

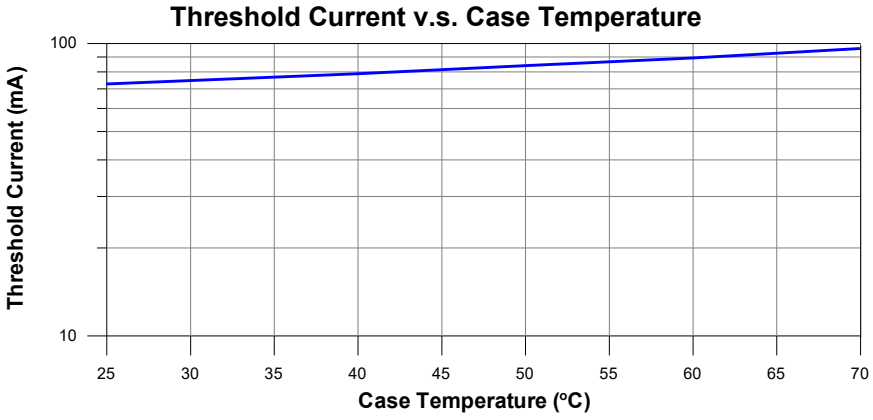

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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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