LCU881061Ap

LCU88xx SERIES LASER DIODE

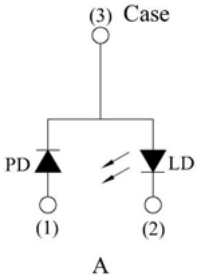
■ Features

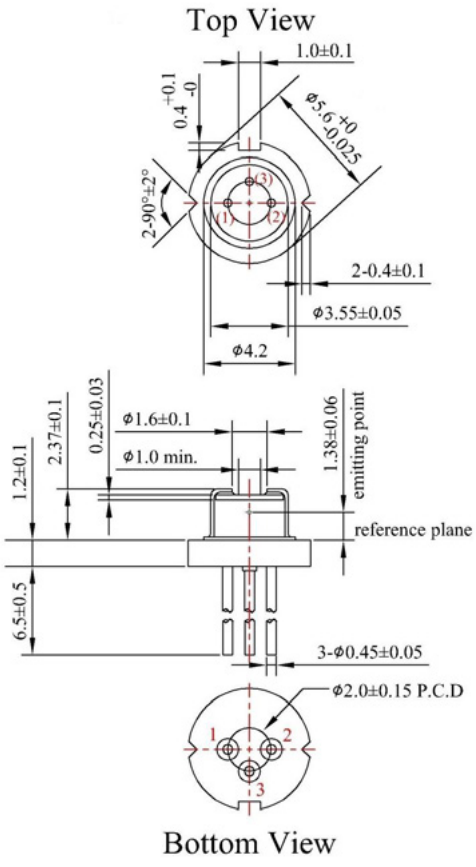
1. Peak wavelength at 25℃ : 880 nm (typical)
2. Standard light output : 10mW (CW)
3. TO-18 (ϕ 5.6mm) Packaged, cap window with flat Pb-free lens, monitor PD inside.
4. Small perpendicular divergence angle

■ Applications

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

■ External dimensions(Unit : mm)





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■ Absolute Maximum Ratings(Tc=25℃)

Parameter	Symbol	Rating	Unit
Optical Output	Po	**12**	mW
Reverse Voltage	Vr	**2**	V
Operating Temperature（Case）	Top	-10～+60	℃
Storage Temperature	Tstg	-40～+85	℃

■ Electrical and Optical Characteristics(Tc=25℃)

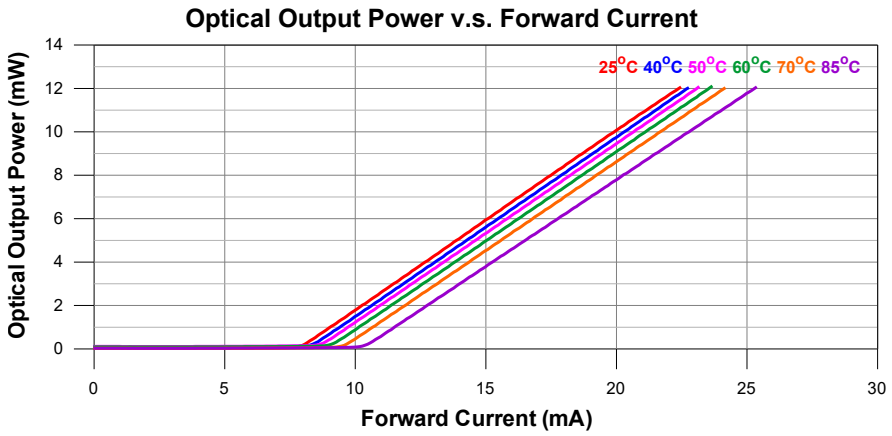
Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	Po=10mW	-	**8**	**13**	mA
Operating Current		Iop	Po=10mW	-	**20**	**26**	mA
Operating Voltage		Vop	Po=10mW	-	**1.9**	**2.3**	Volts
Slope Efficiency		η	Po=2.5-7.5mW	**0.4**	**0.85**	-	mW/mA
Monitor Current		Im	Po=10mW	**0.1**	**0.4**	**0.7**	mA
Beam Divergence	Parallel	$\theta_{//}$	Po=10mW	**6**	**9**	**14**	deg.
(FWHM)	Perpendicular	$\theta_{\perp}$	Po=10mW	**25**	**30**	**35**	deg.
Lasing Wavelength		λ	Po=10mW	**870**	**880**	**890**	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, the long-term lifetime test has not been qualified yet.

■ Typical characteristic curves



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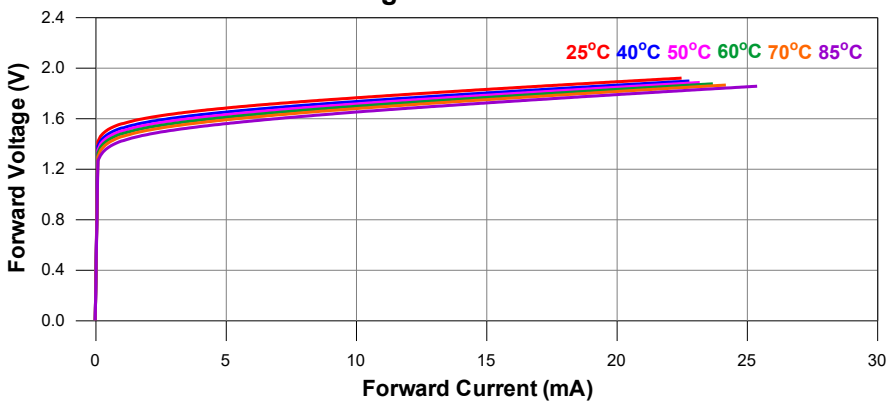
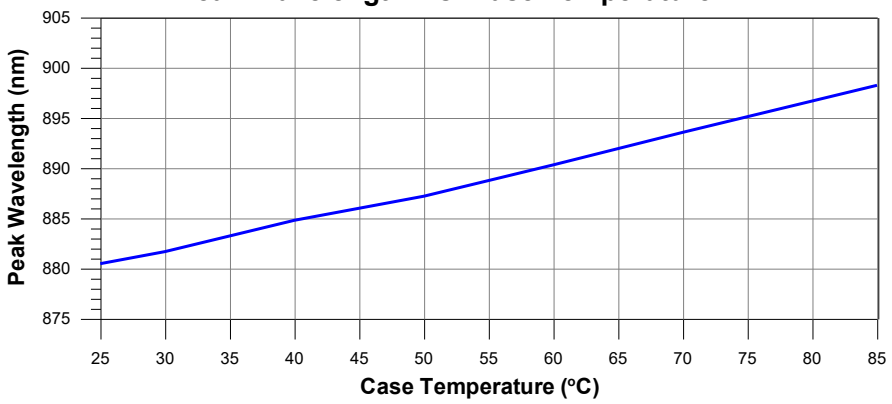
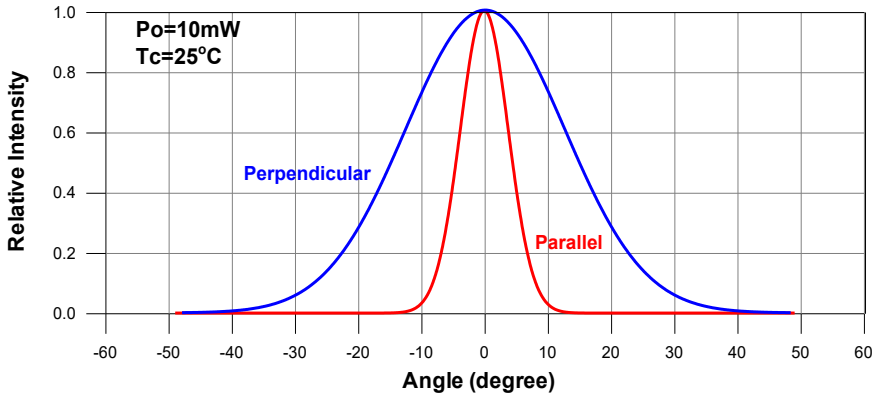
Forward Voltage v.s. Forward Current



Peak Wavelength v.s. Case Temperature



Far-Field Pattern



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/ Germany and Other Countries LASER COMPONENTS Germany GmbH Tel +49 8142 2864-0 info@lasercomponents.com www.lasercomponents.com
/ USA LASER COMPONENTS USA, Inc. Tel +1 603 821-7040 info@laser-components.com www.laser-components.com

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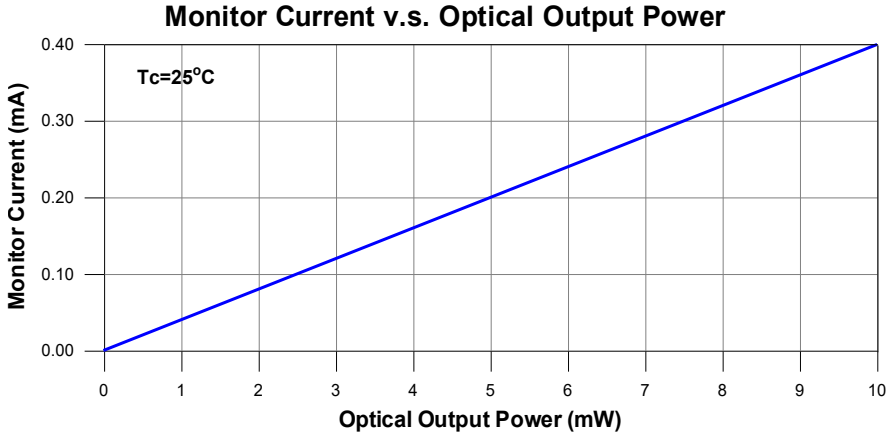

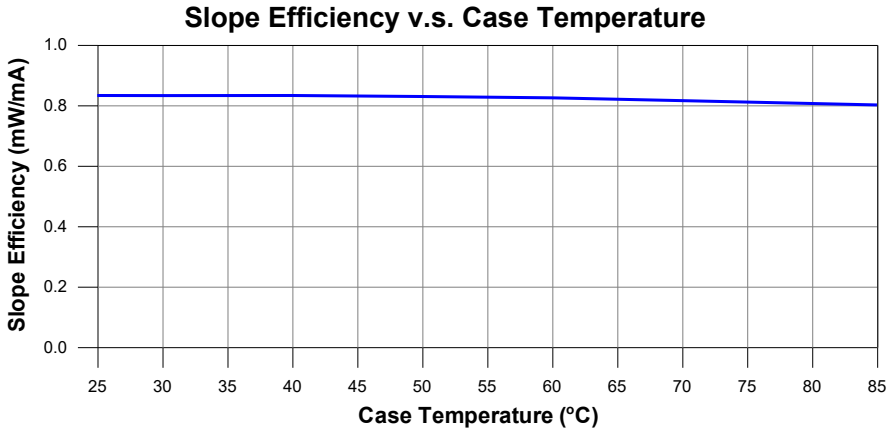

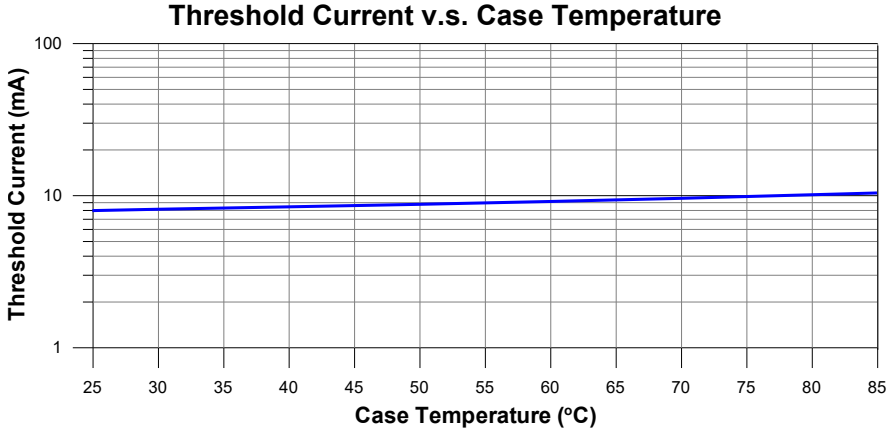

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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

/ Germany and Other Countries LASER COMPONENTS Germany GmbH Tel +49 8142 2864-0 info@lasercomponents.com www.lasercomponents.com
/ USA LASER COMPONENTS USA, Inc. Tel +1 603 821-7040 info@laser-components.com www.laser-components.com