

LCU80B051A/D

LCU80xx SERIES LASER DIODE

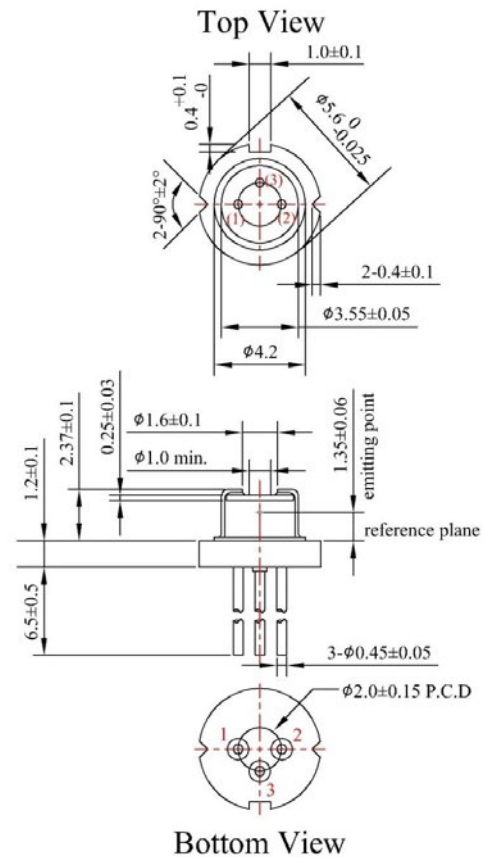
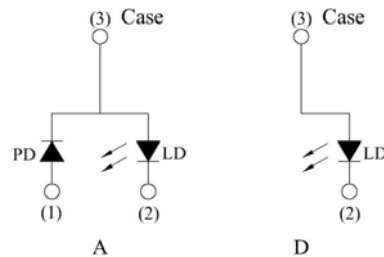
■ Features

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



Ver.15

LCU80B051A/D

LCU80xx SERIES LASER DIODE

Absolute Maximum Ratings(Tc=25°C)

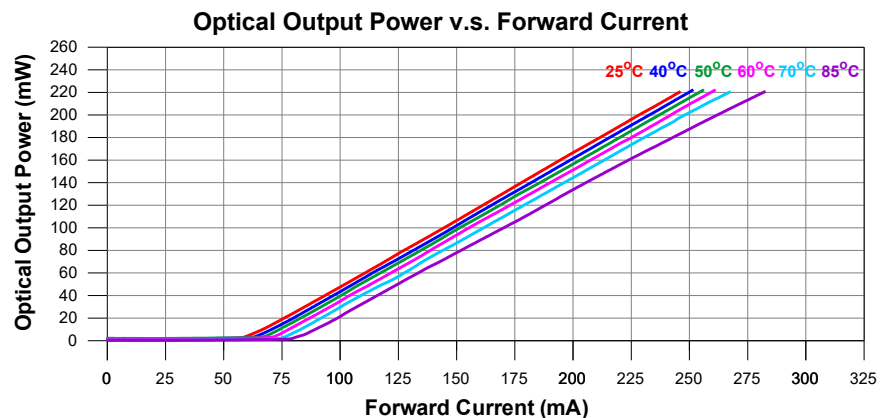
Parameter	Symbol	Rating	Unit
Optical Output	Po	220	mW
Reverse Voltage	Vr	2	V
Operating Temperature (Case)	Top	-10~+50	°C
Storage Temperature	Tstg	-40~+85	°C

Electrical and Optical Characteristics(Tc=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	Ith	Po=200mW	-	55	-	mA	
Operating Current	Iop	Po=200mW	-	230	250	mA	
Operating Voltage	Vop	Po=200mW	-	1.8	2.0	Volt	
Slope Efficiency	η	Po=50-150mW	0.95	1.1	-	mW/mA	
Monitir current	Im	Po=200mW		0.4	2	mA	
Beam Divergence (FWHM)	Parallel	$\theta_{//}$	Po=200mW	-	6.5	-	deg.
	Perpendicular	θ_{\perp}	Po=200mW	-	28	-	deg.
Lasing Wavelength	λ	Po=200mW	805	808	811	nm	

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

Typical characteristic curves

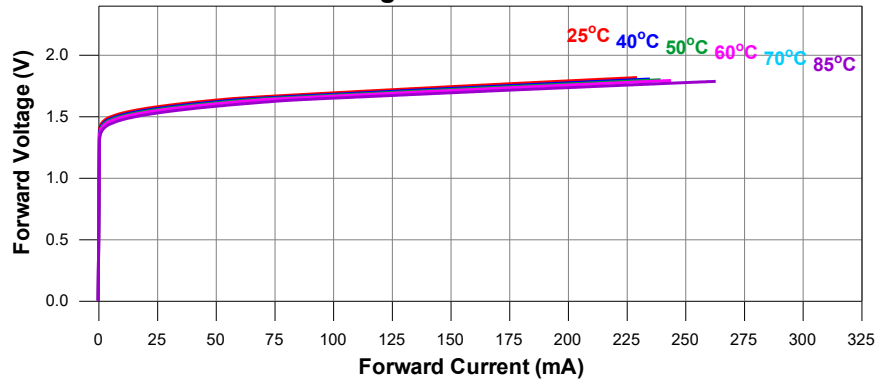


Ver. 15

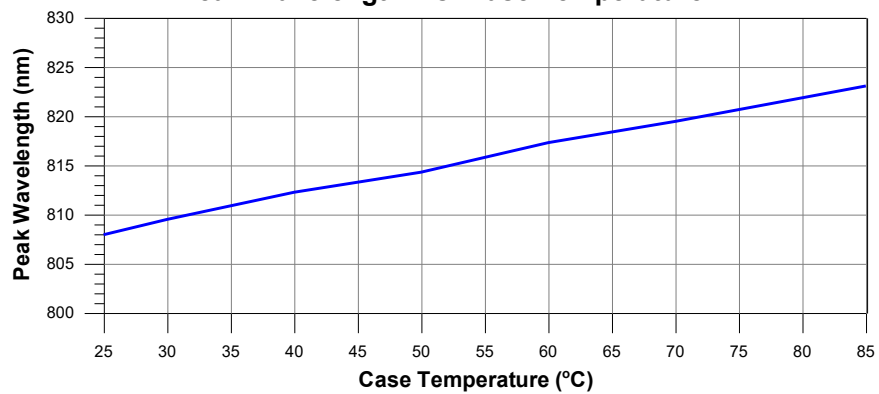
LCU80B051A/D

LCU80xx SERIES LASER DIODE

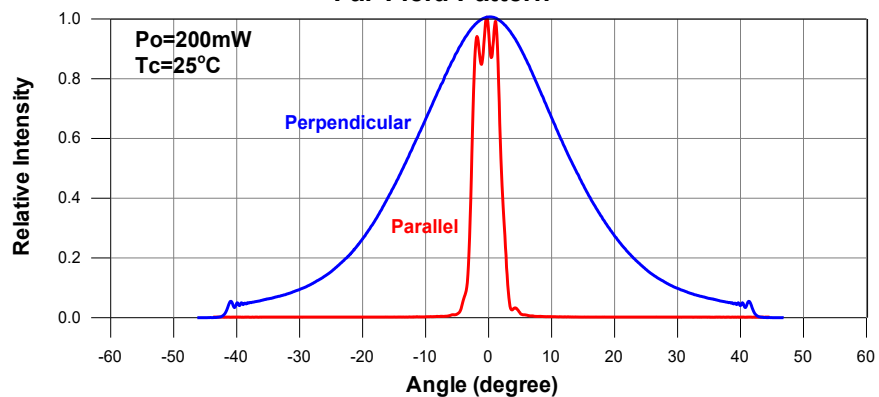
Forward Voltage v.s. Forward Current



Peak Wavelength v.s. Case Temperature



Far-Field Pattern

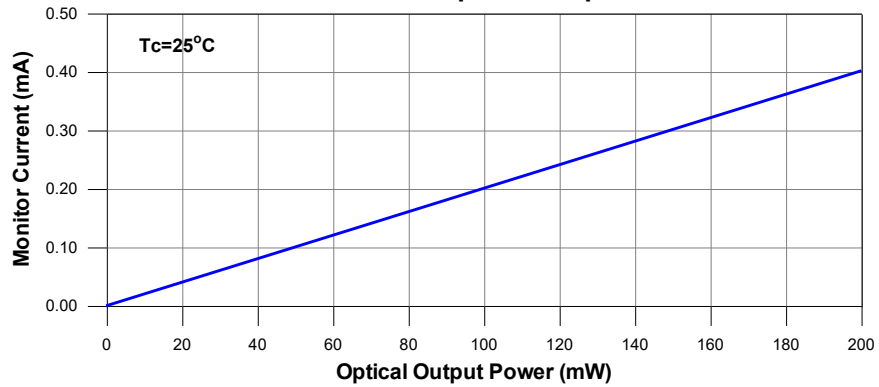


Ver. 15

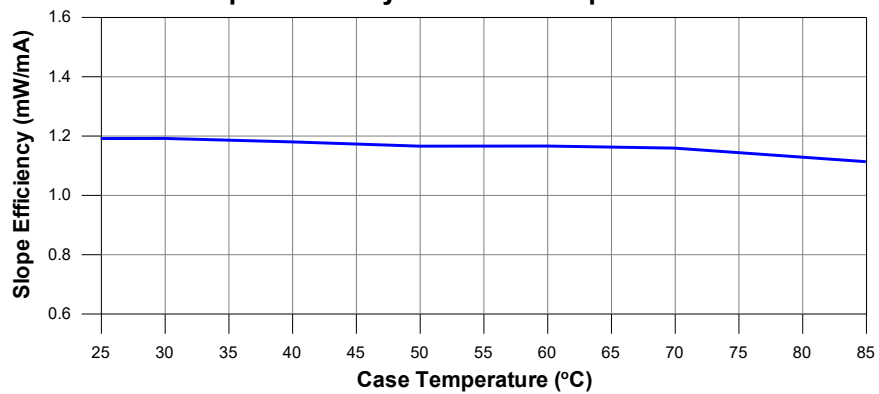
LCU80B051A/D

LCU80xx SERIES LASER DIODE

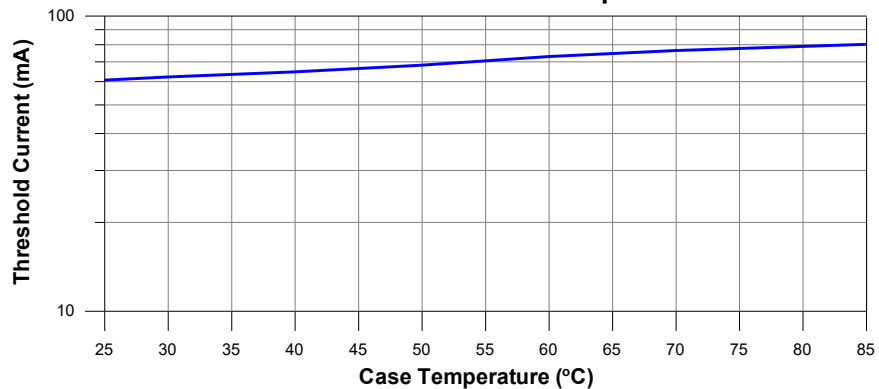
Monitor Current v.s. Optical Output Power



Slope Efficiency v.s. Case Temperature



Threshold Current v.s. Case Temperature



Ver. 15

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Laser Diodes](#) category:

Click to view products by [Laser Components](#) manufacturer:

Other Similar products are found below :

[PLT5 520EA P](#) [PLT3 520D](#) [ADL-65055TL](#) [ADL-66801TL](#) [ADL-83Z01TL](#) [ADL-85301TL](#) [ADL-85501TL](#) [LCU80B051A](#) [RLD78NZM5-00A](#) [ADL-65075SR](#) [ADL-65075TU-1](#) [905D1S3JT09UA](#) [LCU653056AP](#) [LCU66A051AP](#) [LCU80E052AP](#) [LCU80E053A](#) [LCU831061AP](#) [LCU85C061AP](#) [LCU881061AP](#) [LCU98B043AP](#) [LCU98C041AP](#) [PLT5 450B](#) [ADL-63054TL](#) [ADL-63102TL-3](#) [ADL-63153TL](#) [ADL-65103TL](#) [ADL-66201TL](#) [PLT5 510](#) [LCU66A051A](#) [SPL LL90_3](#) [ADL-65075TL](#) [905D1S09UA](#) [905D1S3JT03UA](#) [ADL-63054SL](#) [ADL-63301TL](#) [ADL-63T01NY](#) [ADL-63V0ANP](#) [ADL-65074TA4](#) [ADL-65074TL-1](#) [ADL-65075SL](#) [ADL-65075TA4](#) [ADL-65104TA4](#) [ADL-65104TL](#) [ADL-66201TA4](#) [ADL-66505TL](#) [ADL-78051TL](#) [ADL-83Z51TL](#) [ADL-85051TL](#) [LCU632051A](#) [LCU670561A](#)