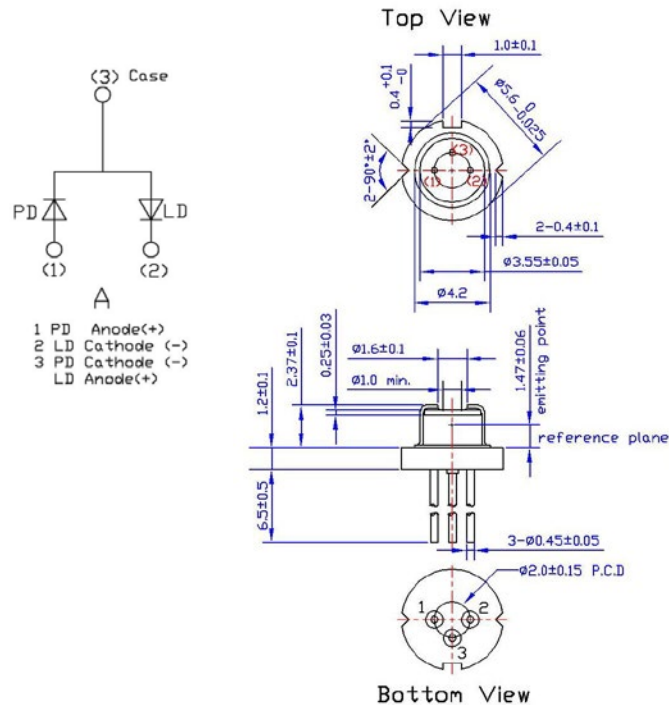


## 808nm Laser Diode LCU80B051A

### ■ Specifications

- (1) Device: Laser Diode
- (2) Structure: TO-18 (  $\phi$  5.6mm ), With Pb free glass cap, PD
- (3) Power Output: 200mW

### ■ External dimensions(Unit : mm)



### ■ Absolute Maximum Ratings(Tc=25°C)

Parameter	Symbols	Ratings	Units
Optical Output	Po	<b>200</b>	mW
Reverse Voltage	Laser	Vr	<b>2</b>
	PIN PD	Vr(PIN)	<b>30</b>
Operating Temperature (Case)	Top	-10~+50	°C
Storage Temperature	Tstg	-10~+85	°C

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### 808nm Laser Diode

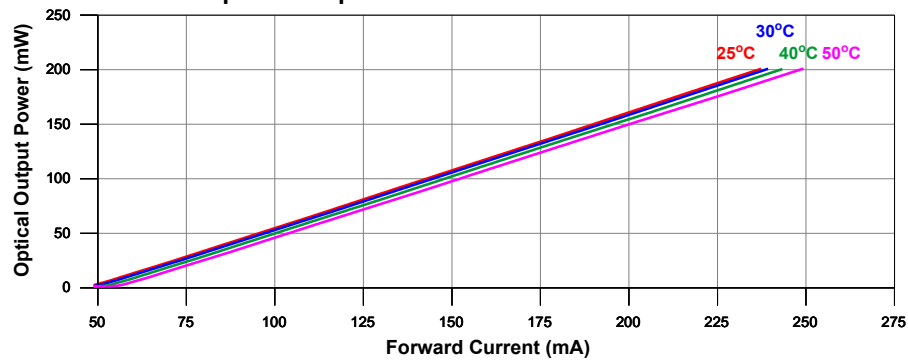
#### Electrical and Optical Characteristics (Tc=25°C)

Parameter	Symbols	Conditions	Min.	Typ.	Max.	Units	
Threshold Current	I <sub>th</sub>	-	-	50	70	mA	
Operating Current	I <sub>op</sub>	P <sub>o</sub> =200mW	-	235	265	mA	
Operating Voltage	V <sub>op</sub>	-	-	1.8	1.95	Volts	
Slope Efficiency	η	150mW-50mW	0.8	1.09	-	mW/mA	
		I <sub>150mW</sub> -I <sub>50mW</sub>					
Monitor Current	I <sub>m</sub>	P <sub>o</sub> =200mW	-	0.8	2	mA	
Beam Divergence (FWHM)	Parallel	θ //	P <sub>o</sub> =200mW	-	7.5	12	deg.
	Perpendicular	θ ⊥	P <sub>o</sub> =200mW	-	30	40	deg.
Lasing Wavelength*	λ	P <sub>o</sub> =200mW	805	808	811	nm	

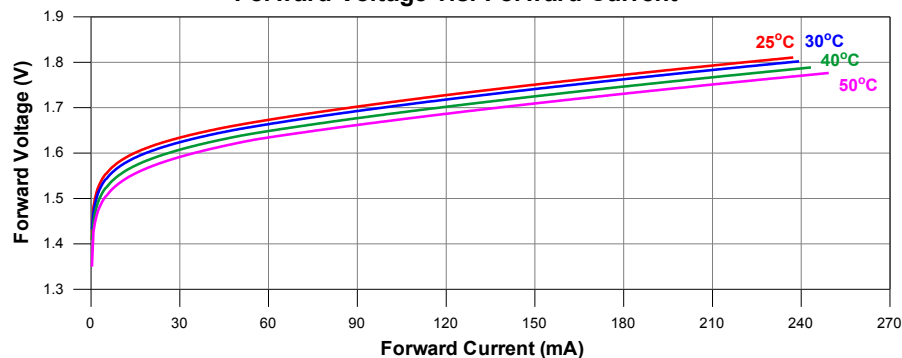
\*θ // and θ ⊥ are defined as the angle within which the intensity is 50% of the peak value.

#### Typical characteristic curves

Optical Output Power v.s. Forward Current

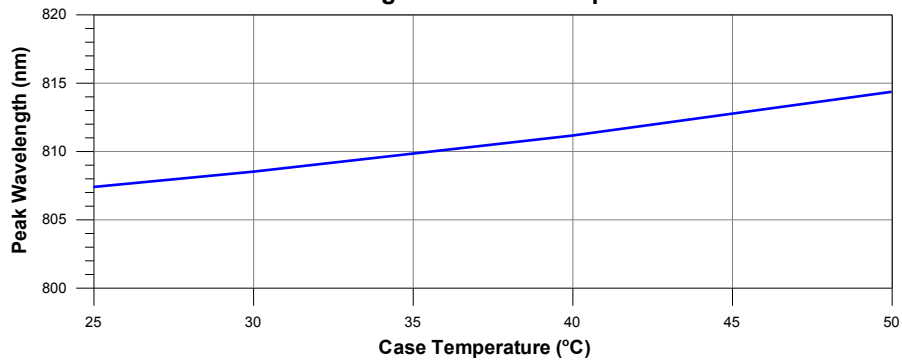


Forward Voltage v.s. Forward Current

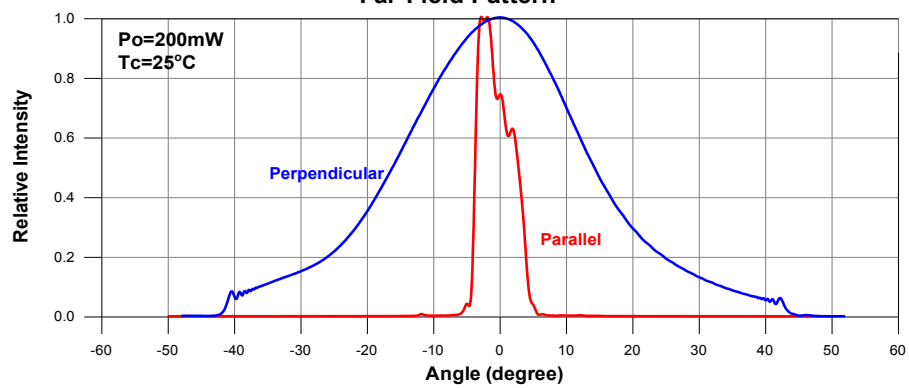


### 808nm Laser Diode

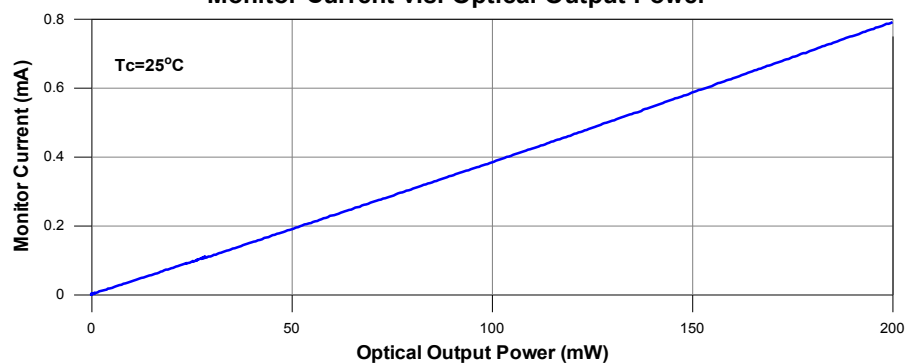
Peak Wavelength v.s. Case Temperature



Far-Field Pattern



Monitor Current v.s. Optical Output Power



### 808nm Laser Diode

