# LCU80B051A/D

**LCU80xx SERIES LASER DIODE**

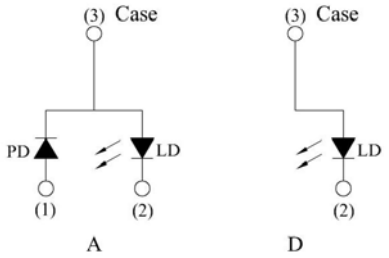
## ■ Features

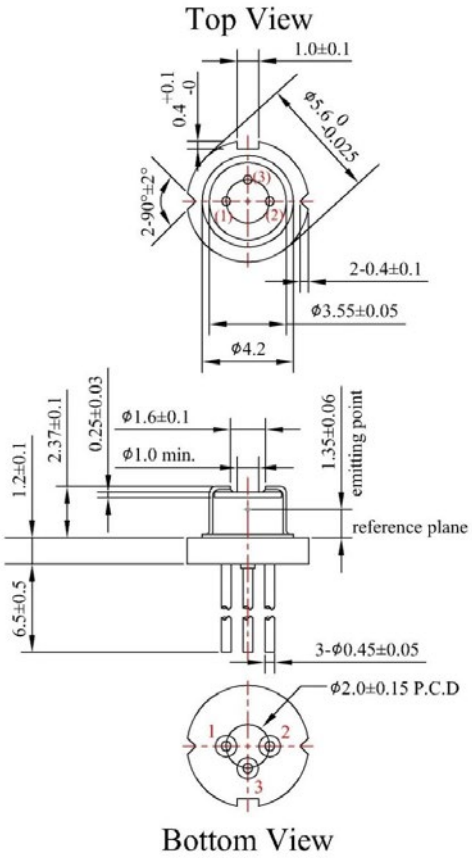
1. Low operation current
2. High reliability
3. Low divergence angle
4. Standard optical power output：200mW (CW)
5. TO-56 ( $\phi$ 5.6mm) Packaged, with Pb-free window cap.

## ■ Applications

1. Motion sensor
2. Medical application
3. Pumping source for solid state laser
4. Infrared illumination
5. Industrial application

## ■ External dimensions(Unit : mm)

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## ■ Absolute Maximum Ratings(Tc=25℃)

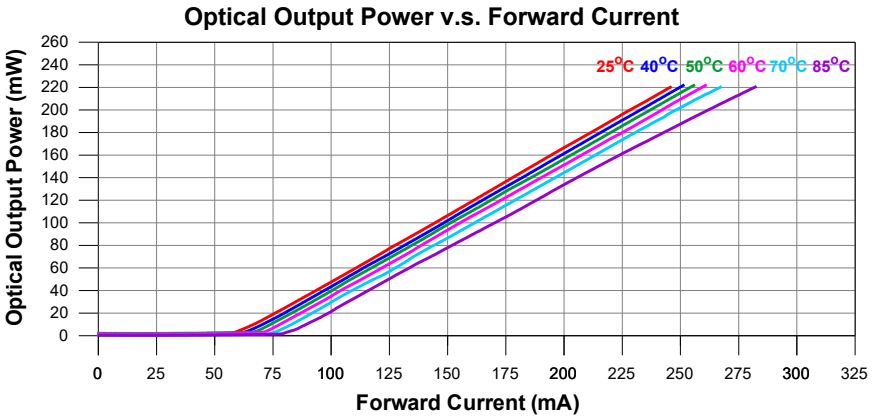
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Optical Output | Po | 220 | mW |
| Reverse Voltage | Vr | 2 | V |
| Operating Temperature（Case） | Top | -10～+50 | ℃ |
| Storage Temperature | Tstg | -40～+85 | ℃ |

## ■ Electrical and Optical Characteristics(Tc=25℃)

| 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 | Parallel | $\theta_{//}$ | Po=200mW | - | **6.5** | - | deg. |
| (FWHM) | Perpendicular | $\theta_{\perp}$ | Po=200mW | - | **28** | - | deg. |
| Lasing Wavelength | | λ | Po=200mW | **805** | **808** | **811** | nm |

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

## ■ Typical characteristic curves

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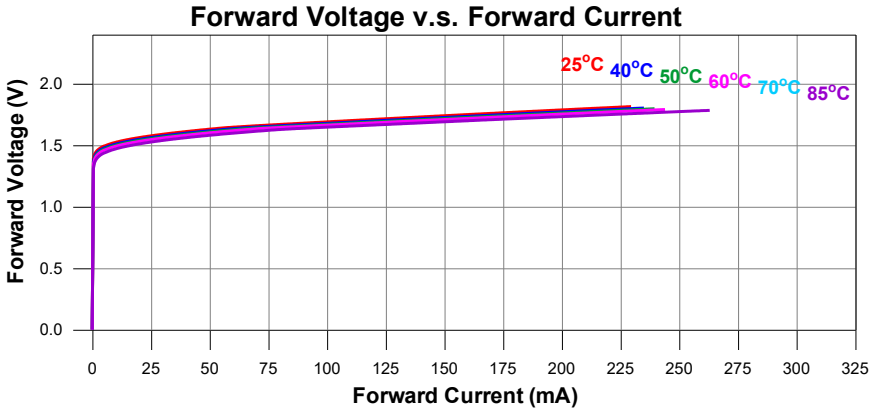


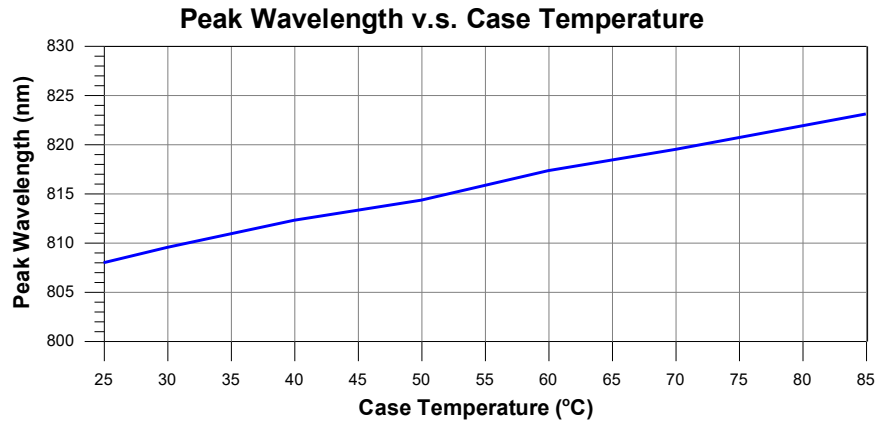


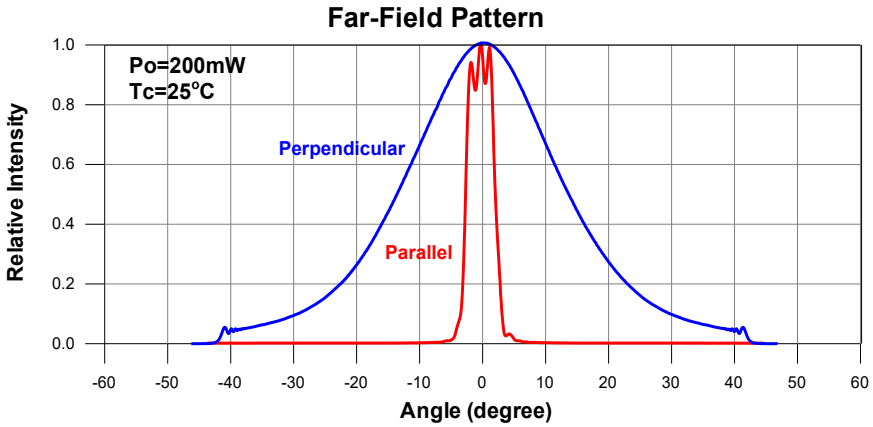


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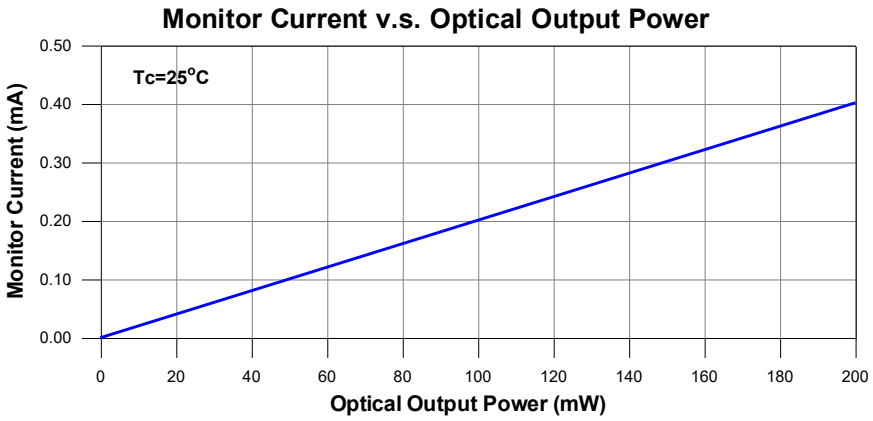


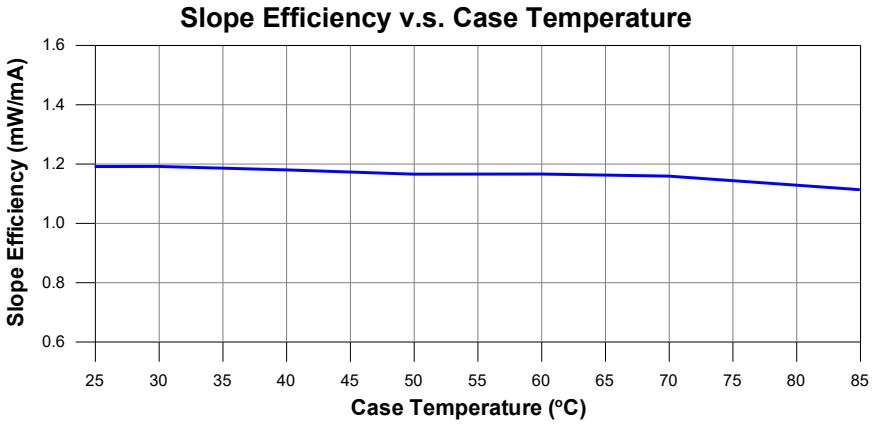


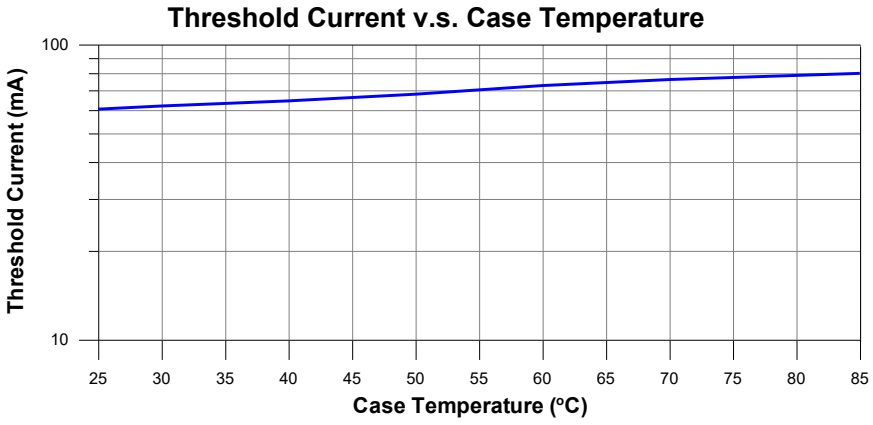


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**SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.**



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