

## LCU653056Ap/Dp

LCU65xx SERIES LASER DIODE

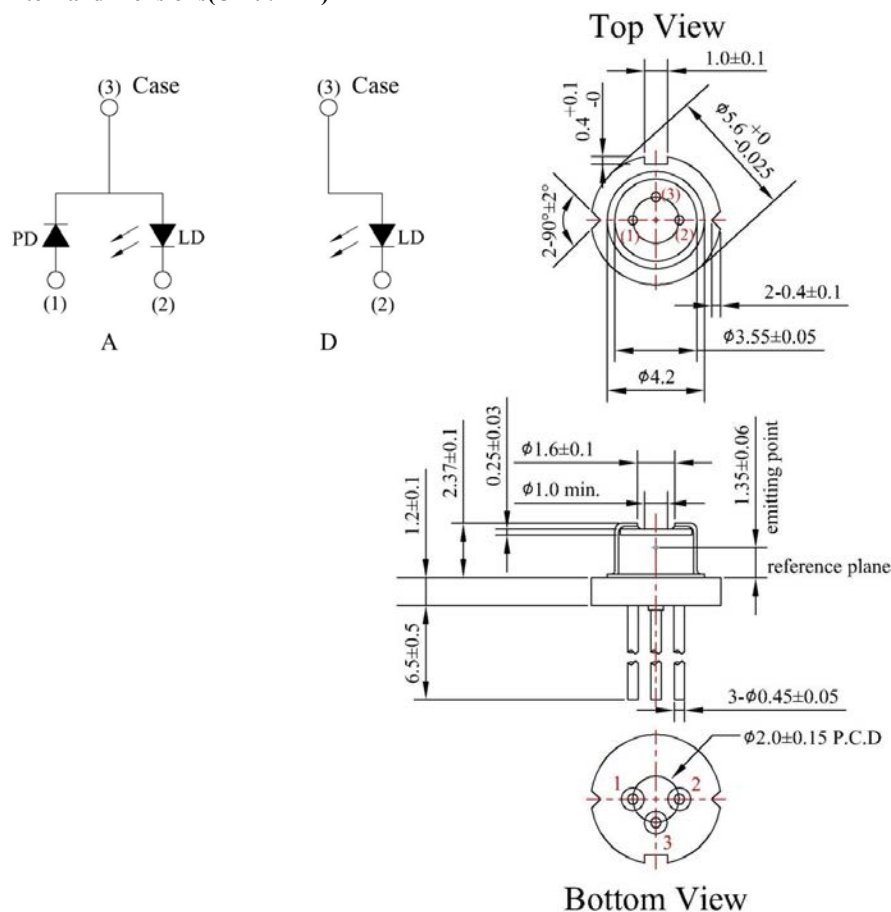
### ■ Features

1. High temperature operation
2. Standard optical power output : 30mW (CW)
3. TO-56 ( $\phi$  5.6mm) Packaged, with Pb-free window cap.

### ■ Applications

1. Laser Module
2. Lase Pointer
3. Industrial Use
4. Medical application

### ■ External dimensions(Unit : mm)



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### Absolute Maximum Ratings(Tc=25°C)

Parameter	Symbol	Rating	Unit
Optical Output	Po	35	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)

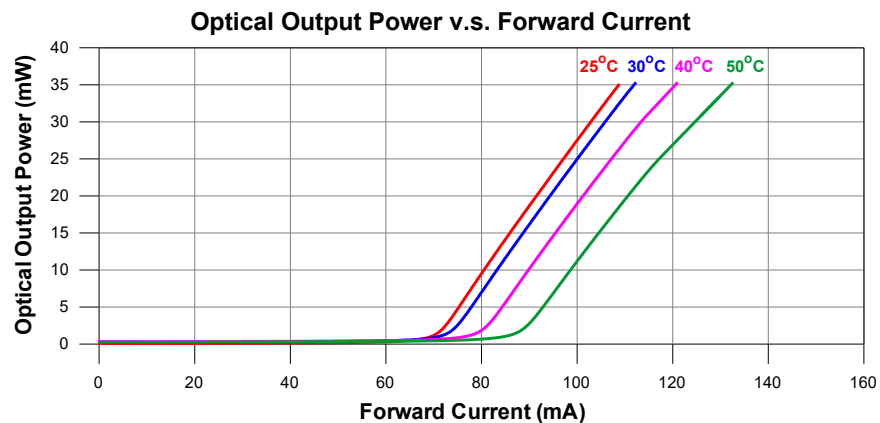
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	Ith	Po=30mW	-	70	85	mA	
Operating Current	Iop	Po=30mW	-	105	130	mA	
Operating Voltage	Vop	Po=30mW	-	2.2	2.6	Volts	
Slope Efficiency	$\eta$	Po=7.5-22.5mW	0.5	0.9	-	mW/mA	
Monitor Current	Im	Po=30mW	-	0.03	0.06	mA	
Beam Divergence (FWHM)	Parallel	$\theta_{//}$	Po=30mW	7	8	13	deg.
	Perpendicular	$\theta_{\perp}$	Po=30mW	-	28	35	deg.
Lasing Wavelength	$\lambda$	Po=30mW	645	660	665	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

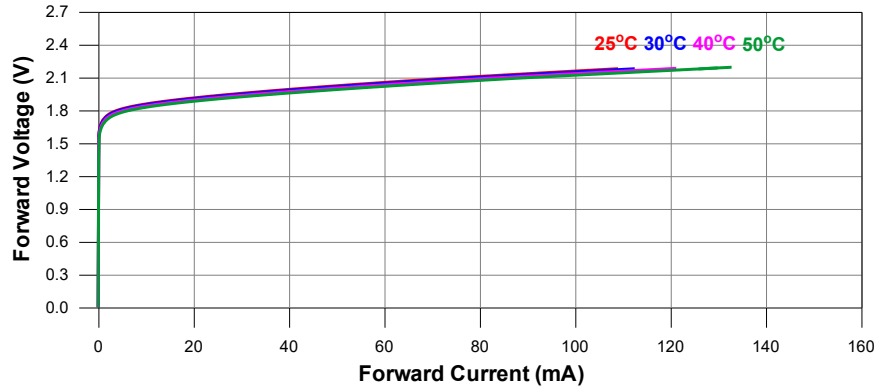


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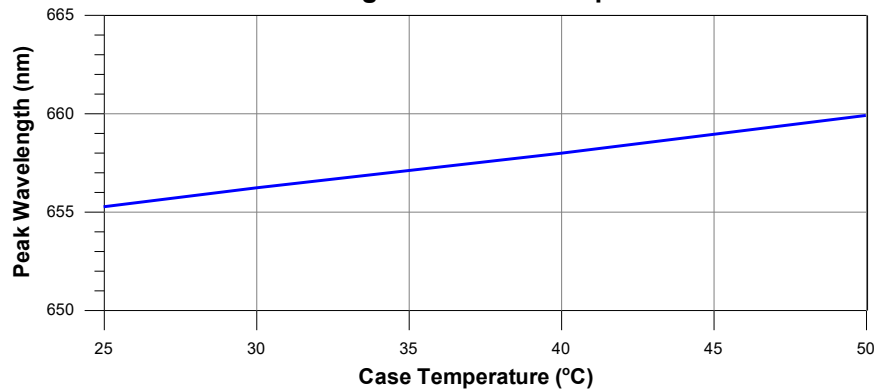
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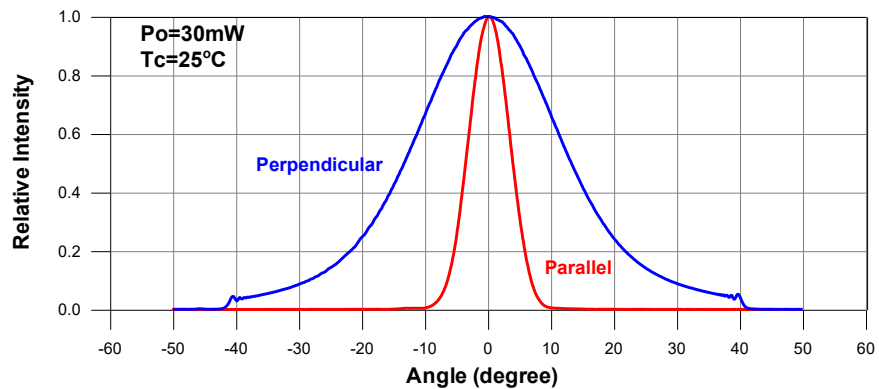
Forward Voltage v.s. Forward Current



Peak Wavelength v.s. Case Temperature



Far-Field Pattern

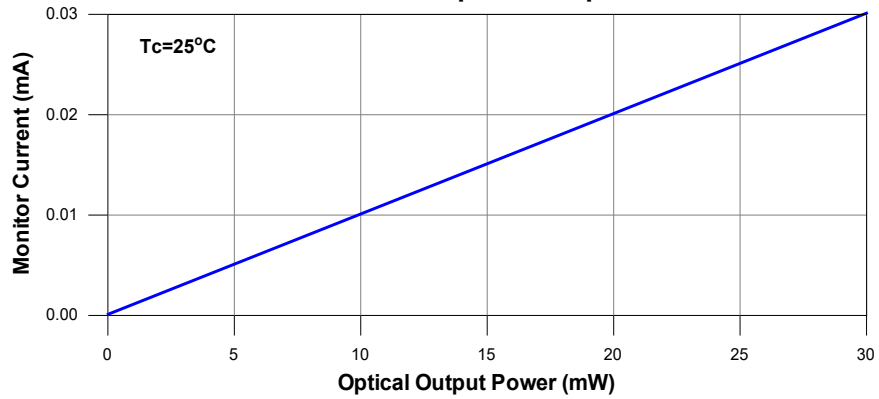


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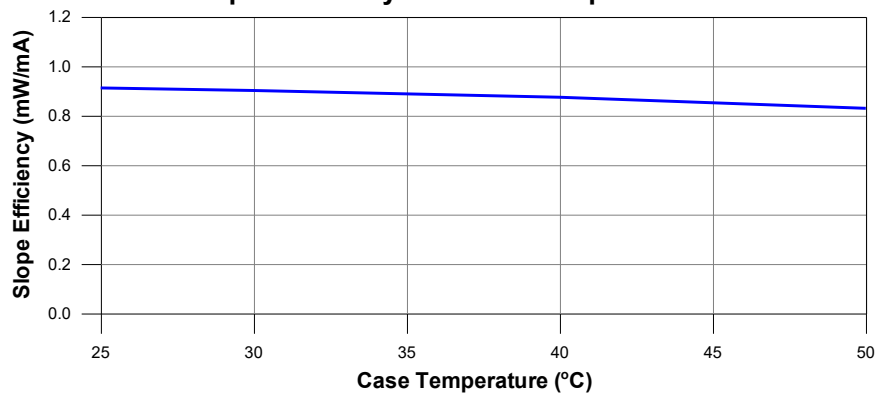
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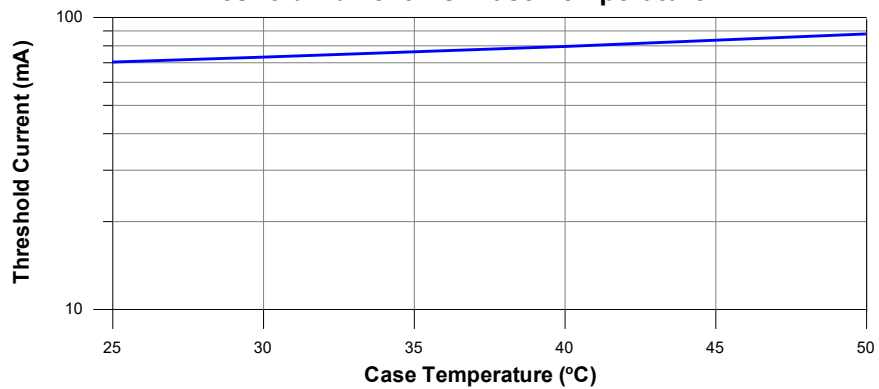
Monitor Current v.s. Optical Output Power



Slope Efficiency v.s. Case Temperature



Threshold Current v.s. Case Temperature



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