

LCU985072A/D

LCU980 SERIES LASER DIODE

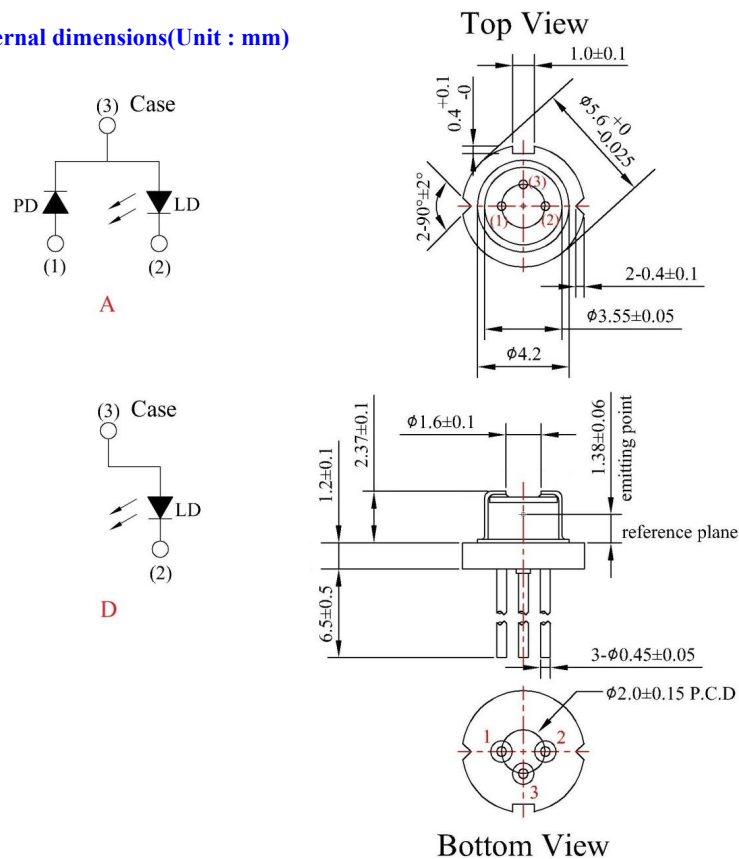
■ Features

1. Standard optical power output : 50mW (CW)
2. TO-56 (ϕ 5.6mm) Package, with Pb-free window cap.

■ Applications

1. Medical laser treatment
2. Laser indicator
3. 3D sensing
4. Night vision
5. Anti-counterfeiting

■ External dimensions(Unit : mm)



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Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Optical Output (Tc=25°C)	Po	100	mW
LD Reverse Voltage (Tc=25°C)	Vr_LD	2	V
PD Reverse Voltage (Tc=25°C)	Vr_PD	30	V
Operating Temperature (Case)	Top	-10~+70	°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=1-5mW	-	12	20	mA	
Operating Current	Iop	Po=50mW	-	75	90	mA	
Operating Voltage	Vop	Po=50mW	-	1.55	2.0	V	
Slope Efficiency	η	Po=12.5-37.5mW	0.64	0.8	-	mW/mA	
Monitor Current	Im	Po=50mW	0.08	0.3	0.5	mA	
Beam Divergence (FWHM)	Parallel	$\theta_{//}$	Po=50mW	-	10	-	deg.
	Perpendicular	θ_{\perp}	Po=50mW	-	35	-	deg.
Lasing Wavelength	λ	Po=50mW	965	980	990	nm	

© $\theta_{//}$ and θ_{\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.

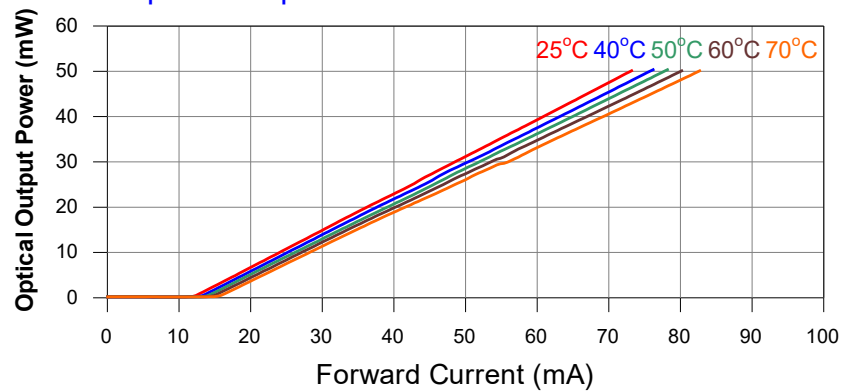
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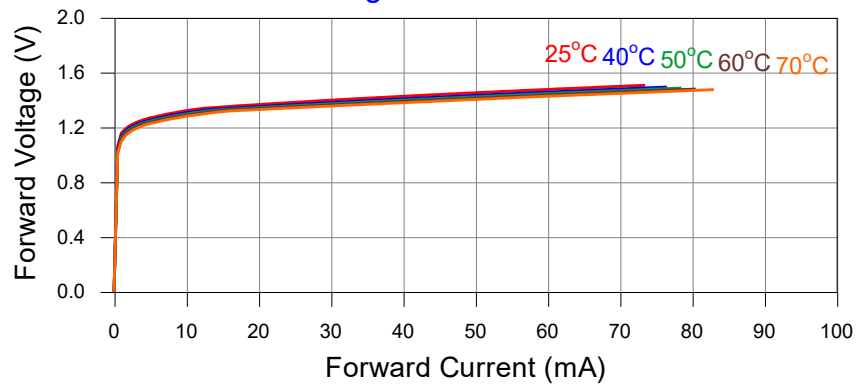
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■ Typical characteristic curves

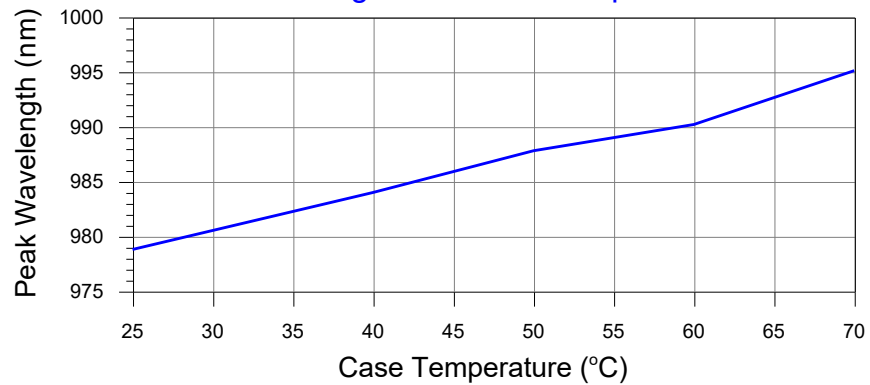
Optical Output Power v.s. Forward Current



Forward Voltage v.s. Forward Current



Peak Wavelength v.s. Case Temperature

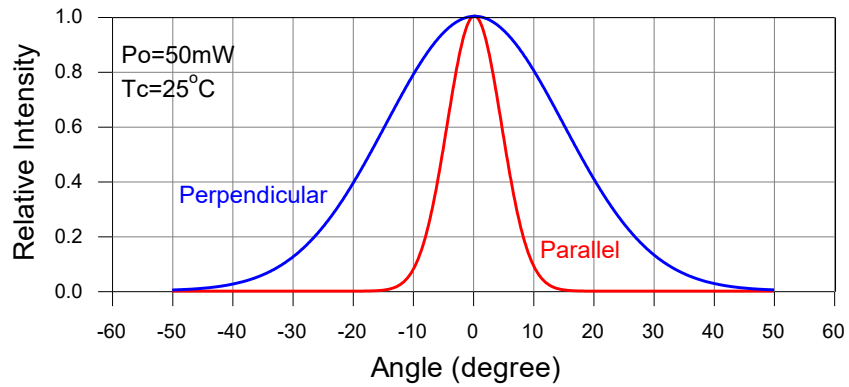


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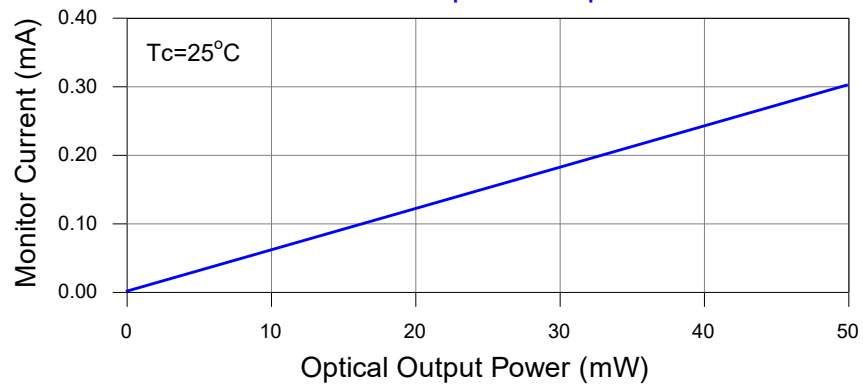
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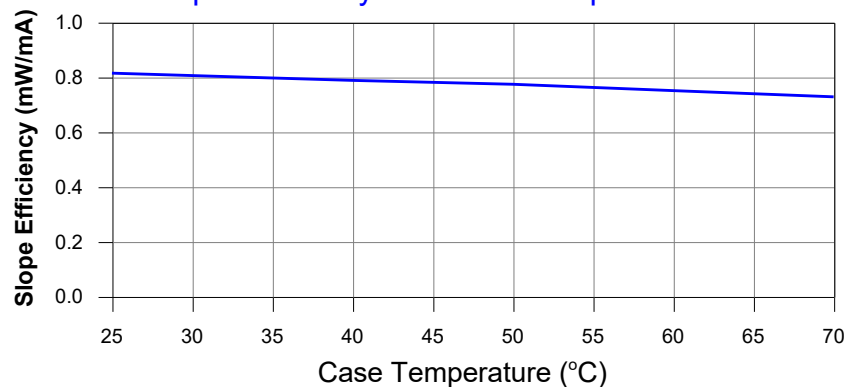
Far-Field Pattern



Monitor Current v.s. Optical Output Power



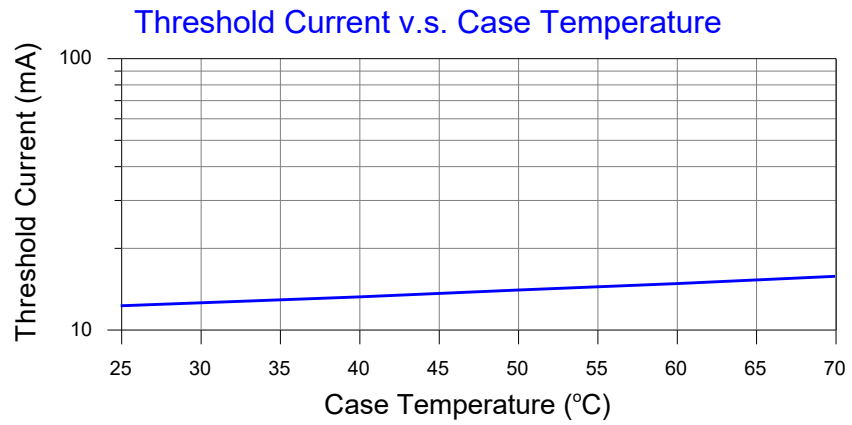
Slope Efficiency v.s. Case Temperature



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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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