

LCU98A071A/D/H

LCU980 SERIES LASER DIODE

Features

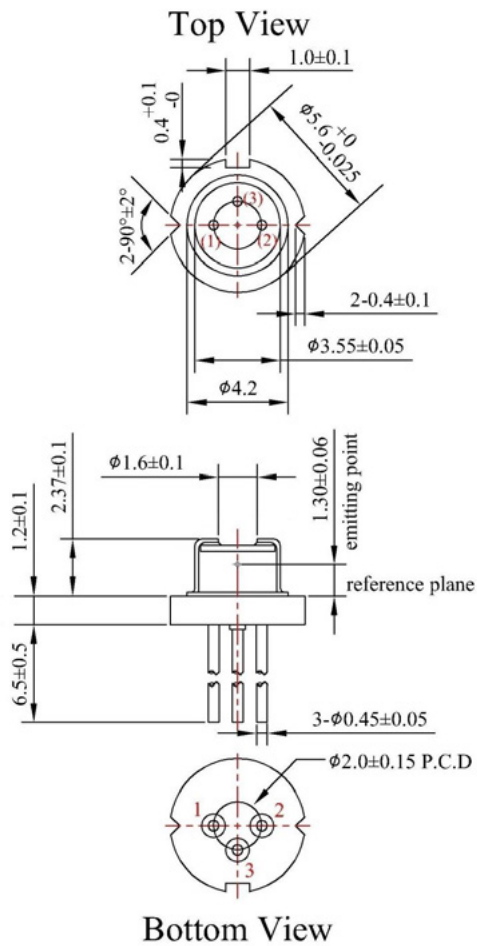
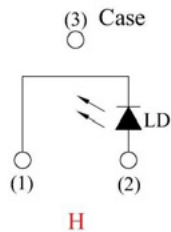
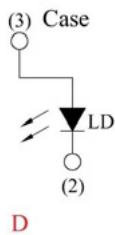
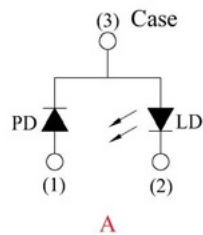
1. Standard optical power output : 100mW (CW)
2. TO-56 (ϕ 5.6mm) package, cap window with flat Pb-free lens.

Applications

1. Phototherapy
2. Laser indicator
3. 3D sensing
4. Night vision
5. Anti-counterfeiting

External dimensions(Unit : mm)

Pin configuration



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Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Optical Output (Tc=25°C)	Po	200	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		I _{th}	-	-	40	50	mA
Operating Current		I _{op}	Po=100mW	-	150	180	mA
Operating Voltage		V _{op}	Po=100mW	1.4	1.5	2.1	V
Slope Efficiency		η	Po=25-75mW	0.75	0.9	-	mW/mA
Monitor Current		I _m	Po=100mW, V _{RD} =5V	0.1	0.35	1.0	mA
Beam Divergence (FWHM)	Parallel	$\theta_{//}$	Po=100mW	-	8	-	deg.
	Perpendicular	$\theta_{\perp}$	Po=100mW	-	32	-	deg.
Lasing Wavelength		λ	Po=100mW	970	980	990	nm

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

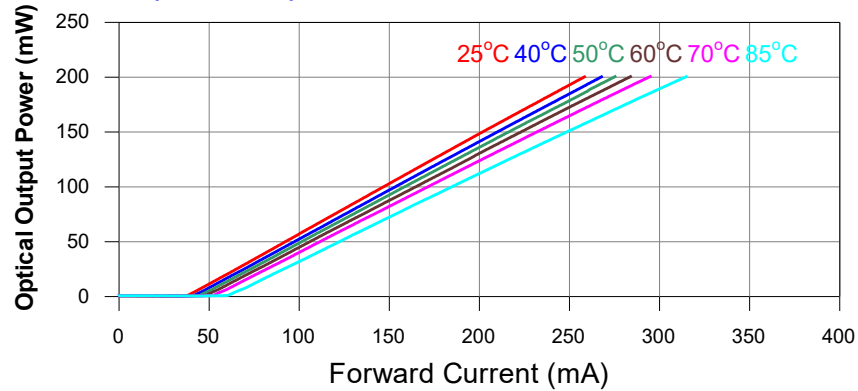
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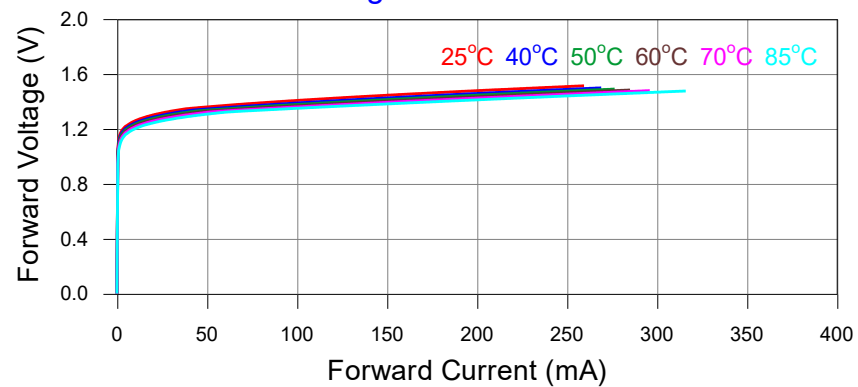
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■ Typical characteristic curves

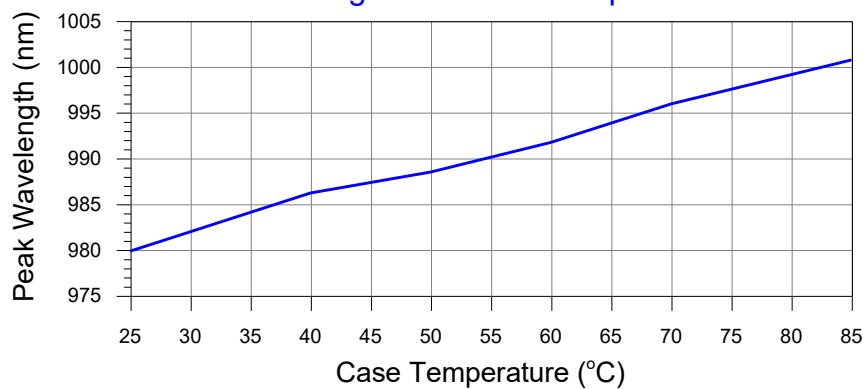
Optical Output Power v.s. Forward Current



Forward Voltage v.s. Forward Current



Peak Wavelength v.s. Case Temperature

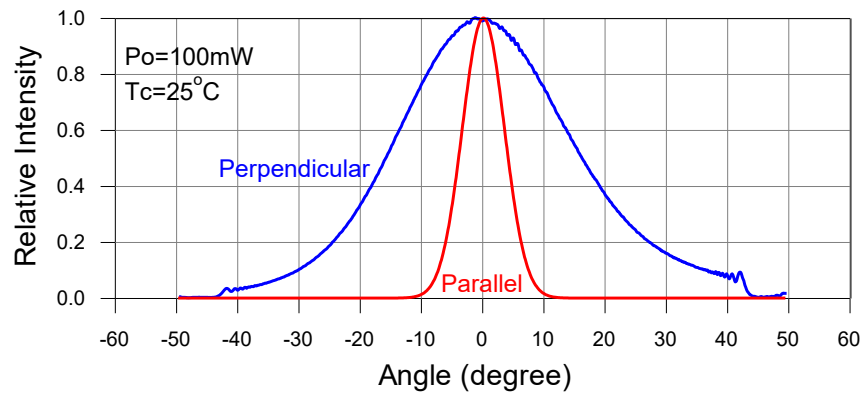


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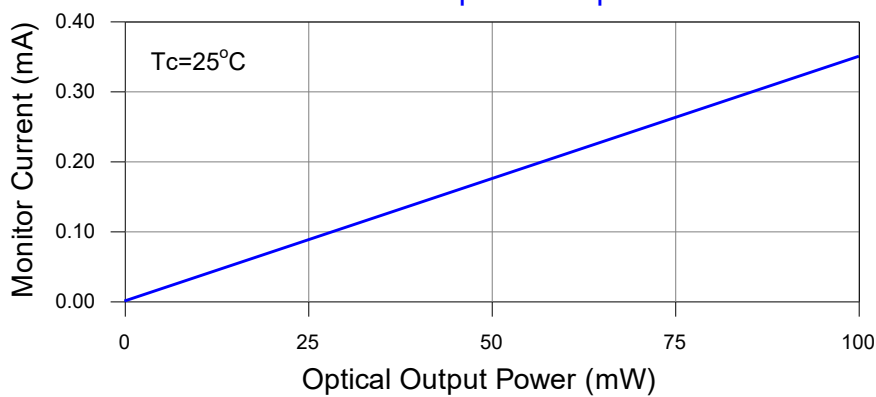
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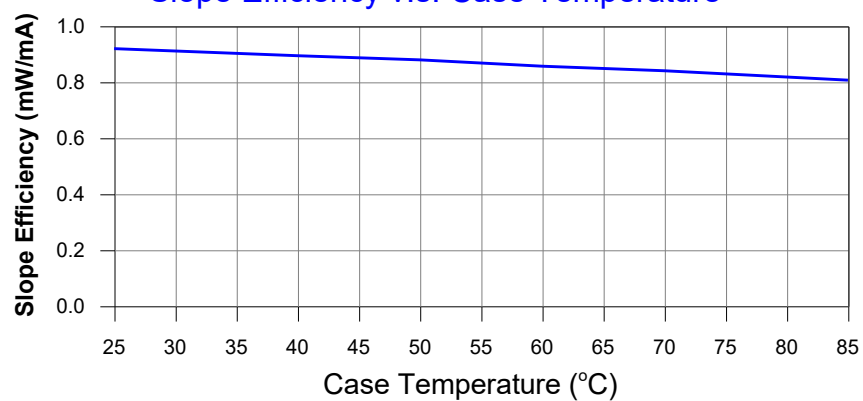
Far-Field Pattern



Monitor Current v.s. Optical Output Power



Slope Efficiency v.s. Case Temperature

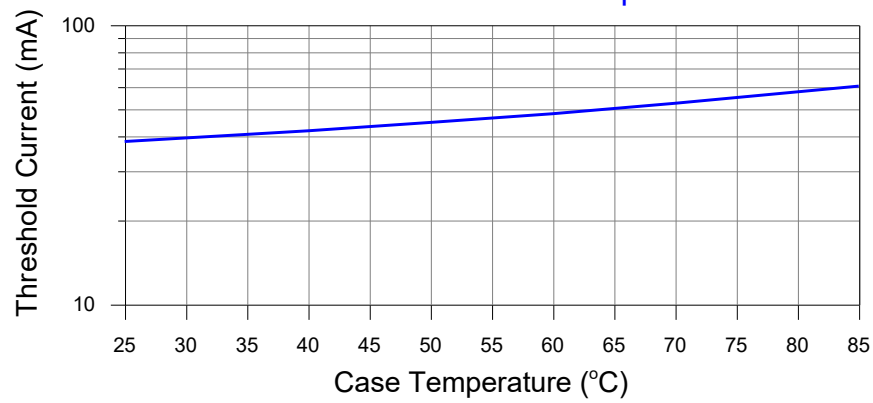


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Threshold Current v.s. Case Temperature



SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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