

LCU98A043Ap

LCU98xx SERIES LASER DIODE

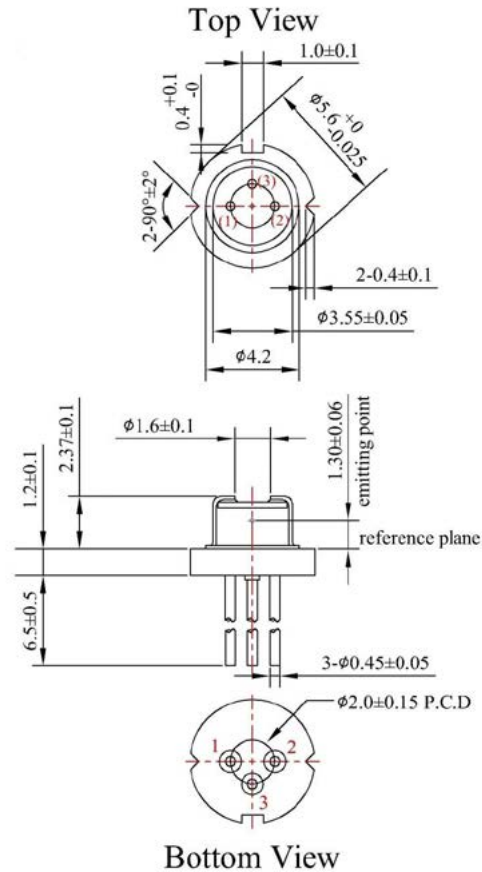
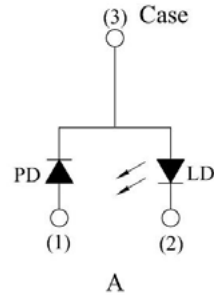
■ Features

1. Multi-mode Laser Diode
2. Standard optical power output : 100mW (CW)
3. TO-56 (ϕ 5.6mm) package, with Pb-free window cap.
4. Built-in photo diode for monitoring laser diode.

■ Applications

1. Medical laser treatment
2. Laser indicator
3. Laser detector
4. Night vision

■ External dimensions(Unit : mm)



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■ Absolute Maximum Ratings(Tc=25°C)

Parameter	Symbol	Rating	Unit
Optical Output	Po	100	mW
Reverse Voltage	Vr	2	V
Operating Temperature (Case)	Top	-10~+40	°C
Storage Temperature	Tstg	-40~+85	°C

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

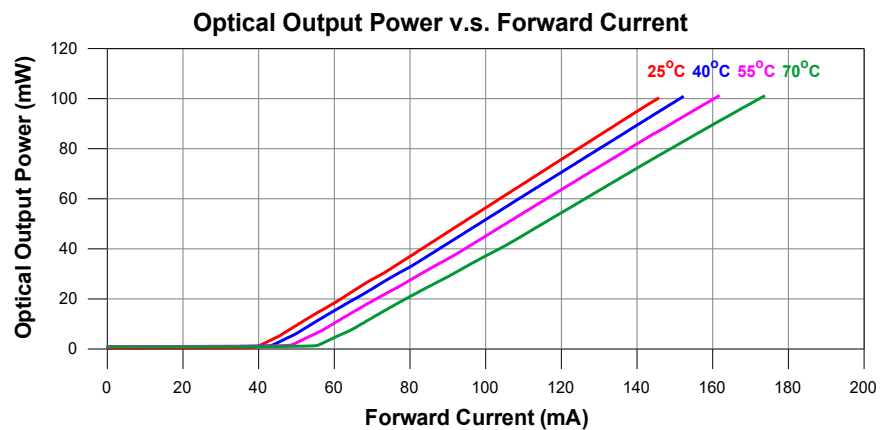
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	Ith	Po=1-5mW	-	40	50	mA
Operating Current	Iop	Po=100mW	-	150	180	mA
Operating Voltage	Vop	Po=100mW	1	1.5	2.1	V
Slope Efficiency	η	Po=25-75mW	0.75	0.9	-	mW/mA
Monitor current	Im	Po=100mW	0.1	0.35	1.0	mA
Beam Divergence (FWHM)	Parallel	θ_{\parallel}	-	8	-	deg.
	Perpendicular	θ_{\perp}	-	32	-	deg.
Lasing Wavelength	λ	Po=100mW	970	980	990	nm

◎ θ_{\parallel} 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.

■ Typical characteristic curves

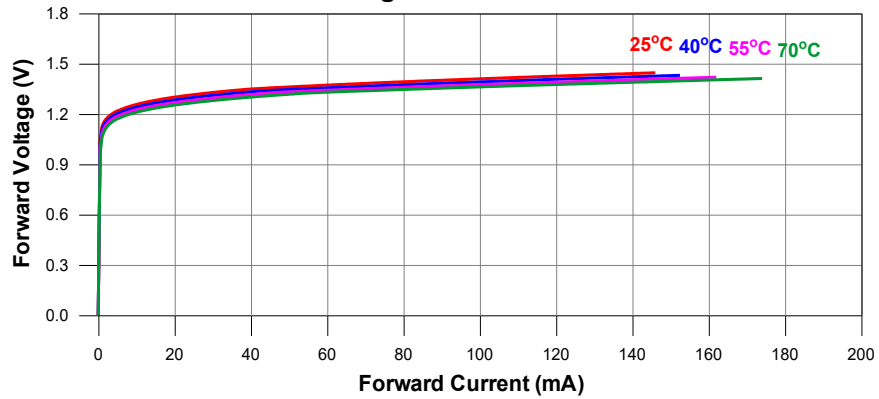


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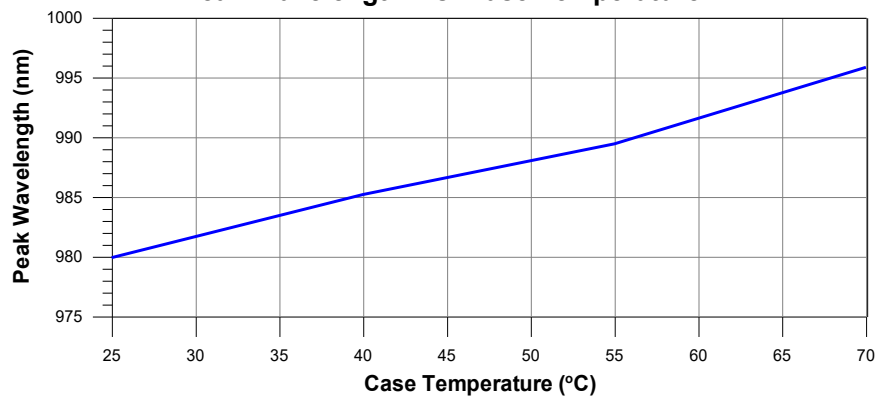
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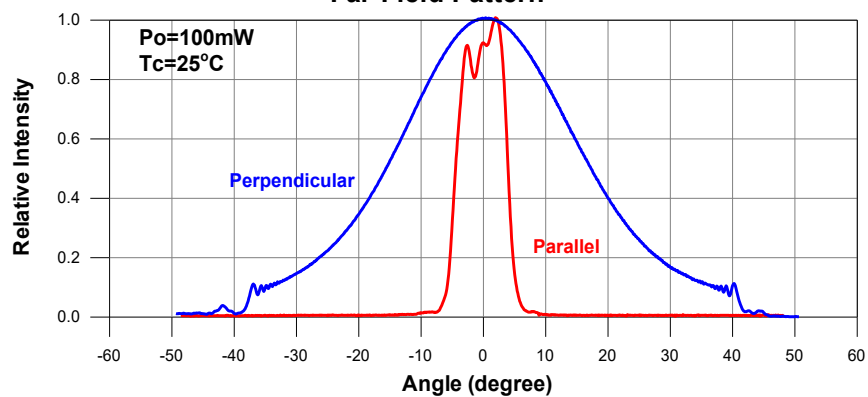
Forward Voltage v.s. Forward Current



Peak Wavelength v.s. Case Temperature



Far-Field Pattern



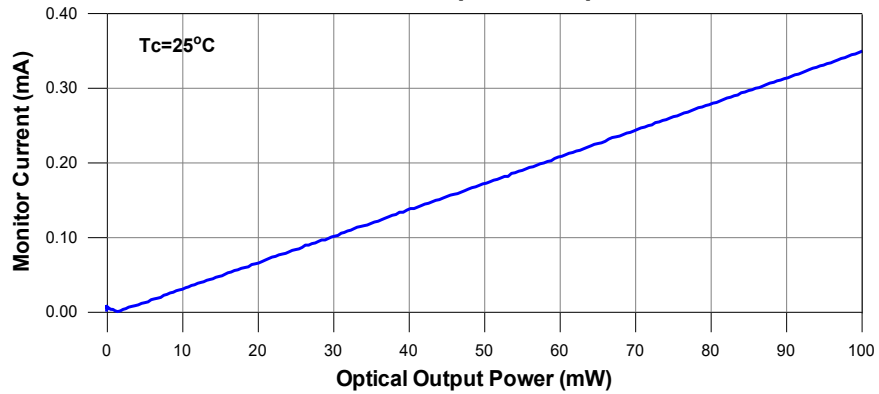
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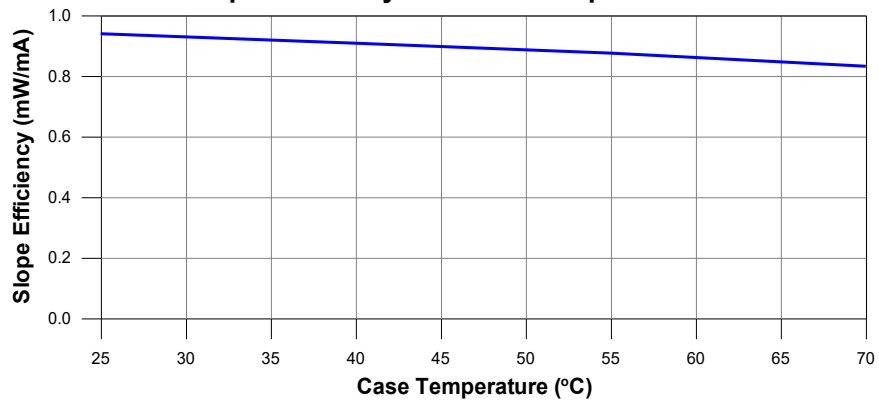
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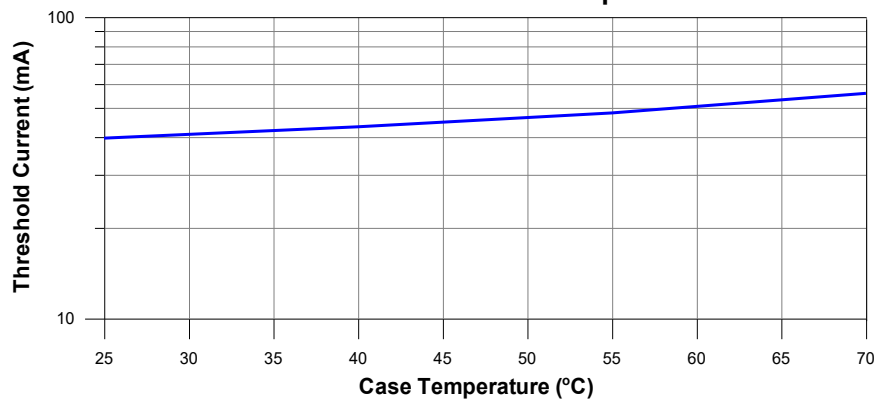
Monitor Current v.s. Optical Output Power



Slope Efficiency v.s. Case Temperature



Threshold Current v.s. Case Temperature



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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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