

LCU98A041Ap/Cp/Dp

LCU98xx SERIES LASER DIODE

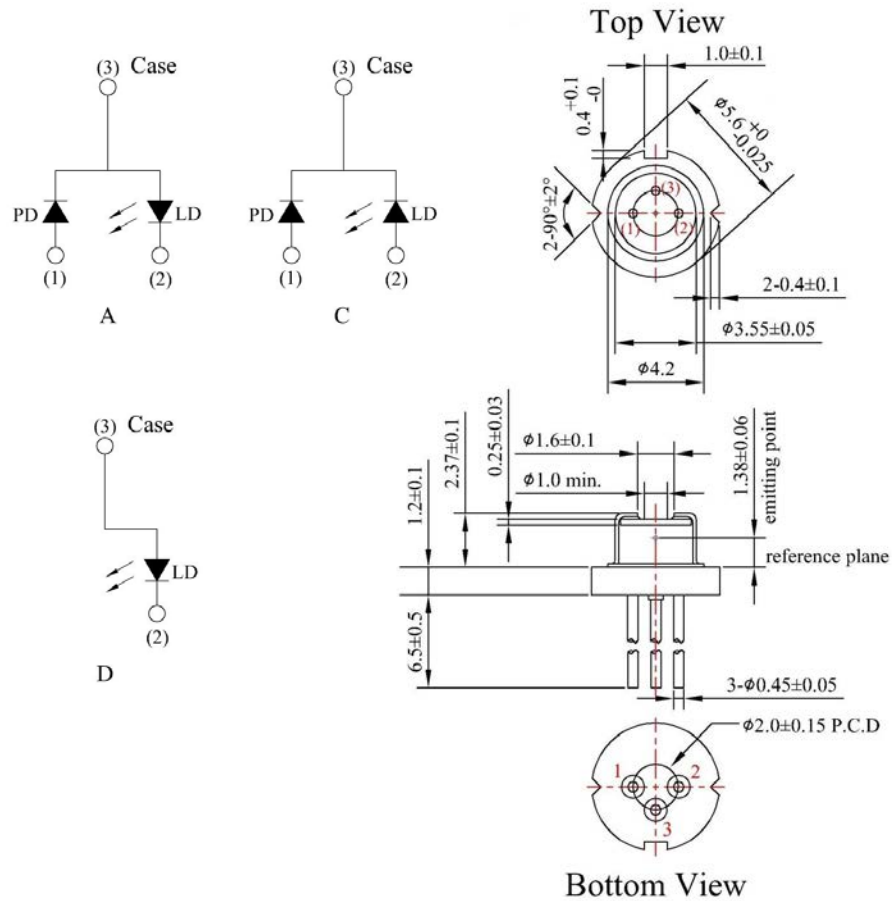
■ Features

1. Peak wavelength at 25°C : 980 nm (typical)
2. Standard light output : 100mW (CW)
3. TO-18 (ϕ 5.6mm) Packaged, cap window with flat Pb-free lens.

■ Applications

1. Laser indicator
2. Laser detector
3. 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)

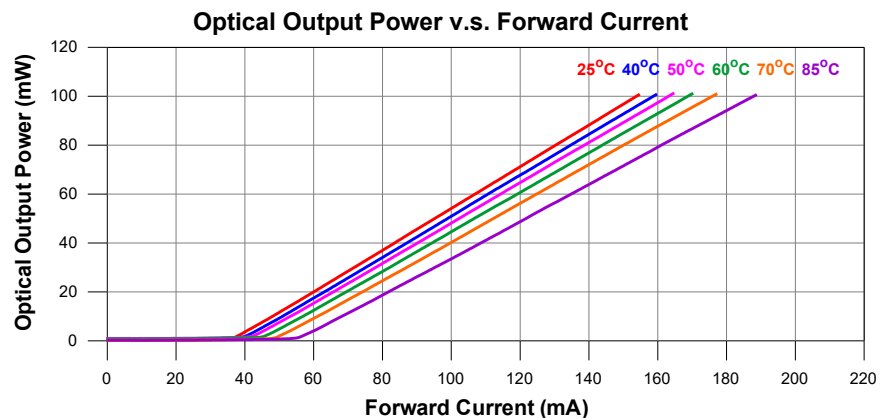
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	Ith	Po=100mW	-	40	50	mA
Operating Current	Iop	Po=100mW	-	165	190	mA
Operating Voltage	Vop	Po=100mW	1	1.5	2.1	Volts
Slope Efficiency	η	Po=25-75mW	0.5	0.8	-	mW/mA
Monitor current	Im	Po=100mW	0.1	0.9	1.4	mA
Beam Divergence (FWHM)	Parallel	θ_{\parallel}	-	6	-	deg.
	Perpendicular	θ_{\perp}	27	32	37	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

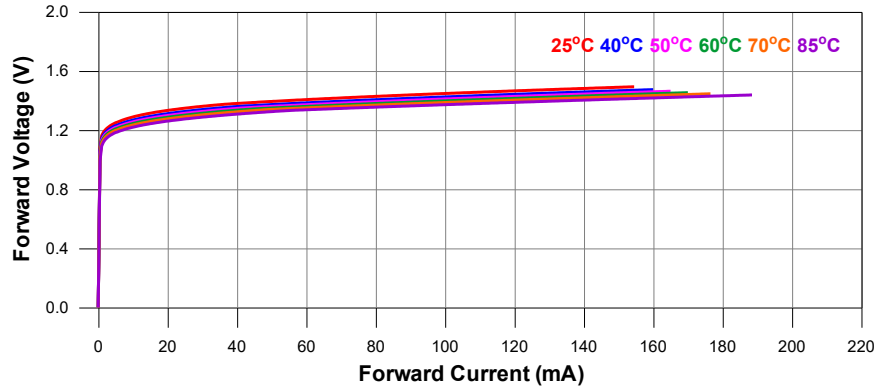


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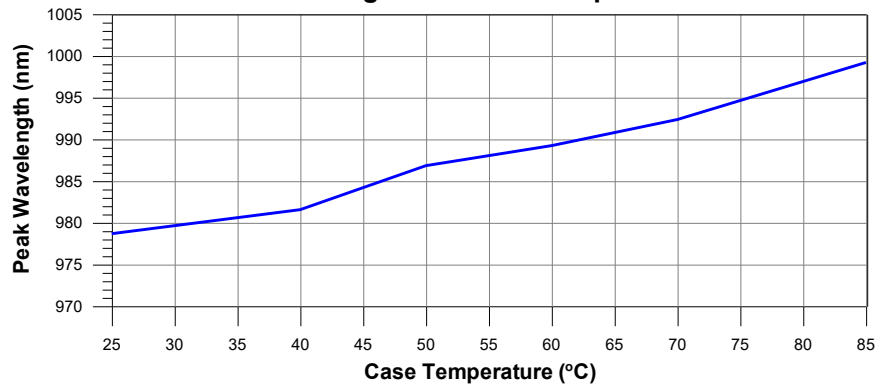
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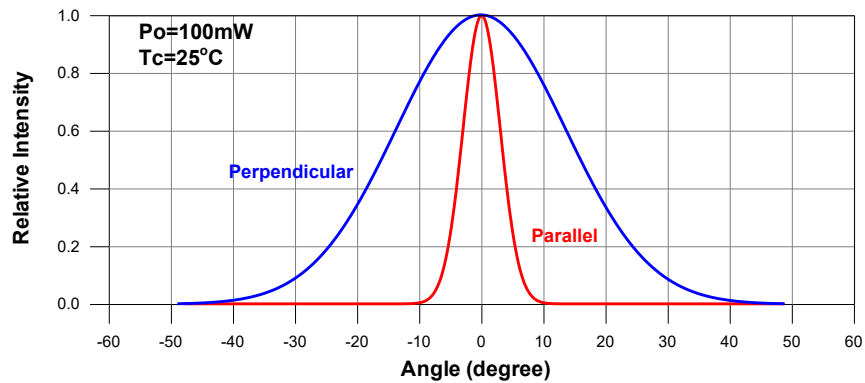
Forward Voltage v.s. Forward Current



Peak Wavelength v.s. Case Temperature



Far-Field Pattern

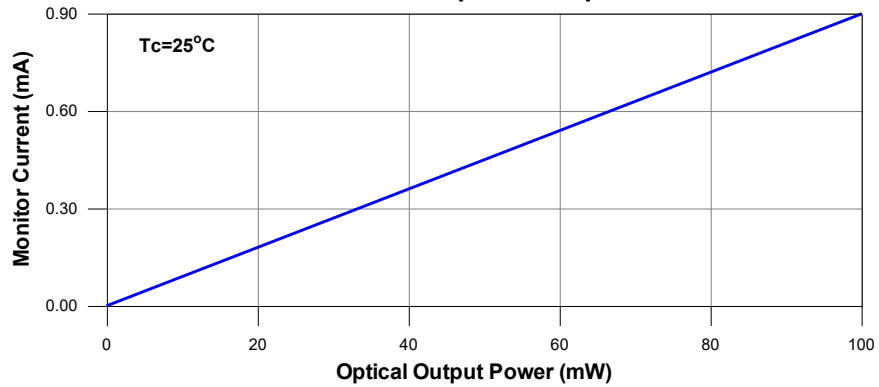


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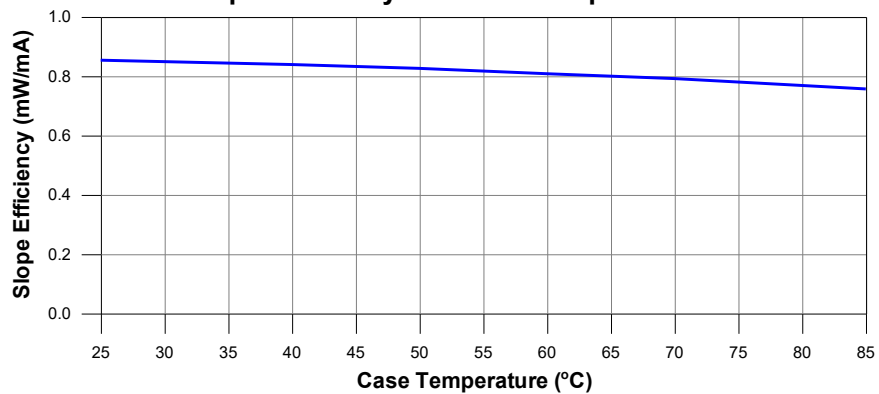
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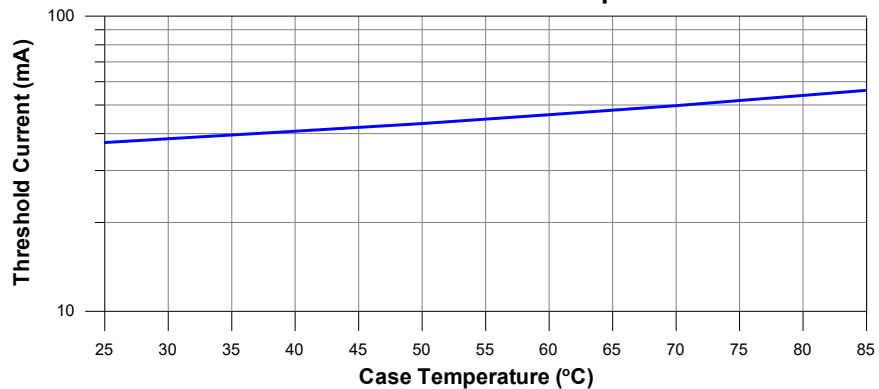
Monitor Current v.s. Optical Output Power



Slope Efficiency v.s. Case Temperature



Threshold Current v.s. Case Temperature



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