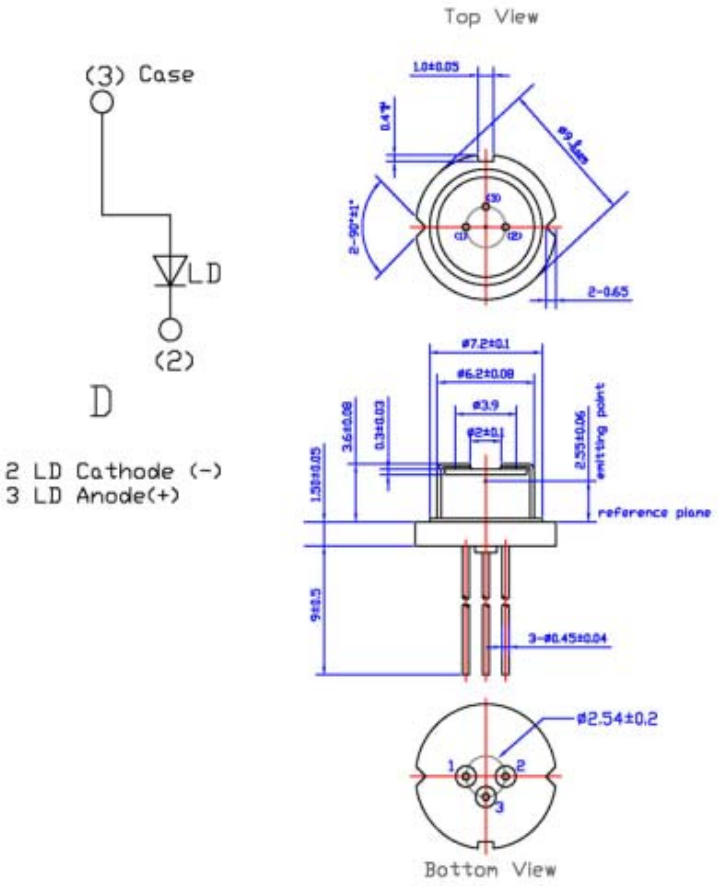
980nm Laser Diode
LCU98C046D-preliminary

■Specifications

(1) Device: Laser Diode

(2) Structure: TO-5(ϕ 9.0mm), With Pb free glass cap, PD

■External dimensions(Unit : mm)



■Absolute Maximum Ratings(Tc=25℃)

Parameter		Symbol	Rating	Unit
Optical Output		Po	**300**	mW
Reverse	Laser	Vr	**2**	V
Operating Temperature		Top	-10～+40	℃
Storage Temperature		Tstg	-15～+85	℃

Germany and other countries: LASER COMPONENTS GmbH, Phone: +49 8142 2864 0, Fax: +49 8142 2864 11, info@lasercomponents.com
USA: LASER COMPONENTS IG, Inc., Phone: +1 603 821 7040, Fax: +1 603 821 7041, info@laser-components.com
Great Britain: LASER COMPONENTS (UK) Ltd., Phone: +44 1245 491 499, Fax: +44 1245 491 801, info@lasercomponents.co.uk
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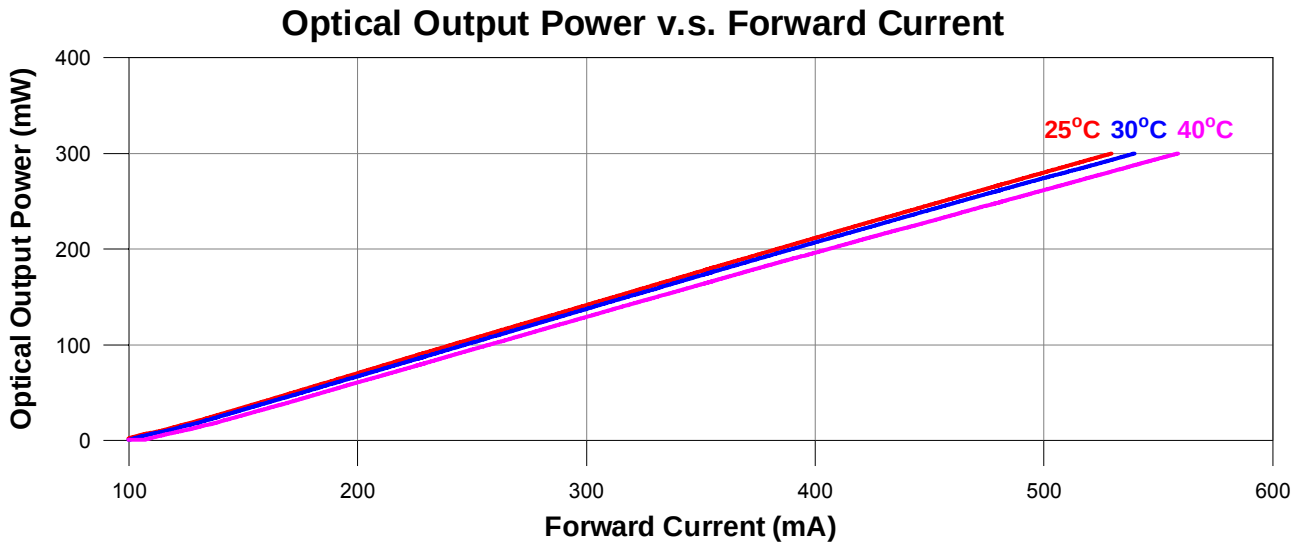
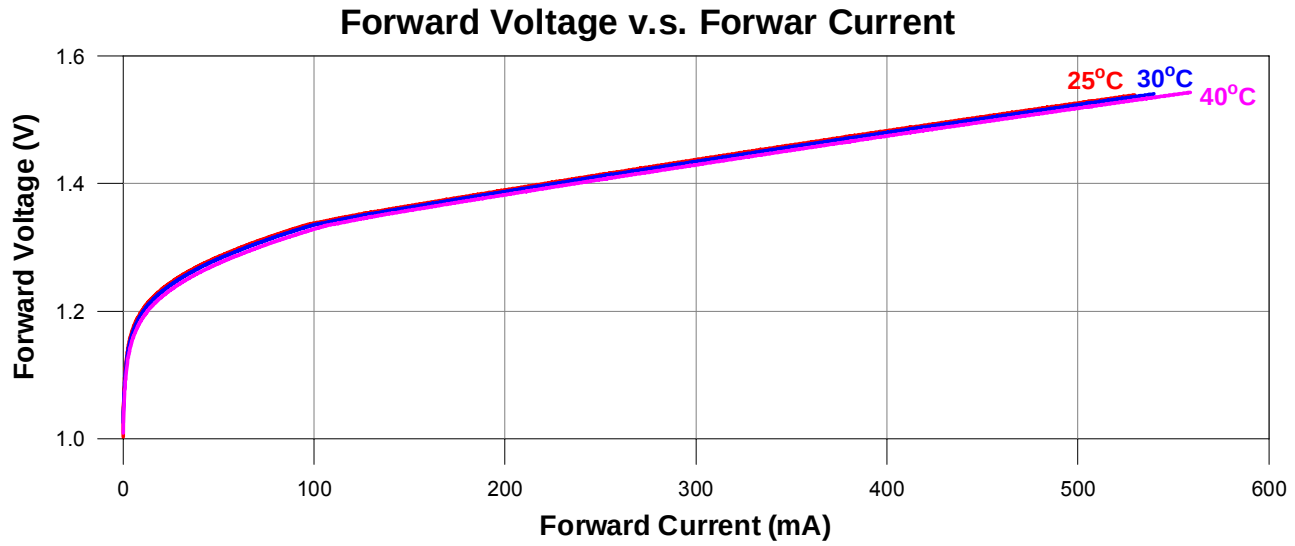
■Electrical and Optical Characteristics(Tc=25℃)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	-	-	**105**	**140**	mA
Operating Current		Iop	Po=300mW	-	**530**	**740**	mA
Operating Voltage		Vop	-	**1.2**	**1.6**	**2.3**	Volt
Slope Efficiency		η	225mW-75mW / I_{225mW}-I_{75mW}	**0.5**	**0.7**	-	mW/mA
Beam Divergence (FWHM)	Parallel	θ //	Po=300mW	-	**7**	-	deg.
	Perpendicular	θ ⊥	Po=300mW	**28**	**31**	**42**	deg.
Lasing Wavelength		λ	Po=300mW	**970**	**980**	**990**	nm

◎θ ⊥ are defined as the angle within which the intensity is 50% of the peak value.

■Typical characteristic curves





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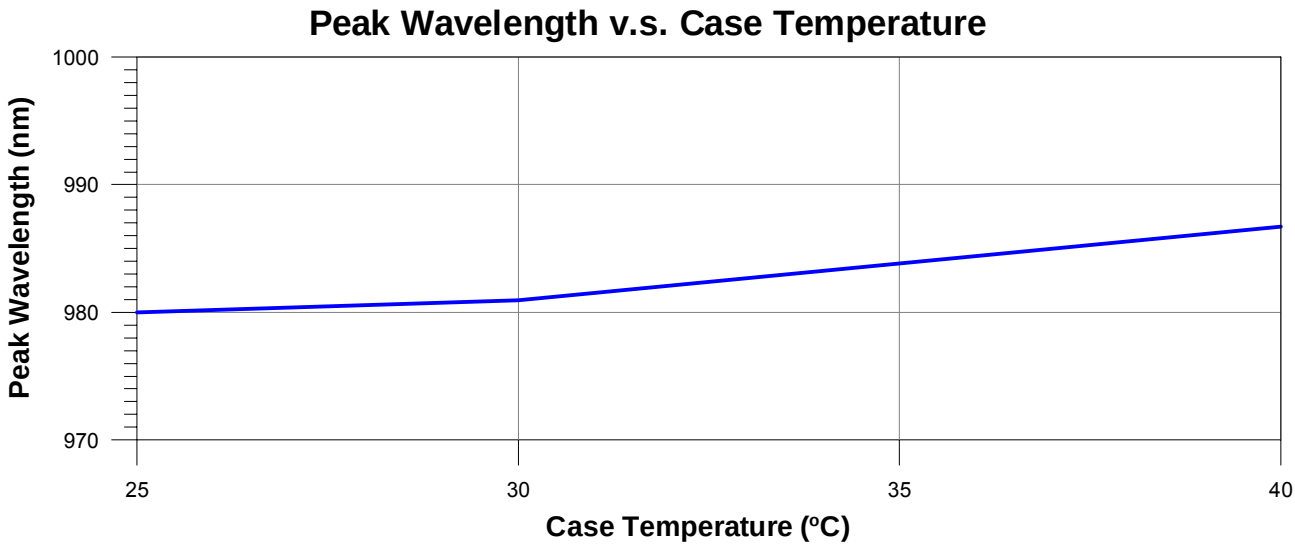

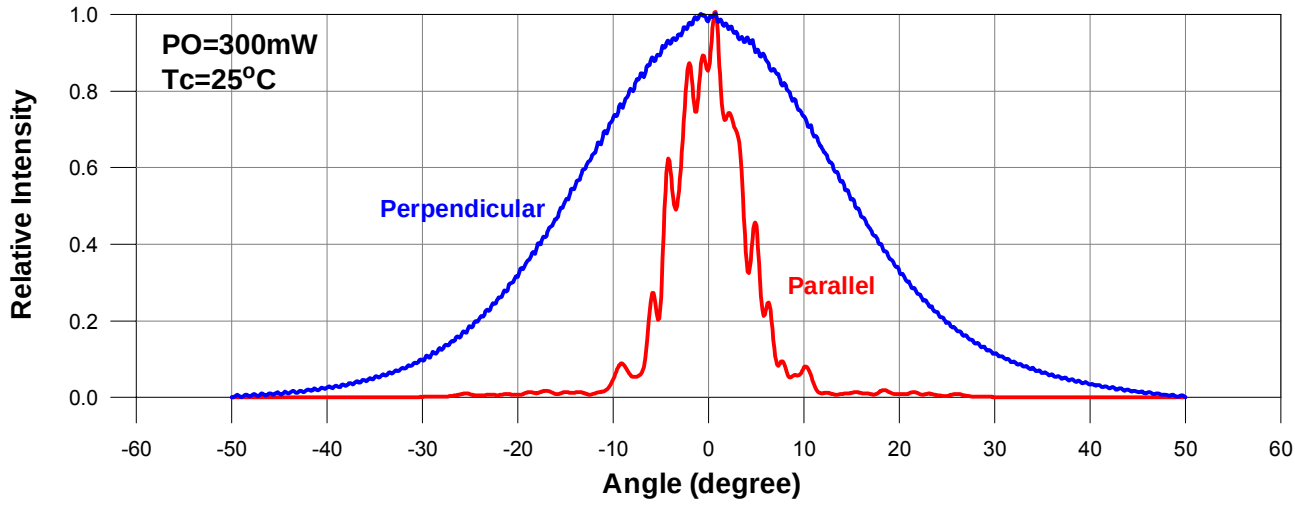

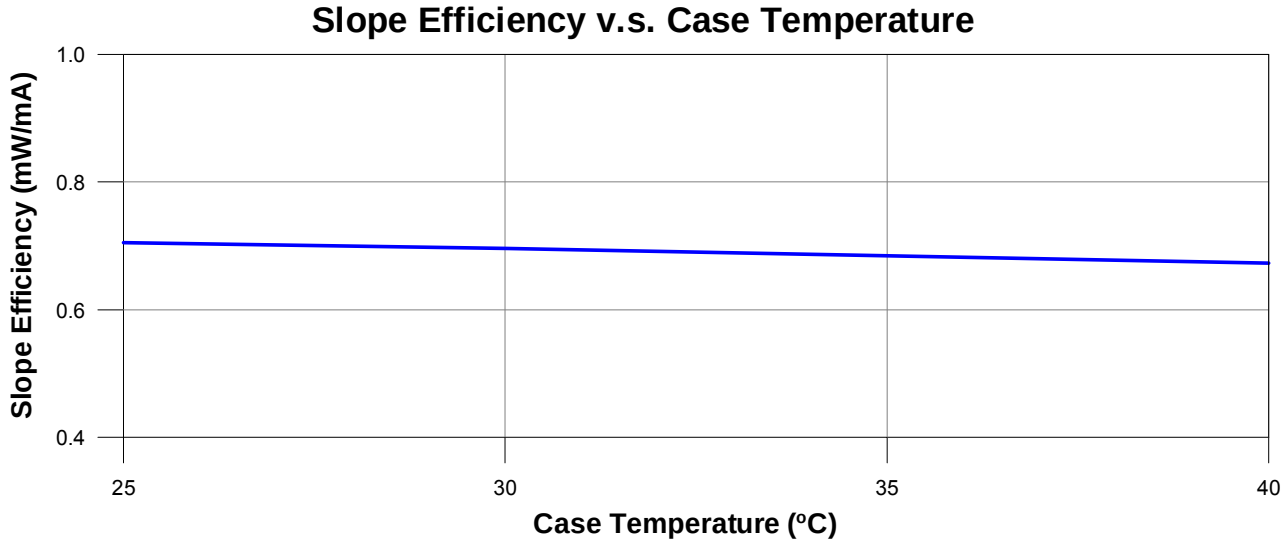

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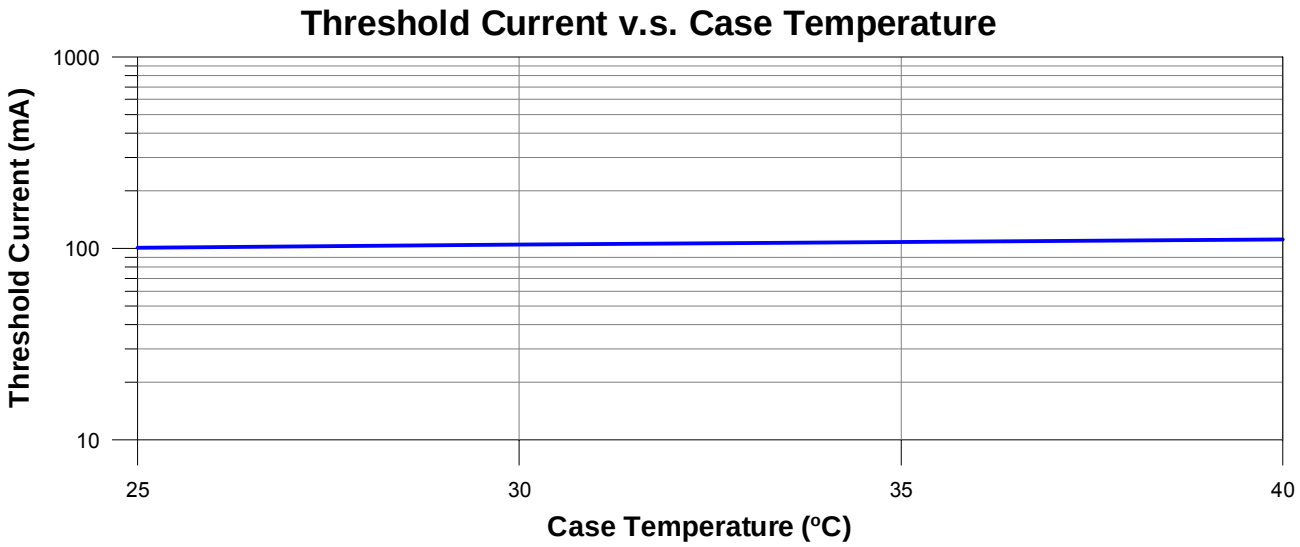

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