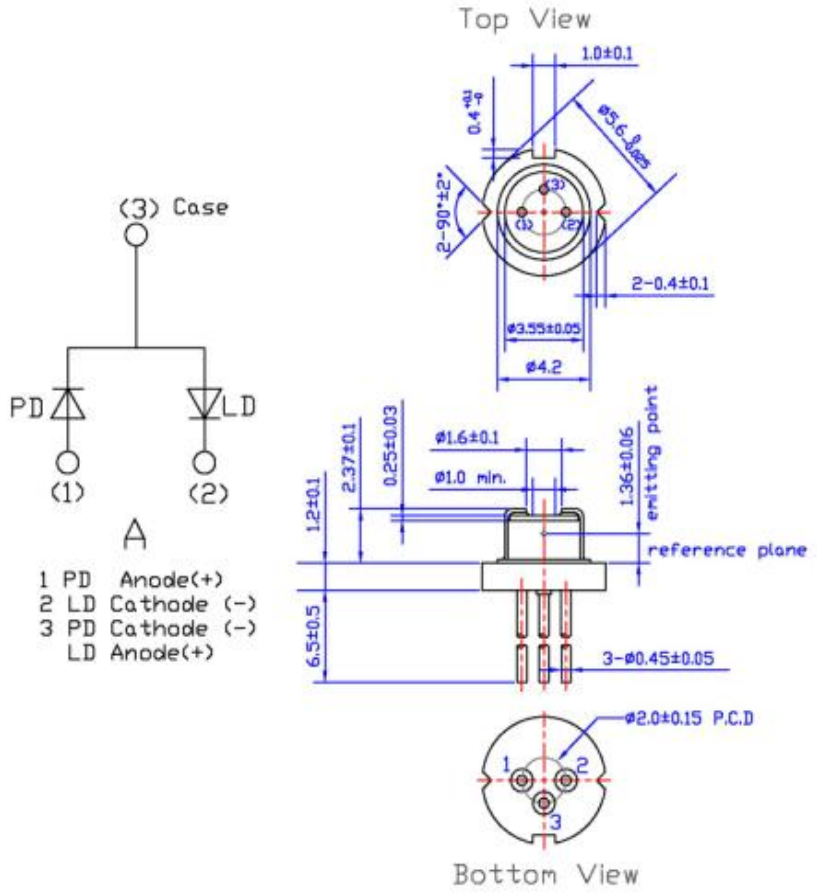
980nm Laser Diode
LCU985041A

■Specifications

(1) Device: Laser Diode

(2) Structure: TO-18(ϕ 5.6mm),With Pb free glass cap,with PD

■External dimensions(Unit : mm)



■Absolute Maximum Ratings(Tc=25℃)

Parameter		Symbol	Rating	Unit
Optical Output		Po	**50**	mW
Reverse Voltage	Laser	Vr	**2**	V
	PIN PD	Vr(PIN)	**30**	V
Operating Temperature		Top	-10～+40	℃
Storage Temperature		Tstg	-15～+85	℃

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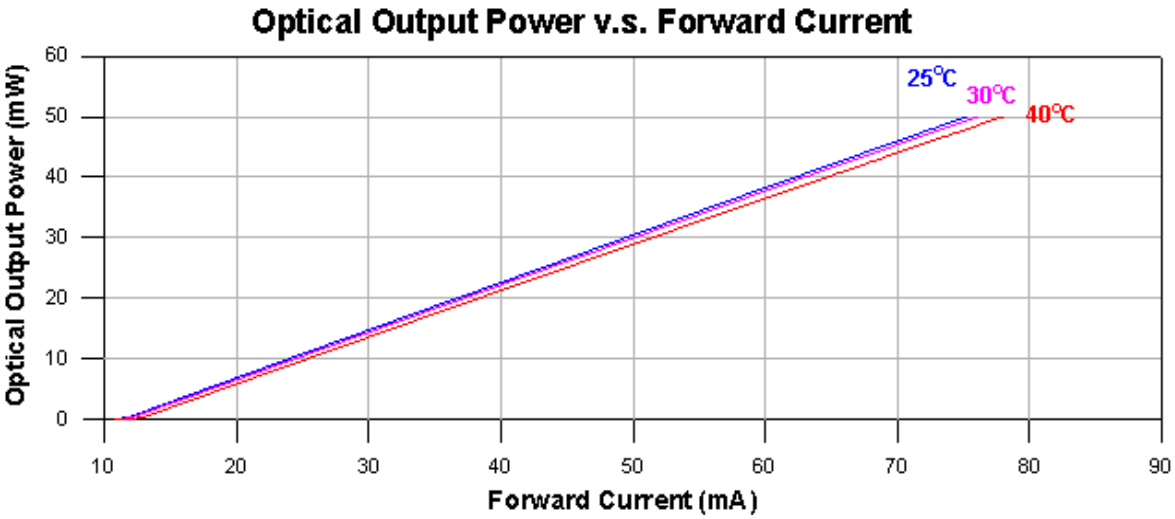
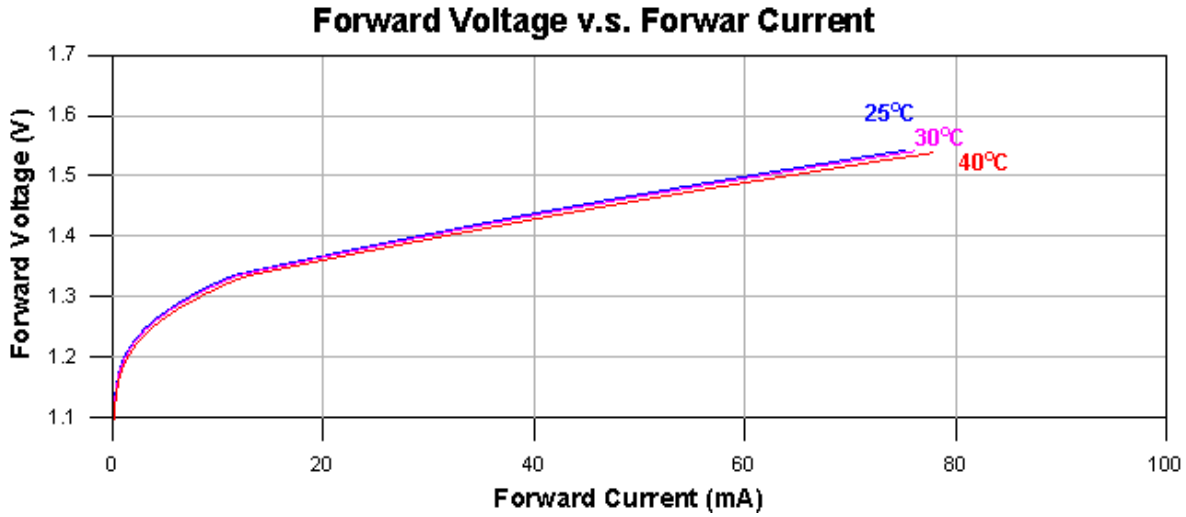
■Electrical and Optical Characteristics(Tc=25℃)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	-	-	**12**	**20**	mA
Operating Current		Iop	Po=50mW	-	**75**	**100**	mA
Operating Voltage		Vop	-	**1**	**1.5**	**2.1**	Volt
Slope Efficiency		η	$\frac{30mW-10mW}{I_{30mW}-I_{10mW}}$	**0.5**	**0.8**	-	mW/mA
Monitor Current		Im	Po=50mW	**0.1**	**0.3**	**0.5**	mA
Beam Divergence (FWHM)	Parallel	θ //	Po=50mW	**8**	**13**	**18**	deg.
	Perpendicular	θ ⊥	Po=50mW	**25**	**30**	**35**	deg.
Lasing Wavelength		λ	Po=50mW	**970**	**980**	**990**	nm

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

■Typical characteristic curves





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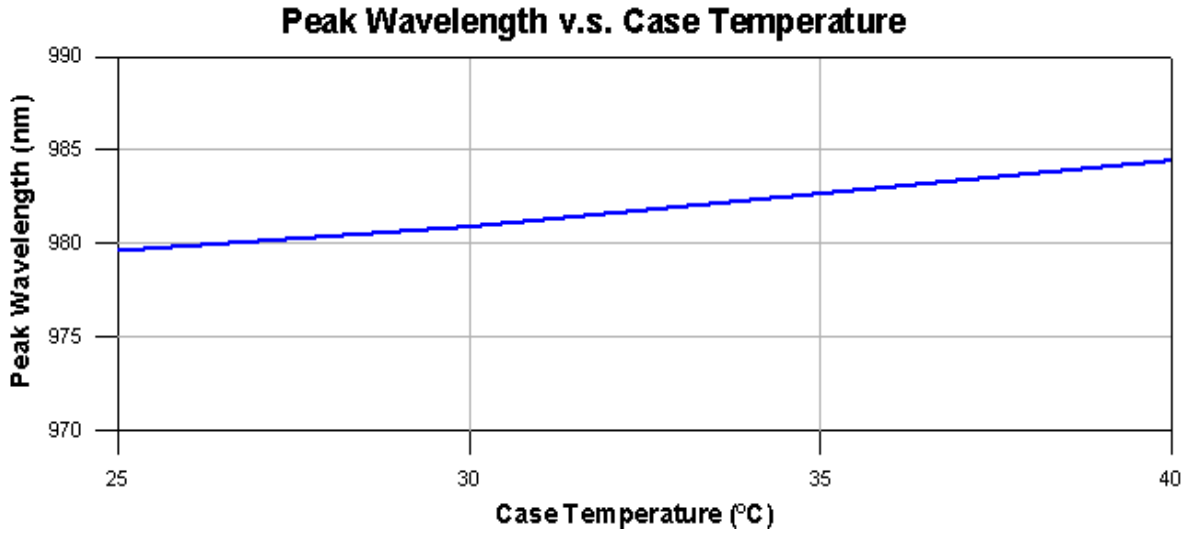

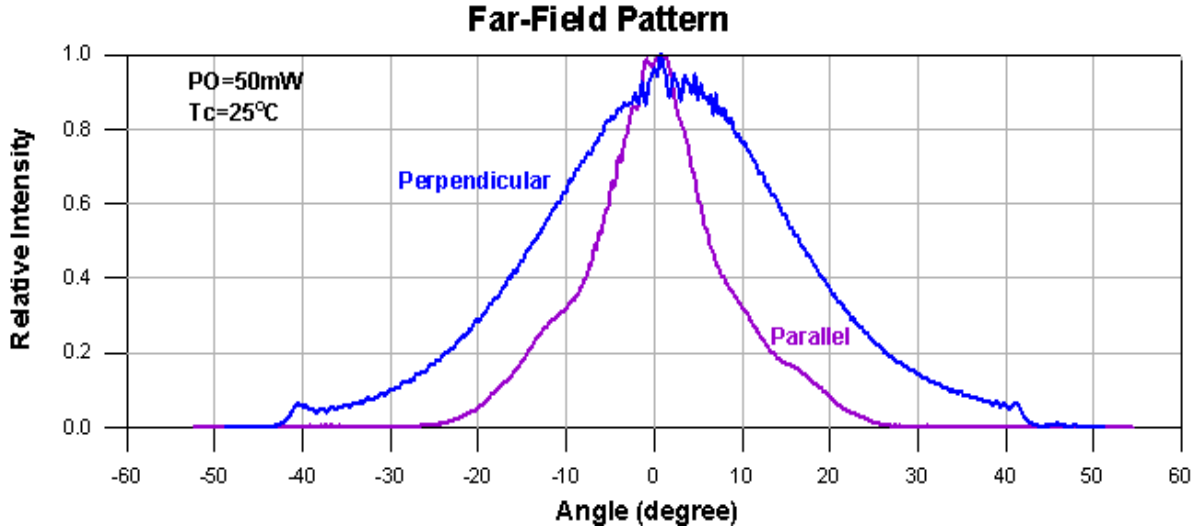

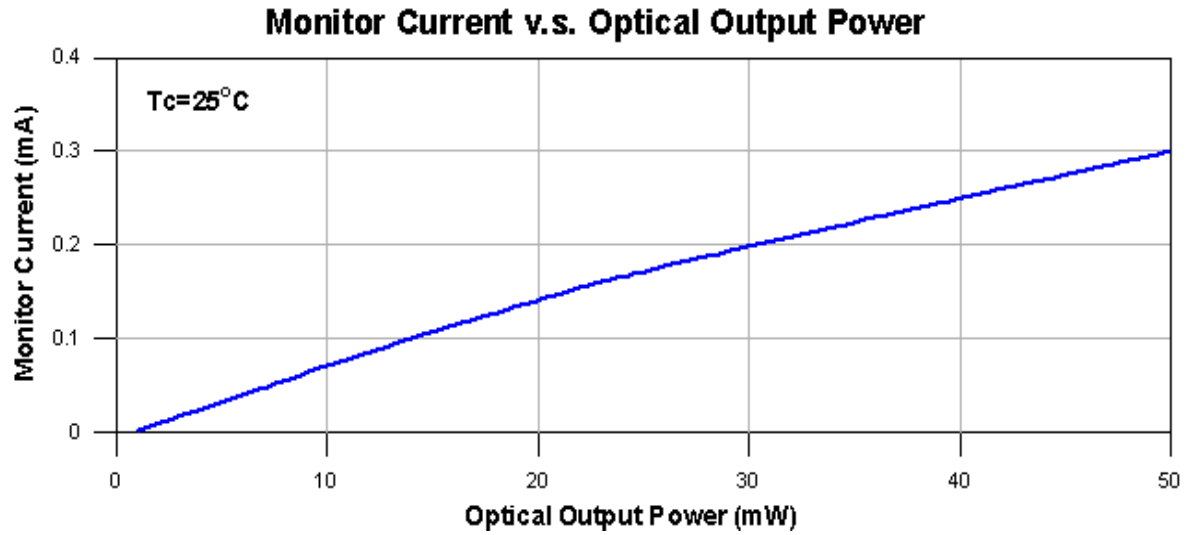

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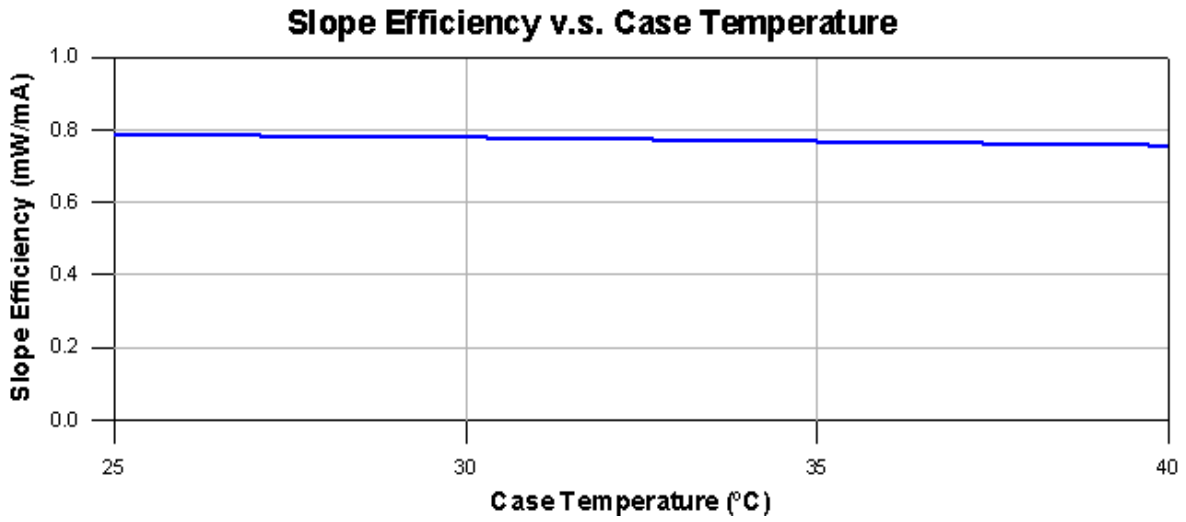

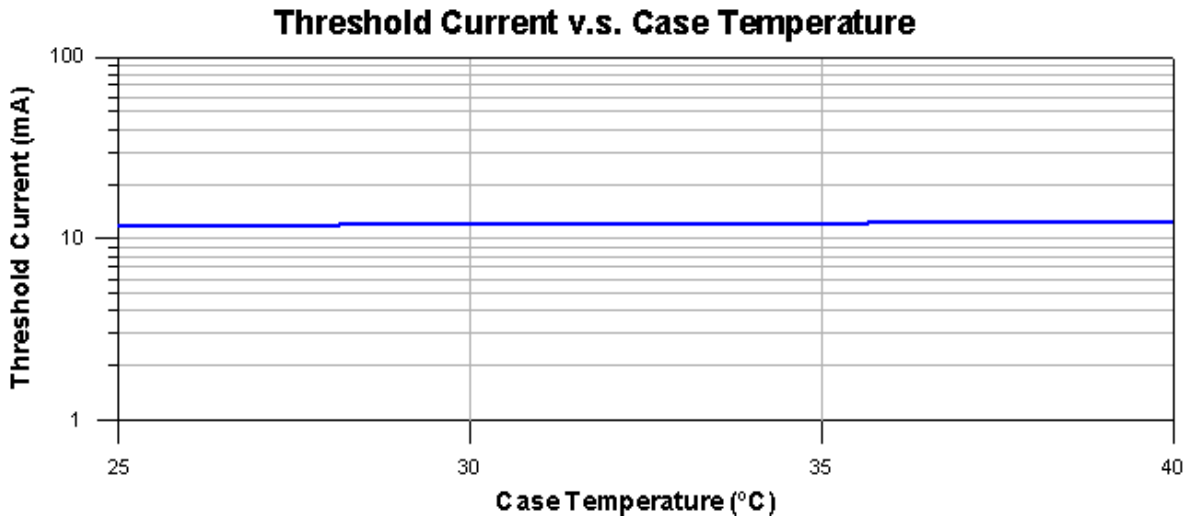

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