

980nm Laser Diode

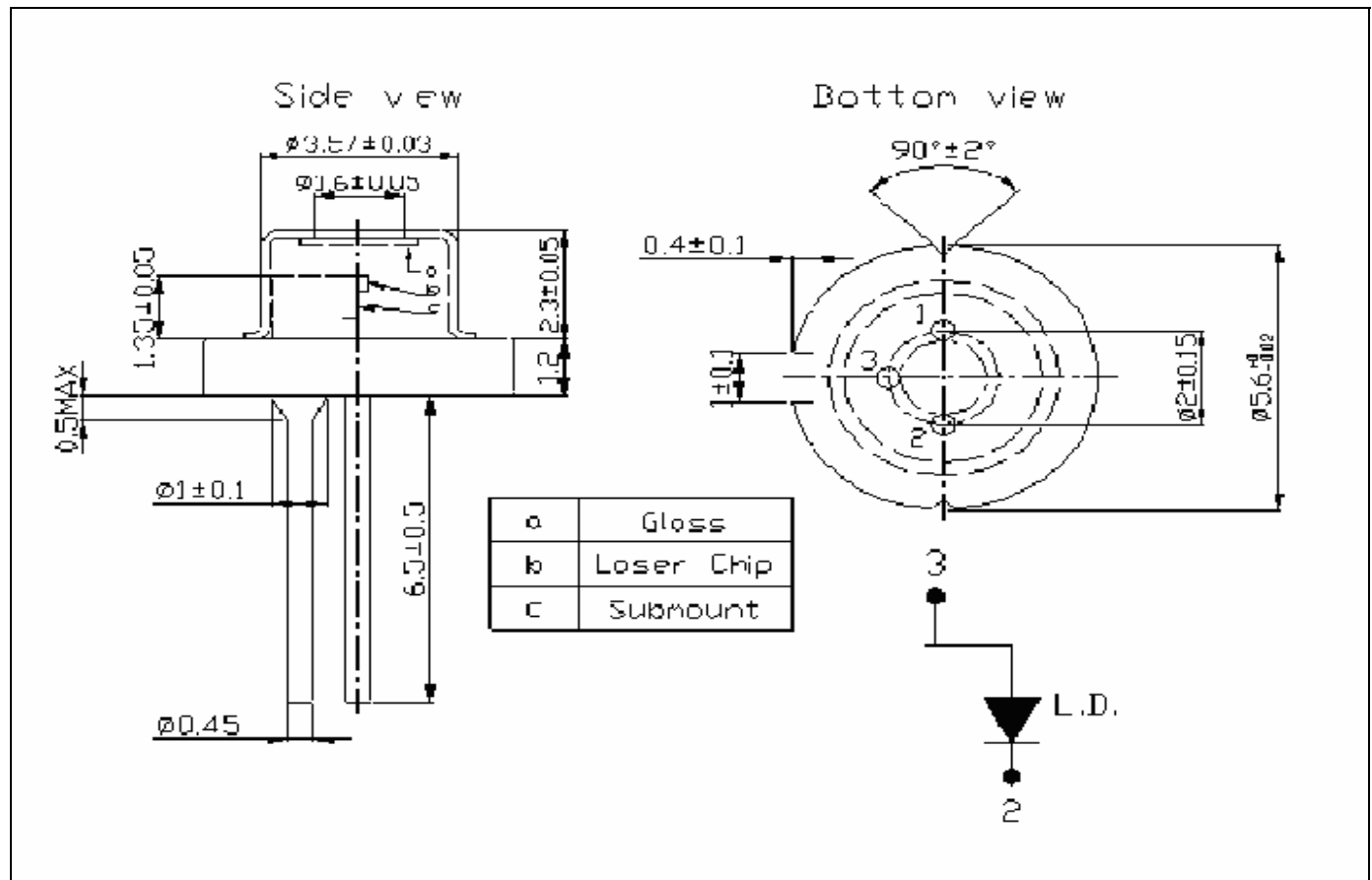
RLD98002002

■ Specifications

(1) Device: Laser Diode

(2) Structure: TO-18(ϕ 5.6mm), With Pb free glass cap, no PD

■ External dimensions(Unit : mm)



■ Absolute Maximum Ratings($T_c=25^\circ\text{C}$)

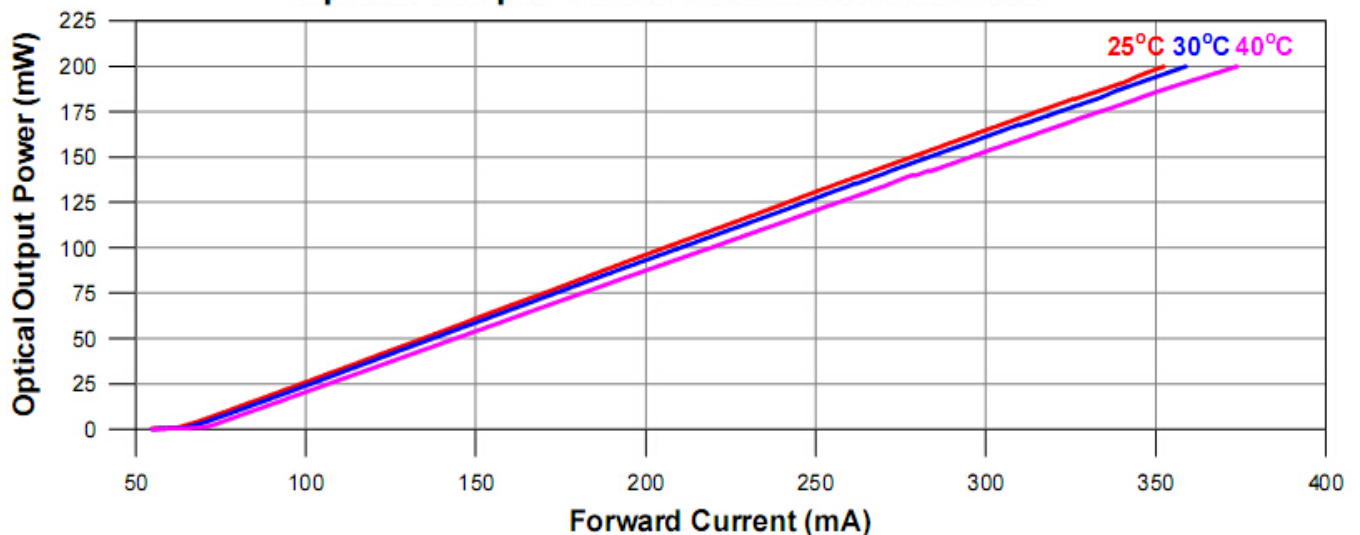
Parameter		Symbol	Rating	Unit
Optical Output		Po	200	mW
Reverse Voltage	Laser	Vr	2	V
	PIN PD	Vr(PIN)	30	V
Operating Temperature		Top	-10~+40	$^\circ\text{C}$
Storage Temperature		Tstg	-15~+85	$^\circ\text{C}$

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

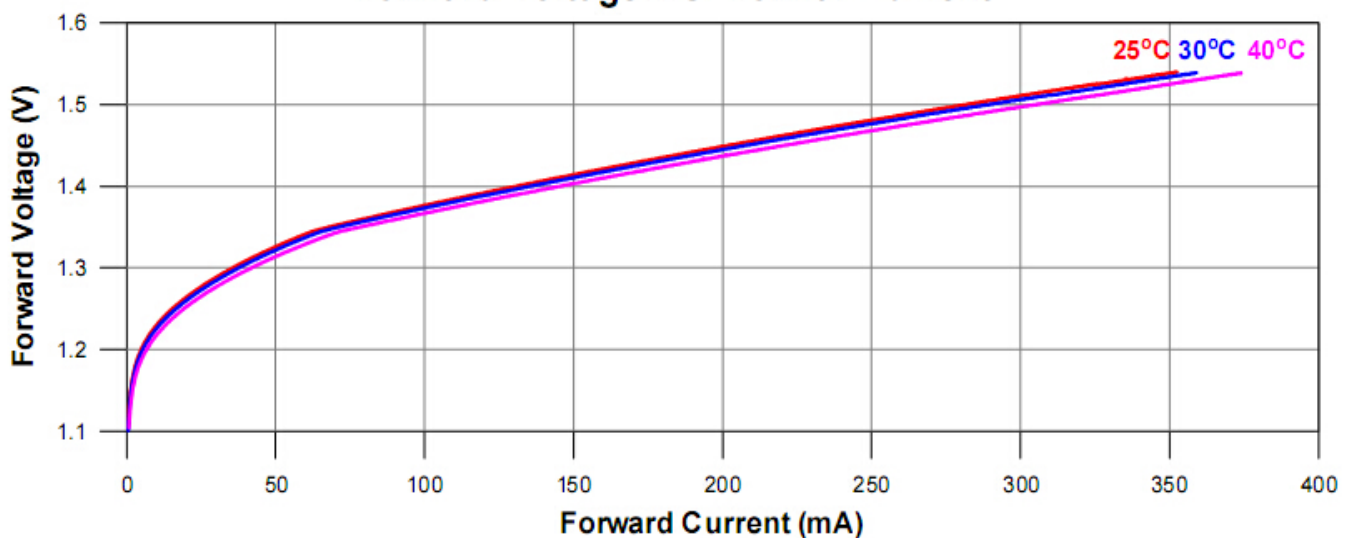
Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I _{th}	-	-	60	80	mA
Operating Current		I _{op}	Po=200mW	-	355	400	mA
Operating Voltage		V _{op}	-	1	1.5	2.1	Volt
Slope Efficiency		η	150mW-50mW	0.5	0.7	-	mW/mA
			I _{150mW} -I _{50mW}				
Monitor Current		I _m	Po=200mW	-	-	-	mA
Beam Divergence (FWHM)	Parallel	$\theta //$	Po=200mW	-	6	-	deg.
	Perpendicular	$\theta \perp$	Po=200mW	27	30	37	deg.
Lasing Wavelength		λ	Po=200mW	970	980	990	nm

◎ $\theta \perp$ are defined as the angle within which the intensity is 50% of the peak value.

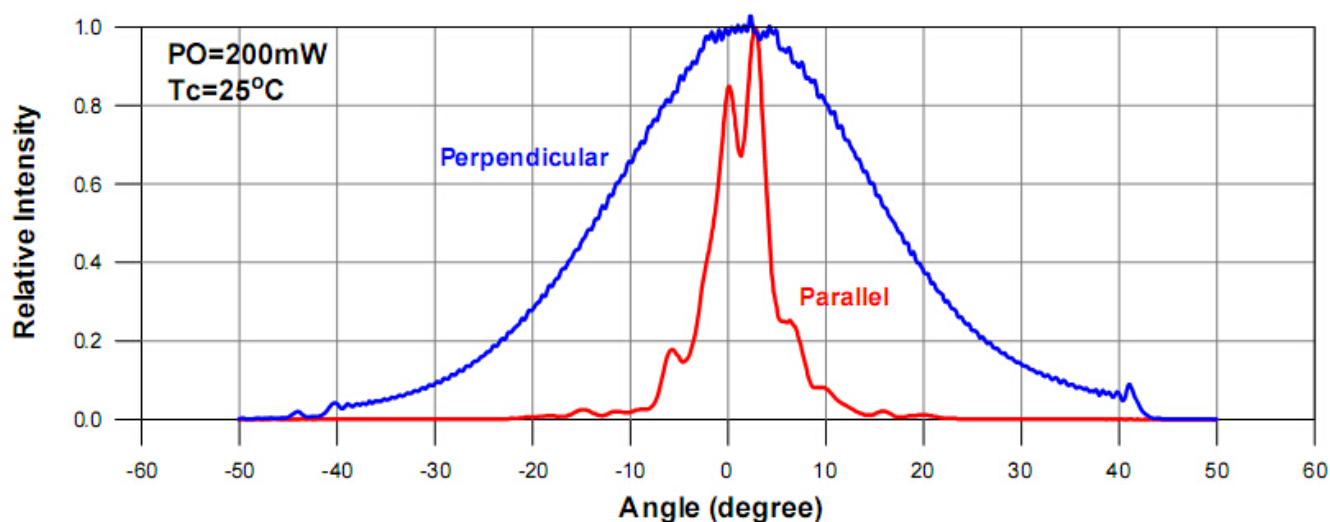
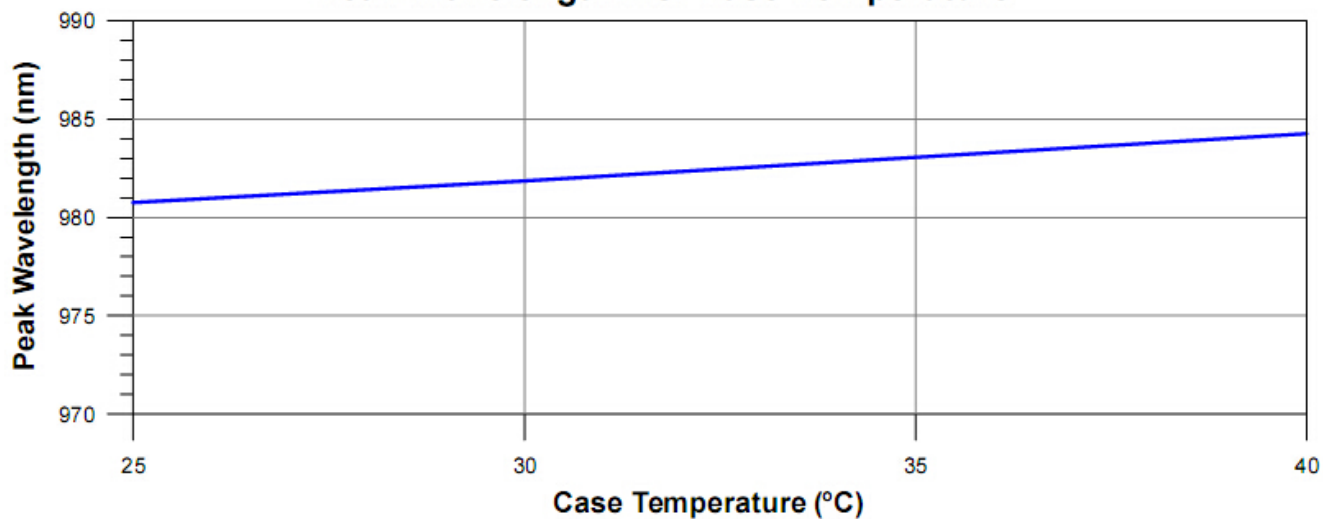
Optical Output Power v.s. Forward Current



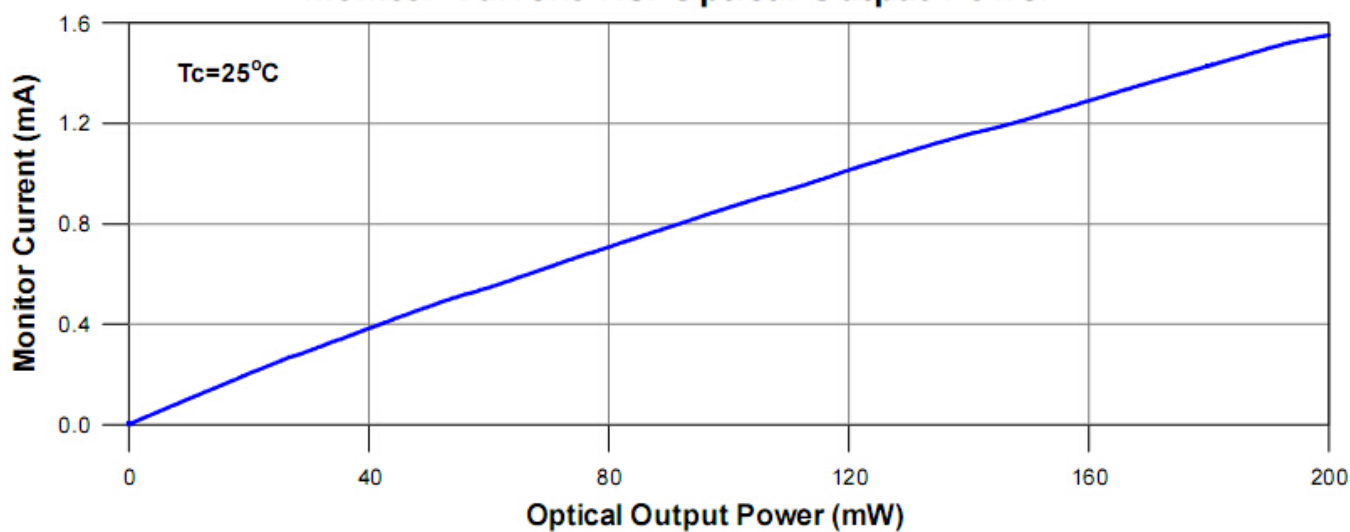
Forward Voltage v.s. Forward Current



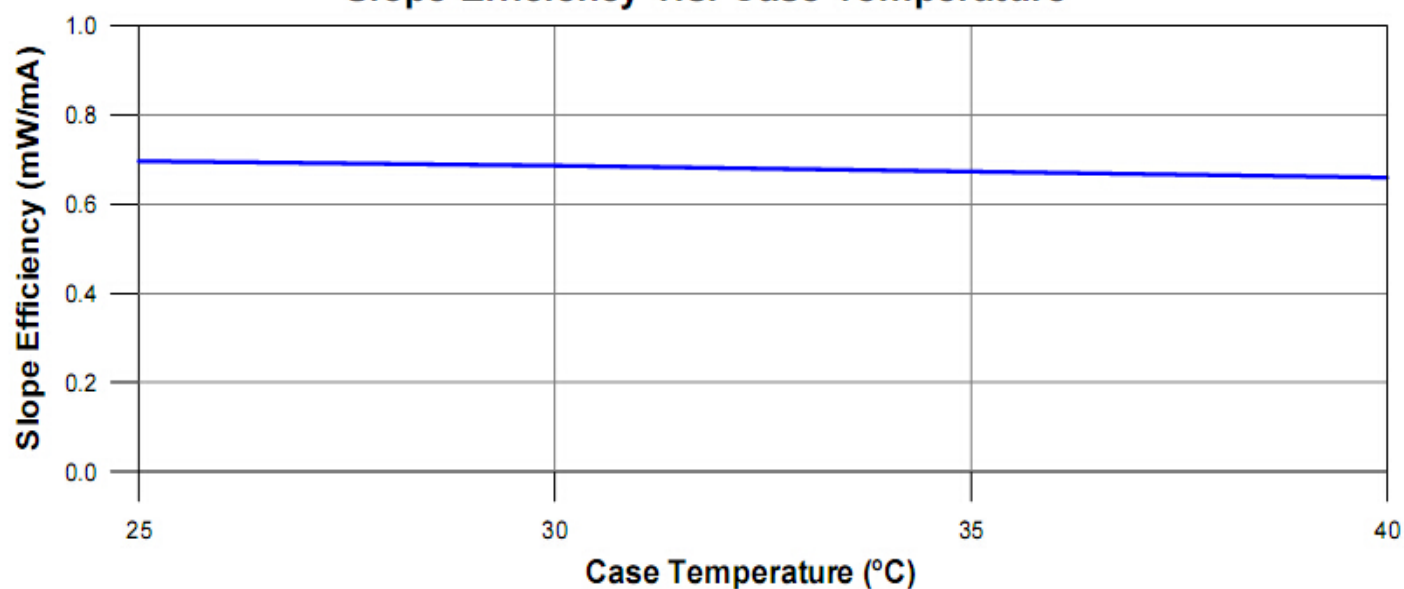
Peak Wavelength v.s. Case Temperature



Monitor Current v.s. Optical Output Power



Slope Efficiency v.s. Case Temperature



Threshold Current v.s. Case Temperature

