

980nm Laser Diode

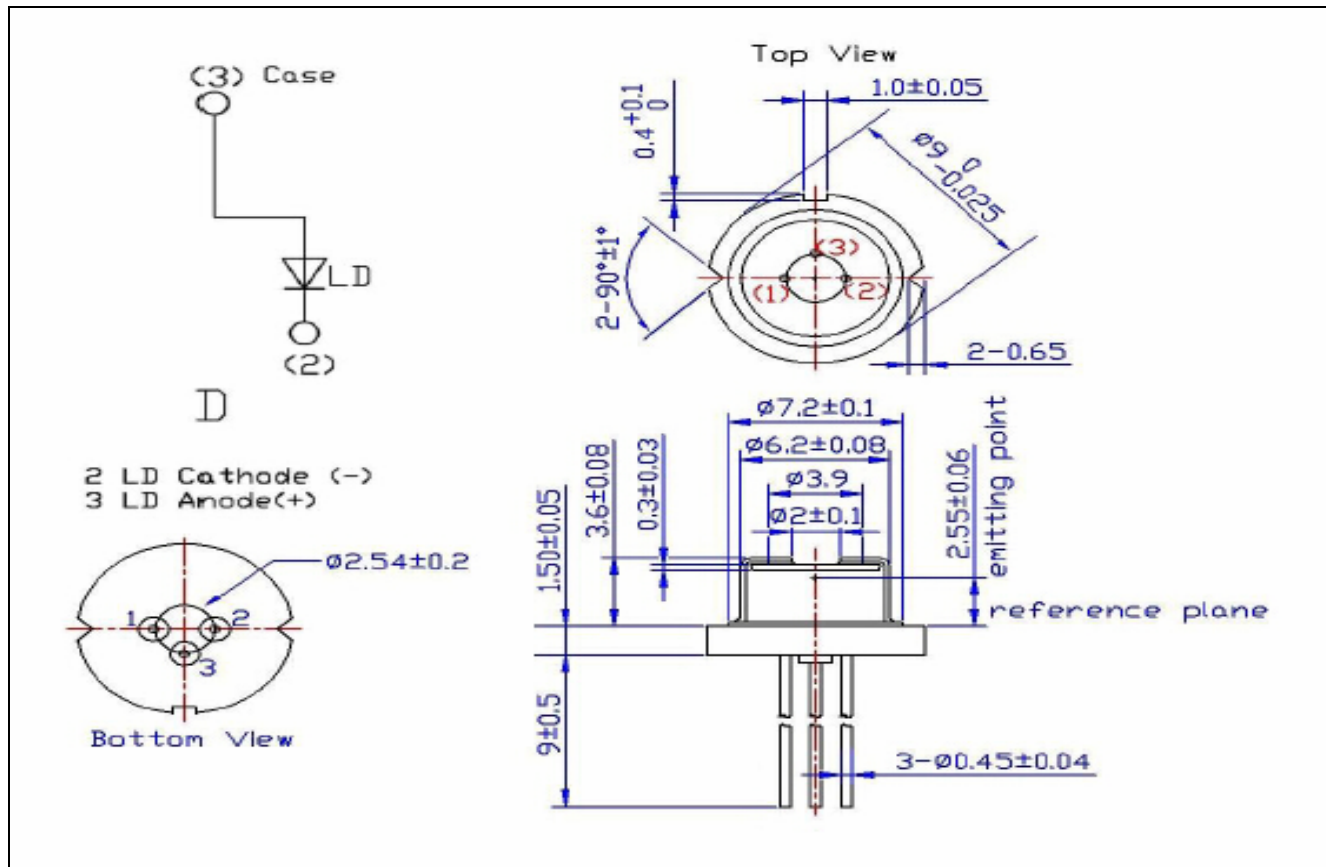
RLD98005001

■ Specifications

(1) Device: Laser Diode

(2) Structure: TO-5(ϕ 9mm), 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	P_o	500	mW
Reverse Laser	V_r	2	V
Operating Temperature	T_{op}	-10~+40	$^\circ\text{C}$
Storage Temperature	T_{stg}	-15~+85	$^\circ\text{C}$

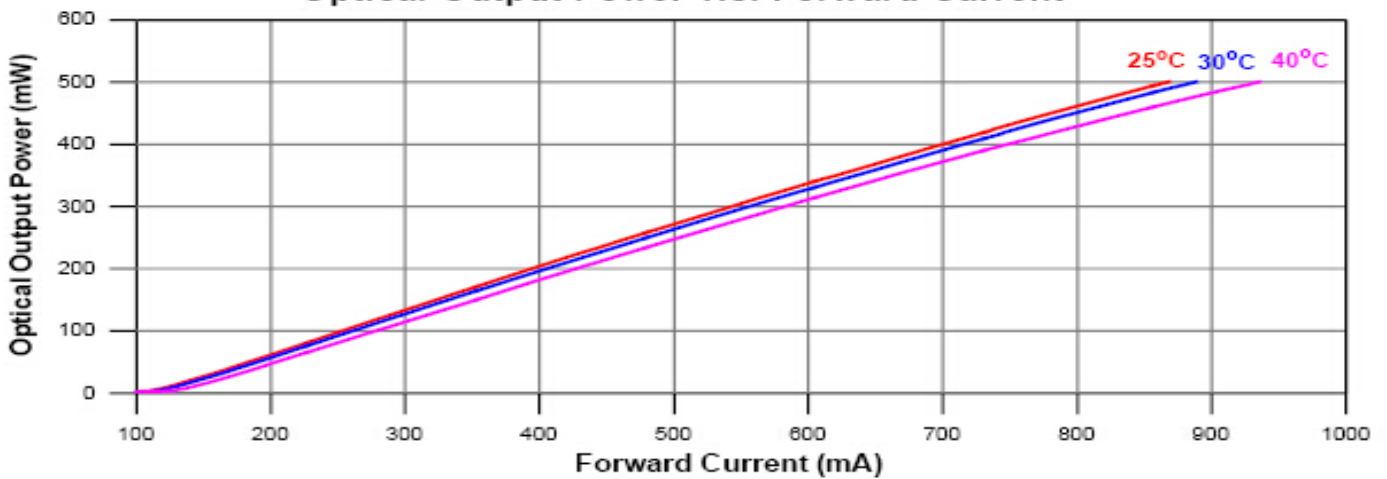
■ Electrical and Optical Characteristics(Tc=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	I _{th}	-	-	140	180	mA	
Operating Current	I _{op}	P _o =500mW	-	870	1000	mA	
Operating Voltage	V _{op}	-	1.2	1.6	2.3	Volt	
Slope Efficiency	η	375mW-125mW	0.5	0.73	-	mW/mA	
		I _{375mW} -I _{125mW}					
Beam Divergence (FWHM)	Parallel	θ //	P _o =500mW	-	7	-	deg.
	Perpendicular	θ ⊥	P _o =500mW	28	31	42	deg.
Lasing Wavelength	λ	P _o =500mW	970	980	990	nm	

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

■ Typical characteristic curves

Optical Output Power v.s. Forward Current



Forward Voltage v.s. Forward Current

