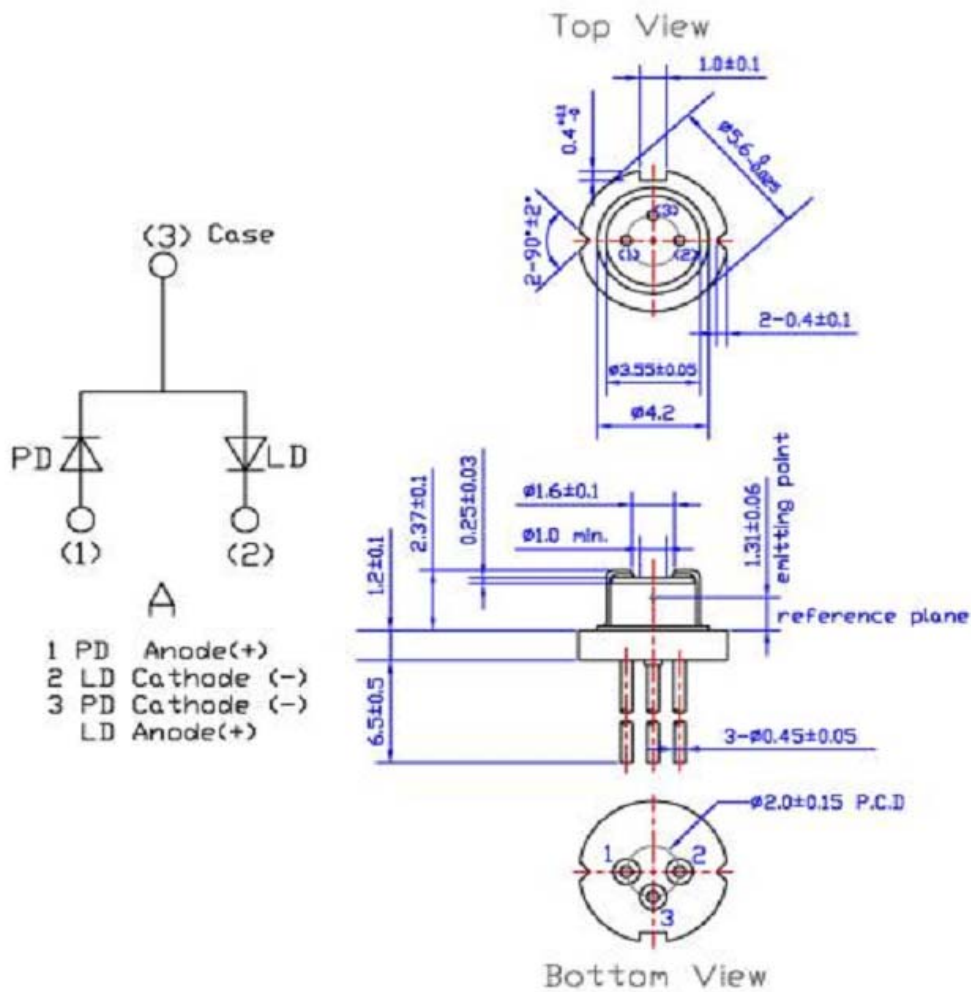


808nm Laser Diode RLD80805001

Specifications

- (1) Device: Laser Diode
- (2) Structure: TO-18(ϕ 5.6mm)

External dimensions(Unit : mm)



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

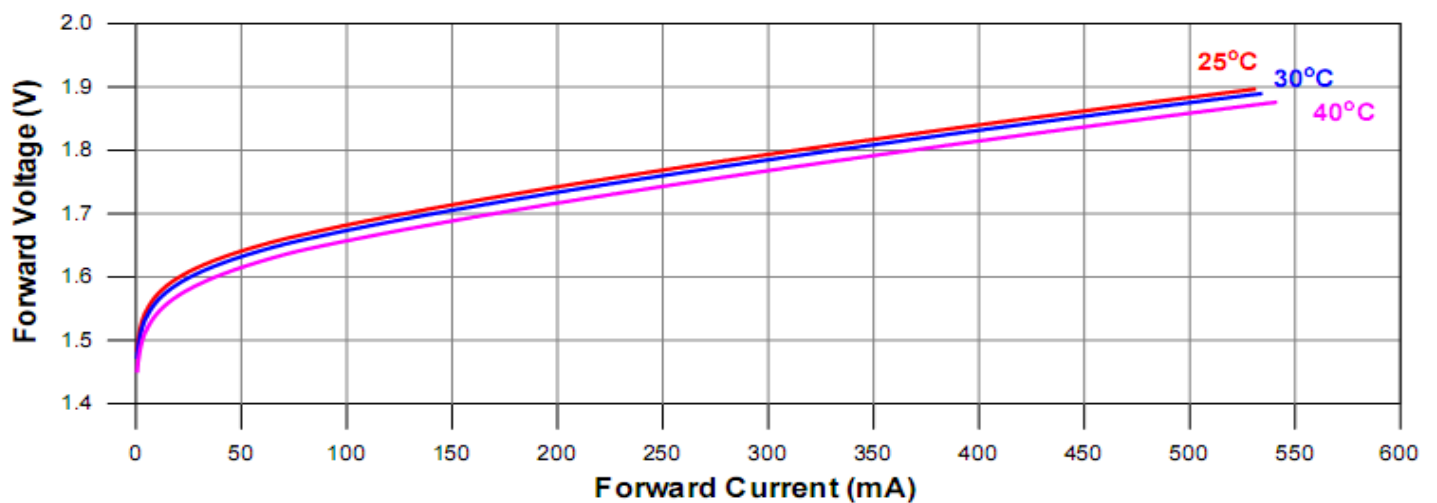
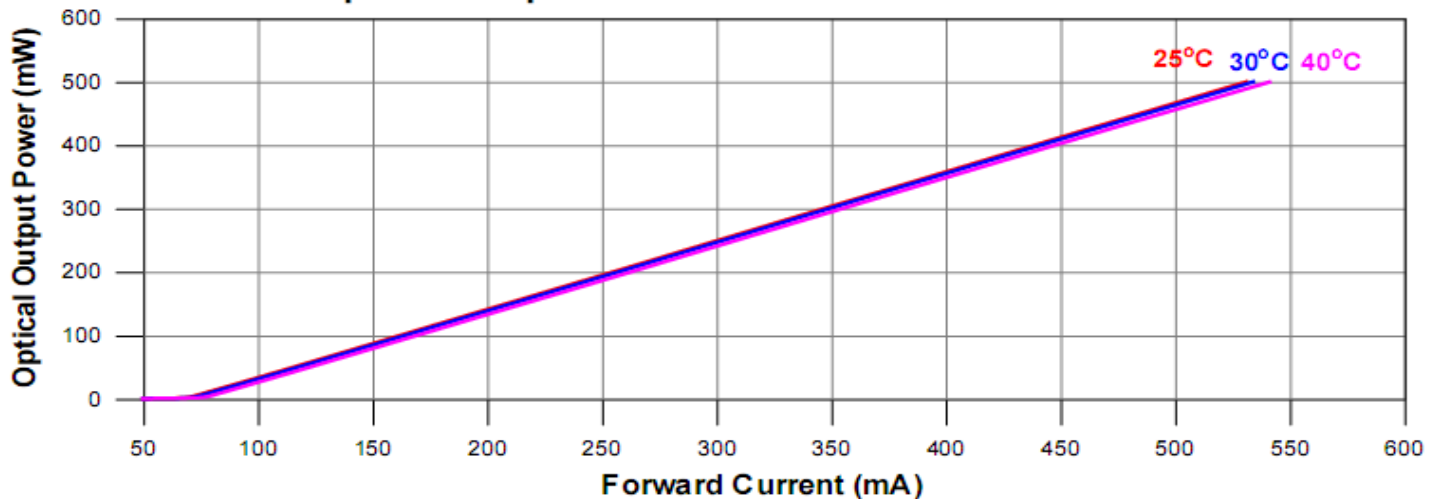
Parameter	Symbol	Value	Unit
Optical Output	Po	500	mW
Laser Reverse Voltage	Laser	Vr(LD)	2
	PIN PD		
Operating Temperature	TOP	-10~+40	$^\circ\text{C}$
Storage Temperature	Tstg	-15~+85	$^\circ\text{C}$

Electrical and Optical Characteristics(Tc=25°C)

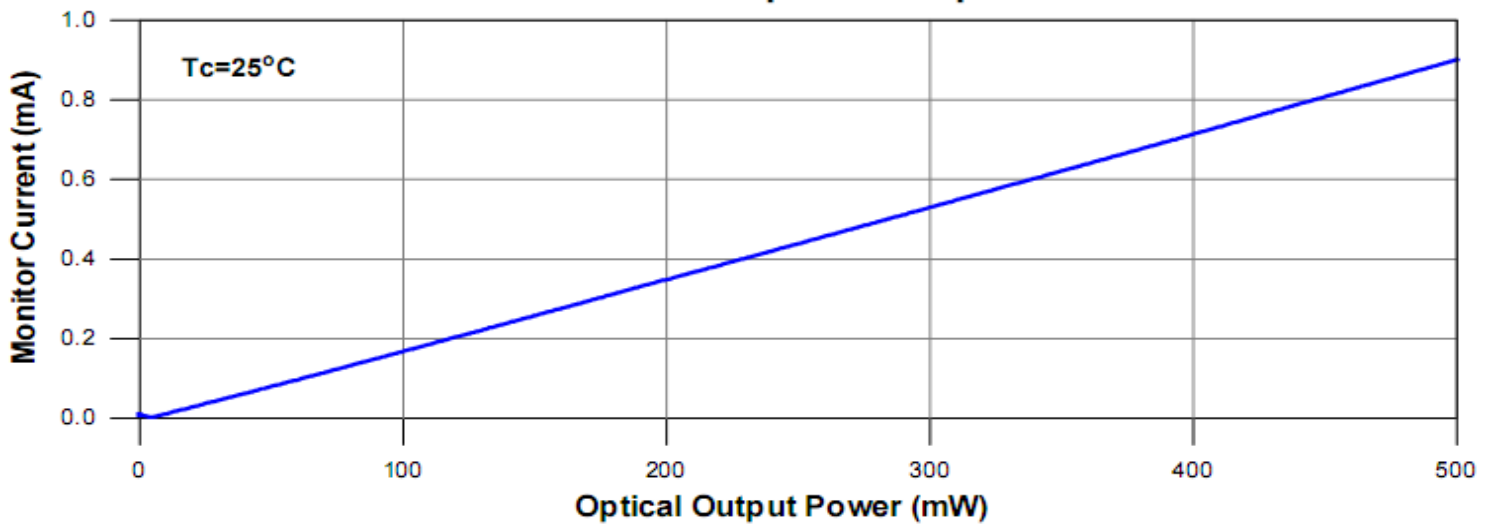
Parameter	Symbols	Conditions	Min.	Typ.	Max.	Units	
Threshold Current	I _{th}	P _o =500mW	-	70	100	mA	
Operating Current	I _{op}	P _o =500mW	-	540	590	mA	
Operating Voltage	V _{op}	P _o =500mW	-	1.9	1.95	Volts	
Slope Efficiency	η	375mW-125mW	0.8	1.1	-	mW/mA	
		I _{375mW} -I _{125mW}					
Monitor Current	I _m	P _o =500mW	-	0.9	2.5	mA	
Beam Divergence (FWHM)	Parallel	$\theta //$	P _o =500mW	-	10	-	deg.
	Perpendicular	$\theta \perp$	P _o =500mW	-	31	-	deg.
Lasing Wavelength*	λ	P _o =500mW	803	808	811	nm	

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

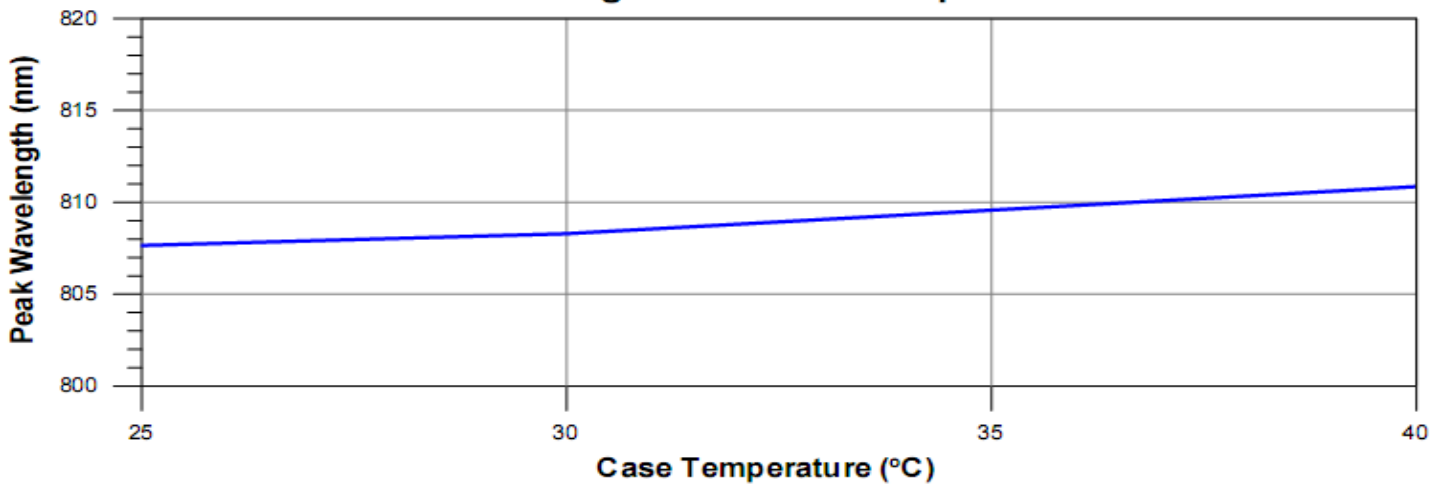
Optical Output Power v.s. Forward Current



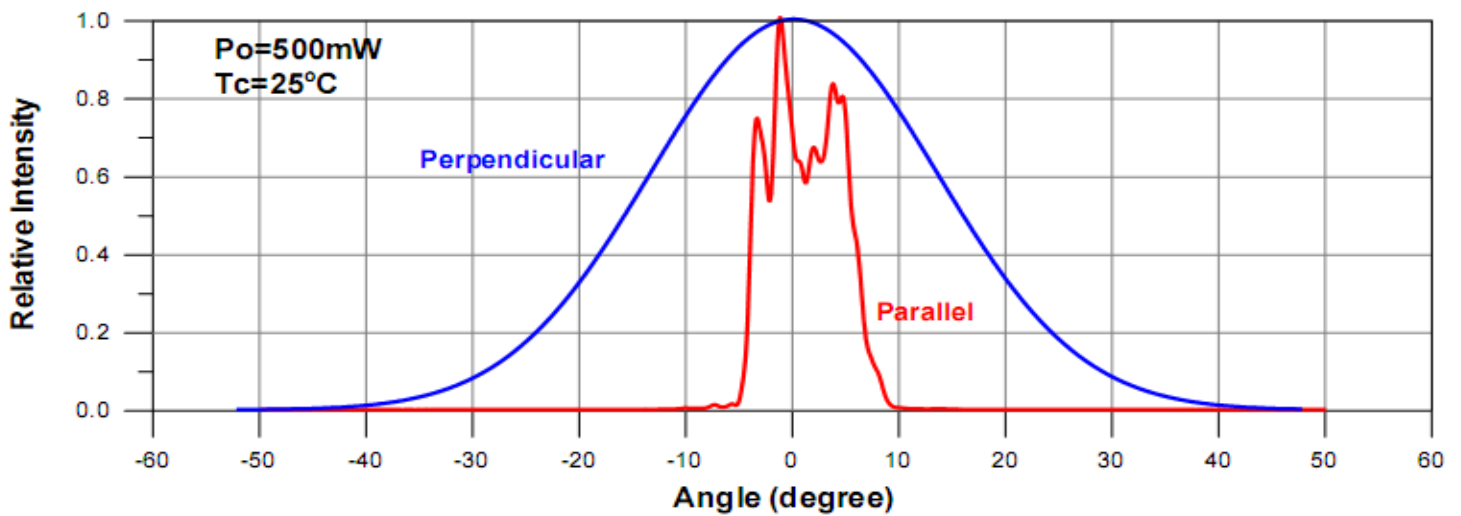
Monitor Current v.s. Optical Output Power



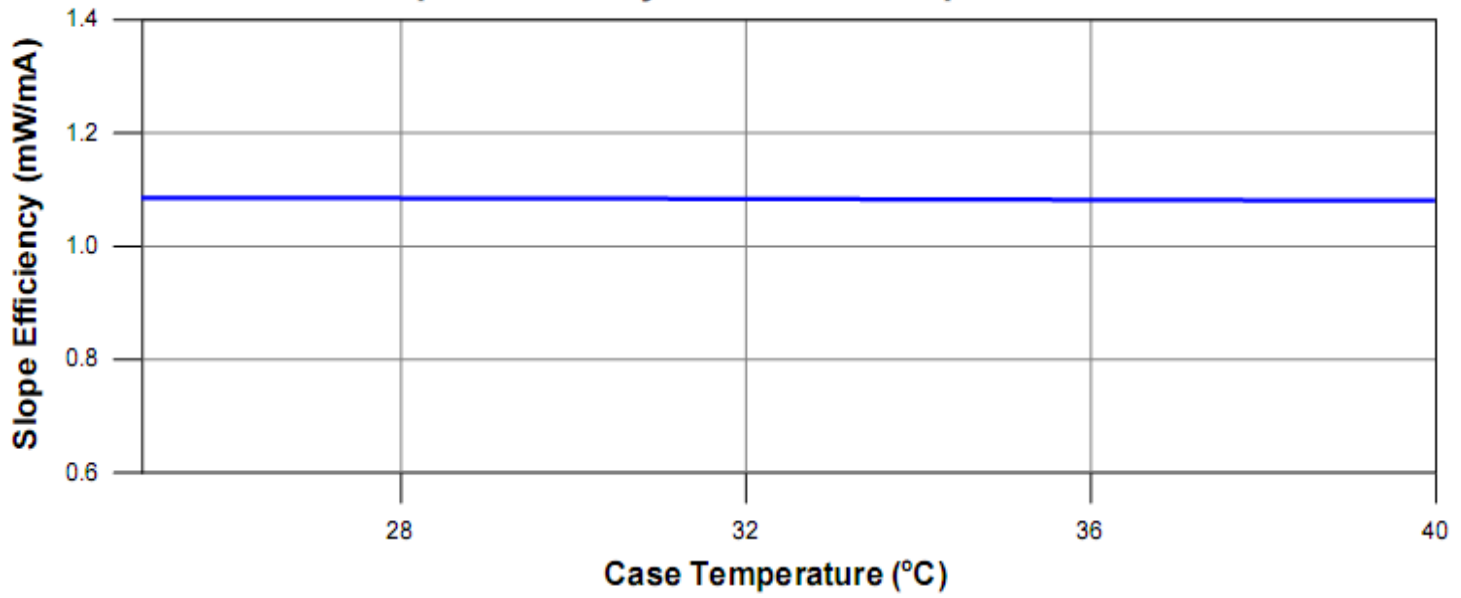
Peak Wavelength v.s. Case Temperature



Far-Field Pattern



Slope Efficiency v.s. Case Temperature



Threshold Current v.s. Case Temperature

