

830nm Laser Diode

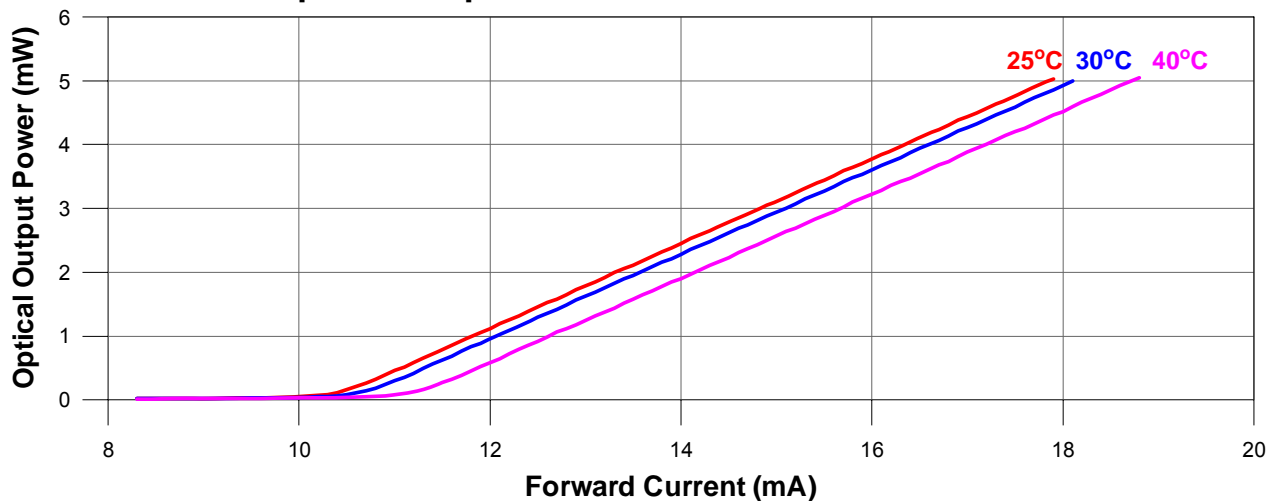
■ Electrical and Optical Characteristics(Tc=25°C)

Parameter	Symbols	Conditions	Min.	Typ.	Max.	Units	
Threshold Current	I _{th}	-	-	10	15	mA	
Operating Current	I _{op}	P _o =5mW	-	18	25	mA	
Operating Voltage	V _{op}	-	-	1.7	2.3	Volts	
Slope Efficiency	η	3.75mW-1.25mW	0.3	0.7	-	mW/mA	
		I _{3.75mW} -I _{1.25mW}					
Monitor Current	I _m	P _o =5mW	-	0.1	-	mA	
Beam Divergence (FWHM)	Parallel	$\theta //$	P _o =5mW	-	8	-	deg.
	Perpendicular	$\theta \perp$	P _o =5mW	-	39	-	deg.
Lasing Wavelength*	λ	P _o =5mW	810	820	830	nm	

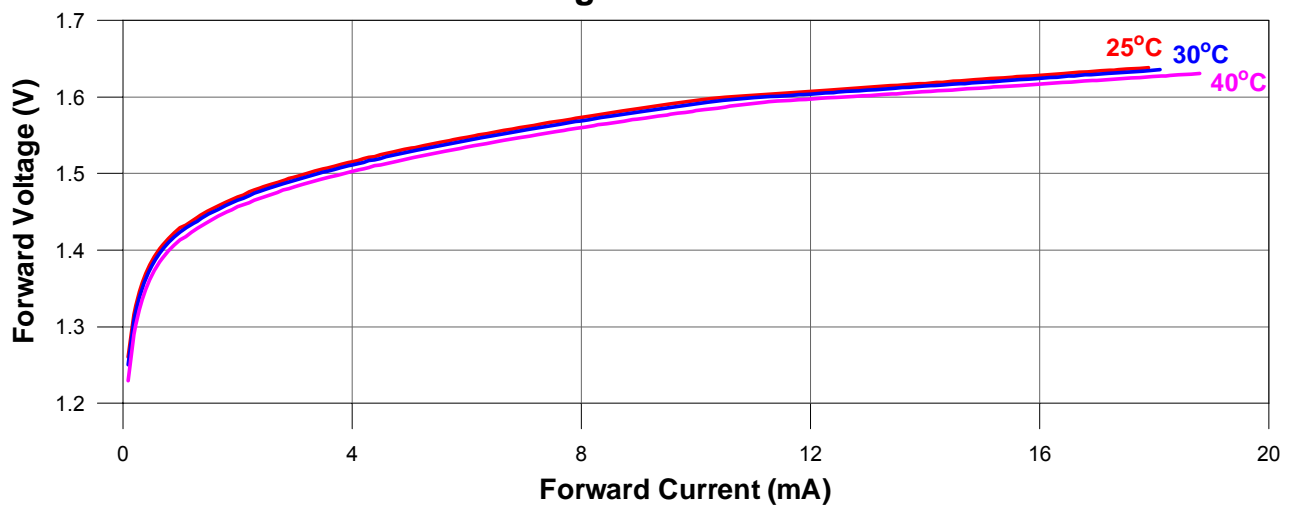
◎ $\theta //$ and $\theta \perp$ are defined as the angle within which the intensity is 50% of the peak value.

■ Typical characteristic curves

Optical Output Power v.s. Forward Current

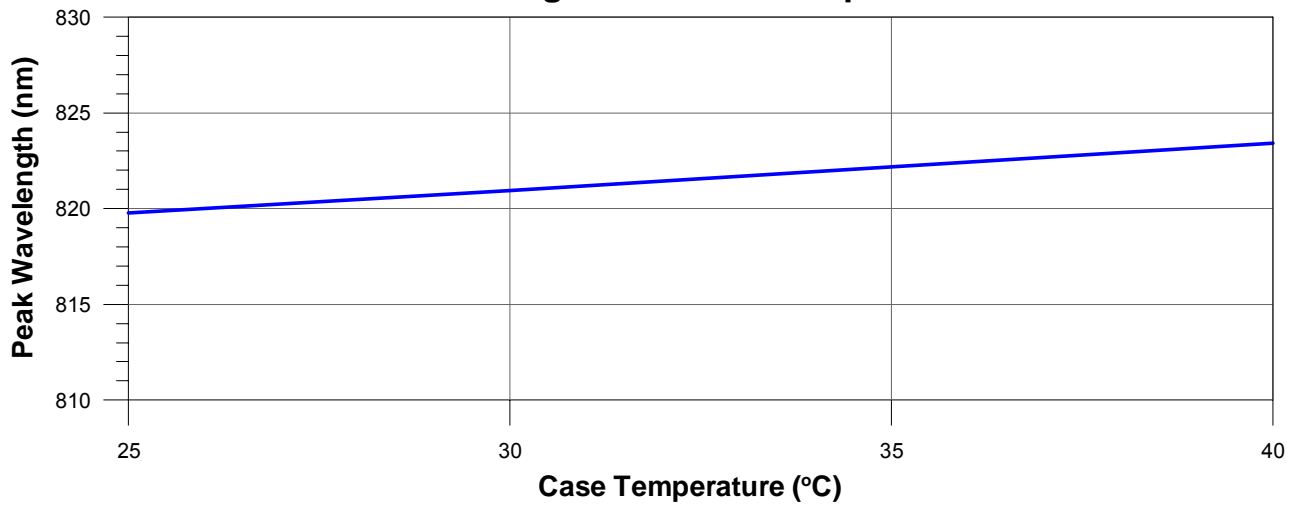


Forward Voltage v.s. Forward Current

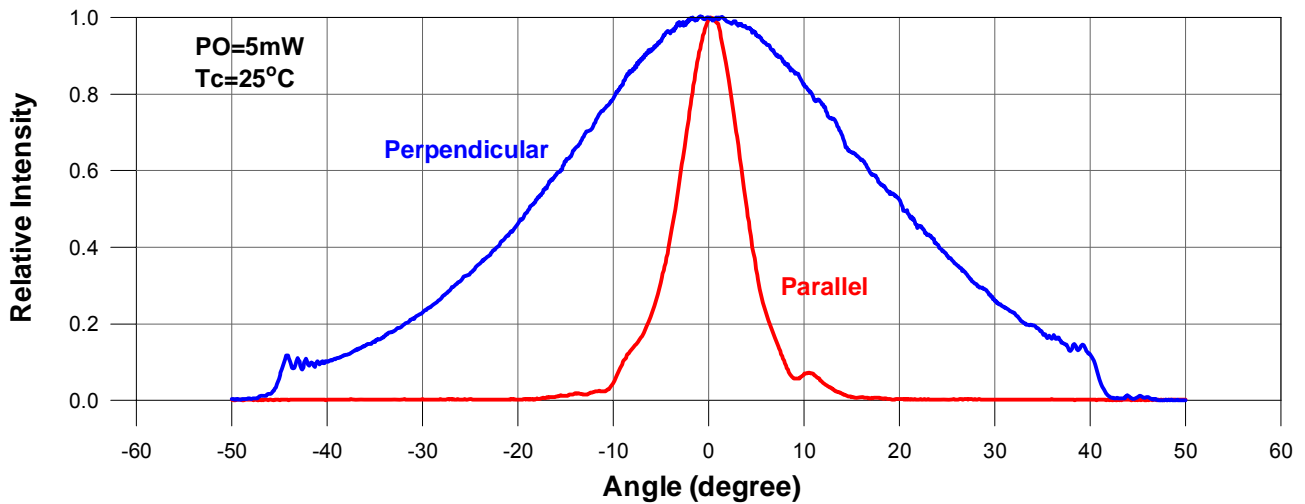


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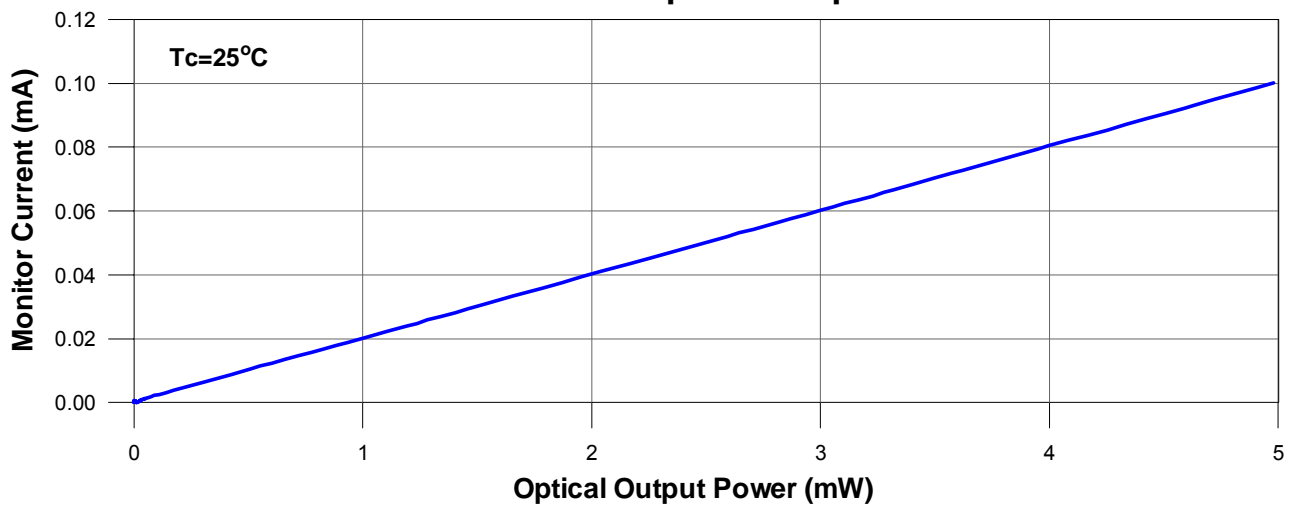
Peak Wavelength v.s. Case Temperature



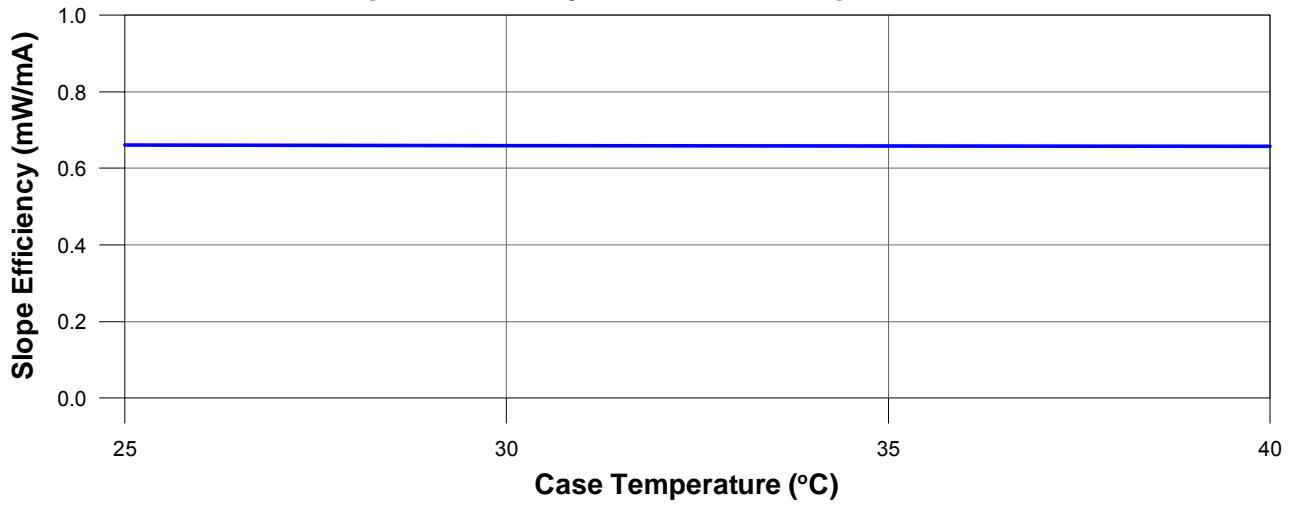
Far-Field Pattern



Monitor Current v.s. Optical Output Power



Slope Efficiency v.s. Case Temperature



Threshold Current v.s. Case Temperature

