

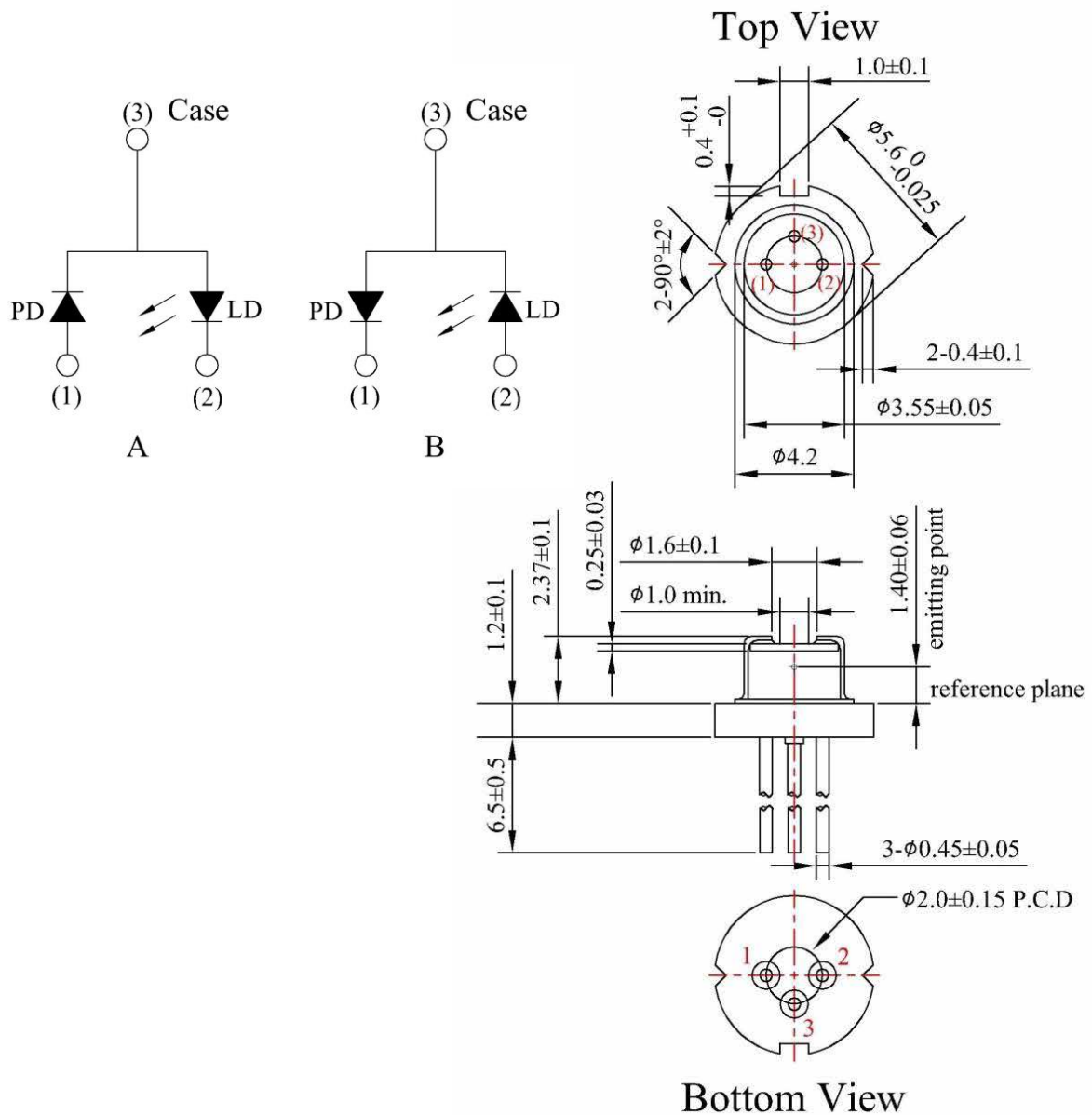
■ Features

1. Peak wavelength at 25°C : 650 nm (typical)
2. Standard light output : 5mW (CW)
3. TO-18 (ψ 5.6mm) Packaged, cap window with flat Pb-free lens, monitor PD inside.

■ Applications

1. Laser Pointer
2. Bar Code Scanner
3. Laser Module
4. Medical equipment

■ External dimensions(Unit : mm)



■ Absolute Maximum Ratings(Tc=25°C)

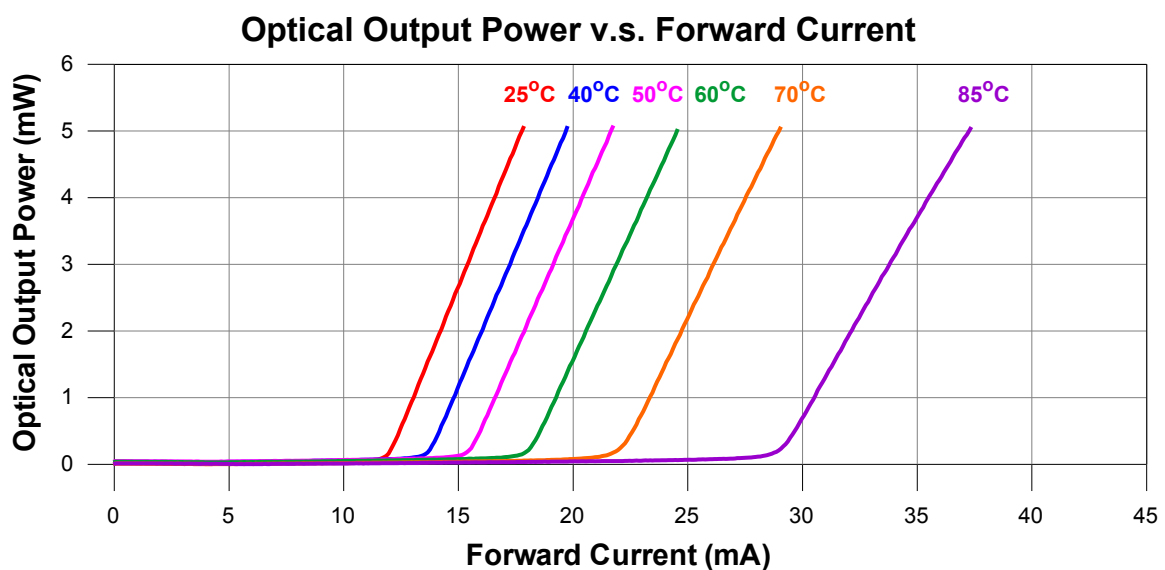
Parameter	Symbol	Rating	Unit
Optical Output	Po	5	mW
Reverse Voltage	Vr	2	V
Operating Temperature (Case)	Top	-10~+40	°C
Storage Temperature	Tstg	-40~+85	°C

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

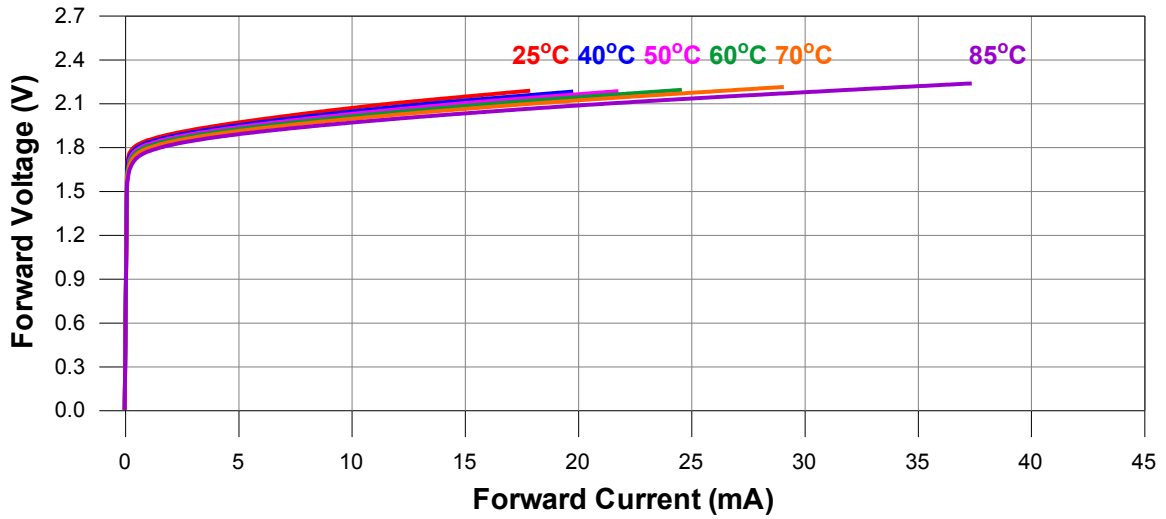
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	Ith	Po=5mW	-	12	15	mA	
Operating Current	Iop	Po=5mW	-	18	22	mA	
Operating Voltage	Vop	Po=5mW	-	2.1	2.5	Volts	
Slope Efficiency	η	Po=1.25-3.75mW	0.5	0.8	-	mW/mA	
Monitor Current	Im	Po=5mW	0.05	0.2	0.5	mA	
Beam Divergence (FWHM)	Parallel	$\theta_{//}$	Po=5mW	5	8	12	deg.
	Perpendicular	θ_{\perp}	Po=5mW	30	36	42	deg.
Lasing Wavelength	λ	Po=5mW	640	650	660	nm	

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

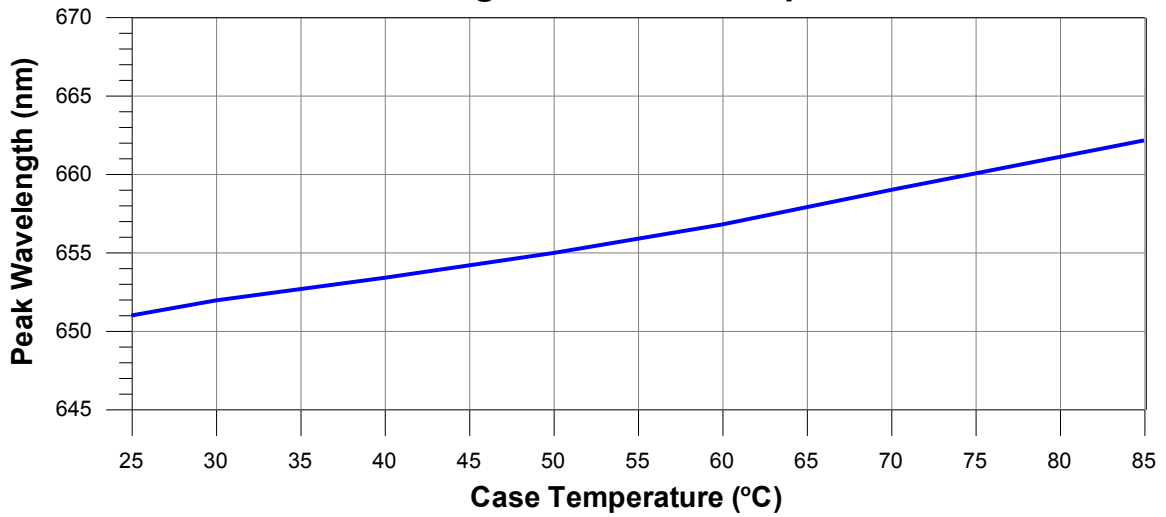
■ Typical characteristic curves



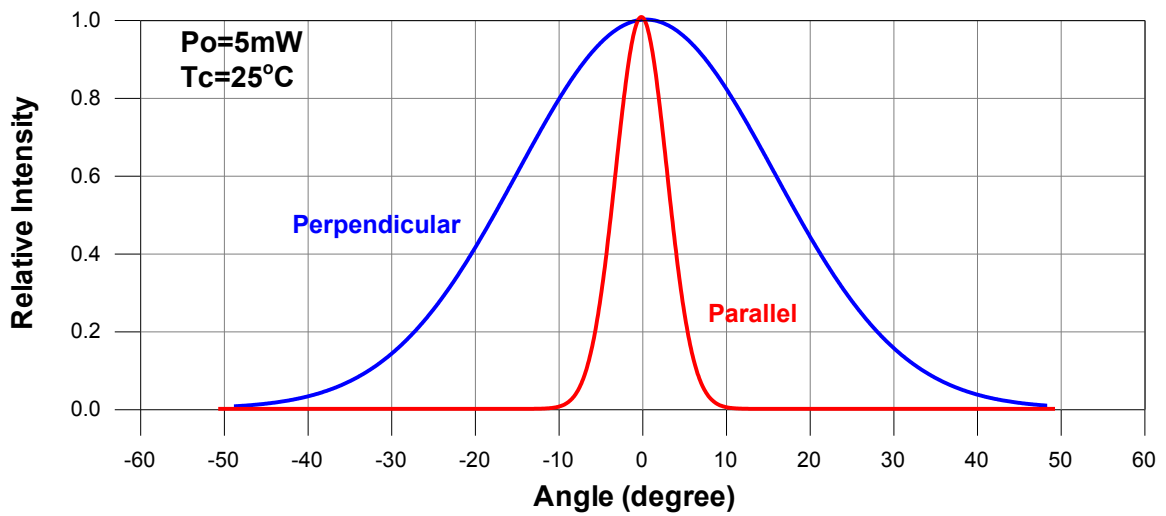
Forward Voltage v.s. Forward Current



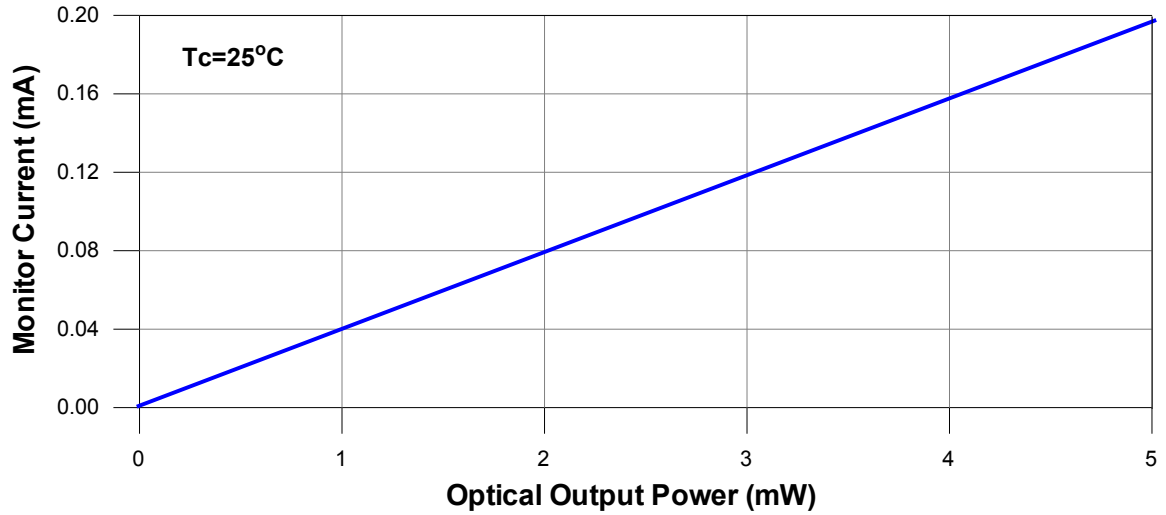
Peak Wavelength v.s. Case Temperature



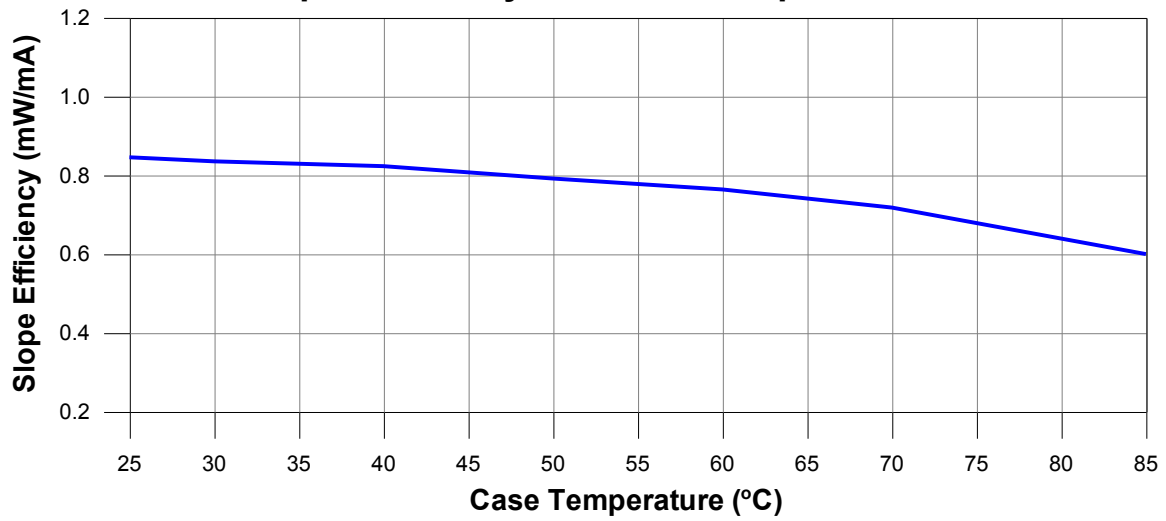
Far-Field Pattern



Monitor Current v.s. Optical Output Power



Slope Efficiency v.s. Case Temperature



Threshold Current v.s. Case Temperature

