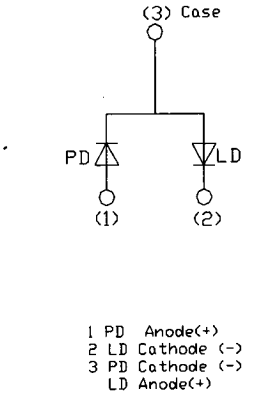
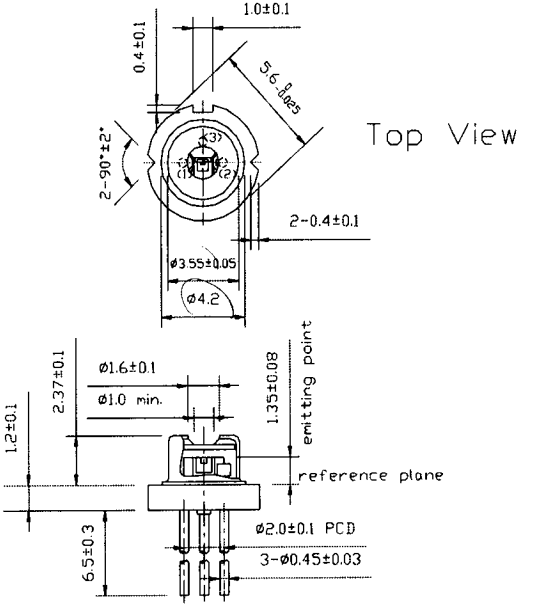
■Specifications

(1) Device: Laser Diode

(2) Structure: TO-18(φ 5.6mm)

■External dimensions(Unit : mm)





■Absolute Maximum Ratings(Tc=25℃)

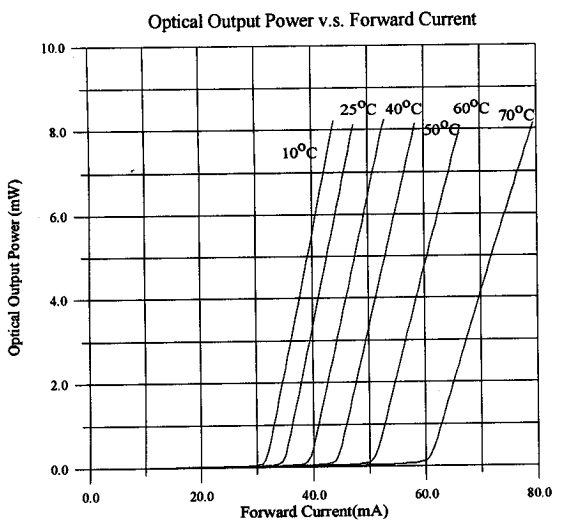
Parameter		Symbol	Value	Unit
Optical Output		Po	**12**	mW
Reverse Voltage	Laser	Vr	**2**	V
	PIN PD	Vr(PIN)	**30**	V
Operating Temperature		Top	-10～+40	℃
Storage Temperature		Tstg	-15～+85	℃

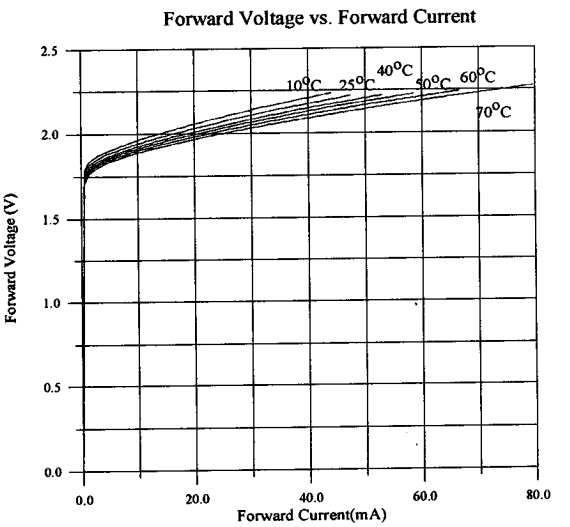
■Electrical and Optical Characteristics(Tc=25℃)

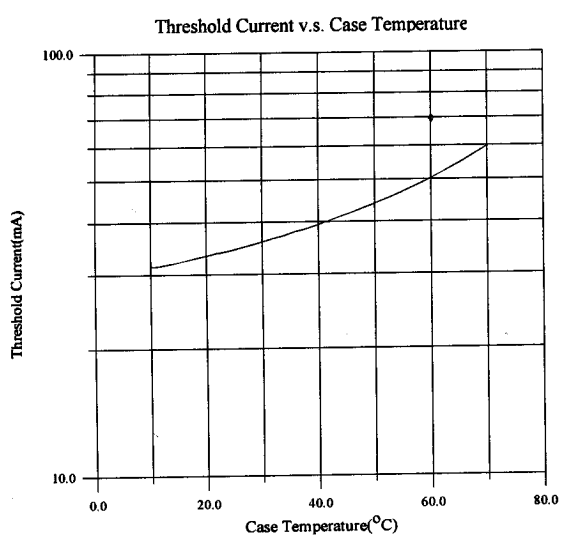
Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith		-	24	40	mA
Operating Current		Iop	Po=10mW	-	**40**	**50**	mA
Operating Voltage		Vop	-	-	**2.4**	**2.8**	Volt
Slope Efficiency		η	7mW-3mW / I_{7mW}-I_{3mW}	**0.3**	**0.6**	-	mW/mA
Monitor Current		Im	Po=10mW	**0.1**	**0.3**	**1**	mA
Beam Divergence (FWHM)	Parallel	θ //	Po=10mW	**5**	**8**	**12**	deg.
	Perpendicular	θ ⊥	Po=10mW	**26**	**30**	**32**	deg.
Lasing Wavelength		λ	Po=10mW	**640**	**655**	**665**	nm

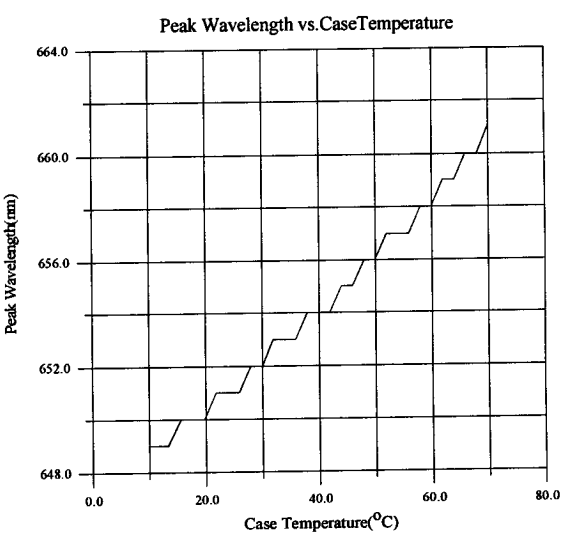
◎ θ // and θ ⊥ are defined as the angle within which the intensity is 50% of the peak value.

■Typical characteristic curves

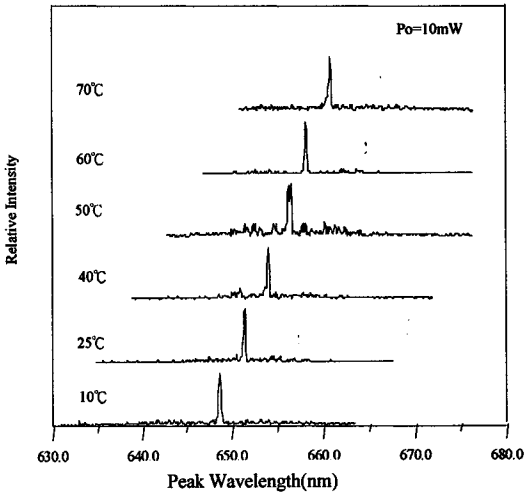




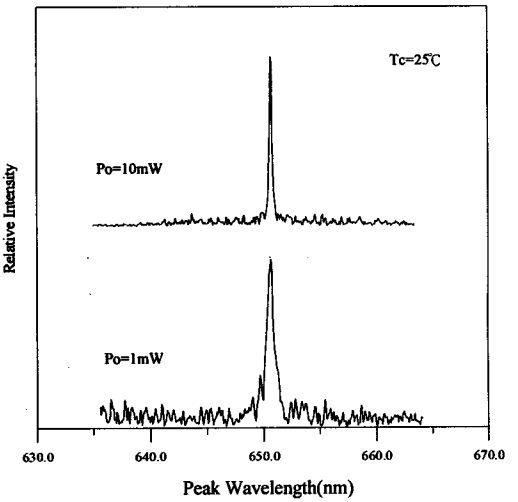




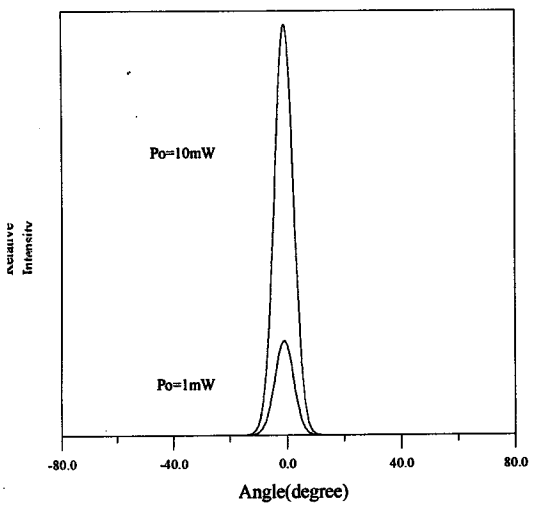
Lasing Spectrum v.s. Temperature



Lasing Spectrum v.s.Optical Output Power



Far-Field Pattern(Parallel) vs.Optical Output Power



Far-Field Pattern(Perpendicular) vs.Optical Output Power