

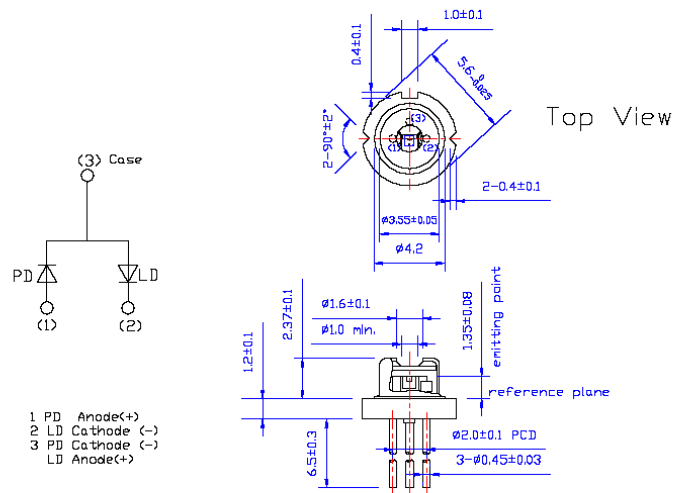


S9810MG

■ 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	10	mW
Reverse Voltage	Laser Vr	2	V
	PIN PD Vr(PIN)	30	V
Operating Temperature	Top	-10~+40	$^\circ\text{C}$
Storage Temperature	Tstg	-15~+85	$^\circ\text{C}$

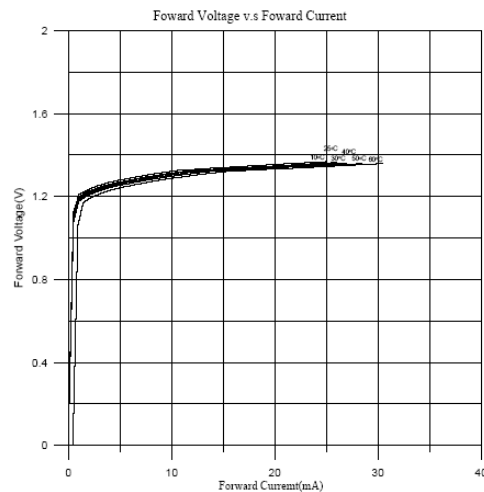
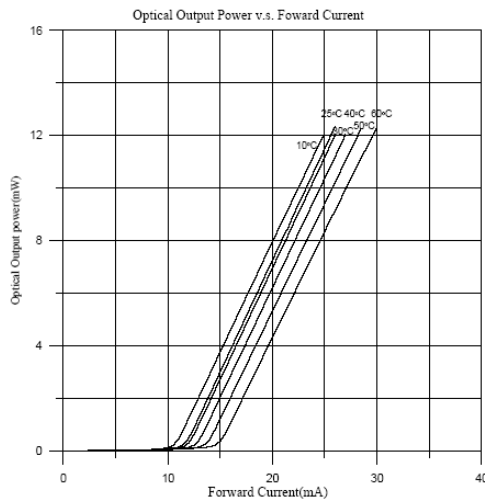


■ Electrical and Optical Characteristics (Tc=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I _{th}	CW	-	12	20	mA
Operating Current		I _{op}	P _o =10mW	-	25	40	mA
Operating Voltage		V _{op}	P _o =10mW	-	1.5	2	Volt
Slope Efficiency		η	7.5mW-2.5mW	0.5	0.8	-	mW/mA
			I _{7.5mW} - I _{2.5mW}				
Monitor Current		I _m	P _o =10mW	0.02	0.03	0.5	mA
Beam Divergence	Parallel	$\theta //$	P _o =10mW	8	12	14	deg.
(FWHM)	Perpendicular	$\theta \perp$	P _o =10mW	25	32	40	deg.
Lasing Wavelength		λ	P _o =10mW	965	980	995	nm

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

■ Typical characteristic curves





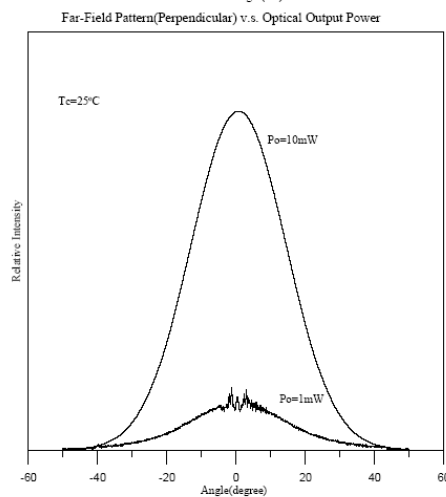
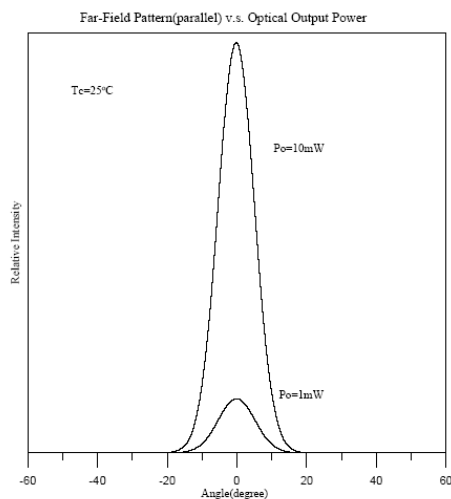
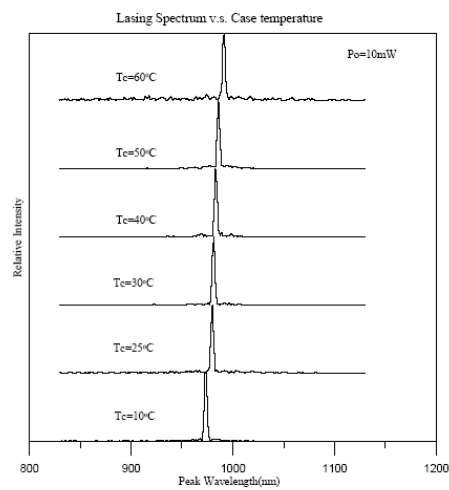
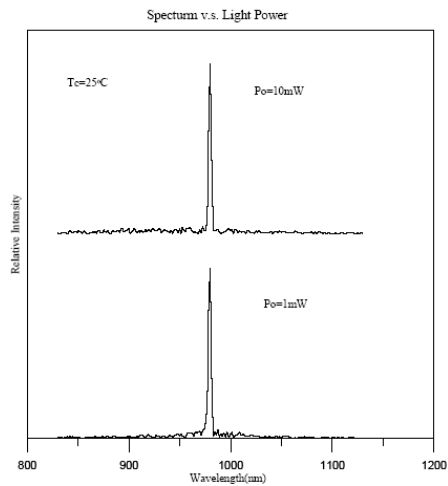
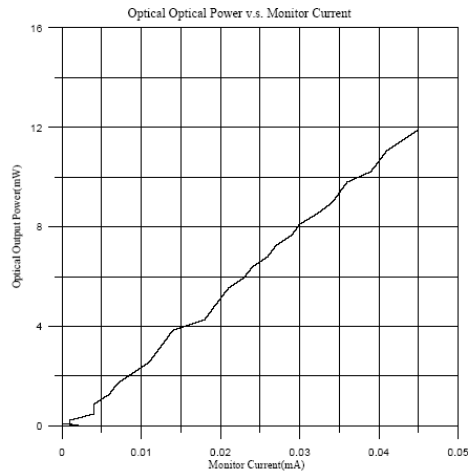
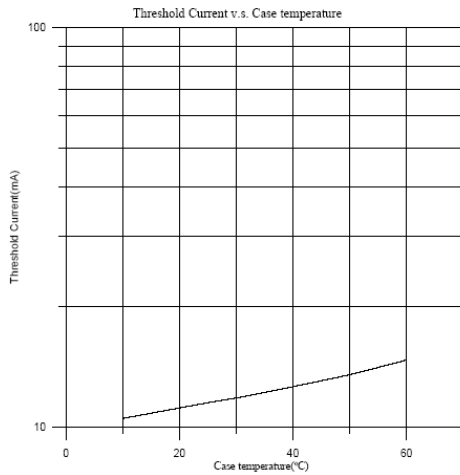
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