

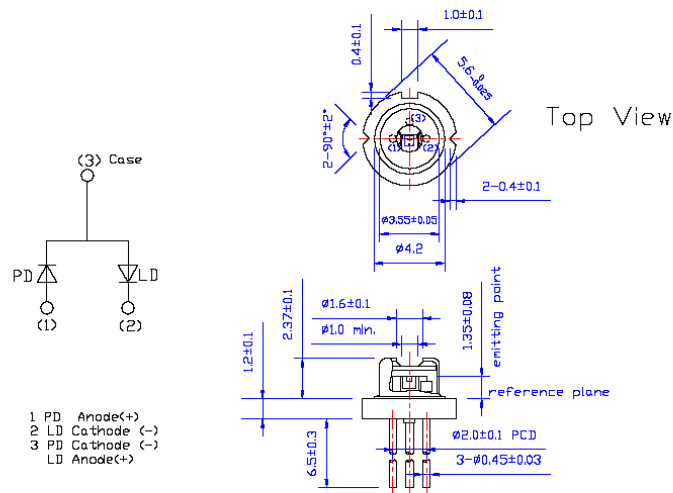


## S9810MG

### ■ Specifications

- (1) Device: Laser Diode
- (2) Structure: TO-18 ( $\phi$  5.6mm)

### ■ External dimensions(Unit : mm)



### ■ Absolute Maximum Ratings(Tc=25°C)

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

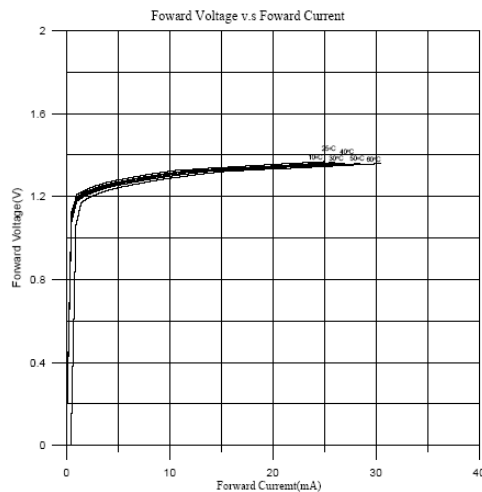
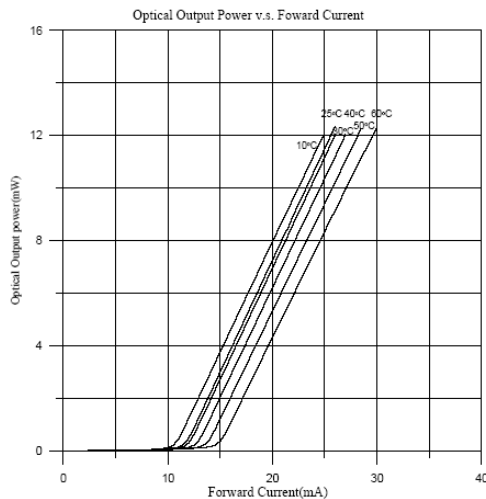


### ■ Electrical and Optical Characteristics(Tc=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	I <sub>th</sub>	CW	-	12	20	mA	
Operating Current	I <sub>op</sub>	P <sub>o</sub> =10mW	-	25	40	mA	
Operating Voltage	V <sub>op</sub>	P <sub>o</sub> =10mW	-	1.5	2	Volt	
Slope Efficiency	η	7.5mW-2.5mW	0.5	0.8	-	mW/mA	
		I <sub>7.5mW</sub> - I <sub>2.5mW</sub>					
Monitor Current	I <sub>m</sub>	P <sub>o</sub> =10mW	0.02	0.03	0.5	mA	
Beam Divergence (FWHM)	Parallel	θ //	P <sub>o</sub> =10mW	8	12	14	deg.
	Perpendicular	θ ⊥	P <sub>o</sub> =10mW	25	32	40	deg.
Lasing Wavelength	λ	P <sub>o</sub> =10mW	965	980	995	nm	

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

### ■ Typical characteristic curves





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