

### ●Application

- Leveling
- Ranging
- Sensor
- Bar-code reader
- Laser pointer

### ●Features

- 1) LD anode common
- 2) PD cathode common
- 3) 5.6φ CAN 3pin package

### ●Features



### ●Absolute maximum ratings (T<sub>c</sub>= 25°C)

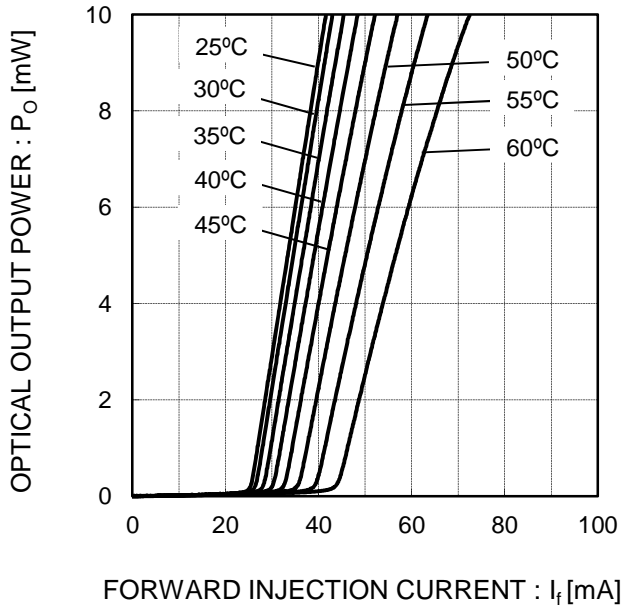
Parameter	Symbol	Ratings	Unit	
Optical output power	P <sub>O</sub>	6	mW	
Reverse voltage	Laser diode	V <sub>R</sub>	2	V
	Photo diode	V <sub>R</sub> (PD)	20	V
Operating temperature	Top	-10 to +40	°C	
Storage temperature	Tstg	-40 to +85	°C	

### ●Electrical and optical characteristics (T<sub>c</sub>= 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Threshold current	I <sub>th</sub>	—	24	35	mA	-
Operating current	I <sub>op</sub>	—	33	45	mA	P <sub>O</sub> =5mW
Operating voltage	V <sub>op</sub>	—	2.2	2.7	V	P <sub>O</sub> =5mW
Output efficiency	η	0.2	0.55	0.8	mW/mA	2mW/ (I (5mW)- I (3mW))
Monitor current	I <sub>m</sub>	0.05	0.18	0.5	mA	P <sub>O</sub> =5mW, V <sub>R</sub> (PD)=15V
Parallel beam divergence	θ <sub>//</sub>	6	8	12	deg.	P <sub>O</sub> =5mW
Perpendicular beam divergence	θ <sub>⊥</sub>	28	32	40	deg.	
Parallel beam tolerance	Δθ <sub>//</sub>	-3	0	3	deg.	
Perpendicular beam tolerance	Δθ <sub>⊥</sub>	-4	0	4	deg.	
Emission point accuracy	ΔXYZ	-100	0	100	μm	-
Lasing wavelength	λ	630	635	645	nm	P <sub>O</sub> =5mW

●Electrical characteristics

Fig.1 Optical Output power vs. Forward Injection Current



●Optical characteristics

Fig.2 Far Field Pattern

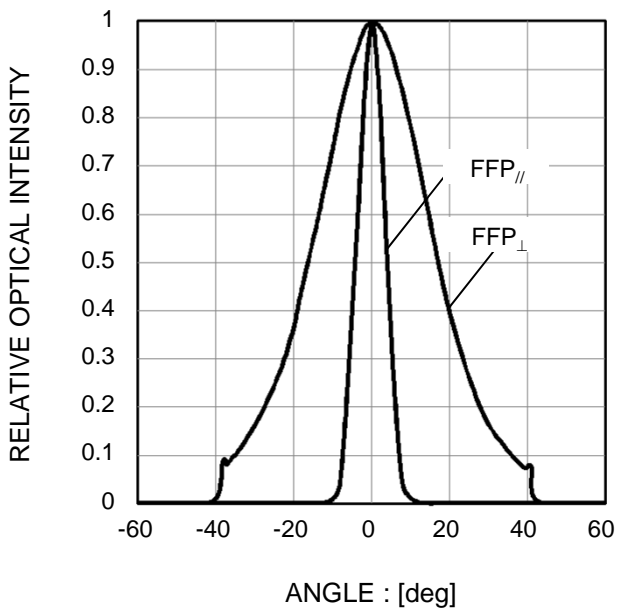
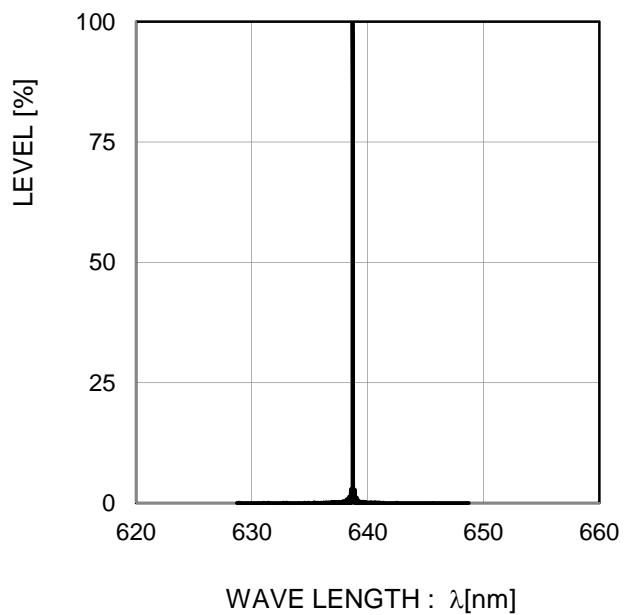


Fig.3 Lasing Spectrum



●Dimensions (Unit : mm)

Figure-1

Unit : mm

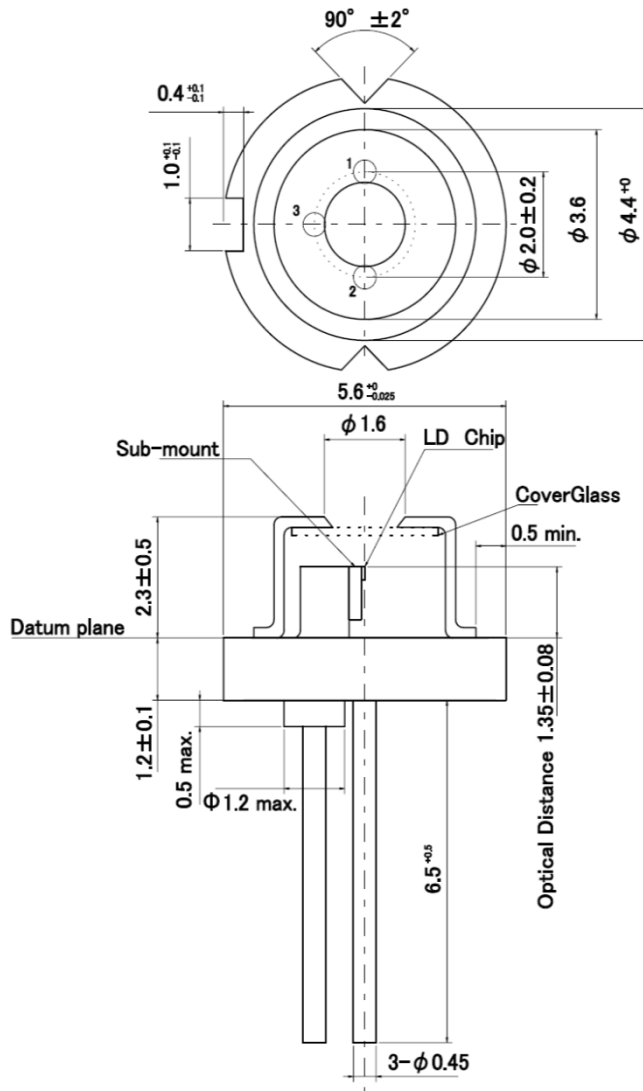
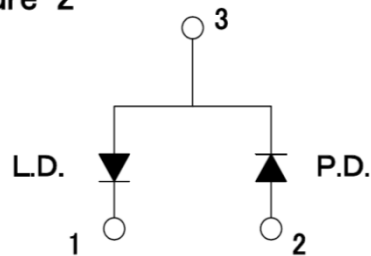


Figure-2



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