

LASER DIODE SPECIFICATIONS

Customer :

Model : QL67F6S-A/B/C

Signature of Approval

Approved by _____

Checked by _____

Issued by _____

Approval by Customer

◆ OVERVIEW

QL67F6S-A/B/C is a MOCVD grown 670 nm band **Gain-Guided** type *InGaAlP* laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 10 mW for opto-electronic devices such as Bar Code Reader.

◆ APPLICATION

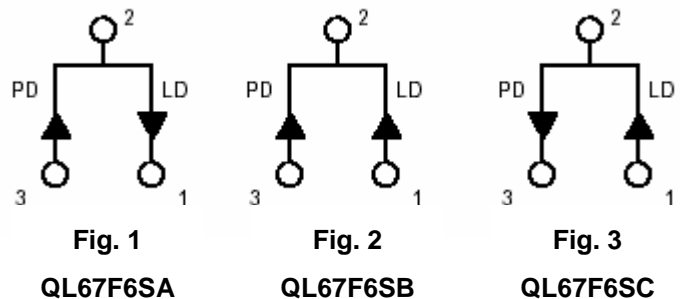
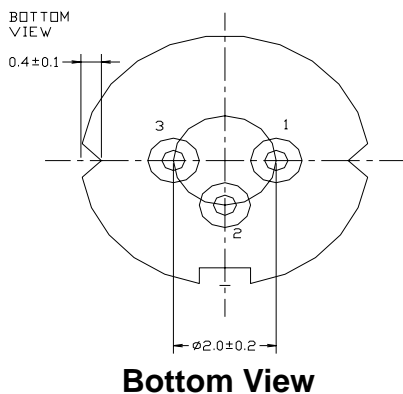
- Optical Leveler
- Laser Module
- Bar Code Reader

◆ FEATURES

- Visible Light Output : $\lambda_p = 670 \text{ nm}$
- Optical Power Output : 10 mW CW
- Package Type : TO-18 (5.6mm ϕ)
- Built-in Photo Diode for Monitoring Laser Output

◆ ELECTRICAL CONNECTION

A	LD cathode, PD anode (Fig. 1)
B	LD , PD anode (Fig. 2)
C	LD anode, PD cathode (Fig. 3)



◆ **ABSOLUTE MAXIMUM RATING at Tc=25**

Items	Symbols	Values	Unit
Optical Output Power	P	12	mW
Laser Diode Reverse Voltage	V	2	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	Topr	-10 +60	°C
Storage Temperature	Tstg	-40 +85	°C

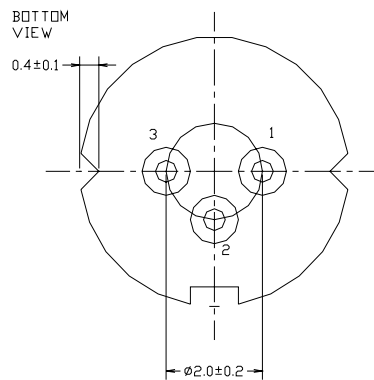
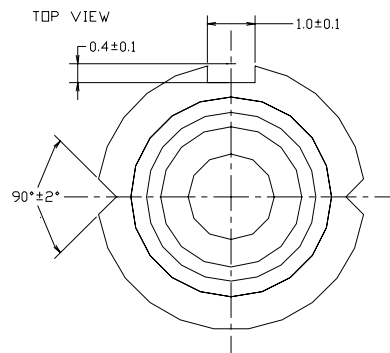
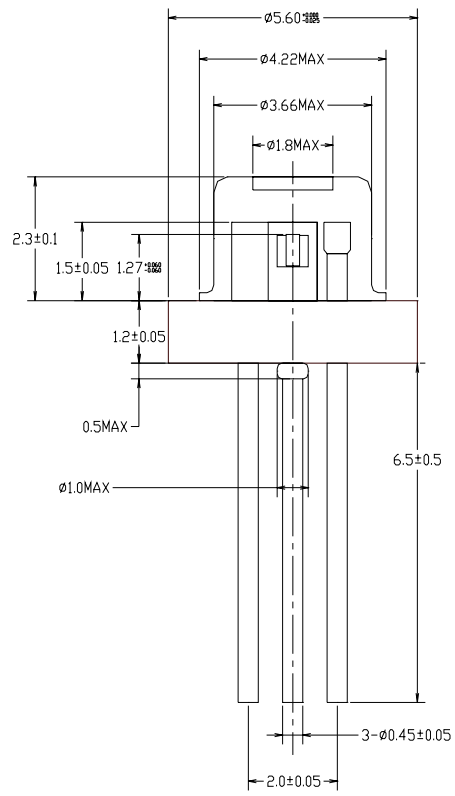
◆ **ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25**

Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	10	-	mW	-
Threshold Current	Ith	-	40	60	mA	-
Operating Current	Iop	-	50	70	mA	Po=10mW
Operating Voltage	Vop	-	2.3	2.6	V	Po=10mW
Lasing Wavelength	λp	660	670	680	nm	Po=10mW
Beam Divergence	$\theta \parallel$	8	11	15	deg	Po=10mW
	$\theta \perp$	24	32	35	deg	Po=10mW
Beam Angle	$\Delta \theta \parallel$	-	-	± 1.5	deg	Po=10mW
	$\Delta \theta \perp$	-	-	± 2.5	deg	Po=10mW
Monitor Current	I _m	0.3	0.6	0.9	mA	Po=10mW
Astigmatism	AS		30		μm	
Optical Distance	$\Delta X, \Delta Y, \Delta Z$	-	-	± 60	μm	

NOTICE : QL67F6S-A/B/C to be operated on APC circuit

The above product specification are subject to change without notice.

◆ PACKAGE DIMENSION



◆ PACKING

