QSI LASER DIODE SPECIFICATIONS FOR APPROVAL

Customer :.	
Model: QL67F6S-A	/B/C
Signature of App	roval
Approved by	
Checked by	
Issued by	
Approval by Cus	tomer



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QL67F6S-A/B/C

InGaAIP Laser Diode

Quantum Semiconductor International Co., Ltd.

Ver 1. July. 2008

♦ OVERVIEW

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

♦ APPLICATION

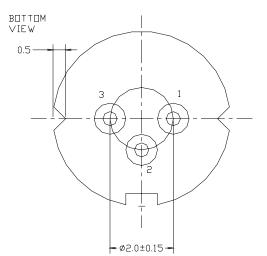
- Optical Leveler
- Laser Module
- Bar Code Reader

♦ FEATURES

- Visible Light Output $\lambda p = 670 \text{ nm}$ 10mW CW - Optical Power Output

- Package Type TO-18 (5.6mm_{\phi}) - Built-in Photo Diode for Monitoring Laser Diode

♦ ELECTRICAL CONNECTION Bottom View



Pin Configuration

А	LD cathode, PD anode (Fig. 1)
В	LD , PD anode (Fig. 2)
С	LD anode, PD cathode (Fig. 3)

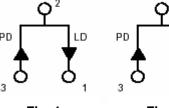






Fig. 2 QL67F6SB

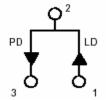


Fig. 3 QL67F6SC



♦ ABSOLUTE MAXIMUM RATING at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power	Р	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°C

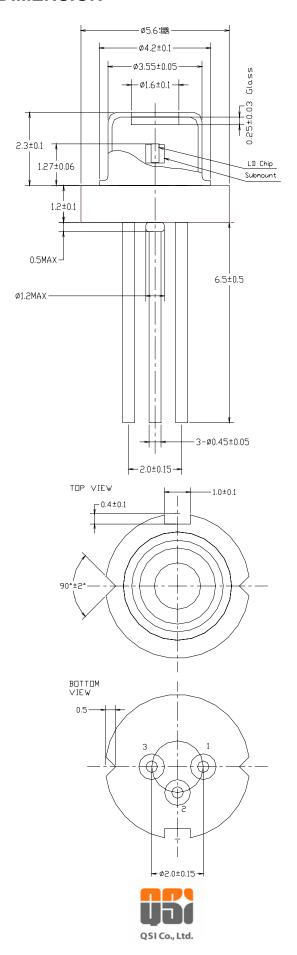
Items	Symbols	Min.	Тур.	Max.	Unit	Condition
Optical Output Power	Po	-	10	-	mW	-
Threshold Current	Ith	-	40	60	mA	-
Operating Current	lop	-	50	70	mA	Po=10mW
Operating Voltage	Vop	-	2.3	2.6	V	Po=10mW
Lasing Wavelength	λр	660	670	680	nm	Po=10mW
Beam Divergence	θΠ	7	8	11	deg	Po=10mW
	θ⊥	24	32	35	deg	Po=10mW
Beam Angle	Δθ	-	-	±1.5	deg	Po=10mW
	Δθ ⊥	-	-	±2.5	deg	Po=10mW
Monitor Current	lm	0.1	0.3	0.5	mA	Po=10mW
Astigmatism	As		30		μ m	
Optical Distance	ΔΧ, ΔΥ, ΔΖ	-	-	±60	μ m	-

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

The above product specifications are subject to change without notice.



♦ PACKAGE DIMENSION



♦PACKING

