

QSI LASER DIODE SPECIFICATIONS FOR APPROVAL

Customer :

Model : QL65O6S-A/B/C

Tentative

Signature of Approval

Approved by _____

Checked by _____

Issued by _____

Approval by Customer



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QL65O6S-A/B/C

InGaAIP Laser Diode

Tentative

Quantum Semiconductor International Co., Ltd.

Ver. 1 Aug. 2006

◆ OVERVIEW

QL65O6S-A/B/C is a MOCVD grown 660nm band *InGaAIP* laser diode with quantum well structure. It's an attractive light source, with a typical light output power of CW 100mW and pulse 250mW for optical storage devices such as High Power Laser Modules.

◆ APPLICATION

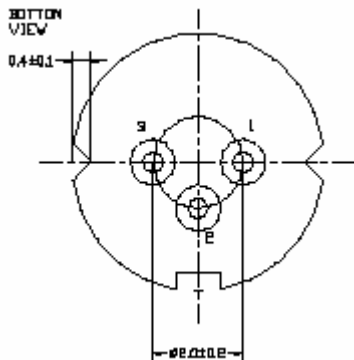
- High Power Laser Modules
- Medical Applications
- Portable High Density Optical Disc Drives

◆ FEATURES

- Visible Light Output : $\lambda_p = 660 \text{ nm}$
- Optical Power Output : 100mW CW, 250mW Pulse
- Package Type : TO-18 (5.6mm ϕ)

◆ ELECTRICAL CONNECTION

Bottom View



Pin Configuration

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

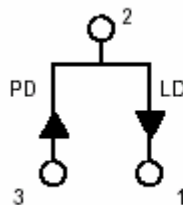


Fig. 1

QL65O6SA

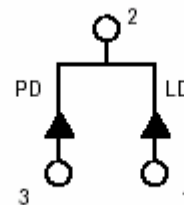


Fig. 2

QL65O6SB

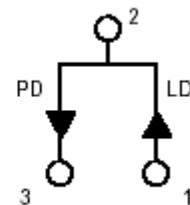


Fig. 3

QL65O6SC

Tentative

◆ ABSOLUTE MAXIMUM RATING at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power (CW)	Po	100	mW
Optical Output Power (Pulse, Tp≤30ns,Duty 35%)	Pp	250	mW
Laser Diode Reverse Voltage	V	2	V
Operating Temperature	Topr	-10 ~ +60	°C
Storage Temperature	Tstg	-40 ~ +80	°C

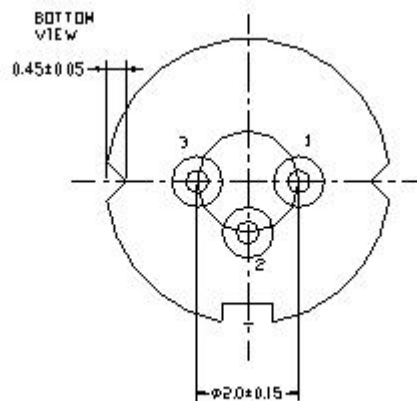
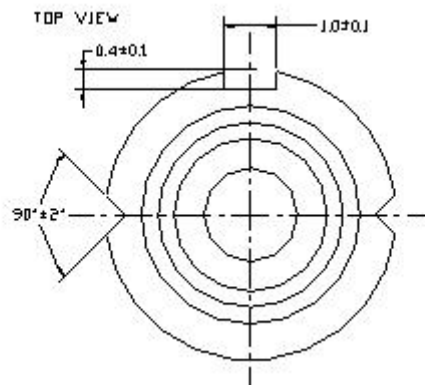
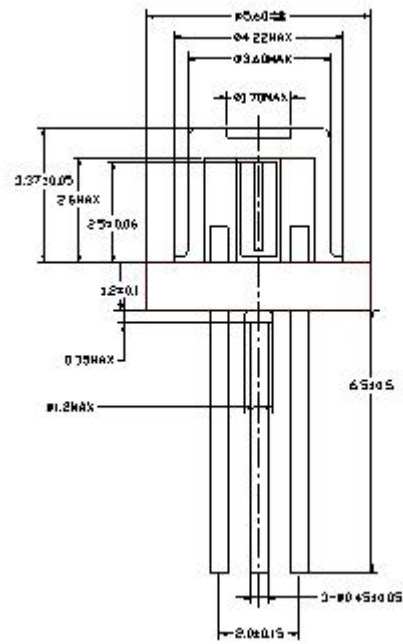
◆ ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25°C

Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Threshold Current	Ith	-	75	100	mA	CW
Operating Current	Iop	-	180	200	mA	CW, Po=100mW
Operating Voltage	Vop	2.0	2.5	3.0	V	CW, Po=100mW
Peak Wavelength	λ_p	654	660	666	nm	CW, Po=100mW
Slope Efficiency	SE(η_d)	0.7	1.0	1.3	W/A	CW, Po=100mW
Beam Divergence ³⁾	$\theta_{ }$	7	9	12	°	CW, Po=100mW
	θ_{\perp}	15	18	21	°	CW, Po=100mW
Beam Angle	$\Delta\theta_{ }$	-	-	±3	°	CW, Po=100mW
	$\Delta\theta_{\perp}$	-	-	±3	°	CW, Po=100mW
Monitor Current	Im	0.05	0.50	1.00	mA	CW, Po=100mW
Polarization Angle	PA					
Polarization Ratio	PR					

NOTICE : QL6506S-A/B/C to be operated on APC

The above product specifications are subject to change without notice.

◆ PACKAGE DIMENSION



◆PACKING

