QSI LASER DIODE

TENTATIVE SPECIFICATIONS FOR

APPROVAL

Customer :

Model : QL94J6SA/B/C

TENTATIVE

Signature of Approval

Approved by _____

Checked by _____

Issued by _____

Approval by Customer

_____

QSI Co., Ltd.

315-9, Cheonheung-ri, Sungger-eup,
Cheonan-city, Chungnam, Korea 330-836
WWW.*QSI*Laser.com

QL94J6SA/B/C

InGaAs Laser Diode

Quantum Semiconductor International Co., Ltd.

Ver. 0. 2017

♦OVERVIEW

QL94J6SA/B/C is a MOCVD grown 940nm band *InGaAs* laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 50mW for industrial optical module and sensor application

♦APPLICATION

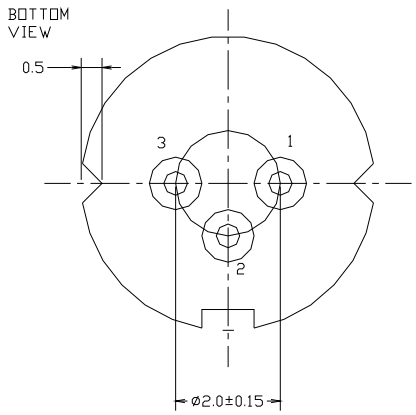
- Industrial optical module
- Sensor

♦FEATURES

- Visible Light Output : λp = 940 nm
- Optical Power Output : 50mW CW
- Package Type : TO-18 (5.6mmϕ)
- Built-in Photo Diode for Monitoring Laser Diode

♦ELECTRICAL CONNECTION

Bottom View



Pin Configuration

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

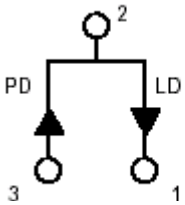


Fig. 1
QL94J6SA

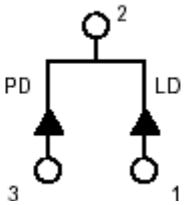


Fig. 2
QL94J6SB

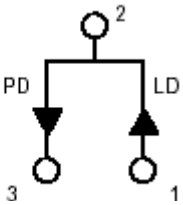


Fig. 3
QL94J6SC

QSI Co., Ltd.

♦ ABSOLUTE MAXIMUM RATING at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power	P	60	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

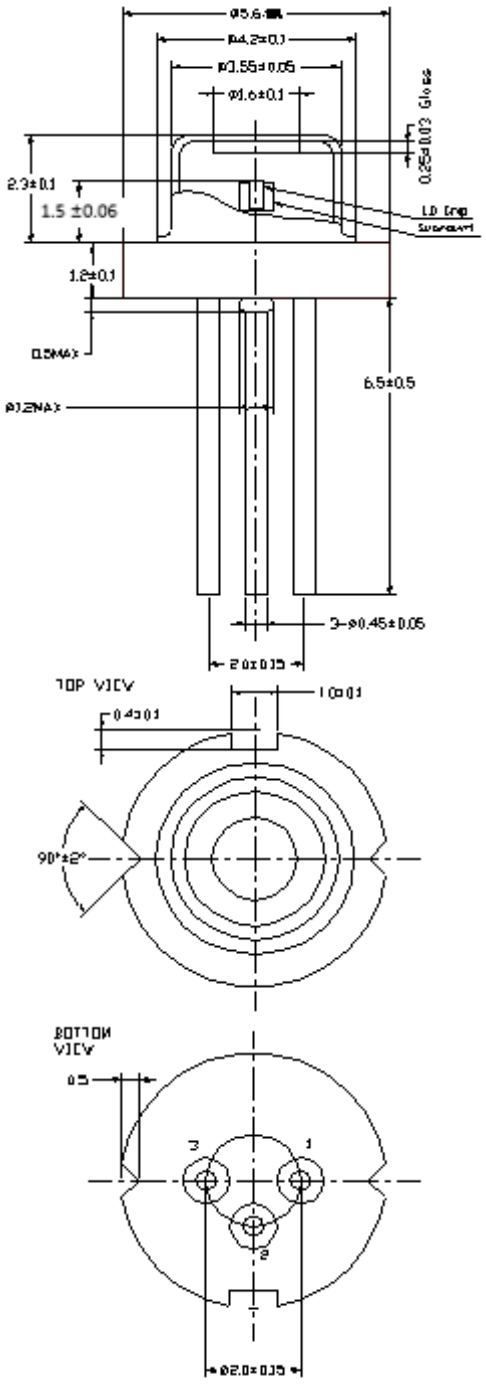
♦ ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25°C

Items	Symbols	Min.	Typ.	Max	Unit	Condition
Optical Output Power	Po	-	50	-	mW	-
Threshold Current	Ith	-	10	40	mA	-
Operating Current	Iop	-	60	90	mA	Po=50mW
Differential efficiency	η	0.50	0.90	1.20	mW/mA	Po=50mW
Operating Voltage	Vop	1.5	1.8	2.4	V	Po=50mW
Lasing Wavelength	λp	930	940	950	nm	Po=50mW
Beam Divergence	$\theta_{\parallel}$	6	8	12	deg	Po=50mW
	$\theta_{\perp}$	22	25	28	deg	Po=50mW
Beam Angle	$\Delta\theta_{\parallel}$	-	-	±3.0	deg	Po=50mW
	$\Delta\theta_{\perp}$	-	-	±3.0	deg	Po=50mW
Monitor Current	Im	0.1	0.2	0.8	mA	Po=50mW
Optical Distance	$\Delta X, \Delta Y, \Delta Z$	-	-	±60	μm	Po=50mW

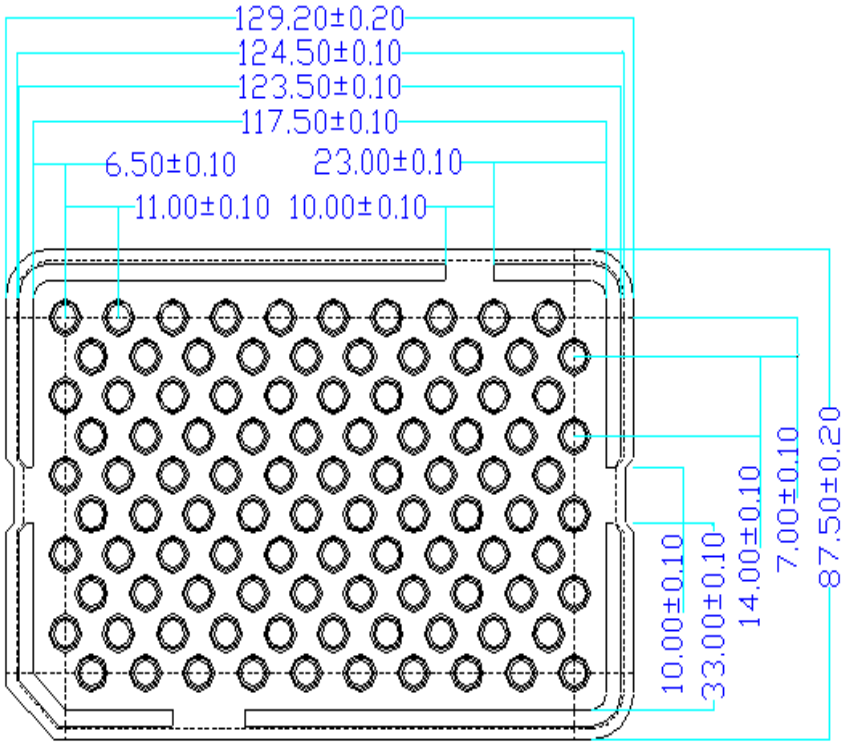
NOTICE : QL94J6SA/B/C to be operated on APC

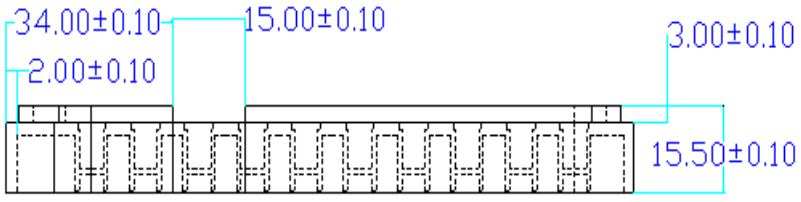
The above product specifications are subject to change without notice.

♦ PACKAGE DIMENSION



♦PACKING





QSI Co., Ltd.