QSI LASER DIODE

SPECIFICATIONS FOR APPROVAL

Customer :.

Model : QL68I6S-A/B/C

Signature of Approval

Approved by ______________________________

Checked by ______________________________

Issued by ______________________________

Approval by Customer

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QL68I6S-A/B/C

InGaAlP Laser Diode

Quantum Semiconductor International Co., Ltd.

Ver. 1 MAR. 2011

◆OVERVIEW

QL68i6S-A/B/C is a MOCVD grown 0.68㎛ band *InGaAlP* laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 30mW for optoelectronic devices such as Industrials.

◆APPLICATION

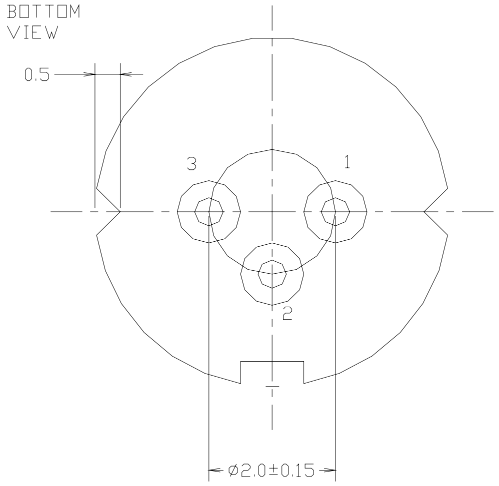
- Industrials
- Laser Module

◆FEATURES

- Visible Light Output : λp = 685 nm
- Optical Power Output : 30mW CW
- Package Type : TO-18 (5.6mmϕ)
- Built-in Photo Diode for Monitoring Laser Diode

◆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)

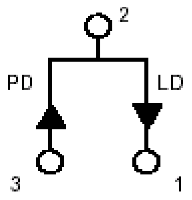


Fig. 1

QL68I6SA

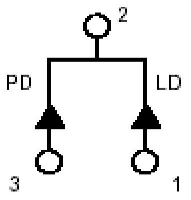


Fig. 2

QL68I6SB

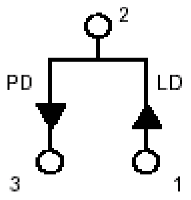


Fig. 3

QL68I6SC

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◆ABSOLUTE MAXIMUM RATING at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power	P	35	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	-	30	-	mW	-
Threshold Current	Ith	-	28	60	mA	-
Operating Current	Iop	-	59	140	mA	Po=30mW
Operating Voltage	Vop	2	2.2	3	V	Po=30mW
Lasing Wavelength	λp	670	683	700	nm	Po=30mW
Beam Divergence	$\theta \parallel$	8	11	14	deg	Po=30mW
	$\theta \perp$	16	19	25	deg	Po=30mW
Beam Angle	$\Delta\theta \parallel$	-	-	±2.0	deg	Po=30mW
	$\Delta\theta \perp$	-	-	±2.5	deg	Po=30mW
Monitor Current	Im	0.05	0.4	2.5	mA	Po=30mW
Astigmatism	As			8	µm	
Optical Distance	ΔX, ΔY, ΔZ	-	-	±60	µm	-

NOTICE : QL68I6S-A/B/C to be operated on APC

The above product specifications are subiect to change without notice.

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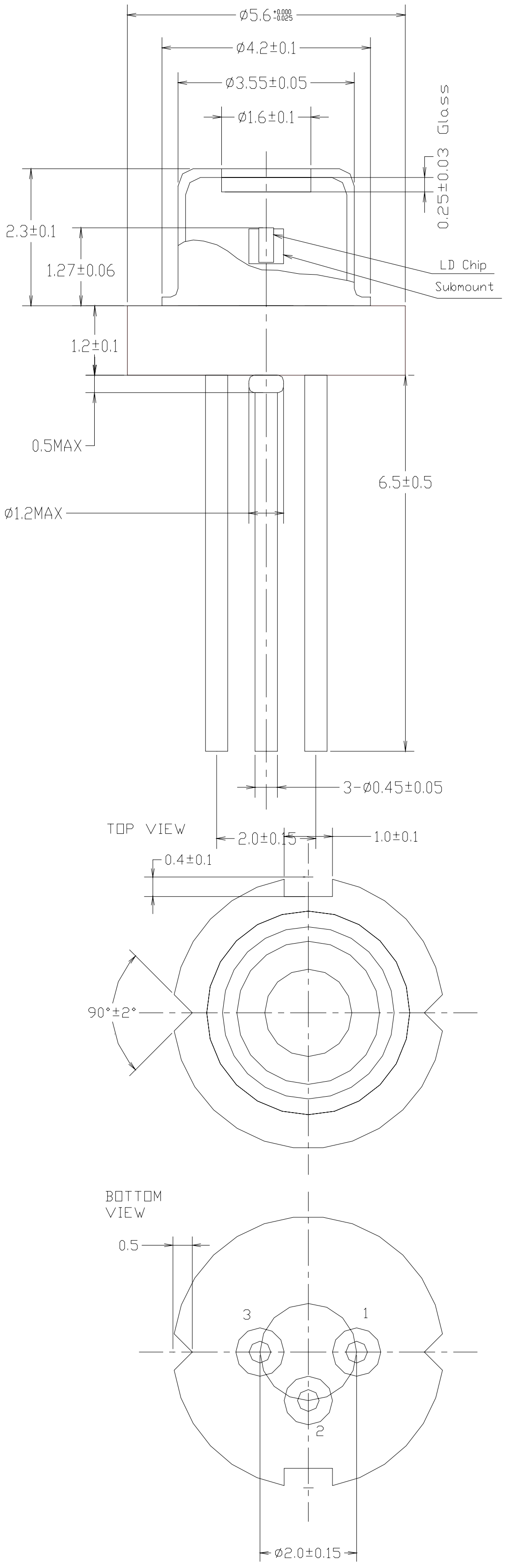
PACKAGE DIMENSION



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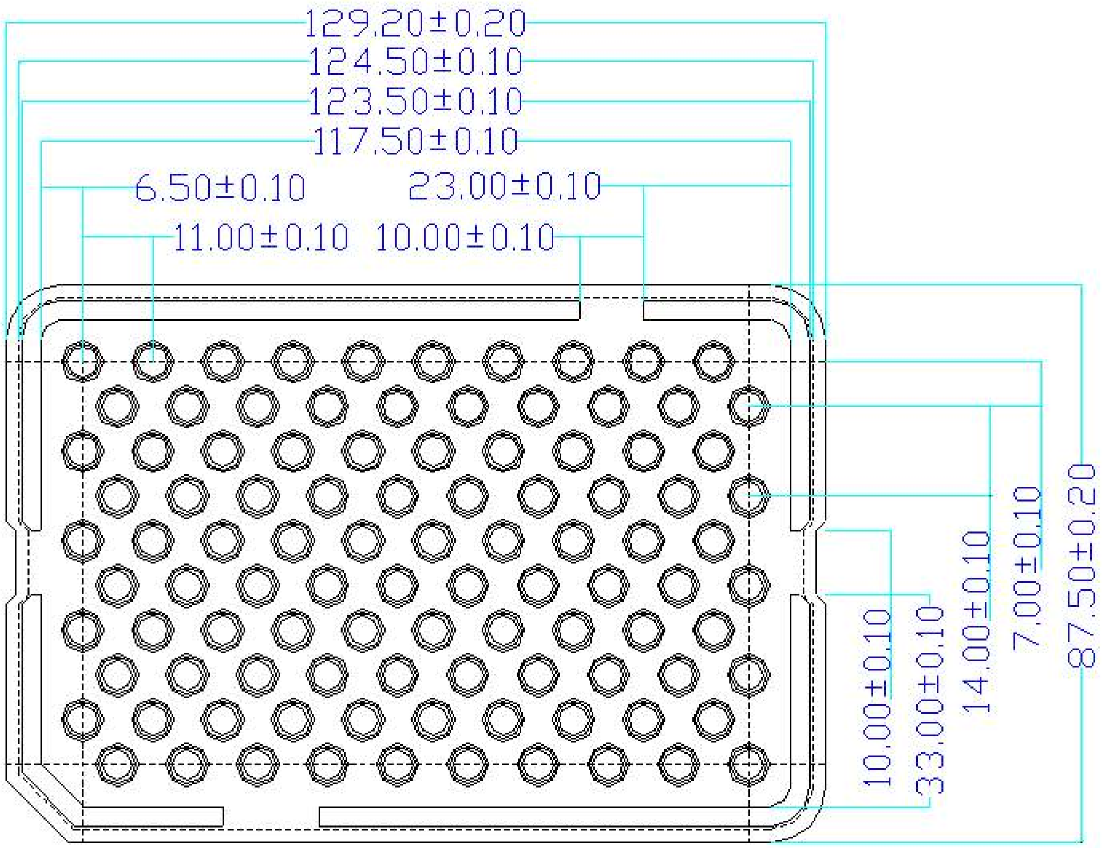
♦PACKING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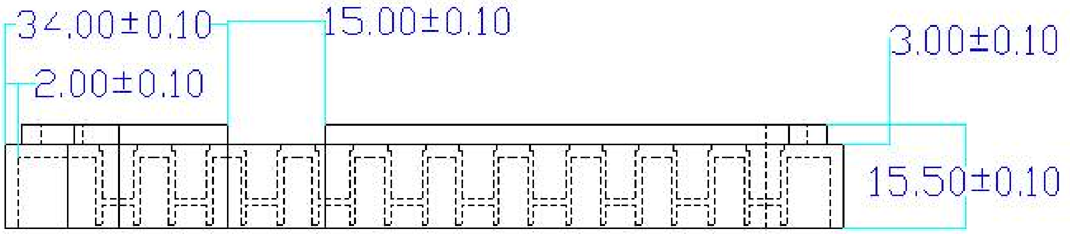
33.00±0.10
14.00±0.10
7.00±0.10
87.50±0.20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3.00±0.10
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