

QSI LASER DIODE

SPECIFICATIONS FOR APPROVAL

Customer :.

Model : QL85R63A/B/D/E

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.QSILaser.com

QL85R63A/B/D/E

AlGaAs Laser Diode

Quantum Semiconductor International Co., Ltd.

Ver. 2 JAN. 2017

◆ OVERVIEW

QL85R63A/B/D/E is a MOCVD grown 850nm band AlGaAs laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 200mW for industrial optical module and sensor applications.

◆ APPLICATION

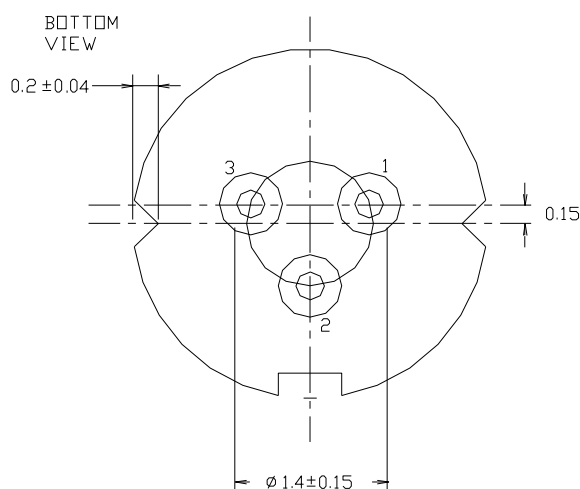
- Motion Recognition Sensor
- Industrial Optical Module

◆ FEATURES

- Visible Light Output : $\lambda_p = 850 \text{ nm}$
- Optical Power Output : 200mW CW
- Package Type : TO-CAN (3.3mm ϕ , with window glass)

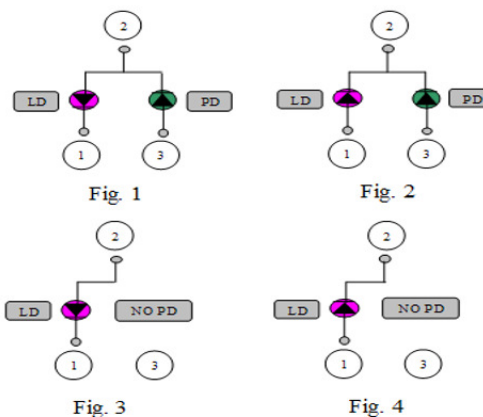
◆ ELECTRICAL CONNECTION

Bottom View



Pin Configuration

A	LD Cathode, PD Anode (Fig. 1)
B	LD Anode, PD Anode (Fig. 1)
D	LD Cathode, w/o PD (Fig. 3)
E	LD Anode, w/o PD (Fig. 4)



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

Items	Symbols	Values	Unit
Optical Output Power	P	210	mW
Laser Diode Reverse Voltage	V	2	V
Operating Temperature	Topr	-10 ~ +60	°C
Storage Temperature	Tstg	-40 ~ +85	°C

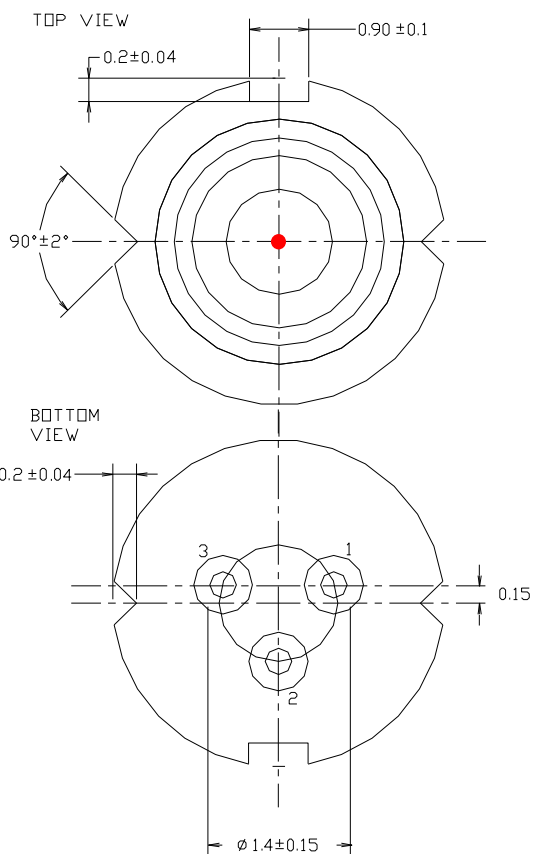
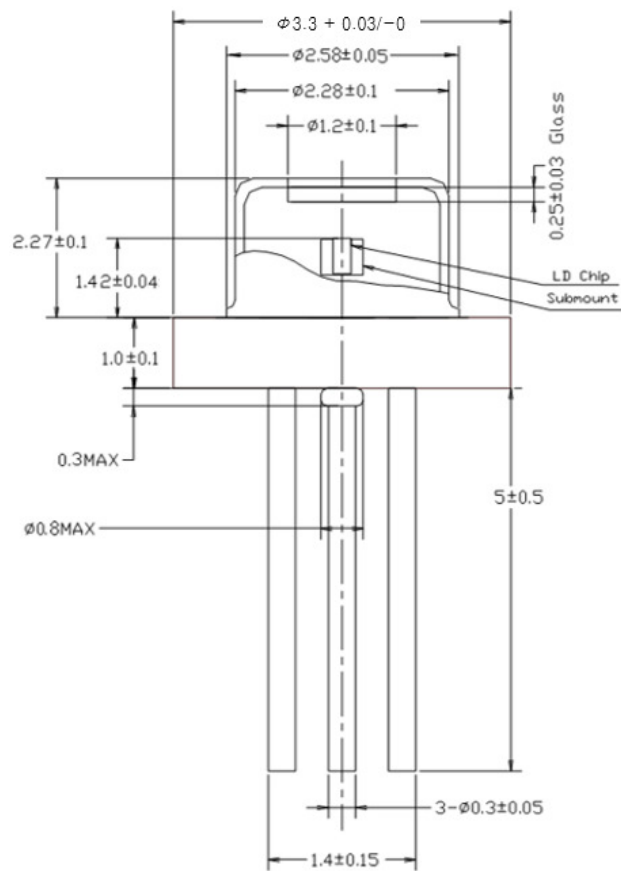
◆ **ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25°C**

Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	200	-	mW	-
Threshold Current	Ith	-	60	80	mA	-
Operating Current	Iop	180	210	240	mA	Po=200mW
Operating Voltage	Vop	1.8	2.4	2.7	V	Po=200mW
Slope Efficiency	SE	0.8	1.2	1.6	mW/mA	Po=200mW
Lasing Wavelength	λ_p	840	850	860	nm	Po=200mW
Beam Divergence	$\theta_{ }$	5	9	12	deg	Po=200mW
	$\theta_{\perp}$	13	18	23	deg	Po=200mW
Beam Angle	$\Delta\theta_{ }$	-	-	±3.0	deg	Po=200mW
	$\Delta\theta_{\perp}$	-	-	±3.0	deg	Po=200mW
Monitor Current	I _m	0.01	0.25	1.2	mA	Po=200mW
Optical Distance	$\Delta X, \Delta Y, \Delta Z$	-	-	±60	μm	-

NOTICE : QL85R63A/B to be operated on APC circuit.

The above product specifications are subject to change without notice.

◆ PACKAGE DIMENSION



◆PACKING

