

InGaAlP Laser Diode

660nm 500mW Red Laser Diodes LD

◆ OVERVIEW

It is a MOCVD grown 650nm band *InGaAlP* laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 50mW for optoelectronic devices such as DVD R/RW

◆ APPLICATION

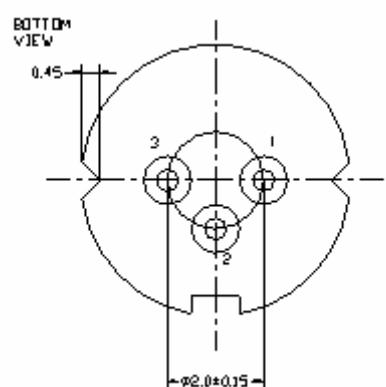
- DVD R/RW
- Optical Module

◆ FEATURES

- Visible Light Output : $\lambda_p = 660$ nm(typ.)
- Optical Power Output : 50mW CW
- Package Type : TO-18 (5.6mm ϕ)
- 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)

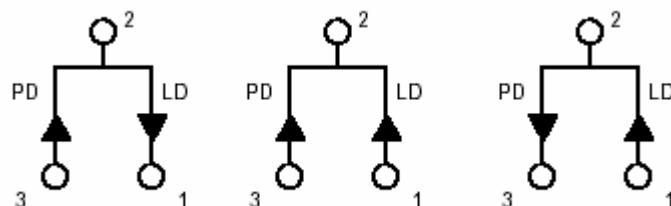


Fig. 1
QL65J7SA

Fig. 2
QL65J7SB

Fig. 3
QL65J7SC

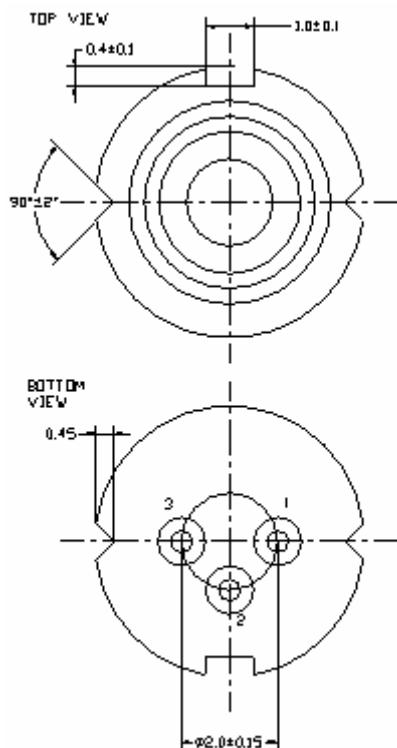
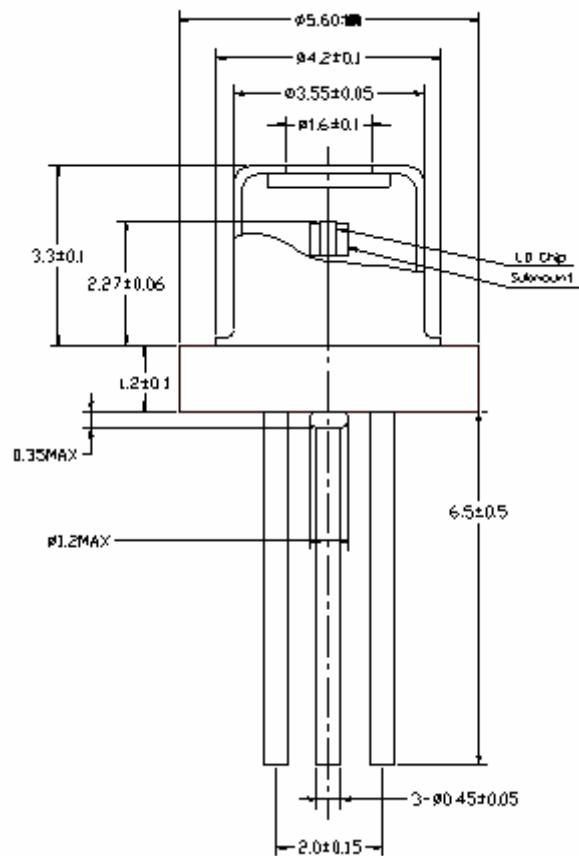
◆ ABSOLUTE MAXIMUM RATING at Tc=25°C

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 ~ +75	°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	30	45	60	mA	-
Operating Current	Iop	-	90	120	mA	Po=50mW
Slope Efficiency	SE		1.0	-	mW/mA	30~50 mW
Operating Voltage	Vop	-	2.6	3.0	V	Po=50mW
Lasing Wavelength	λp	653	660	667	nm	Po=50mW
Beam Divergence	θ	6	9	12	deg	Po=50mW
	θ ⊥	15	20	25	deg	Po=50mW
Beam Angle	Δθ	-	-	±3	deg	Po=50mW
	Δθ ⊥	-	-	±3	deg	Po=50mW
Monitor Current	Im	0.01	0.3	1.0	mA	Po=50mW
Optical Distance	ΔX, ΔY, ΔZ	-	-	±60	μm	-

◆ PACKAGE DIMENSION



◆PACKING

