



QL68J6S-A/B/C

InGaAlP Laser Diode

2007-11-22

◆ OVERVIEW

QL68J6S-A/B/C is a MOCVD grown 0.68 μ m band InGaAlP laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 50mW for opto-electronic devices such as Industrials.

◆ APPLICATION

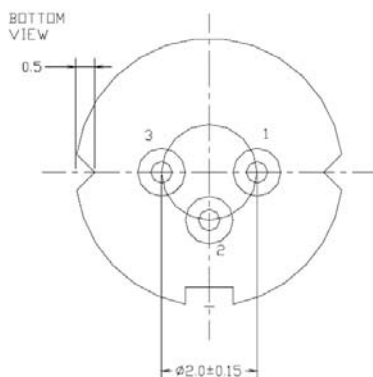
- Industrials
- Laser Module

◆ FEATURES

- Visible Light Output : $\lambda_p = 685\text{nm}$
- Optical Power Output : 50 mW CW
- Package Type : TO-18 (5.6mm ϕ)
- Built-in Photo Diode for Monitoring Laser Output

◆ 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)

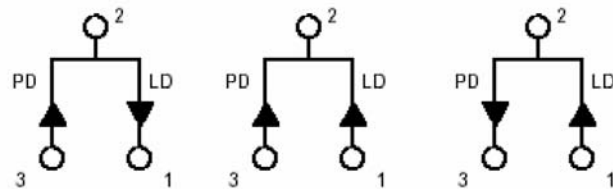


Fig. 1
QL68J6SA

Fig. 2
QL68J6SB

Fig. 3
QL68J6SC



◆ ABSOLUTE MAXIMUM RATING at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power	P	55	mW
Laser Diode Reverse Voltage	V	2	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	T _{opr}	-10 ~ +60	°C
Storage Temperature	T _{stg}	-40 ~ +85	°C

◆ ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25°C

Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	P _o	-	50	-	mW	-
Threshold Current	I _{th}	-	35	60	mA	-
Operating Current	I _{op}	-	100	140	mA	P _o =50mW
Operating Voltage	V _{op}	2	2.7	3	V	P _o =50mW
Lasing Wavelength	λ _p	670	685	700	nm	P _o =50mW
Beam Divergence	θ	8	10.5	14	deg	P _o =50mW
	θ _⊥	16	20	25	deg	P _o =50mW
Beam Angle	Δθ	-	-	±2.0	deg	P _o =50mW
	Δθ _⊥	-	-	±2.5	deg	P _o =50mW
Monitor Current	I _m	0.05	0.3	2.5	mA	P _o =50mW
Astigmatism	Δs	-	-	8	μm	
Optical Distance	ΔX, ΔY, ΔZ	-	-	±60	μm	

NOTICE : QL68J6S-A/B/C to be operated on APC circuit

The above product specification are subject to change without notice.



◆ PACKAGE DIMENSION

