



## QL68I6S-A/B/C

### ◆ OVERVIEW

QL68I6S-A/B/C is a MOCVD grown 0.68μm band *InGaAlP* laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 30mW for opto-electronic devices such as Industrials.

### ◆ APPLICATION

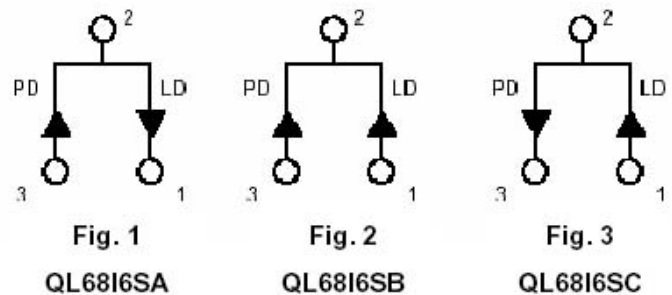
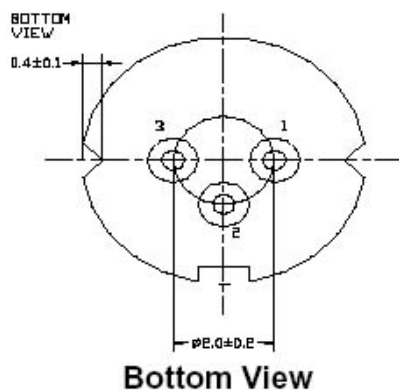
- Industrials
- Laser Module

### ◆ FEATURES

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

### ◆ ELECTRICAL CONNECTION

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



**Pin Configuration**



### ◆ 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	-	35	60	mA	-
Operating Current	Iop	-	80	140	mA	Po=30mW
Operating Voltage	Vop	2	2.4	3	V	Po=30mW
Lasing Wavelength	$\lambda_p$	670	685	700	nm	Po=30mW
Beam Divergence	$\theta_{  }$	7	9.5	12	deg	Po=30mW
	$\theta_{\perp}$	16	20	25	deg	Po=30mW
Beam Angle	$\Delta \theta_{  }$	-	-	$\pm 2.0$	deg	Po=30mW
	$\Delta \theta_{\perp}$	-	-	$\pm 2.5$	deg	Po=30mW
Monitor Current	I <sub>m</sub>	0.05	0.2	2.5	mA	Po=30mW
Astigmatism	As	-	-	8	$\mu\text{m}$	
Optical Distance	$\Delta X, \Delta Y, \Delta Z$	-	-	$\pm 60$	$\mu\text{m}$	

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

The above product specification are subject to change without notice.



## ◆ PACKAGE DIMENSION

