

# LCQ68550S5-N/M/P

## InGaAlP Laser Diode

2007-11-22

### ◆ OVERVIEW

**LCQ68550S5-N/M/P** is a MOCVD grown 0.68  $\mu\text{m}$  band *InGaIP* 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

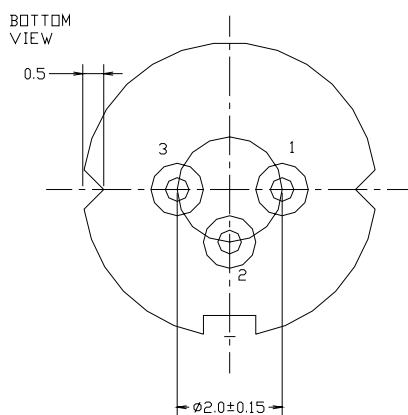
- Industrials
- Laser Module

### ◆ FEATURES

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

### ◆ ELECTRICAL CONNECTION

#### Bottom View



#### Pin Configuration

<b>A</b>	LD cathod, PD anode (Fig. 1)
<b>B</b>	LD , PD anode (Fig. 2)
<b>C</b>	LD anode, PD cathod (Fig. 3)

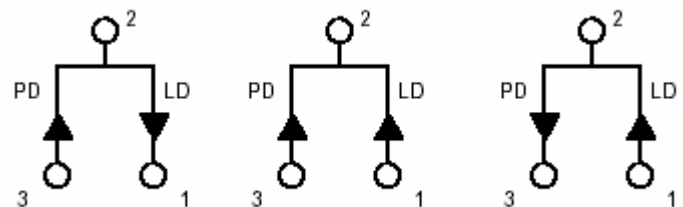


Fig. 1

LCQ68550S5N

Fig. 2

LCQ68550S5M

Fig. 3

LCQ68550S5P

## ◆ ABSOLUTE MAXIMUM RATING at Tc=25

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	Topr	-10 +60	°C
Storage Temperature	Tstg	-40 +85	°C

## ◆ ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25

Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	50	-	mW	-
Threshold Current	Ith	-	35	60	mA	-
Operating Current	Iop	-	100	140	mA	Po=50mW
Operating Voltage	Vop	2	2.7	3	V	Po=50mW
Lasing Wavelength	$\lambda p$	670	685	700	nm	Po=50mW
Beam Divergence	$\theta \parallel$	8	10.5	14	deg	Po=50mW
	$\theta \perp$	16	20	25	deg	Po=50mW
Beam Angle	$\Delta \theta \parallel$	-	-	$\pm 2.0$	deg	Po=50mW
	$\Delta \theta \perp$	-	-	$\pm 2.5$	deg	Po=50mW
Monitor Current	Im	0.05	0.3	2.5	mA	Po=50mW
Astigmatism	$\Delta s$	-	-	8	$\mu m$	
Optical Distance	$\Delta X, \Delta Y, \Delta Z$	-	-	$\pm 60$	$\mu m$	

**NOTICE : LCQ68550S5-N/M/P to be operated on APC circuit**

**The above product specification are subject to change without notice .**

## ◆ PACKAGE DIMENSION

