

**LASER DIODE**  
**SPECIFICATIONS FOR APPROVAL**

**Customer :**

**Model : L67D6S-A/B/C**

**Signature of Approval**

**Approved by** \_\_\_\_\_

**Checked by** \_\_\_\_\_

**Issued by** \_\_\_\_\_

**Approval by Customer**

\_\_\_\_\_

# L67D6S-AB/C

## InGaAlP Laser Diode

Ver 0. JAN. 2004

### ◆ OVERVIEW

**L67D6S-A/B/C** is a MOCVD grown 670nm band **Gain-Guided** type *InGaAlP* laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 5mW for opto-electronic devices such as Bar Code Reader.

### ◆ APPLICATION

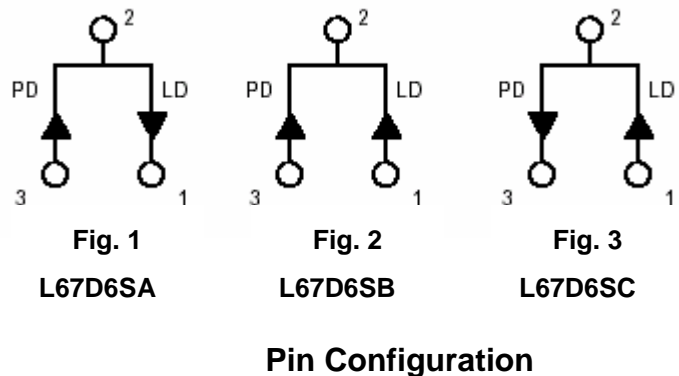
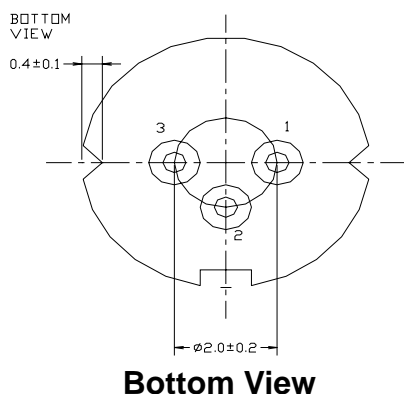
- Optical Leveler
- Laser Module
- Bar Code Reader

### ◆ FEATURES

- Visible Light Output :  $\lambda_p = 670\text{nm}$
- Optical Power Output : 5 mW CW
- Package Type : TO-18 (5.6mm $\phi$ )
- Built-in Photo Diode for Monitoring Laser Output

### ◆ ELECTRICAL CONNECTION

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



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

Items	Symbols	Values	Unit
Optical Output Power	P	7	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

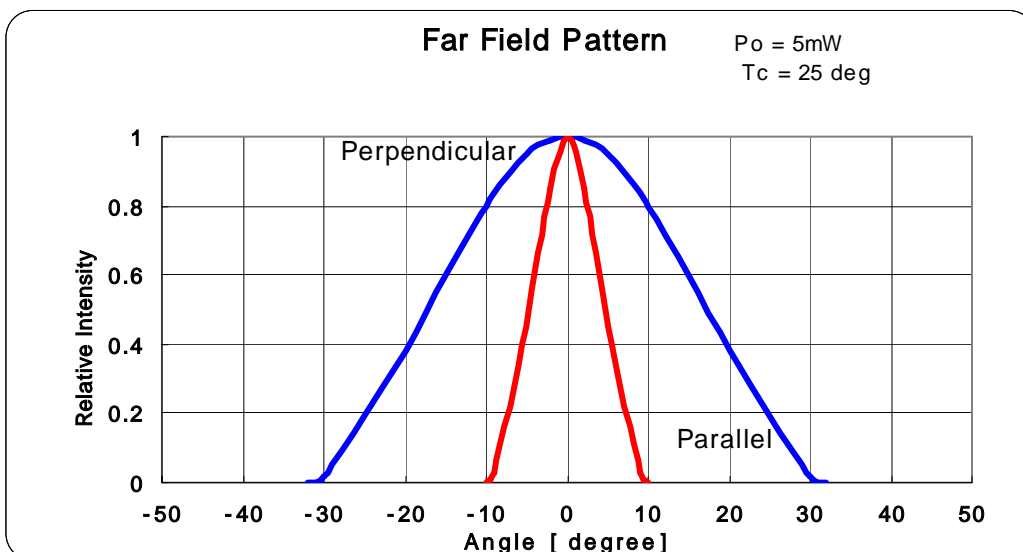
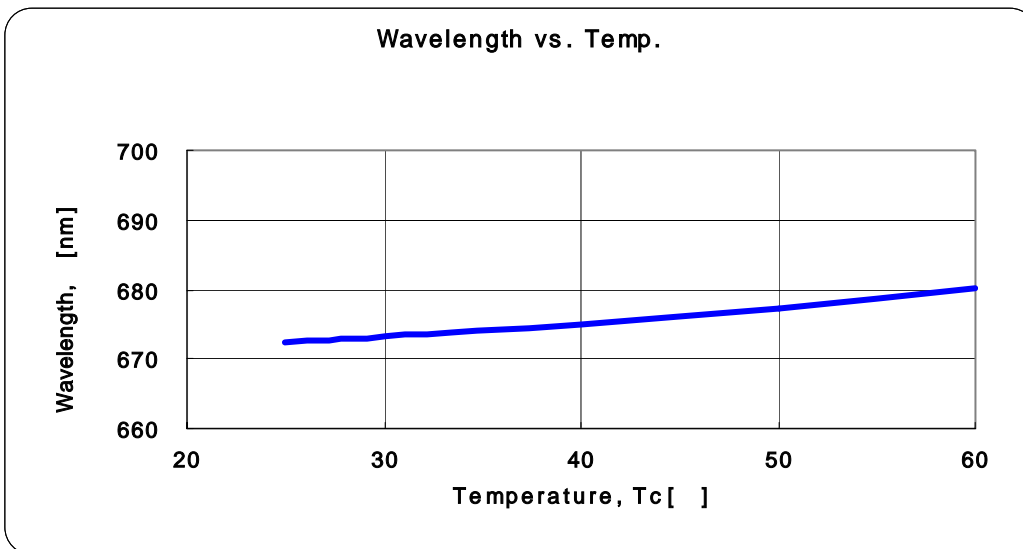
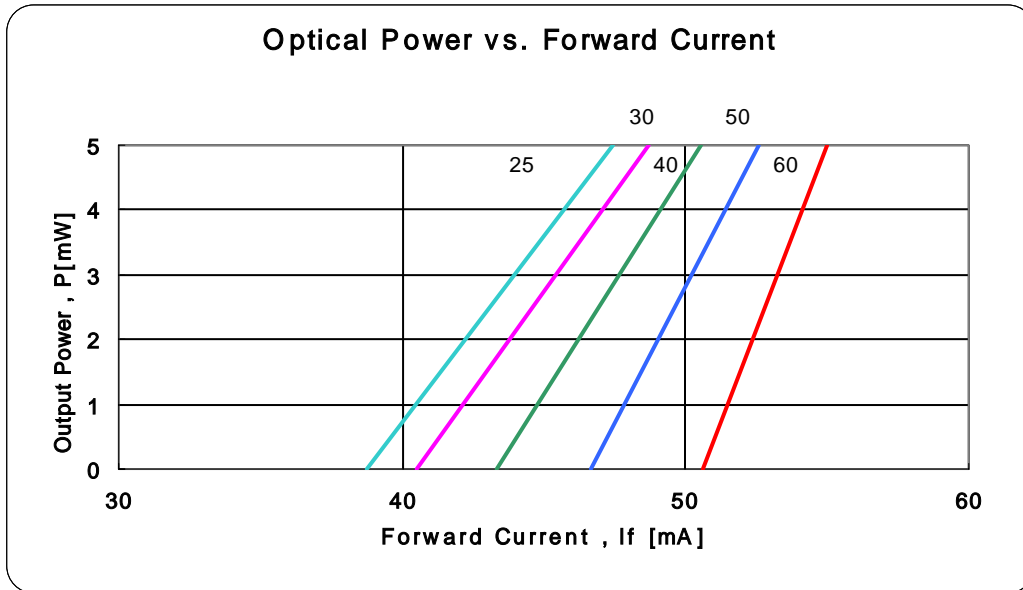
◆ **ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25**

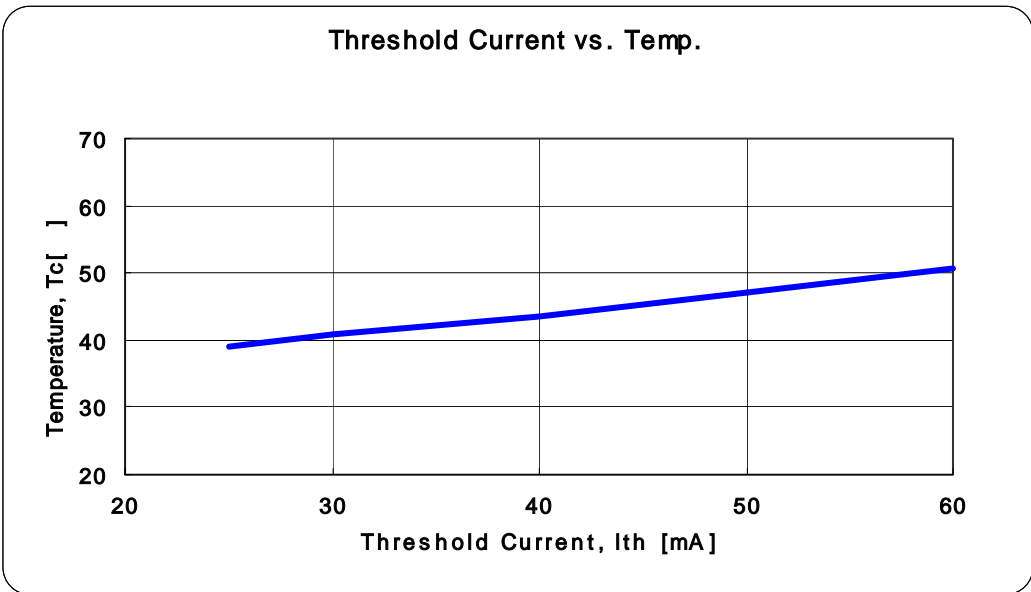
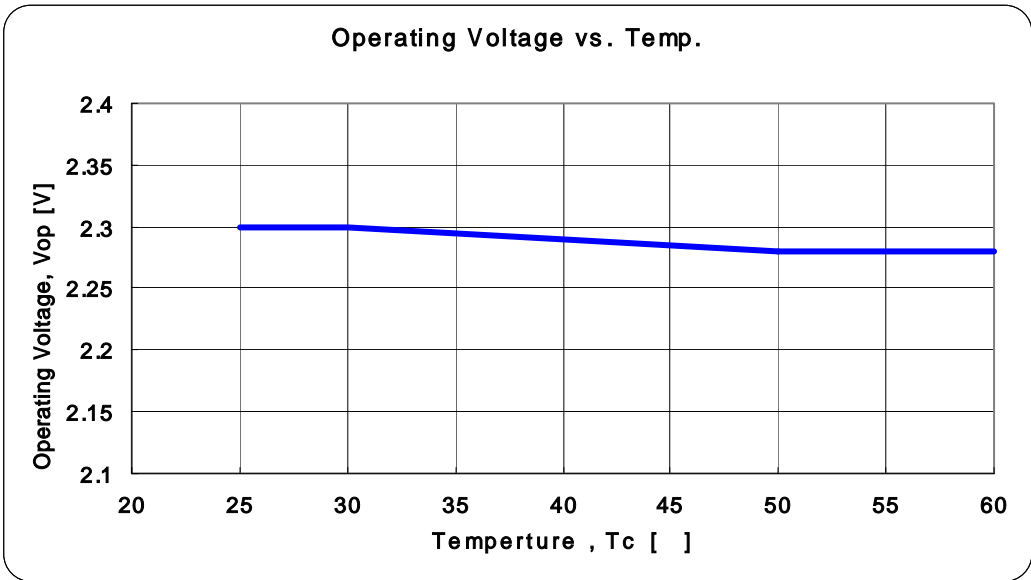
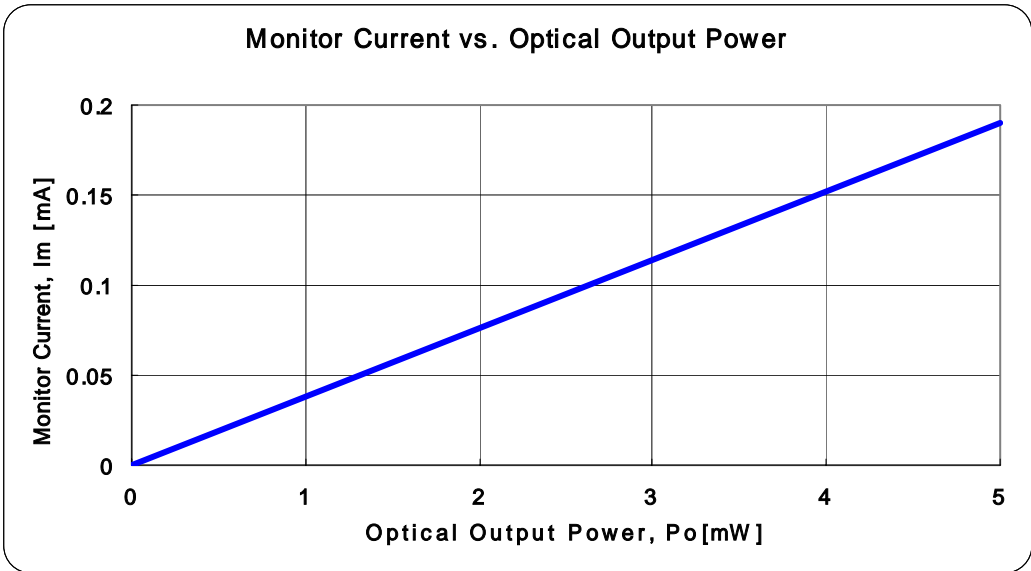
Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	5	-	mW	-
Threshold Current	Ith	-	40	60	mA	-
Operating Current	Iop	-	50	70	mA	Po=5mW
Operating Voltage	Vop	-	2.3	2.6	V	Po=5mW
Lasing Wavelength	$\lambda p$	660	670	680	nm	Po=5mW
Beam Divergence	$\theta \parallel$	8	11	15	deg	Po=5mW
	$\theta \perp$	24	32	35	deg	Po=5mW
Beam Angle	$\Delta \theta \parallel$	-	-	$\pm 1.5$	deg	Po=5mW
	$\Delta \theta \perp$	-	-	$\pm 2.5$	deg	Po=5mW
Monitor Current	I <sub>m</sub>	0.1	0.2	0.5	mA	Po=5mW
Astigmatism	As		30		$\mu\text{m}$	
Optical Distance	$\Delta X, \Delta Y, \Delta Z$	-	-	$\pm 60$	$\mu\text{m}$	

**NOTICE : L67D6S-A/B/C to be operated on APC circuit**

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

◆ EXAMPLE of REPRESENTATIVE CHARACTERISTICS





# ◆ PACKAGE DIMENSION

