LD65F5S-A/B/C

InGaAlP Laser Diode

Quantum Semiconductor International Co., Ltd.

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♦OVERVIEW

LD65F5S-A/B/C 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 10mW for optoelectronic devices such as Laser Pointer & Bar Code Reader.

♦APPLICATION

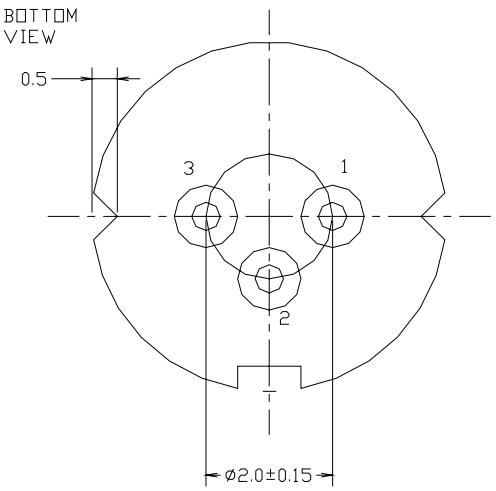
- Optical Leveler
- Laser Pointer
- Bar Code Reader

♦FEATURES

- Visible Light Output : λp = 650 nm
- Optical Power Output : 10mW CW
- Package Type : TO-18 (5.6mmϕ)
- 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)

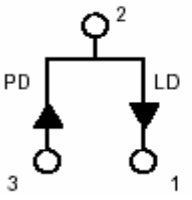


Fig. 1
LD65F5SA

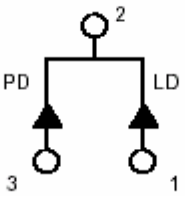


Fig. 2
LD65F5SB

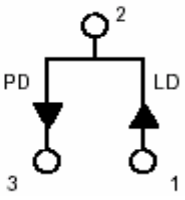


Fig. 3
LD65F5SC

♦ABSOLUTE MAXIMUM RATING at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power	P	12	mW
Laser Diode Reverse Voltage	V	2	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	Topr	–10 ~ +50	°C
Storage Temperature	Tstg	–40 ~ +85	°C

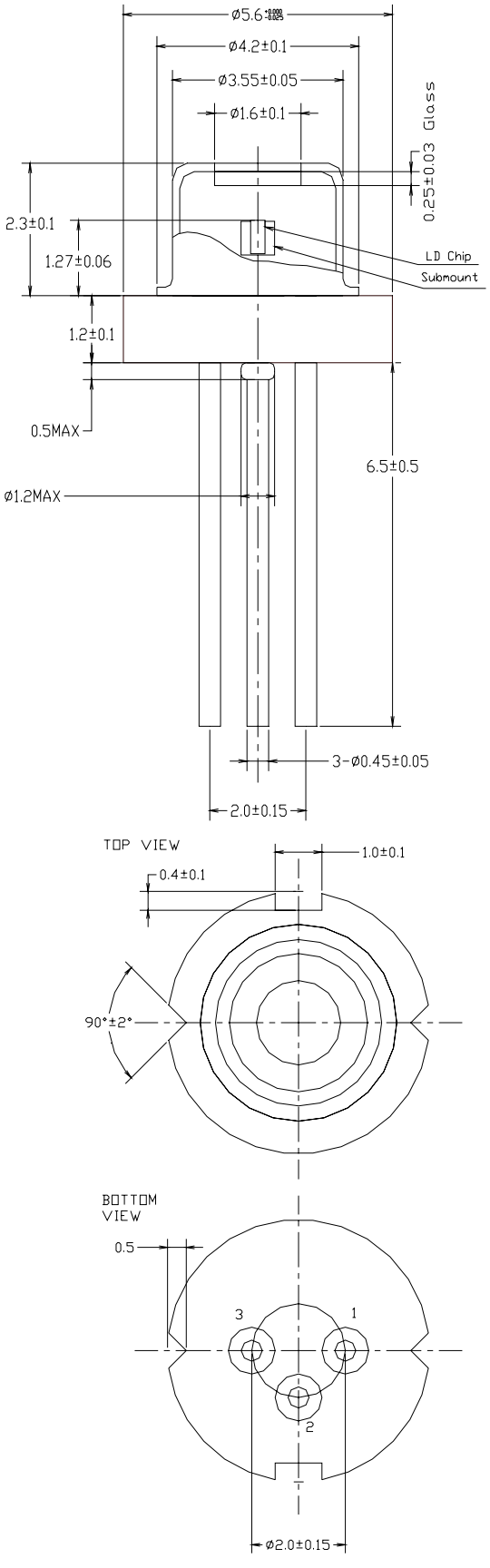
♦ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25°C

Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	10	-	mW	-
Threshold Current	Ith	-	20	25	mA	-
Operating Current	Iop	-	36	45	mA	Po=10mW
Slope Efficiency	SE	0.4	0.6	1.0	mW/mA	5~10mW
Operating Voltage	Vop	-	2.3	2.6	V	Po=10mW
Lasing Wavelength	λp	645	655	660	nm	Po=10mW
Beam Divergence	θ ∥	6	8	12	deg	Po=10mW
	θ ⊥	22	30	36	deg	Po=10mW
Beam Angle	Δθ ∥	-	-	±2	deg	Po=10mW
	Δθ ⊥	-	-	±3	deg	Po=10mW
Monitor Current	Im	0.05	0.15	0.3	mA	Po=10mW
Optical Distance	ΔX, ΔY, ΔZ	-	-	±80	μm	-

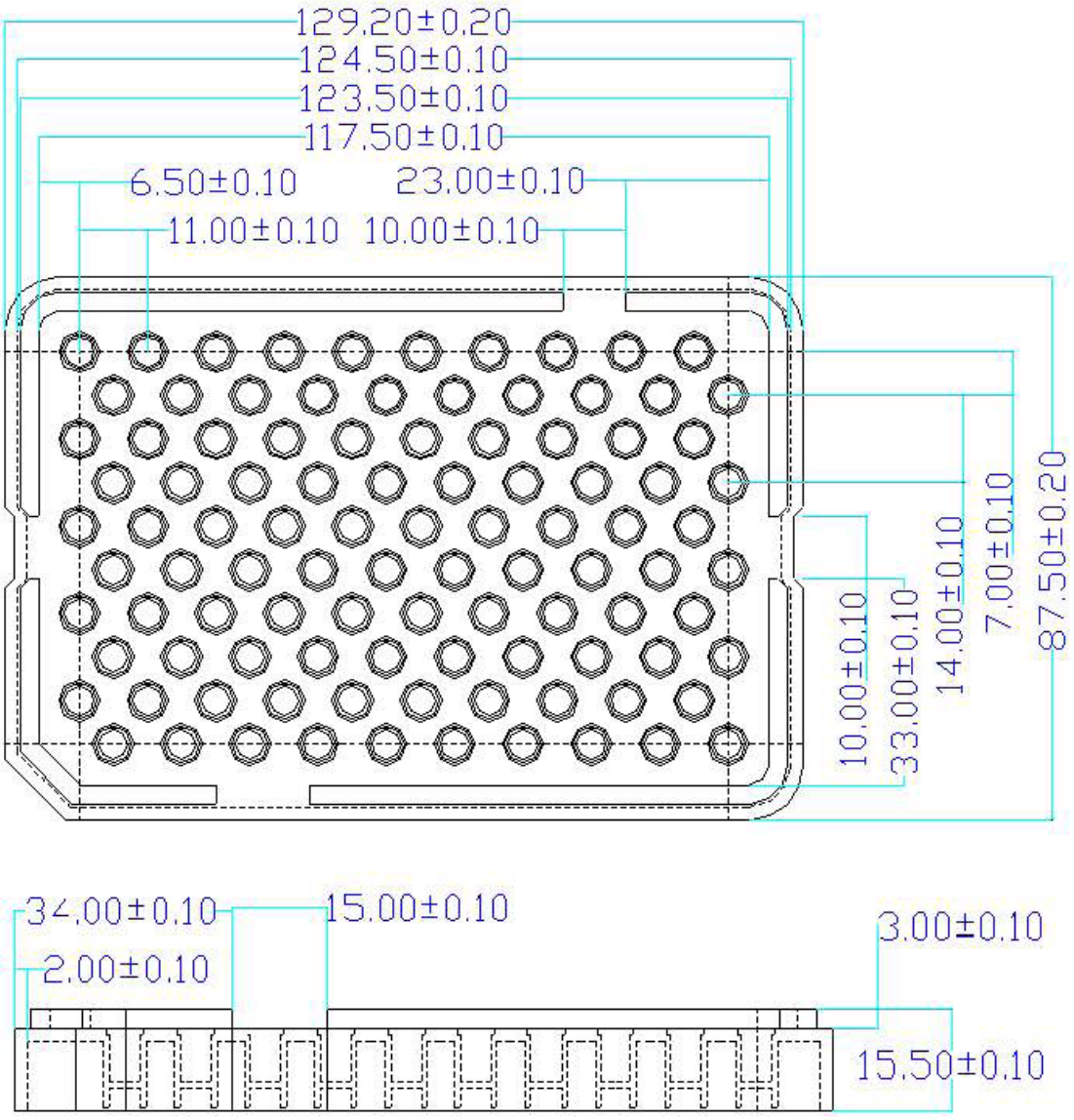
NOTICE : LD65F5S-A/B/C to be operated on APC

The above product specifications are subject to change without notice.

♦PACKAGE DIMENSION



♦PACKING



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