

QL85D6SA

AlGaAs Laser Diode

Quantum Semiconductor International Co., Ltd

Rev 0 _2003

OVERVIEW

QL85D6SA is a MOCVD grown 850nm band AlGaAs laser diode with quantum well structure.

It's an attractive light source, with a typical light output power of 5mW for industrial optical module and sensor applications.

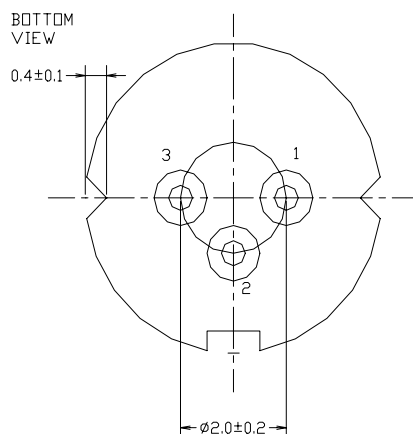
APPLICATION

- Sensor
- Industrial Optical Module

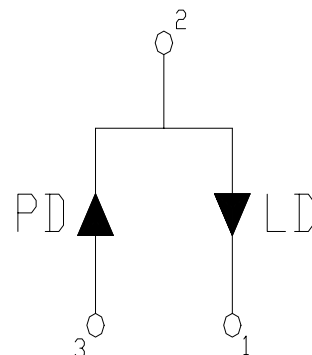
FEATURES

- Lasing Wavelength : $\lambda = 850\text{nm}$
- Optical Power Output : 5mW CW
- Package Type : TO-18 (5.6mm Φ)
- Built-in Photo Diode for Monitoring Laser Output

ELECTRICAL CONNECTION



Bottom View



Pin Configuration

ABSOLUTE MAXIMUM RATING at Tc=25

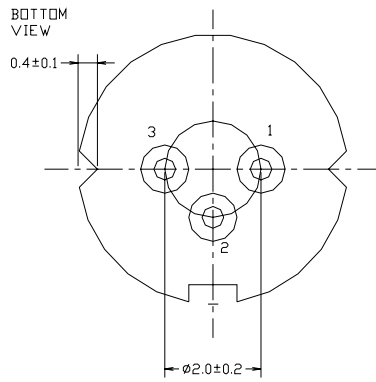
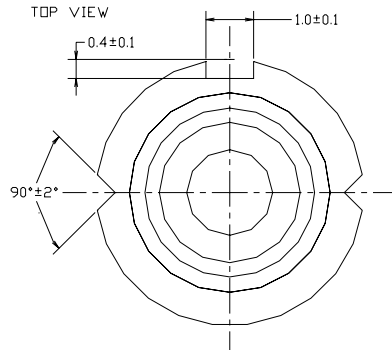
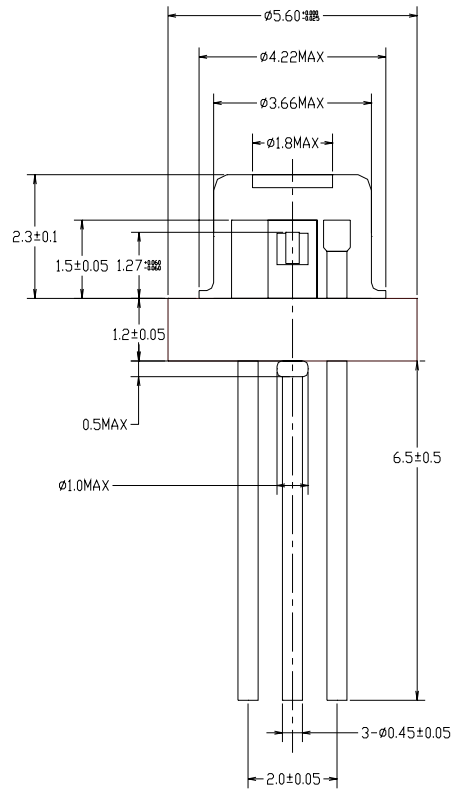
Items	Symbols	Values	Unit
Optical Output Power	P	5	mW
Laser Diode Reverse Voltage	V	2	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	Topr	-10 +60	
Storage Temperature	Tstg	-40 +85	

ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25

Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	5	-	mW	-
Threshold Current	Ith	-	10	20	mA	-
Operating Current	Iop	-	20	30	mA	Po=5mW
Operating Voltage	Vop	-	1.9	2.3	V	Po=5mW
Slope Efficiency	SE	0.3	0.5	0.8	mW/mA	Po=1 ~ 3mW
Lasing Wavelength	λ	845	850	855	nm	Po=5mW
Beam Divergence		8	11	16	deg	Po=5mW
		25	32	40	deg	Po=5mW
Beam Angle		-	-	± 1.5	deg	Po=5mW
		-	-	± 2.5	deg	Po=5mW
Monitor Current	I _m	0.1	0.3	0.5	mA	Po=5mW
Optical Distance	X, Y, Z	-	-	± 60	μm	
Astigmatism	As			15	μm	

The above product specifications are subject to change without notice.

PACKAGE DIMENSION



PACKING

