

QL63F5SA

InGaAlP Laser Diode

2002

OVERVIEW

QL63F5SA is a MOCVD grown 635 nm band *InGaAlP* laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 10 mW for optoelectronic devices such as Optical Leveler and Modules.

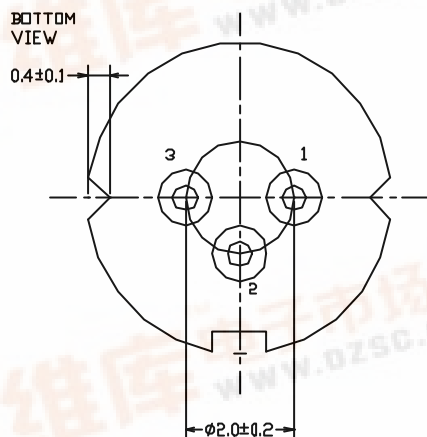
APPLICATION

- Optical Leveler
- Optical Module
- Bar Code Reader

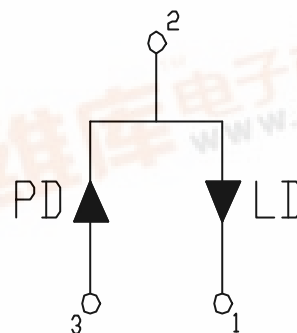
FEATURES

- Visible Light Output: $\lambda_p = 635 \text{ nm}$ (TM Mode)
- Optical Power Output: 10 mW CW
- Package Type: TO-18 (5.6 mm ϕ)
- Built-in Photo Diode for Monitoring Laser Diode

ELECTRICAL CONNECTION



Bottom View



Pin Configuration

“ 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	P _o	-	10	-	mW	-
Threshold Current	I _{th}	-	40	50	mA	-
Operating Current	I _{op}	-	55	70	mA	P _o = 10 mW
Operating Voltage	V _{op}	-	2.2	2.7	V	P _o = 10 mW
Lasing Wavelength	λ _p	630	637	645	nm	P _o = 10 mW
Beam Divergence	θ	7	8	12	deg	P _o = 10 mW
	θ _⊥	22	32	40	deg	P _o = 10 mW
Beam Angle	Δθ	-	-	±1.5	deg	P _o = 10 mW
	Δθ _⊥	-	-	±2.5	deg	P _o = 10 mW
Monitor Current	I _m	0.2	0.4	0.8	mA	P _o = 10 mW
Optical Distance	ΔX, ΔY, ΔZ	-	-	±60	μm	-

NOTICE : QL63F5SA to be operated on APC circuit.

The above product specifications are subject to change without notice.

” PACKAGE DIMENSION

