QL63D6SA

InGaAlP Laser Diode

2002

¨ OVERVIEW

QL63D6SA 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 5 mW for optoelectronic devices such as Optical Leveler and Modules.

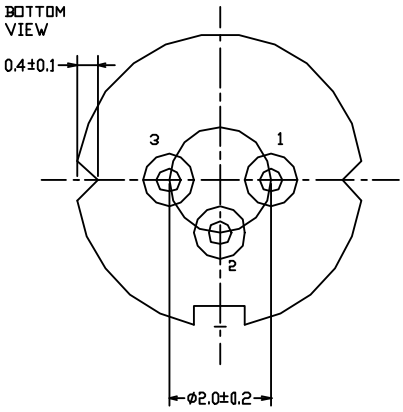
¨ APPLICATION

- Opitical Leveler
- Laser Module
- Bar Code Scanner

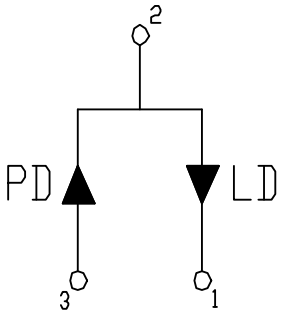
¨ FEATURES

- Visible Light Output: λp = 635 nm (TM Mode)
- Optical Power Output: 5 mW CW
- Package Type: TO-18 (5.6 mmϕ)
- 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	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° C

Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	5	-	mW	-
Threshold Current	Ith	-	40	45	mA	-
Operating Current	Iop	-	45	60	mA	Po = 5mW
Operating Voltage	Vop	-	2.2	2.7	V	Po = 5mW
Lasing Wavelength	λp	630	637	640	nm	Po = 5mW
Beam Divergence	θ∥	7	8	12	deg	Po = 5mW
	θ⊥	22	35	40	deg	Po = 5mW
Beam Angle	Δθ∥	-	-	±1.5	deg	Po = 5mW
	Δθ⊥	-	-	±2.5	deg	Po = 5mW
Monitor Current	Im	0.1	0.15	0.5	mA	Po = 5mW
Optical Distance	ΔX, ΔY, ΔZ	-	-	±60	μm	-

NOTICE : QL63D6SA to be operated on APC circuit.

The above product specifications are subject to change without notice.

PACKAGE DIMENSION