♦OVERVIEW

QL63H5S-A/B/C is a MOCVD grown 635nm band *InGaAlP* laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 20mW for optoelectronic devices such as Optical Leveler and Modules.

♦APPLICATION

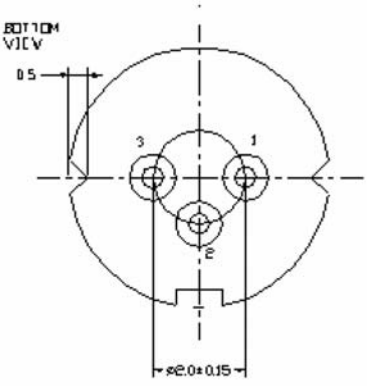
- Bar Code Scanner
- Laser Module

♦FEATURES

- Visible Light Output : λp = 635 nm
- Optical Power Output : 20mW 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)

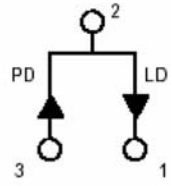


Fig. 1
QL63H5SA

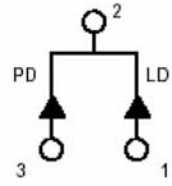


Fig. 2
QL63H5SB

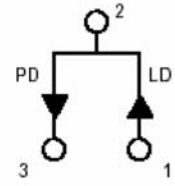


Fig. 3
QL63H5SC

Tentative

♦ ABSOLUTE MAXIMUM RATING at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power	P	24	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 [1)2)]

Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	20	-	mW	-
Threshold Current	Ith	-	30	50	mA	Po=20mW
Operating Current	Iop	-	60	80	mA	Po=20mW
Operating Voltage	Vop	-	2.3	2.6	V	Po=20mW
Lasing Wavelength	λp	630	639	645	nm	Po=20mW
Beam Divergence[3)]	θ∥	6	8	11	deg	Po=20mW
	θ⊥	25	30	35	deg	Po=20mW
Beam Angle	Δθ∥	-	-	±2.0	deg	Po=20mW
	Δθ⊥	-	-	±3.0	deg	Po=20mW
Monitor Current	Im	0.05	0.25	0.7	mA	Po=20mW
Optical Distance	ΔX, ΔY, ΔZ	-	-	±60	μm	-

1) Initial values 2) All above values are evaluated with measuring apparatus

3) Full angle at half maximum

NOTICE : QL63H5S-A/B/C to be operated on APC

The above product specifications are subject to change without notice.

♦ PACKAGE DIMENSION