


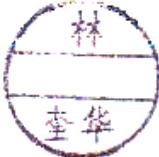
APPROVAL SHEET

(承认书)

ITEM: YDL-98Z01TL

版本 (Version) : YDL-98Z01TL V0

日期 (Date) : 2010-04-19

Prepared By (制订)	Confirmed By (确认)	Approved By (承认)
		
Date (日期)	Date (日期)	Date (日期)

Infrared Laser Diode

YDL-98Z01TL

YDL-98Z01TL V0

980nm/100mW 40°C Reliable Operation Design

Dimension

◆ Features

- Infrared laser diode
- TO-18 (Φ5.6mm) package, with Pb free, Glass cap & PD

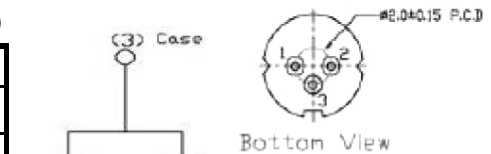
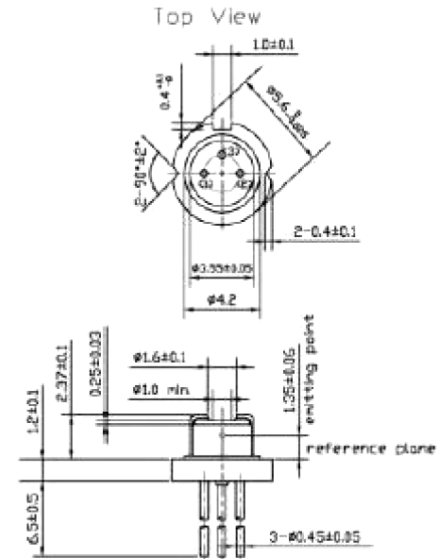
◆ Applications

- Bar code reader
- Security system

◆ Absolute maximum ratings

(TC=25°C)

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_0	0	100	mW
Reverse voltage (LD)	V_{RL}	-	2	V
Case Temperature	T_C	-	-10~+40	°C
Storage temperature	T_S	-	-15~+85	°C



- 1 PD Anode(+)
 2 LD Cathode (-)
 3 PD Cathode (-)
 LD Anode(+)

◆ Electrical and optical characteristics

(TC=25°C)

Parameter	Symbol	Min	Typ.	Max.	Unit	Condition (CW)
Peak wavelength	λ	970	980	990	nm	$P_0 = 100\text{mW}$
Threshold current	I_{th}	-	40	50	mA	
Operating current	I_{op}	-	165	190	mA	
Operating voltage	V_{op}	1	1.5	2.1	V	$P_0 = 75\text{-}25\text{mW}$
Differential efficiency		0.5	0.58	-	mW/mA	
Monitor current	I_m	0.4	0.9	1.4	mA	$P_0 = 100\text{mW}$
Parallel divergence angle		-	6.0	-	deg	$P_0 = 100\text{mW}$
Perpendicular divergence angle		27	32	37	deg	

●Precautions

- * Do not operate the device above maximum ratings. Doing so may cause unexpected and permanent damage to the device.
- * Take precautions to avoid electrostatic discharge and / or momentary power spikes. A change in the characteristics of the laser or premature failure may result.
- * Proper heat sinking of the device assures stability and lifetime. Always ensure the maximum operating temperatures are not exceeded.
- * Observing visible or invisible laser beams with the human eye directly, or indirectly, can cause permanent damage. Use a camera to observe the laser.
- * No laser device should be used in any application or situation where life or property is at risk in event of device failure.
- * Specifications are subject to change without notice. Ensure that you have the laser specification by contacting us prior to purchase or use of the product.

Notice : A-LASER proposes to operate YDL-98Z01TL by the external APC circuit.

**For reference only. Contents above are subject to change without notice.*