


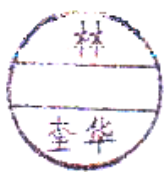
APPROVAL SHEET

(承认书)

ITEM: ADL-80X01TZ-1

版本 (Version) : ADL-80X01TZ V1.0

日期 (Date) : 2009-02-16

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

Infrared Laser Diode

ADL-80X01TZ-1

ADL-80X01TZ V1.0

808nm/300mW 50°C Infrared Laser Diode

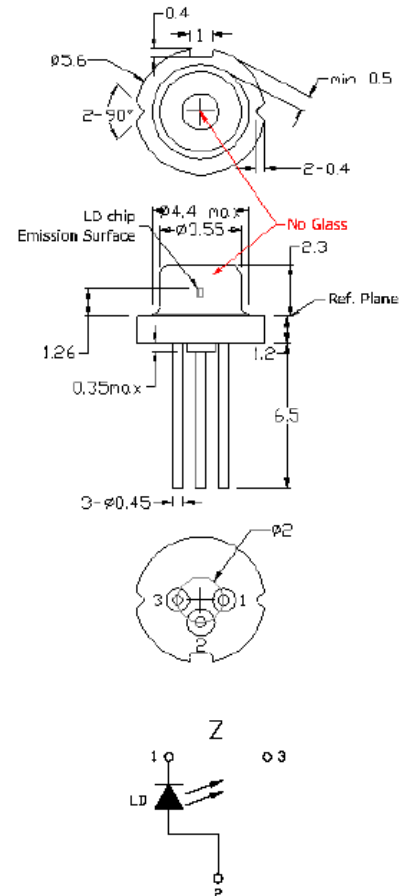
Dimension

◆ Features

- Low operating current
- High Pumping efficiency
- Stable wavelength
- High Reliability

◆ Applications

- Pumping source for DPSS green laser
- Medical applications



◆ Absolute maximum ratings

(TC=25°C)

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_0	CW	300	mW
Reverse voltage (LD)	V_{RL}	-	2	V
Case Temperature	T_C	-	-10~+50	°C
Storage temperature	T_S	-	-40~+85	°C

◆ Electrical and optical characteristics

(TC=25°C)

Parameter	Symbol	Min	Typ.	Max.	Unit	Condition (CW)
Peak wavelength	λ	805	807	810	nm	$P_0 = 300\text{mW}$
Threshold current	I_{th}	-	50	65	mA	
Operating current	I_{op}	-	300	330	mA	
Operating voltage	V_{op}	-	1.95	2.1	V	$P_0 = 250\sim 300\text{mW}$
Differential efficiency		0.8	1.2	-	mW/mA	
Parallel divergence angle		-	8.0	11.0	deg	$P_0 = 300\text{mW}$
Perpendicular divergence angle		-	39	48	deg	
Parallel FFP deviation angle		-3.0	0.0	+3.0	deg	
Perpendicular FFP deviation angle		-5.0	0.0	+5.0	deg	
Emission Point Accuracy	$\Delta x \Delta y \Delta z$	-80	0	+80	um	

●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

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