


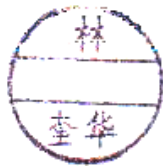
APPROVAL SHEET

(承认书)

ITEM: ADL-65103TL

版本 (Version) : ADL-65103TL V0.0

日期 (Date) : 2009-11-24

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

RED LASER DIODE

ADL-65103TL

ADL-65103TL V0.0

650nm/10mW 50°C Low Current Operation

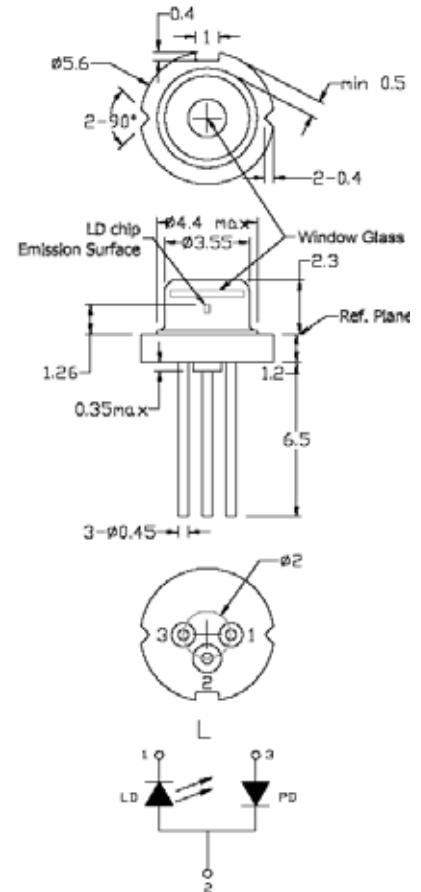
Dimension

◆ Features

- Better FFP performance
- Higher Power
- High efficiency

◆ Applications

- Laser levelers
- Industrial laser markers / measuring instruments
- Bar code readers



◆ Absolute maximum ratings

(TC=25°C)

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_0	CW	13	mW
Reverse voltage (LD)	V_{RL}	-	2	V
Case Temperature	T_C	-	-10~+50	°C
Storage temperature	T_S	-	-40~+85	°C

***Reverse voltage (PD) = 30V, Forward current (PD) = 10mA

◆ Electrical and optical characteristics

(TC=25°C)

Parameter	Symbol	Min	Typ.	Max.	Unit	Condition (CW)
Peak wavelength	λ	645	650	660	nm	$P_0 = 10\text{mW}$
Threshold current	I_{th}	-	20	25	mA	
Operating current	I_{op}	-	31	40	mA	
Operating voltage	V_{op}	-	2.2	2.5	V	
Differential efficiency		0.7	0.9	1.2	mW/mA	$P_0 = 7\text{-}10\text{mW}$
Monitor current	I_m	0.1	0.3	0.4	mA	$P_0 = 10\text{mW}, V_{RD}=5\text{V}$
Parallel divergence angle		6.0	9.5	12.0	deg	$P_0 = 10\text{mW}$
Perpendicular divergence angle		25	28	32	deg	
Parallel FFP deviation angle		-2.0	0.0	+2.0	deg	
Perpendicular FFP deviation angle		-2.0	0.0	+2.0	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

Notice : A-LASER proposes to operate ADL-65103TL by the external APC circuit.

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