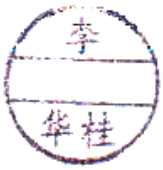
APPROVAL SHEET

(承认书)

ITEM: AD-65053TL-2

版本 (Verison) : 6-2D-LD65-005 Rev.0.0
日期 (Date) : 2018-01-12

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

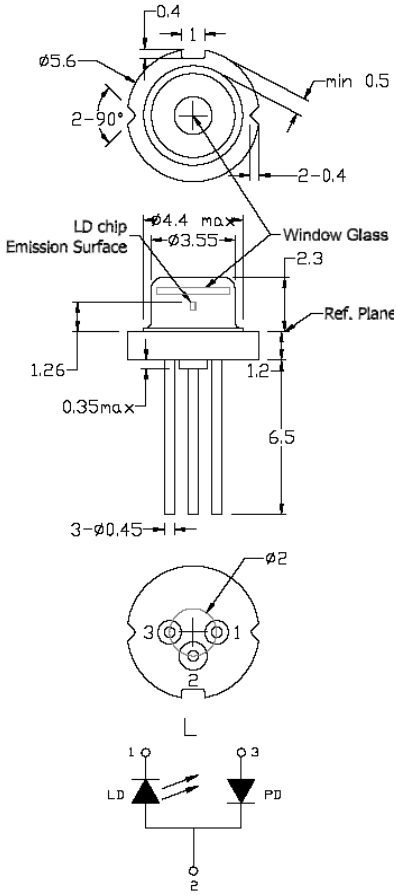
RED LASER DIODE (Taiwan)

AD-65053TL-2

6-2D-LD65-005 Rev.0.0

650nm/5mW 70℃ Visible Laser Diode

Dimension



unit : mm

◆ Features

- High temperature operation
- FFP single lateral mode
- High reliability
- Excellent far field pattern

◆ Applications

- Laser pointers
- Industrial laser markers / measuring instruments
- Bar code readers
- PM2.5 air purification module

◆ Absolute maximum ratings

(TC=25℃)

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_0	CW	7	mW
Reverse voltage (LD)	V_{RL}	-	2	V
Case Temperature	T_C	-	-20~+70	℃
Storage temperature	T_S	-	-40~+85	℃

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

◆ Electrical and optical characteristics

Parameter	Symbol	Min	Typ.	Max.	Unit	Condition (CW)
Peak wavelength	λ	645	655	660	nm	Po = 5mW
Threshold current	I_{th}	-	21	25	mA	
Operating current	I_{op}	-	29	35	mA	
Operating voltage	V_{op}	-	2.15	2.5	V	
Differential efficiency	η	0.5	0.65	1	mW/mA	Po = 3-5mW
Monitor current	I_m	0.05	0.15	0.3	mA	Po = 5mW, VRD=5V
Parallel divergence angle	$\theta_{//}$	6.0	8.0	10.0	deg	Po = 5mW
Perpendicular divergence angle	$\theta_{\perp}$	24	28	35	deg	
Parallel FFP deviation angle	$\triangle\theta_{//}$	-3.0	0.0	+3.0	deg	
Perpendicular FFP deviation angle	$\triangle\theta_{\perp}$	-3.0	0.0	+3.0	deg	
Emission Point Accuracy	△x△y△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 on 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 AD-65053TL-2 by the external APC circuit.

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