

上海新桦邦光电科技有限公司 Shanghai A-LASER Tech. Corp. (常熟华邦光电科技工业有限公司 Changshu A-LASER Tech. Corp.)

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APPROVAL SHEET

(承认书)

ITEM: <u>AD-63052-G-TL</u>

版本 (Verison): 6-2D-LD63-024_Rev.A0

日期 (Date): 2018-12-17

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



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RED LASER DIODE

AD-63052-G-TL

6-2D-LD63-024 Rev.A0

Dimension

635nm/5mW 40°C cost effective type

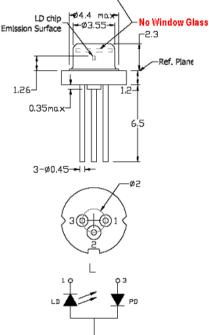
- Features
 - Cost effective
 - High visibility
- Applications
 - General purpose red laser light source
 - Industrial laser markers / measuring instruments
 - Laser pointers / levelers

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	-	-10~+40	$^{\circ}\mathbb{C}$
Storage temperature	Ts	-	-40~+85	$^{\circ}\mathbb{C}$

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



unit : mm

Electrical and optical characteristics

(TC=25°C)

Parameter	Symbol	Min	Тур.	Max.	Unit	Condition (CW)
Peak wavelength	λ	630	635	640	nm	
Threshold current	I _{th}	-	25	30	mA	Po = 5mW
Operating current	l _{op}	-	33	40	mA	- FO = SITIVV
Operating voltage	V_{op}	-	2.2	2.5	V	
Differential efficiency	η	0.4	0.6	0.8	mW/mA	Po = 3-5mW
Monitor current	I _m	0.05	0.15	0.3	mA	Po = 5mW, VRD=5V
Parallel divergence angle	θ∥	6.0	7.5	10.0	deg	
Perpendicular divergence angle	θ _	30	33	36	deg	
Parallel FFP deviation angle	Δθ //	-3.0	0.0	+3.0	deg	Po = 5mW
Perpendicular FFP deviation angle	Δθ ⊥	-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-63052-G-TL by the external APC circuit.

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