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) | | |
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| Date (日期) | Date (日期) | Date (日期) | | |

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

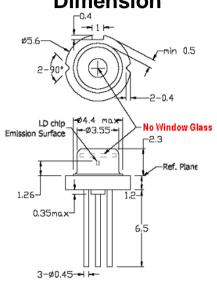
- General purpose red laser light source
- Industrial laser markers / measuring instruments
- Laser pointers / levelers

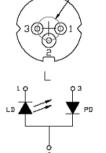
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| Abcoluto | maximum | ratings |
|----------|--------------|----------|
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|----------------------|----------------|-----------|---------|------------------------|
| Parameter | Symbol | Condition | 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

(TC=25°C)

Electrical and optical characteristics

| 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 | | |
| 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 | | |

(TC=25°C)

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.