

# 940nm Infrared Laser Diode

ADL-94Y01TZ

6-2D-LD90-001\_Rev.02

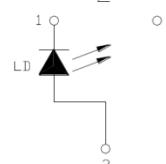
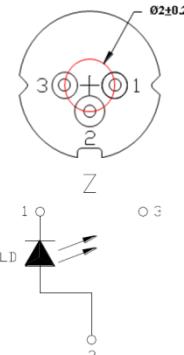
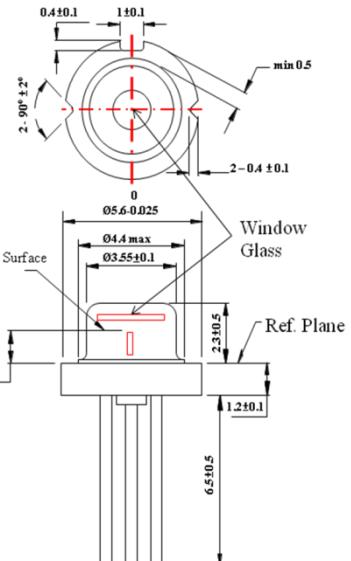
**940nm 200mW**

## Features

High quality  
Highly reliable  
High performance in temperature characteristic

## Applications

Fiber Lasers Pumping  
Laser Ranging  
3D Sensing Application



## Absolute Maximum Ratings

| Parameter           | Symbol          | Condition | Rating | Unit |
|---------------------|-----------------|-----------|--------|------|
| Light Output Power  | P <sub>O</sub>  | CW        | 220    | mW   |
| Reverse Voltage(LD) | V <sub>RL</sub> | -         | 2      | V    |
| Case Temperature    | T <sub>C</sub>  | -         | -10~60 | °C   |
| Storage Temperature | T <sub>S</sub>  | -         | -40~85 | °C   |

## Electrical and Optical Characteristics(Tc=25°C)

| Parameter                         | Symbol          | Min. | Typ. | Max. | Unit  | Condition                 |
|-----------------------------------|-----------------|------|------|------|-------|---------------------------|
| Peak Wavelength                   | λ               | 930  | 940  | 950  | nm    | P <sub>O</sub> =200mW     |
| Threshold Current                 | I <sub>th</sub> |      | 45   | 65   | mA    |                           |
| Operating Current                 | I <sub>op</sub> |      | 300  | 340  | mA    | P <sub>O</sub> =200mW     |
| Operating Voltage                 | V <sub>op</sub> |      | 1.9  |      | V     | P <sub>O</sub> =200mW     |
| Differential efficiency           | η               | 0.65 | 0.75 | 0.85 | mW/mA | P <sub>O</sub> =100-200mW |
| Parallel divergence angle         | θ//             | 4    | 7    | 13   | deg.  | P <sub>O</sub> =200mW     |
| Perpendicular divergence angle    | θ⊥              | 12   | 19   | 25   | deg.  |                           |
| Parallel FFP deviation angle      | Δθ//            | -3   | 0    | 3    | deg   |                           |
| Perpendicular FFP deviation angle | Δθ⊥             | -3   | 0    | 3    | deg   |                           |
| Emission point accuracy           | ΔxΔyΔz          | -80  | 0    | 80   | um    |                           |

\* Sufficient heat dissipation is required for CW operation.

### Precautions

- \* Do not operate the device above maximum ratings even short period of time. 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 that 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 latest specification by contacting us prior to purchase or use of the product.

**ARIMA LASERS CORP.**

PHONE: 886-3-4699800 | FAX: 886-3-4699600

E-MAIL: Ldsales@arimalasers.com | www.arimalasers.com

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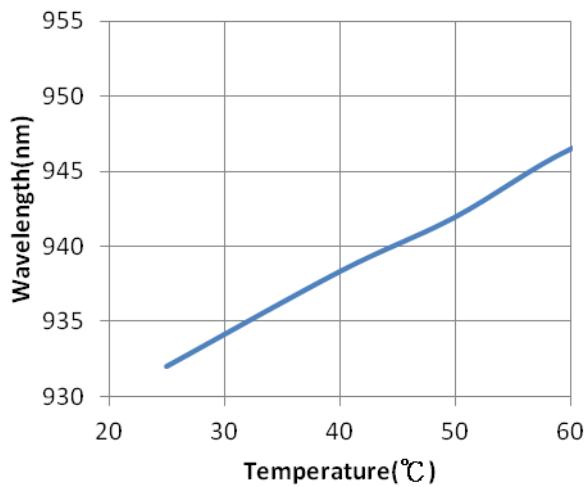
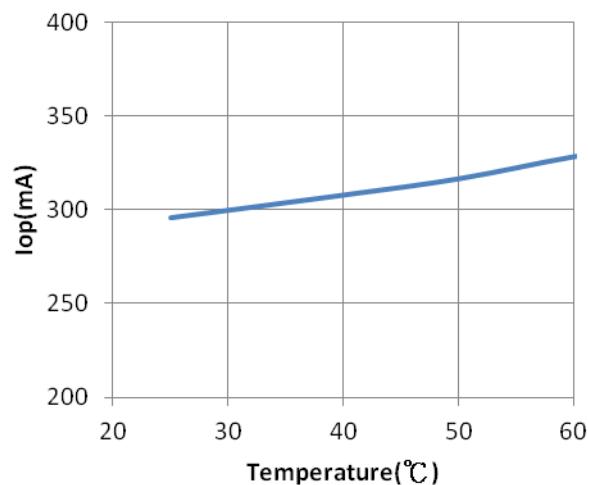
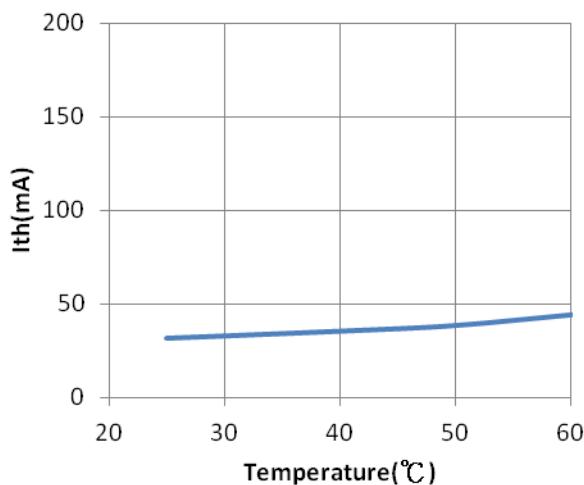
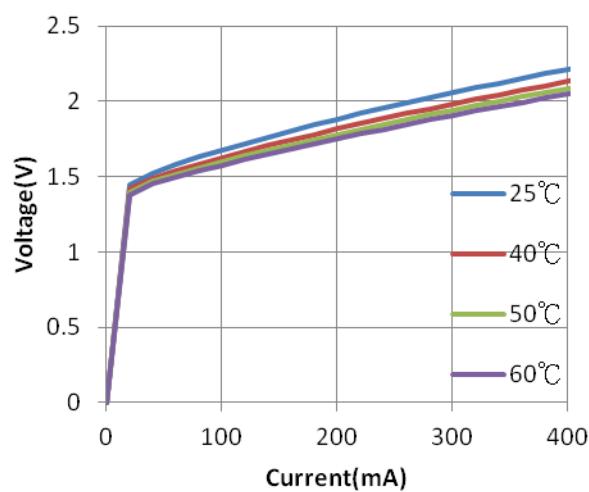
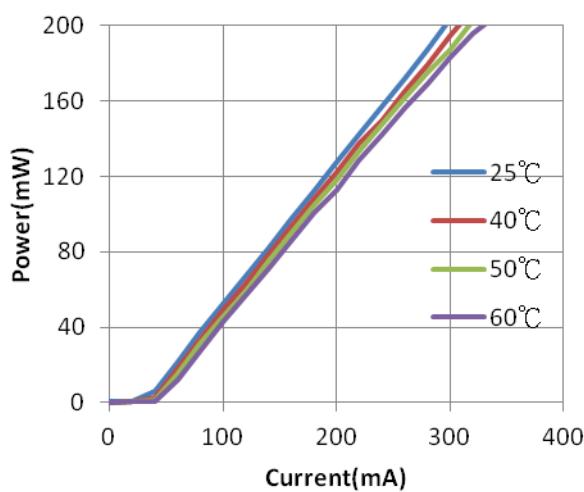
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