

AlGaAs Infrared Laser Diode

ADL-80Y02TZ

6-2D-LD80-004_Rev.00

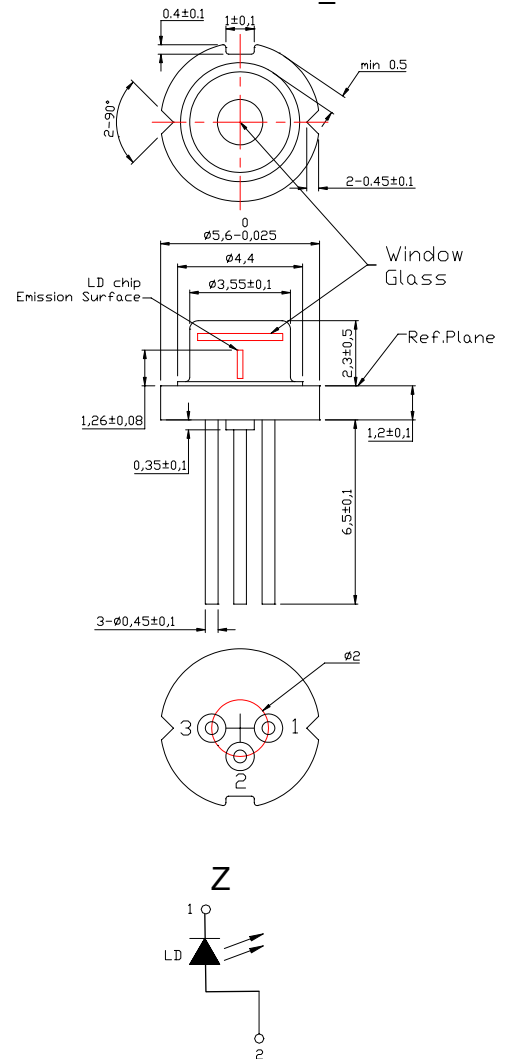
★Low Iop 808nm 200mW Operation

•Features

1. Standard 5.6 φ TO-type, PD included
2. Low operation current
3. Long operation lifetime
4. Cost effective

•Applications

1. Pumps for solid state lasers
2. Miniature low power green laser
3. Medical use



•Absolute maximum ratings

| Parameter | Symbol | Condition | Rating | Unit |
|----------------------|----------|-----------|---------|------|
| Light output power | P_O | CW | 200 | mW |
| Reverse voltage (LD) | V_{RL} | - | 2 | V |
| Case temperature | T_C | - | -10~+50 | °C |
| Storage temperature | T_S | - | -40~+85 | °C |

•Electrical and optical characteristics ($T_c=25\text{ }^\circ\text{C}$)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions (CW) |
|--------------------------------|------------------------------|------|------|------|-------|-------------------------------|
| Peak wavelength | λ | 805 | 808 | 811 | nm | |
| Threshold current | I_{th} | - | 20 | 35 | mA | |
| Operating current | I_{op} | - | 225 | 240 | mA | $P_o=200\text{mW}$ |
| Operating voltage | V_{op} | - | 1.7 | 1.9 | V | |
| Differential efficiency | η | 0.8 | 1.0 | - | mW/mA | |
| Parallel divergence angle | $\theta_{ }$ | - | 13 | 19 | deg | $P_o=150\text{-}200\text{mW}$ |
| Perpendicular divergence angle | θ_{\perp} | - | 42 | 48 | deg | $P_o=200\text{mW}$ |
| Emission point accuracy | $\Delta x \Delta y \Delta z$ | -80 | 0 | +80 | um | $P_o=200\text{mW}$ |

•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 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.

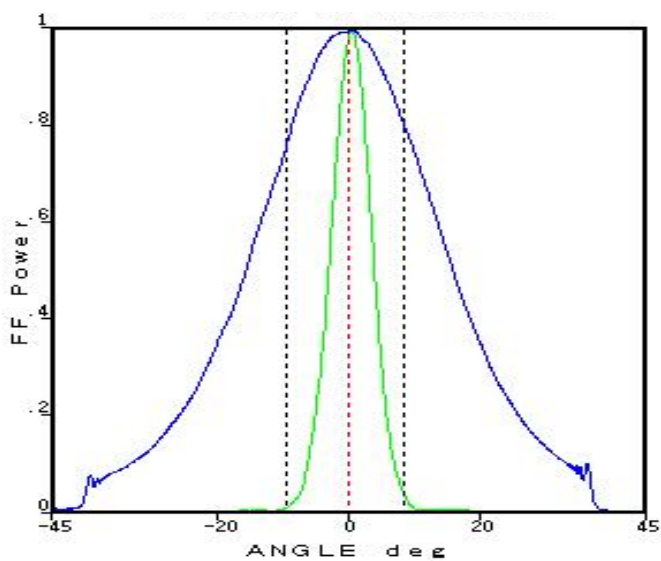
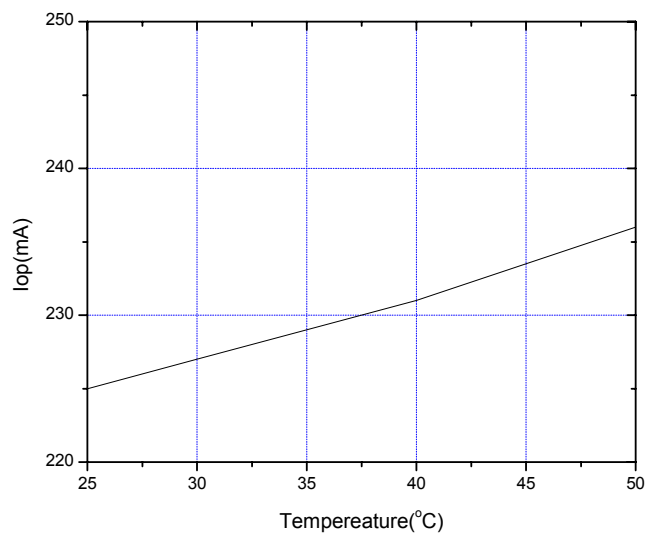
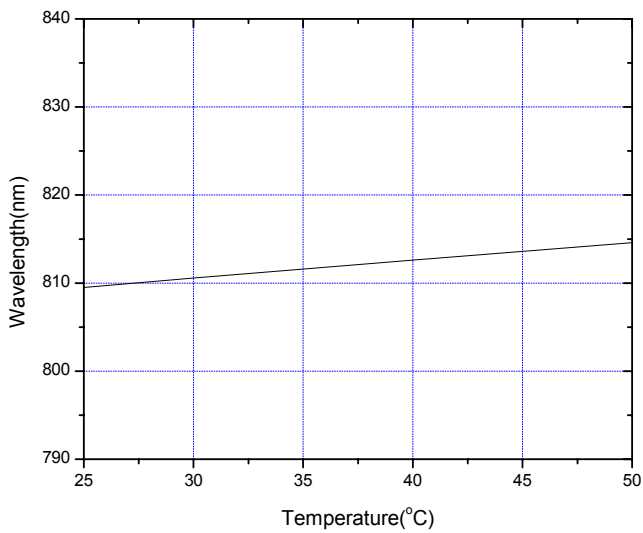
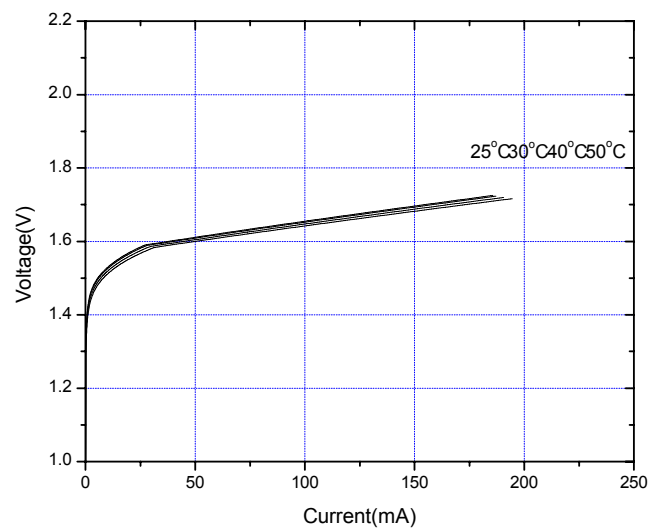
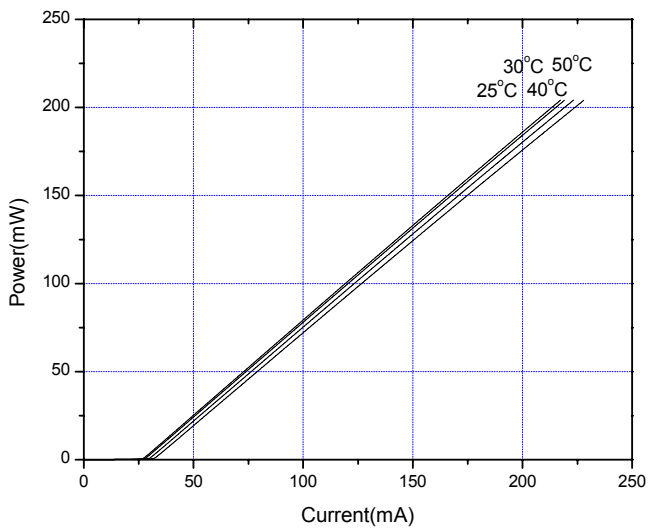
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