

# AlGaInP Visible Laser Diode

**ADL-63104TL**

DATE : 2007/11/12 Ver 2.0

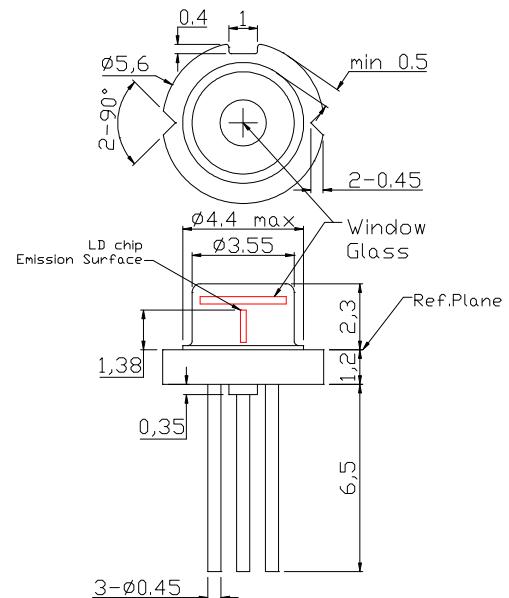
## ★635nm 10mW 50°C Low Current Type LD

### •Features

1. High temperature operation
2. High reliability

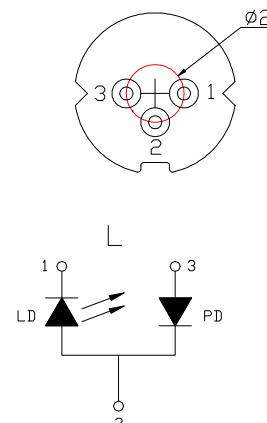
### •Applications

1. Industrial laser markers
2. Measuring instruments
3. High visibility LD display



### •Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P <sub>O</sub>	CW	12	mW
Reverse voltage (LD)	V <sub>RL</sub>	-	2	V
Reverse voltage (PD)	V <sub>RD</sub>	-	30	V
Forward current (PD)	I <sub>FD</sub>	-	10	mA
Case temperature	T <sub>C</sub>	-	-10~+50	°C
Storage temperature	T <sub>S</sub>	-	-40~+85	°C



### •Electrical and optical characteristics (T<sub>c</sub>=25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Peak wavelength	λ	630	637	640	nm	P <sub>O</sub> =10mW
Threshold current	I <sub>th</sub>	-	35	40	mA	
Operating current	I <sub>op</sub>	-	55	65	mA	P <sub>O</sub> =10mW
Operating voltage	V <sub>op</sub>	2	2.2	2.5	V	P <sub>O</sub> =10mW
Differential efficiency	η	0.25	0.5	0.85	mW/mA	P <sub>O</sub> =5-10mW
Monitor current	I <sub>m</sub>	0.05	0.12	0.5	mA	P <sub>O</sub> =10mW, V <sub>RD</sub> =5V
Parallel divergence angle	θ <sub>  </sub>	6	7.5	11	deg	
Perpendicular divergence angle	θ <sub>⊥</sub>	30	33	38	deg	
Parallel FFP deviation angle	Δθ <sub>  </sub>	-2	0	+2	deg	P <sub>O</sub> =10mW
Perpendicular FFP deviation angle	Δθ <sub>⊥</sub>	-2	0	+2	deg	
Emission point accuracy	ΔxΔyΔz	-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 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..

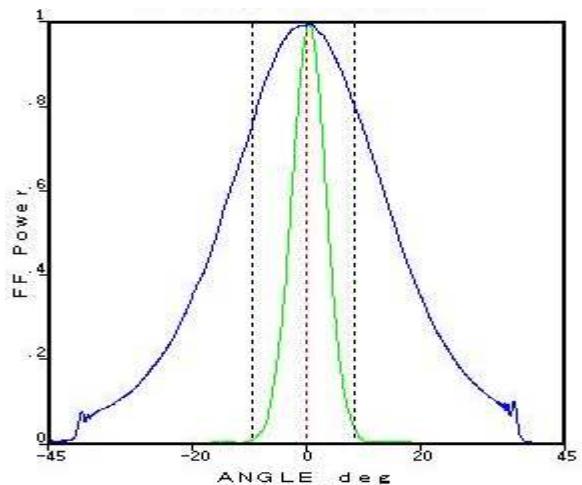
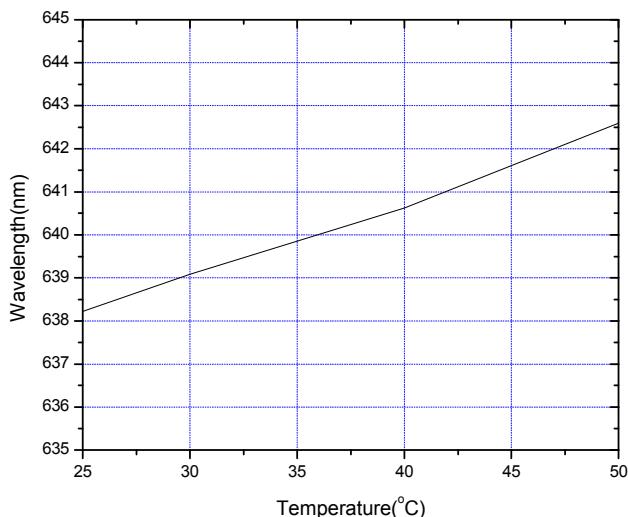
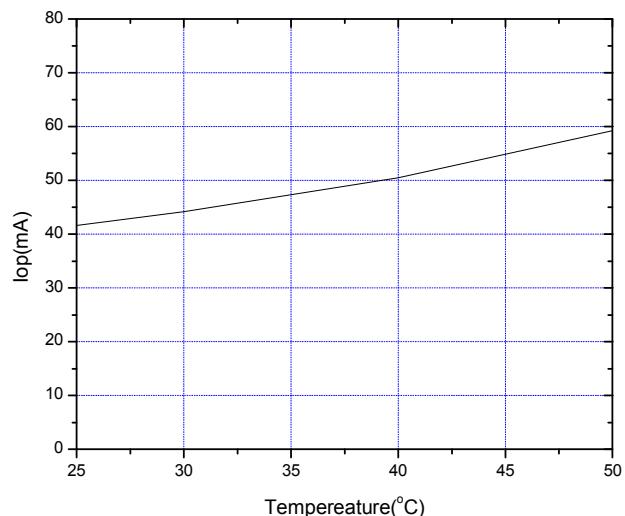
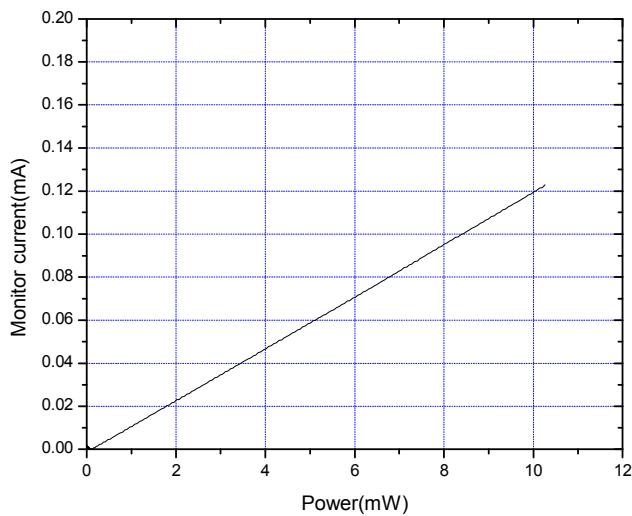
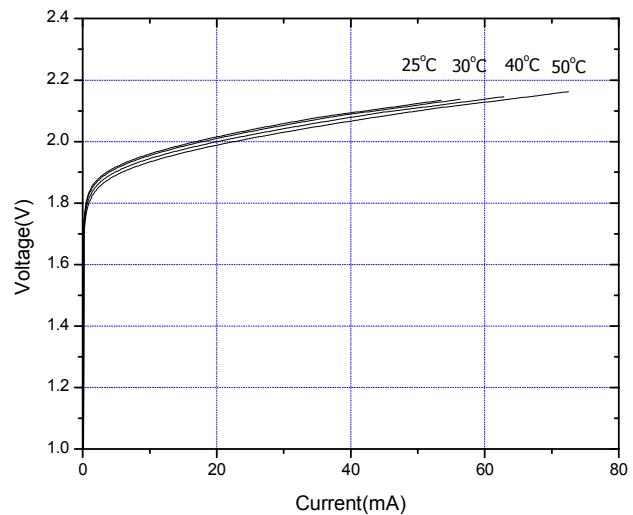
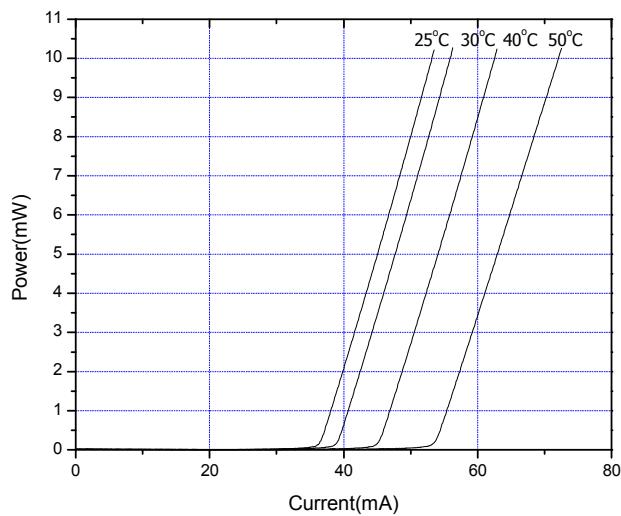
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**Arima**  
LASERS

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