

# AlGaInP | Visible Laser Diode

ADL-65074TL

6-2D-LD65-105\_Rev.00

650nm 7mW 85°C

High Temperature, Reliable Operation!

## Features

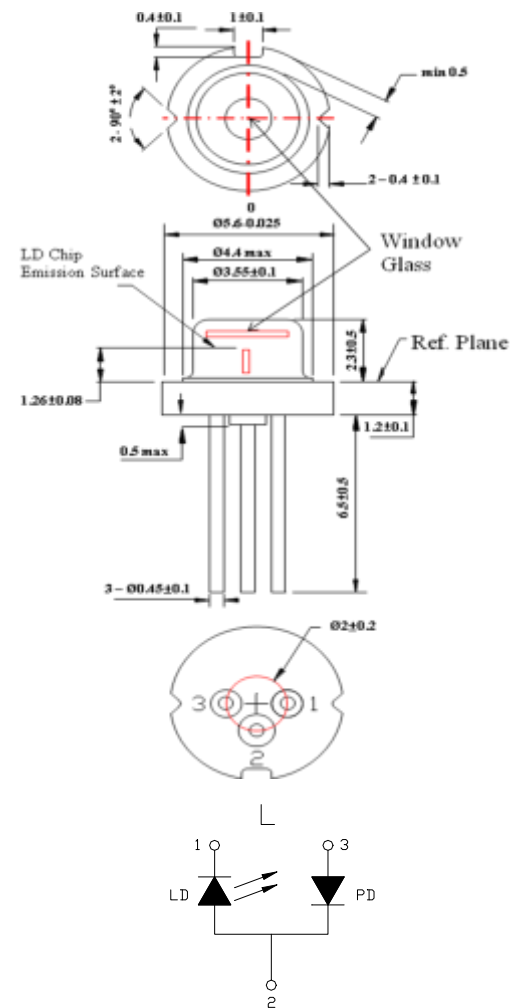
- High temperature operation
- Higher power
- High reliability

## Applications

- Automobile DVD
- Bar code readers
- High reliability laser instrument

## Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	$P_O$	CW	10	mW
Reverse voltage (LD)	$V_{RL}$	-	2	V
Reverse voltage (PD)	$V_{RD}$	-	30	V
Forward current (PD)	$I_{FD}$	-	10	mA
Case temperature	$T_C$	-	-10~+85	°C
Storage temperature	$T_S$	-	-40~+85	°C



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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Peak wavelength	$\lambda$	648	655	660	nm	$P_O=7\text{ mW}$
Threshold current	$I_{th}$	-	20	25	mA	
Operating current	$I_{op}$	-	28	35	mA	$P_O=7\text{mW}$
Operating voltage	$V_{op}$	-	2.1	2.5	V	$P_O=7\text{mW}$
Differential efficiency	$\eta$	0.70	0.86	1.1	mW/mA	$P_O=3\text{-}5\text{mW}$
Monitor current	$I_m$	0.1	0.2	0.3	mA	$P_O=7\text{mW}$ , $V_{RD}=5\text{V}$
Parallel divergence angle	$\theta_{//}$	6	8.5	10	deg.	$P_O=7\text{mW}$
Perpendicular divergence angle	$\theta_{\perp}$	26	29	31	deg.	
Parallel FFP deviation angle	$\Delta\theta_{//}$	-2	0	+2	deg.	
Perpendicular FFP deviation angle	$\Delta\theta_{\perp}$	-2	0	+2	deg.	
Emission point accuracy	$\Delta x\Delta y\Delta z$	-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 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

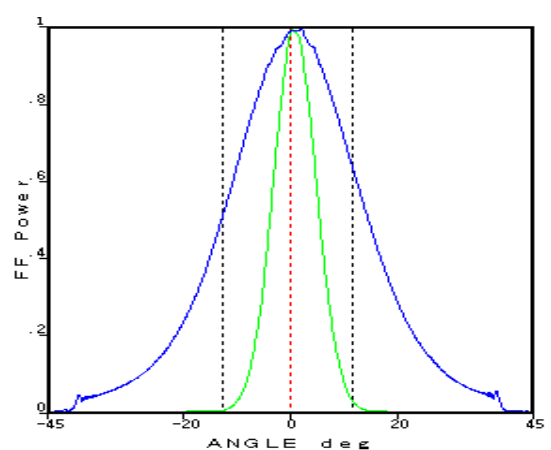
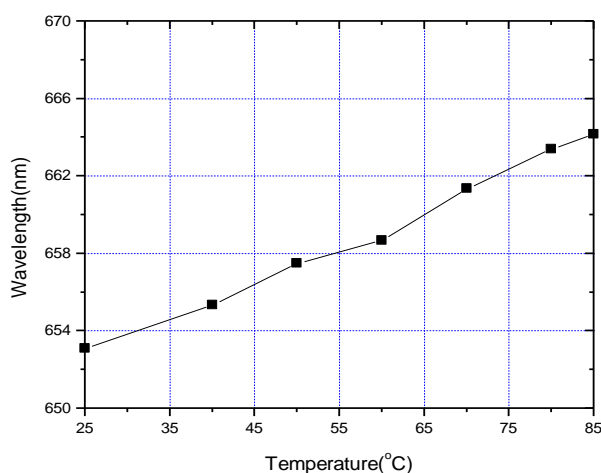
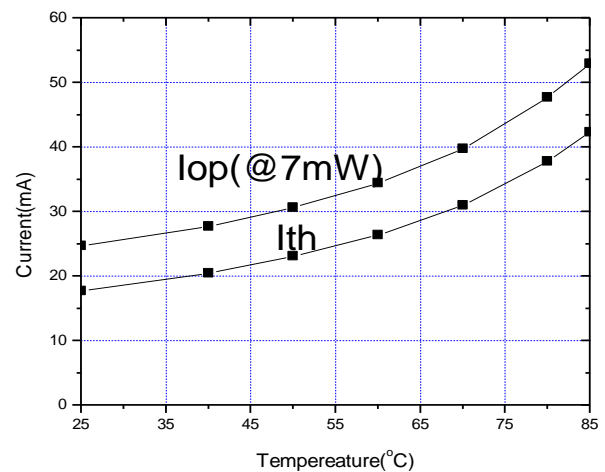
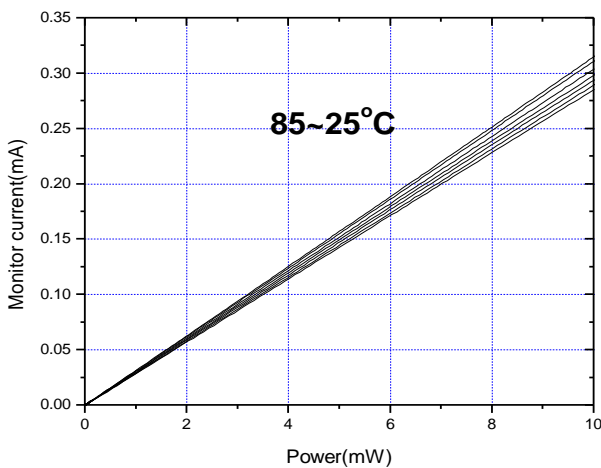
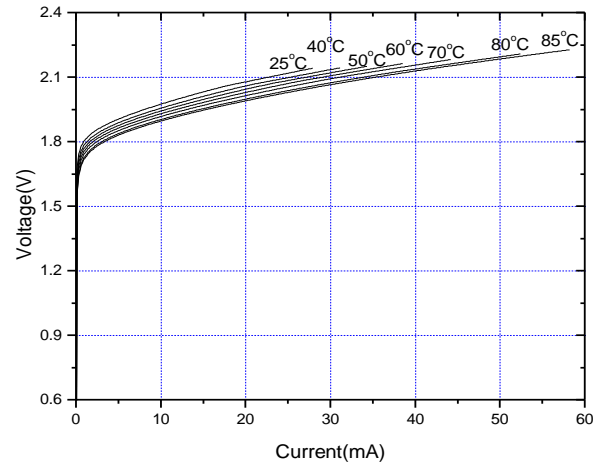
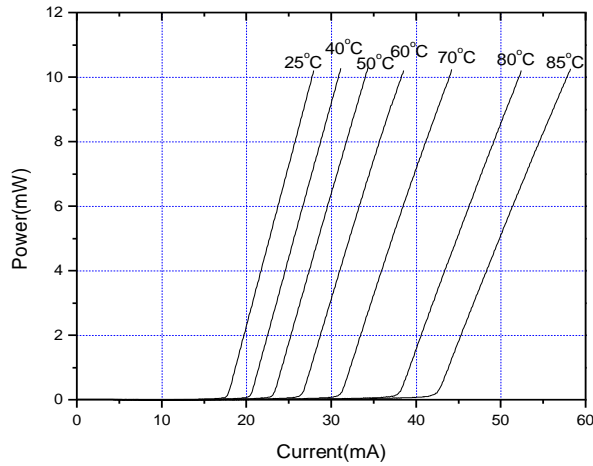
E-MAIL: Ldsales@arimalasers.com | www.arimalasers.com

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