AlGaInP | Visible Laser Diode

ADL-65074SU

6-2D-LD65-044_Rev.01

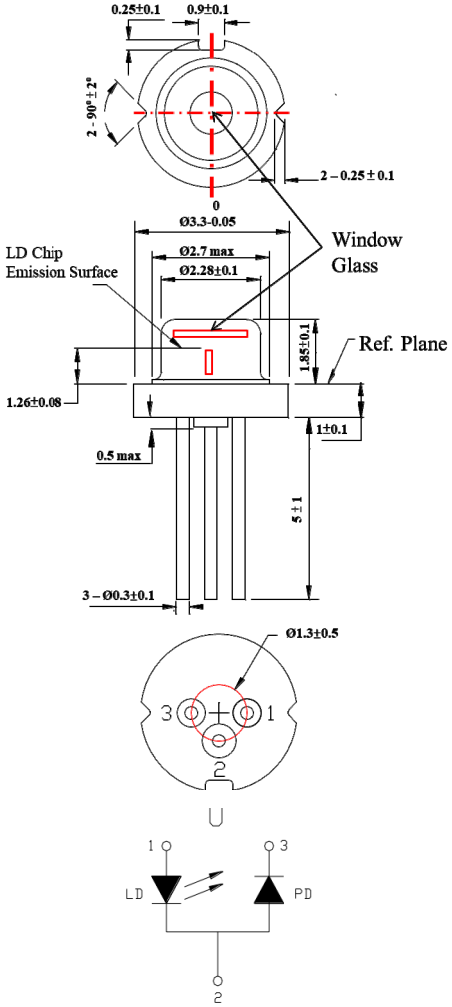
650nm 7mW 85℃

Features

Output Power：7mW
Small Package：Φ3.3mm
TE mode
Single Transverse Mode
Stable reliability

Applications

Industry：laser level, illumination, meter, scanner, detector
Consumer：point light, sweeper, game lighting
Health：special wavelength light source



Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_O	CW	8	mW
Reverse voltage (LD)	V_{RL}	—	2	V
Case temperature	T_C	—	-10 ~ +85	℃
Storage temperature	T_S	—	-40 ~ +85	℃

Electrical and optical characteristics (T_C=25 ℃)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Peak wavelength	λ	648	655	660	nm	P_o=7 mW
Threshold current	I_{th}	-	20	28	mA	
Operating current	I_{op}	-	27	35	mA	P_o=7 mW
Operating voltage	V_{op}	-	2.2	2.5	V	P_o=7 mW
Differential efficiency	η	0.7	0.85	1.1	mW/mA	P_o=3-5mW
Monitor current	I_m	0.05	0.12	0.3	mA	P_o=7mW
Parallel divergence angle	$\theta_{//}$	6	9	12	deg.	P_o=7 mW
Perpendicular divergence angle	$\theta_{\perp}$	24	27	32	deg.	
Parallel FFP deviation angle	$\Delta\theta_{//}$	-3	0	+3	deg.	
Perpendicular FFP deviation angle	$\Delta\theta_{\perp}$	-3	0	+3	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.

ARIMA LASERS CORP.
PHONE: 886-3-4699800 | FAX: 886-3-4699600
E-MAIL: Ldsales@arimalasers.com | www.arimalasers.com

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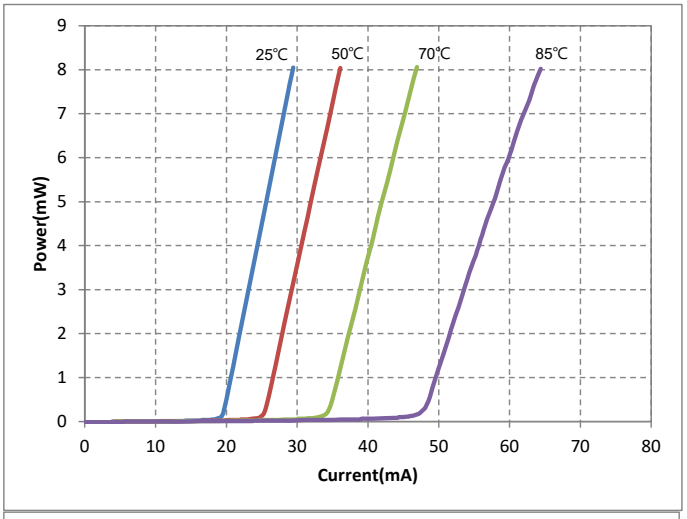

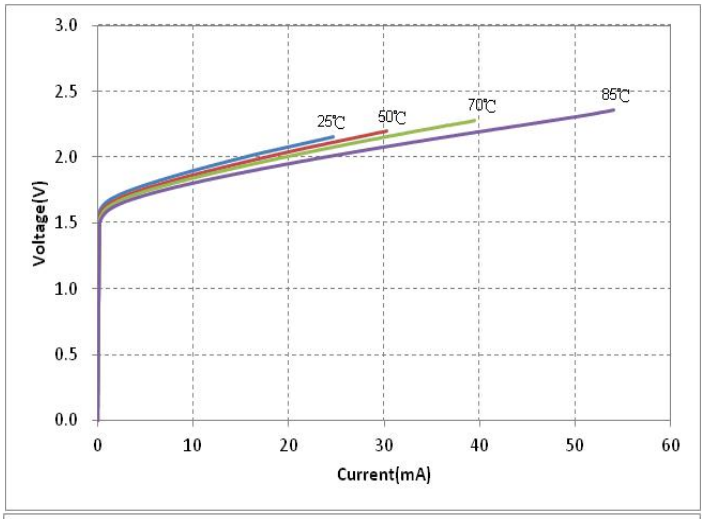

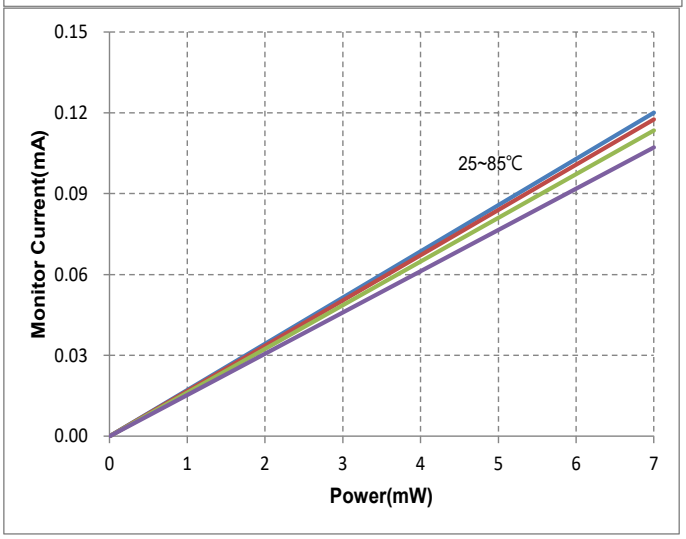

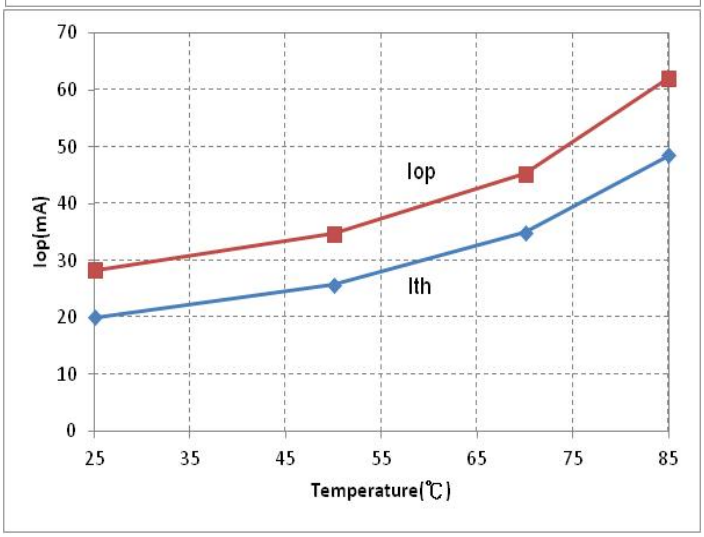

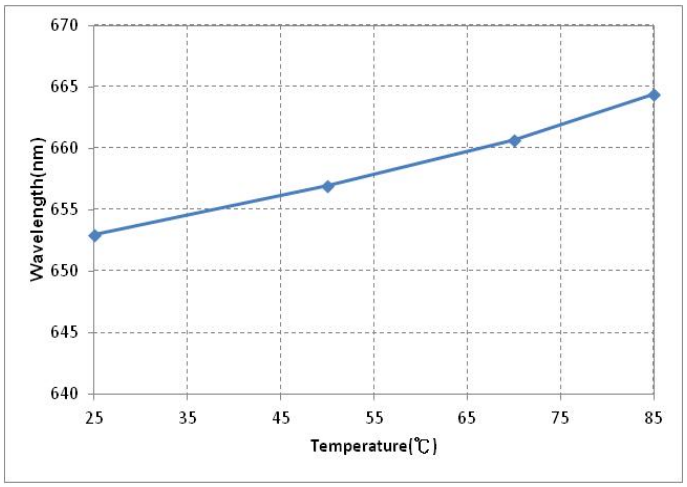

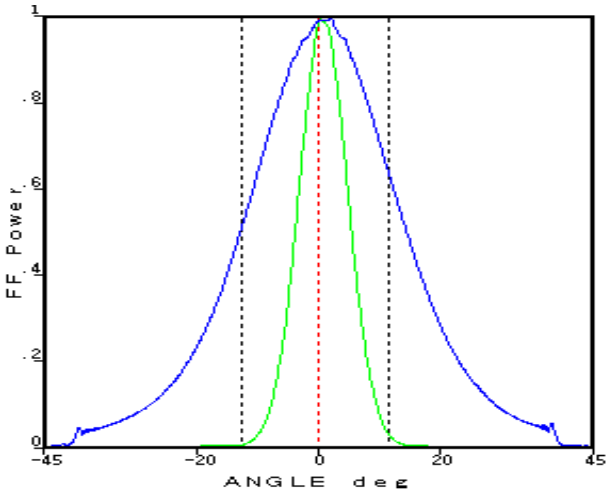

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