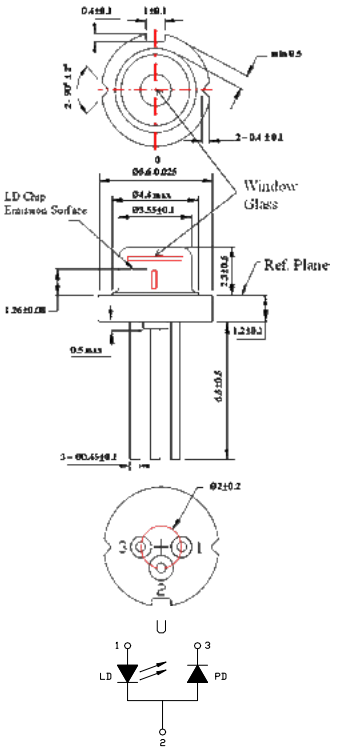
AlGaInP | Visible Laser Diode

ADL-65075TU-1

6-2D-LD65-013_Rev.02

650nm 7mW 70℃ Reliable Operation



Features

High Output Power：7mW CW
Small Package：Φ5.6mm
TE mode
Single Transverse/Longitudinal Mode

Applications

Construction Tools
High Definition Laser Displays
Medical Applications

Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_O	CW	10	mW
Reverse voltage (LD)	V_{RL}	-	2	V
Case temperature	T_C	-	-20~+70	ºC
Storage temperature	T_S	-	-40~+85	ºC

Electrical and optical characteristics (T_c=25 ºC)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Peak wavelength	λ	645	655	660	nm	P_o=7 mW
Threshold current	I_{th}	-	18	25	mA	
Operating current	I_{op}	-	26	30	mA	P_o=7 mW
Operating voltage	V_{op}	-	2.2	2.5	V	P_o=7 mW
Differential efficiency	η	0.7	1.0	1.2	mW/mA	P_o=3-5mW
Monitor current	I_m	0.1	0.13	0.2	mA	P_o=7mW
Parallel divergence angle	$\theta_{//}$	6	9	12	deg.	P_o=7 mW
Perpendicular divergence angle	$\theta_{\perp}$	25	28	32	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	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.

For reference only. Contents above are subject to change without notice.

/ Germany and Other Countries LASER COMPONENTS Germany GmbH Tel +49 8142 2864 – 0 info@lasercomponents.com www.lasercomponents.com
/ France LASER COMPONENTS S.A.S. Tel +33 1 39 59 52 25 info@lasercomponents.fr www.lasercomponents.fr
/ United Kingdom LASER COMPONENTS (UK) Ltd. Tel +44 1245 491 499 info@lasercomponents.co.uk www.lasercomponents.co.uk
/ Nordic Countries LASER COMPONENTS Nordic AB Tel +46 31 703 71 73 info@lasercomponents.se www.lasercomponents.se
/ USA LASER COMPONENTS USA, Inc. Tel +1 603 821 – 7040 info@laser-components.com www.laser-components.com

beyond borders

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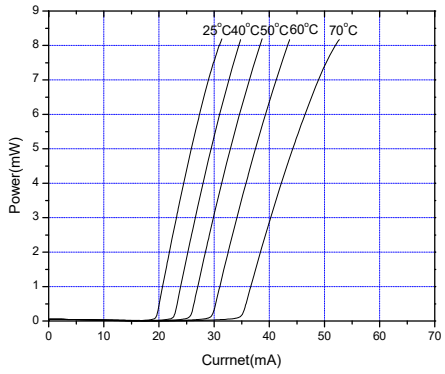

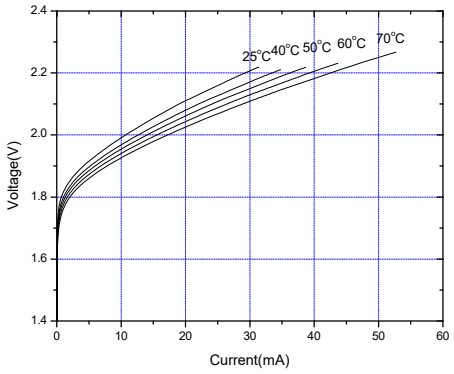

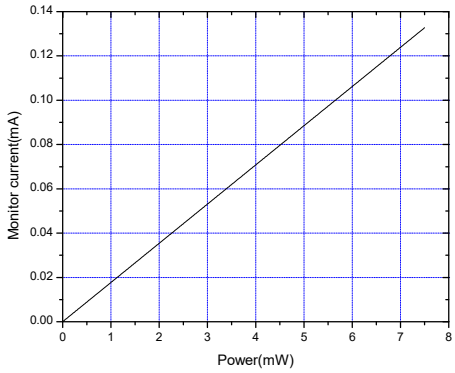

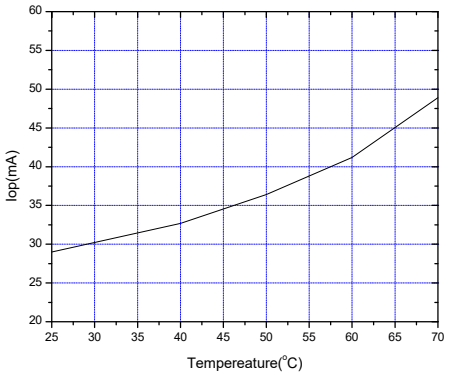

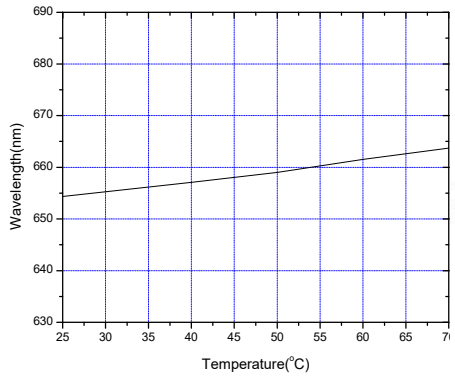

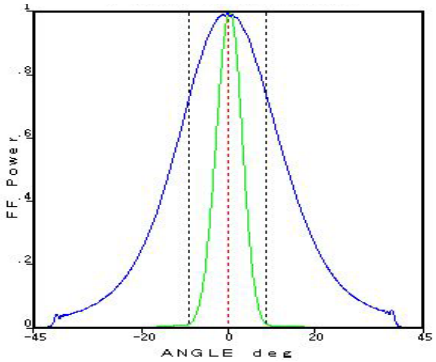

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Arima LASERS

/ Germany and Other Countries LASER COMPONENTS Germany GmbH Tel +49 8142 2864 – 0 info@lasercomponents.com www.lasercomponents.com
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/ Nordic Countries LASER COMPONENTS Nordic AB Tel +46 31 703 71 73 info@lasercomponents.se www.lasercomponents.se
/ USA LASER COMPONENTS USA, Inc. Tel +1 603 821 – 7040 info@laser-components.com www.laser-components.com