

# AlGaInP Red Laser Diode

**ADL-63V07CZ**

6-2D-LD63-049 Rev.00

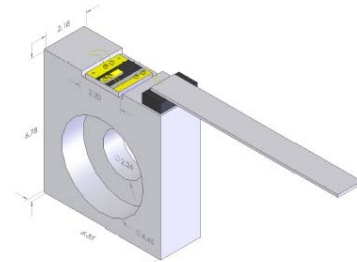
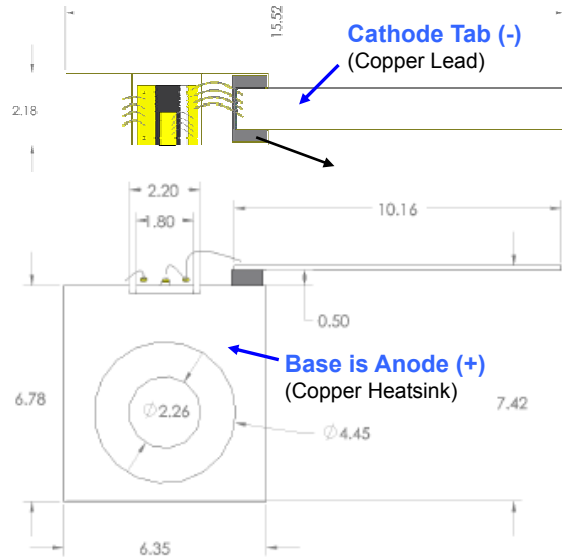
## ★635nm 0.5W 30°C C-Mount PKG

### •Features

1. High power
2. High brightness
3. Long lifetime

### •Applications

1. Laser display
2. PDT
3. Biochemistry
4. Military
5. Solid-state laser pumping
6. Material processing
7. Medical/Life and health sciences
8. Illumination



※ Dimensions are in mm.

### •Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	$P_o$	CW	600	mW
Reverse voltage (LD)	$V_{RL}$	-	2	V
Case temperature	$T_c$	-	-10~+30	°C
Storage temperature	$T_s$	-	-40~+85	°C

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

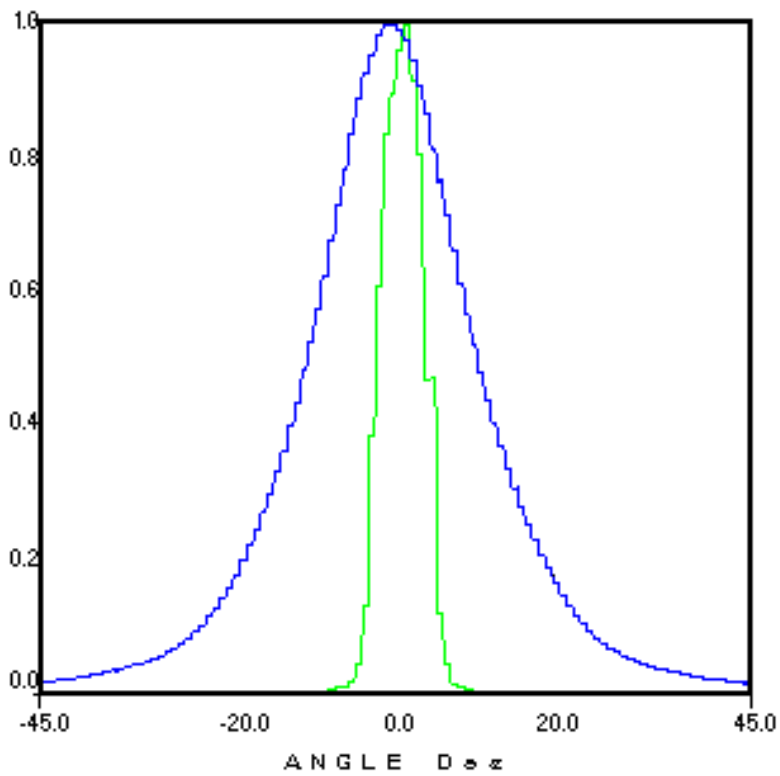
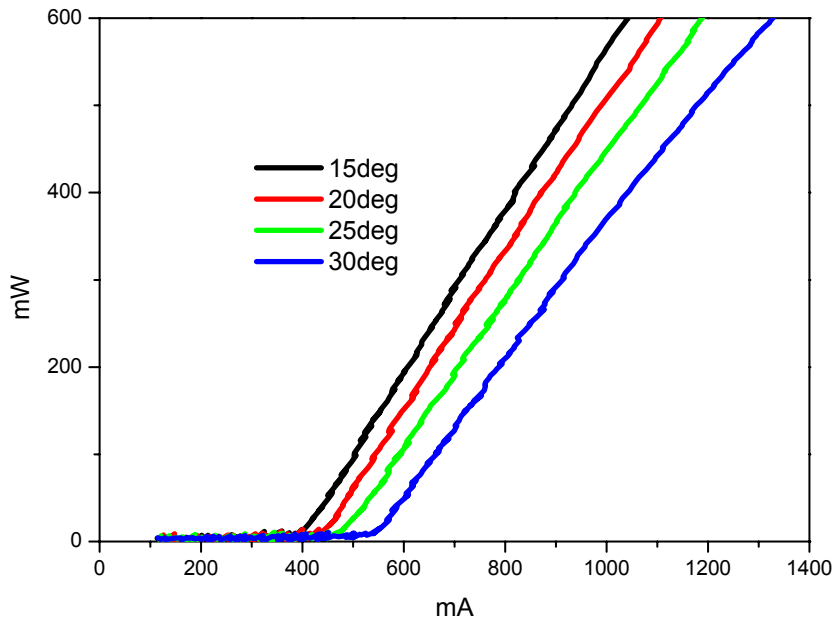
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Peak wavelength	$\lambda$		635		nm	$P_o=500\text{mW}$
Emitter size		-	50	-	um	
Polarization			TM			
Threshold current	$I_{th}$	-	470		mA	
Operating current	$I_{op}$	-	1100	1400	mA	$P_o=500\text{mW}$
Operating voltage	$V_{op}$		2.6	3.0	V	$P_o=500\text{mW}$
Differential efficiency	$\eta$	-	0.83	-	mW/mA	$P_o=20\text{-}200\text{mW}$
Parallel divergence angle	$\theta_{  }$	-	7	12	deg	$P_o=500\text{mW}$
Perpendicular divergence angle	$\theta_{\perp}$		22		deg	

### •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.

**Arima**  
LASERS



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