

AlGaInP Visible Laser Diode

ADL-63Z01TZ

xx-xx-xxxx-xxx Rev.00

638nm 100mW

Features

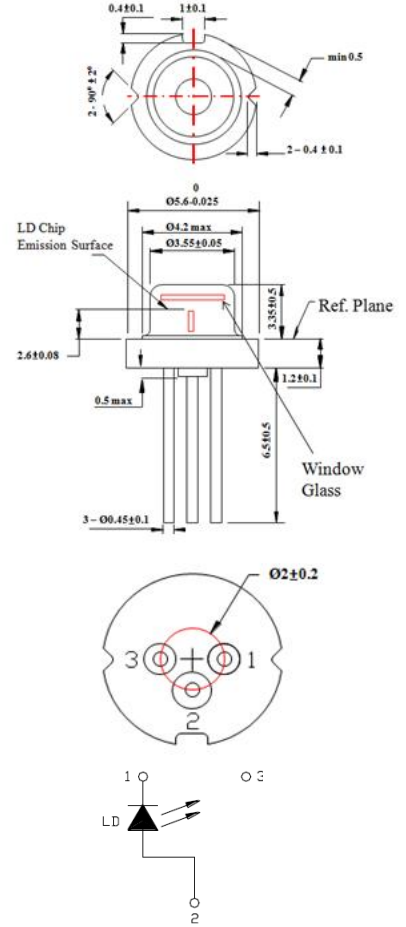
- Small size
- Single transverse mode
- High performance in temperature characteristic

Applications

- Laser projection
- Medical therapy

Absolute Maximum Ratings

Parameter	Symbol	Condition	Rating	Unit
Light Output Power	P_o	CW	100	mW
Reverse Voltage(LD)	V_{RL}	-	2	V
Operation Temperature	TC	-	-10~40	°C
Storage Temperature	TS	-	-40~85	°C



Electrical and Optical Characteristics(Tc=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Peak Wavelength	λ	-	638	-	nm	$P_o=100mW$
Threshold Current	I_{th}	-	40	-	mA	
Operating Current	I_{op}	-	145	-	mA	$P_o=100mW$
Operating Voltage	V_{op}	-	2.6	-	V	$P_o=100mW$
Differential efficiency	η	-	1.0	-	mW/mA	$P_o=5\sim 100mW$
Parallel divergence angle	$\theta_{//}$	-	8	-	deg.	$P_o=100mW$
Perpendicular divergence angle	θ_{\perp}	-	20	-	deg.	

*Sufficient heat dissipation is required for CW operation.

Precautions

- * Do not operate the device above maximum ratings even short period of time. 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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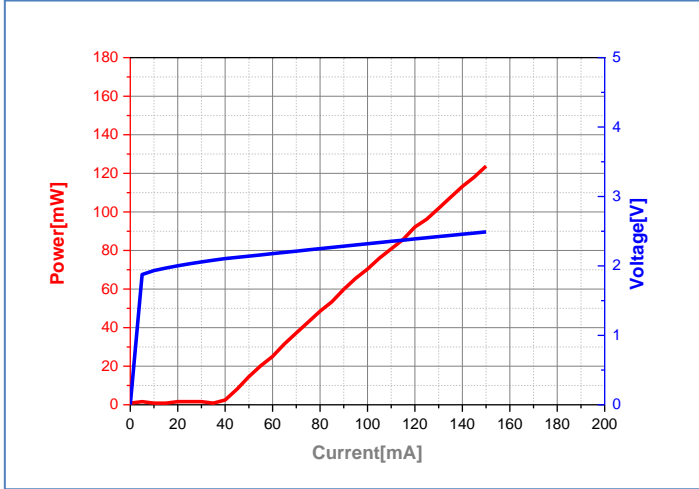
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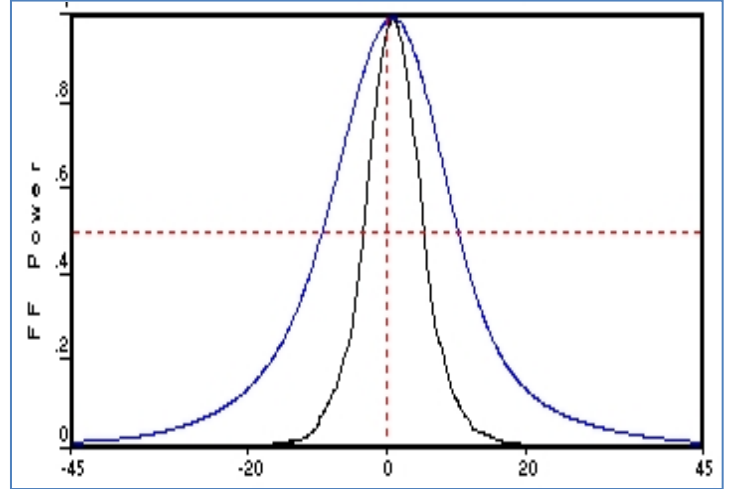
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638nm 100mW

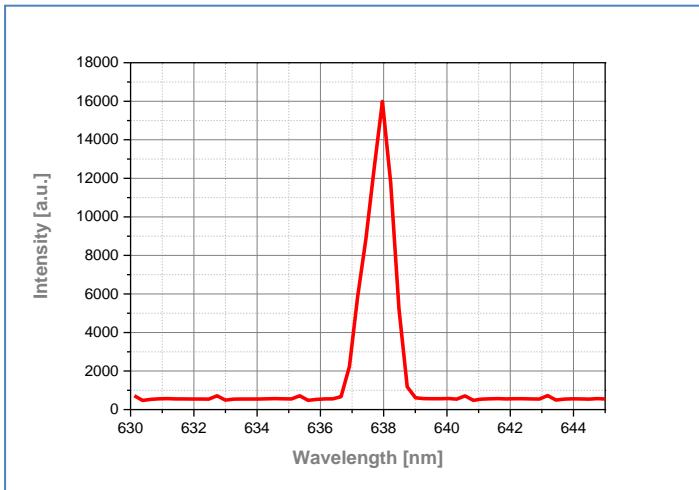
LIV Curve



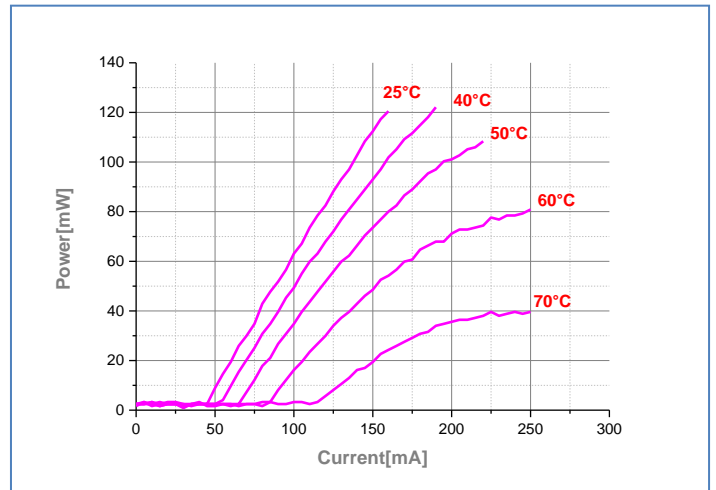
Far-field pattern



Wavelength Plot



Temperature difference test



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