

AlGaInP Visible Laser Diode

ADL-63G02TP

xx-xx-xxxx-xxx Rev.00

638nm 50mW

Features

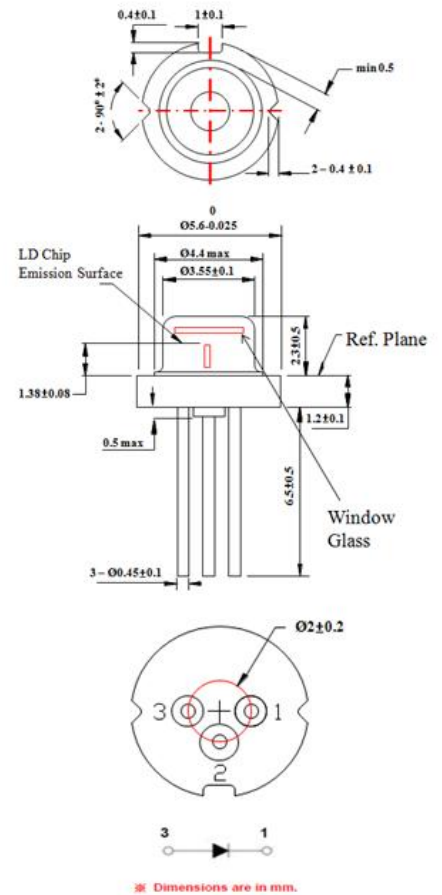
- Small size
- Single transverse mode
- High performance in temperature characteristic

Applications

- Laser projector
- Barcode scanner

Absolute Maximum Ratings

Parameter	Symbol	Condition	Rating	Unit
Light Output Power	P_o	CW	50	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	Po=50mW
Threshold Current	I_{th}	-	35	-	mA	
Operating Current	I_{op}	-	85	-	mA	Po=50mW
Operating Voltage	V_{op}	-	2.8	-	V	Po=50mW
Differential efficiency	η	-	1.0	-	mW/mA	Po=5~50mW
Parallel divergence angle	$\theta_{//}$	-	8	-	deg.	Po=50mW
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.

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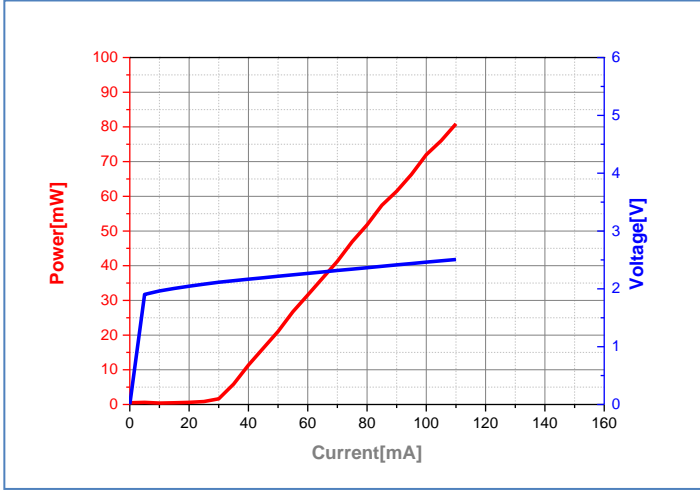
E-MAIL: Ldsales@arimalasers.com | www.arimalasers.com

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

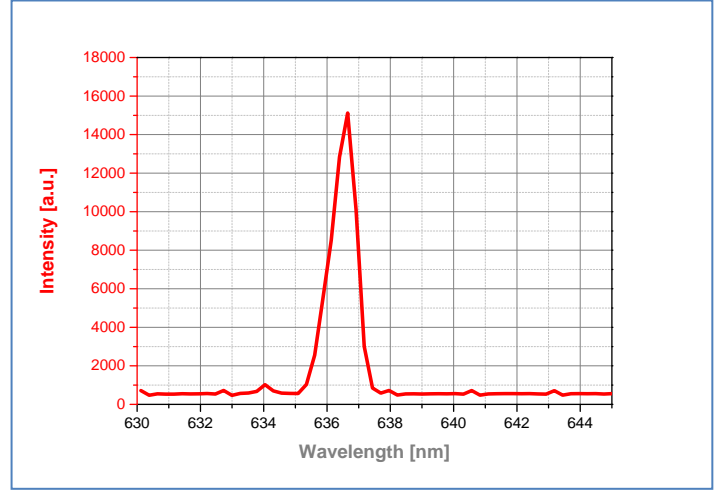
Arima
LASERS

638nm 50mW

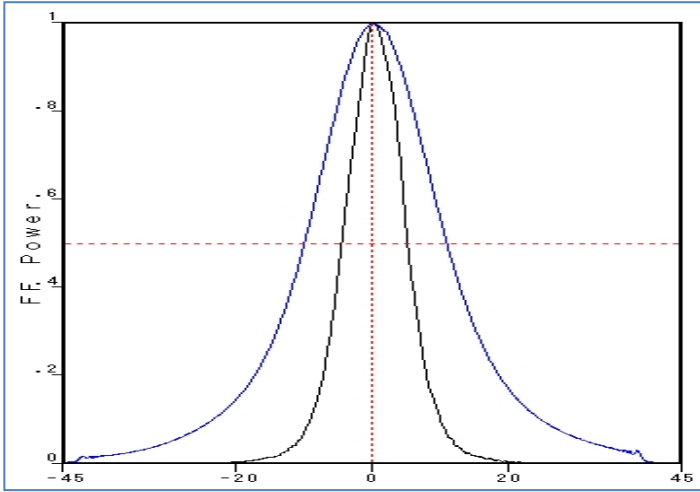
LIV Curve



Wavelength



Far-field pattern



Temperature difference test

