

638nm 50mW

Features

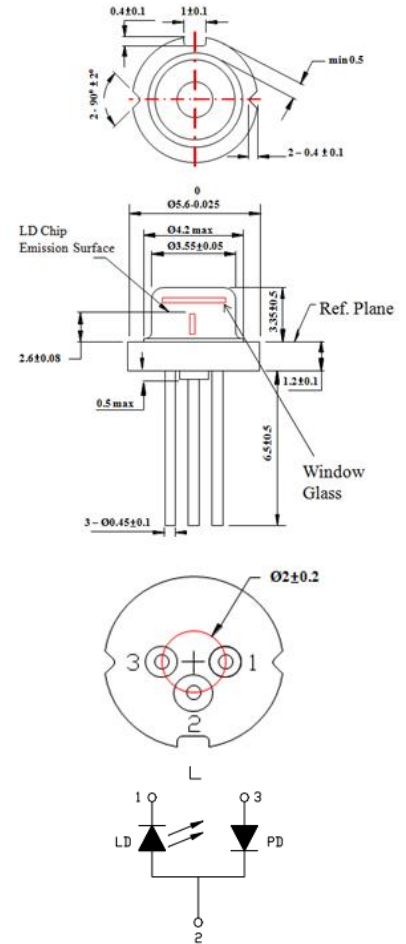
- Small size
- Single transverse mode
- High performance in temperature characteristic

Applications

- Laser projection
- Medical therapy

Absolute Maximum Ratings

Parameter	Symbol	Condition	Rating	Unit
Light Output Power	P _o	CW	50	mW
Reverse Voltage(LD)	V _{RL}	-	2	V
Operation Temperature	T _C	-	-10~50	°C
Storage Temperature	T _S	-	-40~85	°C



Electrical and Optical Characteristics(T_c=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Peak Wavelength	λ	633	638	643	nm	P _o =50mW
Threshold Current	I _{th}	-	45	60	mA	
Operating Current	I _{op}	-	90	120	mA	P _o =50mW
Operating Voltage	V _{op}	-	2.4	2.9	V	P _o =50mW
Differential efficiency	η	0.8	1.0	-	mW/mA	P _o =5~50mW
Monitor current	I _m	0.15	0.25	0.35	mA	P _o =50mW
Parallel divergence angle	$\theta_{//}$	4	8	12	deg.	P _o =50mW
Perpendicular divergence angle	θ_{\perp}	16	20	24	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

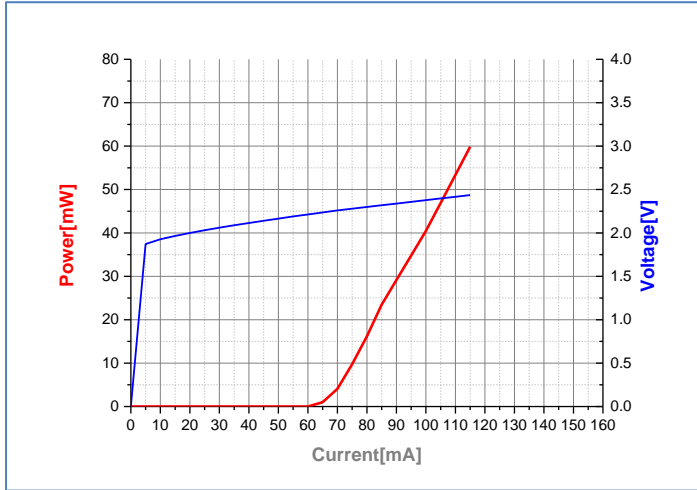
E-MAIL: Ldsales@arimalasers.com | www.arimalasers.com

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

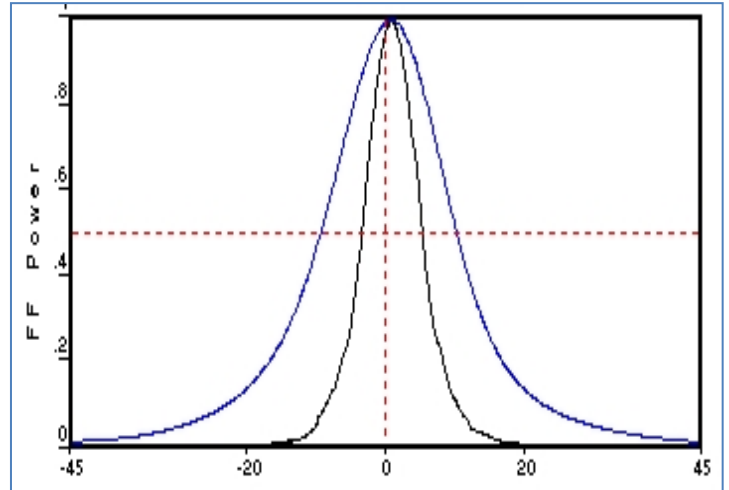
Arima
LASERS

638nm 50mW

LIV Curve



Far-field pattern



Wavelength Plot

