

High Power Red Laser Diode

ADL-63V0BTP

6-2D-LD63-074_Rev.01

638nm 0.5W 25°C TO56 PKG

Features

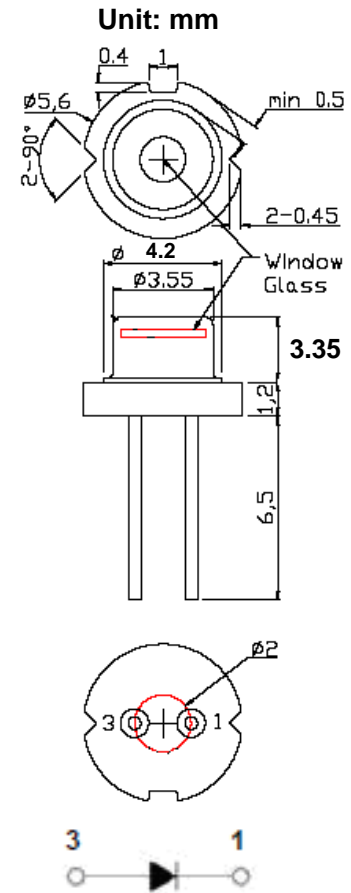
Highly power
Higher brightness

Applications

Laser display
PDT
Biochemistry
Military
Medical/Life and health sciences
Illumination

Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_O	CW	500	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	λ	632	638	644	nm	$P_o=0.5W$
Polarization			TM			
Threshold current	I_{th}	-	200	300	mA	
Operating current	I_{op}	-	700	900	mA	$P_o=0.5W$
Operating voltage	V_{op}	1.9	2.5	3.0	V	$P_o=0.5W$
Differential efficiency	η	-	1.0	-	mW/mA	$P_o=50-500mW$
Parallel divergence angle	$\theta_{//}$	-	6	-	deg.	$P_o=0.5W$
Perpendicular divergence angle	θ_{\perp}	25	36	45	deg.	

* Sufficient heat dissipation is required for CW operation.

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.

ARIMA LASERS CORP.

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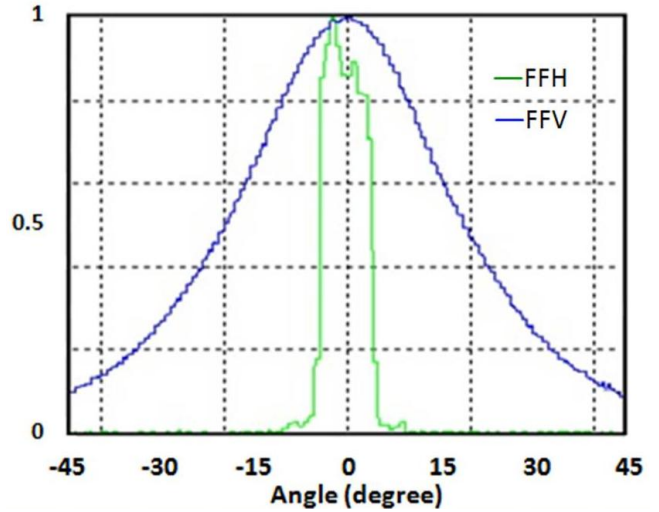
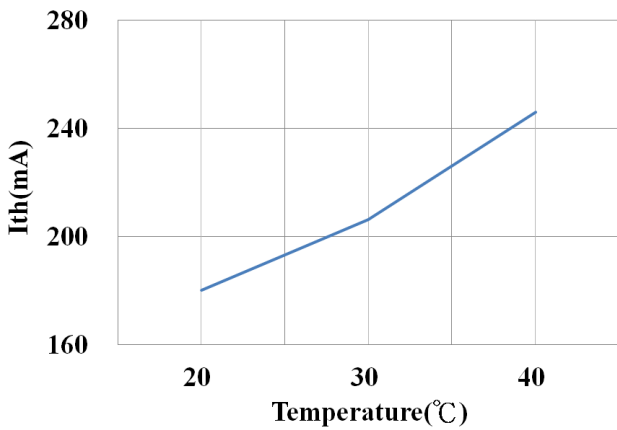
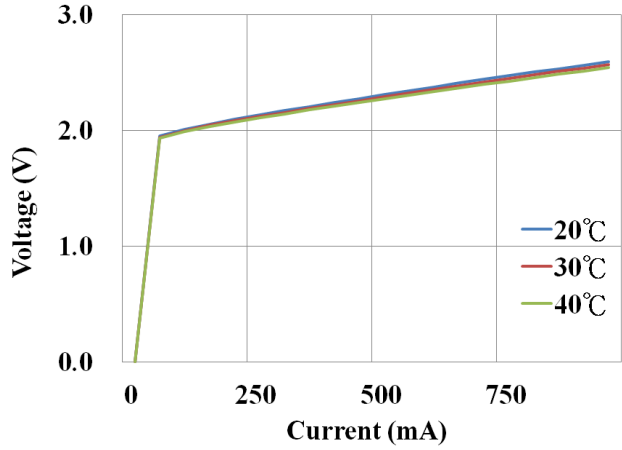
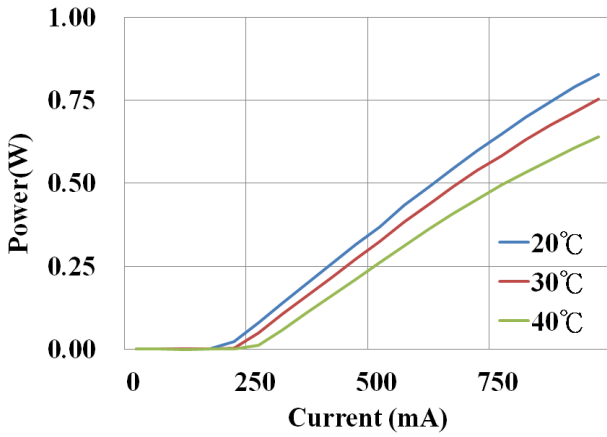
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