

808nm Infrared Laser Diode

ADL-80Q41NZ

T6-2D-LD80-005_Rev.01

808nm 4W Pulsed Laser

Features

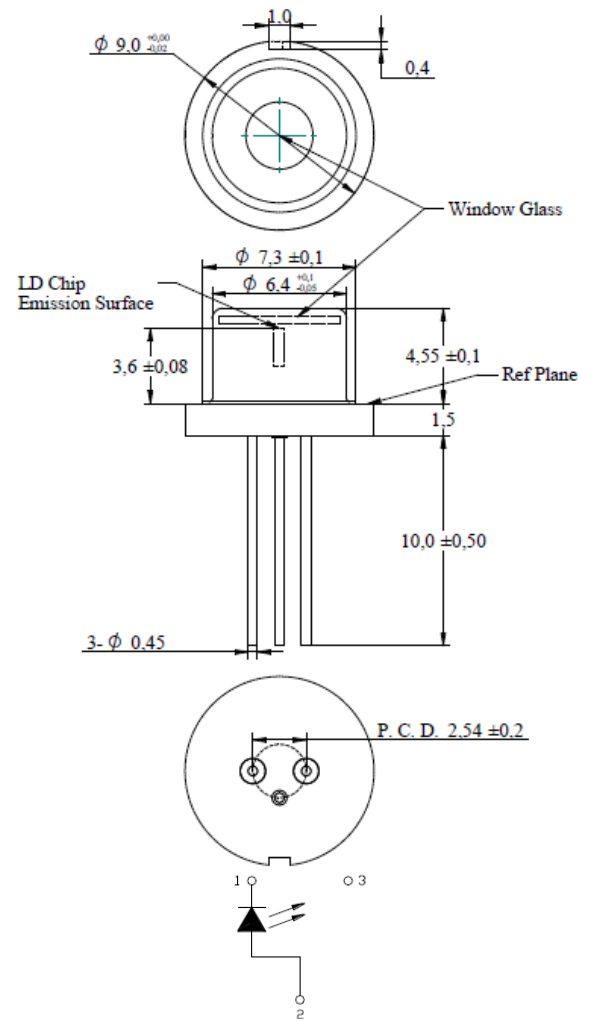
- Highly reliable
- Higher power
- High efficiency

Applications

- Pumping of solid-state lasers and fiber lasers
- Measuring, scientific and medical systems
- Printing, defense and security

Absolute Maximum Ratings

Parameter	Symbol	Condition	Rating	Unit
Light Output Power	P_O	Pulse	4	W
Reverse Voltage(LD)	V_{RL}	-	2	V
Ambience Temperature	T_A	-	-40~85	°C
Storage Temperature	T_S	-	-40~85	°C



Electrical and Optical Characteristics ($T_c=25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Peak Wavelength	λ		808		nm	$P_o=4W$
Threshold Current	I_{th}		0.42	0.5	A	
Operating Current	I_{op}		3.85	4.2	A	$P_o=4W$
Operating Voltage	V_{op}		2.25	3	V	$P_o=4W$
Differential efficiency	η	0.9	1.1		W/A	$P_o=3-4W$
Parallel divergence angle	$\theta_{//}$	7	8.5	12	deg.	$P_o=4W$
Perpendicular divergence angle	θ_{\perp}	25	29	35	deg.	
Parallel FFP deviation angle	$\Delta \theta_{//}$	-3	0	3	deg	
Perpendicular FFP deviation angle	$\Delta \theta_{\perp}$	-3	0	3	deg	
Emission point accuracy	$\Delta x \Delta y \Delta z$	-80	0	80	um	

* The specification is measured under pulse operation. Frequency: 1 kHz; Duty: 10%

● 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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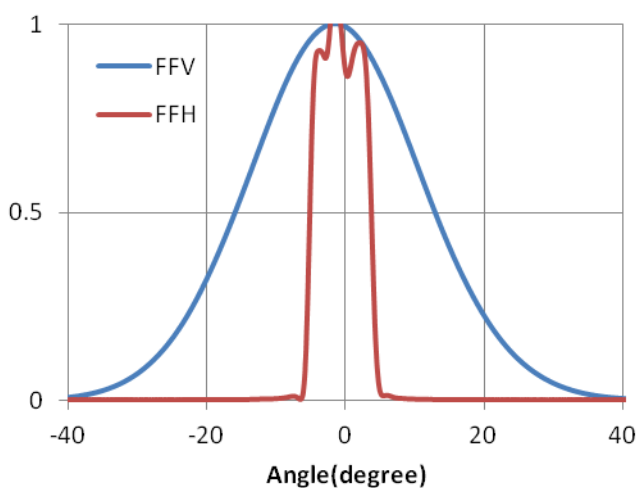
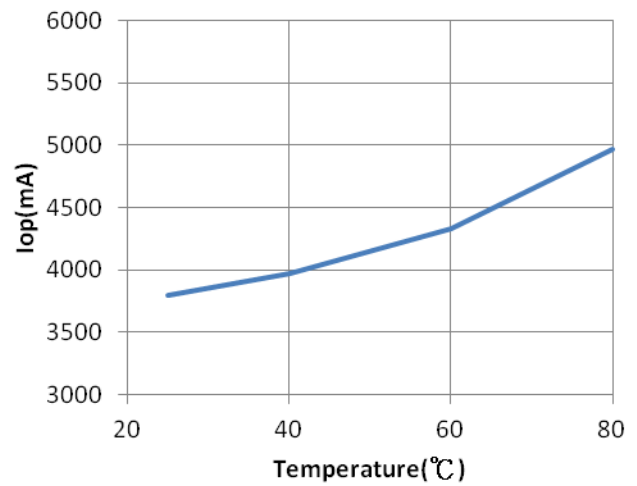
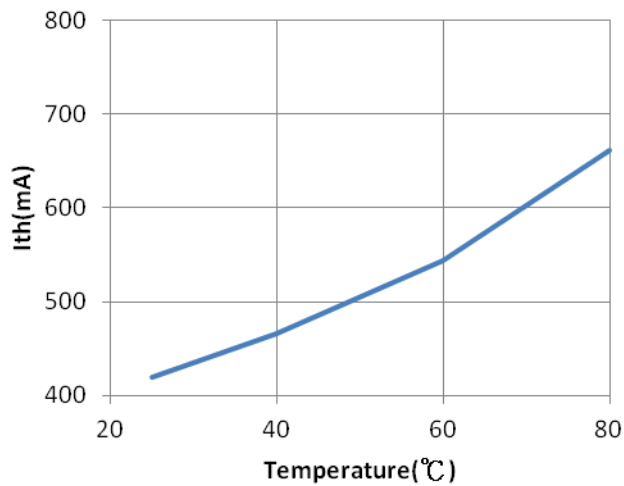
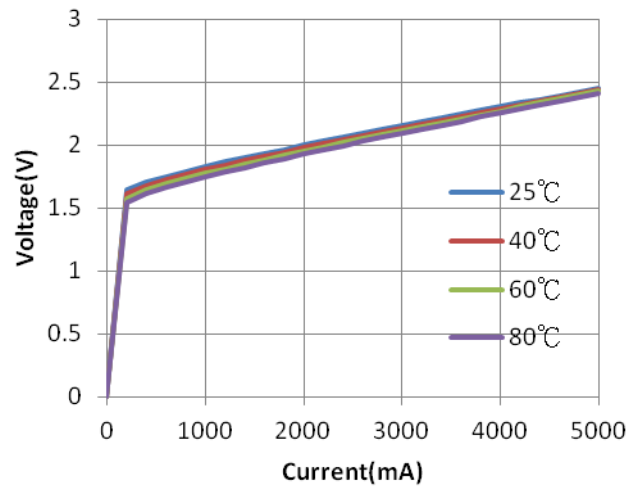
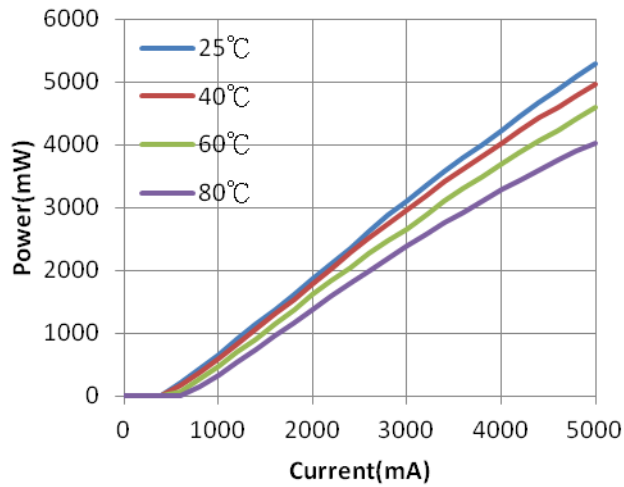
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