

Infrared Laser Diode

ADL-80V03TL

6-2D-LD80-010_Rev.00

808nm 500mW High Power Operation

• Features

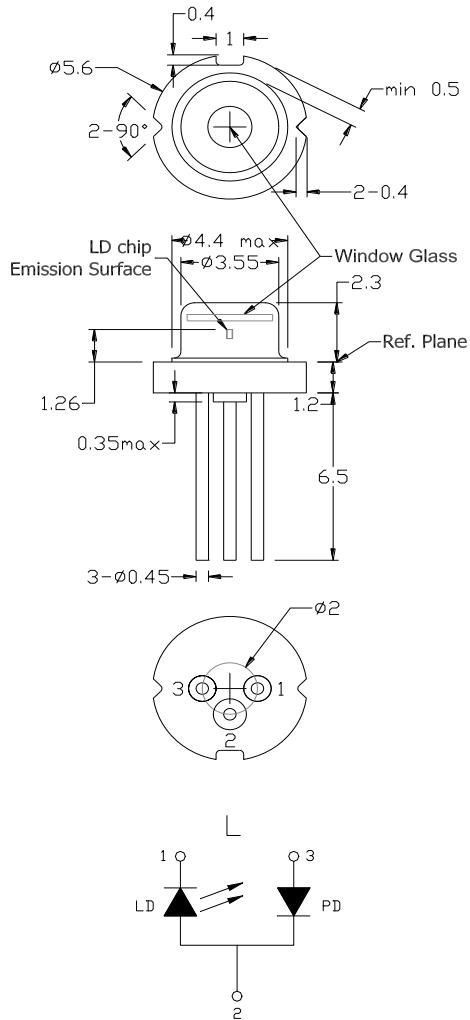
1. Low operation current
2. High pumping efficiency
3. Stable wavelength
4. High reliability

• Applications

1. Pumping source for DPSS green laser
2. Medical applications

• Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P _O	CW	510	mW
Reverse voltage (LD)	V _{RL}		2	V
Reverse voltage (PD)	V _{RD}		30	V
Forward current (PD)	I _{FD}		10	mA
Case 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	Conditions (CW)
Peak wavelength	λ	805	808	811	nm	
Threshold current	I _{th}	-	120		mA	
Operating current	I _{op}	-	570		mA	P _o =500mW
Operating voltage	V _{op}	-	1.9	2.1	V	
Differential efficiency	η	0.8	1.2	-	mW/mA	P _o =400-500mW
Parallel divergence angle	θ _{//}	-	8	11	deg	
Monitor current - L type	I _m	1.2	1.7	3	mA	
Perpendicular divergence angle	θ _⊥	-	39	48	deg	
Parallel FFP deviation angle	Δθ _{//}	-3	0	+3	deg	P _o =500mW
Perpendicular FFP deviation angle	Δθ _⊥	-5	0	+5	deg	
Emission point accuracy	ΔxΔyΔz	-80	0	+80	um	

• 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.

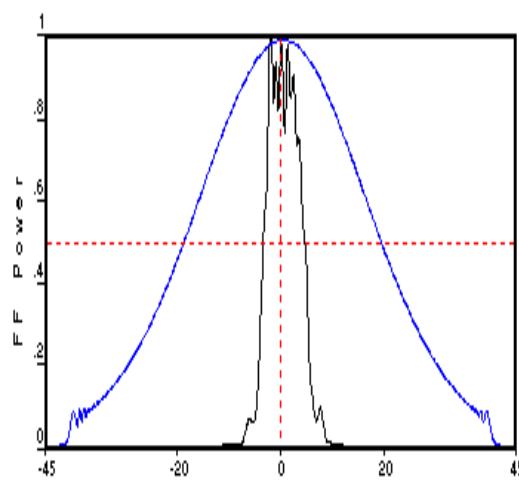
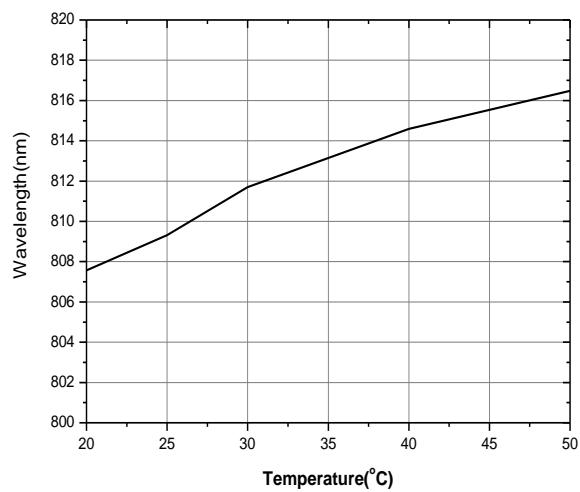
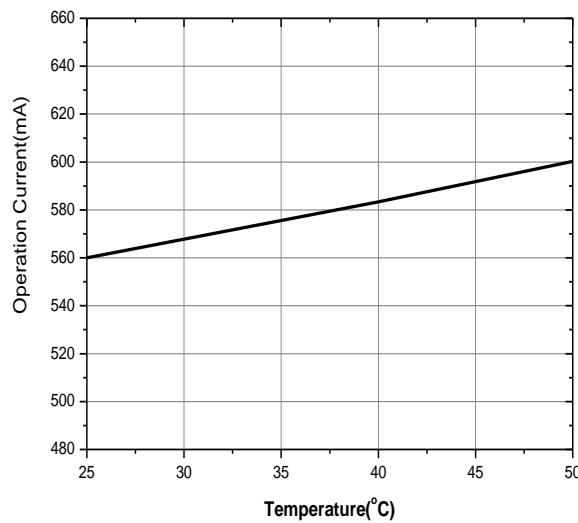
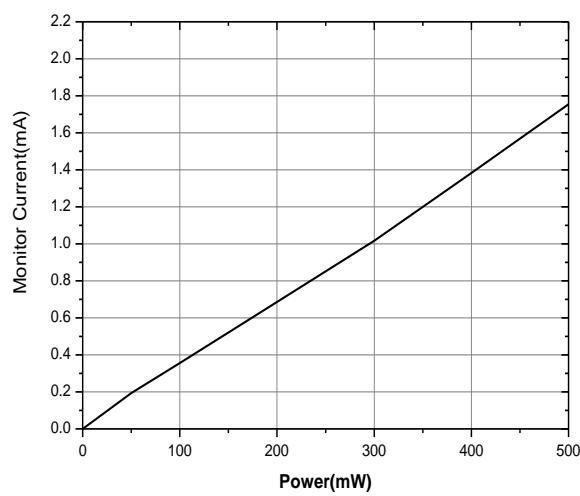
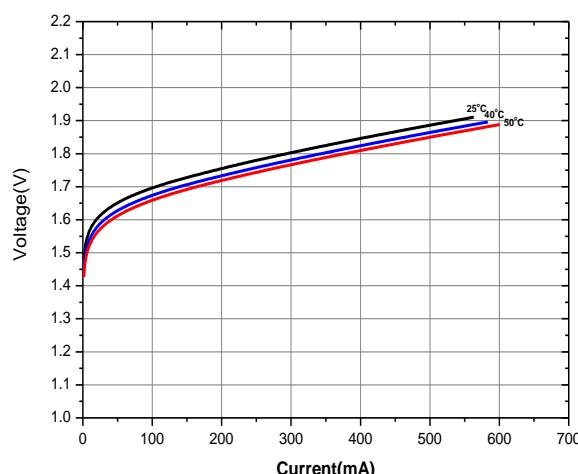
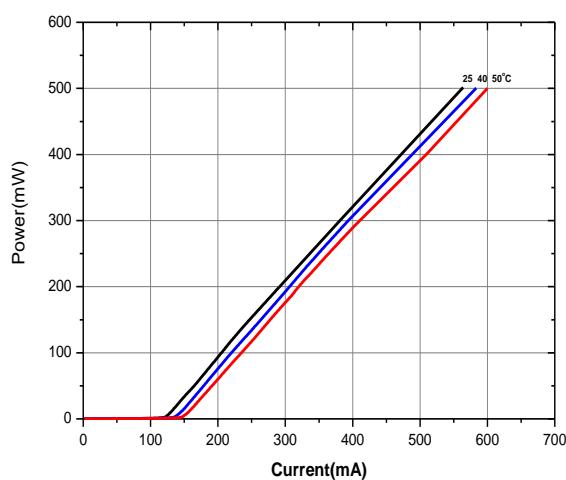
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