# AlGaAs Infrared Laser Diode ADL-80Y01TL





DATE:2005/9/6 Ver 1.0

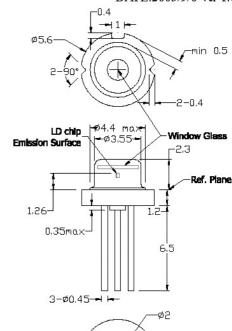
## 🖈 808nm 200mW High Power Operation

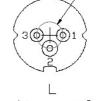
#### Features

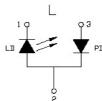
- 1. Stable wavelength
- 2. Low operation current
- 3. High reliability

#### Applications

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







### Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	Po	CW	200	mW
Reverse voltage (LD)	$V_{RL}$	-	2	٧
Reverse voltage (PD)	$V_{RD}$		30	V
Forward current (PD)	I <sub>FD</sub>		10	mΑ
Case temperature	Tc	-	-10~+50	°C
Storage temperature	Ts	-	-40~+85	°C

#### Electrical and optical characteristics (T<sub>c</sub>=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions (CW)	
Peak wavelength	λ	805	808	811	nm		
Threshold current	I <sub>th</sub>	_ =	55	70	mA		
Operating current	I <sub>op</sub>	-	260	280	mA	P <sub>o</sub> =200mW	
Operating voltage	Vop		1.7	1.9	V		
Differential efficiency	η	8.0	11	-	mW/mA		
Monitor current – L type	I <sub>m</sub>	-	1.8		mA		
Parallel divergence angle	$\theta_{II}$	. =	9	15	deg	P <sub>o</sub> =150-200mW	
Perpendicular divergence angle	$\theta$ $_{\perp}$	-	41	48	deg	P <sub>o</sub> =200mVV	
Parallel FFP deviation angle	Δθμ	-3	0	+3	deg		
Perpendicular FFP deviation angle	Δθι	-5	0	+5	deg		
Emission point accuracy	∆x∆y∆z	-80	0	+80	um		

- 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.

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

#### www.lasercomponents.com

Issue: 10/05 / V1 / HW / www/pdf/ari/808nm/ adl-80y01tl.pdf

Germany and other countries: LASER COMPONENTS GmbH, Phone: +49 8142 2864 0, Fax: +49 8142 2864 11, info@lasercomponents.com Great Britain: LASER COMPONENTS (UK) Ltd., Phone: +44 1245 491 499, Fax: +44 1245 491 801, info@lasercomponents.co.uk France: OPTOPHOTONICS sa, Phone: +33 1 3959 5225, Fax: +33 1 3959 5350, info@optophotonics.fr