

AlGaInP Visible Laser Diode

★660nm 80mW 60°C
Reliable High Power Operation

ADL-66801DU

•Features

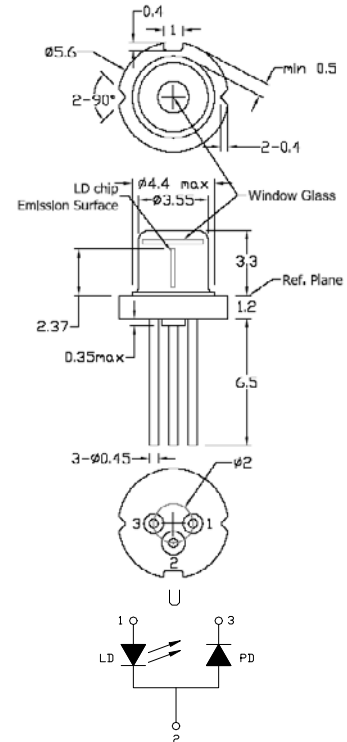
1. Highly reliable
2. Higher power
3. Stable wavelength

•Applications

1. High power Laser modules
2. Industrial laser markers / measuring instruments
3. Medical application

•Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_O	CW	82	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~+60	°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	654	660	666	nm	
Threshold current	I_{th}	-	55	80	mA	
Operating current	I_{op}	-	150	180	mA	$P_o=80\text{mW, CW}$
Operating voltage	V_{op}	-	2.6	3.0	V	
Differential efficiency	η	-	0.85	-	mW/mA	
Monitor current*	I_m	-	0.5	-	mA	$P_o=80\text{mW, } V_{RD}=5\text{V}$
Parallel divergence angle	θ_{\parallel}	7	10	14	deg	
Perpendicular divergence angle	θ_{\perp}	14	17	22	deg	
Parallel FFP deviation angle	$\Delta\theta_{\parallel}$	-3	0	+3	deg	$P_o=80\text{mW, CW}$
Perpendicular FFP deviation angle	$\Delta\theta_{\perp}$	-3	0	+3	deg	
Emission point accuracy	$\Delta x\Delta y\Delta z$	-80	0	+80	μm	

• 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.

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