

AlGaInP Visible Laser Diode

ADL-66302TU

DATE : 2006/02/23 Ver 1.0

★660nm 30mW 50°C

Reliable High Power Operation

•Features

1. Low operating current
2. High efficiency
3. High precision package
4. High power operation

•Applications

1. Laser pointers
2. Industrial laser markers / measuring instruments
3. High visibility applications

•Absolute maximum ratings

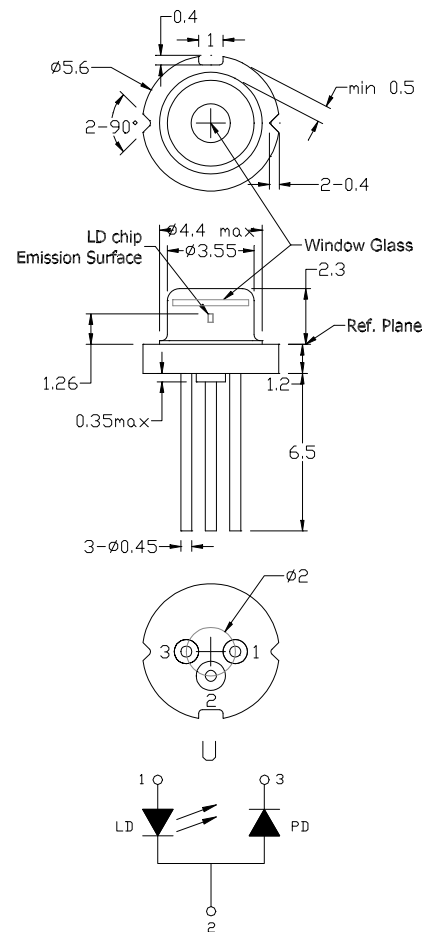
Parameter	Symbol	Condition	Rating	Unit
Light output power	P_O	CW	35	mW
Reverse voltage (LD)	V_{RL}	-	2	V
Reverse voltage (PD)	V_{RD}	-	30	V
Forward current (PD)	I_{FD}	-	10	mA
Case temperature	T_C	-	-10~+50	°C
Storage temperature	T_S	-	-40~+85	°C

•Electrical and optical characteristics ($T_c=25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Peak wavelength	λ	655	659	665	nm	$P_o=30\text{mW}$
Threshold current	I_{th}	-	40	45	mA	$P_o:1\text{-}5\text{mW}$
Operating current	I_{op}	-	68	80	mA	$P_o=30\text{mW}$
Operating voltage	V_{op}	-	2.5	2.8	V	$P_o=30\text{mW}$
Differential efficiency	η	0.7	1.0	1.3	mW/mA	$P_o=28\text{-}30\text{mW}$
Monitor current	I_m	-	0.09	-	mA	$P_o=30\text{mW}, V_{RD}=5\text{V}$
Parallel divergence angle	θ_{\parallel}	7	9	12	deg	$P_o=30\text{mW}$
Perpendicular divergence angle	θ_{\perp}	13	16	20	deg	
Parallel FFP deviation angle	$\Delta\theta_{\parallel}$	-	-	± 3	deg	
Perpendicular FFP deviation angle	$\Delta\theta_{\perp}$	-	-	± 3	deg	
Emission point accuracy	$\Delta x \Delta y \Delta z$	-	-	± 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.



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