

## AlGaInP Visible Laser Diode **ADL-66201TL**

DATE:2005/9/9 Ver 1.0

★660nm 20mW 60°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	22	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

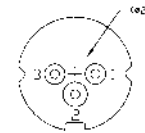
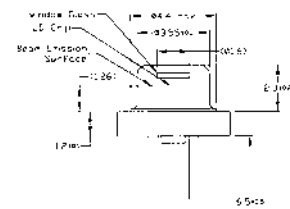
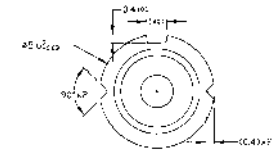
### • Electrical and optical characteristics ( $T_C=22.5\pm 2^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Peak wavelength	$\lambda$	650	658	665	nm	$P_O=20\text{mW}$
Threshold current	$I_{th}$		42	50	mA	
Operating current	$I_{op}$		70	75	mA	$P_O=20\text{mW}$
Operating voltage	$V_{op}$	2.0	2.3	2.5	V	$P_O=20\text{mW}$
Differential efficiency	$\eta$	0.5	0.8	1.0	mW/mA	$P_O=15\sim 20\text{mW}$
Monitor current	$I_m$	0.05	0.15	0.5	mA	$P_O=20\text{mW}, V_{RD}=0\text{V}$
Parallel divergence angle	$\theta_{  }$	6	7	10	deg	$P_O=20\text{mW}$
Perpendicular divergence angle	$\theta_{\perp}$	13	16	22	deg	
Parallel FFP deviation angle	$\Delta\theta_{  }$	-2	0	+2	deg	
Perpendicular FFP deviation angle	$\Delta\theta_{\perp}$	-2	0	+2	deg	
Emission point accuracy	$\Delta x \Delta y \Delta z$	-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.

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



( ) denoted typical value

