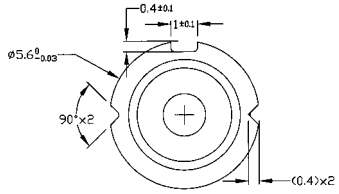
PRELIMINARY

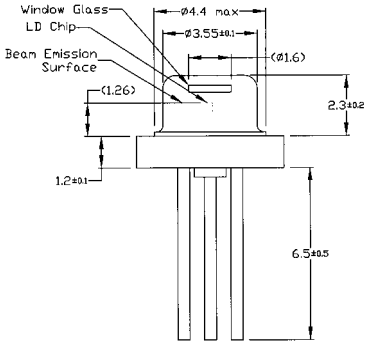
AlGaInP Visible Laser Diode

ADL-66302TU

DATE：2005/11/28 Ver 1.0

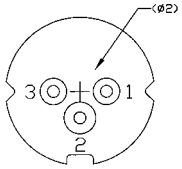
★660nm 30mW 50°C
Reliable High Power Operation



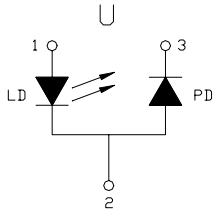


- Features
  1. Low operating current
  2. High efficiency
  3. High precision package
  4. High power operation

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



( ) denoted typical value



- Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_O	CW	33	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
Peak wavelength	λ	655	659	665	nm	P_o=30mW
Threshold current	I_{th}	-	40	45	mA	Po:1-5mW
Operating current	I_{op}	-	68	80	mA	P_o=30mW
Operating voltage	V_{op}	-	2.5	2.8	V	P_o=30mW
Differential efficiency	η	0.7	1.0	1.3	mW/mA	P_o=28-30mW
Monitor current-TU	I_m	-	0.09	-	mA	P_o=30mW, V_{RD}=5V
Parallel divergence angle	$\theta_{//}$	7	9	12	deg	P_o=30mW
Perpendicular divergence angle	$\theta_{\perp}$	13	16	20	deg	
Parallel FFP deviation angle	$\Delta\theta_{//}$	-	-	±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.*

Arima Optoelectronics