

ALGAINP | Visible Laser Diode

635nm 5mW Low Iop type

ADL-6305FTL

T6-2D-LD63-017_REV.00

Features

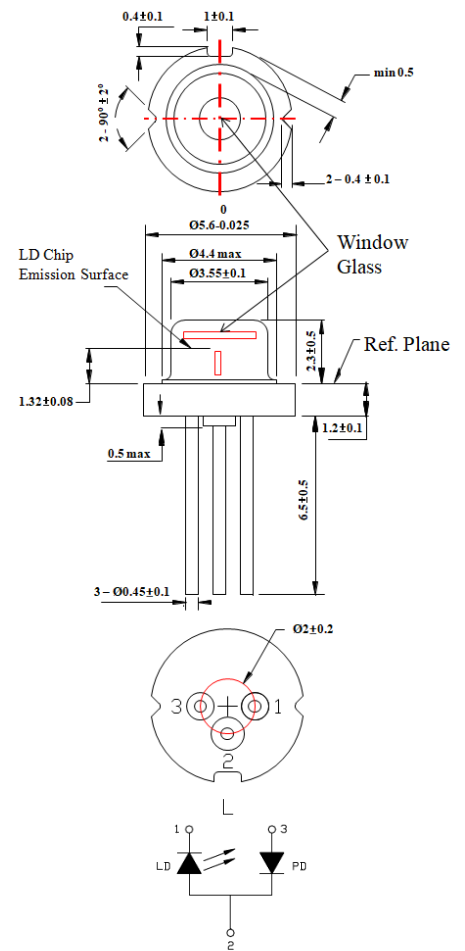
- Low operation current
- High precision assembly
- High visibility

Applications

- Industry laser markers
- Measuring instruments
- Laser pointers
- Levelers

Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_O	CW	6	mW
Reverse voltage (PD)	V_{RD}	-	30	V
Forward current (PD)	I_{FD}	-	10	mA
Case temperature	T_C		-10~+40	°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	630	635	640	nm	$P_O=5\text{mW}$
Threshold current	I_{th}	-	15	20	mA	
Operating current	I_{op}	-	22	28	mA	
Operating voltage	V_{op}		2.15	2.4	V	$P_O=3\text{-}5\text{mW}$
Differential efficiency	η	0.4	0.6	0.9	mW/mA	
Monitor current	I_m	0.1	0.22	0.3	mA	$P_O=5\text{mW}, V_{RD}=5\text{V}$
Parallel divergence angle	$\theta_{//}$	5	7	9	deg.	$P_O=5\text{mW}$
Perpendicular divergence angle	θ_{\perp}	28	33	36	deg.	
Parallel FFP deviation angle	$\Delta \theta_{//}$	-3	0	+3		
Perpendicular FFP deviation angle	$\Delta \theta_{\perp}$	-3	0	+3		
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.

ARIMA LASERS CORP.

PHONE: 886-3-4699800 | FAX: 886-3-4699600

E-MAIL: Ldsales@arimalasers.com | www.arimalasers.com

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

Arima
LASERS