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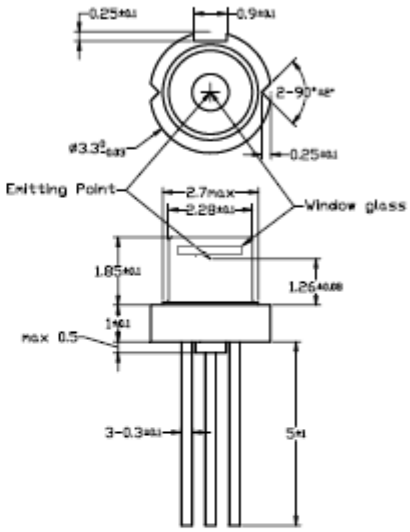
AlGaInP Visible Laser Diode

ADL-65077SU

6-2D-LD65-017 Rev.00

★ φ3.3mm Mini Package!
7mW Reliable Operation



•Features

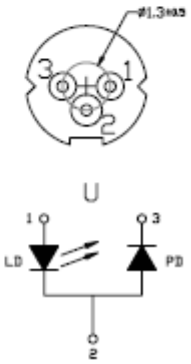
1. Smallest package
2. Low operating current
3. Higher power

•Applications

1. Super slim DVD/Combo OPU
2. Mini size optical modules
3. Laser sensor

•Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_O	CW	10	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~+70	°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	645	655	660	nm	P_o=7mW
Threshold current	I_{th}	-	20	25	mA	
Operating current	I_{op}	-	25	35	mA	P_o=7mW
Operating voltage	V_{op}	-	2.2	2.5	V	P_o=7mW
Differential efficiency	η	0.7	0.9	1.2	mW/mA	P_o=3-5mW
Monitor current	I_m	0.3	0.4	0.6	mA	P_o=7mW
Parallel divergence angle	$\theta_{//}$	6	9	12	deg	
Perpendicular divergence angle	$\theta_{\perp}$	25	28	32	deg	
Parallel FFP deviation angle	$\Delta\theta_{//}$	-2	0	+2	deg	P_o=7mW
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

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