

# ALGaInP Visible Laser Diode

ADC-6507B04

6-2D-LC65-004\_Rev.00

## 650nm 7mW LD Chip on Submount

### Features

Low operating current

### Applications

For TO-type package

Laser pointers

### Absolute maximum ratings

Parameter	Symbol	Condition	Rating	Unit
Light output power	$P_o$	Pulse <sup>*2</sup>	7 <sup>*1</sup>	mW
Reverse voltage (LD)	$V_{RL}$	-	2	V
Operation temperature	$T_{op}$	-	-10 ~ +70	°C
Storage temperature	$T_s$	-	-40 ~ +85	°C

\*1 Lasers shall be used within the absolute maximum ratings. Exceeding these limits may damage the laser chip and this doesn't mean the guarantee its lifetime.

\*2 Measure condition: Duty cycle less than 1% with pulse width less than 2µs

\*3 Proper the heat sinking of the device assures stability and lifetime.

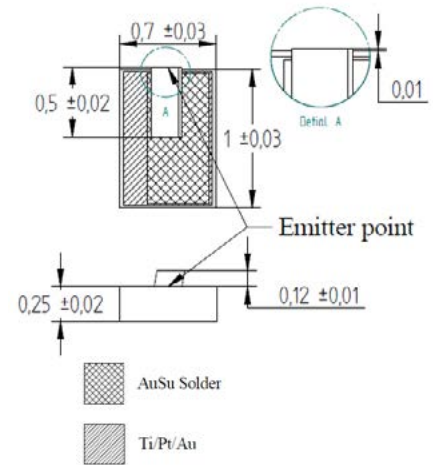
### Electrical and optical characteristics (Tc=25°C)<sup>\*4</sup>

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Peak wavelength	$\lambda$	645	655	660	nm	$P_o=7mW$
Threshold current	$I_{th}$	-	21	25	mA	-
Operating current	$I_{op}$	-	29	35	mA	$P_o=7mW$
Operating voltage	$V_{op}$	-	2.3	2.9	V	$P_o=7mW$
Differential efficiency	$\eta$	0.65	0.85	1.1	mW/mA	$P_o=5-7mW$
Parallel divergence angle	$\theta_{//}$	6	9	12	deg.	$P_o=7mW$
Perpendicular divergence angle	$\theta_{\perp}$	25	28	32	deg.	$P_o=7mW$

\*4 Measure condition: Duty cycle = 1% with pulse width = 2µs

### • 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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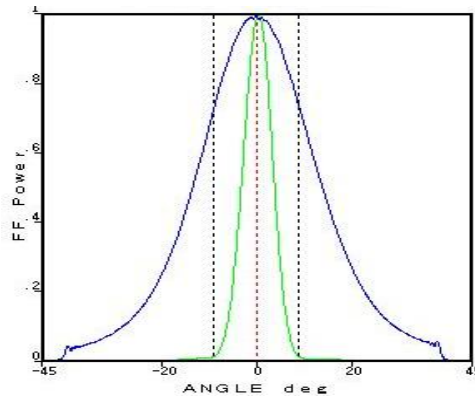
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