



## CHIP-635-P5

### TECHNICAL DATA



### LD Chip die

#### Specifications

- (1) Size : 250\*300\*100  $\mu$  m
- (2) Device: Laser diode bare chip
- (3) Structure: Multi-step growth

#### Absolute Maximum Ratings(Tc=25°C)

Parameter	Symbol	Rating	Unit
Optical Output	Po	7	mW
Reverse Voltage	Vr	2	V
Operation Temperature	Top	-10~+40	°C
Storage Temperature	Tstg	-15~+85	°C

#### Electrical and Optical Characteristics(Tc=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	Ith	Po=5mW	-	24	28	mA	
Operating Current	Iop	Po=5mW	-	33	37	mA	
Operating Voltage	Vop	Po=5mW	-	2.2	2.5	Volts	
Slope Efficiency	$\eta$	Po=1.25~3.75mW	0.3	0.55	-	mW/mA	
Beam Divergence (FWHM)	Parallel	$\theta_{//}$	Po=5mW	6	7.5	11	deg.
	Perpendicular	$\theta_{\perp}$	Po=5mW	30	33	38	deg.
Lasing Wavelength	$\lambda$	Po=5mW	630	636	640	nm	

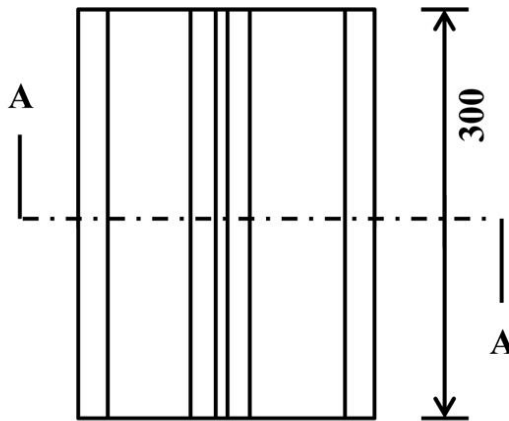
⊙  $\theta_{//}$  and  $\theta_{\perp}$  are defined as the angle within which the intensity is 50% of the peak value.

⊙ Measuring Conditions : Pulse width=5 $\mu$ s , Duty cycle=1%

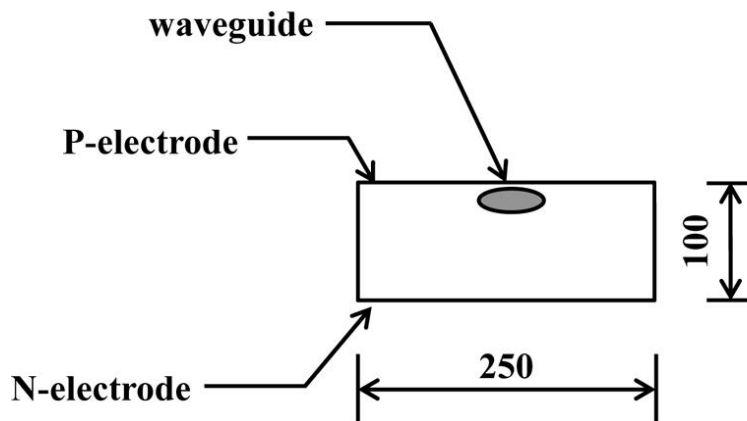


## External Dimensions

Unit :  $\mu\text{m}$



Top View



A-A Section

P-electrode and N-electrode are both gold pads.