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CHIP 6505L TECHNICAL DATA

Visible Wavelength Laserdiodechip

Structure: **AlGaInP**, index guided

Lasing wavelength: **650 nm typ.**

Max. optical power: **5 mW**

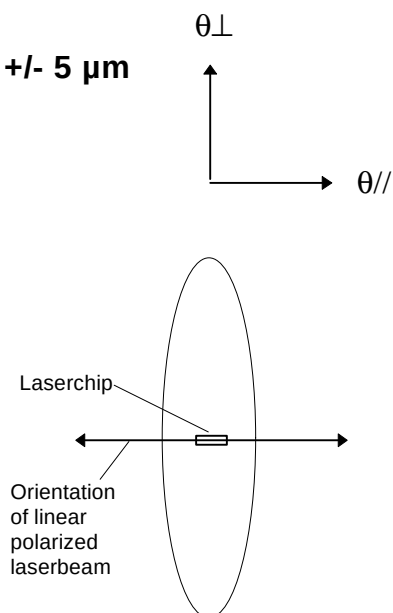
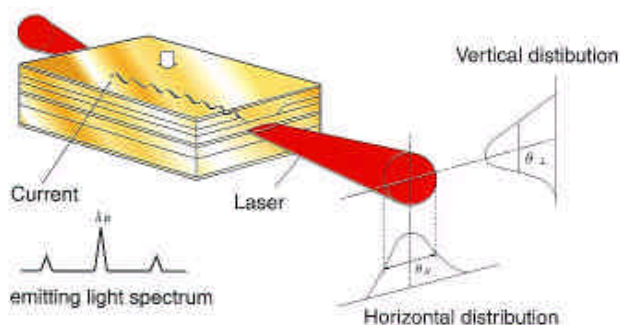
Chipsize: **300 x 300 x 102 μm** [L x W x H] Tolerances **+/- 5 μm**

Cavity length: **300 μm +/- 5 μm**

Emitting Point: **about 2 μm down from top line**

Gold coated on upper and lower side

Low threshold current, low operating current



Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P_o	5	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operation Temperature	T_c	-10 .. +40	°C
Storage Temperature	T_{STG}	-40 .. +85	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P_o	kink free			5	mW
Threshold Current	I_{th}			40	70	mA
Operation Current	I_{op}	$P_o = 5\text{mW}$		50	80	mA
Operating Voltage	V_{op}	$P_o = 5\text{mW}$		2.2	3.0	V
Lasing Wavelength	λ	$P_o = 5\text{mW}$	640	650	665	nm
Beam Divergence	$\theta_{//}$	$P_o = 5\text{mW}$	5	8	12	°
Beam Divergence	$\theta_{\perp}$	$P_o = 5\text{mW}$	24	28	35	°
Astigmatism	A_s	$P_o = 5\text{mW}$, NA=0.4		10		μm