LUXNET CORPORATION

48400 Fremont Blvd.
Fremont, CA 94538 USA
Tel: (510) 445-3068 x 244
Fax: (510) 445-3060

2.5 Gbps 850 nm VCSEL

Part Number: VG2C-7000
Applications: 2.125 / 2.5 Gbps

Absolute Maximum Ratings (T = 25°C):

Parameter	Symbol	Unit	Min.		Max.	Test Condition	Note
Forward Current	I_{max}	mA			15		
Reverse Voltage	V_r	V			5		
Operating Temperature	T_{op}	°C	0		85		
Storage Temperature	T_{stg}	°C	- 40		100		
Maximum Die Exposure	T_{max}	°C			260	For 10 seconds	

Electro-optical Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition	Note
Threshold Current	I_{th}	mA		2.5	3.5		
Ith Temperature Variation	ΔIth	mA	-1.5		1.5	25°C to 95°C	
Forward Voltage	V_f	V		2.0	2.3	@ 10 mA	
Differential Resistance	R_s	Ω		35	50	@ 10 mA	
Reverse Voltage	V_r	V	5			@ -10 μA	
Slope Efficiency	η	mW/mA	0.25	0.3	0.7	@ 10 mA	
Optical Power	P_o	mW	1.5	2.6		@ 10 mA	
Slope Efficiency temp-coeff.	$\Delta\eta/\Delta T$	%/°C	-0.6			25-90°C @ 10 mA	
Peak Wavelength	λ	nm	830	845	860	@ 2 mW	
Beam Divergence	θ	deg			30	Full width, $1/e^2$	
Rise Time	τ_r	ps		90		20-80%	
Fall Time	τ_f	ps		100		20-80%	

Chip configuration:
1. Top contact: Anode; Bottom contact: Cathode.
2. Dimension: 225 um (Wide) x 425 um (Long) x 165 um (Thick)

* Specifications are subject to change without notice. May, 2002
* Screening per customer-specified reject limits is available.

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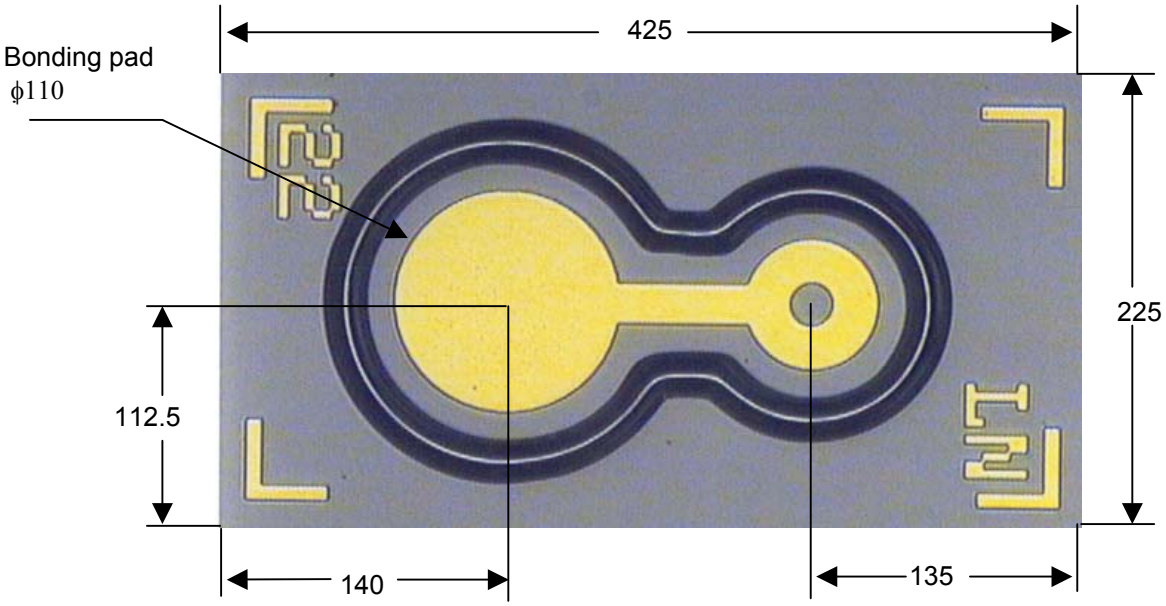

VCSEL Chip Top View

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May, 2002