

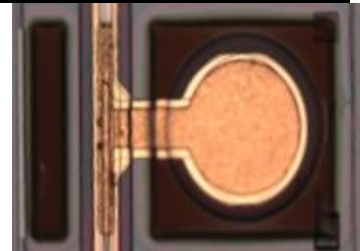
LCTICXX00 CWDM 25Gbps DFB Laser

LCTICXX00 Series

Part Number: LCTICXX00

Product Description:

The LuxNet LCTICXX00 DFB laser chip is designed for high speed, high performance optical communication applications.



Product Specifications:

Absolute Maximum Ratings

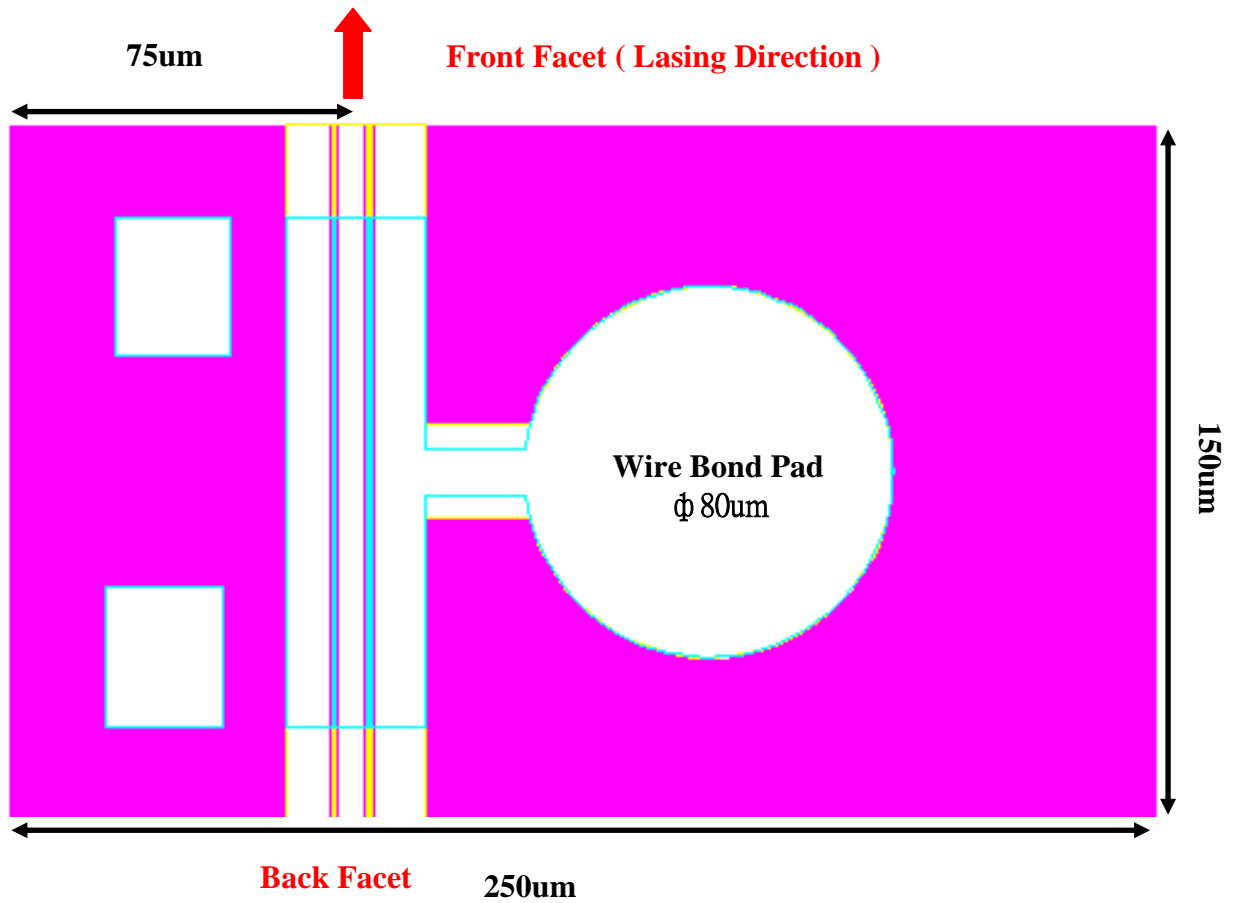
Parameter	Symbol	Unit	Min.	Max.	Note
Operation Temperature	T_C	°C	-40	85	
Storage Temperature	T_{stg}	°C	-40	100	
Die-Attach Temperature		°C	--	330	30 seconds max.
Maximum Power	P_o	mW	--	10	
Reverse Voltage	V_r	V	--	2	
Laser Forward Current	I_{op}	mA		100	

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

Parameter	Symbol	Unit	Min.	Typ	Max.	Test Condition	
Threshold Current	I_{th}	mA	--	7	10 20	$T_a=25^\circ C$ $T_a=85^\circ C$	
Operating Voltage	V_{op}	V	--	1.2	1.5	$P_o=5\text{ mW}$	
Slope Efficiency	η	mW/mA	0.3	--	--	$T_a=25^\circ C$	
Peak Wavelength	LCTIC2700	λ_p	nm	1263.5	1270	1276.5	$P_o=5\text{ mW},$ $T_c=-40\sim 85^\circ C$
	LCTIC2900			1283.5	1290	1296.5	
	LCTIC3100			1303.5	1310	1316.5	
	LCTIC3300			1323.5	1330	1336.5	
Side Mode Suppression Ratio	SMSR	dB	35	--	--	$P_o=5\text{ mW}$	
Beam Divergence Angle (//)	$\theta_{//}$	degree	--	26	--	FWHM @ $P_o=5\text{ mW}$	
Beam Divergence Angle (\perp)	θ_{\perp}			37			
Rise Time	τ_r	ps	--	20	--	$P_o=5\text{ mW},$ 20-80%	
Fall Time	τ_f	ps	--	20	--	$P_o=5\text{ mW},$ 20-80%	
Relaxation Oscillation Frequency	f_r	GHz	--	20	--	$P_o=5\text{ mW}$	

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

DIMENSIONS



Chip configuration:

1. Top contact: anode; Bottom contact: cathode.
2. Dimension: 250 um (width) x 150 um (cavity length) x 80 um (thickness)
Tolerance: +/-12.5um (Thickness) +/-20um (Width, Length)