

L-CT-ICXX-01 CWDM 25Gbps DFB Laser

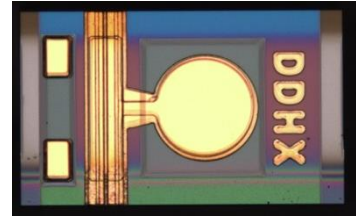
L-CT-ICXX-01 Series

Part Number:

L-CT-ICXX-01 Product

Description:

The LuxNet L-CT-ICXX-01 DFB laser chip is designed for high speed, high performance optical communication applications.



Product Specifications:

Absolute Maximum Ratings

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Case Temperature	T_C	$^{\circ}C$	0	70	
Storage Temperature	T_{stg}	$^{\circ}C$	- 40	100	
Die-Attach Temperature		$^{\circ}C$	--	330	10 seconds max.
Maximum Power	P_o	mW	--	10	
Reverse Voltage	V_r	V	--	2	
Laser Forward Current	I_{op}	mA		100	

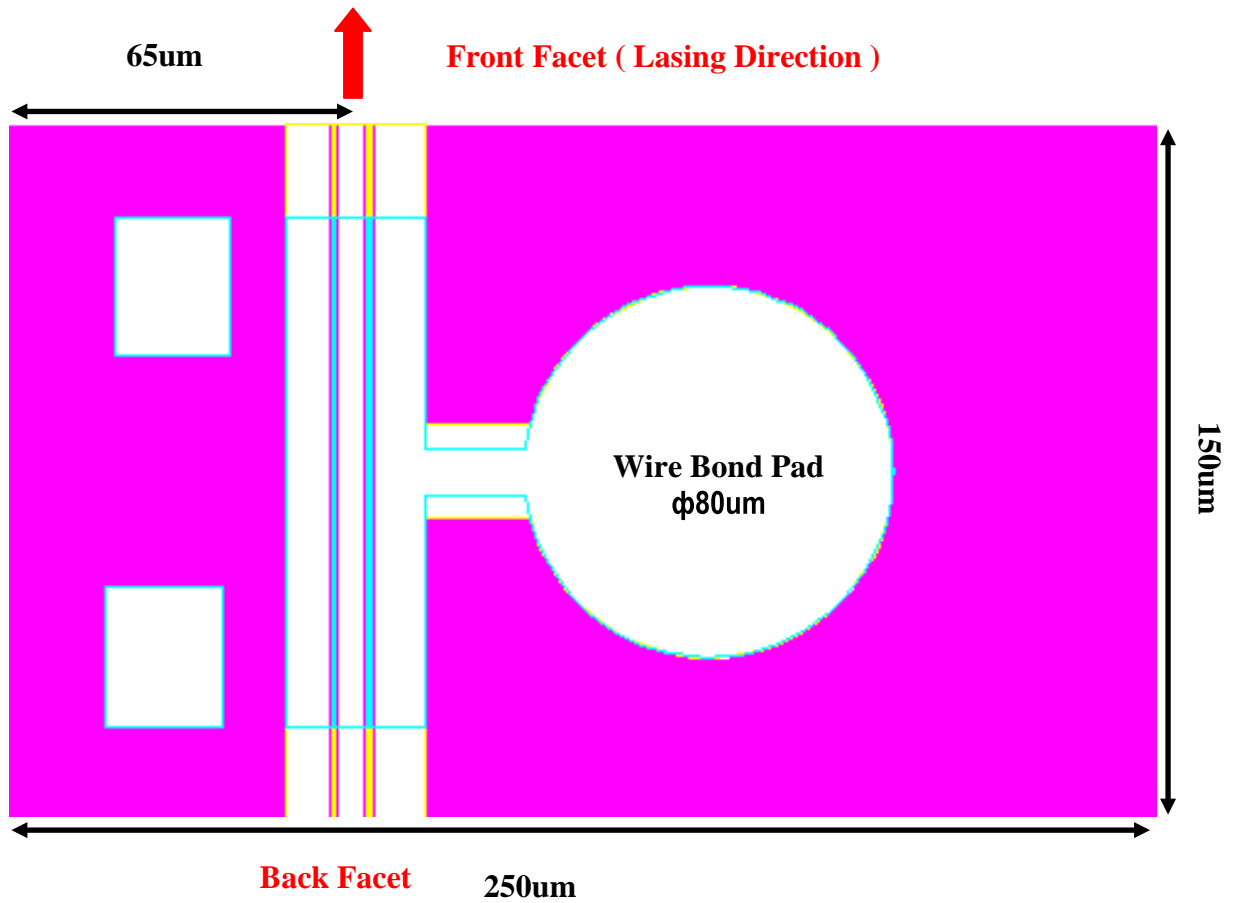
Electro-Optical Characteristics (T = 25 $^{\circ}C$, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ	Max.	Test Condition	
Threshold Current	I_{th}	mA	--	7	10 20	$T_c=25^{\circ}C$ $T_c=85^{\circ}C$	
Operating Voltage	V_{op}	V	--	1.2	1.5	$P_o=5mW$	
Slope Efficiency	η	mW/mA	0.2	--	--	$T_c=25^{\circ}C$	
Peak Wavelength	L-CT-IC27	λ_p	nm	1263.5	1270	1276.5	$I_{op}=35mA,$ $T_c=0\sim 70^{\circ}C$
	L-CT-IC29			1283.5	1290	1296.5	
	L-CT-IC31			1303.5	1310	1316.5	
	L-CT-IC33			1323.5	1330	1336.5	
Side Mode Suppression Ratio	SMSR	dB	35	--	--	$I_{op}=35mA,$	
Beam Divergence Angle (//)	$\theta_{//}$	degree	--	25	--	$I_{op}=35mA,FWHM$ $T_c=25^{\circ}C$	
Beam Divergence Angle (\perp)	θ_{\perp}			40			
Bandwidth	f_{3dB}	GHz	18.75			$I_{th}+30mA$	
Relative Intensity Noise	RIN	dB/Hz	--	-130	--	$I_{op}=35mA$	

* 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)