

## L-CT-ID31-00 25Gbps DFB Laser

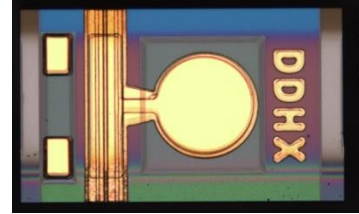
### L-CT-ID31-00

**Part Number:**

**L-CT-ID31-00 Product**

**Description:**

The LuxNet L-CT-ID31-00 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	$T_C$	$^{\circ}C$	-40	85	
Storage Temperature	$T_{stg}$	$^{\circ}C$	- 40	100	
Die-Attach Temperature		$^{\circ}C$	--	330	30 seconds max.
Maximum Power	$P_o$	mW	--	10	
Reverse Voltage	$V_r$	V	--	2	
Laser Forward Current	$I_{op}$	mA		100	

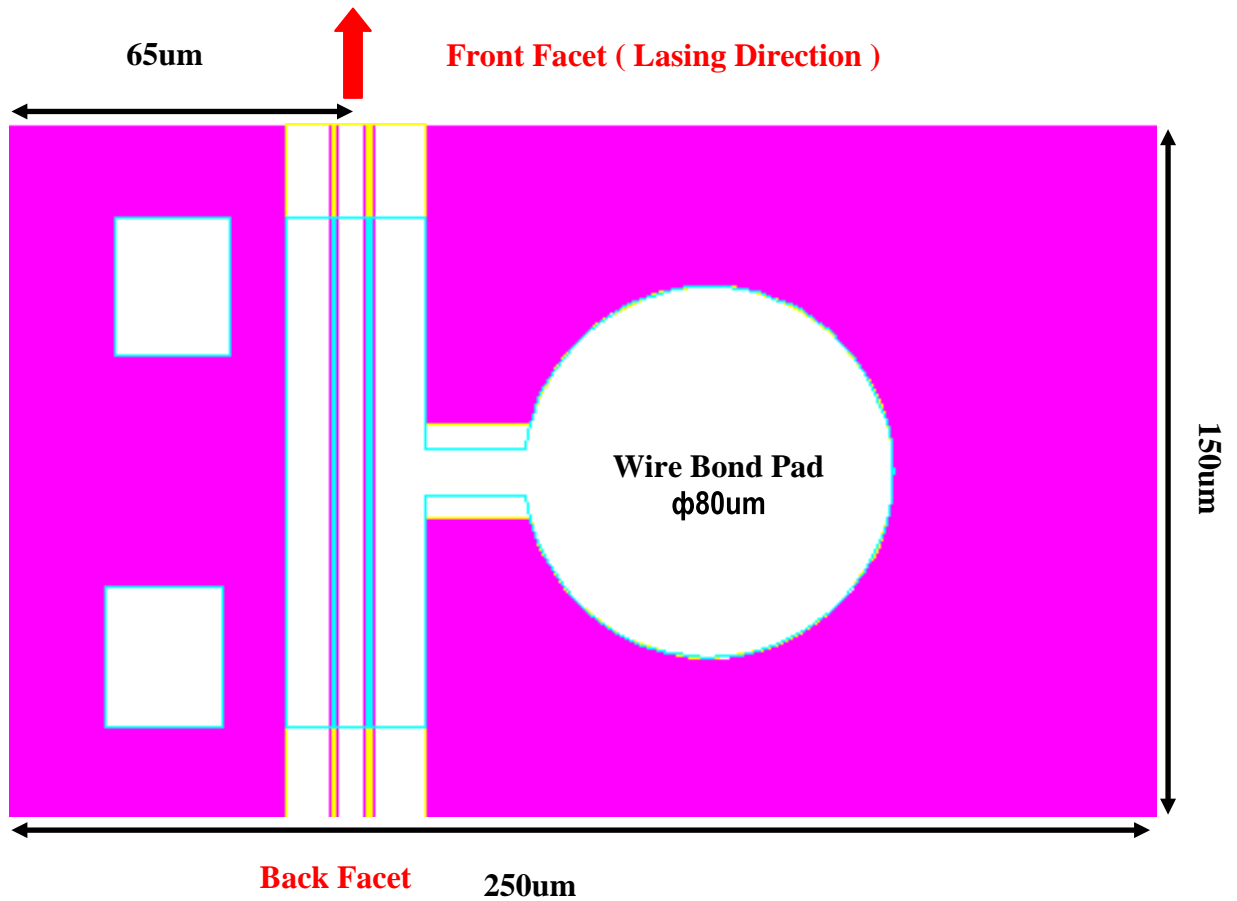
**Electro-Optical Characteristics (T = 25 $^{\circ}C$ , unless noted otherwise):**

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	$P_o=5$ mW
Slope Efficiency	$\eta$	mW/mA	0.3	--	--	
Peak Wavelength	$\lambda_p$	nm	1295	1310	1325	$I_{op}=35$ mA, $T_c=-40\sim 85^{\circ}C$
Side Mode Suppression Ratio	SMSR	dB	35	--	--	$I_{op}=35$ mA
Beam Divergence Angle (//) Beam Divergence Angle ( $\perp$ )	$\theta_{//}$ $\theta_{\perp}$	degree	--	25 40	--	$I_{op}=35$ mA, FWHM
Rise Time	$\tau_r$	ps	--	20	--	$I_{op}=35$ mA, 20-80%
Fall Time	$\tau_f$	ps	--	20	--	$I_{op}=35$ mA, 20-80%
Relaxation Oscillation Frequency	$f_r$	GHz	--	20	--	$I_{op}=35$ mA

\* 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 μm (width) x 150 μm (cavity length) x 85 μm (thickness)  
Tolerance: +/-12.5μm (Thickness) +/-20μm (Width, Length)