

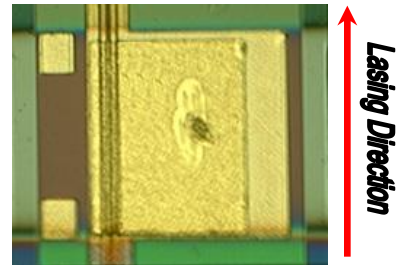
1310 nm 10 Gbps DFB Laser (Preliminary)

BI5X-702X Series

Part Number :BI5A-7022

Product Description:

The LuxNet 1310 nm 10G DFB laser chip is designed for high speed, high performance data communication and telecommunication applications. It is suitable for cooler -less applications over a wide temperature range at speed up to 10 Gbps.



Product Specifications:

Absolute Maximum Ratings

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature	T _{op}	°C	-40	85	
Storage Temperature	T _{stg}	°C	- 40	100	
Maximum Power	P _o	mW		10	
Reverse Voltage	V _r	V		2	

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

Parameter	Symbol	Unit	Min.	Typ	Max.	Test Condition
Threshold Current	I _{th}	mA		10	15 35	Ta=25°C Ta=0 to 85°C
Forward Voltage	V _f	V		1.3	1.5	Po=5 mW
Slope Efficiency	η	W/A	0.25	0.30	--	Average, I _{th} +5 mA to I _{th} +15 mA
Peak Wavelength	λ _p	nm	1295	1310	1325	Po=5 mW
Side Mode Suppression Ratio	SMSR	dB	35	--	--	Po=5 mW
Beam Divergence Angle (//) Beam Divergence Angle (+)		degree		25 35		FWHM
Modulation Bandwidth	F _{3dB}	GHz	10	12		I=I _{th} +25mA

Chip configuration:

1. Top contact: anode; Bottom contact: cathode.
2. Dimension: 250 um (width) x 200 um (cavity length) x 100 um (thickness)
 Tolerance: +/-12.5um (Thickness)
 +/-20um (Width, Length)

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