TBD-2G12-001

1270nm 2.5Gpbs DFB Laser Diode

Preliminary

Features and Applications:

- 1270 nm emission wavelength
- Capable to run 2.5Gbps

ELECTRO-OPTICAL CHARACTERISTICS :

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Peak Wavelength	λ_P	1260	1270	1280	nm	CW, Iop=30(mA)
Threshold Current	I_{th}		8	15	mA	CW, Tc= 25°C
Slope Efficiency	η	0.4	0.5		mW/mA	CW, Po=0.5~5mW
Forward Voltage	Vf		1.2	1.5	V	CW, Po=0.5~5mW
Series Resistance	Rs		7	12	Ohm	Power = 3~7 mW
Side Mode Suppression Ratio	SMSR	35			dB	CW, Iop=30(mA)
Divergence angle (Parallel)	θ//		15		degree	
Divergence angle (Perpendicular)	θ⊥		23			

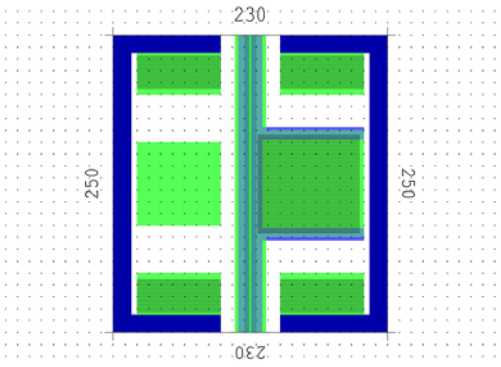
Notes: All parameters are measured at 25°C room temperature, CW operation.

ABSOLUTE MAXIMUM RATINGS :

PARAMETERS	MIN	MAX	UNIT	CONDITIONS
Storage Temperature	-40	85	°C	
Operating Temperature	-40	85	°C	
Output Power		8	mW	
Reverse Voltage		2	V	

OUTLINE DIAGRAM:

- chip size is 230 x 250 μm with 100+/-15 μm thickness.



WARNING:

The DFB LD is a class 3B laser in the safety standard IEC60825-1:2014 and should be treated to avoid exposure to beam.