

TBD-2G12-019

1270nm 10Gbps DFB Laser Diode

Features and Applications

- 1270 nm emission wavelength
- Capable to run 10.3125 Gbps and above data rate

ELECTRO-OPTICAL CHARACTERISTICS:

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Operating Wavelength	λ_p	1260	1270	1280	nm	CW, I _{op} = 30(mA)
Threshold Current	I _{th}		7	12	mA	CW, T _c = 25°C
Slope Efficiency	η	0.45	0.48		mW /mA	Power = 0.5–5 mW
Forward Voltage	V _f		1.2	1.5	V	CW, P _o =5mW
Series Resistance	R _s		7	12	Ohm	Power = 0.5–5 mW
Side Mode Suppression Ratio	SMSR	35			dB	CW, I _{op} = 30(mA)

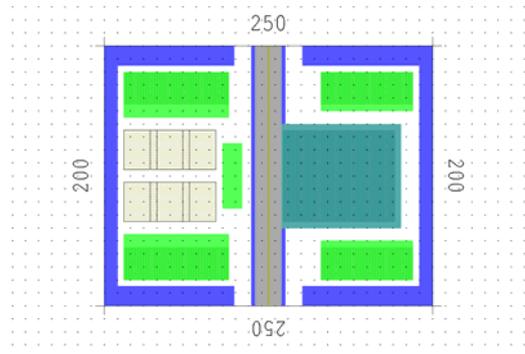
Notes: All parameters are measured at 25°C room temperature, CW operation.

ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	CONDITION
Storage Temperature	-40	85	°C	
Operating Temperature	-40	85	°C	
Output power		10	mW	
Reverse Voltage		2	V	

OUTLINE DIAGRAM:

- chip size is 250 x 200 μm with 100 \pm 15 μm thickness.



WARNING:

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

