

# TFD-3G12-100

## 1310 nm High Power FP LD

### Features and Applications

- 1310 nm emission wavelength
- Capable to run 1.25G bps and above data rate

### ELECTRO-OPTICAL CHARACTERISTICS:

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Operating Wavelength	$\lambda_p$	1290	1310	1330	nm	Power = 5mW
Threshold Current	$I_{th}$		10	13	mA	
Slope Efficiency	$\eta$	0.42	0.49		mW /mA	Power = 1-5 mW
Operating Voltage	$V_{op}$		1.2	1.5	V	Power = 5mW
Series Resistance	$R_s$		8	12	Ohm	Power = 1-5 mW
Spectrum wavelength	$\Delta\lambda$		2	3	nm	Power = 5mW
Divergence angle ( Parallel )	$\theta_{//}$		18		degree	
Divergence angle ( Perpendicular )	$\theta_{\perp}$		35		degree	

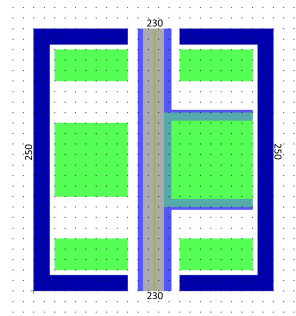
Notes: All parameters are measured at 25°C room temperature, CW operation.

### 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 230 x 250  $\mu\text{m}$  with 100 $\pm$ 15 $\mu\text{m}$  thickness.



### WARNING:

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

