



## DFB Laser Diode 2330nm 3mW

### FNPL-3S-2330-DFB



**FNPL-3S-2330-DFB** is a CW DFB semiconductor laser diode. It is delivered in standard SOT-148 and TO-56 packages with optional monitor diode to stabilize power output and TO-5 and TO-8 packages with integrated TEC, thermistor and monitor diode. Custom mounts are available upon request.

#### Key Features

Excellent reliability  
Variety of packaging options

#### Applications

High performance gas sensing  
Gas Sensing  
Sensing of liquids  
Free space communications  
Spectroscopy

### Optical and electrical characteristics: (T = 25 °C)

Operating parameters	Symbol	Min	Typ	Max	Unit
Optical output power	$P_{out}$	-	3	-	mW
Lasing wavelength	$\lambda$	2329	2330	2331	nm
Threshold current	$I_{th}$	30	45	55	mA
Forward current	$I_f$	55	70	100	mA
Operating Voltage		-		2.5	V
Beam divergence parallel	$\Theta_{  }$	25	30	35	deg.
Beam divergence perpendicular	$\Theta_{\perp}$	45	50	60	deg.
Side mode suppression		-	35	-	dB
Spectral width (FWHM)	$\Delta\lambda$	-	-	3	MHz
Emitting area	WxH	-	2*1.5	-	$\mu\text{m}$
Slope efficiency	$dP_o/dI_{op}$	0.08	0.1	0.12	mW/mA
Current tuning rate	$C_I$	0.01	0.02	0.03	nm/mA
Temperature tuning rate	$C_T$	0.18	0.2	0.22	nm/K
Operating temperature	$T_C$	-20		+50	°C
Storage temperature	$T_S$	-20		+85	°C

## TYPICAL PERFORMANCE

Room Temperature CW Spectrum at 2330nm

