

## DFB Laser Diode 2050nm 15mW

### FNPL-15S-2050-DFB



**FNPL-15S-2050-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

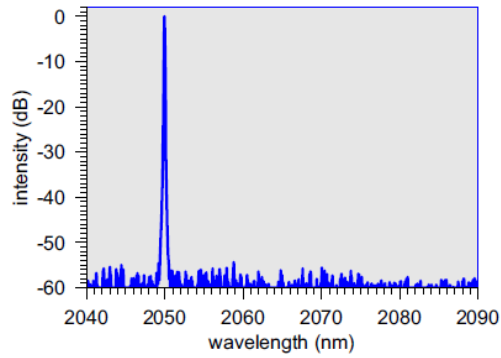
High performance gas sensing  
Gas Sensing  
Sensing of liquids  
Free space communications  
Spectroscopy

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

Operating parameters	Symbol	Min	Typ	Max	Unit
Optical output power	$P_{out}$	-	15	-	mW
Lasing wavelength	$\lambda$	-	2050	-	nm
Threshold current	$I_{th}$	-	16	-	mA
Forward current	$I_f$	-	89	-	mA
Operating Voltage		-	-	1.0	V
Beam divergence parallel	$\Theta_{  }$	-	25	-	deg.
Beam divergence perpendicular	$\Theta_{\perp}$	-	60	-	deg.
Side mode suppression		-	30	-	dB
Spectral width (FWHM)	$\Delta\lambda$	-	-	5	MHz
Emitting area	WxH	-	2.5x1.5	-	$\mu\text{m}$
Slope efficiency	$dP_o/dI_{op}$	-	0.21	-	mW/mA
Operating temperature	$T_C$	-20		+50	°C
Storage temperature	$T_S$	-20		+85	°C

## TYPICAL PERFORMANCE

Room Temperature CW Spectrum at 2050nm



Power against Operating Current

