



## FP Laser Diode 2700nm 5mW

### FNPL-5S-2700-FP



**FNPL-5S-2700-FP** is a CW semiconductor laser diode operating at 2700nm. It is delivered in standard TO-5.6 and TO-9 packages with optional monitor diode to stabilize power output and TO-5 with integrated TEC, thermistor and monitor diode. Custom mounts are available upon request.

#### Key Features

- Broad emission spectrum
- Excellent reliability
- Variety of packaging options

#### Applications

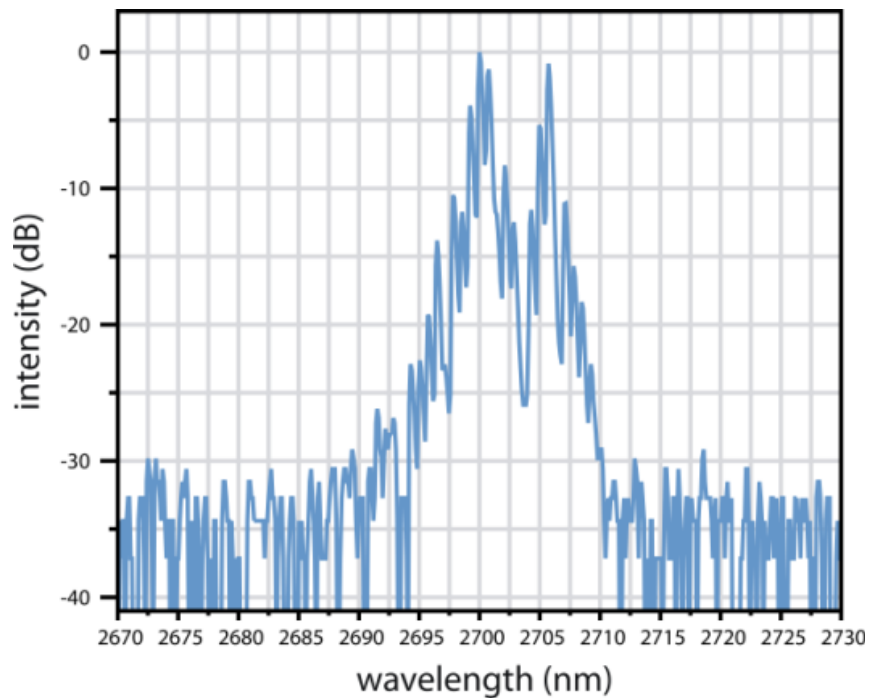
- High performance gas sensing
- Gas Sensing
- Sensing of liquids
- Free space communications
- Spectroscopy

### Optical and electrical characteristics:

Operating parameters	Symbol	Min	Typ	Max	Unit
Optical Output Power	$P_{out}$		5		mW
Lasing Wavelength	$\lambda$	2680	2700	2720	nm
Threshold Current	$I_{th}$	50	60	70	mA
Forward Current	$I_f$		100		mA
Operating Voltage	$V_{op}$		4		V
Beam Divergence Parallel	$\Theta_{  }$	20	30	40	deg.
Beam Divergence Perpendicular	$\Theta_{\perp}$	40	50	60	deg.
Emitting Area	WxH	4.0x1.2	4.4x1.3	4.8x1.4	$\mu\text{m}$
Slope Efficiency	$dP_o/dI_{op}$	0.08	0.1	0.12	mW/mA
Operating Temperature	$T_C$	-20		+50	$^{\circ}\text{C}$
Storage Temperature	$T_S$	-40		+80	$^{\circ}\text{C}$

## TYPICAL PERFORMANCE

Room Temperature CW Spectrum at 2700nm



Power versus Current at Room Temperature

