

## DFB Laser Diode 760nm 20mW

### FNPL-20S-760-DFB



**FNPL-20S-760-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

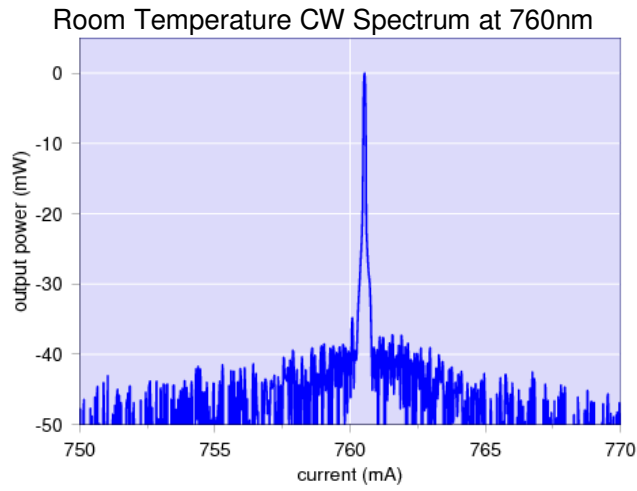
#### Applications

High performance gas sensing O<sub>2</sub>  
Gas Sensing  
Sensing of liquids  
Free space communications  
Spectroscopy

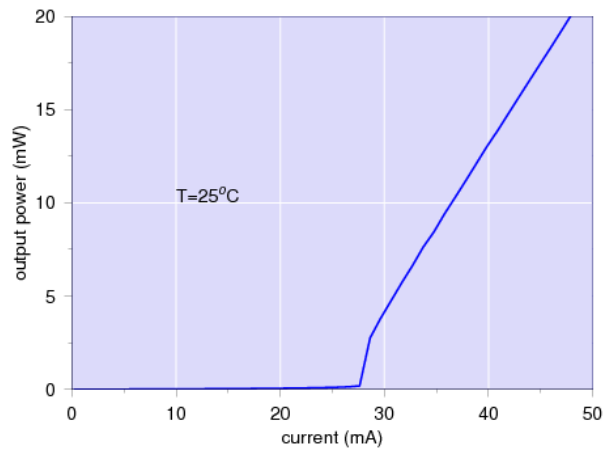
#### Optical and electrical characteristics: (T = 25 °C)

Operating parameters	Symbol	Min	Typ	Max	Unit
Optical output power	P <sub>out</sub>	-	20	22	mW
Lasing wavelength	λ	759	761	762	nm
Threshold current	I <sub>th</sub>	15	20	30	mA
Forward current	I <sub>f</sub>	-	50	60	mA
Operating Voltage			2.0	2.5	V
Beam divergence parallel	Θ <sub>  </sub>	10	15	20	deg.
Beam divergence perpendicular	Θ <sub>⊥</sub>	25	30	35	deg.
Side mode suppression		30	35	40	dB
Spectral width (FWHM)	Δλ	-	-	3	MHz
Emitting area	WxH	-	2x1.5	-	μm
Slope efficiency	dP <sub>o</sub> /dI <sub>op</sub>	0.6	0.7	0.9	mW/mA
Current tuning rate	C <sub>I</sub>	0.008	0.01	0.03	nm/mA
Temperature tuning rate	C <sub>T</sub>	0.03	0.04	0.08	nm/K
Operating temperature	T <sub>C</sub>	-20		+50	°C
Storage temperature	T <sub>S</sub>	-20		+85	°C

**TYPICAL PERFORMANCE**



Power against Operating Current



Tuning Range  
arrow indicates single mode tuning range

