

DFB Laser Diode 760nm 5mW

FNPL-5S-760-DFB



FNPL-5S-760-DFB is a CW DFB semiconductor laser diode operating at 760nm. It is delivered in standard TO-5.6 and TO-9 packages with optional monitor diode to stabilize power output and TO-5 and butterfly packages with integrated TEC, thermistor and monitor diode. Custom mounts are available upon request.

Key Features

- Very high spectral purity
- Narrow Line width <3MHz
- Excellent reliability
- Variety of packaging options

Applications

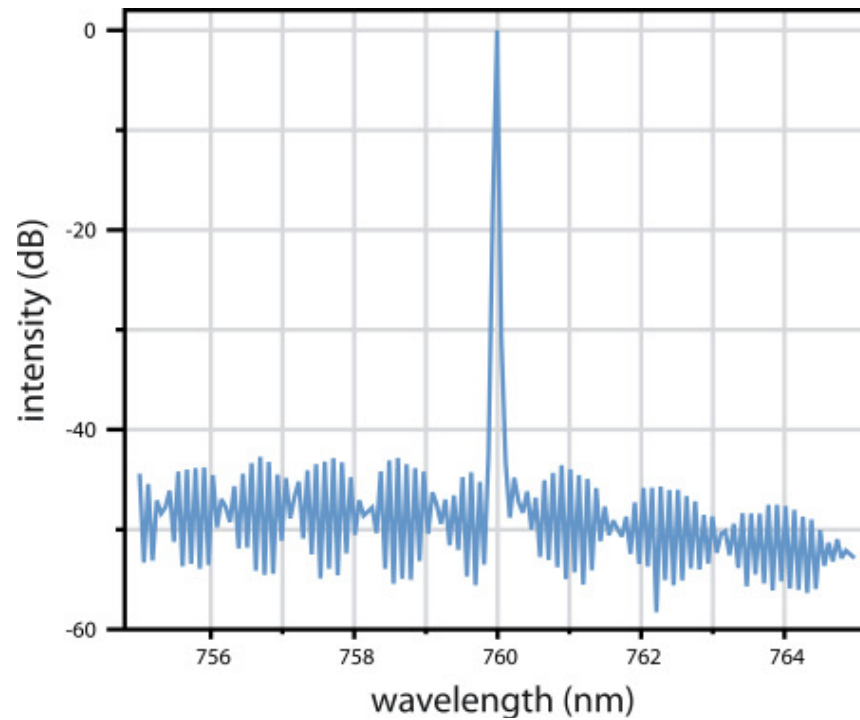
- High performance gas sensing; O₂
- Precision metrology
- Atomic clocks
- Spectroscopy
- Space technology

Optical and electrical characteristics:

Operating parameters	Symbol	Min	Typ	Max	Unit
Optical Output Power	P_{out}		5		mW
Lasing Wavelength	λ	759	760	761	Nm
Threshold Current	I_{th}	10	15	30	mA
Forward Current	I_f		30		mA
Operating Voltage	V_{op}		3		V
Beam Divergence Parallel	$\Theta_{ }$	30	35	40	deg.
Beam Divergence Perpendicular	$\Theta_{\perp}$	50	60	65	deg.
Emitting Area	WxH	1.2x1.3	1.5x2.0	2.0x2.2	μm
Slope Efficiency	dP_o/dI_{op}	0.2	0.5	0.6	mW/mA
Temp. Tuning Coefficient	C_T	0.03	0.04	0.05	nm/K
Current Tuning Coefficient	C_I	0.01	0.02	0.025	nm/mA
Operating Temperature	T_C	-20		+50	°C
Storage Temperature	T_S	-40		+80	°C

TYPICAL PERFORMANCE

Room Temperature CW Spectrum at 760nm



Mode-hop Free Wavelength Current Tuning at Different Temperatures

