

DFB Laser Diode 3640nm 1mW

FNPL-1S-3640-DFB



FNPL-1S-3640-DFB is a CW DFB semiconductor laser diode. It is delivered in standard TO66 packages with integrated TEC, thermistor and monitor diode. Custom mounts are available upon request.

Key Features

- Excellent reliability
- Variety of packaging options
- Narrow Linewidth <3MHz

Applications

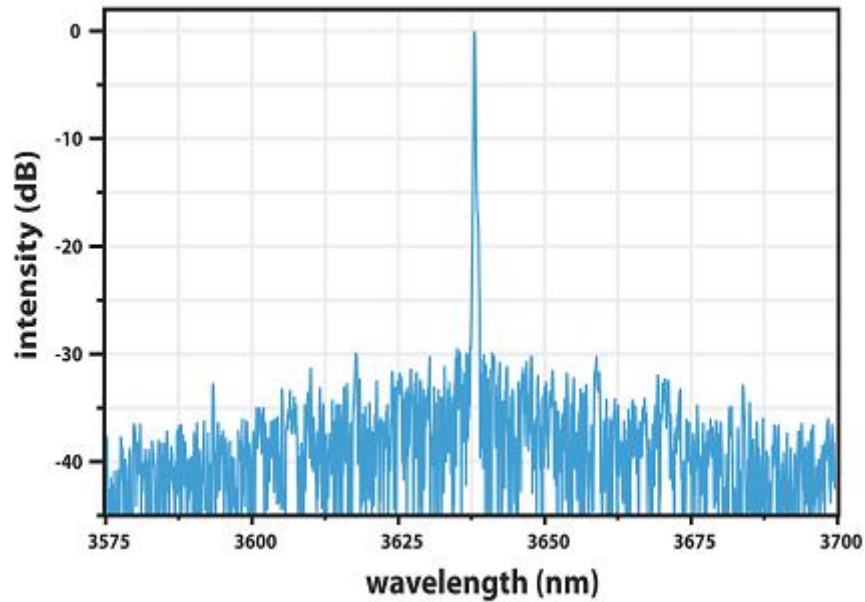
- High performance gas sensing
- Gas Sensing
- Sensing of liquids
- Spectroscopy

Optical and electrical characteristics: (T = 10°C)

Operating parameters	Symbol	Min	Typ	Max	Unit
Optical output power	P_{out}	-	>1	-	mW
Lasing wavelength	λ	3639	3640	3641	nm
Threshold current	I_{th}	60	70	90	mA
Forward current	I_f	-	140		mA
Beam divergence parallel	$\Theta_{ }$	-	-	35	deg.
Beam divergence perpendicular	Θ_{\perp}	-	-	55	deg.
Side mode suppression		-	>32	-	dB
Temperature Tuning Coefficient		-	-	0.4	nm/K
Current Tuning Coefficient		-	-	0.1	nm/mA
Emitting area	WxH	-	-	9x3	μ m
Slope efficiency	dP_o/dI_{op}	-	-	0.06	mW/mA
Operating temperature	T_c	-10	+20	-	°C
Storage temperature	T_s	-20		+80	°C

TYPICAL PERFORMANCE

Near Room Temperature CW Spectrum at 3640nm



Mode Hop Free Tuning by Current Variation at Different Temperatures

