

DFB Laser Diode 760nm 10mW

FNPL-10S-760-DFB



FNPL-10S-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

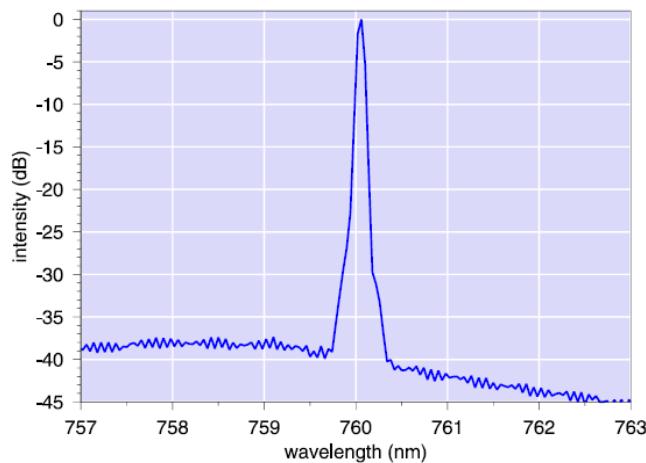
High performance gas sensing O₂
Gas Sensing
Sensing of liquids
Free space communications
Spectroscopy

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

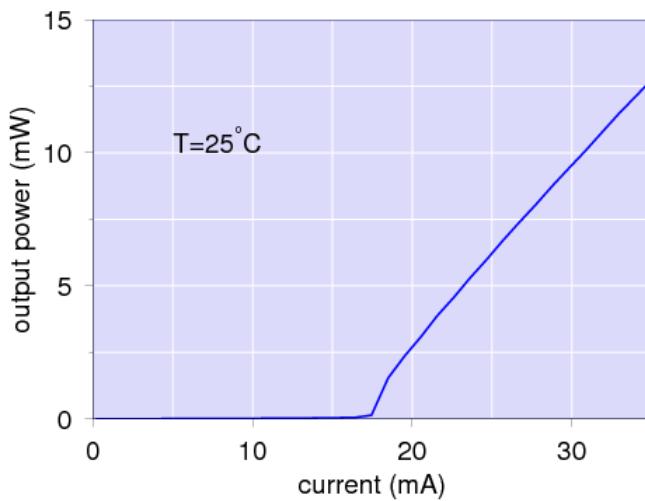
| Operating parameters | Symbol | Min | Typ | Max | Unit |
|-------------------------------|-----------------------------------|-------|-------|------|-------|
| Optical output power | P _{out} | 5 | 10 | 15 | mW |
| Lasing wavelength | λ | 759 | 761 | 762 | nm |
| Threshold current | I _{th} | 15 | 20 | 30 | mA |
| Forward current | I _f | 28 | 35 | 50 | mA |
| Operating Voltage | | | 2.0 | 2.5 | V |
| Beam divergence parallel | Θ | 10 | 15 | 20 | deg. |
| Beam divergence perpendicular | Θ⊥ | 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 _o /dI _{op} | 0.6 | 0.7 | 0.9 | mW/mA |
| Current tuning rate | C _I | 0.008 | 0.01 | 0.03 | nm/mA |
| Temperature tuning rate | C _T | 0.03 | 0.04 | 0.08 | nm/K |
| Operating temperature | T _c | -20 | | +50 | °C |
| Storage temperature | T _s | -20 | | +85 | °C |

TYPICAL PERFORMANCE

Room Temperature CW Spectrum at 760nm



Power against Operating Current



Tuning Range
arrow indicates single mode tuning range

