

## Mid-IR DFB Lasers for Spectroscopy

Tunable mid-IR lasers are ideal for trace gas sensing applications using Tunable Laser Diode Absorption Spectroscopy (TLDS) techniques. Norcada's distributed feedback (DFB) laser diodes provide an excellent tuning range and high stability.

### Features and Specifications:

- Integrated DFB grating provides single frequency operation
- Frequency tuning by adjusting laser current or temperature
- Tuning range of 8 nm without mode hopping
- Temperature tuning control: 0.2 nm / °C
- Current tuning control: 0.1 nm / mA
- Output Power: 4-6 mW
- Threshold Current: 80 mA

### Applications:

- Molecular spectroscopy
- Industrial gas sensing (TLDS)

### Package:

- TO-39 header with window lid
- Hermetically sealed
- Includes thermoelectric cooler (TEC) and thermistor

### Options:

- Mounted lens for beam collimation
- 14-pin butterfly style packaging

### Available Wavelengths (Center wavelength):

- 2465 nm
- 2475 nm
- 2485 nm
- 2495 nm
- 2505 nm

