

Tunable Mid-IR DFB Lasers for Methane Detection
Typical Specifications for 3270nm Lasers

Operating Parameters

| Parameter | Units | Min. | Max. |
|-----------------------------|-------|------|------|
| Storage Temperature | °C | -40 | 80 |
| Case Operating Temperature | °C | -20 | 40 |
| TEC Current | A | | 1.2 |
| Laser Diode Forward Current | mA | | 225 |
| Laser Diode Reverse Voltage | V | | 2 |

Typical Characteristics

| Parameter | Units | Typical |
|------------------------------------|-------|---------|
| Threshold Current @ 10°C | mA | 80 |
| Optical power @ 200mA & 10°C | mW | 1.5 |
| Forward Voltage | V | 2 |
| Thermistor Resistance @ 25°C | kΩ | 10 |
| Center Wavelength Tolerance @ 10°C | nm | ± 1 |
| Temperature Tuning | nm/°C | 0.27 |
| Drive Current Tuning | nm/mA | 0.03 |
| Side mode suppression ratio (SMSR) | dB | > 25 |

Package:

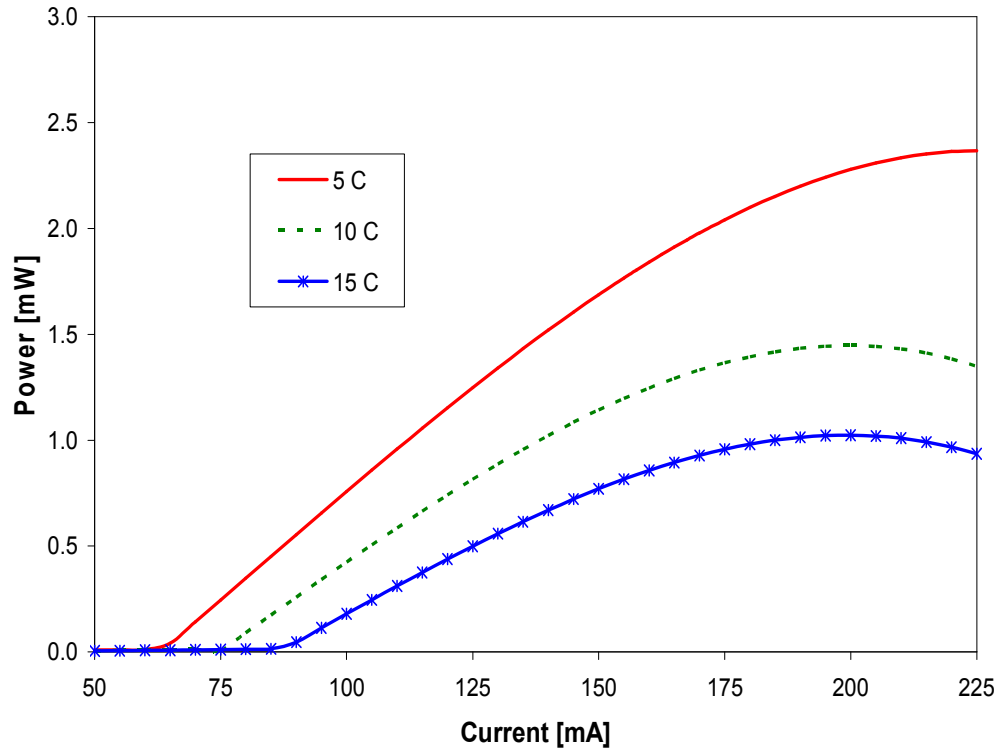
- TO-66 header, hermetically sealed
- AR coated Sapphire window
- Internal TEC and thermistor

Lens Option:

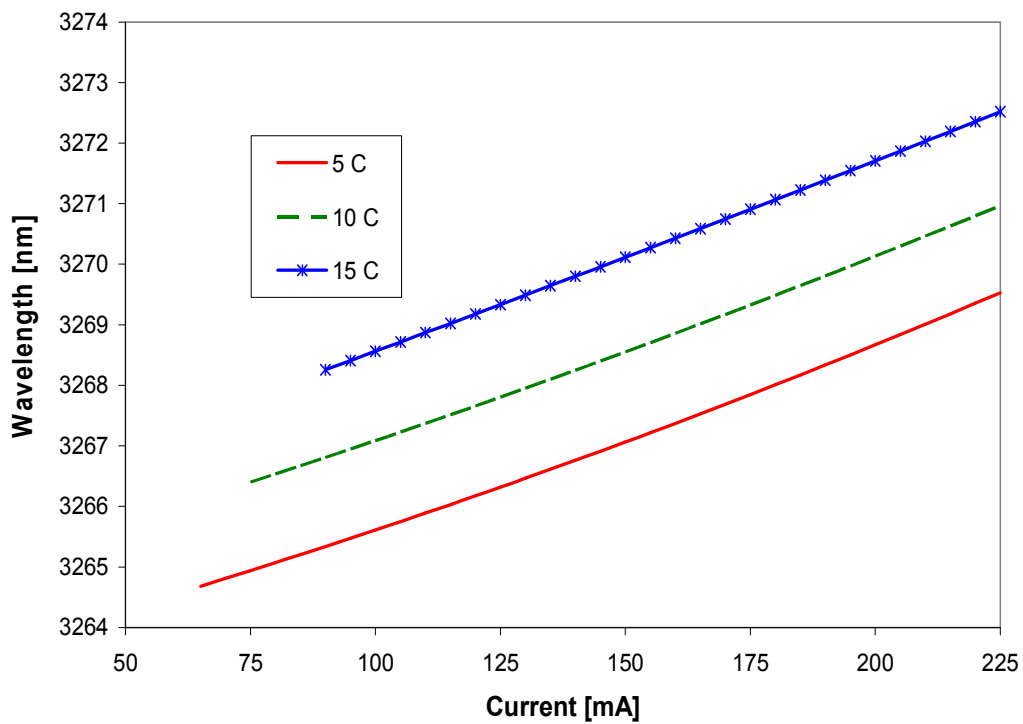
- Aspheric AR coated Lens, R < 0.6%
- Beam diameter (1/e): typically 4 mm
- Beam divergence: typically 0.5 to 2 mrad

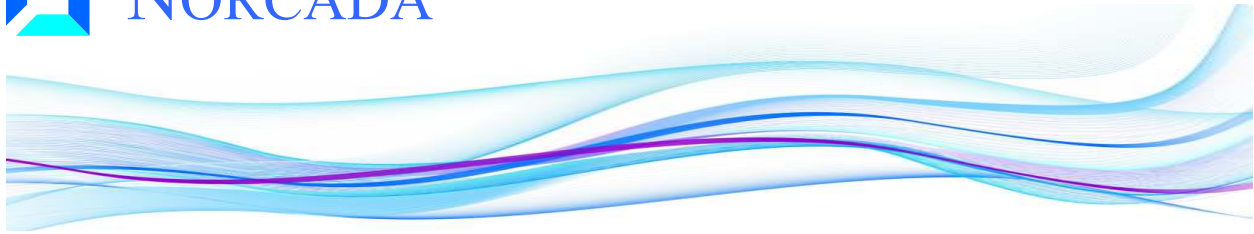


Typical LIV Characteristics



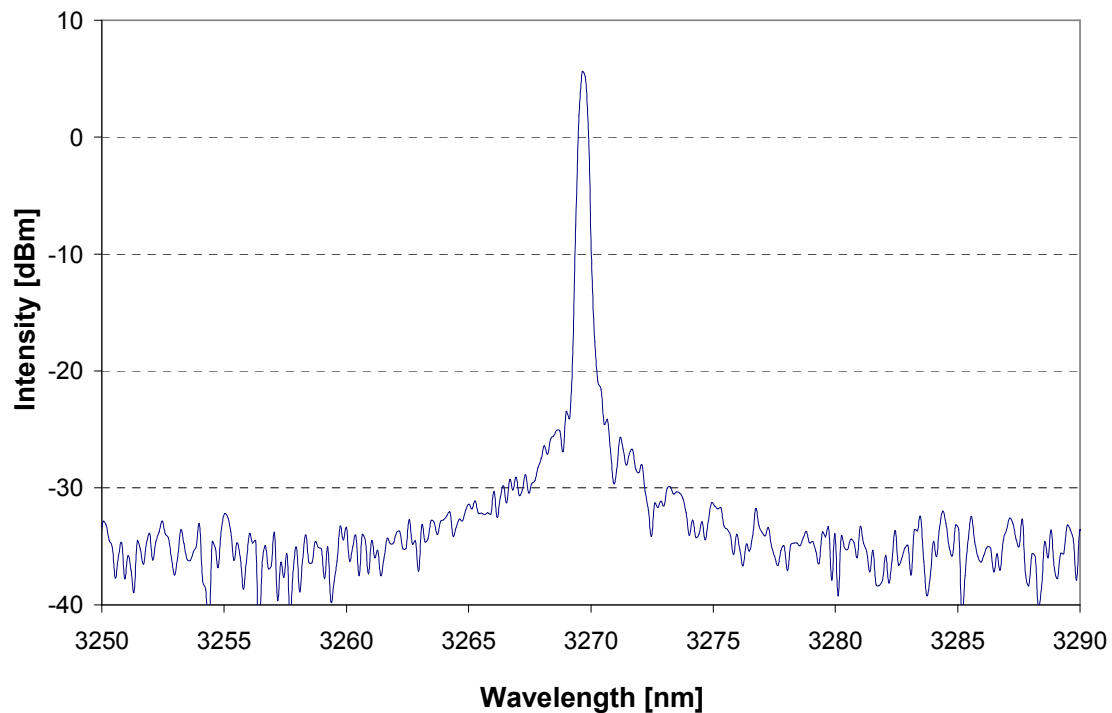
Typical Wavelength vs Current Curves





3270nm DFB Laser Spectrum

(For reference only, please consult us for further details)



Please Note:

The SMSR is greater than 30 dB. Our SMSR measurements and the spectral line width measurements are limited by the capability of the instrument used for the measurement. For further technical details, please contact us at info@norcada.com.