# FP3613a O-band Package High Power DFB 

## Product Brief

## FEATURES

- Single-frequency distributed feedback (DFB) laser chip


## APPLICATIONS

- Optical Fiber

Communications

- RF Photonic Links
- Fiber Optic Testing
- Medical
- Sensing


## NOTES

1. Measured at $25^{\circ} \mathrm{C}$
2. Non-condensing
3. Measured at specified operating power
4. Measured using our Whisperdrive laser mount
5. Above 1 GHz

## OVERVIEW

The FP3613 High Power Distributed Feedback (DFB) Laser is a high performance single spectral mode device, with output power of $>90 \mathrm{~mW}$, available in wavelengths ranging from 1260 nm to 1320 nm .

The package can be operated at higher temperatures for reduced power consumption in warm ambient environments.

The device is packaged into a standard 14-pin butterfly package, with an internal twostage optical isolator and polarization maintaining single-mode fiber output.

## TARGET PERFORMANCE

| General Parameter | Value | Unit |
| :--- | :---: | :---: |
| Output Power in Fiber ${ }^{1}$ | $>90$ | mW |
| Operating Current | $<600$ | mA |
| Wavelength | 1260 to 1320 | nm |
| Case Temperature Operating Range $^{2}$ | $10-55$ | ${ }^{\circ} \mathrm{C}$ |
| ${\text { Case Temperature Storage } \text { Range }^{2}}^{\circ} \mathrm{C}$ | $-10-85$ | ${ }^{\circ} \mathrm{C}$ |
| SMSR $^{3}$ | $>45$ | dB |
| Linewidth $^{3,4}$ | $<300$ | kHz |
| RIN $^{3,5}$ | -150 | $\mathrm{dBc} / \mathrm{Hz}$ |

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PINOUT

| Pin | Descriptions | Pin | Descriptions |
| :---: | :--- | :---: | :--- |
| 1 | Thermistor | 14 | Optional Case \&/or Laser Anode |
| 2 | Thermistor | 13 | Laser Anode |
| 3 | Laser Cathode | 12 | NC (Optional bias-T) |
| 4 | Monitor PD Anode | 11 | Laser Anode |
| 5 | Monitor PD Cathode | 10 | Optional Case \&/or Laser Anode |
| 6 | TEC + | 9 | Optional Case \&/or Laser Anode |
| 7 | TEC - | 8 | Optional Case \&/or Laser Anode |

## MECHANICAL DRAWING



All Dimensions in millimeters

