



Product Brief — FP3016u U-band Package Tunable Laser

FEATURES

- 45 nm tuning range: fast, continuous, gap free
- Integrated SOA functions as amplifier or shutter
- PM Fiber Output
- 14-pin Butterfly Package
- Internal Optical Isolator

APPLICATIONS

- Gas Sensing
- Test and Measurement
- Spectroscopy

NOTES

- 1. Gap-free continuous wavelength tuning range.
- Power depends on current tuning points and thermal management. 5 mW typical across majority of tuning range.

OVERVIEW

The FP3016u tunable laser consists of a monolithic Indium Phosphide chip that integrates a widely tunable laser with a semiconductor optical amplifier (SOA). The laser is electronically tuned and can address wavelengths in the U-band.

The integrated SOA facilitates flexible control of the output power and acts as a shutter when reverse biased, enabling dark tuning between channels.

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

SPECIFICATIONS

| General Parameter | Value | Unit |
|---------------------------|-------|--------|
| Center Wavelength | 1638 | nm |
| Tuning Range ¹ | ≥40 | nm |
| Output Power ² | ≥5 | mW |
| SMSR | >30 | dB |
| Linewidth | <50 | MHz |
| RIN | <-135 | dBc/Hz |



As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.





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PINOUT

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| Pin | Descriptions | Pin | Descriptions |
|-----|--------------|-----|--------------|
| 1 | TEC + | 14 | TEC - |
| 2 | Thermistor | 13 | Gain GND |
| 3 | Thermistor | 12 | Gain |
| 4 | SOA GND | 11 | PH GND |
| 5 | SOA | 10 | РН |
| 6 | FM GND | 9 | BM GND |
| 7 | FM | 8 | BM |

MECHANICAL DRAWING





All Dimensions in millimeters

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