

LD-FP-1590



1590 nm FP Laser Diode Coaxial

The Optilab LD-FP-1590 is a CWDM Coaxial DFB laser diode at 1590 nm for CWDM analog communication, CATV return-path, laboratory instrument, and R&D applications. This high-stability DFB laser chip has built-in InGaAsP monitor photodiode, built-in optical isolator and 4-pin coaxial-pigtailed package, single mode coupling, and FC/APC connector. Contact Optilab for more information.

Features

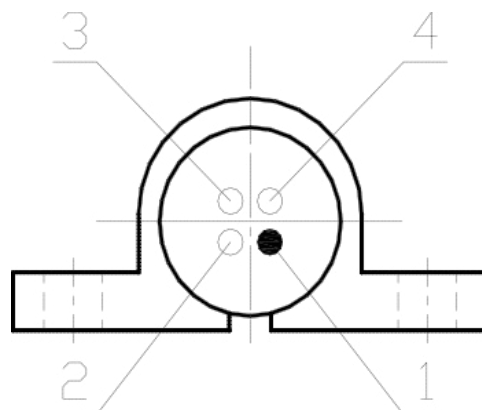
- Center wavelength range 1580 nm ~1600 nm
- High-stability FP laser chip
- Built-in InGaAsP monitor photodiode
- 4-pin coaxial-pigtailed package
- Single mode coupling
- Built-in optical isolator

Applications

- Analog communication
- CATV transmission return-paths
- Laboratory instrument
- R&D applications

Functional Diagram

- 1 Case GND
- 2 LD Cathode
- 3 LD Anode, PD Anode
- 4 PD Cathode



1590 nm FP Laser Diode Coaxial

OPTIONS

LD-FP-1590

TECHNICAL INFO

For technical info and support:

sales@optilab.com

www.optilab.com

WEB ORDER

To order, please visit OEQuest.com.



Optilab Advantage

- Innovation
- Performance
- Quality
- Customization
- Warranty

| Electrical Specifications | |
|-------------------------------|--|
| Threshold Current | 8 mA typ., 15 mA max. |
| Operating Current | 100 mA max. |
| Analog Bandwidth | 2.5 GHz typ. @ 30 mA |
| Monitor PD Current | 50 μ A min., 2 mA max. |
| Monitor PD Dark Current | 10 nA max. |
| Photodiode Capacitance | 10 pF min. |
| RF Passband Flatness | 1.0 dB max. |
| Noise Power Ratio | 40/14 min. @ 25 °C |
| Rise/Fall Time | 500 ps max. to 3 Gb/s |
| Optical Specifications | |
| Center Wavelength | 1590 nm \pm 10 nm |
| Optical Isolation | 20 dB min., 30 dB typ. |
| Optical Output Power | 3 dBm typ. |
| Laser Linewidth | 10 nm max. |
| Slope Efficiency | 0.05 W/A min., 0.15 W/A max. |
| Side Mode Supression Ratio | 30 dB min. |
| Spurious Noise w/ Carrier | -60 dBc typ. |
| Spurious Noise w/o Carrier | -52 dBc typ. |
| Relative Intensity Noise | -135 dB/Hz max. |
| Maximum Rating Specifications | |
| Laser Diode Reverse Voltage | 2 V |
| Laser Diode Forward current | 150 mA |
| Monitor PD Reverse Voltage | 15 V |
| Monitor PD Reverse Current | 2 mA |
| Mechanical Specifications | |
| Operating Temperature | -20° C to +75° C |
| Storage Temperature | -40° C to +85° C |
| Power Supply Voltage | 1.2 V typ., 2.0 V max. |
| Optical Connectors | FC/APC, SC/APC |
| Optical Fiber | SMF-28 with 900 μ m or 3 mm jacket |
| Housing Dimensions | 28 mm x 6 mm x 6 mm |
| Housing | Coaxial with Fiber Pigtail |