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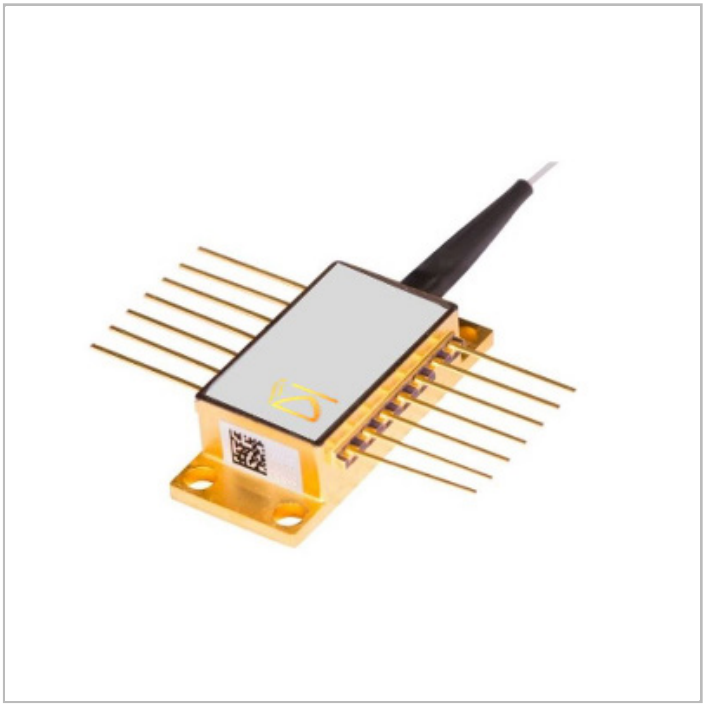
LASER LAB SOURCE

manufactured by AeroDIODE

DFB BUTTERFLY LASER DIODE

1310nm, 180mW (CW) / 250mW (Pulsed)



1310nm DFB Laser Diode
1310LD-4-0-0 / LASER-DIODE

- Output Power (CW mode): 180 mW
  Output Power (Pulsed): 250 mW
- Spectral Width (FWHM): < 200 kHz
- 14-Pin Butterfly Package, Industry Standard Type 1 Pin Configuration
- SMF28 Fiber, FC/APC Connector
- PM1550 Polarization Maintaining Fiber Available (Inquire)

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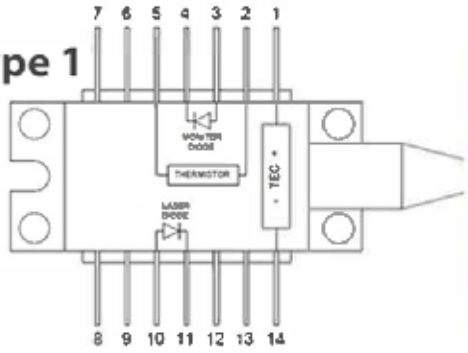
Distributed Feedback Laser Diode, Fiber-Coupled Butterfly Package

These DFB lasers offer a single longitudinal mode (single frequency) emission profile and up to 180mW CW output power and 250mW pulsed. DFB lasers utilize Bragg diffraction gratings in the active gain region of the semiconductor material to form a waveguide. Their high stability and wavelength tuneability make them an excellent choice for sensing, spectroscopy, metrology, telecom, and atomic physics research applications.

These laser diodes are offered in an industry standard 14-pin butterfly package with a single-mode fiber pigtail, terminated with an FC/APC connector. PM1550 polarization maintaining fiber is available; inquire for price and lead-time. They have an integrated thermo-electric cooler, an internal 10 kΩ thermistor, and an internal monitor photodiode. The package is electrically floating relative to ground, offering flexibility in mounting and control of the laser.

ELECTRICALLY FLOATING PACKAGE | TYPE 1 PIN CONFIGURATION

Type 1



№	Description	№	Description
1	TEC Anode	14	TEC Cathode
2	Thermistor	13	n/c
3	Monitor PD Anode	12	n/c
4	Monitor PD Cathode	11	LD Cathode
5	Thermistor	10	LD Anode
6	n/c	9	n/c
7	n/c	8	n/c

Part Number: 1310LD-4-0-0 / LASER-DIODE

OPTICAL SPECIFICATIONS

- Wavelength: 1310 nm ±5 nm
- CW Output Power: 180 mW
- Emission Bandwidth: < 200 kHz
- Pulsed Output Power: 250 mW
- Wavelength Tuning vs. Temperature: 0.08 nm/°C
- Wavelength Tuning vs. Current: 0.003 nm/A
- SMSR: 50 dB (typ)
- Internal Photodiode Responsivity: 5 mA/W
- Internal Photodiode Dark Current: 500 nA (max)

ELECTRICAL SPECIFICATIONS

- Operating Current: 1200 mA (typ)
- Threshold Current: 20 mA (typ)
- Operating Voltage: 1.8 V (typ)
- Laser Diode Reverse Voltage: 15 V (max)
- TEC Current: 1 A (max)
- TEC Voltage: 1.5 V (max)
- Thermistor: 10 kΩ

FIBER SPECIFICATIONS

- Single Mode SMF28, Fiber Core: 9 µm
- Fiber Bend Radius: 30 mm (min)
- Fiber Termination: FC/APC Connector
- PM1550 Fiber Available (Inquire for Details)
- Connector Aligned to Slow-Axis for PM Fiber

GENERAL SPECIFICATIONS

- Case Storage Temperature: -40°C to 70°C
- Case Operating Temperature: -20°C to 60°C
- Lead Soldering Temperature: 260°C

Product Sales and Service

Orders for this product are fulfilled by LaserDiodeControl.com, part of the Laser Lab Source group. It is manufactured by Aerodiode, Talence, France.

Product Warranty

This product is sold with a full one-year warranty. It is warrantied to be free from defects in material and/or workmanship for a period of one year from the date of shipment.

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