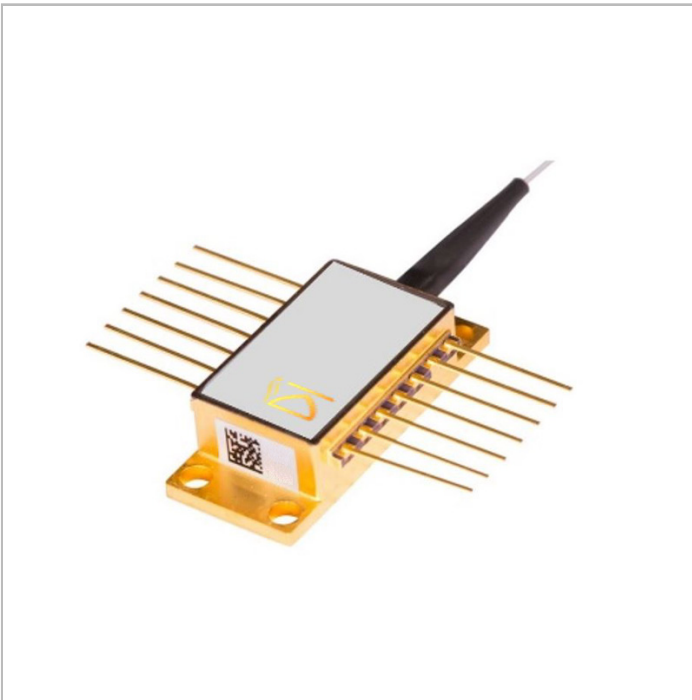




Offered by
LASER LAB SOURCE

manufactured by **AeroDIODE**

1470nm DFB Butterfly Laser Diode 40mW CW / 60mW Pulsed Output Power



1470LD-2-0-0 / LASER-DIODE

- o Butterfly Package DFB Laser Diode
- o Narrow Line Width < 200 kHz
- o Single Mode Fiber-Coupled, FC/APC Connector
PM Fiber Available
- o Industry-Standard Type-1 Pinout
- o Also Available in Pre-Configured CW Mode
Control and Mount Module



**LASER
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SOURCES**



DFB BUTTERFLY LASER DIODE

These DFB lasers offer a single longitudinal mode (single frequency) emission profile up to 40mW CW output power, and 60mW pulsed output power.

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.

RELIABLE PERFORMANCE IN A STANDARD LASER PACKAGE

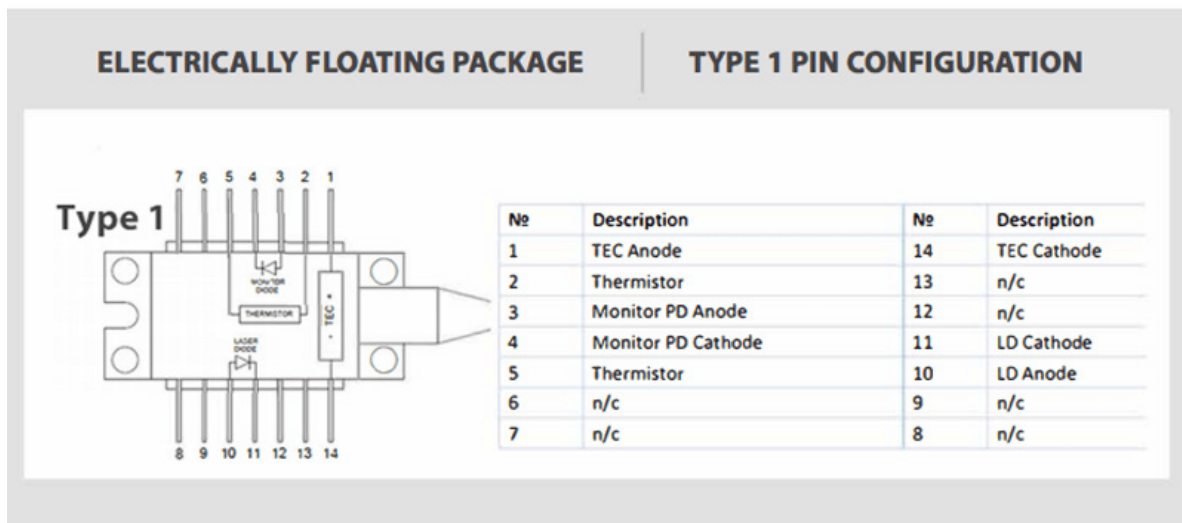
These laser diodes are offered in an industry standard 14-pin butterfly package with a single-mode fiber pigtail, terminated with an FC/APC connector. Polarization-maintaining fiber is available; inquire for price and lead-time.

The laser package integrates a thermo-electric cooler with 10 k Ω thermistor, and an internal monitor photodiode.

The pinout is industry-standard Type-1 pinout. The package is electrically floating relative to ground, offering flexibility in mounting and control of the laser.

AVAILABLE IN A PRE-CONFIGURED CW-MODE CONTROL AND MOUNTING MODULE

This laser diode can also be ordered mounted in a pre-configured CW-mode control and mounting module. The control system arrives with operating safety limits programmed, and the laser diode mounted in the temperature-controlled mounting socket.





1470NM DFB LASER DIODE - 40MW CW / 60MW PULSED

OPTICAL SPECIFICATIONS

- Wavelength: 1470 nm \pm 5 nm
- CW Output Power: 40 mW
- Emission Bandwidth: < 200 kHz
- Pulsed Output Power: 60 mW
- Wavelength Tuning vs. Temperature: 0.08 nm/ $^{\circ}$ 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)
- Integrated Optical Isolator

ELECTRICAL SPECIFICATIONS

- Operating Current: 300 mA (typ)
- Threshold Current: 8 mA (typ)
- Operating Voltage: 1.6 V (typ)
- Laser Diode Reverse Voltage: 15 V (max)
- TEC Current: 1 A (max)
- TEC Voltage: 1.5 V (max)
- Thermistor: 10 k Ω

FIBER SPECIFICATIONS

- Single Mode SMF28, Fiber Core: 9 μ m
- 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 $^{\circ}$ C to 70 $^{\circ}$ C
- Case Operating Temperature: -20 $^{\circ}$ C to 60 $^{\circ}$ C
- Lead Soldering Temperature: 260 $^{\circ}$ C



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**LASER
DIODE
SOURCES**

PRODUCT SALES AND SERVICE:

Unlimited phone and email support is provided for products purchased through Laser Lab Source. Orders for this product are fulfilled by Laser Lab Source in North America and select international regions. It is manufactured by AeroDIODE, Talence, France.

PRODUCT WARRANTY:

This product is sold with a full one-year warranty. It is warranted 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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