

DEVICE

1064 nm DFB Laser Diode, PM Output, Up to 400 mW Kink Free

OVERVIEW

The Optilab LD-1064-PM-400 is a high-power laser diode has been designed as a light source for pulsed fiber lasers and CW applications. It is mostly utilized in combination with an external optical modulator, such as a Mach-Zehnder Interferometer (MZI) modulator. It offers kink free output powers up to 400mW CW. Wavelength stabilized high power single mode laser module has been designed as a CW light source for narrow bandwidth fiber laser and direct frequency conversion applications. Contact Optilab for more information.

FEATURES

- Center wavelength: 1064±2 nm
- High Output power, up to 400mW kink free CW

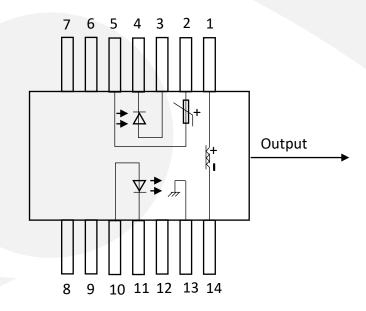
USE IN

- LiDAR
- Fiber laser systems
- Free space communications

- Built in isolator
- Built in TEC for wavelength tuning
- Frequency conversion
- Optical spectroscopy

PIN OUT DIAGRAM

PIN#	INFORMATION	PIN#	INFORMATION
1	Peltier Cooler (+)	8	N/C
2	Thermistor	9	N/C
3	Monitor anode (-)	10	Laser Anode (+)
4	Monitor Cathode (+)	11	Laser Cathode (-)
5	Thermistor	12	N/C
6	N/C	13	Case Ground
7	N/C	14	Peltier Cooler (-)







SPECIFICATIONS

GENERAL

Center Wavelength Range	1064 ± 5 nm typ.
Wavelength Tuning Range	± 1 nm
Operating power	400 mW typ.
Peak Power	1.3 W typ.
Forward Voltage	2 V typ.
Threshold Current	40 mA typ.
Pulse Width	500ns max.
Repetition Rate	500kHz max
Monitor Dark Current	10nA max
Polarization Extinction Ratio	20 dB typ.

MECHANICAL

Operating Temperature	-10°C to +60°C
Storage Temperature	-40°C to +85°C
Operating Humidity	95% @ < 30℃
Optical Fiber Type	PM 98D
Optical Connector	FC/APC, others available

ABSOLUTE MAXIMUM RATINGS

Reverse Voltage	2 V
Operating Current	500 mA
Heat Pump Current	2.2 A
PD Forward Current	10 mA
TEC Current	4 V
TEC Voltage	2.2 A





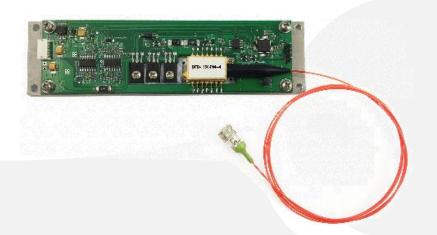
AVAILABLE ACCESSORIES

Universal Laser Diode Controller (ULDC)



ULDC is a fully integrated laser diode controller with precise current and temperature setting. With a Zero Insertion Force (ZIF) adaptor, ULDC can be used with all 14 pin laser diodes.

Laser Source Module, Polarization Maintaining



LD-1064-PM-400 can be ordered with DFB-PM-M, which has laser's operating temperature and output power precisely controlled to ensure constant wavelength and power stability. It can be used for module level integration system.

