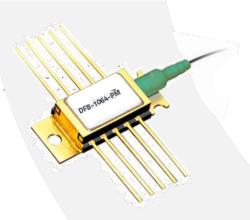


## DFB-1064-PM-100-CW



#### DEVICE

### 1064 nm DFB Laser Diode, PM Output, 100 mW

The Optilab DFB-1064-PM-100-CW is a Distributed FeedBack Laser designed for Continuous Wave (CW) operation. It is mostly utilized in combination with an external optical modulator, such as a Mach-Zehnder Interferometer (MZI) modulator. It offers a CW power output of 100 mW. 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. The DFB- xxxx-PM-200-CW can also be ordered with 1030 nm wavelength option. Contact Optilab for more information.

#### OVERVIEW

#### **FEATURES**

- Center wavelength: 1064±2 nm
- High Output CW power: 100 mW
- **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

1 TEC (+)

6 Laser Anode

2 Thermistor

7 Lser Cathode

3 Monitor Anode

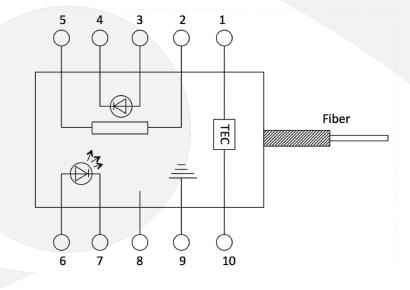
8 NC

4 Monitor Cathode

9 Package Ground

5 Thermistor

10 TEC (-)







# DFB-1064-PM-100-CW

**SPECIFICATIONS** 

GENERAL

Center Wavelength Range	1064 ± 2 nm typ.	
Wavelength Tuning Range	± 1 nm	
Operating CW Current	400 mA max.	
CW Output Power	100 mW typ.	
Forward Voltage	2 V typ.	
Threshold Current	25 mA typ.	
Photodiode Dark Current	5 nA max.	
Side Mode Suppression	30 dB min.	
Linewidth	100 MHz typ.	
Polarization Extinction Ratio	20 dB typ.	
	**	

**MECHANICAL** 

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

ABSOLUTE MAXIMUM RATINGS

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

**OPTIONS** 

DFB-xxxx-PM-yy

wavelength in nm: 1030, 1064 yy: Output Power in mW: 100





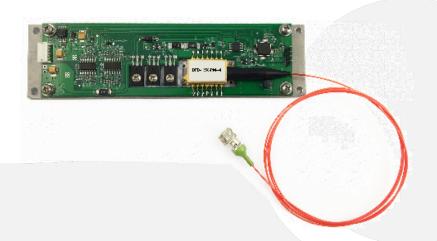
#### **AVAILABLE ACCESSORIES**

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.

DFB Laser Source Module, Polarization Maintaining (DFB-1064-PM-100-CW)



DFB-1064-PM-100-CW can be ordered as DFB-PM-M, which has DFB 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.

