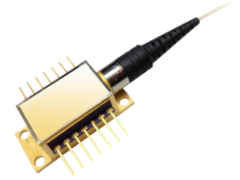


# 1104 FP Laser Diode

**LD-1310P-BP**



## 1310 nm Fabry Perot Laser Diode, 20 mW CW, 50 mW Peak Power

The LD-1310P-BP is a high power Fabry-Perot (FP) laser diode with a 1310 nm wavelength. The LD-1310P-BP incorporates a strained multi-quantum (st-MQW) laser diode chip with thermo-electric cooler (TEC), a pin photodiode, and a PM output fiber in a hermetically sealed 14-pin butterfly package. It can be used for both CW and pulse mode. Also, the laser is designed for laboratory test application that requires short coherence laser.

### FEATURES

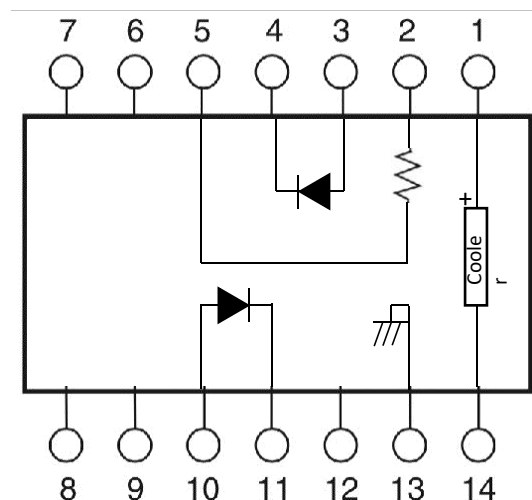
- 20 mW CW Output Power
- 50 mW Peak Power
- Used for Both CW & Pulse
- Short Coherence Length
- PM Fiber Output Available
- Built in TEC, Thermistor & Monitor PD

### USE IN

- Interferometer
- Multi-mode Laser Source
- General Laboratory and Research Use
- Fiber Sensors

### FUNCTIONAL DIAGRAM

Pin#	Desc	Pin#	Desc
1	TEC (+)	8	NC
2	Thermistor	9	NC
3	Detector (P)	10	LD (P)
4	Detector (N)	11	LD (N)
5	Thermistor	12	NC
6	NC	13	Ground
7	NC	14	TEC (-)



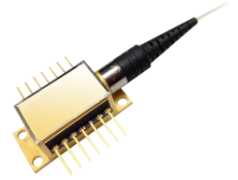
**Order notes to our customers:** The default parameters are as follows. For special needs, please contact sales.

**1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.**

**2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.**

## 1104 FP Laser Diode

LD-1310P-BP

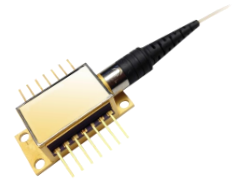


Center Wavelength	1270 nm to 1330 nm
Optical Output Power (CW)	20 mW typ.
Operating Current (CW)	200 mA typ.
Peak Output Power (Pulse)	50 mW typ.
Operating Current (Pulse)	500 mA typ.
Forward Voltage	2.5 V typ.
Series Resistance	25 $\Omega$ typ.
Threshold Current	25 mA typ.
Monitor Current	0.10 mA min.; 1.0 mA max.
Photodiode Dark Current	2 nA typ.; 100 nA max.
Spectral Width	10 nm max.
Optical Isolation	30 dB typ. (No Isolator Version is Available Up on Special Request)
Polarization Extinction Ratio	20 dB typ.
Operating Temperature	-10 °C to +60 °C
Storage Temperature	-40 °C to +70 °C
Operating Humidity	95% @30 °C max.
Optical Fiber Type	SM Fiber (PM Fiber Available)
Optical Connector	FC/APC, Other Available
TEC Current	1.0 A max.
TEC Voltage	2.4 V max.
TEC Resistance	2.4 $\Omega$ typ.
Thermistor Resistance	7.7 k $\Omega$ min.; 12.6 k $\Omega$ max.
Thermistor B Constant	3,270 K min.; 3,450 K typ.; 3,630 K max.

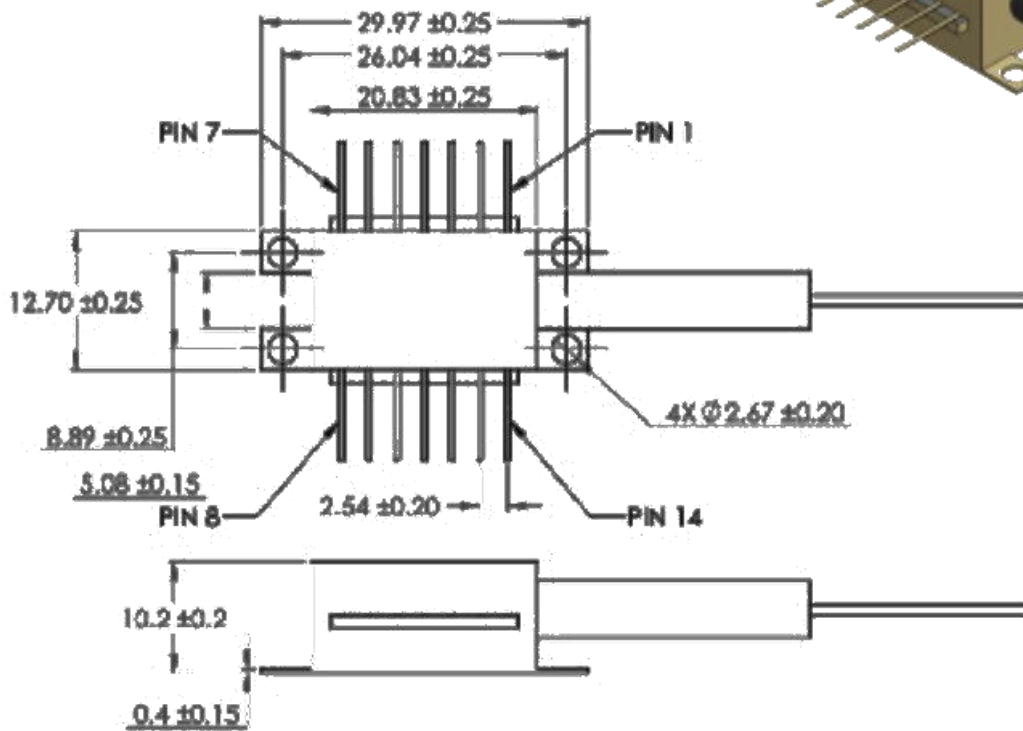
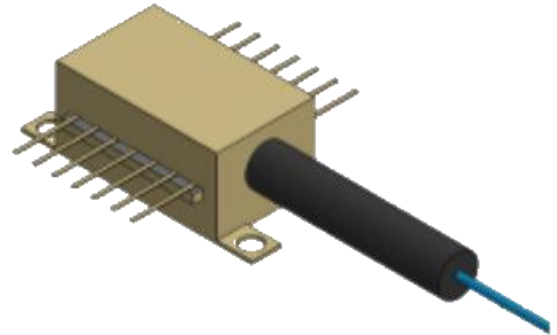
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**1) Connector FC/APC, 900  $\mu$ m, 1 m by default for all devices except for high power devices.**  
**2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.**

# 1104 FP Laser Diode

**LD-1310P-BP**



## MECHANICAL DRAWING



Unit: mm

## ORDERING OPTIONS

LD-13XXP-BP-YY-ZZ

XX: Wavelength in nm

YY: PM for PM, None for SM

ZZ: Output Power in mW: 20, 30

**Order notes to our customers:** The default parameters are as follows. For special needs, please contact sales.

1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.

2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.