

# 1002 1480 nm Pump

PL-1480-500

## 1480 nm Pump Laser Diode, 500 mW, SM/PM Fiber

The pump has been designed for use in a wide variety of optical amplifiers, such as EDFA and Raman amplifiers used in optical transmission systems, especially in dense wavelength division multiplexing (DWDM) systems. A strained multi-quantum well (st-MQW) laser diode chip is integrated with thermo-electric cooler (TEC) and PIN photodiode in a hermetically sealed 14-pin butterfly package.

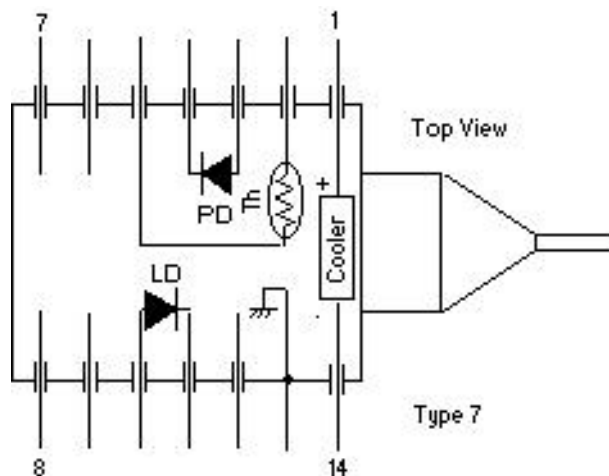
### FEATURES

- Fiber-Coupled Power up to 500 mW
- SM/PM Fiber
- 14-pin Butterfly Footprint
- Integrated PIN Photodiode for Back Facet Monitor

### USE IN

- Pump Source for Er-Doped Fiber Amplifier
- C- and/or L-band EDFA
- Single Channel Amp. to DWDM Amp.
- Pump Source for Raman Amplifier

### FUNCTIONAL DIAGRAM



Pin	Description
1	Cooler (+)
2	Thermistor
3	PD Anode (-)
4	PD Cathode (+)
5	Thermistor
6	No Connection
7	No Connection

Pin	Description
8	No Connection
9	No Connection
10	LD Anode (+)
11	LD Cathode (-)
12	No Connection
13	Case Ground
14	Cooler (-)

**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.**

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Storage Temperature	-40°C to 85°C
Operating Case Temperature	-20°C to 70°C
LD Forward Current	2100 mA max.
LD Reverse Voltage	2 V max.
PD Forward Current	5 mA max.
PD Reverse Voltage	20 V max.
TEC Current	-1.1 min.; 4.5 A max.
TEC Voltage	4.5 V max.
Relative Humidity	0 to 85%
Torque Force	0.08 N m max.
Electrostatic Discharge (ESD) (HBM)	500 V max.
Fiber-Coupled Power	500 mW min.
Threshold Current	120 mA max.
LD Forward Voltage	2.5 V max.
LD Forward Current (BOL)	1800 mA max.
LD Forward Current (EOL)	2070 mA max.
Monitor Current	100 uA min.; 2000 uA max.
Monitor Dark Current	100 nA max.
Monitor Capacitance	15 pF max.
Center Wavelength	1460 nm to 1490 nm
Spectral Width	8 nm max.
TEC Current	3.2 max.
TEC Voltage	3.8 V max.
Total Power Consumption	15 W max.
Polarization Extinction Ratio	16 dB min.
Thermistor Resistance	9.5 k ohms min.; 10 k ohms typ.; 10.5 k ohms max.
Thermistor B Constant	3900 K typ.
Tracking Error	-0.5 dB min.; 0.5 dB max.
Return Loss	25 dB min.
Isolation	30 dB min.
Fiber Type	SM/PM

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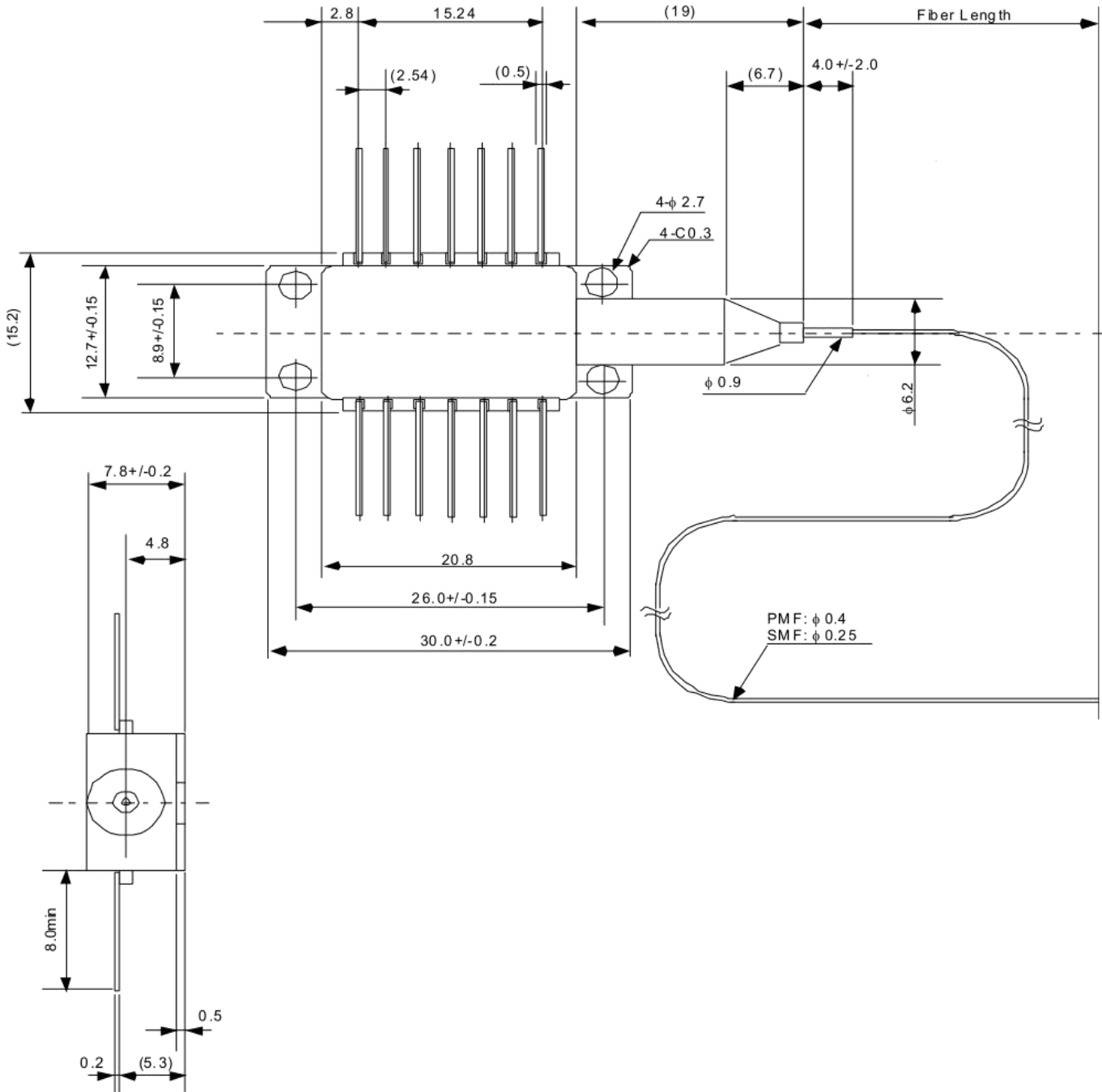
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## MECHANICAL DRAWING



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