

### 1002 1480 nm Pump





# 1491 nm Pump Laser Diode, 240 mW, 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.

#### **FFATURES**

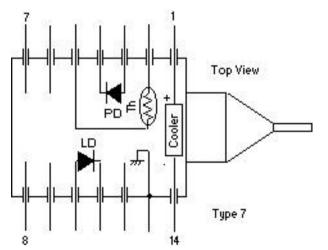
- Rated Output Power Up to 250 mW (CW)
- Polarization Maintaining Fiber Pigtail
- 14-pin Butterfly Footprint

- Integrated PIN Photodiode for Back **Facet Monitor**
- Single Mode Fiber

#### **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

- Cooler (+)
- Thermistor
- 3 PD Anode (-)
- 4 PD Cathode (+)
- Thermistor
- 6 Not Connected
- 7 Not Connected

Pin Description

- 8 Not Connected
- 9 Not Connected
- 10 LD Anode (+)
- 11 LD Cathode (-)
- 12 Not Connected
- 13 Case GND
- 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
Operation Temperature	-20°C to 70°C
LD Forward Current	1000 mA max.
LD Reverse Voltage	2 V max.
PD Forward Current	5 mA max.
PD Reverse Voltage	20 V max.
TEC Current	-0.6 A min.; 2 A max.
TEC Voltage	4.5 V max.
Center Wavelength (FP)	1460 nm to 1490 nm
Center Wavelength (FBG)	1420 nm to 1510 nm (±1.5 nm)
Spectral Width (FP)	8 nm max.
Spectral Width (FBG)	3 nm max.
Forward Voltage	2.5 V max.
Forward Current at EOL	1.2xlfBOL mA max.
Monitor Current	50 μA min.; 1000 μA max.
Monitor Dark Current	100 nA max.
Extinction Ratio	16 dB min.
Thermistor Resistance	9.5 k $\Omega$ min.; 10 k $\Omega$ typ.; 10.5 k $\Omega$ max.
Thermistor B Constant	3900 K typ.

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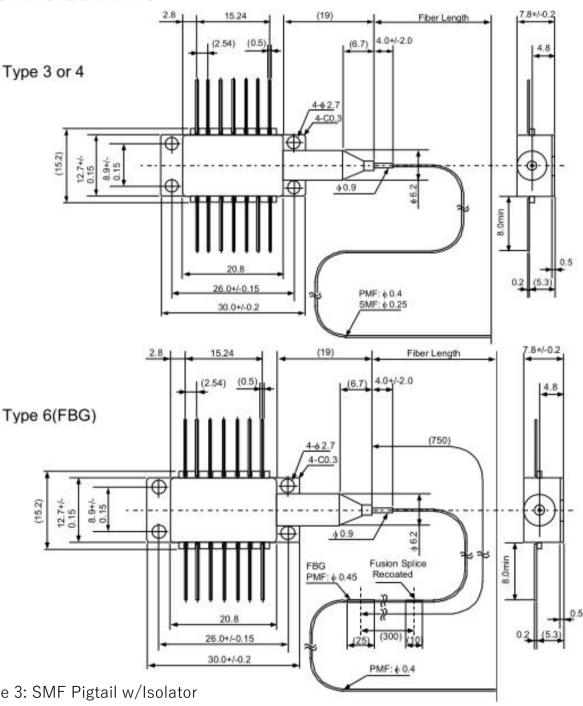
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#### MECHANICAL DRAWING



Type 3: SMF Pigtail w/Isolator

Type 4: PMF Pigtail w/Isolator

Type 6: PMF Pigtail w/FBG

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