

### 1002 1480 nm Pump

sales@wdmquest.com www.wdmquest.com

# PL-1456-PM-240



## 1456 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.

#### FEATURES

- Rated Output Power Up to 240 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



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.

P.01



## 1002 1480 nm Pump

## PL-1456-PM-240

| 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)      | 1400 nm to 1500 nm (±2 nm)            |
| Spectral Width (FP)          | 8 nm max.                             |
| Spectral Width (FBG)         | 3 nm max.                             |
| LD Operating Forward Voltage | 2.5 V max.                            |
| LD 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. (Type 4 & Type 6)          |
| Isolation                    | 30 dB min. (Type 3 & Type 4)          |
| Thermistor Resistance        | 9.5 kΩ min.; 10 kΩ typ.; 10.5 kΩ max. |
| Thermistor B Constant        | 3900 K typ.                           |

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.

Product specifications and price are subject to change without notice. © 2023 WDMQuest. Mar 2023 Rev. 5.0

P.<u>02</u>



sales@wdmquest.com www.wdmquest.com

### 1002 1480 nm Pump





Type 4: PMF Pigtail w/Isolator

Type 6: PMF Pigtail w/FBG

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.

P.03