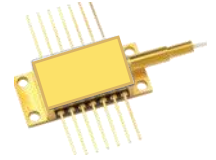


# 1001 980 nm Pump

**PL-980-250**



## 980 nm Pump Laser Diode, 250 mW Kink Free, TEC, FBG

These lasers are designed as pump sources for Erbium-Doped Fiber Amplifier (EDFA) applications. Processes and techniques of coupling the fiber to the laser allow high output powers that are very stable with both time and temperature.

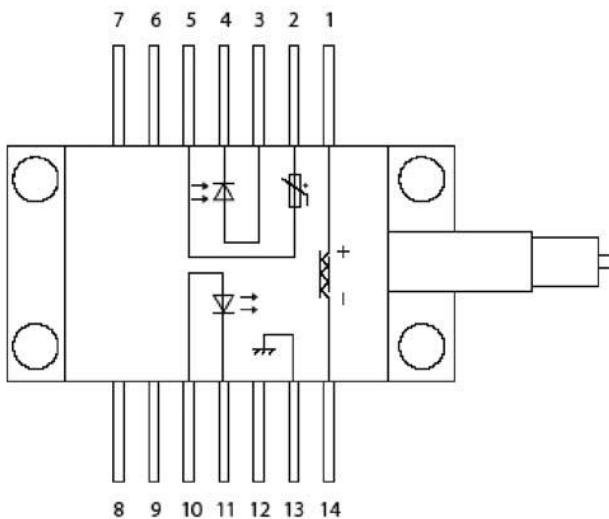
### FEATURES

- Double Fiber Bragg Grating Wavelength Stabilization
- High Output Power to 400 mW Kink Free
- Single-mode Fiber Pigtail
- RoHS Compliant
- Hermetically Sealed 14-pin Butterfly Package
- Telcordia GR-468-CORE Compliant
- Field Proven High Reliability
- Internal Thermoelectric Heatpump and Monitor PD

### USE IN

- Low Noise EDFAs
- HFC Applications
- DWDM EDFAs

### FUNCTIONAL DIAGRAM



#### Pin Description

- |                       |                       |
|-----------------------|-----------------------|
| 1 Peltier Cooler (+)  | 8 Not Connected       |
| 2 Thermistor          | 9 Not Connected       |
| 3 Monitor Anode (-)   | 10 Laser Anode (+)    |
| 4 Monitor Cathode (+) | 11 Laser Cathode (-)  |
| 5 Thermistor          | 12 Not Connected      |
| 6 Not Connected       | 13 Case Ground        |
| 7 Not Connected       | 14 Peltier 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.**

## 1001 980 nm Pump

PL-980-250

Threshold Current	35 mA typ.; 45 mA max.
Forward Voltage	1.9 V typ.; 2.5 V max.
Centre Wavelength	974 nm typ.
Spectral Width ( RMS@-13 dB )	0.2 nm typ.; 1 nm max.
Spectrum Stability ( t=60 s )	±0.2 nm max.
Temperature Dependence of Peak Wavelength	0.02 nm/°C max.
Wavelength Tolerance	±0.5 nm max.
Monitor Detector Responsivity	1 µA/mW min.; 10 µA/mW max.
Monitor Dark Current	50 nA max.
Thermistor Resistance	9.5 kΩ min.; 10 kΩ typ.; 10.5 kΩ max.
Thermistor BETA Value	3,575±1% K typ.
Heatpump Current	1.5 A max.
Heatpump Voltage	2.8 V max.
Operating Temperature	-20°C to +75°C
Storage Temperature	-40°C to +85°C
Laser Forward Current	1000 mA max.
Laser Reverse Voltage	2 V max.
Bend Radius	20 mm min.
Fiber Type	Puremode HI980 or Equivalent 250 µm Primary Coated
Coating Outside Diameter	245±10 µm
Coating Material	UV Cured, Dual Acrylate
Cladding Outside Diameter	125±0.5 µm
Core to-cladding Offset	0.3 µm max.
Cutoff Wavelength	930±50 nm
Attenuation	2.5 dB/km @ 980 nm max.
Mode-field Diameter	4.2±0.3 µm @ 980 nm
FBG Recoat Outside Diameter	260±20 µm
Fiber Proof Test Level	200 kpsi
Grating Proof Test Level	150 kpsi

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

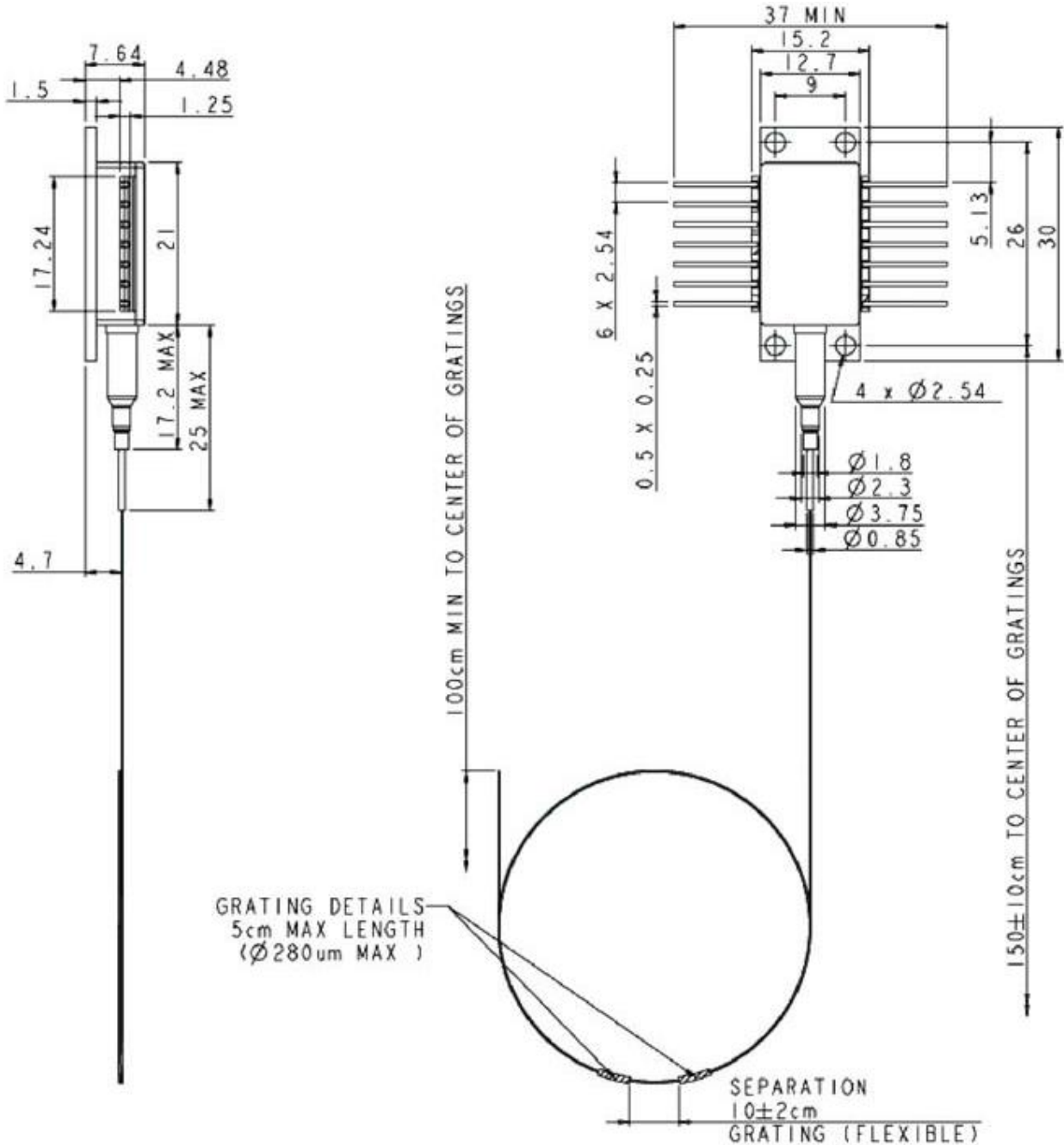
**1) Connector FC/APC, 900 µm, 1 m by default for all devices except for high power devices.**

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

# 1001 980 nm Pump

PL-980-250

## MECHANICAL DRAWING



Unit: mm  
General Tolerance: ±0.1

**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.