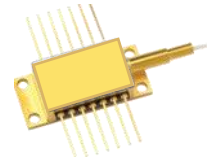


# 1001 980 nm Pump

**PL-980-410**



## 980 nm Pump Laser Diode, 410 mW Kink Free, TEC, FBG

The lasers are designed as pump sources for 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.

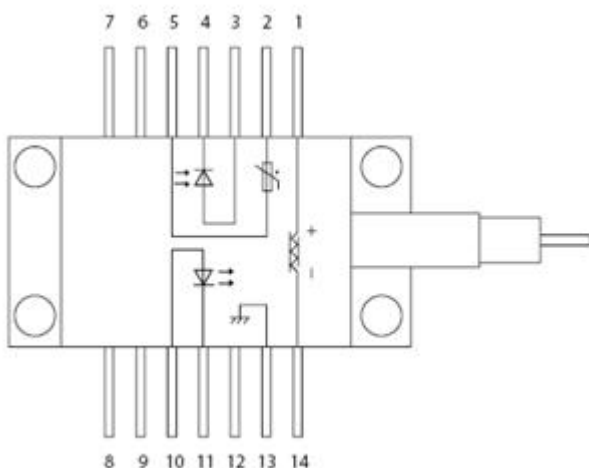
### FEATURES

- Fiber Bragg Grating Wavelength Stabilization
- High Output Power to 600 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		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-980-410

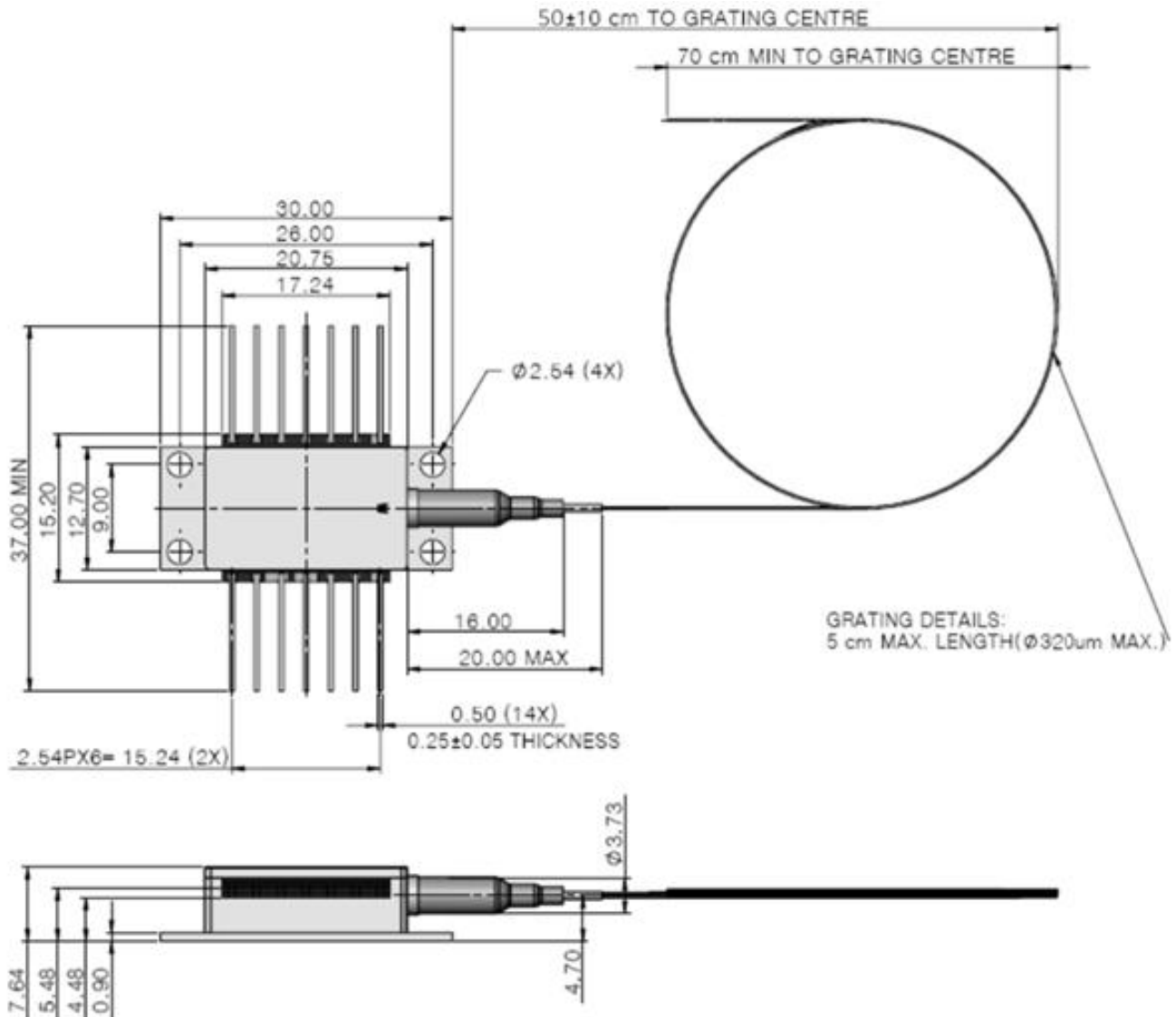
Wavelength	973 nm to 975 nm
Operating Power	375 mW
Operating Current	730 mA
Kink-Free Power	410 mW max.
Threshold Current	50 mA typ.; 70 mA max.
Forward Voltage	1.7 V typ.; 2.0 V max.
Spectral Width	0.2 nm typ.; 1.0 nm max.
Signal to Noise Ratio	20 dB min.
Temperature Dependence of Peak Wavelength	0.008 nm/°C min.; 0.01 nm/°C max.
Monitor Detector Responsivity	1 μA/mW min.; 5 μA/mW typ.; 10 μA/mW max.
Return Loss	35 dB min.
Thermistor BETA Value	3500 K min.; 4100 K max.
Thermistor Resistance	9.5 kΩ min.; 10 kΩ typ.; 10.5 kΩ max.
Thermistor Constant	3600 K min.; 4200 K max.
Operating Case Temperature	-20°C to +75°C
Storage Temperature	-40°C to +85°C
LD Forward Current	1100 mA max.
LD Current Transient	1200 mA max.
LD Reverse Current	10 uA max.
LD Reverse Voltage	2 V max.
Heat Pump Current	-2.4 A min.; 2.4 A max.
Bend Radius	13 mm min.
Storage Relative Humidity	5% to 95%
Operating Relative Humidity	5% to 85%
Fiber Type	HI1060 or Equivalent

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## MECHANICAL DRAWING



Unit: mm

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