

sales@wdmquest.com www.wdmquest.com

## 1001 980 nm Pump





# 980 nm Pump Laser Diode, 470 mW Kink Free, TEC, FBG

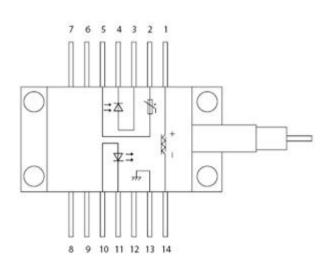
The lasers are designed as pump sources for EDFA applications. Processes and techniques of coupling the fiber to the laser allow high output powers that are very stable with both time and temperature.

#### **FEATURES**

- Fiber Bragg Grating Wavelength Stabilization Telcordia GR-468-CORE Compliant
- High Output Power to 600 mW Kink Free
- Single-mode Fiber Pigtail
- RoHS Compliant
- Hermetically Sealed 14-pin Butterfly Package
- Field Proven High Reliability
- Internal Thermoelectric Heatpump and Monitor PD

#### USE IN

- Low Noise EDFAs
- HFC Applications
- FUNCTIONAL DIAGRAM



DWDM EDFAs

- Pin Description Peltier Cooler (+) 1
- 2 Thermistor
- 3 Monitor Anode (-)
- 4 Monitor Cathode (+)
- 5 Thermistor
- 6 Not Connected
- Not Connected 7

Pin Description

- 8 Not Connected
- 9 Not Connected
- 10 Laser Anode (+)
- 11 Laser Cathode (-)
- 12 Not Connected
- 13 Case Ground
- 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.

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# PL-980-470

Wavelength	973 nm to 975 nm
Operating Power	425 mW
Operating Current	820 mA
Kink-Free Power	470 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 Wave	elength 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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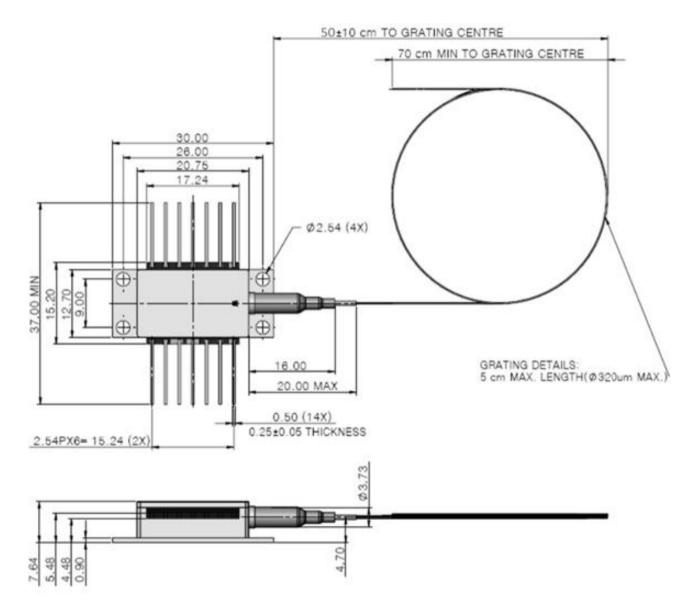


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#### MECHANICAL DRAWING



Unit: mm

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