

### 1001 980 nm Pump

PL-980-220



# 980 nm Pump Laser Diode, 220 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.

#### **FFATURES**

- Double Fiber Bragg Grating Wavelength Stabilization
- High Output Power to 300 mW Kink Free
- Single-mode Fiber Pigtail
- RoHS Compliant

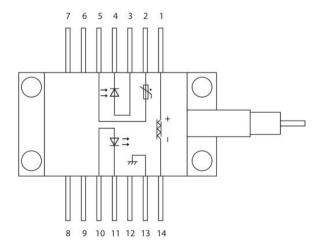
- Hermetically Sealed 14-pin Butterfly Package
- Telcordia GR-468-CORE Compliant
- Field Proven High Reliability
- Internal Thermoelectric Heatpump and Monitor PD

#### **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.



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Threshold Current	30 mA typ.; 40 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 )	±0.5 nm max.	
Temperature Dependence of Peak Wavelength	n 0.02 nm/°C max.	
Wavelength Tolerance	±0.5 nm max.	
Monitor Detector Responsivity	1 μA/mW min.; 8 μA/mW typ.; 25 μA/mW max.	
Monitor Dark Current	50 nA max.	
Thermistor Resistance	9.5 k $\Omega$ min.; 10 k $\Omega$ typ.; 10.5 k $\Omega$ max.	
Heatpump Current	1.3 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	800 mA max.	
Laser Reverse Voltage	2 V max.	
Bend Radius	30 mm min.	

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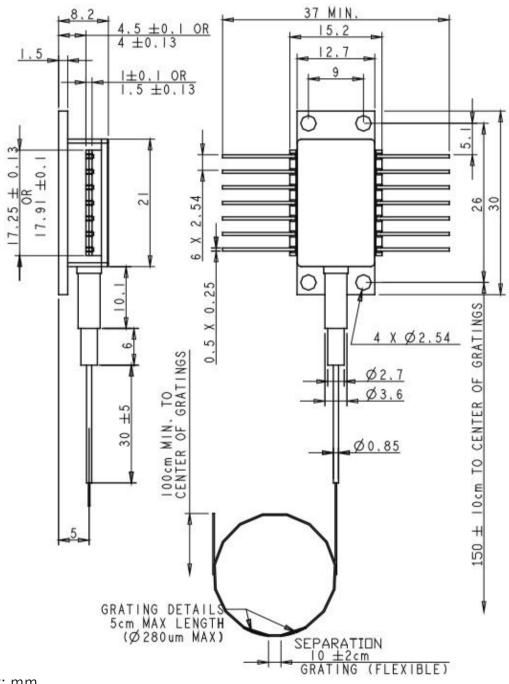
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#### MECHANICAL DRAWING



Unit: mm

General Tolerance: ±0.1

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