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1001 980 nm Pump





980 nm Pump Laser Diode, 310 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

- Very High Kink-free Powers to 500 mW
- Low-Profile, Epoxy-Free, And Flux-Free 14-Pin Butterfly Planar Package With PM Fiber
- Fiber Bragg Grating Stabilization
- Integrated Thermoelectric Cooler, Thermistor, and Monitor Diode
- High Dynamic Range
- Excellent Low Power Stability

USE IN

- Low Noise EDFAs
- HFC Applications
- Next Generation DWDM EDFAs Requiring the Highest Power with "Locked" Wavelength Emission
- Reduced Pump-count EDFA Architectures
- HFC Trunks and Very High Node Count Distribution

FUNCTIONAL DIAGRAM



Pin Description

- Cooler (+) 1
- 2 Thermistor
- 3 Monitor PD Anode (-)
- 4 Monitor PD Cathode (+) 11 Laser Cathode
- 5 Thermistor
- 6 N/C
- 7 N/C

Pin Description

- 8 N/C
- 9 N/C
- 10 Laser Anode
- 12 N/C
- 13 Case Ground
- 14 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-980-310

| Wavelength | 973 nm to 986 nm |
|-----------------------------------|-----------------------------|
| Operating Power | 280 mW |
| Operating Current | 555 mA |
| Kink-Free Power | 310 mW max. |
| Kink-Free Current | 615 mA max. |
| Threshold Current | 30 mA max. |
| Forward Voltage | 2.5 V max. |
| Pump in Pump Band | 90% min. |
| Spectral Width | 2.0 nm max. |
| Wavelength Tuning vs. Temperature | 0.02 nm/°C max. |
| Monitor Diode Responsivity | 2 μA/mW min.; 20 μA/mW max. |
| TEC Cooling Capacity | 50°C min. |
| Thermistor Resistance | 9.5 kΩ min.; 10.5 kΩ max. |
| Thermistor Constant | 3600 K min.; 4200 K max. |
| Operating Case Temperature | -5°C to +75°C |
| Storage Temperature | -40°C to +85°C |
| LD Reverse Voltage | 2.5 V max. |
| LD Forward Current | 1100 mA max. |
| LD Reverse Current | 10 uA max. |
| PD Reverse Voltage | 20 V max. |
| PD Forward Current | 10 mA max. |
| Bend Radius | 16 mm min. |
| TEC Voltage | 4.5 V max. |
| Relative Humidity | 5% to 95% |
| Fiber Type | Panda PM-980 |

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MECHANICAL DRAWING



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Unit: mm Tolerance: .x±0.3; .xx±0.2

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