

8pin mini & 14pin 980nm Pumped Laser / 8pin 迷你 & 14pin 980nm 泵浦激光器

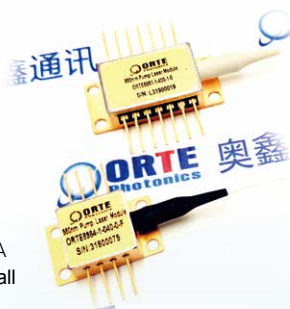
Description 描述

ORTE8981-1-***-1-0 Series 980nm pump laser module has been specifically designed for low noise low power Erbium Doped Fiber Amplifiers (EDFA), and ASE. Low-temperature glass soldering technology of fixing lensed fiber and low threshold current chip are adopted, lead to excellent stability and reliability of 980nm pump laser module.

ORTE8981-1-xxx-1-0 系列 980nm 泵浦激光组件专设计用于低功率光纤放大器和 ASE 泵浦光源, 采用低温玻璃焊料固定耦合透镜光纤, 选用低阈值电流激光芯片, 提升组件的可靠性和稳定性。

Features 特征

14 or 8pin Butterfly Package 14/8-pin 蝶形封装
 With TEC and Monitor Photodiode (MPD) 带热电制冷和控 PD
 Single Mode Fiber(HI-1060) Coupling 带透镜单模光纤耦合
 Telcordia GR-468-CORE and RoHS Compliant
 满足 Telcordia GR-468-CORE 标准和 RoHS



Applications 应用

Low noise erbium doped fiber amplifiers/ASE 低噪声 EDFA/ASE
 High bit rate, multichannel digital EDFAs 高速率多通道数字 EDFA
 Dense wavelength division multiplexing(DWDM) EDFAs for small package Designs 用于小尺寸的 DWDM EDFA
 CATV system CATV 系统
 Optical Fiber Gyro 光纤陀螺

Absolute Maximum Ratings 最大额定值

| Parameter 参数 | Symbol 符号 | Min. 最小值 | Max. 最大值 | Unit 单位 | Test Conditions 测试条件 |
|--------------------------------|-----------|----------|----------|---------|------------------------------------|
| LD Forward Current LD 正向电流 | I_f | - | 1000 | mA | - |
| LD Reverse Voltage LD 反向电压 | V_r | - | 0.3 | V | - |
| TEC Operation Current TEC 工作电流 | I_{tec} | - | 2 | A | - |
| TEC Operation Voltage TEC 工作电压 | V_{tec} | - | 4 | V | - |
| Storage Temperature 储存温度 | T_{stg} | -40 | 85 | °C | - |
| ESD Level 防静电级 | - | - | 500 | V | C=100pF, R=1.5KΩ, Hum anbody model |

Electrical/Optical Characteristics 电光特性

(BOL, $T_c = -25^\circ\text{C}$ to 70°C , TLD= 25°C , -50dB reflection, unless noted otherwise)

| Parameter 参数 | Symbol 符号 | Unit 单位 | Min. 最小值 | Type 典型值 | Max. 最大值 | Remark 备注 |
|------------------------------|-----------------|------------------|----------|----------|----------|---|
| Threshold Current 阈值电流 | I_{th} | mA | - | 50 | 80 | |
| Optical Output Power 输出光功率 | P_o | mW | 400 | - | - | @600mA |
| | | | 600 | - | - | @900mA |
| LD Forward Voltage 激光正向电压 | V_F | V | - | - | 2.5 | |
| Center Wavelength 中心波长 | λ_c | nm | 972 | - | 985 | |
| Spectrum Width 谱宽 | $\Delta\lambda$ | nm | - | - | 1 | RMS@-3dB |
| MPD Responsibility 监控 PD 响应度 | R_m | $\mu\text{A/mW}$ | 0.5 | 1 | 20 | |
| TEC Current 制冷器电流 | I_{tec} | A | - | - | 1.3 | $\Delta T=50^\circ\text{C}$, $I_{op}=450\text{mA}$ |
| TEC Voltage 制冷器电压 | V_{tec} | V | - | - | 3.5 | $\Delta T=50^\circ\text{C}$, $I_{op}=450\text{mA}$ |
| Thermistor Resistanc 热敏电阻值 | R_{th} | KΩ | 9.5 | 10 | 10.5 | $T=25^\circ\text{C}$ |