



编 号: GDZ-PS-M044      客 户: \_\_\_\_\_

版本号: 第 A/0 版      编 制: 九州光电子公司技术中心

## 产 品 规 格 书

产品名称: 1310nm FP 尾纤式激光器

产品型号: JZL13P-FC/APC-2-A-F-G

物料代码: \_\_\_\_\_

产品描述: 1310nm FP 带隔离器 同轴 FC/APC  $\Phi 0.9\text{mm}$  SM 单模黄纤  
纤长 1m  $P_o \geq 1.2@20\text{mA}$

编 制: \_\_\_\_\_

日 期: 2020-07-09

审 核: \_\_\_\_\_

日 期: \_\_\_\_\_

批 准: \_\_\_\_\_

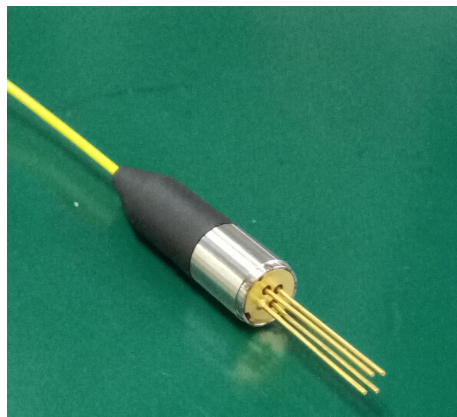
日 期: \_\_\_\_\_

## 文件历史记录

[illegible]

## 1. 特性 Features

- ◆ 1310nm FP 激光发射二极管.  
1310nm FP as Transmitter
- ◆ 低阈值电流，高斜效率，高线性度.  
Low threshold current,  
High slope efficiency,  
High linearity.
- ◆ 同轴封装，高可靠性.  
Coaxial Package, High reliability.



## 2. 应用 Application

- ◆ 光收发模块，电信，数据通信.  
Optical Bidi Module, Telecommunication, Data Communication.
- ◆ 光仪器仪表，OTDR.  
Test Equipment, OTDR.
- ◆ 接入网，GSM, CDMA.  
Access networks, GSM, CDMA.

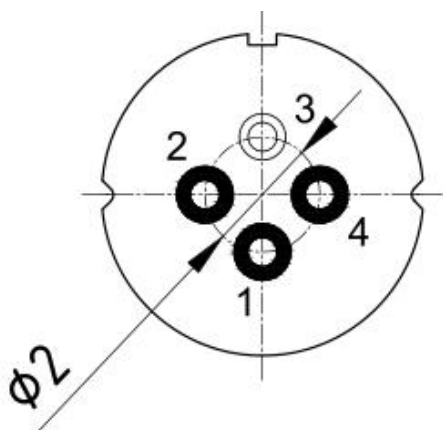
## 3. 极限参数 Absolute maximum rating ( $T_c=25^{\circ}\text{C}$ )

| 参数<br>Parameter                          | 符号<br>Symbol | 参数值<br>Ratings | 单位<br>Unit         |
|------------------------------------------|--------------|----------------|--------------------|
| LD 反向电压<br>Reverse Voltage (Laser diode) | $V_{RL}$     | 2              | V                  |
| LD 正向电流<br>Forward current (Laser diode) | $I_{FL}$     | 150            | mA                 |
| PD 反向电压<br>Reverse Voltage (Photo diode) | $V_{RD}$     | 20             | V                  |
| PD 正向电流<br>Forward current (Photo diode) | $I_{FD}$     | 2              | mA                 |
| 工作温度<br>Operating temperature            | $T_c$        | $-40\sim+85$   | $^{\circ}\text{C}$ |
| 储存温度<br>Storage temperature              | $T_{stg}$    | $-40\sim+100$  | $^{\circ}\text{C}$ |

4. 光电指标 Optical and Electrical Characteristics ( $T_c=25^{\circ}\text{C}$ )

| 参数<br>Parameter               | 符号<br>Symbol    | 测试条件<br>Test condition                      | 最小值<br>Min. | 典型值<br>Type | 最大值<br>Max. | 单位<br>Unit |
|-------------------------------|-----------------|---------------------------------------------|-------------|-------------|-------------|------------|
| 阈值电流<br>Threshold Current     | $I_{th}$        | CW, $T=25^{\circ}\text{C}$                  | ---         | 10          | 15          | mA         |
|                               |                 | CW, $T=85^{\circ}\text{C}$                  | ---         | 25          | 45          |            |
| 输出光功率<br>Optical Output Power | $P_f$           | CW, $I_f=20\text{mA}$                       | ---         | 1.2         | ---         | mW         |
| 工作电流<br>Operating Current     | $I_{op}$        | $T=25^{\circ}\text{C}$ , $P_o=1.2\text{mW}$ | ---         | 20          | ---         | mA         |
| 斜效率<br>Slope Efficiency       | $\eta$          |                                             | 0.2         | ---         | ---         | mW/mA      |
| 工作电压<br>Operating Voltage     | $V_{op}$        | CW, $I_{FL}=I_{op}$                         | ---         | 1.2         | 2           | V          |
| 中心波长<br>Center Wavelength     | $\lambda_c$     | CW, $I_{FL}=I_{th}+20\text{mA}$             | 1290        | 1310        | 1330        | nm         |
| 光谱均方根宽度<br>Spectral Width RMS | $\Delta\lambda$ | $I_{FL}=I_{op}$                             | ---         | 1           | 3           | nm         |
| 上升/下降时间<br>Rise and fall time | $T_r, T_f$      | $I_{FL}=I_{th}+20\text{mA}$ , 10%~90%       | ---         | ---         | 120         | ps         |
| 监视电流<br>Monitor Current       | $I_{mon}$       | $V_{rp}=10\text{V}$ , $P_o=P_f$             | 100         | ---         | 1000        | uA         |
| 监视暗电流<br>Monitor Dark Current | $I_D$           | $V_{rp}=10\text{V}$                         | ---         | ---         | 100         | nA         |
| 监视结电容<br>Monitor Capacitance  | $C_{PD}$        | $V_{PD}=5\text{V}$ , $f=1\text{MHz}$        | ---         | 10          | 15          | pF         |

## 5. 管脚图 Pin Assignment



TYPE A  
PIN ASSIGN

|   |                     |
|---|---------------------|
| 1 | PD Cathode (PD-)    |
| 2 | PD Anode (PD+)      |
| 3 | LD Anode (LD+), GND |
| 4 | LD Cathode (LD-)    |

## 6. 封装尺寸 Package dimensions

产品尺寸

