

SPL1310-3-9-PD

Applications

Optical Transmitter

Optical Bidi Module and Optical Receiver

ATTENTION

OBSERVE PRECAUTIONS FOR HANDLING TROSTATIC SENSITIVE DEVICES

TECHNICAL DATA

Pigtailed Coaxial Laser Diode

Features

- 1310 nm
- SM Fiber
- Coaxial package
- Built-in PD

Specifications (25°C)

Lead Soldering Temperature (10 sec.)

Min. Max. Unit Тур. **Optical Specification** mW Output Power P_F 3 Center Wavelength λ_{C} 1290 1310 1330 nm Spectral Width $\Delta \lambda$ nm **Fiber Characteristics** Fiber Core Size 9 μm -Fiber Length _ 0.8 1.0 m Connector FC/SC/ST/LC/MU **Electrical Specification** Slope Efficiency Es mW/mA Threshold Current Ith 15 5 mΑ Operation Current Iop 32 mΑ --Operation Voltage V_f 1.6 V 1.1 _ Monitor Current Im 0.1 mΑ -PD Reverse Voltage 15 V -PD Capacitance 10 15 pF -PD Dark Current 0.1 _ μA Side Mode Suppression Ration 30 35 dB -1.25 Data Rate Gb/s Package Style Coaxial **Absolute Maximum Ratings** Reverse Voltage V_r 2.0 V Operating Temperature Top °C -10 ... +50 Storage Temperature T_{stg} -40 ... +85 °C

The above specifications are for reference purpose only and subjected to change without prior notice.

260

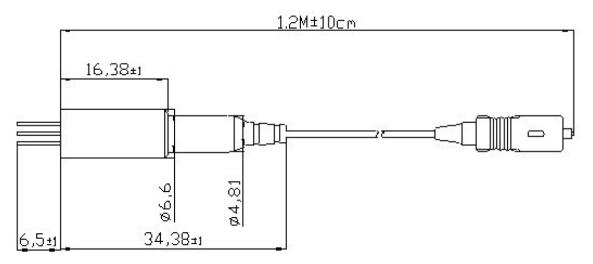
°C



Electrical Connection

| Pin Configuration - Type A | | | (standard) | Bottom View |
|----------------------------|----------------|-------------------------|---|-------------|
| | | PIN 1 2 3 4 | FunctionPD AnodeLD CathodeLD Anode, GNDPD Cathode | |
| Pin Configuration - Type B | | | (on request) | Bottom View |
| 10 | ₽ ³ | PIN | Function | 2 |
| | | 1 | LD Anode, PD Cathode | |
| | ∧ PD | 2 | LD Cathode | |
| Ť | \rightarrow | 3 | n.c. | 4 |
| 2 | ۰ ₄ | 4 | PD Anode | |

Package Dimensons (Unit: mm)



Safety of Laser light

• Laser Light can damage the human eyes and skin. Do not expose the eye or skin directly to any laser light and/or through optical lens. When handling the LDs, wear appropriate safety glasses to prevent laser light, even any reflections from entering to the eye. Focused laser beam through optical instruments will increase the chance of eye hazard.



• These LDs are emitting invisible light.



Cautions

1. Operating methode

- This LD shall change its forward voltage requirement and optical ouput power according to temperature change. Also, the LD will require more operation current to maintain same ouput power as it degrades. In order to maintain output power, use of APC (Automatic Power Control) is recommended. Which use monitor feedback to adjust the operation current.
- Confirm that electrical spike current generated by swithing on and off does not exceed the maximum operating current level specified herein above as absolute maximum rating. Also, employ appropriat countermeasures to reduce chattering and/or overshooting in the circuit.

2. Static Electricity

• Static electricity or electrical surges will reduce and degrade the reliability of the LDs. It is recommended to use a wrist trap or anti-electrostatic glove when handeling the product.

3. Absolute Maximum Rating

 Active layer of LDs shall have high current density and generate high electric field during its operation. In order to prevent excessive damage, the LD must be operated strictly below absolute maximum rating.

