



SPL830-30-PM-PD

- IR Pigtailed Laser Diode
- 830 nm, 30 mW
- 5 μm Pol. Maintaining Fiber
- FC/APC Connector
- Integrated Monitor PD



Description

SPL830-30-PM-PD is an infrared pigtailed laser diode, typically emitting at 830 nm with an output power of 30 mW and integrated monitor photodiode. It comes in a coaxial package with heat sink, and **5 μm polarization maintaining fiber** with FC/APC connector. A variant without heat sink is optionally available.

Maximum Rating

| Parameter | Symbol | Values | | Unit |
|---------------------------------|-----------|--------|-------|--------------------|
| | | Min. | Max. | |
| Reverse Voltage | V_R | | 2.0 | V |
| PD Reverse Voltage | V_{RP} | | 15 | V |
| Operating Temperature | T_{OPR} | - 10 | + 60 | $^{\circ}\text{C}$ |
| Storage Temperature | T_{STG} | - 40 | + 85 | $^{\circ}\text{C}$ |
| Soldering Temperature (max. 3s) | T_{SOL} | | + 260 | $^{\circ}\text{C}$ |

Electro-Optical Characteristics ($T_{CASE} = 25^{\circ}\text{C}$)

| Parameter | Symbol | Values | | | Unit |
|-------------------|-----------------------|--------------------------|------|------|---------------|
| | | Min. | Typ. | Max. | |
| Peak Wavelength | λ_P | 815 | 830 | 845 | nm |
| Output Power | P_O | | 30 | | mW |
| Operating Voltage | V_F | | 1.8 | 2.5 | V |
| Threshold Current | I_{th} | | 30 | 55 | mA |
| Operating Current | I_O | | 150 | 170 | mA |
| Monitor Current | I_M | | 0.3 | | mA |
| Fiber Spec. | Type | Polarization Maintaining | | | |
| | Pol. extinction ratio | 13 | 15 | | dB |
| | Core diameter | | 5 | | μm |
| | Connector | FC/APC | | | |
| | Length | | 80 | | cm |

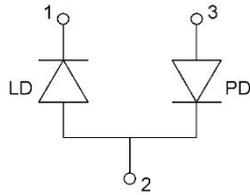




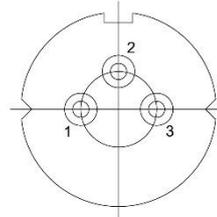
Electrical Connection

Pin Configuration*

| Pin # | Function |
|-------|----------------------|
| Pin 1 | LD cathode |
| Pin 2 | LD anode, PD cathode |
| Pin 3 | PD anode |

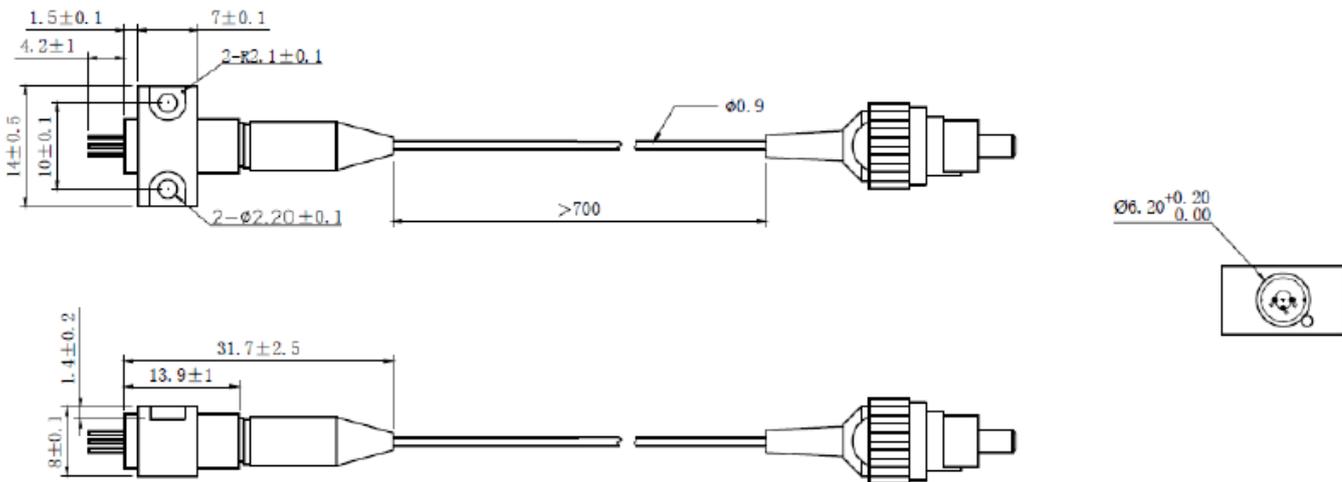


Bottom View



* subject to change

Outline Dimension



All dimensions in mm

Precautions

Safety

Laser light emitted from any laser diode may be harmful to the human eye. **Avoid looking directly into the laser diode's aperture.** The use of optical lenses will increase eye hazard



ESD Caution

Always do handle laser diodes with care to **prevent electrostatic discharge.** We advise to **wearing wrist straps, and grounding all applicable work surfaces,** when handling laser diodes

Operating Considerations

Usage of current regulated drive circuits is mandatory We advise to operate this laser diode with a current source and heat sink, and to never exceed the maximum specifications as outlined in this datasheet.

