



SPL405-30-3-PD

- Violet Pigtailed Laser Diode
- 405 nm, 30 mW
- 3 μ m SM Fiber
- FC/PC connector
- Heat Sink



Description

SPL405-30-3-PD is a violet pigtailed laser diode, typically emitting at 405 nm with an output power of 30 mW. It comes in a coaxial package with integrated heat sink, and **3 μ m single mode fiber** with FC/PC connector. Variants without heat sink and different types of connectors are optionally available.

Maximum Ratings

| Parameter | Symbol | Values | | Unit |
|--|-----------|--------|-------|------|
| | | Min. | Max. | |
| Reverse Voltage | V_R | | 2.0 | V |
| PD Reverse Voltage | V_{RPD} | | 30 | V |
| Operating Temperature | T_{OPR} | - 10 | + 70 | °C |
| Storage Temperature | T_{STG} | - 40 | + 85 | °C |
| Soldering Temperature ($t_{max.}$ 3s) | T_{SOL} | | + 260 | °C |

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

| Parameter | Symbol | Values | | | Unit |
|--------------------|------------------|-------------|--------|------|---------|
| | | Min. | Typ. | Max. | |
| Peak Wavelength | λ_P | 395 | 405 | 415 | nm |
| Spectral Width | λ_Δ | | 2.0 | | nm |
| Output Power | P_O | | 30 | | mW |
| Operating Voltage | V_F | | 5.0 | 6.0 | V |
| Threshold Current | I_{th} | | 40 | 75 | mA |
| Operating Current | I_O | | 110 | 130 | mA |
| PD Monitor Current | I_{PD} | | 0.3 | | mA |
| Fiber Spec. | Type | Single Mode | | | |
| | Core diameter | | 3 | | μ m |
| | N.A. | | 0.12 | | |
| | Connector | | FC/PC* | | |
| | Length | | 80 | | cm |

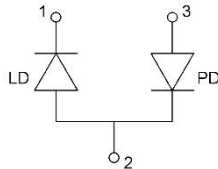
* SC / SMA905 con. available on request



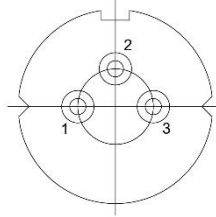
Electrical Connection

Pin Configuration*

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

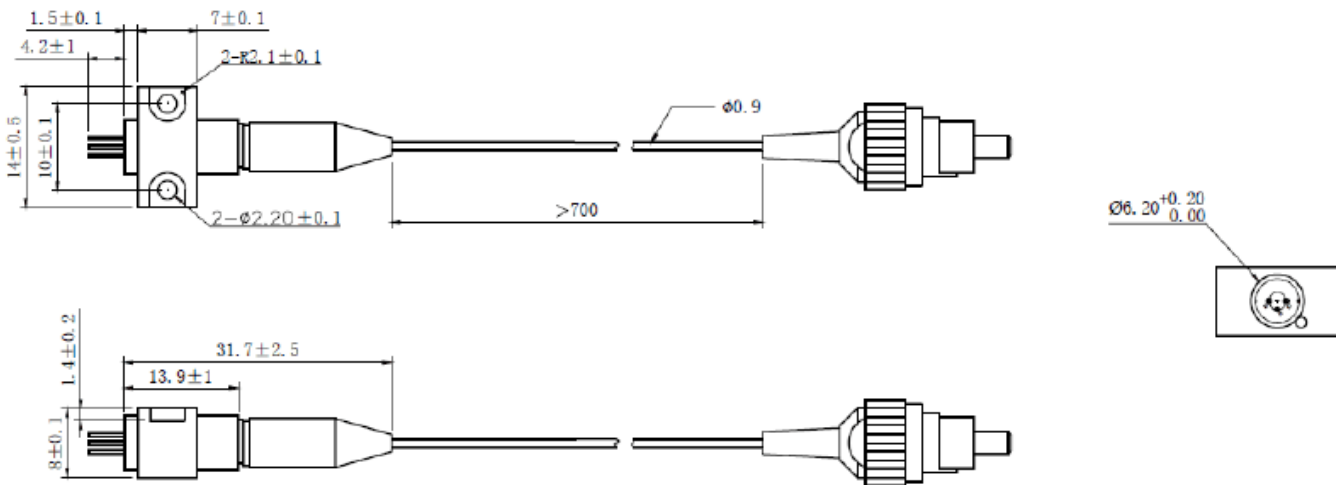


Bottom View



* 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.

