



## SPL1310-10-PM-PD

- IR Pigtailed DFB Laser Diode
- 1310 nm, 10 mW
- 9  $\mu$ m Pol. Maintaining Fiber
- FC/APC Connector
- Integrated Monitor PD



### Description

**SPL1310-10-PM-PD** is an infrared pigtailed DFB laser diode, typically emitting at 1310 nm with an output power of 10 mW and integrated monitor photodiode. It comes in a coaxial package with heat sink, and **9  $\mu$ m 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	$T_{OPR}$	- 20	+ 50	$^{\circ}$ C
Storage Temperature	$T_{STG}$	- 40	+ 85	$^{\circ}$ C
Soldering Temperature (max. 3s)	$T_{SOL}$		+ 260	$^{\circ}$ C

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

Parameter	Symbol	Values			Unit
		Min.	Typ.	Max.	
Peak Wavelength	$\lambda_P$	1300	1310	1320	nm
Output Power	$P_O$		10		mW
Spectral Width	$\Delta\lambda$			3.0	nm
Operating Voltage	$V_F$		1.4	1.7	V
Threshold Current	$I_{th}$		5	15	mA
Operating Current	$I_O$		70	80	mA
Monitor Current	$I_M$		/		mA
Fiber Spec.	Type	Polarization Maintaining			
	Pol. extinction ratio	13	15		dB
	Core diameter		9		$\mu$ m
	Connector	FC/APC			
	Length		80		cm

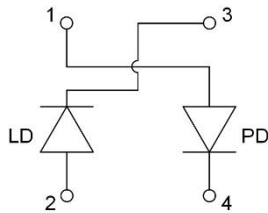




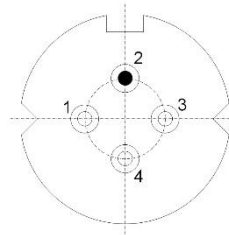
## Electrical Connection

### Pin Configuration\*

Pin #	Function
Pin 1	PD Anode
Pin 2	LD Anode, Ground
Pin 3	LD Cathode
Pin 4	PD Cathode

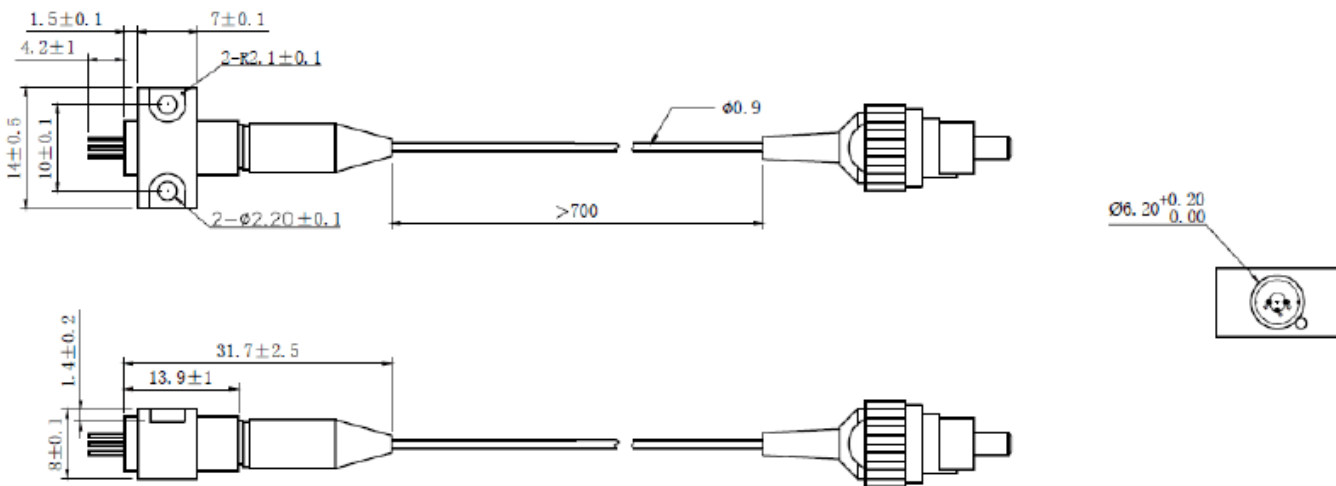


### Bottom View



\* 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.

