



## SPL905-50-105-PD

- IR Pigtailed Laser Diode
- 905 nm, 50 mW
- 105  $\mu$ m MM Fiber
- FC/PC Connector
- Integrated Monitor PD



### Description

**SPL905-50-105-PD** is a red pigtailed laser diode, typically emitting at 905 nm with an output power of 50 mW and integrated monitor photodiode. It comes in a coaxial package with heat sink, and **105  $\mu$ m multi mode fiber** with FC/PC connector. Variants without heat sink and different types of connectors are optionally available.

### Maximum Rating

Parameter	Symbol	Values		Unit
		Min.	Max.	
Reverse Voltage	$V_R$		2.0	V
PD Reverse Voltage	$V_{RP}$		30	V
Operating Temperature	$T_{OPR}$	- 10	+ 60	$^{\circ}$ 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	$\lambda_P$	895	905	915	nm
Output Power	$P_O$		50		mW
Operating Voltage	$V_F$		1.9	2.4	V
Threshold Current	$I_{th}$		25	60	mA
Operating Current	$I_O$		150	170	mA
Monitor Current	$I_M$		0.3		mA
Fiber Spec.	Type	Multi Mode			
	Core diameter	105			$\mu$ m
	Connector	FC/PC*			
	Length	80			cm

\*SC / SMA905 available on request

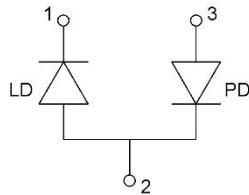




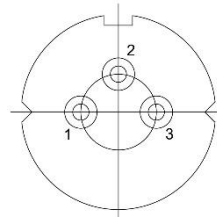
## Electrical Connection

### Pin Configuration\*

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

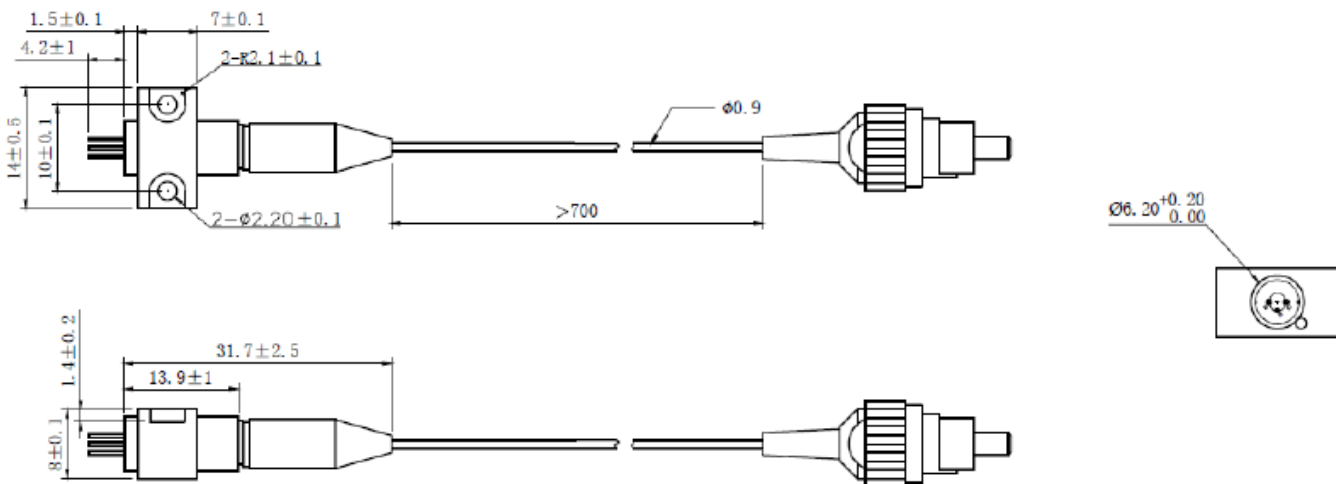


### Bottom View



\* 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.

