



## SPL635-150-105M-PD

- Red Pigtailed Laser Diode
- 638 nm, 150 mW
- 105  $\mu\text{m}$  MM Fiber
- FC/PC connector
- Integrated Monitor PD



### Description

**SPL635-150-105M-PD** is a red pigtailed laser diode, typically emitting at 638 nm with an output power of 150 mW and integrated monitor photodiode. It comes in a coaxial package with heat sink, and **105  $\mu\text{m}$  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	$^{\circ}\text{C}$
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	$\lambda_P$	630	638	645	nm
Output Power	$P_O$		150		mW
Operating Voltage	$V_F$		2.8	3.5	V
Threshold Current	$I_{th}$		70	100	mA
Operating Current	$I_O$		280	300	mA
Monitor Current	$I_M$		0.3		mA
Fiber Spec.	Type		Multi Mode		
	Core diameter		105		$\mu\text{m}$
	Connector		FC/PC*		
	Length		80		cm

\*SC / SMA905 available on request

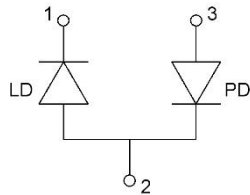




## Electrical Connection

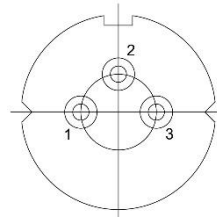
### Pin Configuration\*

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

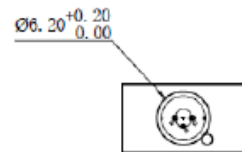
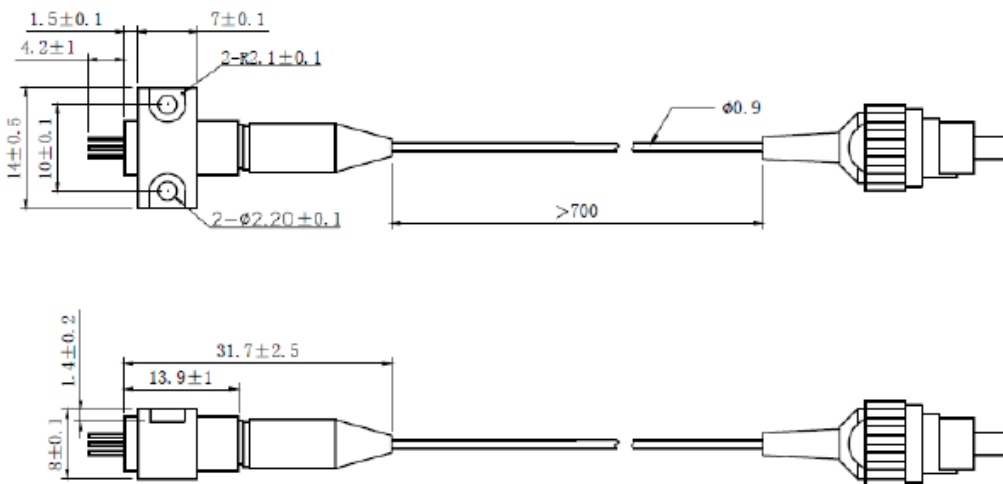


\* subject to change

### Bottom View



## 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.

