



SPL850-120-105M-PD

- IR Pigtailed Laser Diode
- 850 nm, 120 mW
- 105 μm MM Fiber
- FC/PC Connector
- Integrated Monitor PD



Description

SPL850-120-105M-PD is a red pigtailed laser diode, typically emitting at 850 nm with an output power of 120 mW and integrated monitor photodiode. It comes in a coaxial package with heat sink, and **105 μm 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	λ_P	840	850	860	nm
Output Power	P_O		120		mW
Spectral Width	$\Delta\lambda$		2.0		nm
Operating Voltage	V_F		2.3	2.6	V
Threshold Current	I_{th}		40	85	mA
Operating Current	I_O		220	240	mA
Monitor Current	I_M		0.3		mA
Fiber Spec.	Type	Multi Mode			
	Core diameter		105		μm
	Connector		FC/PC*		
	Length		80		cm

*SC / SMA905 available on request

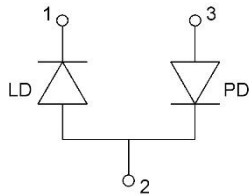




Electrical Connection

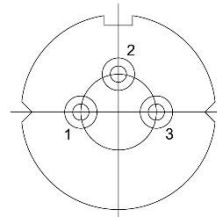
Pin Configuration*

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

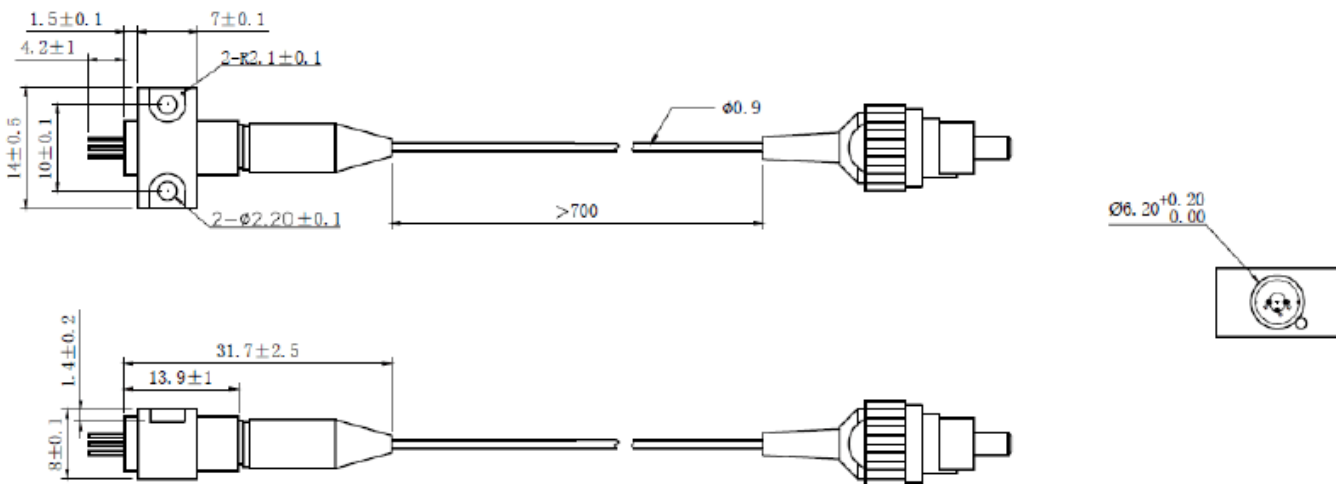


* subject to change

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.

