



SPL670-50-SM

- Red Pigtailed Laser Diode
- 670 nm, 50 mW
- 4 μm SM Fiber
- FC/PC connector
- Heat Sink



Description

SPL670-50-SM is a red pigtailed laser diode, typically emitting at 670 nm with an output power of 50 mW. It comes in a coaxial package with integrated heat sink, and **4 μm single 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
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	660	670	680	nm
Spectral Width	λ_{Δ}		2.0		nm
Output Power	P_O		50		mW
Operating Voltage	V_F		2.8	3.5	V
Threshold Current	I_{th}		55	75	mA
Operating Current	I_O		200	220	mA
Fiber Spec.	Type	Single Mode			
	Core diameter		4		μm
	N.A.		0.12		
	Connector		FC/PC*		
	Length		80		cm

* SC / SMA905 con. available on request

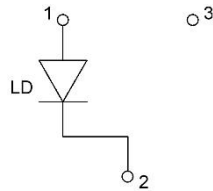




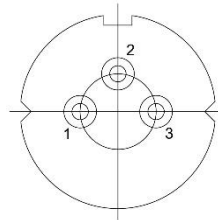
Electrical Connection

Pin Configuration*

Pin #	Function
Pin 1	LD anode
Pin 2	LD cathode
Pin 3	NC

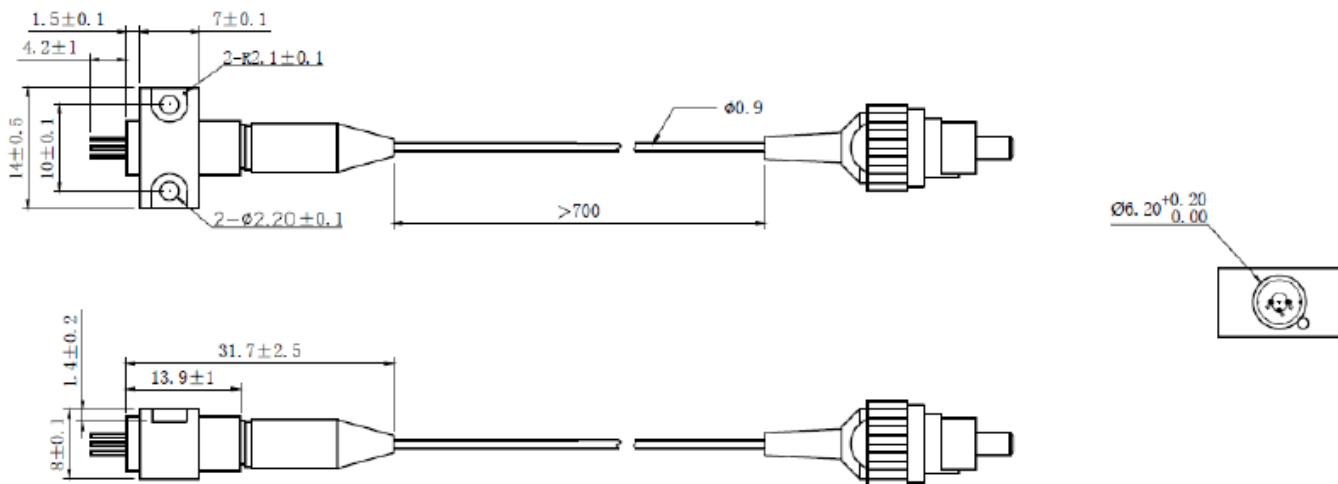


Bottom View



* 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.

