



SPL980-10-C9-PD

- IR Pigtailed Laser Diode
- 976 nm, 10 mW
- 9 μm SM Fiber
- FC/PC connector
- Built-in PD



Description

SPL980-10-C9-PD is an infrared pigtailed laser diode with **built-in monitor photodiode**, typically emitting at 976 nm with an output power of 10 mW. It comes in a coaxial package with **9 μm single mode fiber** and FC/PC connector. Variants with integrated heat sink and different types of connectors are optionally available.

Maximum Ratings*

Parameter	Symbol	Values		Unit
		Min.	Max.	
Reverse Voltage	V_R		2.0	V
PD Reverse Voltage	V_{RPD}		30	V
Operating Temperature	T_{OPR}	- 10	+ 40	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	- 40	+ 85	$^{\circ}\text{C}$
Soldering Temperature ($t_{max. 3s}$)	T_{SOL}		+ 260	$^{\circ}\text{C}$

* Operating close to or exceeding these parameters may damage the device

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

Parameter	Symbol	Values			Unit
		Min.	Typ.	Max.	
Peak Wavelength	λ_P	960	976	990	nm
Spectral Width	λ_{Δ}		/		nm
Output Power	P_O		10		mW
Operating Voltage	V_F		1.6	2.1	V
Threshold Current	I_{th}		10	25	mA
Operating Current	I_O		55	65	mA
PD Monitor Current	I_{PD}		0.2		mA
Fiber Spec.	Type		SMF-28		
	Core diameter		9		μm
	N.A.		0.12		
	Connector		FC/PC*		
	Length		80		cm

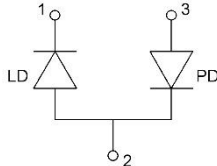
* FC/APC, SC, SMA905 available on request



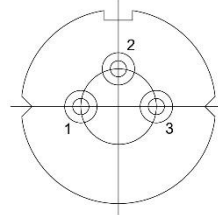
Electrical Connection

Pin Configuration*

Pin #	Function
Pin 1	LD cathode
Pin 2 [case]	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.



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