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SPL460-50-PM

- **Blue Pigtailed Laser Diode**
- **460 nm, 50 mW**
- **3 µm PM Fiber**
- **FC/APC connector**
- **Heat Sink**

RoHS COMPLIANT Pb Pb-Free

Description

SPL460-50-PM is a blue pigtailed laser diode, typically emitting at 460 nm with an output power of 50 mW. It comes in a coaxial package with integrated heat sink, and **polarization maintaining fiber** with FC/APC connector. A Variant without heat sink is optionally available.

Maximum Rating

Parameter	Symbol	Values		Unit
		Min.	Max.	
Reverse Voltage	V_R		2.0	V
Operating Temperature	T_{OPR}	- 10	+ 70	°C
Storage Temperature	T_{STG}	- 40	+ 85	°C
Soldering Temperature (max. 3s)	T_{SOL}		+ 260	°C

Electro-Optical Characteristics (T_{CASE} = 25°C)

Parameter		Symbol	Values			Unit
			Min.	Typ.	Max.	
Peak Wavelength		λ_P	450	460	470	nm
Spectral Width		λ_Δ		2		nm
Output Power		P_O		50		mW
Operating Voltage		V_F		6.0	7.0	V
Threshold Current		I_{th}		25	65	mA
Operating Current		I_O		150	170	mA
Fiber Spec.	Type		Polarization Maintaining			
	Polarization Ext. Ratio		13	15		dB
	Core diameter			3		µm
	N.A.			0.12		
	Connector			FC/APC		
	Length			80		cm

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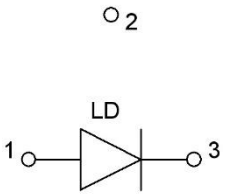
Electrical Connection

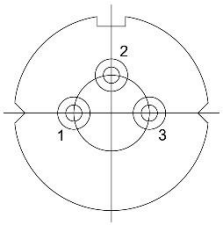
Pin Configuration*

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

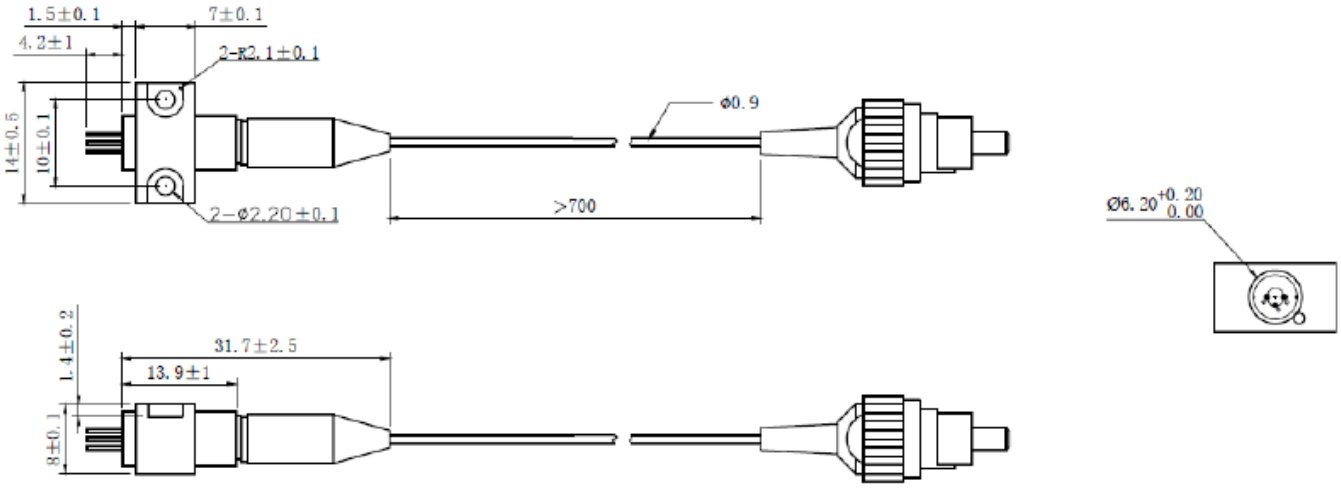
* subject to change



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.