



SPL785-20-4P-PD



TECHNICAL DATA

Pigtailed Coaxial Laser Diode

Features

- 785 nm
- PM Fiber
- Coaxial package
- Built-in PD

Applications

- Medical laser treatment
- Printing



Electrical Connection

Pin Configuration		Bottom View								
	<i>p-type</i> <table><tr><th>PIN</th><th>Function</th></tr><tr><td>1</td><td>LD Anode</td></tr><tr><td>2</td><td>LD Cathode, PD Anode</td></tr><tr><td>3</td><td>PD Cathode</td></tr></table>	PIN	Function	1	LD Anode	2	LD Cathode, PD Anode	3	PD Cathode	
PIN	Function									
1	LD Anode									
2	LD Cathode, PD Anode									
3	PD Cathode									

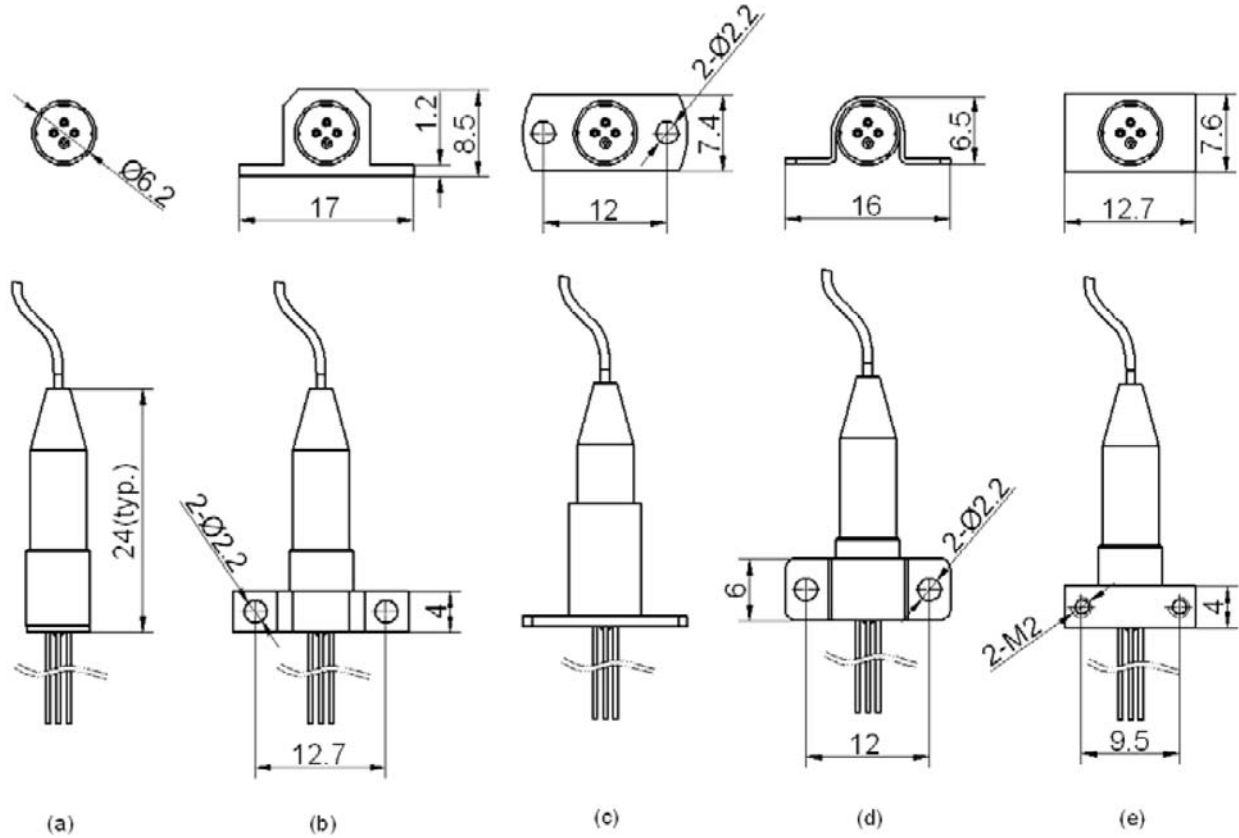
Specifications (25°C)

Type	Min.	Typ.	Max.	Unit
Optical Specification				
Output Power P _F	-	20	30	mW
Center Wavelength λ _C	775	785	795	nm
Spectral Width Δλ	-	-	-	nm
Fiber Characteristics				
Fiber Kind	Polarization Maintaining Fiber			
Fiber Length	-	0.8	1.0	m
Connector	FC/ST/SMA-905			
Electrical Specification				
Slope Efficiency E _S	-	1.1	-	mW/mA
Threshold Current I _{th}	-	35	-	mA
Operation Current I _O	-	115	-	mA
Operation Voltage V _f	-	2.0	-	V
Monitor Current I _m	-	0.5	-	mA
PD Reverse Voltage	-	30	-	V
Package Style	Coaxial			
Absolute Maximum Ratings				
Reverse Voltage V _r	2.0			V
Operating Temperature T _{Op}	-10 ... +50			°C
Storage Temperature T _{stg}	-40 ... +85			°C
Lead Soldering Temperature (10 sec.)	260			°C

The above specifications are for reference purpose only and subjected to change without prior notice.



Package Dimensions (Unit: mm)





Safety of Laser light

- Laser Light can damage the human eyes and skin. Do not expose the eye or skin directly to any laser light and/or through optical lens. When handling the LDs, wear appropriate safety glasses to prevent laser light, even any reflections from entering to the eye. Focused laser beam through optical instruments will increase the chance of eye hazard.
- These LDs are emitting invisible light.



Cautions

1. Operating methode

- This LD shall change its forward voltage requirement and optical output power according to temperature change. Also, the LD will require more operation current to maintain same output power as it degrades. In order to maintain output power, use of APC (Automatic Power Control) is recommended. Which use monitor feedback to adjust the operation current.
- Confirm that electrical spike current generated by swithing on and off does not exceed the maximum operating current level specified herein above as absolute maximum rating. Also, employ appropriat countermeasures to reduce chattering and/or overshooting in the circuit.

2. Static Electricity

- Static electricity or electrical surges will reduce and degrade the reliability of the LDs. It is recommended to use a wrist trap or anti-electrostatic glove when handling the product.

3. Absolute Maximum Rating

- Active layer of LDs shall have high current density and generate high electric field during its operation. In order to prevent excessive damage, the LD must be operated stricly below absolute maximum rating.



NOTE
LASERDIODE
MUST BE COOLED