808nm 30mW Coaxial Single Mode Fiber Coupled Laser

Product Description

The LP-808SM-FA-C series coaxial single-mode fiber coupled laser is a low-cost single-mode fiber coupled laser launched by Idealphotonics. It has advantages such as a small package size and high output power. Our products are widely used in laser communication, printing, and medical laser fields.

Part Number

LP-808SM-FA-C

Product features

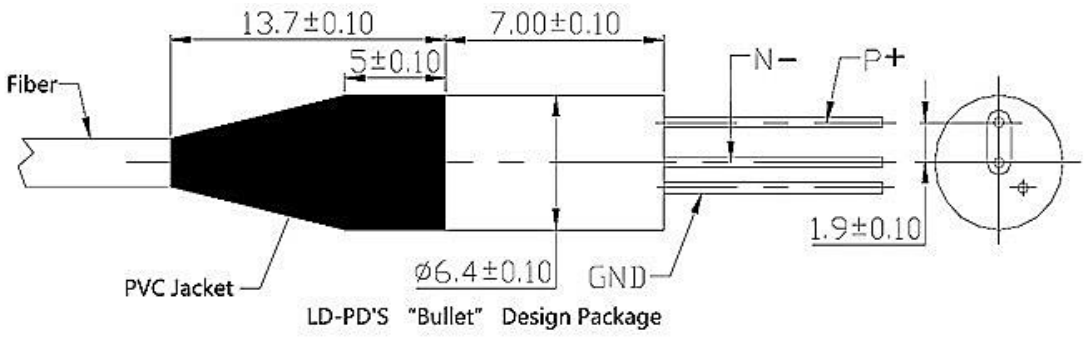
Wavelength: 808nm、 Single-mode fiber、 Coaxial package、 Built-in detector

Application area

Medical field、 Printing 、 Fiber laser systemsl

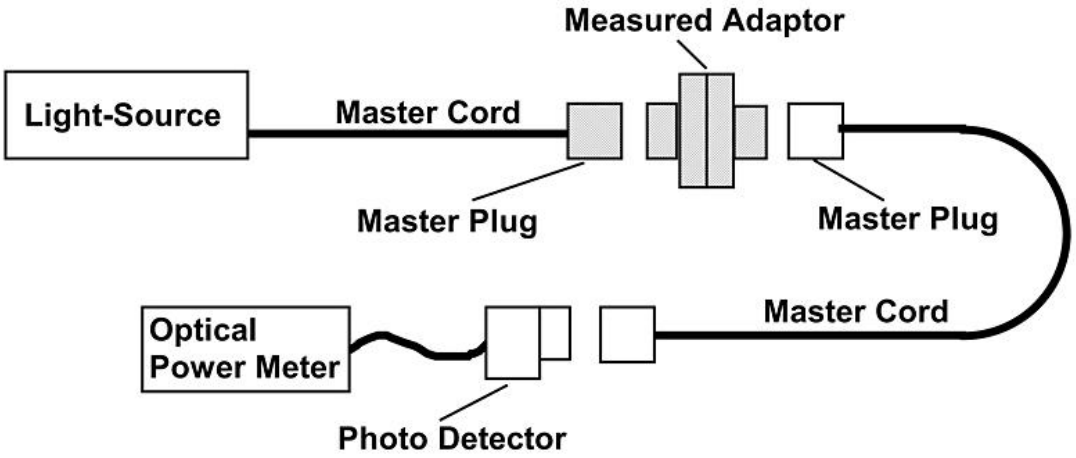
Parameters

Dimensional Drawing

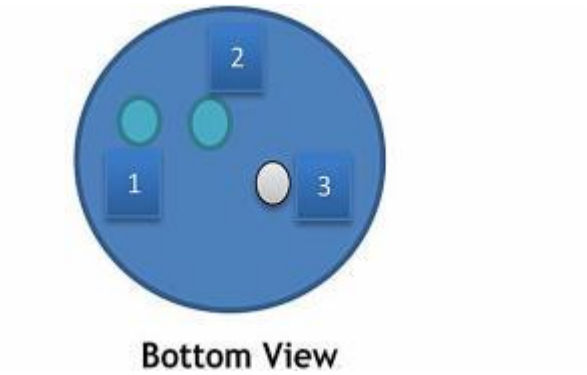


Parameters

Parameters	Value
Center wavelength (nm)	808±5nm
Continuous output power (mW)	>30mw
Spectral width	0.5-2nm
Fiber core	6um
Numerical aperture (NA)	0.12
Fiber length	0.8m
Connector	FC/APC
Operating voltage	1.8-2.3V
Threshold current	35mA
Maximum operating current	140mA
Monitoring current	0.5mA
Differential efficiency	0.9mw/mA
PD reverse breakdown voltage	30V
Package type	Coaxial package



pin definition



1	LD+
2	LD-/PD+
3	PD-

Limited Parameters

Name	Symbol	Unit	Min	Typ	Max	Conditions
Shell Temperature	TOP	℃	-5	25	70	
Forward Operating Voltage	VR	V	1.8	2	2.3	
Axial Pull Force		N	-	-	5N	3x10s
Lateral Pull Force		N	-	-	2.5N	3x10s
Fiber Bending Radius			16mm			-
Reverse Operating Voltage (LD)	VLD	V	-	-	2	HBM

Soldering Time		S		-	10s	260℃
Storage Temperature	TSTG	℃	-40	-	+85	2000hr
Operating Temperature	TOP	℃	-55	-	+125	
Relative Humidity	RH		5%	-	95%	Noncondensing

Precautions

1.Avoid direct laser exposure to the eyes and skin while the laser is operating. Even weak laser light entering the eye can cause serious damage due to the focusing effect of the eye.

2. The laser requires a stable driving power supply to avoid surges, and the instantaneous reverse current and reverse voltage should not exceed the limit value, otherwise it will damage the components.

3. Semiconductor lasers are sensitive to temperature. High operating temperatures reduce conversion efficiency and accelerate component aging. They should be used with adequate heat dissipation or cooling.

4.The laser should be operated at the rated current and power. Exceeding the rated output power can accelerate component aging.

5.The laser is an electrostatic-sensitive device. Anti-static measures must be taken during transport, storage, and use.

6.The laser should be stored or operated in a dry, well-ventilated environment to prevent condensation that could damage the laser.

7.The cavity surface is one of the key parts of the laser. Any operation that damages the cavity should be avoided. During use, the chip must be kept free from contamination and mechanical damage.

8.The fiber should not be sharply bent. The bending radius should be greater than 300 times the fiber diameter.