1064nm 20mW Coaxial Single-Mode Fiber-Coupled Laser

Product Description

The coaxial single-mode fiber-coupled laser is a cost-effective single-mode fiber-coupled laser launched by Idealphotonics It features a compact package size and high output power. Our products are widely used in laser communication, printing, and medical laser fields.

Product features

Wavelength: 1064nm、 Single-mode fiber、 Coaxial packaging、 Built-in photodetector

Part Number

MP-FCD-1064-20-SA

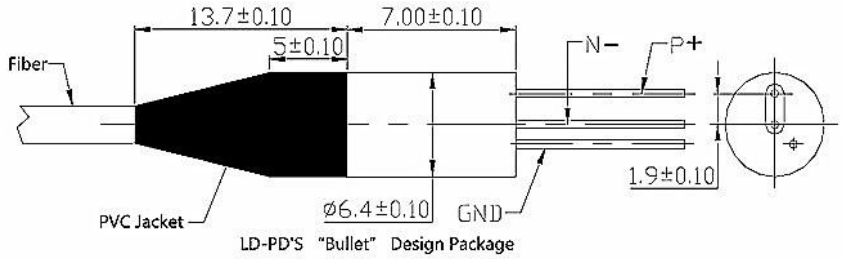
Application area

Medical field、 Printing、 Fiber lasers

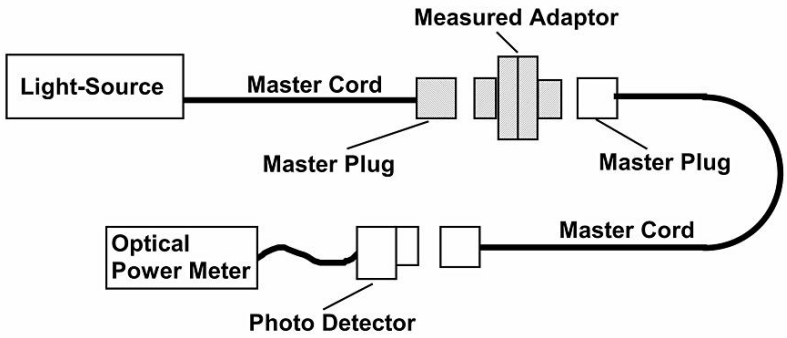
Core parameters

Center Wavelength	Continuous Output Power	Spectral Width
1064nm	20mW	0.5-2mW

Dimension Drawing



General Parameters



Parameters

Parameters	Value
Center Wavelength (nm)	1060±5nm
Continuous Output Power (mW)	>20mw
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	200mA
Monitor Current	0.5mA
Slope Efficiency	0.9mw/mA
PD Reverse Voltage	30V
Package Type	Coaxial Packaging

Pin Definition

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

Bottom View

Absolute Maximum Ratings

Name	Symbol	Unit	Min	Typ	Max	Test Conditions
Housing Temperature	T_{OP}	℃	-5	25	70	
Forward Operating Voltage	V_R	V	1.8	2	2.3	
Axial Tension		N	-	-	5N	3x10s
Lateral Tension		N	-	-	2.5N	3x10s
Fiber Bending Radius			16mm			-
Reverse Operating Voltage (LD)	V_{LD}	V			2	HBM
Soldering Time		S		-	10s	260℃
Storage Temperature	T_{STG}	℃	-40	-	+85	2000hr
Operating Temperature	T_{OP}	℃	-55	-	+125	
Relative Humidity	RH		5%	-	95%	Noncondensing

Precautions

1.Avoid direct exposure of the laser to eyes and skin during operation. Even weak laser light, when focused by the eye, may cause severe damage.

2.The laser requires a stable driving power supply to avoid surges. Instantaneous reverse current or voltage must not exceed the maximum limits, as this may damage the component.

3.Semiconductor lasers are temperature-sensitive. Operating at high temperatures reduces conversion efficiency and accelerates component aging. Use under adequate heat dissipation or cooling conditions is necessary.

4.The laser should operate within its rated current and power. Excessive output power will accelerate component aging.

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

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

7.The emitting surface (cavity facet) is a critical part of the laser. Avoid any actions that could damage the cavity facet. During use, ensure the core remains uncontaminated and free from mechanical damage.

8.The fiber must not be bent at sharp angles. The bending diameter should be greater than 300 times the fiber diameter.