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G081PU210W



TECHNICAL DATA

High Power Fiber Coupled Infrared Laser Diode

Features

- CW Output Power: 10 W
- Typical 808 nm Emission Wavelength
- High Reliability
- High Efficiency

Applications

- Laser Pumping
- Medical Usage
- Printing
- Heating
- Material Dealing
- Marking

Specifications (25°C)

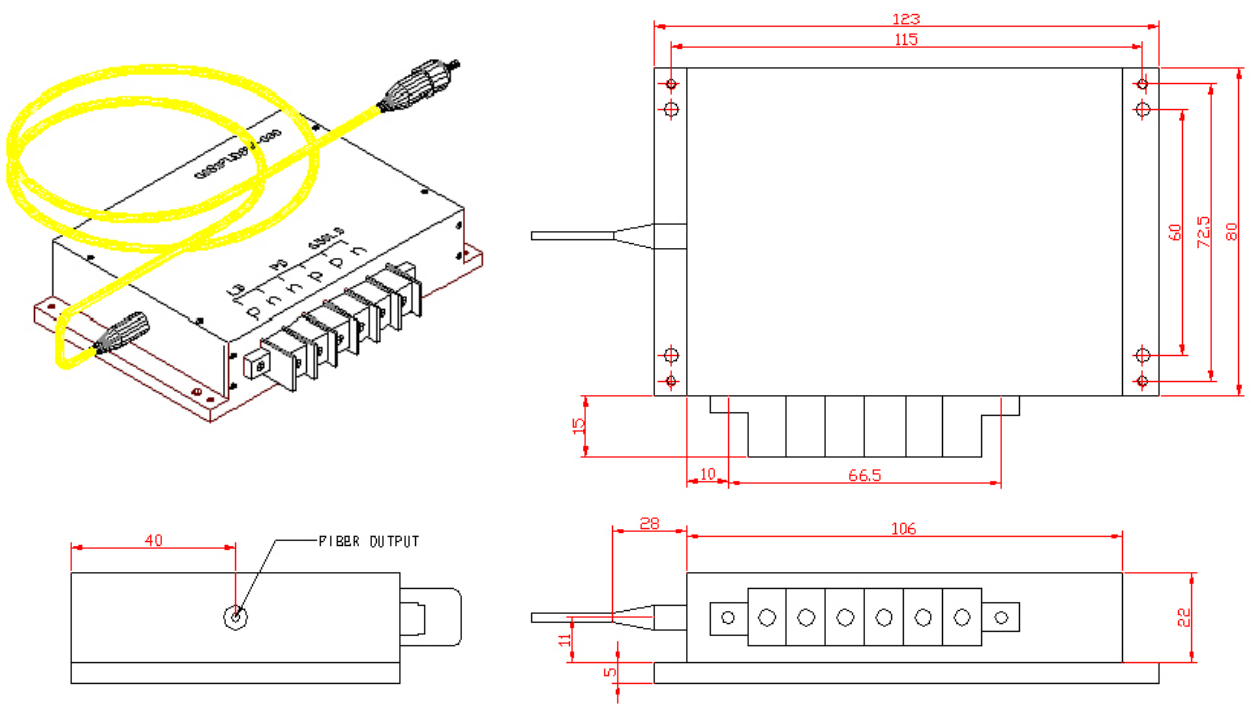
Type	Symbol	Value	Unit
Optical Specification			
CW Output Power from Fiber	P_F	10	W
Center Wavelength	Δ_C	808	nm
Wavelength Tolerance		800 – 820	nm
Spectral Width	$\Delta\lambda$	< 5	nm
Wavelength Temperature Coefficient		0.3	nm/°C
Fiber Characteristics			
Fiber Core Size		400	µm
N.A.		0.22	
Fiber Length		1	m
Connector		FC/ST/SMA-905	
Electrical Specification			
Slope Efficiency	E_S	> 5	W/A
Threshold Current	I_{th}	500	mA
Operation Current	I_F	2500	mA
Operation Voltage	U_F	< 14	V
Series Resistance	R_D	< 1.4	Ω
Package Style		P2-Package	
Absolute Maximum Ratings			
Reverse Voltage V_r	U_R	14	V
Operating Temperature T_O	T_{OP}	-10 … 45	°C
Storage Temperature T_{stg}	T_{STG}	-40 … 85	°C



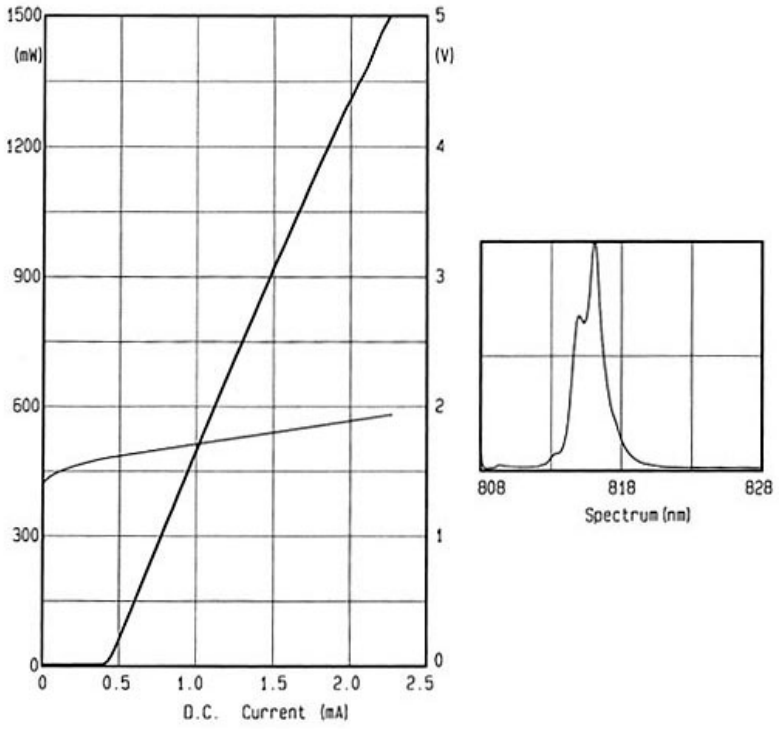
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Package Dimensions

P2-Package (*Unit:mm*)



Typical Performance Curves



Notes

1. Laser beam is harmful especially for your eyes. Don't look at the laser beam directly.
2. Lifetime of the diode laser varied with the operating temperature inversely. We advise that the TEC cooler should be used to keep the temperature suitable.
3. For turning on the diode laser, please increase the current gradually to the specified operating value. For shutting down the diode laser, please decrease the current to zero gradually, and then turn off the power.
4. Please wear static proof bracelet when operating.
5. Please connect the pins of the diode laser correctly as the picture shown in the manual.
6. The operating current must less than the rated current. Otherwise the diode laser should be damaged.
7. The fiber facet should be keep clean before the diode laser is operating.
8. Please use the constant-current source to avoid the surge.
9. Diode laser should be short circuit when stop using.
10. Bend diameter of the fiber must be larger than 4cm temporarily and 8cm permanently.