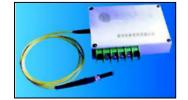


ROITHNER LASERTECHNIK GIRDH

WIEDNER HAUPTSTRASSE 76 IO40 VIENNA AUSTRIA TEL. +43 I 586 52 43 -0, FAX. -44, OFFICE@ROITHNER-LASER.COM



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)

Туре	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	Δλ	< 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	Es	> 5	W/A
Threshold Current	l _{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 _{stq}	T_{STG}	-40 85	°C





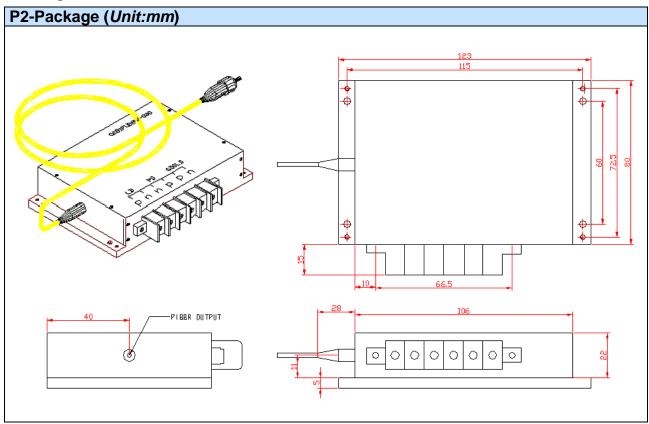
ROITHNER LASERTECHNIK GmbH

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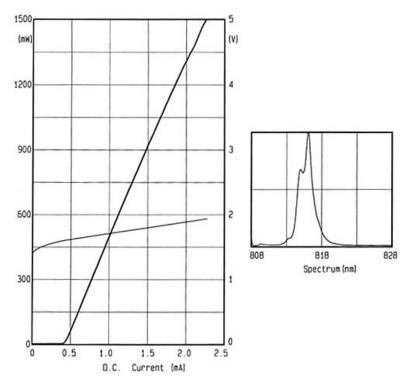
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Package Dimensions



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.