

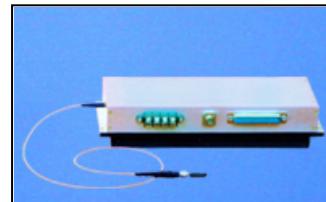


**ROITHNER LASERTECHNIK GmbH**

WIEDNER HAUPTSTRASSE 76      1040 VIENNA      AUSTRIA  
TEL. +43 1 586 52 43 -0, FAX. -44, OFFICE@ROITHNER-LASER.COM



# G098PU322W



## TECHNICAL DATA

### High Power Fiber Coupled Infrared Laser Diode

#### Features

- CW Output Power: 22 W
- Typical 980 nm Emission Wavelength
- High Reliability
- High Efficiency

#### Applications

- Medical Usage
- Heating
- Material Processing
- Marking

#### **Specifications (25°C)**

Type	G081PU322W	Unit
<b>Optical Specification</b>		
CW Output Power from Fiber P <sub>F</sub>	22	W
Center Wavelength Δ <sub>C</sub>	980	nm
Wavelength Tolerance	980 ±10	nm
Spectral Width Δλ	< 7	nm
Wavelength Temperature Coefficient	0.3	nm/°C
<b>Fiber Characteristics</b>		
Fiber Core Size	700	μm
N.A.	0.22	
Fiber Length	1	m
Connector	FC/ST/SMA-905	
<b>Electrical Specification</b>		
Slope Efficiency E <sub>S</sub>	> 11	W/A
Threshold Current I <sub>th</sub>	500	mA
Operation Current I <sub>O</sub>	2500	mA
Operation Voltage V <sub>f</sub>	< 35	V
Series Resistance R <sub>d</sub>	< 3.5	Ω
Package Style	P3-Package	
<b>Absolute Maximum Ratings</b>		
Reverse Voltage V <sub>r</sub>	35	V
Operating Temperature T <sub>O</sub>	-10 ... 45	°C
Storage Temperature T <sub>stg</sub>	-40 ... 85	°C





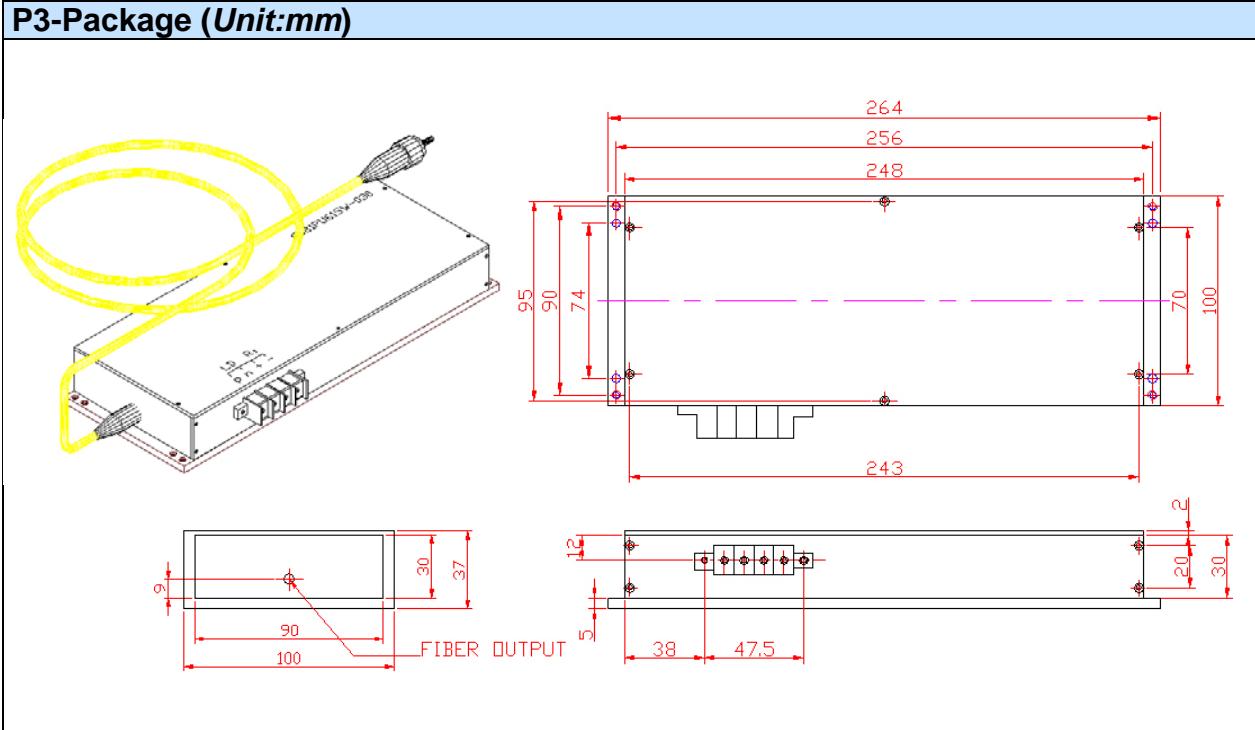
# ROITHNER LASERTECHNIK GmbH

WIEDNER HAUPTSTRASSE 76 1040 VIENNA AUSTRIA  
TEL. +43 1 586 52 43 -0, FAX. -44, OFFICE@ROITHNER-LASER.COM



## Package Dimensions

### P3-Package (Unit:mm)



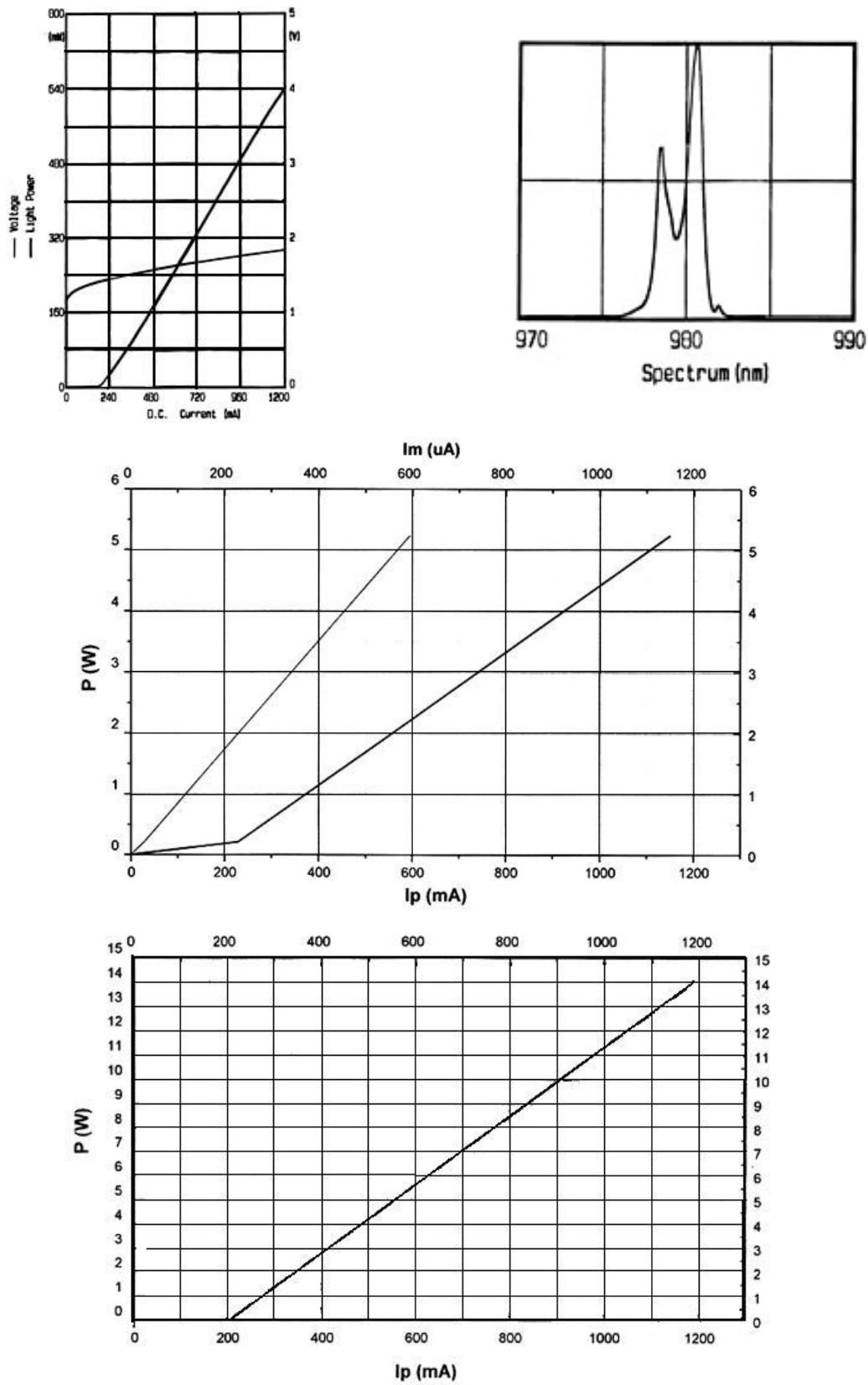


# ROITHNER LASERTECHNIK GmbH

WIEDNER HAUPTSTRASSE 76      1040 VIENNA      AUSTRIA  
TEL. +43 1 586 52 43 -0, FAX. -44, OFFICE@ROITHNER-LASER.COM



## Typical Performance Curves





**ROITHNER LASERTECHNIK GmbH**

WIEDNER HAUPTSTRASSE 76      1040 VIENNA      AUSTRIA  
TEL. +43 1 586 52 43 -0, FAX. -44, [OFFICE@ROITHNER-LASER.COM](mailto:OFFICE@ROITHNER-LASER.COM)



## Notes

1. Laser beam is harmful especially for your eyes. Don't look at the laser beam directly.
2. Lifetime of the diode laser variated 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 staticproof 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.