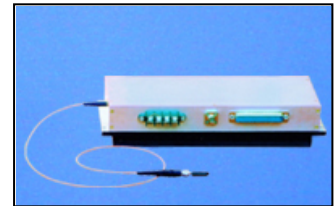




## G098PU312W



### TECHNICAL DATA

## High Power Fiber Coupled Infrared Laser Diode

#### Features

- CW Output Power: 12 W
- Typical 980 nm Emission Wavelength
- High Reliability
- High Efficiency

#### Applications

- Medical Usage
- Heating
- Material Processing
- Marking

#### *Specifications (25°C)*

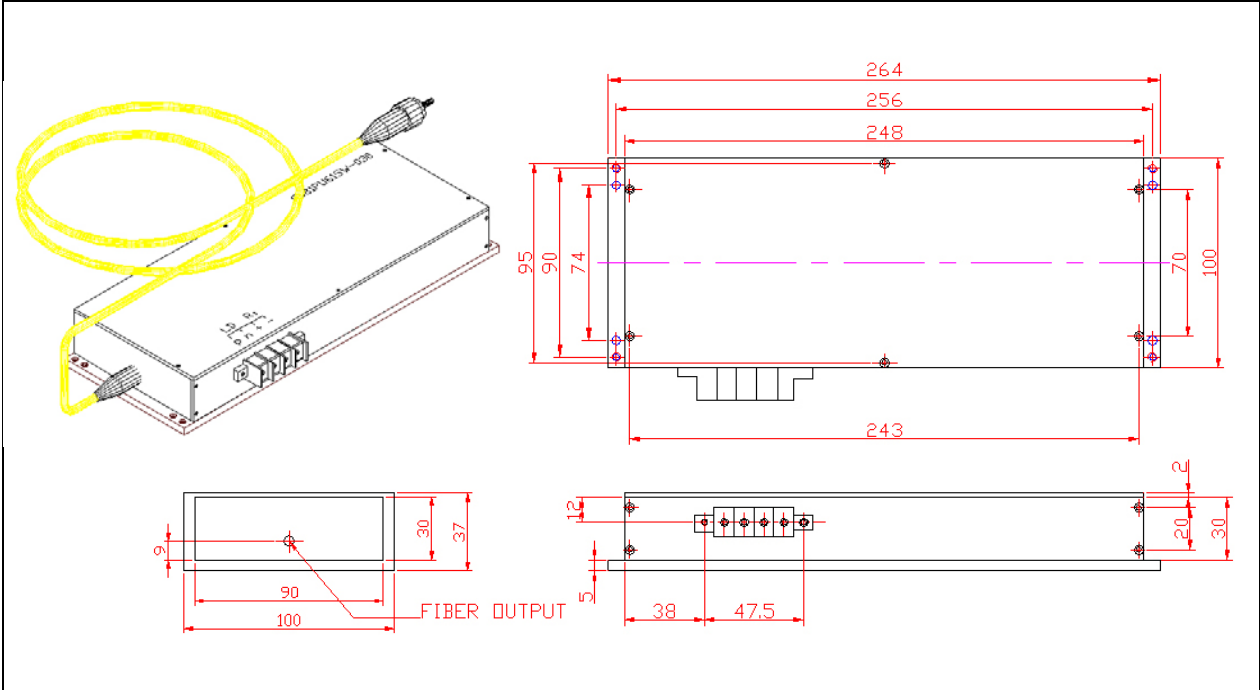
Type	G081PU312W	Unit
<b>Optical Specification</b>		
CW Output Power from Fiber $P_F$	12	W
Center Wavelength $\Delta_C$	980	nm
Wavelength Tolerance	$980 \pm 10$	nm
Spectral Width $\Delta\lambda$	$< 7$	nm
Wavelength Temperature Coefficient	0.3	nm/°C
<b>Fiber Characteristics</b>		
Fiber Core Size	700	$\mu\text{m}$
N.A.	0.12	
Fiber Length	1	m
Connector	FC/ST/SMA-905	
<b>Electrical Specification</b>		
Slope Efficiency $E_S$	$> 12$	W/A
Threshold Current $I_{th}$	250	mA
Operation Current $I_O$	1250	mA
Operation Voltage $V_f$	$< 35$	V
Series Resistance $R_d$	$< 3.5$	$\Omega$
Package Style	P3-Package	
<b>Absolute Maximum Ratings</b>		
Reverse Voltage $V_r$	35	V
Operating Temperature $T_O$	-10 ... 45	°C
Storage Temperature $T_{stg}$	-40 ... 85	°C





## Package Dimensons

### P3-Package (Unit:mm)



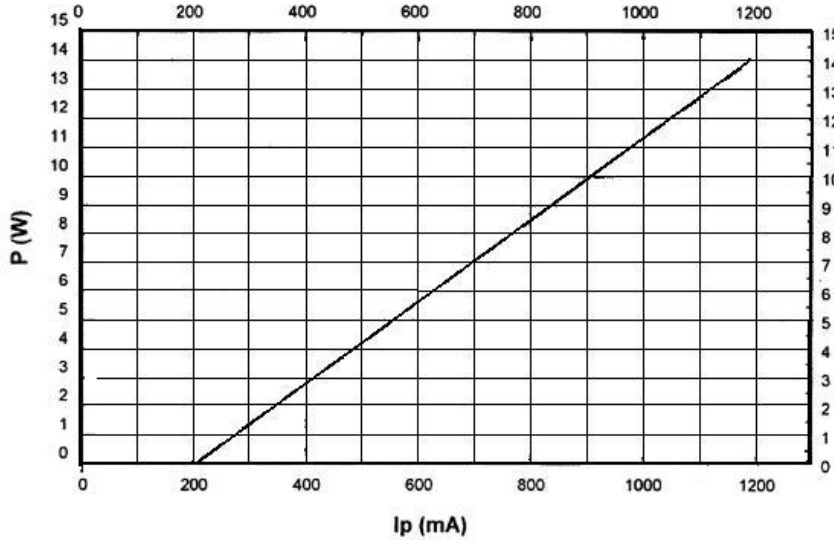
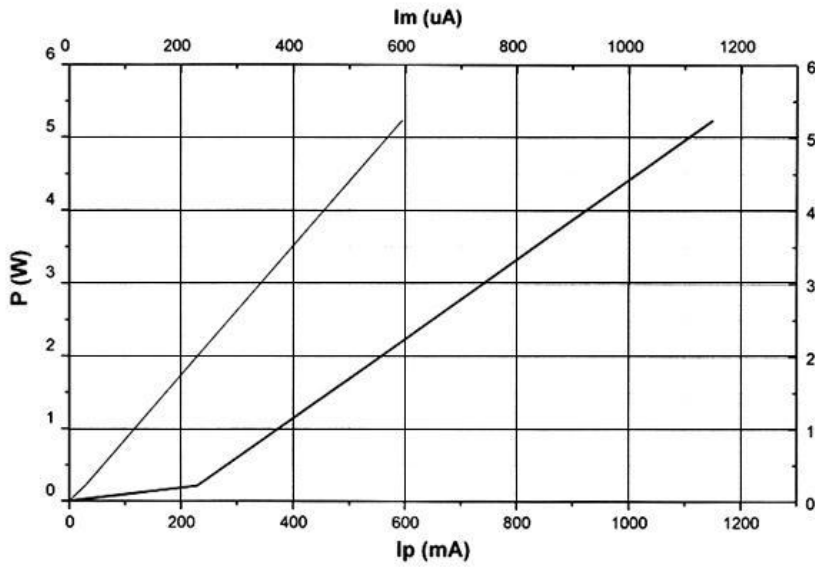
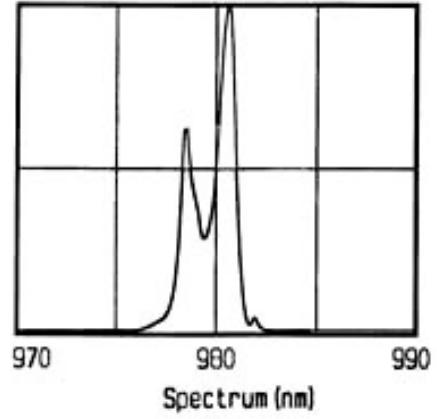
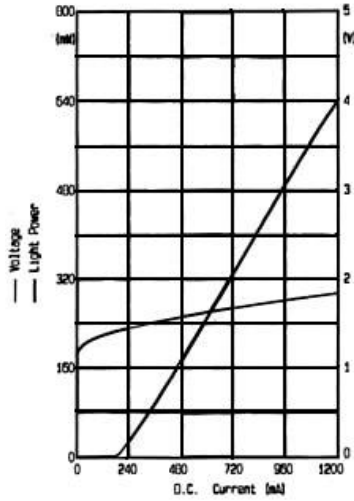


# ROITHNER LASERTECHNIK GmbH

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## Typical Performance Curves





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### **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 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. Otherelse the diode laser should be damaged.
7. The fiber facet should be keep clean befor 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.