



ROITHNER LASERTECHNIK GmbH

WIEDNER HAUPTSTRASSE 76 1040 VIENNA AUSTRIA
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G098PU1750M

TECHNICAL DATA



High Power Fiber Coupled Infrared Laser Diode

Features

- CW Output Power: 750 mW
- Typical 980 nm Emission Wavelength
- High Reliability
- High Efficiency

Applications

- Medical Usage
- Heating
- Material Processing
- Marking

Specifications (25°C)

Type	G081PU1750M	Unit
Optical Specification		
CW Output Power from Fiber P _F	750	mW
Center Wavelength Δ _C	980	nm
Wavelength Tolerance	980 ±10	nm
Spectral Width Δλ	< 4	nm
Wavelength Temperature Coefficient	0.3	nm/°C
Fiber Characteristics		
Fiber Core Size	100	μm
N.A.	0.22 (0.12)	
Fiber Length	1	m
Connector	FC/ST/SMA-905	
Electrical Specification		
Slope Efficiency E _S	> 0.75	W/A
Threshold Current I _{th}	250	mA
Operation Current I _O	1250	mA
Operation Voltage V _f	< 2	V
Series Resistance R _d	< 0.2	Ω
Package Style	P1-Package	
Absolute Maximum Ratings		
Reverse Voltage V _r	2	V
Operating Temperature T _O	-10 ... 45	°C
Storage Temperature T _{stg}	-40 ... 85	°C





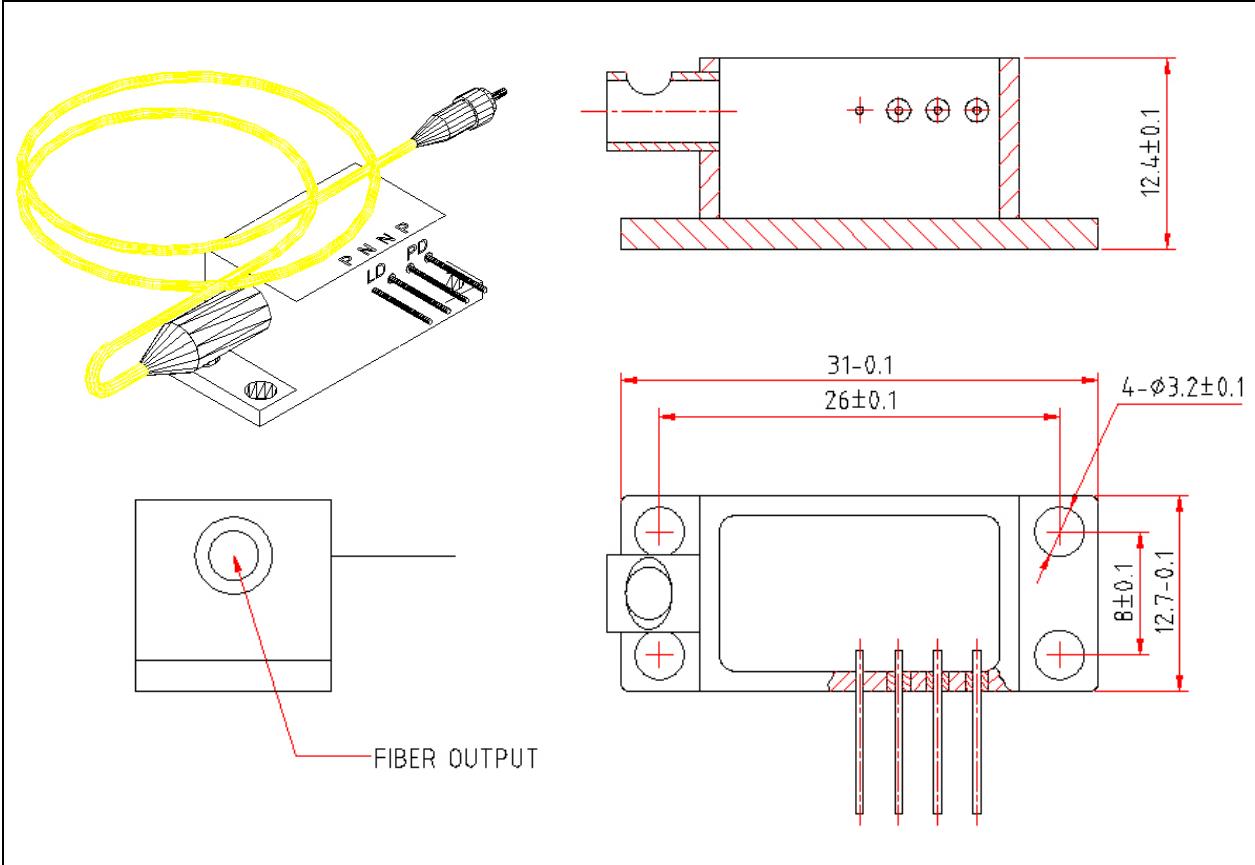
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Package Dimensions

P1-Package (Unit:mm)



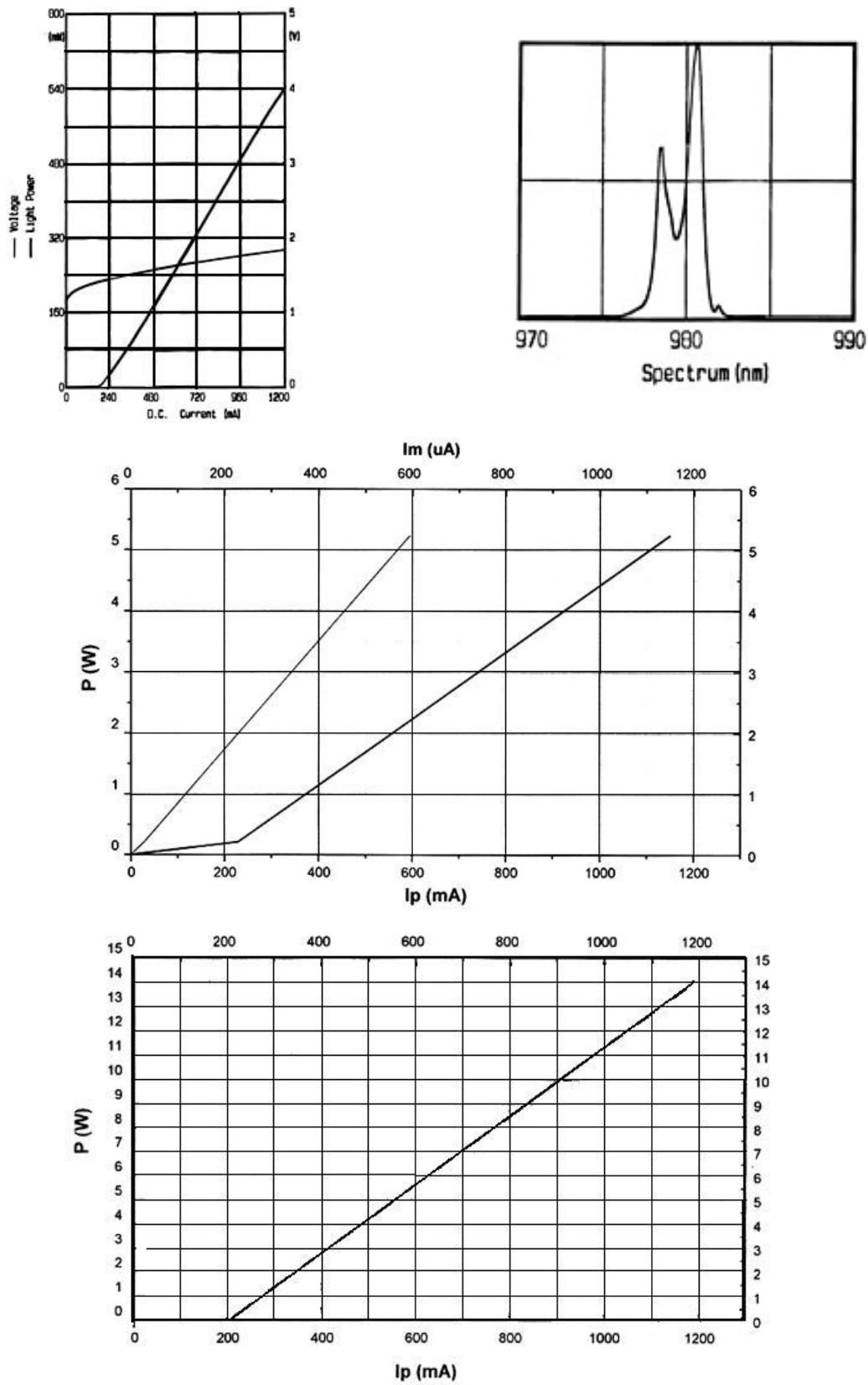


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Typical Performance Curves





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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 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.