



## G145PU400M



### TECHNICAL DATA

## High Power Fiber Coupled Infrared Laser Diode

#### Features

- CW Output Power: 400 mW
- Typical 1450 nm Emission Wavelength
- High Reliability
- High Efficiency

#### Applications

- Laser Pumping
- Medical Usage
- Printing

#### *Specifications (25°C)*

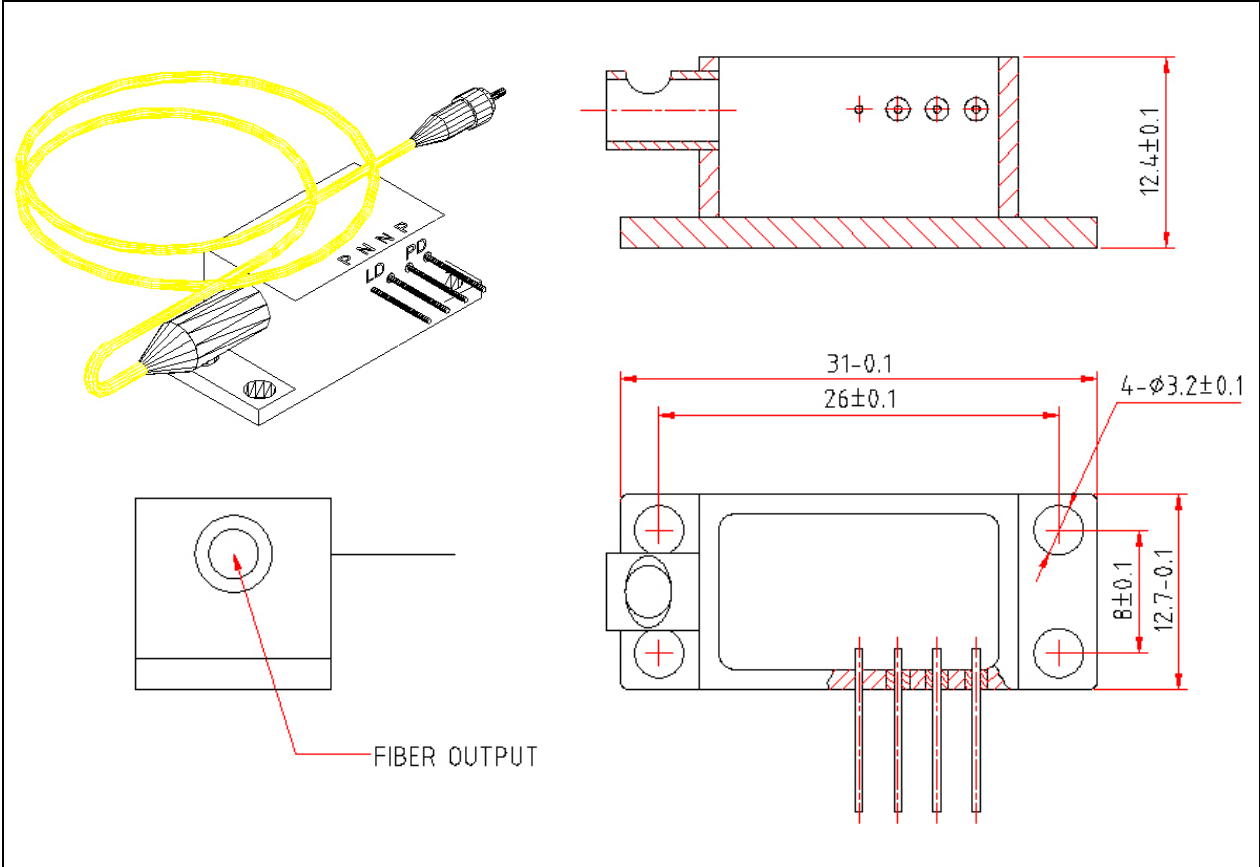
Type	G145PU400M	Unit
<b>Optical Specification</b>		
CW Output Power from Fiber $P_F$	400	mW
Center Wavelength $\Delta_C$	1450	nm
Wavelength Tolerance	1420 – 1480	nm
Spectral Width $\Delta\lambda$	< 10	nm
Wavelength Temperature Coefficient	0.4	nm/°C
<b>Fiber Characteristics</b>		
Fiber Core Size	100	$\mu\text{m}$
N.A.	0.22	
Fiber Length	1	m
Connector	FC/ST/SMA-905	
<b>Electrical Specification</b>		
Slope Efficiency $E_S$	> 0.17	W/A
Threshold Current $I_{th}$	600	mA
Operation Current $I_O$	3	A
Operation Voltage $V_f$	< 2	V
Series Resistance $R_d$	< 0.2	$\Omega$
Package Style	P1-Package	
<b>Absolute Maximum Ratings</b>		
Operating Temperature $T_O$	-10 ... 30	°C
Storage Temperature $T_{stg}$	-40 ... 70	°C





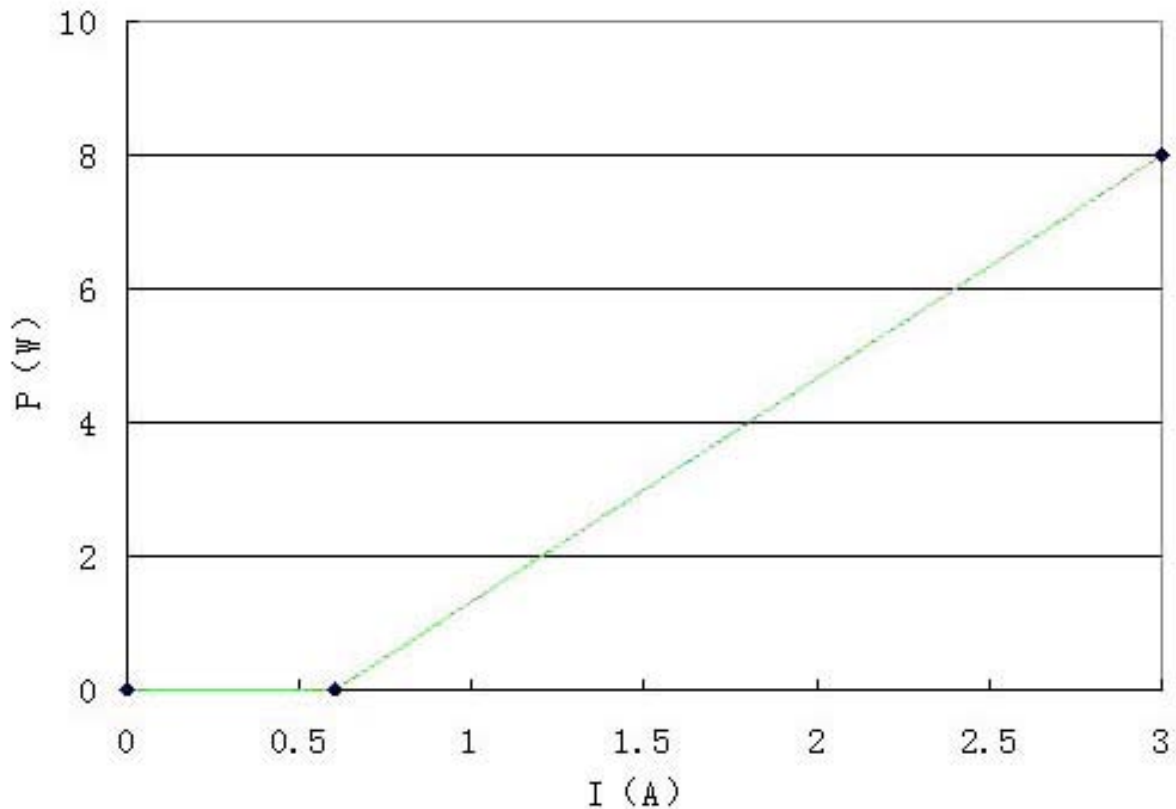
## Package Dimensons

### P1-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 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.