



G145PU23W



TECHNICAL DATA

High Power Fiber Coupled Infrared Laser Diode

Features

- CW Output Power: 3 W
- Typical 1450 nm Emission Wavelength
- High Reliability
- High Efficiency

Applications

- Laser Pumping
- Medical Usage
- Printing

Specifications (25°C)

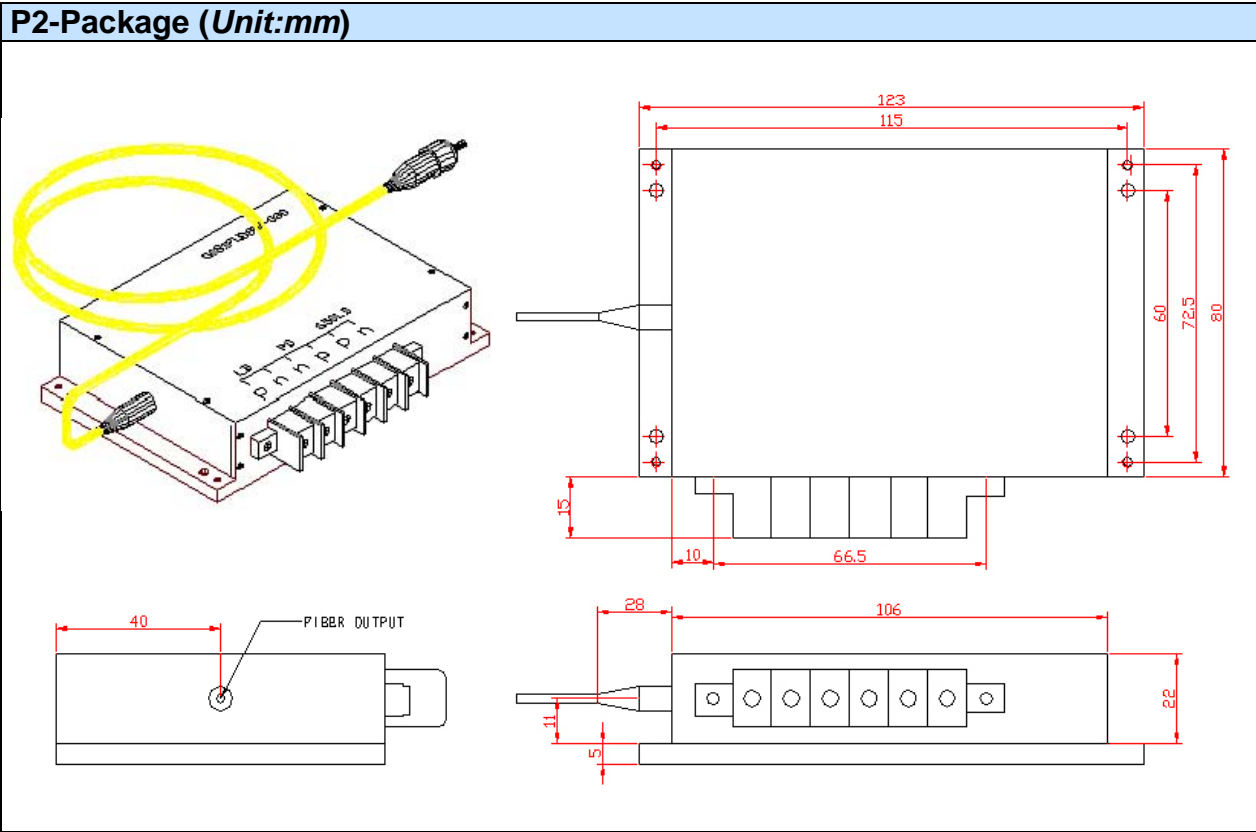
Type	G145PU23W	Unit
Optical Specification		
CW Output Power from Fiber P_F	3	W
Center Wavelength Δ_C	1450	nm
Wavelength Tolerance	1420 – 1480	nm
Spectral Width $\Delta\lambda$	< 10	nm
Wavelength Temperature Coefficient	0.4	nm/°C
Fiber Characteristics		
Fiber Core Size	400	μm
N.A.	0.22	
Fiber Length	1	m
Connector	ST/SMA-905	
Electrical Specification		
Slope Efficiency E_S	> 1.25	W/A
Threshold Current I_{th}	600	mA
Operation Current I_O	3	A
Operation Voltage V_f	< 15	V
Series Resistance R_d	< 1.2	Ω
Package Style	P2-Package	
Absolute Maximum Ratings		
Operating Temperature T_O	-10 ... 30	°C
Storage Temperature T_{stq}	-40 ... 70	°C





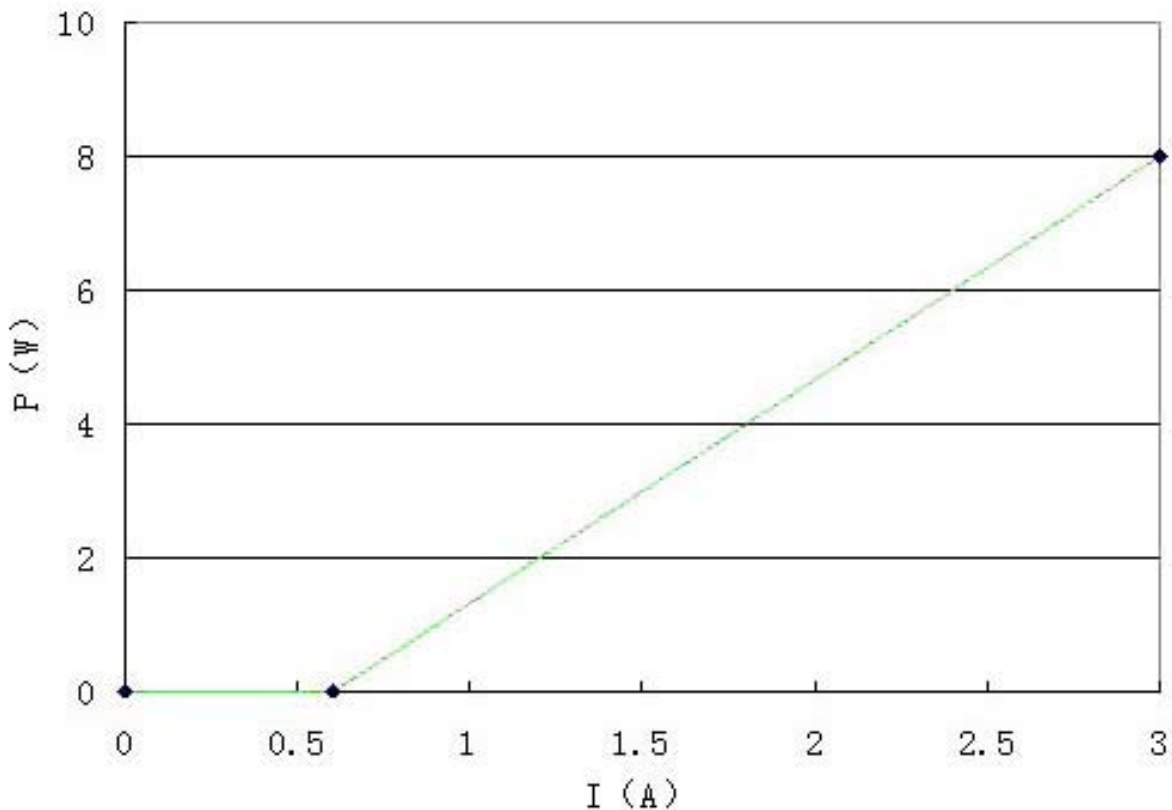
Package Dimensons

P2-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.