

High Power 1550nm PM DFB Laser Module 13dBm

Features

High Power and Wavelength Stability
 With Software Control
 High-performance
 λ_c of 1550±2nm

Applications

Optical device production and testing
 Optical communication system test
 Optical sensing and optical communication experimen

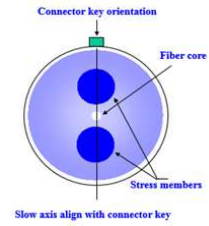
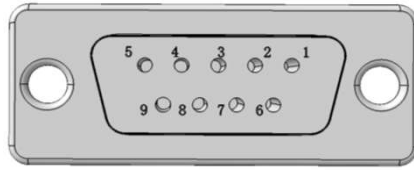
The Modules was designed with the customer's need in mind: highly integrated, small form factor and self-contained module. The laser device in the modules are built in a hermetically sealed 14-PIN butterfly package. The laser device contains DFB chip, thermoelectric cooler (TEC), thermistor, monitor PD and isolator to secure high quality laser performance. External monitoring and control by the RS-232 standard interfaces and specialized control software to achieved high power and wavelength stability.

Specifications

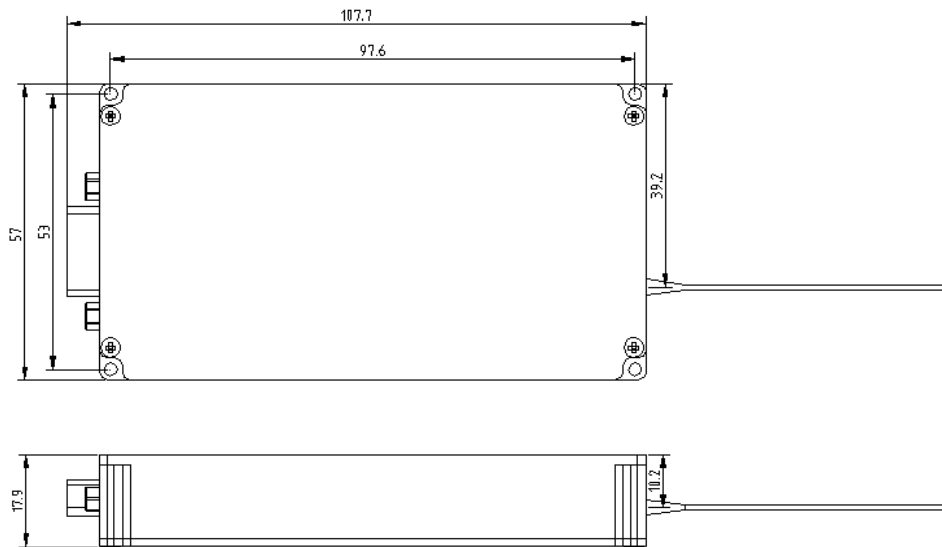
Parameters	Unit	Values	Symbol	Test Conditions
Center Wavelength	nm	1550±2	λ_c	TL=15~35°C, CW
Peak Optical Output Power	dBm	≥103	P _o	P=P _o (CW)
Spectral Linewidth	MHz	≤1	LW	FWHM
Sidemode Suppression Ratio	dB	≥40	SMSR	CW
Polarization Extinction Ratio	dB	≥18	PER	
Optical Isolation	dB	≥30		
Relative Intensity Noise	dB/Hz	-145	RIN	20-1000MHz
Wavelength Temperature Coefficient	nm/°C	0.09(Typ.)	$\Delta\lambda/\Delta T$	TEC temperature 15~35°C
Power Short-term Stability	dB@15min	≤0.01	P _{ss}	Operating case temperature: -20~65°C
Power Long-term Stability	dB@8h.	≤0.03	P _{sL}	
Wavelength Short-term Stability	pm@15min.	≤5	λ_{ss}	
Wavelength Long-term Stability	pm@8h.	≤10	λ_{sL}	
Dimension L×W×H	mm	107.7×57×17.9		
Interface Connector		RS 232		
Operating Voltage	V	4.75~5.25	V	
Power Consumption	W	≤6	P	@25°C
Max Power Consumption	W	≤10	P _{max}	@-20~65°C
Operating Temperature	°C	-20 ~ +65	T _{op}	
Storage Temperature	°C	-40 ~ +85	T _s	

RS232 PIN Assignments:

- Pin 1——+5VDC
- Pin 2——RS232 TX
- Pin 3——RS232 RX
- Pin 5——Ground
- Pins 4, 6, 7, 8, 9——Not connected



Package Dimensions (mm)



Ordering Information

PMDFBM- (1)(1)(1)(1)-(2)-(3)(3)(3)-(4)(4)(4)(4)(4)(4)-(5)-(6)(6)

①	Wavelength	1550;
②	Optical Power	6=6dBm; 10=10dBm; 13=13dBm; 16=16dBm; XX=Customization;
③	Pigtail Type	250=250µm Bare Fiber; 900=900µm Loose Tube;
④	Fiber Type	PM1550;
⑤	Fiber Length	1=1m;
⑥	Connector	NE=None; FA=FC/APC; FC=FC/UPC; SA=SC/APC; SC=SC/UPC; LC=LC/UPC; XX=Others;