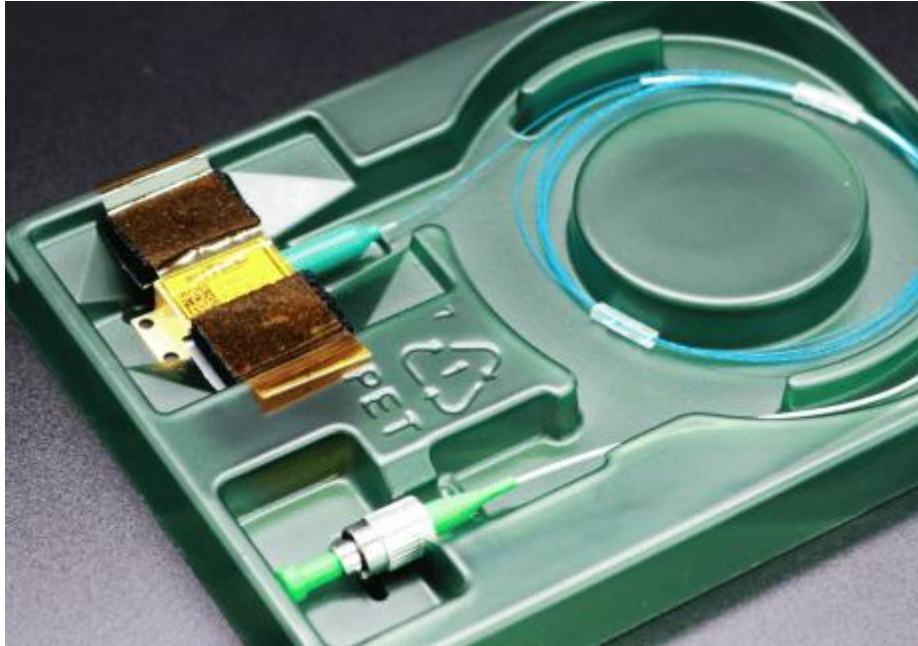


## 1480nm 500mW PM FP laser diode with FBG



### ● Product Description

The 1480nm laser is designed for optical amplifier systems, such as fiber Raman amplifiers used in optical transmission systems, and can also be used in DWDM systems. The laser diode chip is packaged in an industry-standard 14-pin butterfly package, with built-in TEC, thermistor, and PIN photodiode. A dual-lens system efficiently couples the circular beam from the laser chip into the optical fiber, achieving an output power of up to 500mW.



## ● Product features

High output power; FBG frequency stabilization technology;  
Multi-longitudinal mode characteristics; High-reliability package; Low-noise design

## ● Part Number

MP-FP-1480-500-14BF-PA-FBG

## ● Application area

Fiber laser pumping | Industrial processing | Medical equipment | Scientific research experiments | Optical fiber sensing

## ● Core parameters

Central Wavelength	Output Power
1480nm	500mW





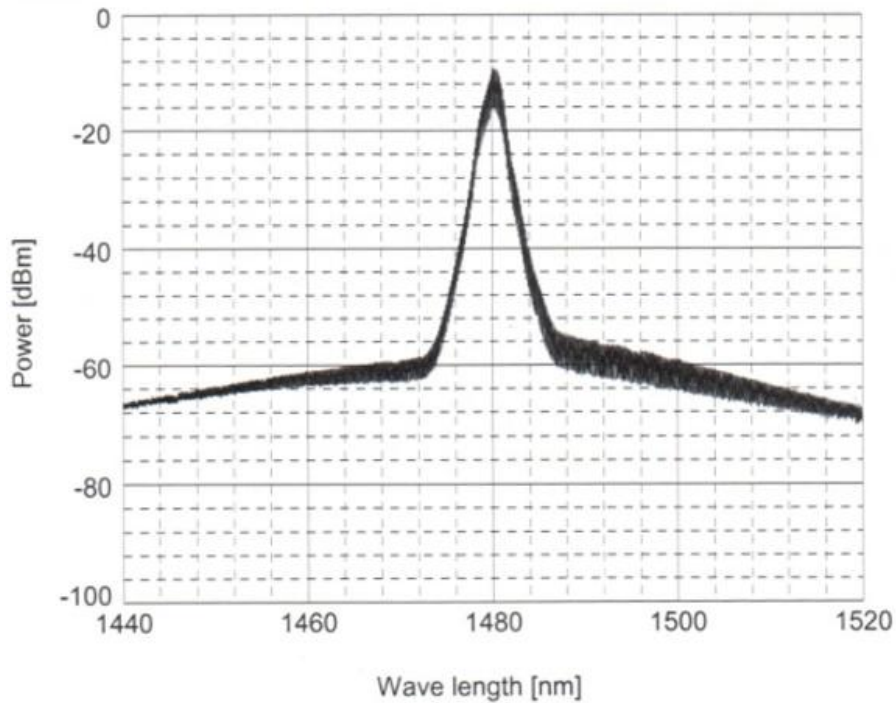
<b>Spectral Width @ Pf=500mW</b>	$\Delta\lambda$	-	0.8	3	nm
<b>Threshold Current</b>	$I_{th}$	-	-	120	mA
<b>Thermistor Resistance</b>	$R_{th}$	9.5	10	10.5	k $\Omega$
<b>TEC Current</b>	$I_c$	-	-	3.4	A
<b>TEC Voltage</b>	$V_c$	-	-	4.1	V
<b>Total Power Consumption</b>	$W_{total}$	-	-	17	W
<b>Polarization Extinction Ratio (PER)</b>	PER	16	-	-	dB

## Absolute Maximum Ratings

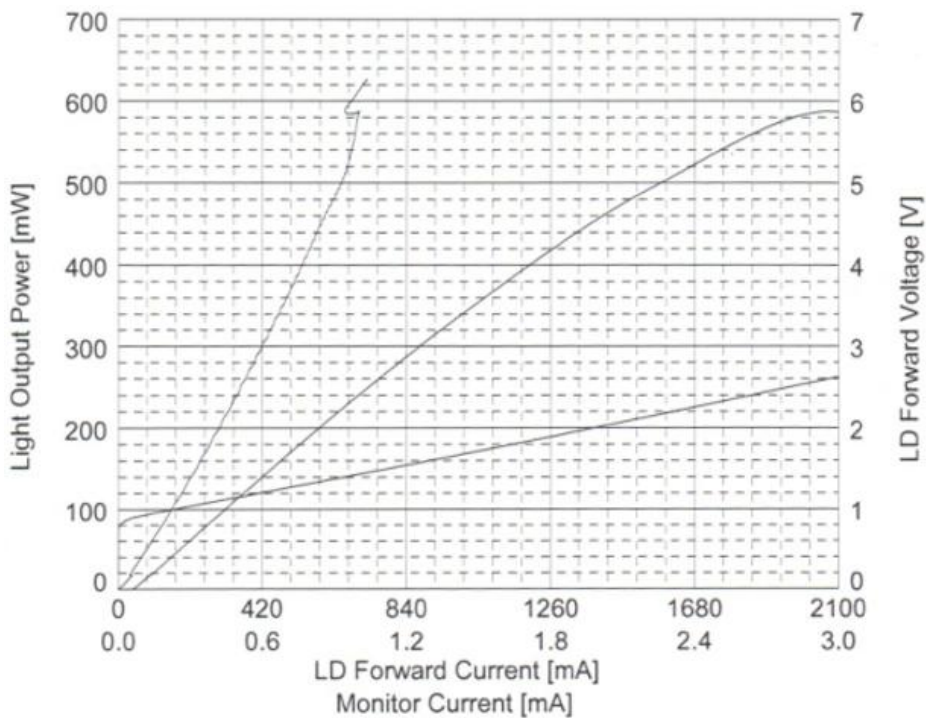
Parameter	Symbol	Min.	Max.	Unit
<b>Storage Temperature</b>	$T_{stg}$	-40	85	$^{\circ}\text{C}$
<b>Operating Case Temperature</b>	$T_c$	-20	70	$^{\circ}\text{C}$
<b>LD Forward Current</b>	$I_f$	-	2100	mA
<b>LD Reverse Voltage</b>	$V_r$	-	2	V
<b>TEC Current</b>	$I_c$	-	4.5	A
<b>TEC Voltage</b>	$V_c$	-	4.5	V

# Product Characteristics

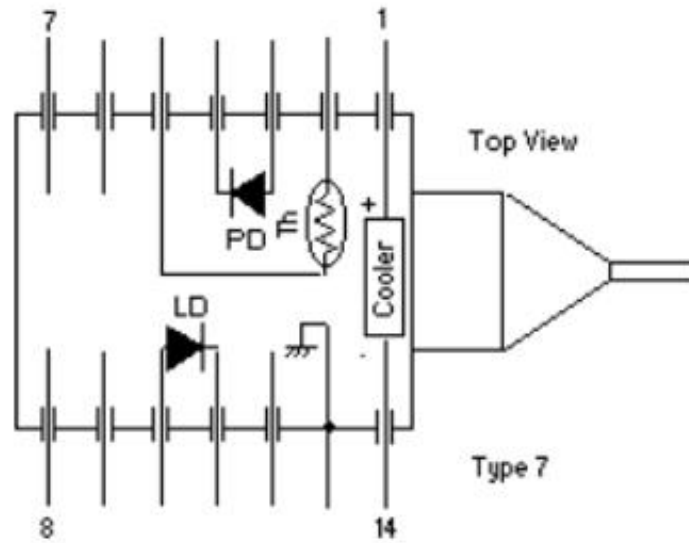
## Optical Spectrum



## Power Curve



## Pin Definition



Pin#	Function	Pin#	Function
1	Cooler(+)	8	No Connection
2	Thermistor	9	No Connection
3	PD anode(-)	10	LD anode(+)
4	PD cathode(+)	11	LD cathode(-)
5	Thermistor	12	No Connection
6	No Connection	13	Case GND
7	No Connection	14	Cooler(-)