

1060nm DFB Laser Diode 50mW Pump Type



● Product Description

The 10xxnm 14PIN Butterfly Packaged DFB Laser Diode integrates TEC, lens, thermistor, and PD into a 14PIN butterfly package. The hermetically sealed design meets telecom-grade operating requirements. It offers narrow linewidth and high power (50mW) and can support output with PM980 or HI1060 fiber. Custom pin definitions are also supported.

● Product features

14PIN Butterfly Package、Wavelengths from 1018 to 1200nm available、Integrated TEC and thermistor、Narrow linewidth DFB chip、PM980/HI1060 fiber



● Part Number

MP-DFB-1060-50-A81-14BF-PA-1

● Application area

Ultrafast lasers、 SHG seed light

● Core parameters

Wavelength	Optical Power	Fiber Type
1060nm	50mW	PM980-XP

● General Parameters

Electro-Optical Characteristics (T = 25°C)

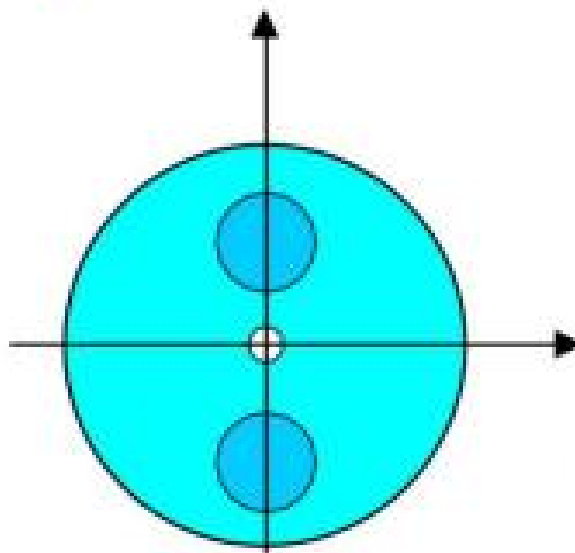
Optical Electrical Characteristics (TCHIP=15-35 °C, TCASE=25 °C, Iop=150 mA)

Parameter	Min	Typ.	Max	Unit
Central Wavelength	1026	1028	1030	nm
	1034	1036	1038	
	1058	1060	1062	
	1062	1064	1066	
	1066	1068	1070	
	1082	1084	1086	
SMSR	40	50	-	dB
Linewidth	-	5	-	MHz
Optical Power (Fiber Internal)	30	50	-	mW
Drive Voltage	-	2	2.5	V
Drive Current	-	150	250	mA
No Mode-Hop Range	20	50	-	mA
Threshold Current	-	35	-	mA

Parameter	Min	Typ.	Max	Unit
Slope Efficiency	-	0.25	-	W/A
Current Wavelength Coefficient	-	0.002	-	nm/mA
Temperature Wavelength Coefficient	-	0.08	-	nm/ °C
MPD Responsivity	-	0.5	-	A/W
Extinction Ratio	-	16	-	dB

Optical Fiber Characteristics:

Key Aligned to the Slow axis



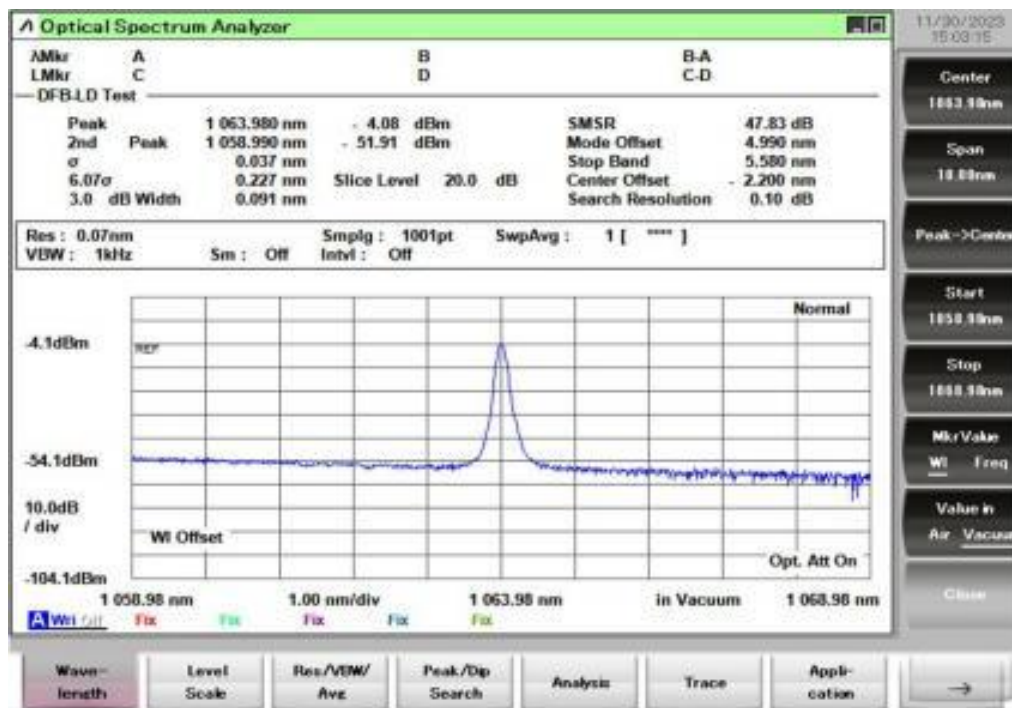
Fiber Type	PM980-XP
Mode Field Diameter	$6.6 \pm 0.5 \mu\text{m}$ @ 980 nm
Numerical Aperture	0.10
Fiber Length	1.5 m
Connector	FC/APC (2.0 mm Narrow Key)
Loose Tube	$\varnothing 900 \mu\text{m}$



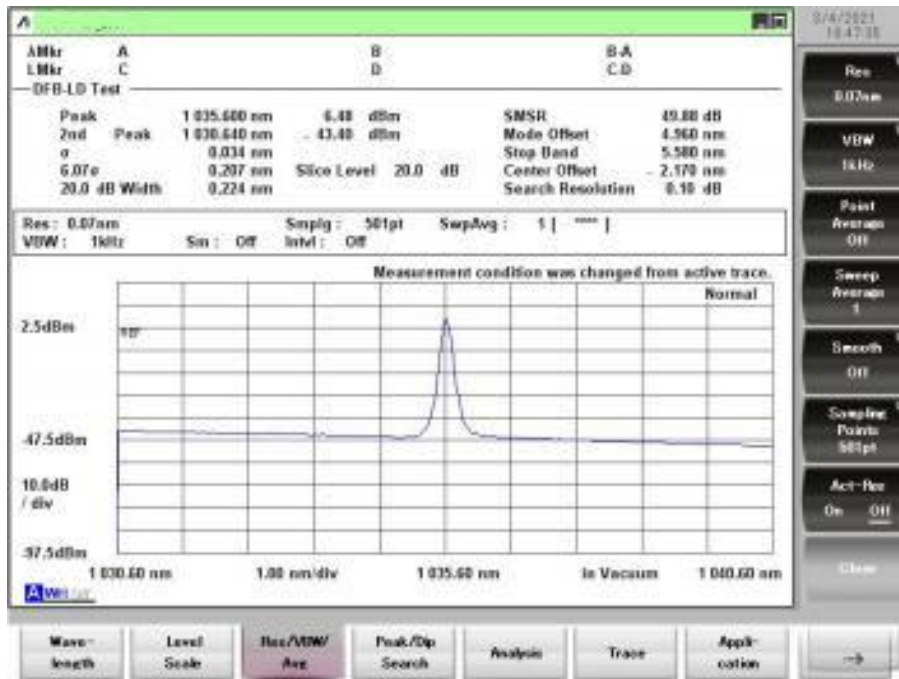
Limit Parameters

Parameter	Typical Value	Unit
Fiber Optical Power	50	mW
Operating Current	400	mA
LD Reverse Voltage	2	V
PD Reverse Voltage	15	V
Case Operating Temperature	0 to 50	°C
Storage Temperature	-10 to 65	°C
TEC Current	2.5	A
TEC Voltage	4.0	V
Thermistors Resistance	10	kOhms

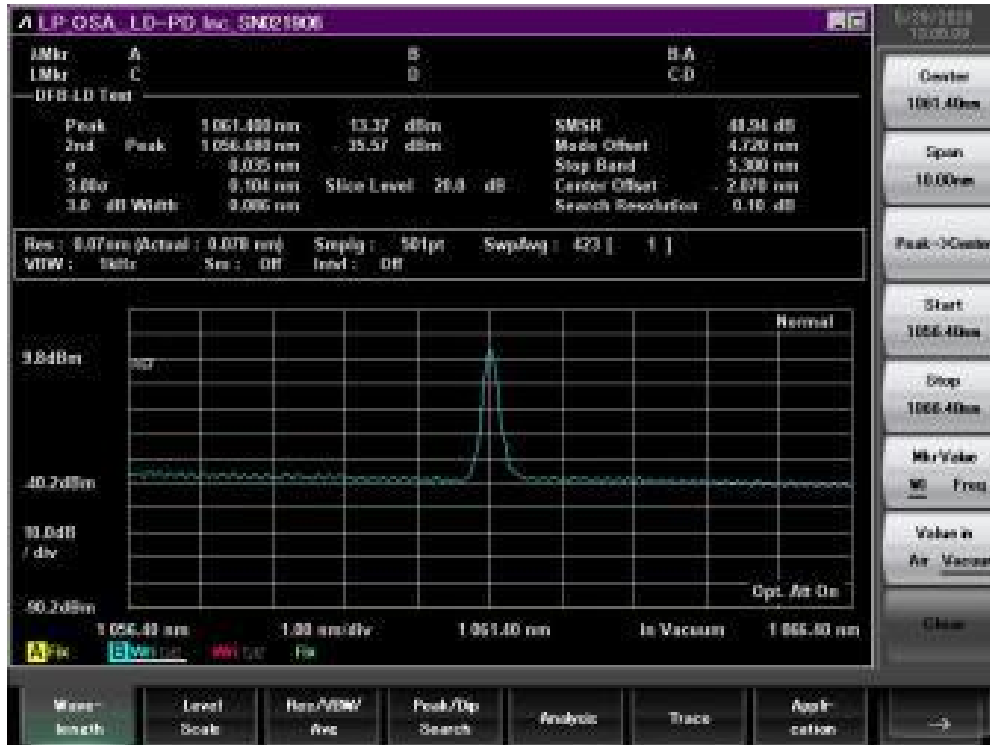
Spectral Analysis



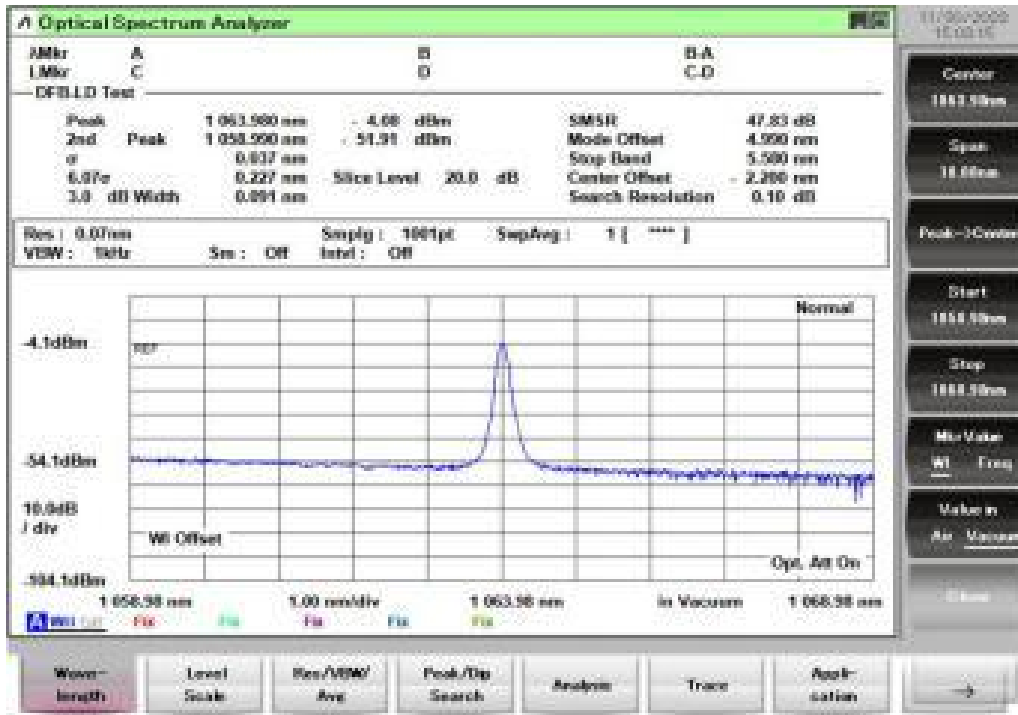
1028nm



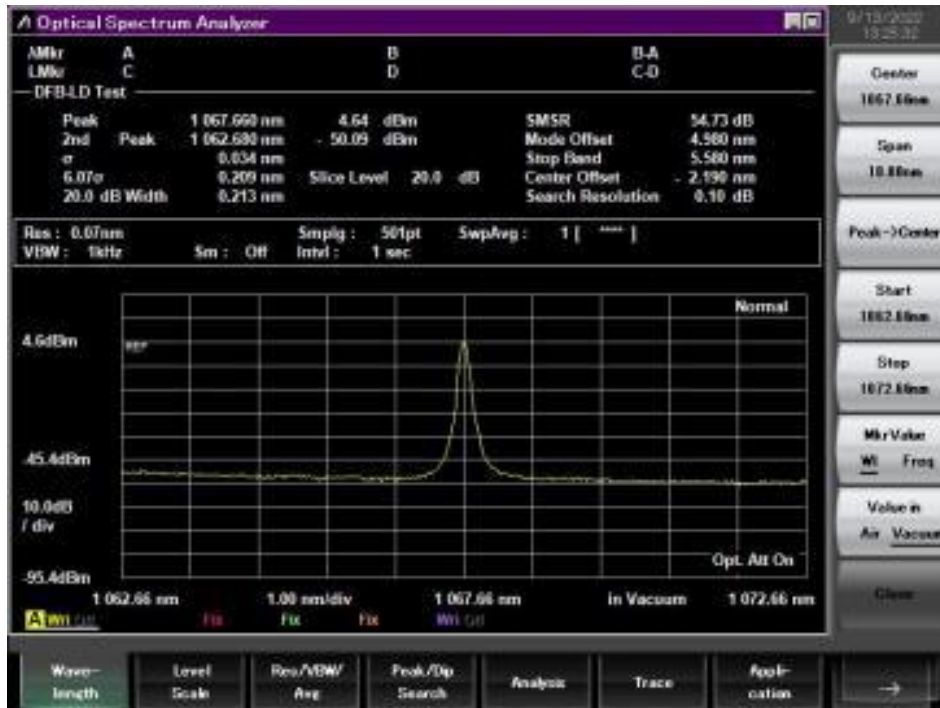
1036nm



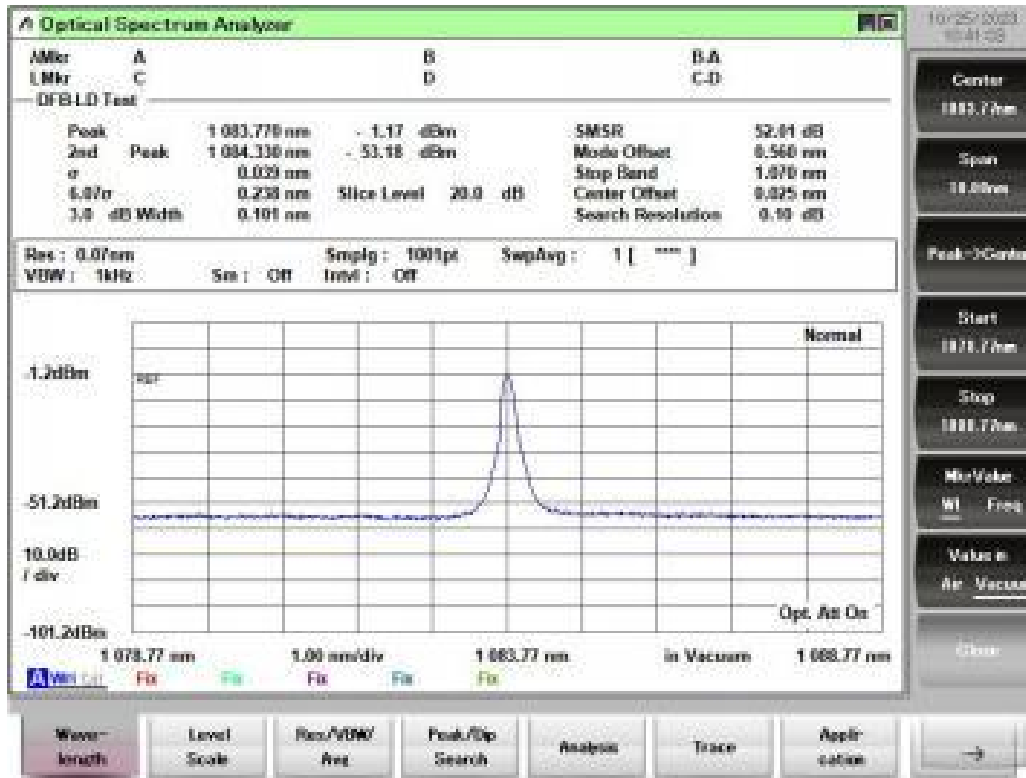
1060nm



1064nm

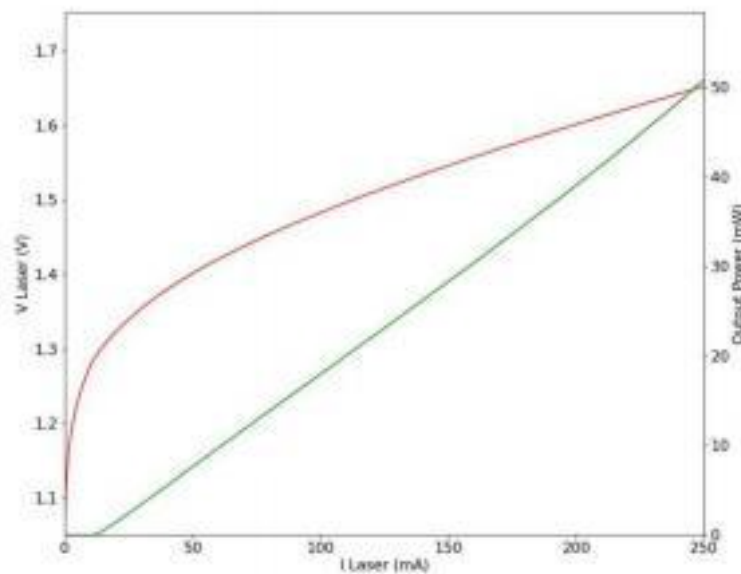


1068nm

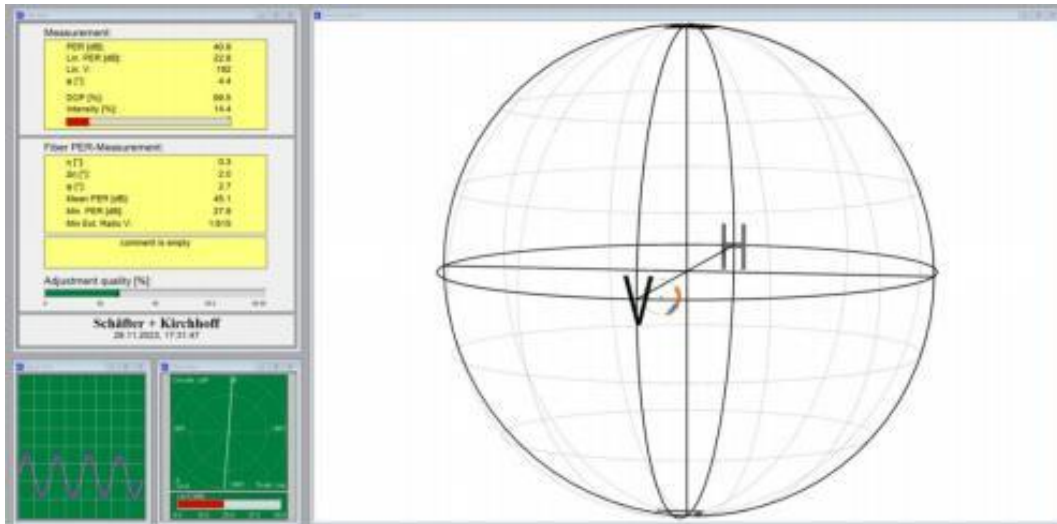


1084nm

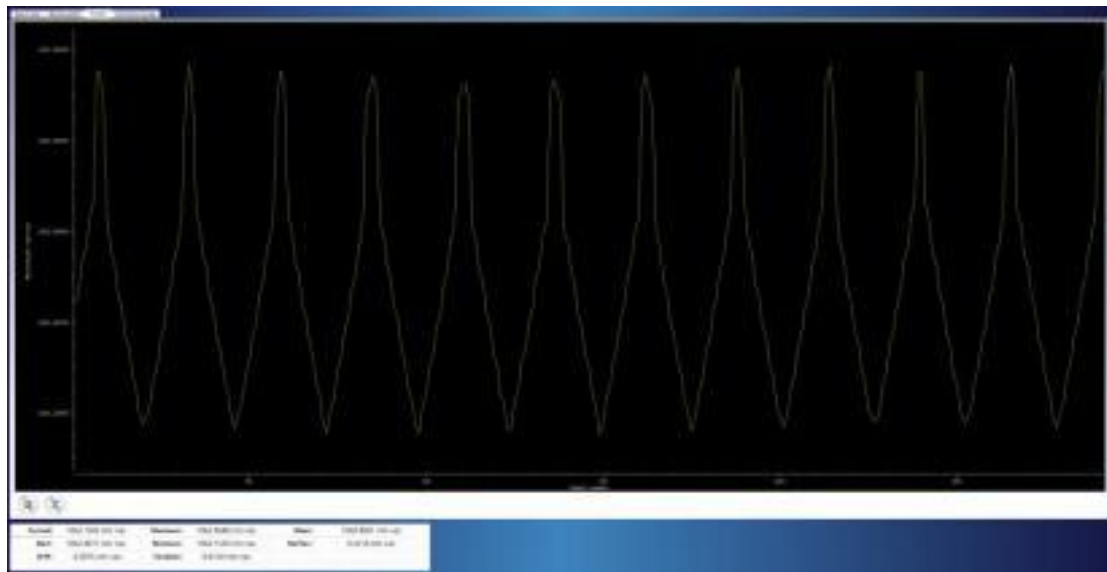
L-I-V Curve



Extinction Ratio Test (Polarization Maintaining Version)

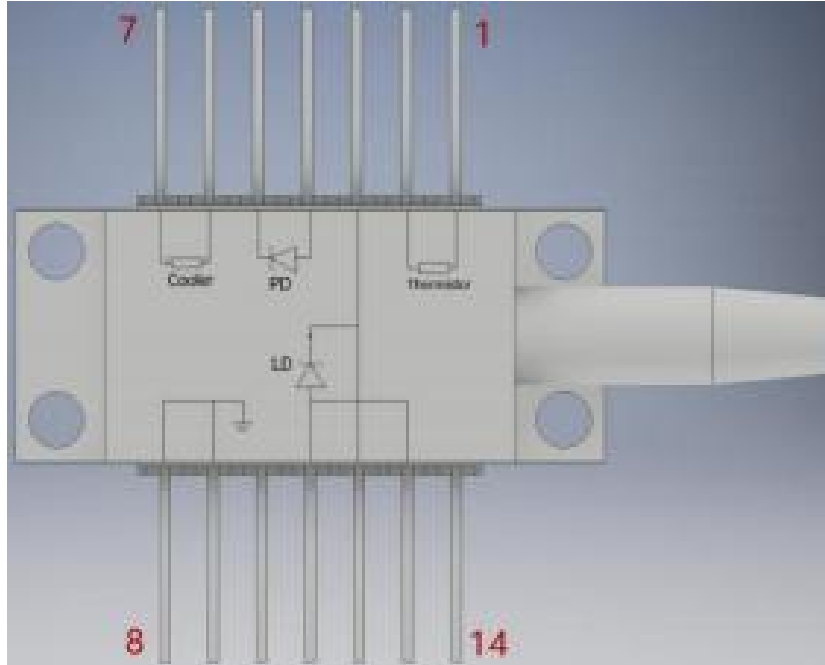


Mode hoppe tuning Range

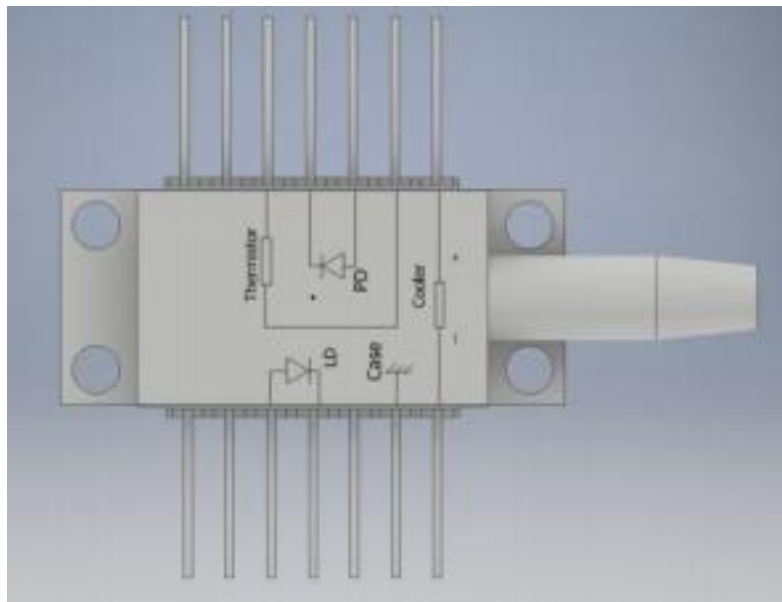


Pin Definition

Type A



Type B





Ordering Info

MP-DFB- □□□□-☆-A8▽-XX

□□□□: Wavelength

1018: 1018nm

1030: 1030nm

1053: 1053nm

1064: 1064nm

1084: 1084nm

1120: 1120nm

☆ : Pin Definition

A: Telecom A

B: Pump B

▽: Wavelength Tolerance

1: ± 1nm

2: ±2nm

XX: Fiber and Connector Type

SA=HI1060+ FC/APC

SP=HI1060+ FC/PC

PA=PM980 Fiber+ FC/APC

PP=PM980 Fiber+ FC/PC



(Our default packaging does not include an isolator. If the customer requires an isolator, please add "-ISO" at the end of the model number. With the addition of the isolator, we can only guarantee an output power of 30mW+.)

Eg:

PN#MP-DFB-1064-B-A81-PA-ISO