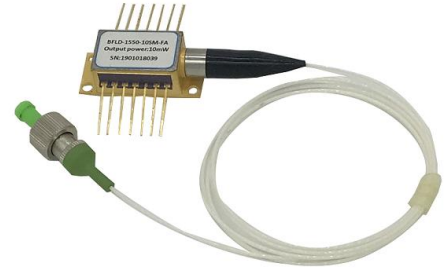


## 1064nm 200mW DFB Butterfly Laser Diode

### 1. Features:

- 200mW High output power;
- Field-proven high reliability;
- Hi1060 SM or PM980-HP fiber pigtail;
- 14PIN Butterfly package;
- Internal thermoelectric heatpump and monitor photodiode;

**Reliability:** Telcordia GR-468. RoHS



### 2. Applications:

- Seed source for lasers;
- Spectroscopy;
- Optical sensing.

### 3. Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
LD Reverse current	$I_R$	-	2	V
LD Forward current	$I_F$	-	50	mA
MPD Reverse voltage	$V_{MPD}$	-	20	V
Thermoelectric cooler voltage	$V_{TEC}$	-	4.8	V
Thermoelectric cooler current	$I_{TEC}$	-	1.8	A
Operating case temperature	$T_C$	-20	60	°C
Storage temperature	$T_{STG}$	-40	85	°C
Storage humidity	-	5	85	%RH
Electro static discharge (ESD)	$V_{ESD}$	-	500	V
Lead soldering temperature	$S_{TEMP}$	-	260	°C
Lead soldering time	$S_{TIME}$		10	sec

### 4. Electro-Optical Characteristics(25°C laser temperature):

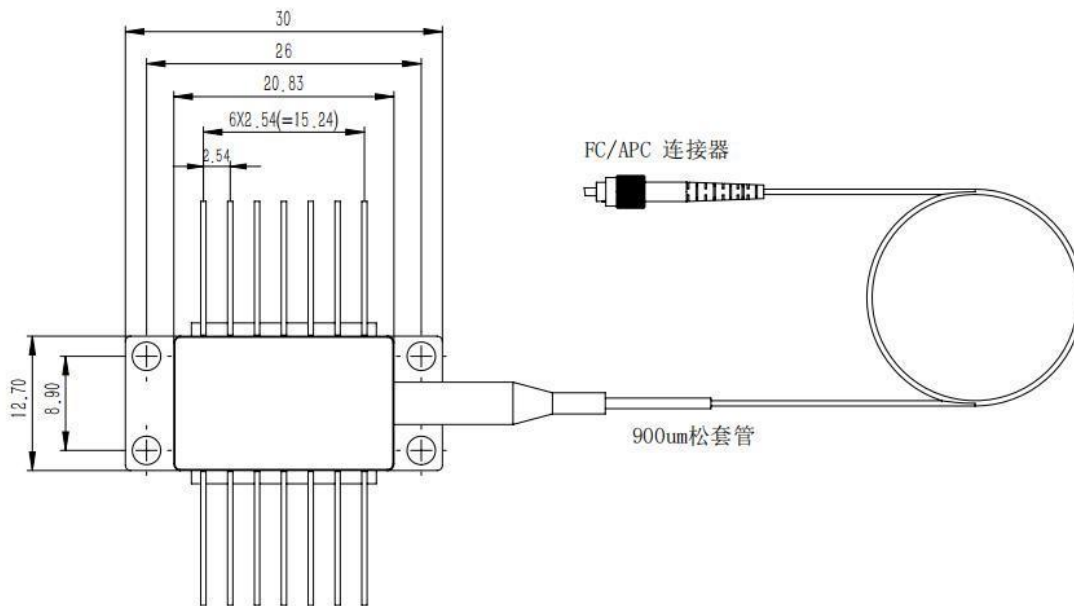
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Center wavelength	$\lambda_C$	$T_L=15\sim 35^\circ\text{C}$ CW	1062	1064	1066	nm
Optical output power	$P_O$	$T_L=25^\circ\text{C}$	-	200	-	mW
Threshold current	$I_{TH}$	$T_L=25^\circ\text{C}$	-	45	70	mA
Operating voltage	$V_{OP}$	$I_{OP}= 200\text{mA}(\text{CW})$	-	-	2.5	V
Operating current	$I_{OP}$	$I_{OP}= 200\text{mA}(\text{CW})$	-	300	500	mA
-3dB Spectral width	$\Delta\lambda$	-	-	0.03	-	nm

Side mode suppression ratio	SMSR	-	-	40	-	dB
Polarization extinction ratio	ER	-	18	-	-	dB
Temp. wavelength coefficient	$\Delta\lambda/\Delta T$	-	-	0.08	-	nm/°C
MPD Responsivity	$I_{MON}/P_{OP}$	@-5V bias voltage	1	-	30	$\mu A/mW$
Thermistor resistance	$R_{TH}$	-	9.5	10	10.5	K $\Omega$

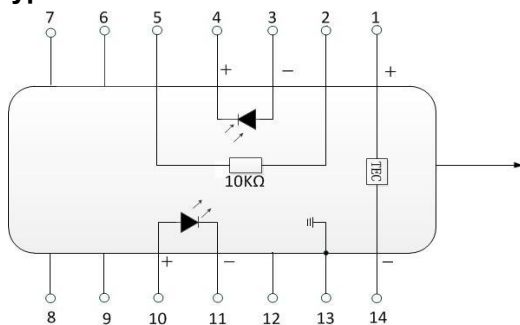
**5. Optical Fiber Specifications:**

Parameters	Description
Fiber type	Hi1060 or PM980
Pigtail type	900 $\mu m$ loose tube
Pigtail length	1.0 $\pm$ 0.1m
Connector type	FC/APC

**6. Package drawing&PIN-OUT Definition(Unit:mm):**

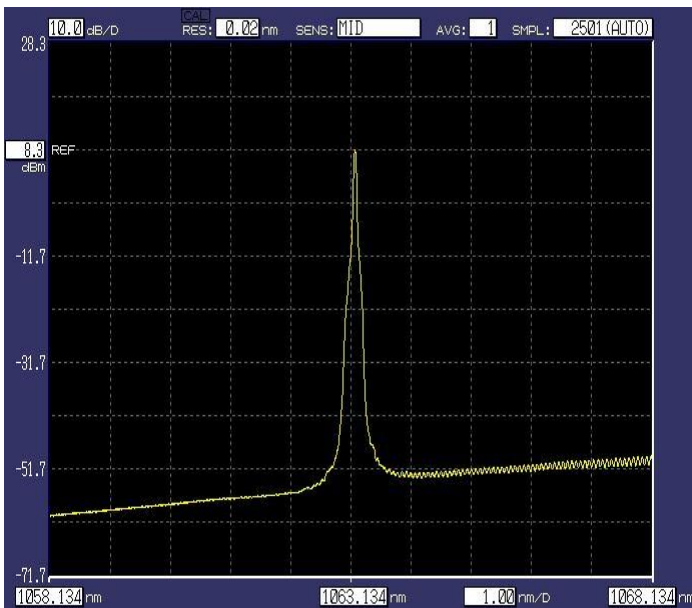


**Type 2**

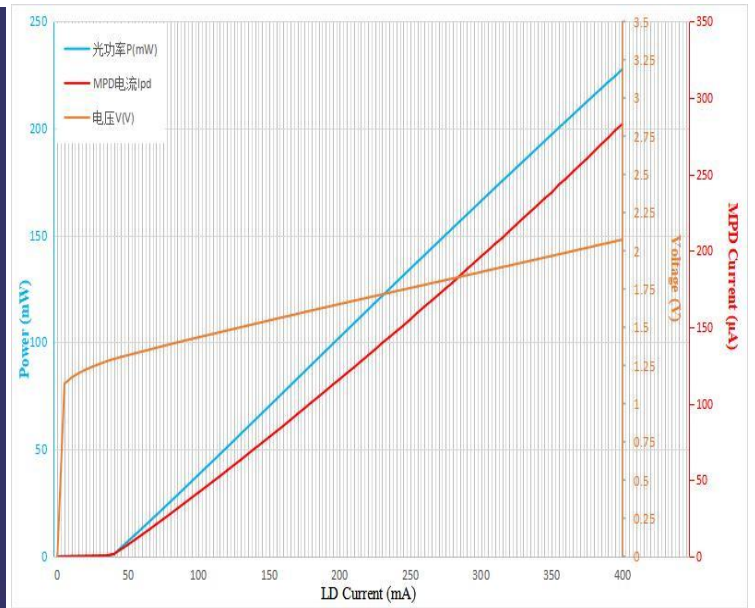


PIN	Description	PIN	Description
1	TEC(+)	14	TEC(-)
2	Thermistor	13	Case Ground
3	PD Monitor Anode (-)	12	NC
4	PD Monitor Cathode (+)	11	Laser Cathode (-)
5	Thermistor	10	Laser Anode (+)
6	NC	9	NC
7	NC	8	NC

**7. Type Optical spectrum**



Light-Current-Voltage Curves (25°C)



Spectrum (Pop=200mW,25°C)

**8. Ordering Information:**

BFLD	-XXXX	-X	XX	-XX	X
Laser type	Wavelength	Output power	Fiber type	Connector	PIN-OUT
DFB	1064: 1064nm	2H: 200mW	SM: Hi1060 PM : PM980	FA : FC/APC Other	NULL: 14PIN Type 2 Customized(10PIN)

E.g.:BFLD-1060-2HSM-FA (Order information: 1064nm DFB Butterfly laser diode with 200mW output power, and SM Hi1060 fiber with FC/APC connector, PIN-OUT is Type 2).