

520nm FP Butterfly Laser Diode

1. Features:

- 14pin Butterfly package;
- Built-in thermistor, and TEC;
- Fiber type can be SM-460HP or PM-S460-HP fiber;
- Operating temperature: -10~ +60°C.

2. Applications

- Optical instrument;
- Light source.

3. Absolute Maximum Ratings:

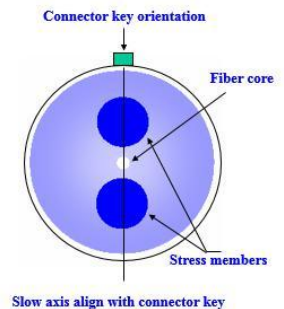
Parameter	Symbol	Condition	Min.	Max.	Unit
Laser forward DC current	-	-	-	320	mA
TEC voltage	V _{TEC}	CW	-	4.2	V
TEC Current	I _{TEC}	CW	-	1.8	A
Lead solder temperature/Time	-	-	-	260/10	°C/S
Operating temperature	T _{OP}	Case temperature	-10	+60	°C
Storage temperature	T _{STG}	Ambient temperature	-40	+85	°C

4. Optical-Electro Characteristics(T=25°C, I_F =I_{OP}):

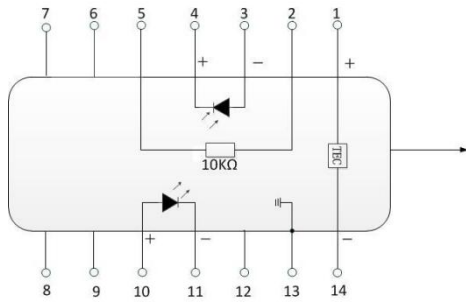
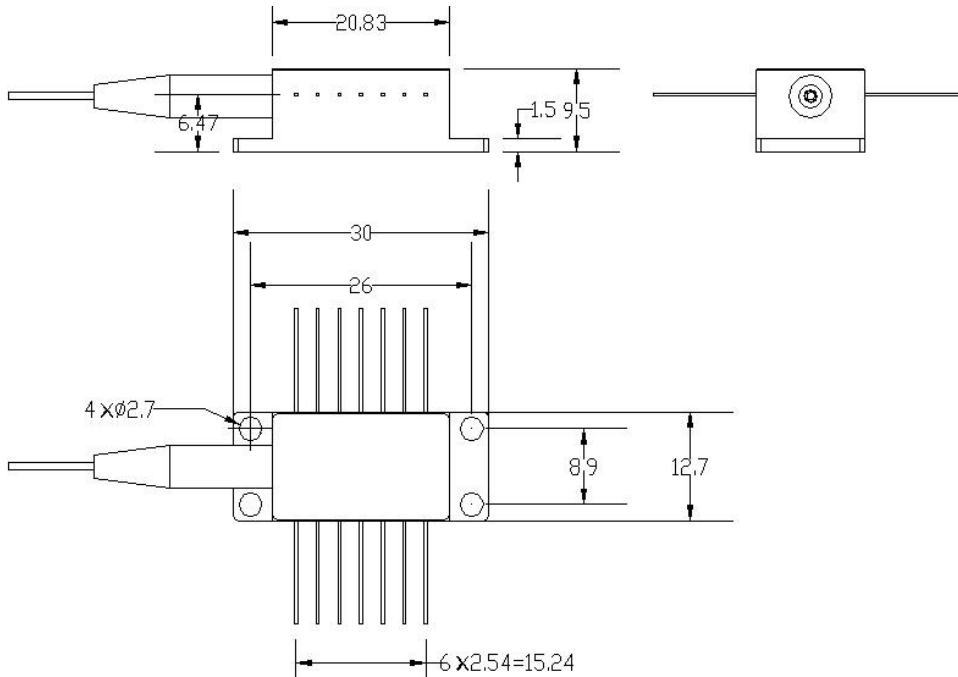
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Operating wavelength	λ _C	CW, 25°C	515	520	530	nm
Optical output power	P _F	-	30	-	-	mW
Threshold current	I _{TH}	25°C	-	90	95	mA
Operating current	I _{OP}	CW	-	270	320	mA
Operating voltage	V _{OP}	25°C	-	1.1	2.0	V
Monitor Current	I _{MON}	V _{RM} =5V	50	-	1500	μA
MPD Dark current	I _D	V _{RM} =5V	-	-	50	μA
Thermistor resistance	R _{TH}	25°C	9.5	10	10.5	kΩ
Thermistor B-value	β	25°C/80°C	-	3950	-	K

5. Optical Fiber Specifications:

Parameters	Description
Fiber Type	SM-460HP or PM-S460-HP
Pigtail Type	900μm loose tube
Pigtail Length	1.0±0.1m
Connector Type	FC/APC
Note: The PM fiber and the connector key are aligned to the slow axis.	



6. Type 2 Package Drawing&PIN-OUT Definition(Unit:mm)



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. Ordering Information:

BFLD	-FXXX	-XX	-XX	-XX	-X
Laser type	Wavelength	Output power	Fiber type	Connector type	PIN-OUT
FP Laser	520: 520nm	30: 30mW Customized	SM : Single mode PM : Polarization maintaining	FA : FC/APC SA : SC/APC Other	2: Type 2

E.g.:BFLD-F520-30SM-FA2 (Order information: 520nm FP Laser diode with 30mW output power, and SM fiber with FC/APC connector, PIN-OUT is Type 2).