1550nm DFB 40mW High Power Butterfly Laser

1. Features:

- High optical output power;
- Built-in isolator;
- FC/APC SM fiber;
- High side-mode suppression ratio.

OC-48 Pinout Compatible.

2. Applications:

- Testing system;
- High optical power system.

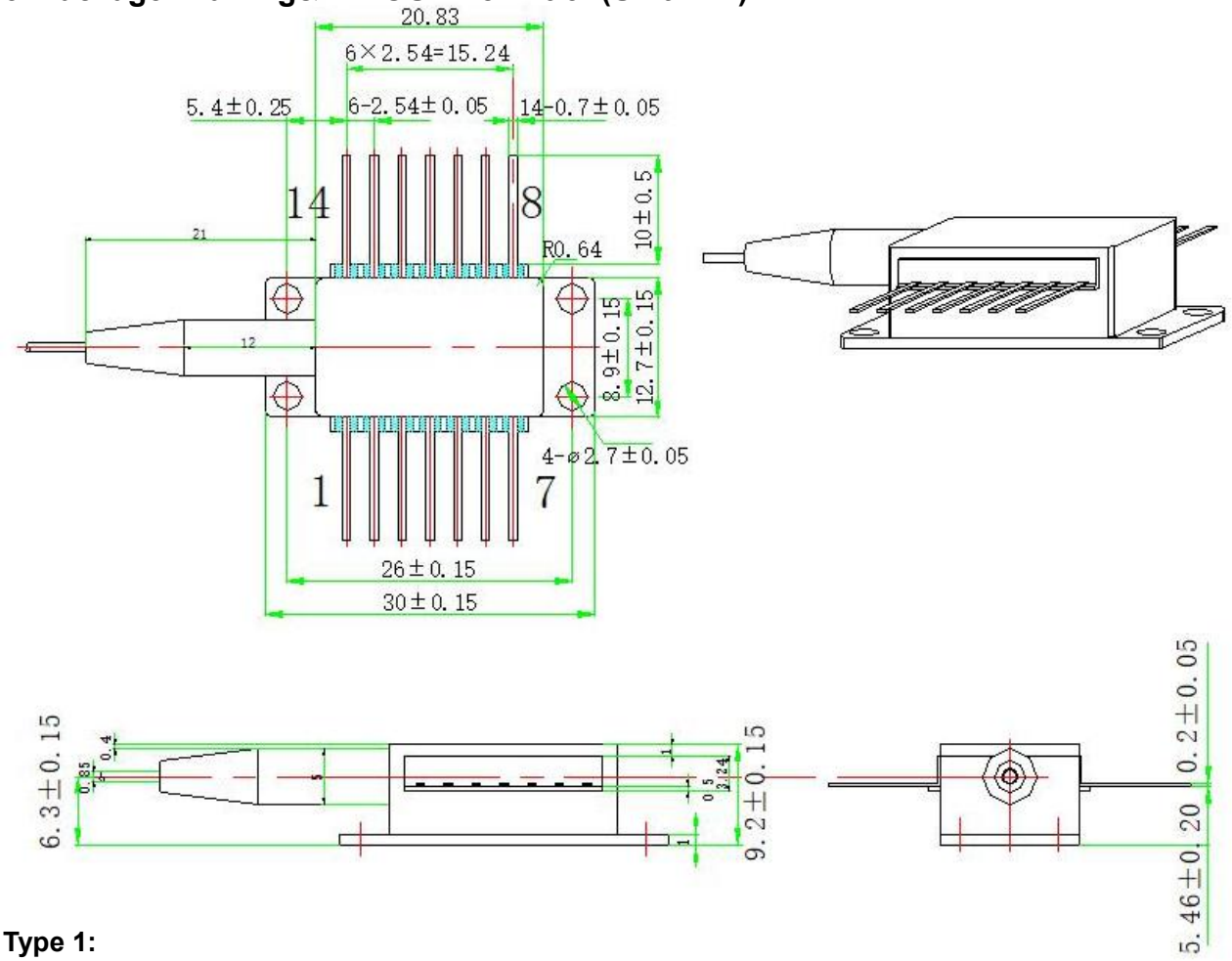
3. Absolute Maximum Ratings:

Parameter	Symbol	Condition	Min.	Max.	Unit
Laser forward current	I_F	-	-	400	mA
Reverse voltage	V_R	CW	-	-2.0	V
ESD Voltage	-	-	500	-	V
Operating temperature	T_{OP}	Case temperature	0	+70	℃
Storage temperature	T_{STG}	Ambient temperature	-40	+85	℃

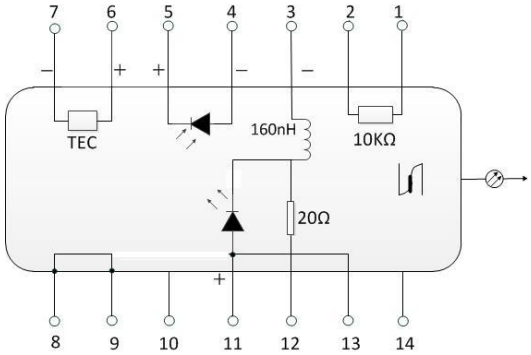
4. Optical-Electro Characteristics(T=25℃, I_F =I_{OP}):

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Operating wavelength	λ_C	CW, 25℃	1540	1550	1560	nm
Optical output power	P_F	SM Fiber	40	-	-	mW
Threshold current	I_{TH}	25℃	14	20	50	mA
Operating current	I_{OP}	CW	-	200	300	mA
Operating voltage	V_{OP}	25℃	-	-	3.0	V
Side mode suppression ratio	SMSR	-	35	-	-	dB
TEC Current	I_{TEC}	-	-1.5	-	2.5	A
TEC Voltage	V_{TEC}	-	-2.5	-	3.8	V
Thermistor resistance	R_{TH}	25℃	9.5	10	10.5	kΩ
Thermistor B-value	β	25℃/80℃	-	3950	-	K

5. Package Drawing&PIN-OUT Definition(Unit:mm):

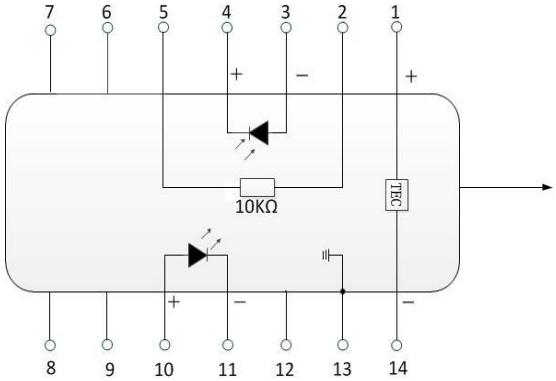


Type 1:



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

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