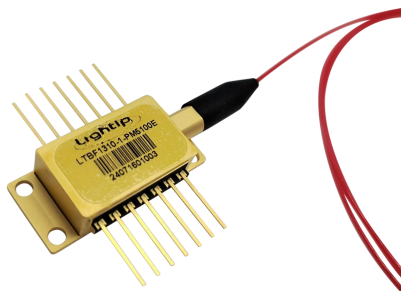


1310nm High Power DFB Butterfly Laser Module

LTBF1310



Key Features

- High Power DFB Laser Chip,
- Butterfly Package
- High Stabilization
- Telecordia GR-468-CORE Compliant
- RoHS Compliant

Applications

- Light Source
- Test instrument

Absolute Maximum Ratings

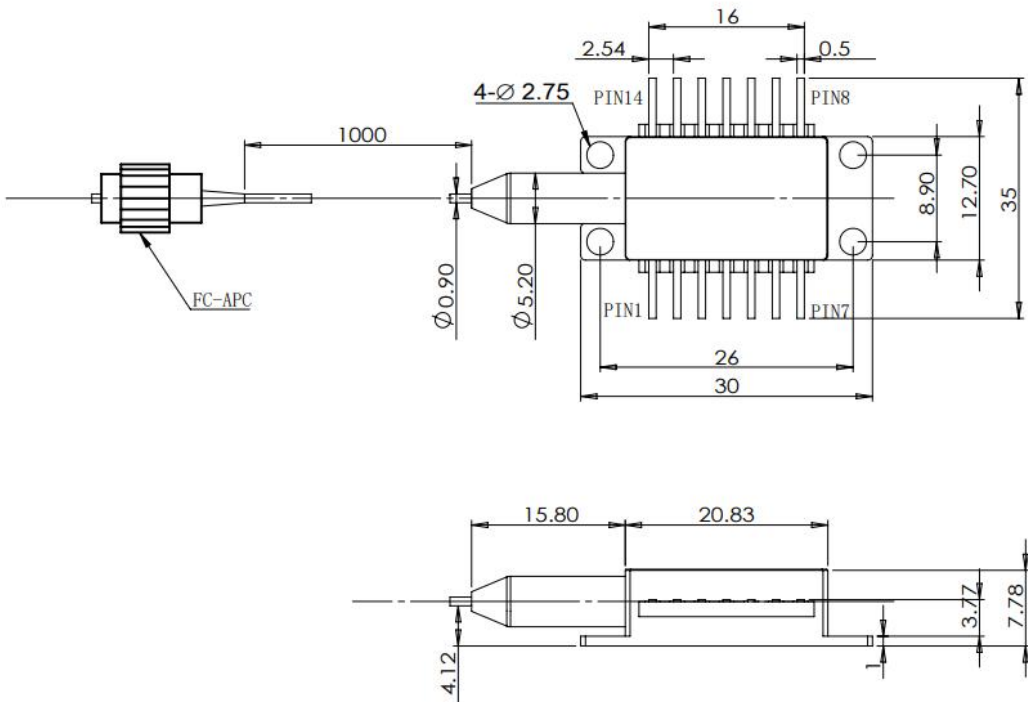
Parameter	Symbol	Min	Max	Unit
Storage Temperature	T_{stg}	-40	85	°C
Relative Humidity	RH	0	85	%
LD Forward Current	I_{LF}	-	600	mA
LD Reverse Voltage	V_{LR}	-	2	V
PD Reverse Voltage	V_R	-	10	V
TEC Current	I_{tec}	-	2.6	A
TEC Voltage	V_{tec}	-	4.5	V
Lead Soldering Temperature and Time	$T_{sold/t}$	-	260/10	°C /s

Optical/Electrical Characteristics

Parameter	Symbol	Test Conditions	Min.	Typ	Max.	Unit
Threshold Current	I_{th}	@25°C, CW	-	35	-	mA
Operation Current	I_{op}	-	-	400	600	mA
Optical Output Power	P	@25°C, $I_F=I_{op}$	100	-	-	mW
Monitor Operation Current	I_{MON}	@25°C, CW	50	-	8000	μA
TEC Current	I_{TEC}	-	-	-	2.5	A
Thermistor Resistance	RT	@25°C	9.5	10	10.5	kΩ
Thermistor Temp. Coeff.	α	@25°C	-	-4.39	-	%/°C
Peak Wavelength	c	@25°C, $I_F=I_{op}$	1300	1310	1320	nm
Side Mode Suppression Ratio	SMSR	@25°C, $I_F=I_{op}$	40	50	-	dB
Isolation	ISO	@25°C, CW	30	-	-	dB
Fiber Length	-	-	-	1	-	m
Fiber (Align to slow axis)	-	-	-	PM1310	-	-
Polarization Extinction Ratio	PER	@25°C	20	-	-	dB
FWHM spectral linewidth	-	@25°C, $I=I_{op}$	-	150	300	KHz

Package Outline:

Dimensions are in millimeters



Pin Assignment

Type A

Pin	Description	Pin	Description
1	Thermistor	8	Case Ground
2	Thermistor	9	Case Ground
3	Laser (-)	10	Null
4	MPD (+)	11	Laser (+)
5	MPD (-)	12	Laser (-)
6	TEC (+)	13	Laser (+)
7	TEC (-)	14	Null

Ordering Information

Example: LTBF1310-1-PM5100E

Family Name	Wavelength	-	Cooled	-	Fiber	Connector	Optical power	PIN Assignment
LTBF	1310	-	1:with cooled	-	PM	2: SC/APC 5: FC/APC	10:010mW 20:020mW 100:100mW	A: Type A
LTBF	1310	-	1	-	PM	5	100	A

Document History

Date	Author	Audited	Approved	Revision Number	Content
2025-03-24	Baolin.Pan	Juqiang.Zhu	Jiasheng. Zhao	V1.1	