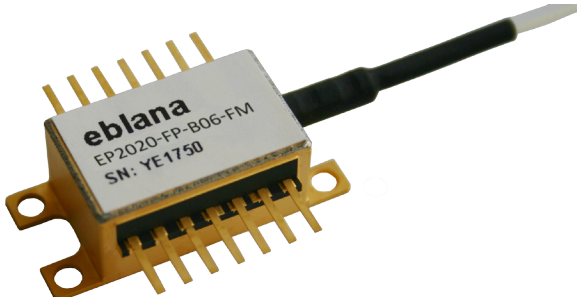
2020nm FP LASER

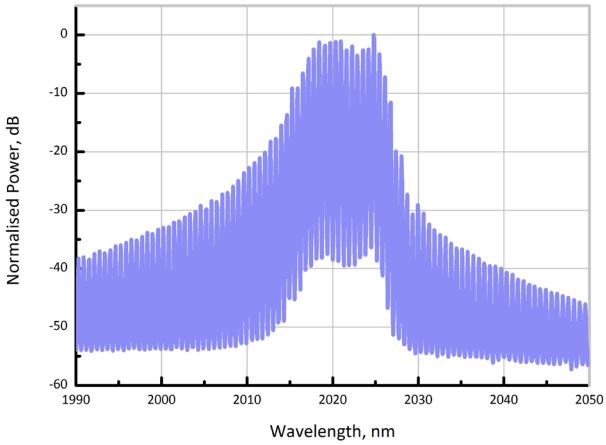
EP2020-FP-B

www.rpmclasers.com

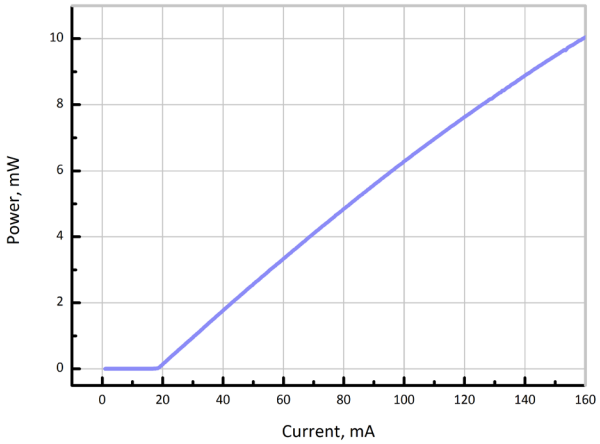


SUPERIOR PERFORMANCE

Eblana Photonics EP2020-FP-B laser diode, available in range from 1950-2150nm, is a cost effective, highly coherent laser source. Eblana's advanced epistructure design is used to deliver an InP-based strained quantum-well FP laser with applications in CO_2 monitoring and free space comms.



Optical Spectrum at 25°C



Representative wavelength-current tuning characteristics

ELECTRO-OPTICAL CHARACTERISTICS* (T_{SUB} = 25° C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Centre Wavelength Range	λ	1950	2020	2150	nm
Side Mode Supression Ratio	SMSR	30	40		dB
Threshold Current	I_{th}	-	20	30	mA
Output Power in fiber	P_f	6	10	14	mW
Temperature Tuning Coefficient	T_λ	-	0.1	-	nm/°C
Current Tuning Coefficient	I_λ	-	0.01	-	nm/mA
Slope Efficiency	SE	0.05	0.08	-	mW/mA
Forward Voltage	V_f	-	1.3	1.6	V
Thermistor Resistance	R_T	9.5	10	10.5	kΩ
Thermistor Temp. Coefficient	C	-	-4.4	-	%/°C

*CW bias unless otherwise stated

RPMC Lasers, Inc. 8495 Veterans Memorial Pkwy | O'Fallon, MO 63366
www.rpmclasers.com | 636.272.7227

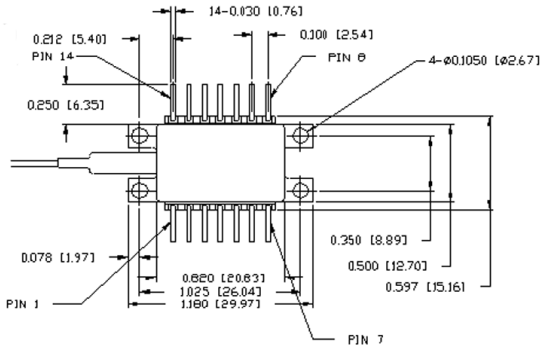
ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Forward Current	I_f	-	-	220	mA
TEC Current	I_{TEC}	-	-	1.2	A
Reverse Voltage LD	V_{rev}	-	-	2.0	V
Case Temperature*	T_{Case}	-20	-	50	°C
Chip Submount Temperature	T_{Sub}	0	--	50	°C
Storage Temperature	$T_{storage}$	-40	-	85	°C

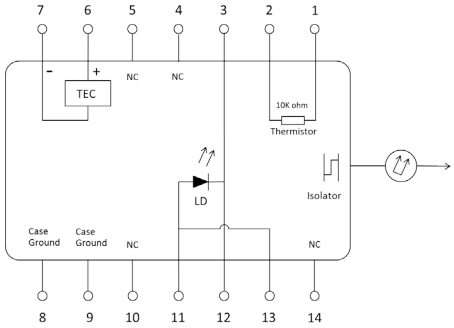
*For T_{sub} < 25°C, Max Case Temperature should be derated to $T_{Case,Max} = T_{sub} + 40°C$

PACKAGING

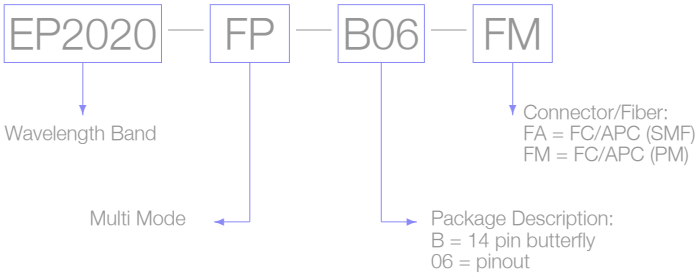
The EP2020-FP-B product series is offered in a 14-pin Butterfly package - Inquire for alternative packaging options. The standard package pinout is shown below, variations may be requested. mPD not included as standard.



14-pin butterfly schematic



Standard "Pinout 06" option



www.rpmclasers.com

Laser Safety

This is a Class 3R Laser Product as defined by International Standard IEC 60825-1,Edition 2. Invisible Laser radiation is emitted from the end of the fiber or connector. Avoid direct eye exposure to the beam. Laser safety labels are not attached to the module due to space limitations but instead are affixed to the outside of the shipping carton.