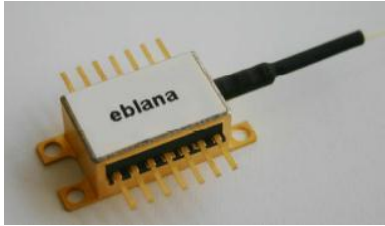




FP Laser Diode EP2020-FP-B



The EP2020-FP-B laser diode, available in a range from 1950-2150nm, is a cost effective, highly coherent laser source. Eblana's advanced epistucture design is used to deliver an InP-based strained quantum-well FP laser.

Key Features

Excellent Reliability
Highly Coherent

Applications

CO₂ Monitoring
Free Space Comms

Optical and electrical characteristics: (T = 25°C)

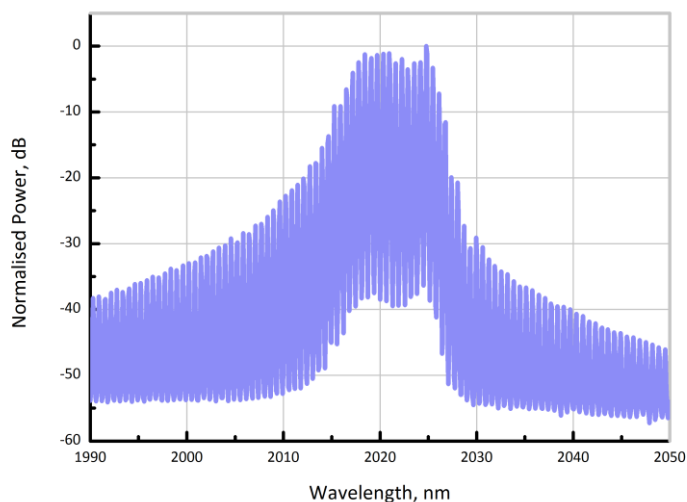
PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
LASER DIODE					
Output Power in Fibre	P _f	6	10	14	mW
Centre Wavelength	λ _{cen}	1950	2020	2150	nm
Threshold Current	I _{th}	-	20	30	mA
Operating Current	I _{op}	-	120	220	mA
Forward Voltage	V _f	-	1.3	1.6	V
Temperature Tuning Coefficient		-	0.5	-	nm/K
Slope Efficiency	η	0.05	0.08	-	mW/mA
THERMISTOR					
Thermistor Resistance	R _T	9.5	10	10.5	kΩ
Thermistor Temp. Coefficient		-	-4.4	-	%/°C

Absolute Maximum Ratings ($T_{\text{sub}} = 25^{\circ}\text{C}$)

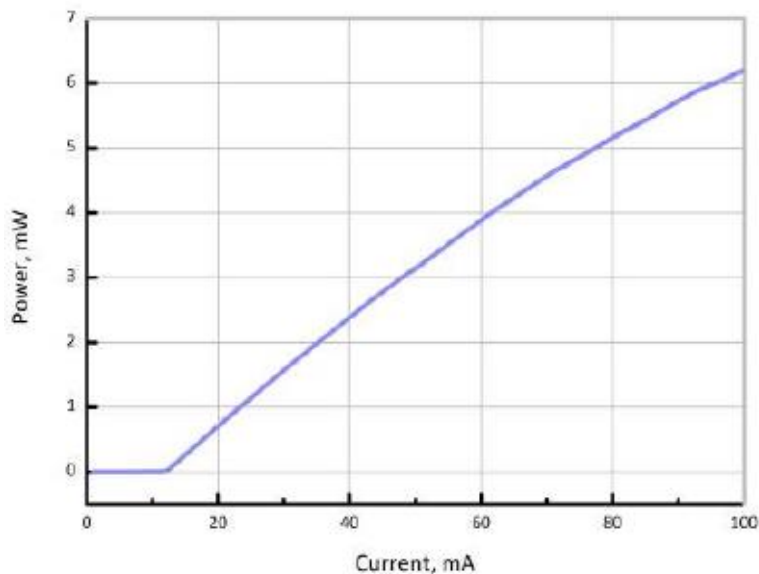
Parameter	Symbol	Ratings	Units
Laser Diode Reverse Voltage	V_R	2	V
Laser Diode Forward Current	I_F	220	mA
Peltier Current	I_P	1.2	A
Operating Case Temperature	T_{case}	-20 to 50	$^{\circ}\text{C}$
Chip Submount Temperature	T_{sub}	0 to 50	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-40 to 85	$^{\circ}\text{C}$

TYPICAL PERFORMANCE

Typical CW Spectrum

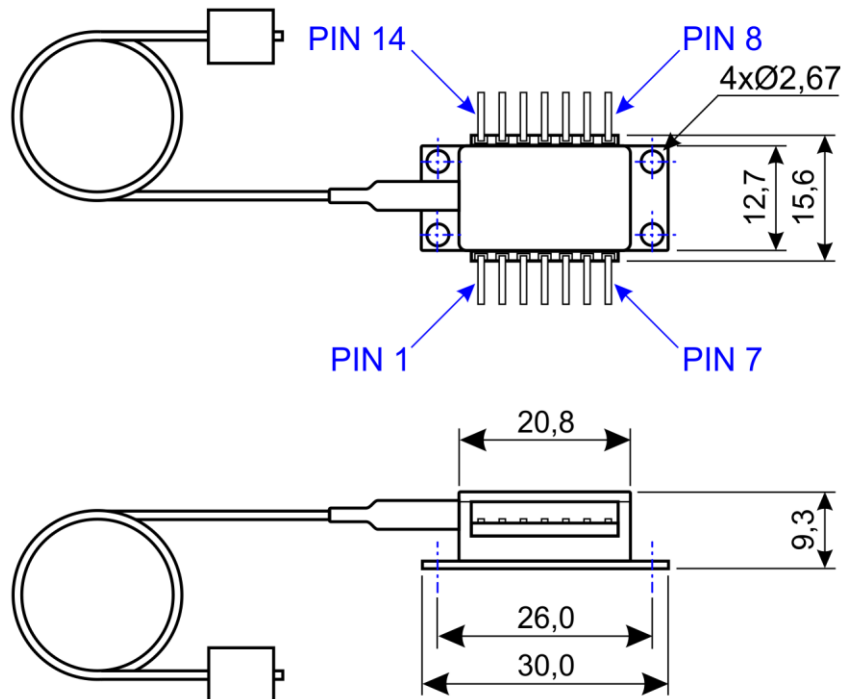


Power vs. Operating Current



Package Specification

Housing drawing



Pin No.	Pin Information
1	Thermistor
2	Thermistor
3	Laser cathode
4	NC
5	NC
6	Thermoelectric cooler +
7	Thermoelectric cooler -
8	Case ground
9	Case ground
10	NC
11	Laser anode
12	Laser cathode
13	Laser anode
14	NC