1550nm high power DFB laser

EP1550-DFBH-B

eblanaphotonics

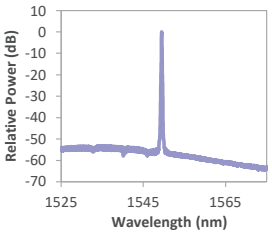


Figure 1: Optical Spectrum at 25 °C

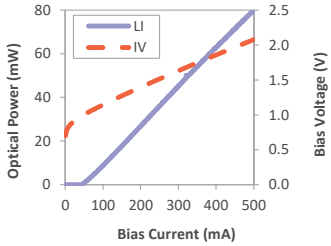


Figure 2: LIV at 25°C

COHERENCE AND STABILITY

Eblana Photonics EP1550-DFBH-B laser diode, available in wavelength range from 1530 - 1570 nm, offers DFB-type lasers in 14-pin buttefly pacakge with high-power fiber output 70 mW and a narrow linewidth.

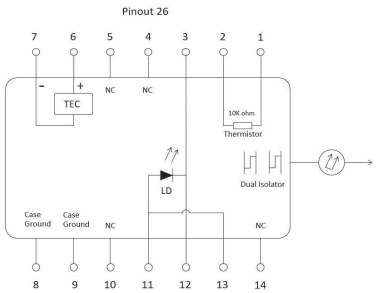
ELECTRO-OPTICAL CHARACTERISTICS (T_{SUB} =25°C)

PARAMETER	SYMBOL	UNITS	MIN.	TYPICAL	MAX.	COMMENTS
Wavelength	λ	nm	λ-2	1550	λ+2	Available from 1530 - 1570 nm
Side Mode Supression Ratio	SMSR	dB	40	55	-	
Threshold Current	I_{th}	mA		60	100	
Output power in fiber	P_{CW}	mW	-	70	100	P_O=70mW at bias current 400mA
Optical Linewidth	Δf	kHz	20	100	200	I_{op}=400mA
Temperature Tuning Coefficient	T_λ	nm/◦C	-	0.1	-	
Current Tuning Coefficient	I_λ	pm/mA	-	2.2	-	
PER		dB	-	18	-	
Slope Efficiency	SE	mW/mA	-	0.2	-	at Iop
Thermistor Resistance	R_T	kΩ	9.5	10	10.5	
Thermistor β coefficient	β	K		3930		

Table 1: Electro-optica characteristics

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	UNITS	MIN.	MAX.
Forward current	I_f	mA	-	600
Forward Voltage	V_f	V	-	2
TEC Current	I_{TEC}	A	-	2.5
Reverse Voltage	V_r	V	-	2
Chip Submount Temperature	T_{sub}	◦C	0	50
Storage Temperature	$T_{storage}$	◦C	-40	85



PACKAGING

The EP1550-DFBH-B product series (2mm chip) is offered in a 14-pin Butterfly package.
Inquire for other packaging options.

eblanaphotonics

www.eblanaphotonics.com
Sales@eblanaphotonics.com
Dublin, Ireland