

# 1550nm LASER

EP1550-ADF-B

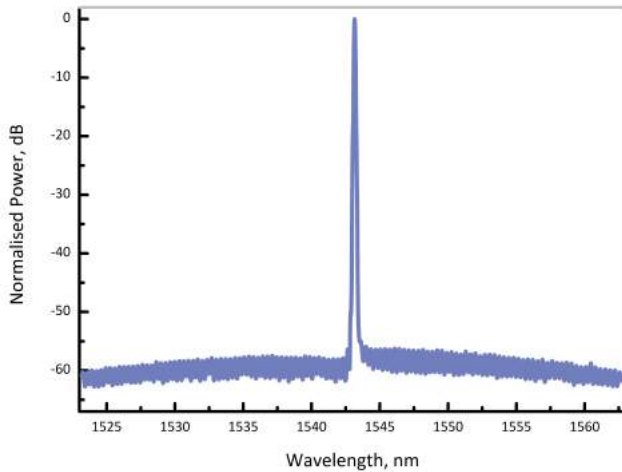


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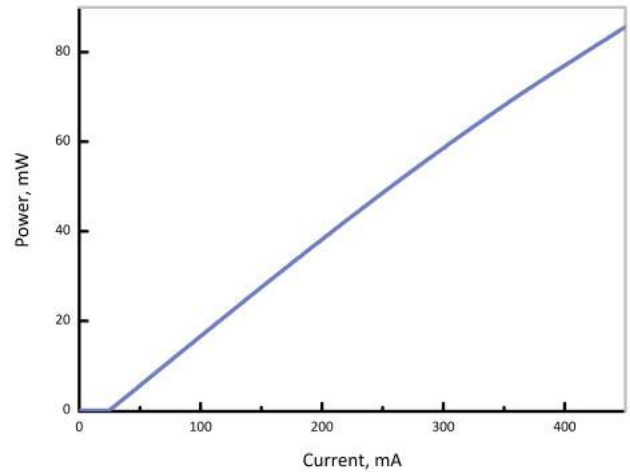


## ADVANCED COMMUNICATIONS

Eblana Photonics EP1550-ADF-B laser diode is ideally suited for telecoms applications such as long reach analog transmission and CATV. This high power, low threshold laser features a highly linear output and excellent SMSR performance.



Optical Spectrum at 25°C



Output power as a function of bias current

## ELECTRO-OPTICAL CHARACTERISTICS\* ( $T_{SUB} = 25^{\circ} C$ )

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Centre Wavelength Range	$\lambda$	1540	1550	1560	nm
Side Mode Supression Ratio	SMSR	35	45	-	dB
Threshold Current	$I_{th}$	-	12	20	mA
Operating Current	$I_{op}$	-	375	500	mA
Output Power in fiber	$P_f$	40	50	-	mW
Optical linewidth	$\Delta f$	-	-	1	MHz
Slope Efficiency	SE	0.08	0.12	-	mW/mA
Optical Isolation	ISO	30	35	-	dB
Relative Intensity Noise (20-1000 MHz)	RIN	-	-	-160	dB
Thermistor Resistance	$R_T$	9.5	10	10.5	k $\Omega$
Thermistor Temp. Coefficient	C	-	-4.4	-	%/°C

\*CW bias unless otherwise stated

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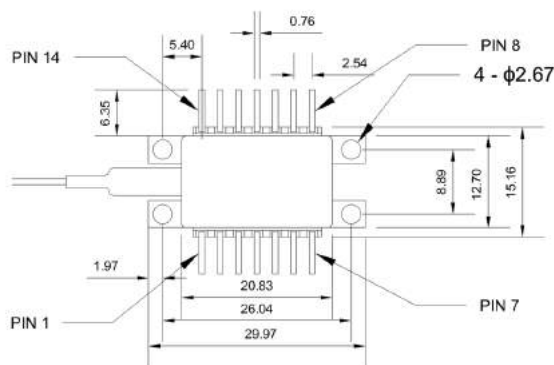
# ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	MAX	UNIT
Forward Current	$I_f$	-	500	mA
Forward Voltage	$V_f$	-	2.5	V
TEC Current	$I_{TEC}$	-	1.7	A
Reverse Voltage LD	$V_r$	-	2	V
Reverse Voltage mPD	$V_{rev}$	-	20	V
mPD Forward Current	$I_{mPD}$	-	10	mA
Case Temperature*	$T_{Case}$	-20	65	°C
Storage Temperature	$T_{storage}$	-40	85	°C

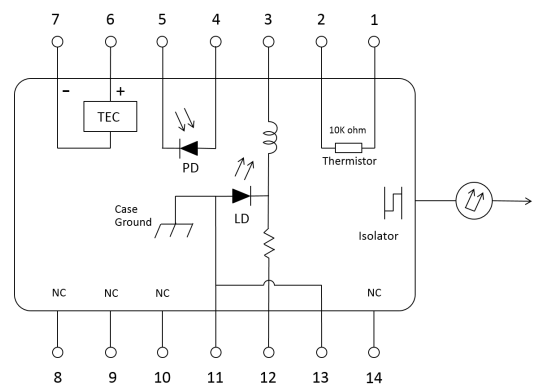
\*For  $T_{sub} < 25^{\circ}C$ , Max Case Temperature should be derated to  $T_{Case,Max} = T_{sub} + 40^{\circ}C$

## PACKAGING

The EP1550-ADF-B product series is offered in a 14-pin Butterfly package. The standard package pinout is shown below.



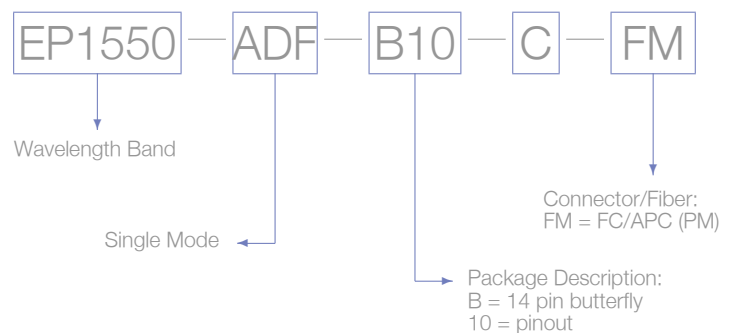
14-pin butterfly schematic



Standard "Pinout 10" option

## HOW TO ORDER

Construct your part number using the following example and email your order to [sales@eblanaphotonics.com](mailto:sales@eblanaphotonics.com), or call +353 1 675 3228.



### Laser Safety

This is a Class 3R Laser Product as defined by International Standard IEC 60825-1, Edition 3. 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.

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