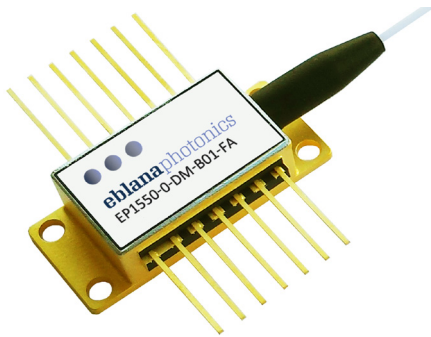


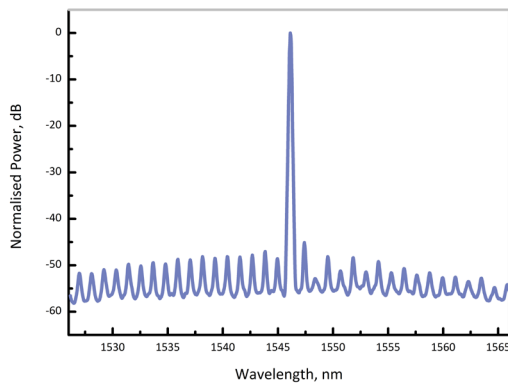
# 1550nm DM LASER

EP1550-DM-B

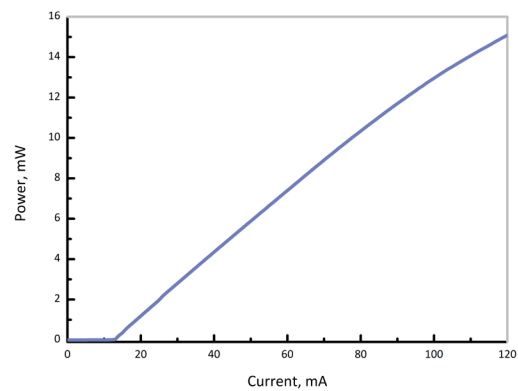


## ADVANCED COMMUNICATIONS

Eblana Photonics EP1550-DM-B laser diode, available in the 1540 - 1560nm range, is the perfect choice for telecoms applications such as SONET/SDH and Gigabit Ethernet. Eblana's Discrete-Mode (DM) technology platform enables DFB-like performance at a more competitive price.



Typical 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
Available Wavelength Range	$\lambda$	1540	1550	1560	nm
Wavelength Tolerance	$\lambda_{spec}$	$\lambda - 1$	$\lambda$	$\lambda + 1$	nm
Side Mode Supression Ratio	SMSR	30	40	-	dB
Threshold Current	$I_{th}$	-	14	20	mA
Output Power in fiber	$P_f$	6	8	-	mW
Optical linewidth	$\Delta f$	-	-	800	kHz
Temperature Tuning Coefficient	$T_{\lambda}$	0.07	0.1	-	nm/°C
Current Tuning Coefficient	$I_{\lambda}$	8	12	-	pm/mA
Slope Efficiency	SE	0.10	0.12	-	mW/mA
Thermistor Resistance	$R_T$	9.5	10	10.5	k $\Omega$
Thermistor Temp. Coefficient	C	-	-4.4	-	%/°C

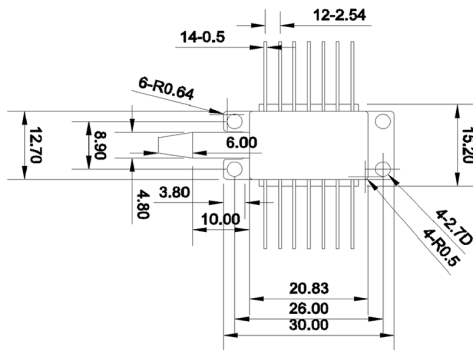
## ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	MAX	UNIT
Forward Current	$I_f$	-	120	mA
Forward Voltage	$V_f$	-	2	V
TEC Current	$I_{TEC}$	-	1.2	A
Reverse Voltage LD	$V_r$	-	2	V
Reverse Voltage PD	$V_{rev}$	-	20	V
Case Temperature*	$T_{Case}$	-20	65	°C
Chip Submount Temperature	$T_{Sub}$	0	50	°C
Storage Temperature	$T_{storage}$	-40	85	°C

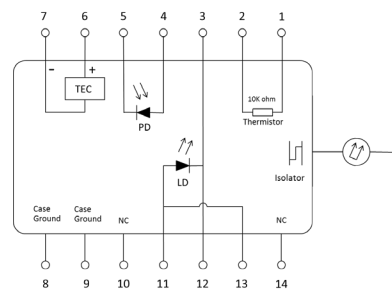
\*For  $T_{sub} < 25^{\circ}\text{C}$ , Max Case Temperature should be derated to  $T_{Case,Max} = T_{sub} + 40^{\circ}\text{C}$

### PACKAGING

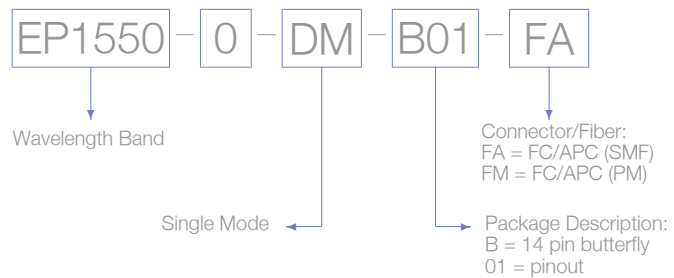
The EP1550-DM-B product series is offered in a 14-pin Butterfly package - Inquire for other packaging options. The standard package pinout is shown below, variations may be requested.



14-pin butterfly schematic



Standard "Pinout 01" option



#### 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.