

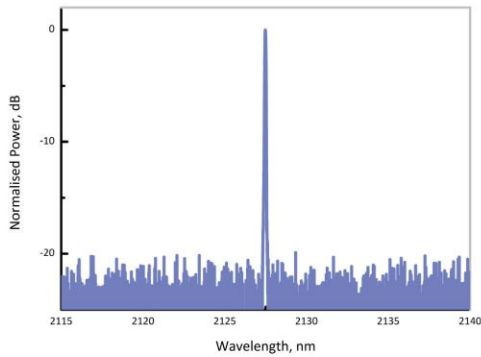
2128nm DM LASER

EP2128-DM-B - Preliminary

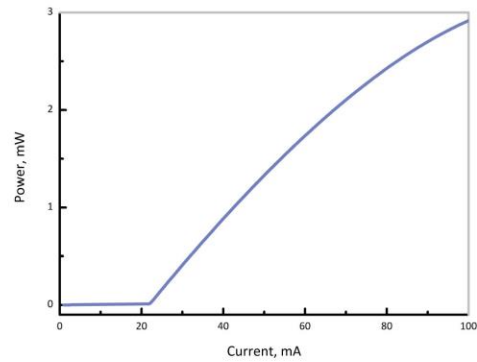


SUPERIOR PERFORMANCE

Eblana Photonics EP2128-DM-B laser diode is a cost effective, highly coherent laser source, designed using Eblana's discrete-mode (DM) technology. Excellent SMSR and linewidth performance make it suitable for a wide variety of applications.



Optical Spectrum at 25°C (data from chip-on-submount tests)



Output power vs bias current characteristics (data from bar test)

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

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Centre Wavelength Range	λ	2127	2128	2129	nm
Wavelength specification	λ_{spec}	$\lambda - 1$	λ	$\lambda + 1$	nm
Side Mode Supression Ratio	SMSR	30	40	-	dB
Threshold Current	I_{th}	-	25	40	mA
Output Power in fiber	P_f	-	2	-	mW
Optical linewidth	Δf	-	-	2	MHz
Temperature Tuning Coefficient	T_{λ}	-	0.1	-	nm/°C
Current Tuning Coefficient	I_{λ}	-	0.006	-	nm/mA
Slope Efficiency	SE	0.02	0.03	-	mW/mA
Thermistor Resistance	R_T	9.5	10	10.5	k Ω
Thermistor Temp. Coefficient	C	-	-4.4	-	%/°C

*CW bias unless otherwise stated

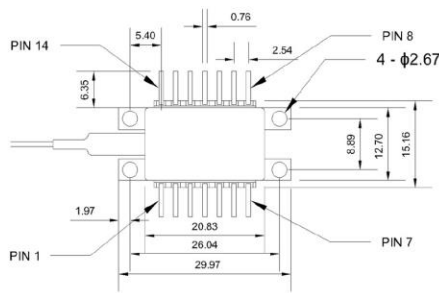
ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Forward Current	I_f	-	80	120	mA
Forward Voltage	V_f	-	1.3	1.6	V
TEC Current	I_{TEC}	-	0.5	1.0	A
Reverse Voltage LD	V_r	-	-	2.0	V
Case Temperature*	T_{Case}	-20	-	65	°C
Chip Submount Temperature	T_{Sub}	0	-	50	°C
Storage Temperature	$T_{storage}$	-40	-	85	°C

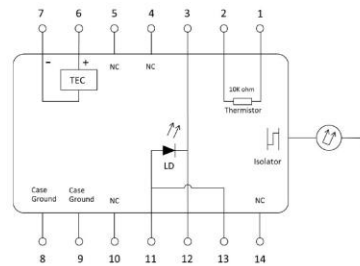
*For $T_{sub} < 25^{\circ}C$, Max Case Temperature should be derated to $T_{Case,Max} = T_{sub} + 40^{\circ}C$

PACKAGING

The EP2128-DM-B product series is offered in a 14-pin Butterfly package - Inquire for other packaging options. The standard package pinout is shown below - mPD not included as standard.



14-pin butterfly schematic



Standard "Pinout 06" option

HOW TO ORDER

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

