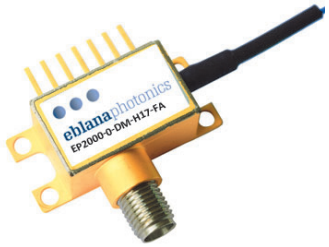
IMM photonics

2000nm DM LASER

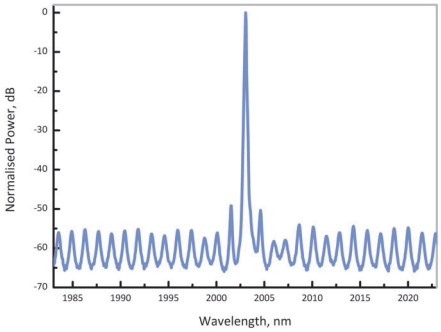
EP2000-DM-H

eblanaphotonics

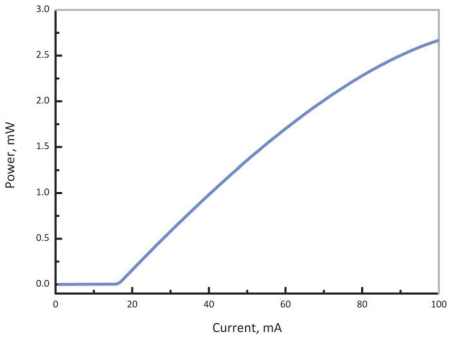


SUPERIOR PERFORMANCE

Eblana Photonics EP2000-DM-H laser diode is a highly coherent laser source, designed using Eblana's discrete-mode (DM) technology. Packaged in a high speed 7-pin butterfly package, this device exhibits excellent modulation characteristics. Applications include seed laser source for fiber amplifiers, as well as next gen communications.



Optical Spectrum at 25°C



Output power vs bias current at 25°C

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

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Available Wavelength Range	λ_c	1950	2000	2051	nm
Side Mode Supression Ratio	SMSR	30	40	-	dB
Threshold Current	I_{th}	-	20	40	mA
Output Power in fiber	P_f	1.5	1.75	2	mW
3dB modulation bandwidth (at 2006nm)	f_{3dB}	-	4	-	GHz
Rise, Fall time (at 2000nm)	τ_r, τ_f	-	60, 120	-	ps
Temperature Tuning Coefficient	T_λ	-	0.1	-	nm/°C
Current Tuning Coefficient	I_λ	-	4	-	pm/mA
Slope Efficiency	SE	0.02	0.03	-	mW/mA
Thermistor Resistance	R_T	9.5	10	10.5	kΩ
Thermistor Temp. Coefficient	C	-	-4.4	-	%/°C

*At T_{Sub} = 25°C

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Individual. Innovative. Exceptional.

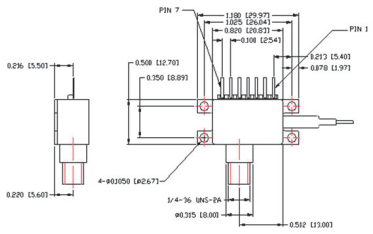
ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	MAX	UNIT
Forward Current	I_f	-	140	mA
Forward Voltage	V_f	-	2	V
TEC Current	I_{TEC}	-	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

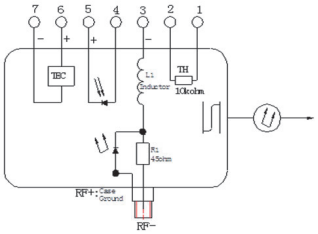
*For T_{sub} < 25°C, Max Case Temperature should be derated to $T_{Case,Max} = T_{sub} + 40°C$

PACKAGING

The EP2000-DM-H product series is offered in a 7-pin package with K connector and 50Ω RF impedance input - inquire for other packaging options. Package drawing and pinout diagram shown below. mPD not included as standard.



7-pin butterfly schematic



Package pinout configuration

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.

EP2000 – 0 – DM – H17 – FA

- EP2000 – Wavelength Band
- 0 – Single Mode
- DM
- H17 – Package Description: H = high speed butterfly; 17 = pinout (s-iso, no mPD)
- FA – Connector/Fiber: FA = FC/APC (SMF); FM = FC/APC (PM)

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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