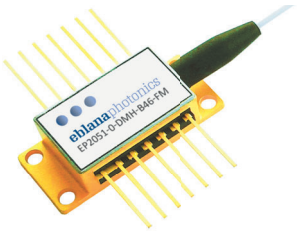
IMM photonics

2051nm DM LASER

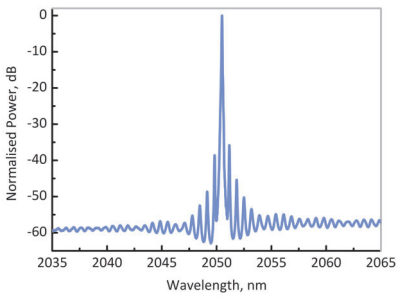
EP2051-DMH-B

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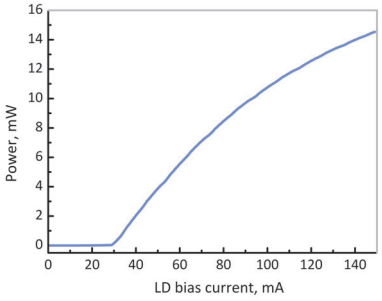


SUPERIOR PERFORMANCE

Eblana Photonics EP2051-DMH-B combines Eblana's patented Discrete-Mode (DM) technology with expert epistructure design, resulting in an advanced single mode, high power laser diode. This product is ideal for many applications including high power, high sensitivity CO_2 detection, seed laser and next-gen WDM communications.



Typical optical spectrum



Power (in fibre) vs LD current (15°C, SOA=100mA)

ELECTRO-OPTICAL CHARACTERISTICS* (T_{SUB} = 15° C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Available Wavelength Range	λ	2049	2051	2053	nm
Wavelength tolerance	λ_{spec}	λ -2	λ	λ +2	nm
Side Mode Supression Ratio	SMSR	30	35	-	dB
Threshold Current (SOA = 100mA)	I_{th}	-	30	50	mA
Output Power in fibre (LD/SOA = 200/100mA)	P_f	8	10	-	mW
Optical linewidth	Δf	-	5	-	MHz
Temperature Tuning Coefficient	T_λ	-	0.1	-	nm/°C
Current Tuning Coefficient	I_λ	-	3	-	pm/mA
Slope Efficiency (LD/SOA tied)	SE	0.04	0.06	-	mW/mA
Thermistor Resistance	R_T	9.5	10	10.5	kΩ
Thermistor Temp. Coefficient	C	-	-4.4	-	%/°C

*CW bias unless otherwise stated

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eblanaphotonics

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

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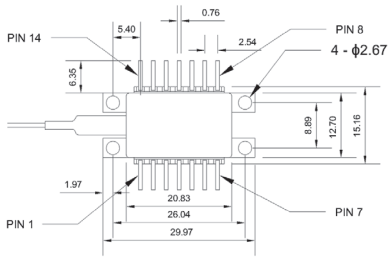
ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	MAX	UNIT
Max Current per section (LD/SOA)	I_f	-	200	mA
Forward Voltage	V_f	-	2.5	V
TEC Current	I_{TEC}	-	1.2	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

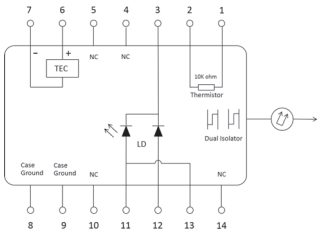
*For T_{sub} < 25°C, Max Case Temperature should be derated to $T_{Case,Max} = T_{sub} + 40°C$

PACKAGING

The EP2051-DMH-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 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 3220.

EP2051 – 0 – DMH – B46 – FM

- EP2051 – Wavelength Band
- 0 – Single Mode - High Power
- DMH – Single Mode - High Power
- B46 – Package Description: B = 14 pin butterfly, 46 = dual iso, dual bias
- FM – Nufern PM1950 (FC/APC)

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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www.eblanaphotonics.com
Sales@eblanaphotonics.com
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