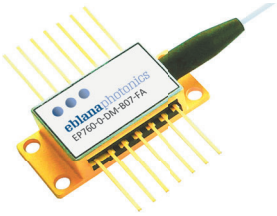
IMM photonics

760nm DM LASER

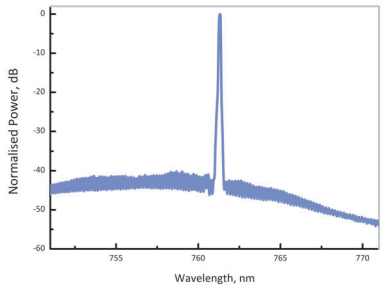
EP760-DM-B

eblanaphotonics

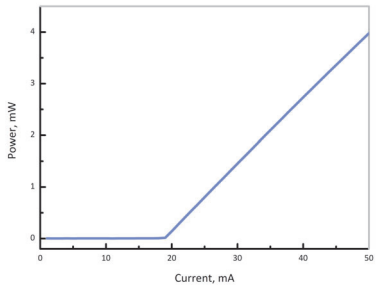


ADVANCED O_2 DETECTION

Eblana Photonics EP760-DM laser diode is the perfect tool for TDLAS-based O_2 sensing. Eblana's patented Discrete-Mode (DM) technology is used to design a cost effective, highly coherent and stable single mode laser.



Representative optical Spectrum at 25°C



Representative LIV plot

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

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Centre Wavelength (25°C, 80mA)	λ	760	763	765	nm
Tuning Range (without Mode Hops)*	λ_{tune}	0.25	0.5	-	nm
Side Mode Supression Ratio	SMSR	30	35	-	dB
Threshold Current	I_{th}	-	20	-	mA
Output Power (50mA)	P_f	-	5	-	mW
Temperature Tuning Coefficient	T_λ	-	0.06	-	nm/°C
Current Tuning Coefficient	I_λ	-	10	-	pm/mA
Slope Efficiency	SE	-	0.16	-	mW/mA
Thermistor Resistance	R_T	9.7	10	10.3	kΩ
Beta Coefficient (25°C/85°C)	Beta	-	3930	-	K

*Tuning range is defined to be within the operating temperature range of the laser (15 – 35C)

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eblanaphotonics

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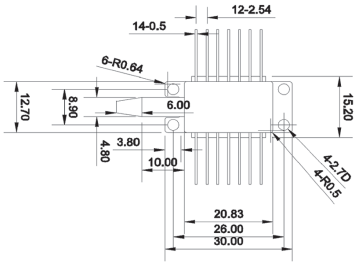
ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	MAX	UNIT
Forward Current	I_f	-	50	mA
Forward Voltage	V_f	-	2	V
TEC Current	I_{TEC}	-	1.2	A
Reverse Voltage LD	V_r	-	2.0	V
Case Temperature*	T_{Case}	-20	65	°C
Storage Temperature	$T_{storage}$	-40	85	°C

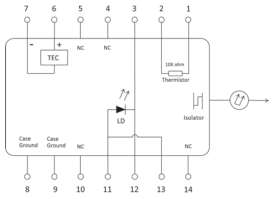
*For T_{sub} < 25°C, Max Case Temperature should be derated to $T_{Case,Max} = T_{sub} + 40°C$

PACKAGING

The EP760-DM-B product series is offered in a 14-pin Butterfly package - Please inquire for other packaging options. Standard package pinout is shown below, variations may be requested.



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 3220.

EP760 – 0 – DM – B06 – FA

- EP760 – Wavelength Band
- 0 – Single Mode
- DM
- B06 – Package Description: B = 14 pin butterfly, 06 = pinout
- 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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