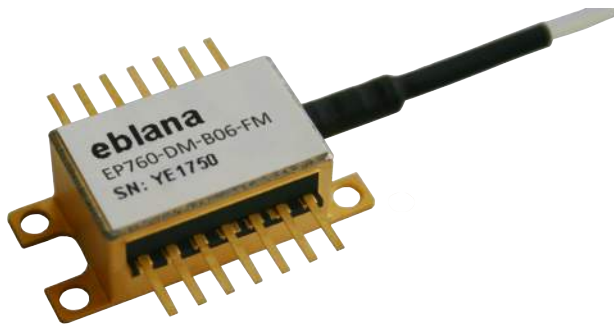


760nm DM LASER

EP760-DM-B

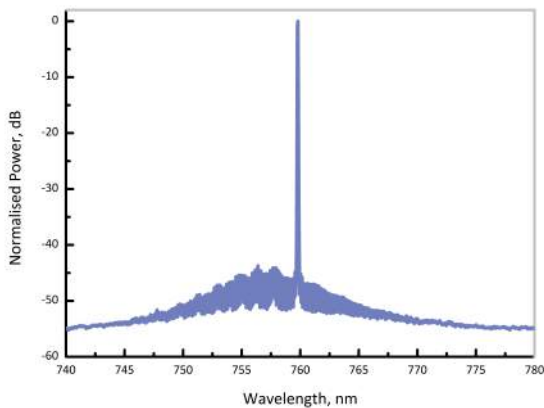


eblanaphotonics

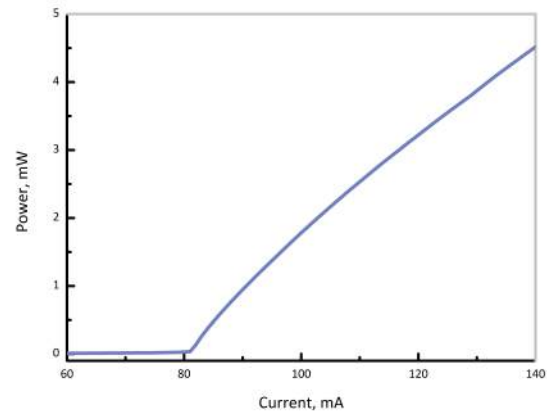


ADVANCED O₂ DETECTION

Eblana Photonics EP760-DM laser diode is the perfect tool for TDLAS-based O₂ sensing. Eblana's patented Discrete-Mode (DM) technology is used to design a cost effective, highly coherent and stable single mode laser.



Typical optical spectrum at 25° C



Output power as a function of bias current

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

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Available Wavelength Range	λ	758	760	764	nm
Wavelength Tolerance	λ_{spec}	$\lambda - 1$	λ	$\lambda + 1$	nm
Side Mode Supression Ratio	SMSR	30	40	-	dB
Threshold Current	I_{th}	-	80	-	mA
Output Power in fiber (at I_{op})	P_{f}	2	3	-	mW
Optical linewidth	Δf	-	-	3	MHz
Temperature Tuning Coefficient	T_{λ}	-	0.06	-	nm/°C
Current Tuning Coefficient	I_{λ}	-	6	-	pm/mA
Slope Efficiency	SE	0.05	0.07	-	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

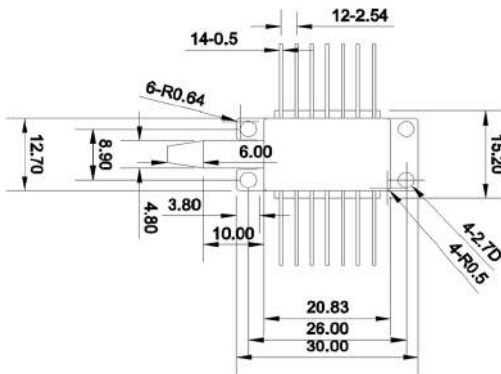
ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	MAX	UNIT
Forward Current	I_f	-	150	mA
Forward Voltage	V_f	-	2.5	V
TEC Current	I_{TEC}	-	1.2	A
Reverse Voltage LD	V_r	-	2	V
Case Temperature*	T_{Case}	-20	65	°C
Chip Submount Temperature	T_{Sub}	0	50	°C
Storage Temperature	$T_{storage}$	-40	85	°C

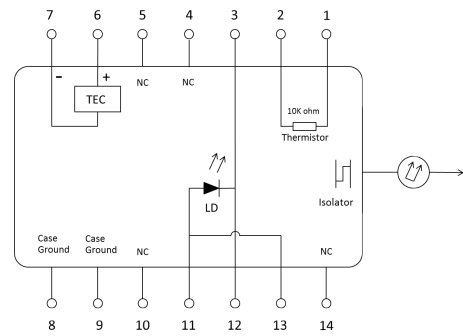
*For $T_{sub} < 25^{\circ}C$, Max Case Temperature should be derated to $T_{Case,Max} = T_{sub} + 40^{\circ}C$

PACKAGING

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



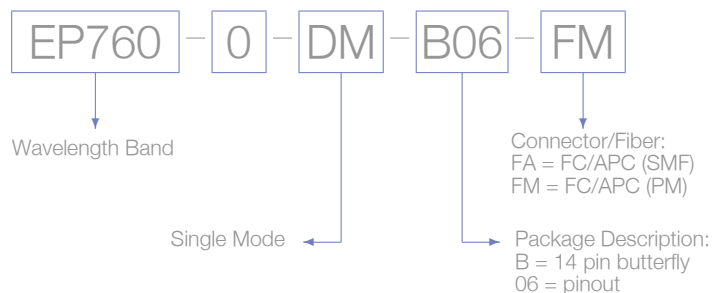
14-pin butterfly schematic



Standard "Pinout 06" option

HOW TO ORDER:

Construct your part number using the following example and email your order to contact@cybel-llc.com.



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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