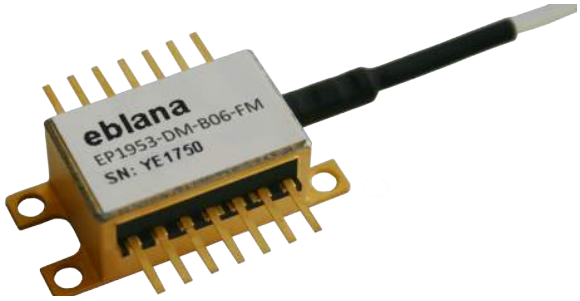
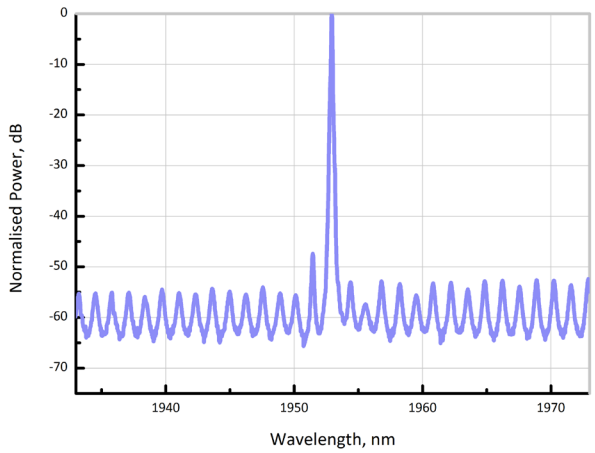
1953nm DM LASER

EP1953-DM-B

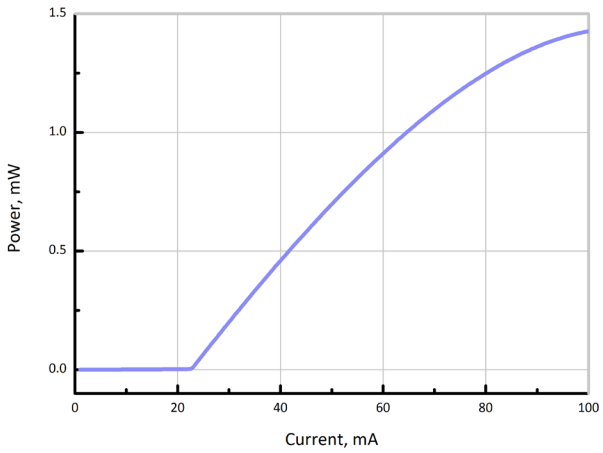


SUPERIOR PERFORMANCE

Eblana Photonics EP1953-DM-B laser diode, available in a range from 1950-2150nm, is a cost effective, highly coherent laser source, designed using Eblana's discrete-mode (DM) technology. Excellent SMSR and linewidth performance enable applications as an effective seed laser.



Optical Spectrum at 25°C



Output power vs bias current characteristics

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

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Centre Wavelength Range	λ	1950	1953	2150	nm
Wavelength specification	λ_{spec}	λ -1	λ	λ +1	nm
Side Mode Supression Ratio	SMSR	30	40	-	dB
Threshold Current	I_{th}	-	20	40	mA
Output Power in fiber	P_f	1	1.25	1.5	mW
Optical linewidth	Δf	-	-	2	MHz
Temperature Tuning Coefficient	T_λ	-	0.1	-	nm/°C
Current Tuning Coefficient	I_λ	-	0.01	-	nm/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

*CW bias unless otherwise stated

Cybel
1195 Pennsylvania Ave. Bethlehem, PA 18018 USA
Sales: contact@cybel-llc.com
Phone: (610) 691 7012
Website: www.cybel-llc.com

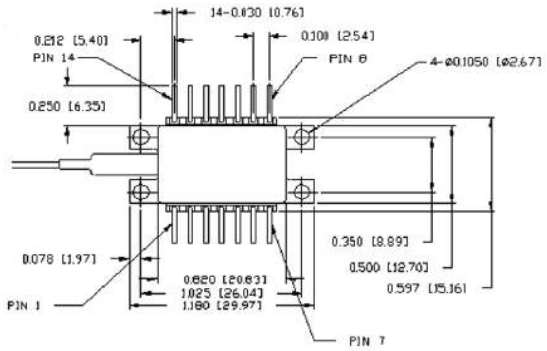
ABSOLUTE MAXIMUM RATINGS

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

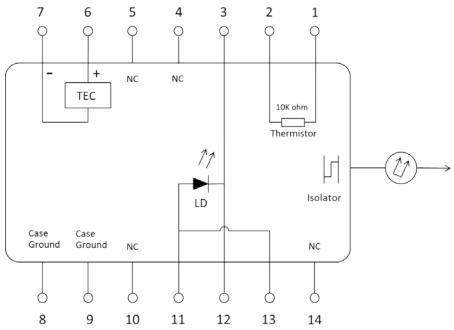
*For T_{sub} < 25°C, Max Case Temperature should be derated to $T_{Case,Max} = T_{sub} + 40°C$

PACKAGING

The EP1953-DM-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. mPD not included as standard.



14-pin butterfly schematic



Standard "Pinout 06" option

EP1953 — DM — B06 — FM

- EP1953: Wavelength Band
- DM: Single Mode
- B06: Package Description: B = 14 pin butterfly, 06 = pinout
- FM: 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 2. 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.

Cybel

1195 Pennsylvania Ave. Bethlehem, PA 18018 USA
Sales: contact@cybel-llc.com

Phone: (610) 691 7012
Website: www.cybel-llc.com