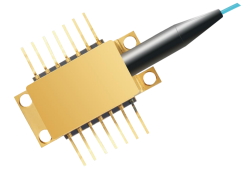


1101 DFB Laser with TEC

DFB-1XXXH-PM-YY



DFB Laser, 1310 nm, Up to 150 mW, PM Output, DM Capable

The Optilab DFB-1310H-PM is a single frequency laser coupled with Polarization Maintaining fiber. Built with Distributed Feed-Back Grating (DFB) as cavity reflector, it provides pure, single longitudinal mode, hopping free and extremely stable wavelength source. This laser diode is fabricated with Multiple Quantum Well (MQW) for excellent reliability and stability. It can be used either in CW operation for seeding the external modulation and coherence interferometry, or directly modulated for signal transmission. This MQW DFB laser features 150 mW of output optical power, high Side Mode Suppression Ratio (SMSR). The standard 14-pin butterfly integrates TEC, thermistor, monitor PD and an output isolator.

FEATURES

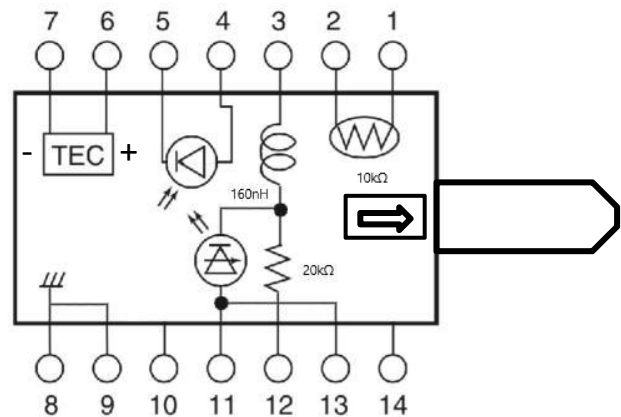
- Up to 150 mW Output Power
- Built-in Isolator
- Polarization Maintained Fiber Output
- Built-in TEC, Thermistor & Monitor PD
- Side Mode Suppression Ratio 45 dB
- Zero Chromatic Dispersion

USE IN

- Stabilized Single Frequency Laser Source
- Light Laser Source for Interferometer
- PM Pulse Laser Source
- External Modulation Optical Link

FUNCTIONAL DIAGRAM

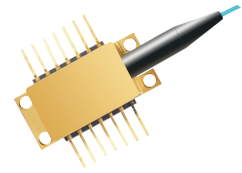
Pin#	Desc	Pin#	Desc
1	Thermistor	8	Case Ground
2	Thermistor	9	Case Ground
3	LD- (Bias)	10	NC
4	PD+	11	LD+
5	PD-	12	LD RF -
6	TEC+	13	LD+
7	TEC-	14	NC



Order notes to our customers: The default parameters are as follows. For special needs, please contact sales.
1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.
2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.

1101 DFB Laser with TEC

DFB-1XXXH-PM-YY

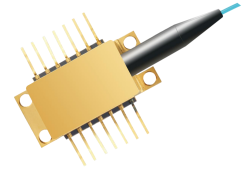


LD Forward Current	650 mA
LD Forward Voltage	2.9 V
LD Reverse Voltage	2 V
PD Forward Current	5 mA
PD Reversed Voltage	10 V
TEC Voltage	3.5 V
TEC Current	1.5 A
Lead Soldering Time	10 s @ < 260 °C
Center Wavelength Range	1310±3 nm
Optical Output Power	Up to 150 mW
Threshold Current	15 mA typ.
LD Operation Current	500 mA typ.; 600 mA max
Forward Voltage	2.5 V typ.
Side Mode Suppression Ratio	45 dB typ.
Wavelength Temperature Coefficient	80 pm/ °C typ.
Laser Linewidth	10 MHz Max.
3 dB S21 Bandwidth	2 GHz Min.
Relative Intensity Noise	-145 dB/Hz
Thermistor Resistance	10±0.5 kOhm @25 °C, NTC
Thermistor B Constant	3950±100 K
Polarization Extinction Ratio	20 dB Min.
Optical Isolation	30 dB typ.
Operating Case Temperature	-20 °C to +65 °C
Storage Temperature	-40 °C to +85 °C
Optical Connectors	FC/APC, Slow Axis Aligned
Optical Fiber Type	Fujikura SM13-PS-U40D, Panda
Fiber Tubing	900 µm Loose Tube

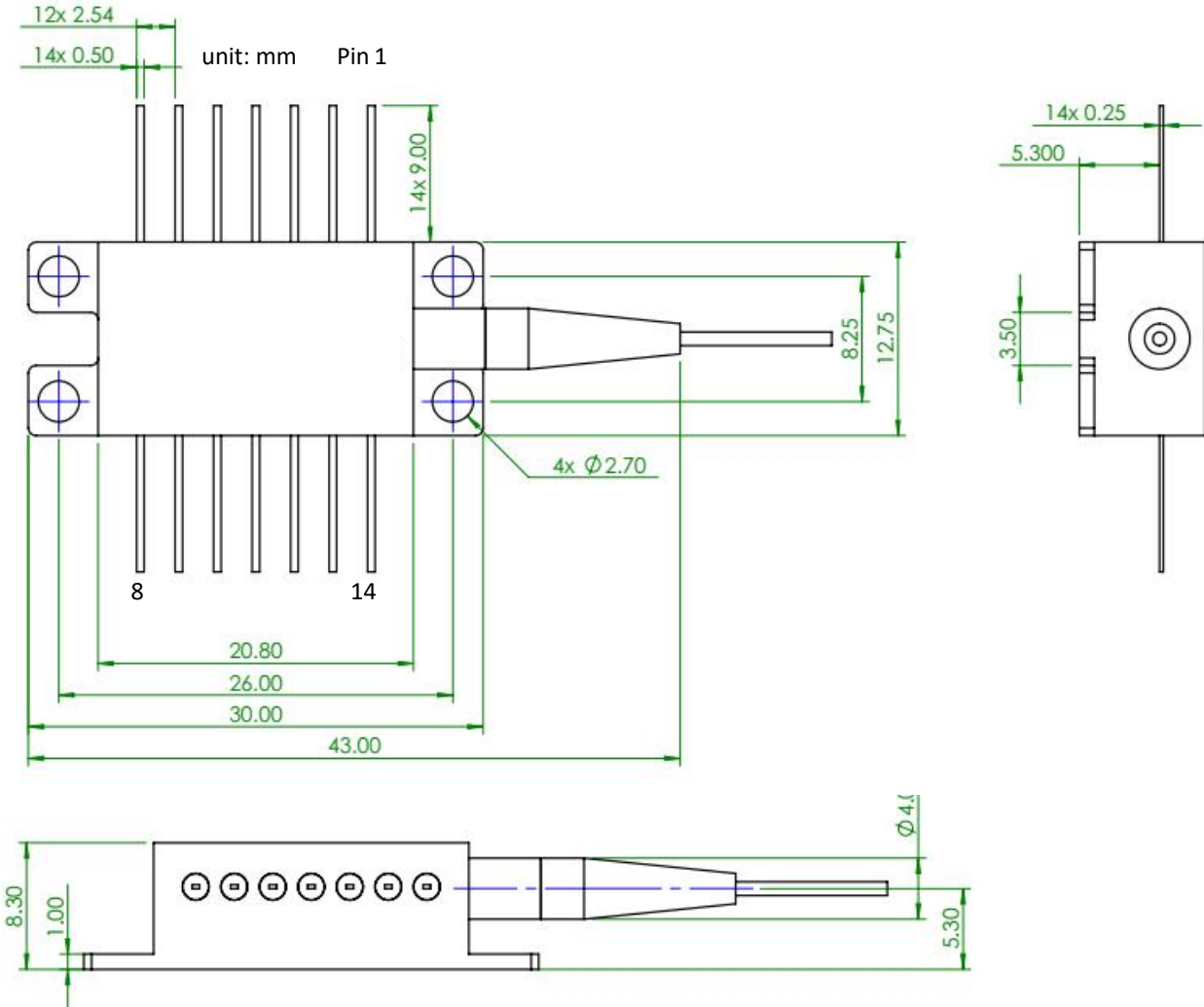
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1101 DFB Laser with TEC

DFB-1XXXH-PM-YY



MECHANICAL DRAWING



ORDERING OPTIONS

DFB-1XXXH-PM-YY

XXX : Wavelength in Nanometer

1270 nm, 1290 nm, 1310 nm, 1330 nm

YY : Optical Power in mW

050 mW, 060 mW, 070 mW, 080 mW, 090 mW, 100 mW,
110 mW, 120 mW, 130 mW, 140 mW, 150 mW

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