520nm FP-LD SM Fiber Coupled Laser Diode



Description:

The PL-FP-520-A-A81-SA is single mode laser diode module designed for optical measurement and communication. The laser is packaged in 14-pin standard butterfly package with monitor photodiode and thermo-electric cooler (TEC).Coupled with Nufern HP460 fiber.This Module is pigtailed with 0.7-1.0 m of single mode polarization maintaining fiber and connectorized by FC/APC connector.

Features:

- Optical output: 30mW
- FC-APC connector
- Efficient coupling into single mode fiber
- 14-pin butterfly package
- CW or pulsed operation
- Internal monitor PD and TEC
- SM or PM Fiber (ø0.9mm)

Application:

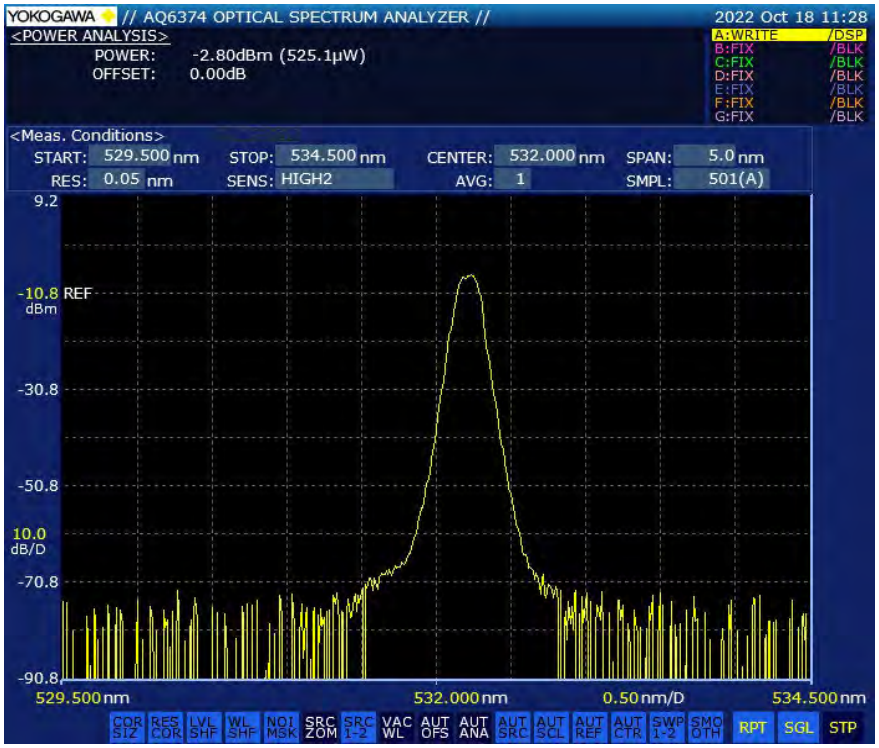
- Fiber transmission systems
- Laser interferometric
- Laser indication
- Testing Light source

Laser Specifications:

Tsub=25°C, CW bias unless stated otherwise

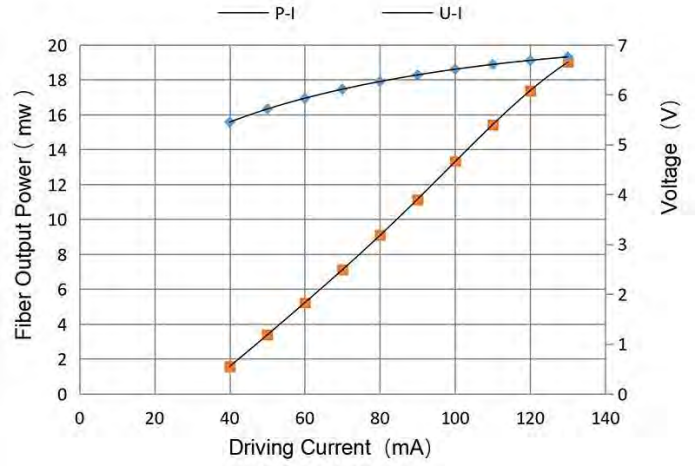
Parameter	Symbol	Min	Typ	Max	Unit
Centre Wavelength	λ	518	520	522	nm
Spectral Width	Δλ	0.6	0.8	1.2	nm
Threshold Current	Ith		20	30	mA
Operating Current	Iop		120	150	mA
Fiber output Power	Pf	10	20	30	mW
PD Dark Current (VRD=5V)	Id			0.1	uA
Extinction Ratio PM VERSION	PER	17	20		dB
Coupled Fiber Type	Nufern HP460 NA=0.14				
Forward Voltage	Vf		6	8	V
Thermistor Resistance	RT	9.5	10	10.5	KΩ
Thermistor Temp. Coefficient			-4.4		%/°C
Connector	FC/APC				

Spectrum:

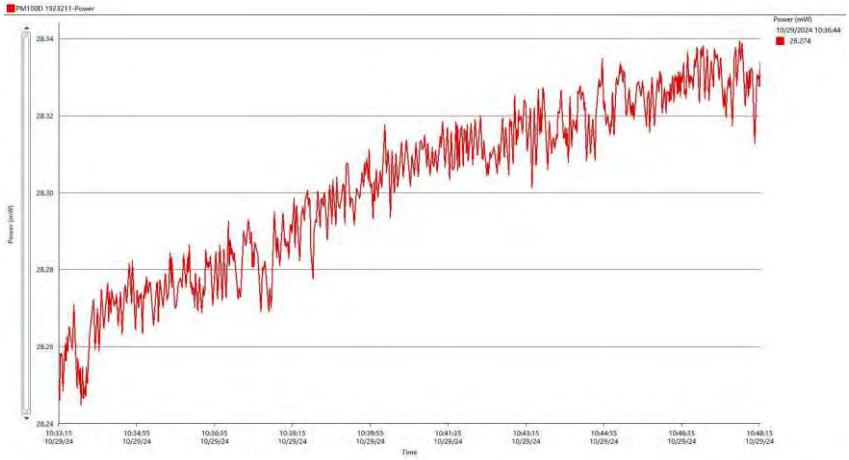


62 Highland Ave., Bethlehem, PA 18017, USA
Sales: contact@cybel-llc.com | Web: www.cybel-llc.com | Tel: +1 (610) 691-7012

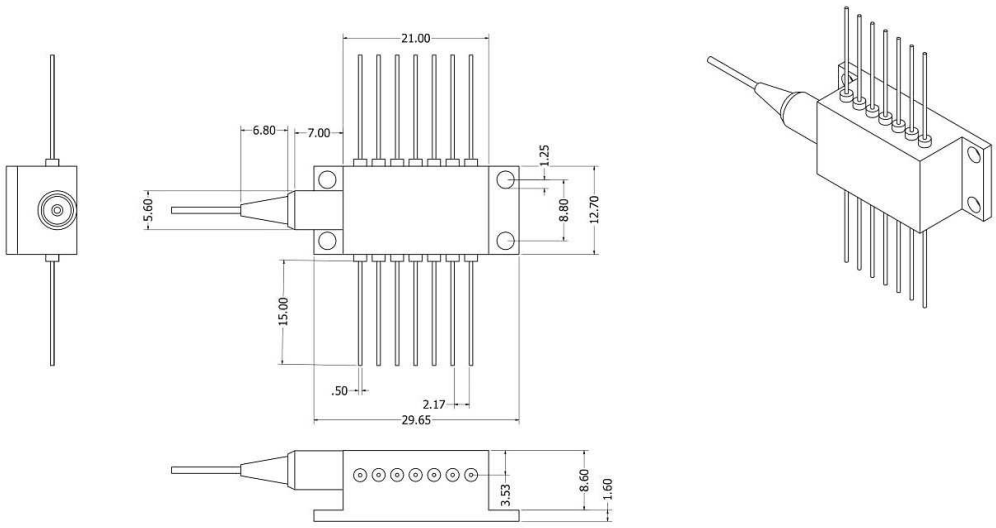
L-I Curve:



Power Stability:

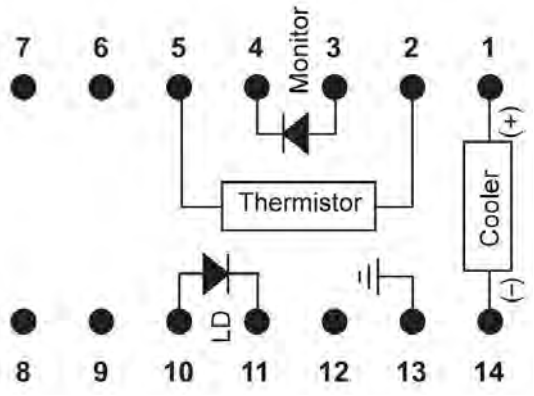


Package Size and pin definition:



62 Highland Ave., Bethlehem, PA 18017, USA
Sales: contact@cybel-llc.com | Web: www.cybel-llc.com | Tel: +1 (610) 691-7012

Package Size:



1	Thermoelectric Cooler (+)	8	N/C
2	Thermistor	9	N/C
3	PD Monitor Anode (-)	10	Laser Anode (+)
4	PD Monitor Cathode (+)	11	Laser Cathode (–)
5	Thermistor	12	N/C
6	N/C	13	Case Ground
7	N/C	14	Thermoelectric Cooler (–)

ABSOLUTE MAXIMUM RATINGS:

Item	Unit	Min	Typ	Max
Case Temperature	°C	-5	25	70
Chip Temperature	°C	+10	25	40
Operating Current	mA	0	120	150
Forward Voltage	V	0.8	1.2	1.8
TEC Current	A	-	1.2	1.4
Reverse Voltage (LD)	V	-	-	1.8
Reverse Voltage (PD)	V	-	-	10

Ordering Info:

PL-FP-□□□□-☆-A8▽-XX

□□□□: Wavelength

405: 405nm

520: 520nm

633: 633nm

680: 680nm

850: 850nm

*****

1550:1550nm

☆: Output Power

A: 20mW

B: 30mW

▽:Wavelength Tolerance

1: ±1nm

2: ±2nm

XX: Fiber and Connector Type

SA=HP460+ FC/APC

SP=HP460+ FC/PC

PP=PM Fiber+ FC/PC

PA=PM Fiber+ FC/APC