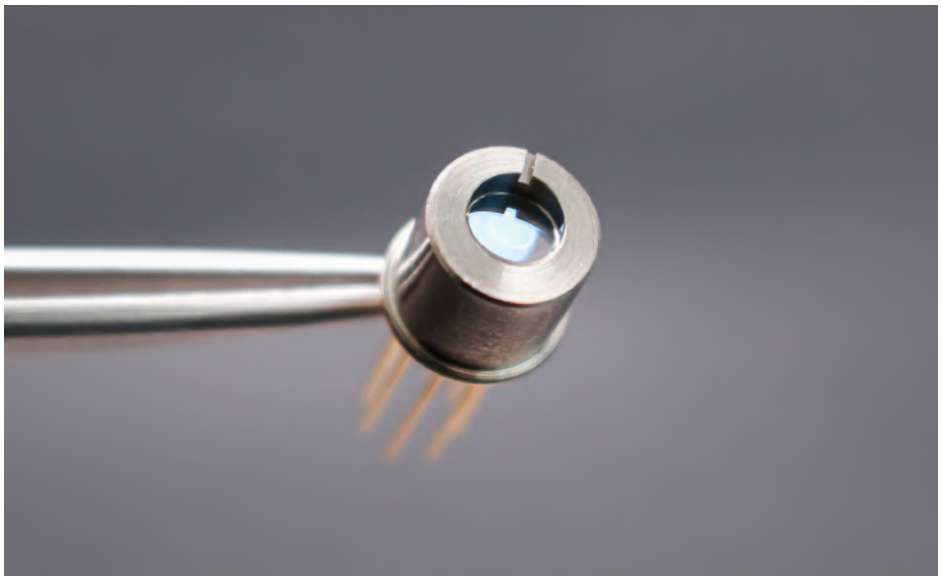
2332nm DFB SM Laser diode (TO39)



Description

The PL-DFB-2332-A-A81 2332nm DFB laser diode module made by LD-PD is a cost effective, highly coherent laser source. The DFB laser diode chip is packaged in an industry standard hermetically sealed TO39 package with TEC and PD Built in.

Features

- Narrow Linewidth < 2MHz
- Excellent wavelength control and stability
- Industry Standard 14 pin Butterfly package
- Mode-Hop free tuning
- Excellent reliability
- Customer specific wavelengths available

Application

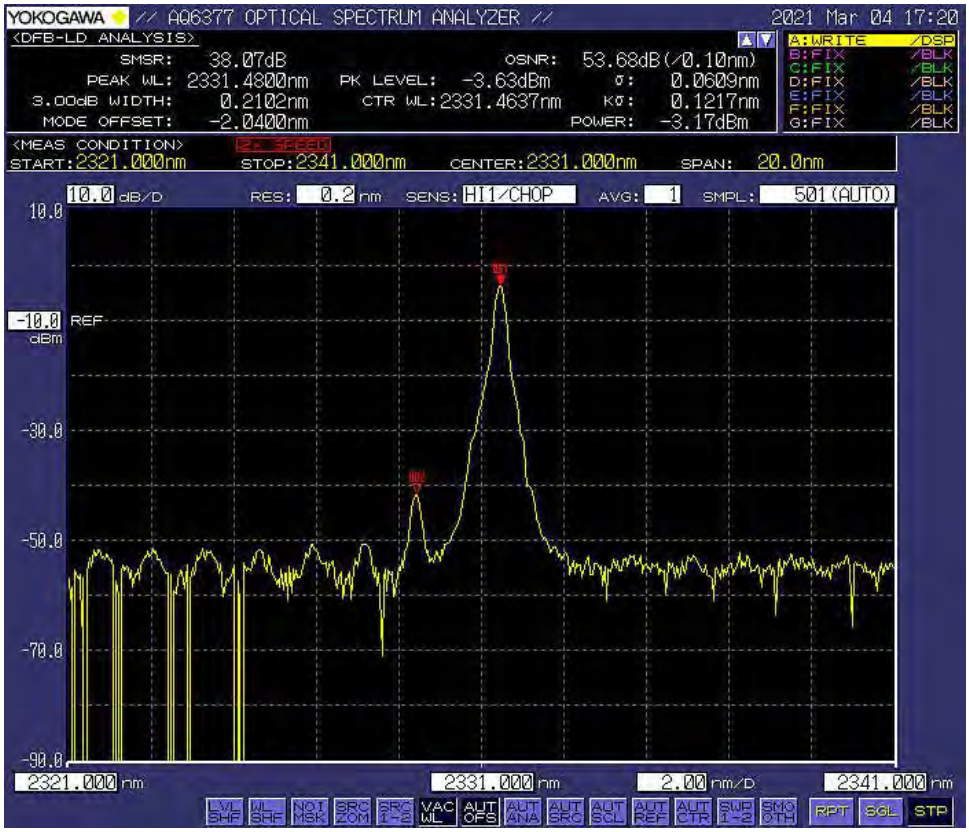
- Tunable diode laser absorption spectroscopy
- CO Monitoring

Laser Specifications

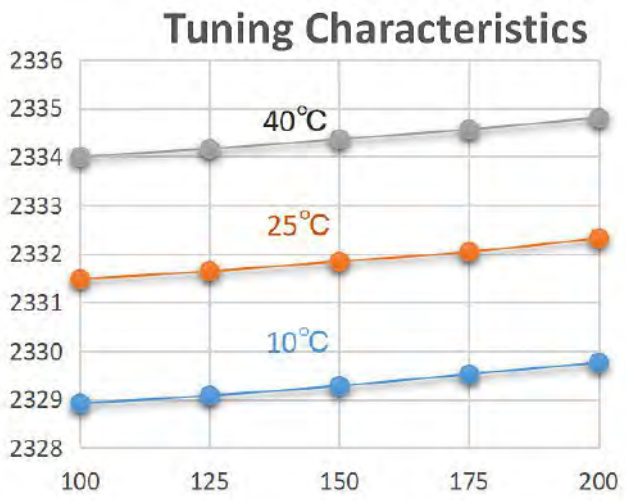
Electrical/Optical Characteristics (Tsub=25°C, CW bias unless stated otherwise)

Parameter	Symbol	Min	Typ	Max	Unit
Centre Wavelength	λ	2321	2332	2333	nm
Side Mode Suppression Ratio	SMSR	30	40		dB
Threshold Current	Ith		20	30	mA
Operating Current	Iop		80	120	mA
Chip output Power	Pf	4	5	10	mW
Quantum Efficiency	η	0.08	0.12		mW/mA
Current Tuning Coefficient	Δλ/ΔI		0.015		nm/mA
Temperature Tuning Coefficient	Δλ/ΔT		0.12		nm/K
Forward Voltage	Vf		1.3	2	V
Thermistor Resistance	RT	9.5	10	10.5	KΩ
Thermistor Temp. Coefficient			-4.4		%/°C
Connector	FC/APC				

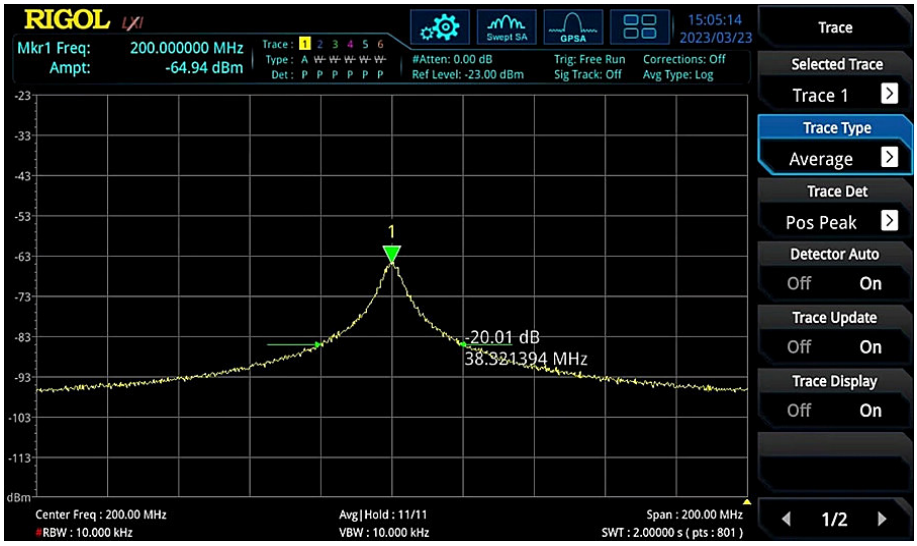
Spectrum



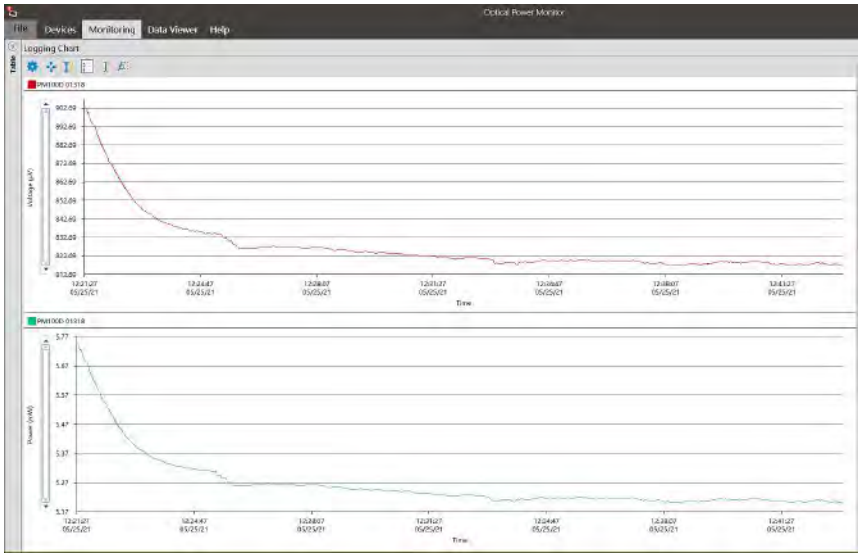
Tuning characteristics



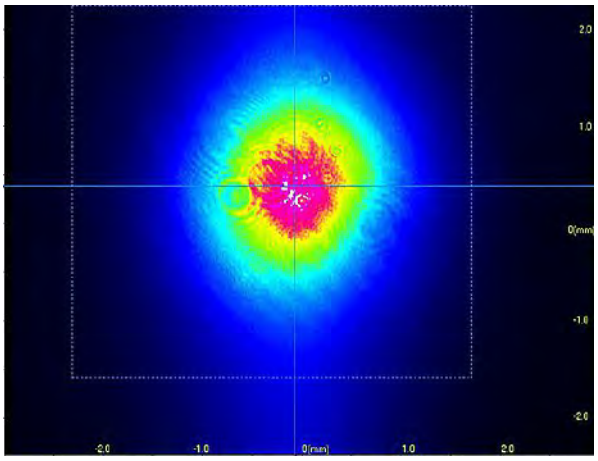
DFB Linewidth Testing Result



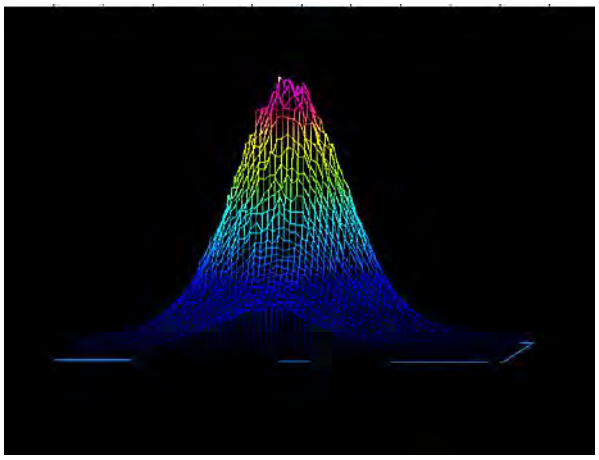
Power Stability



Beam Quality

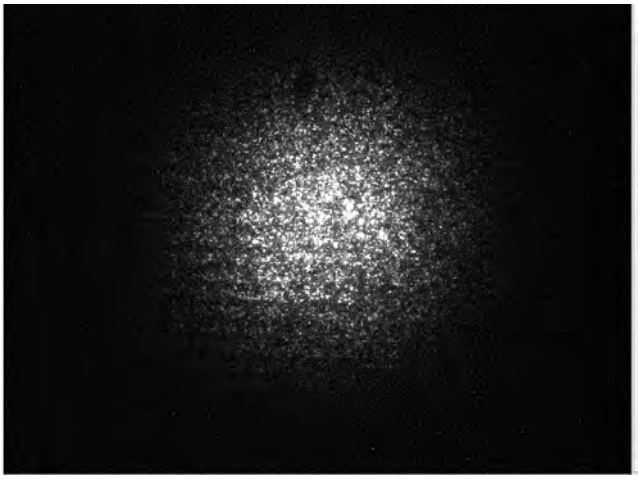


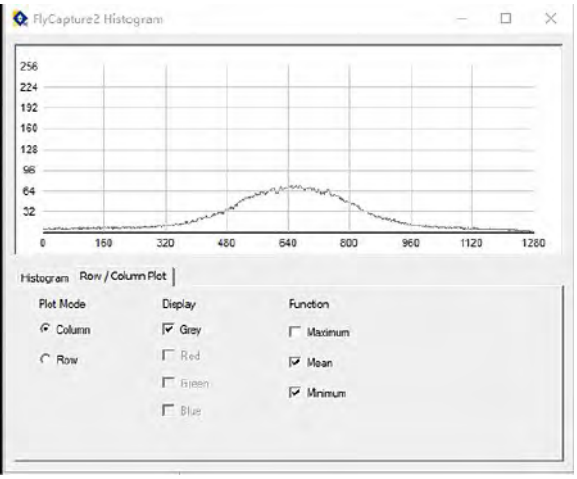
2D



3D

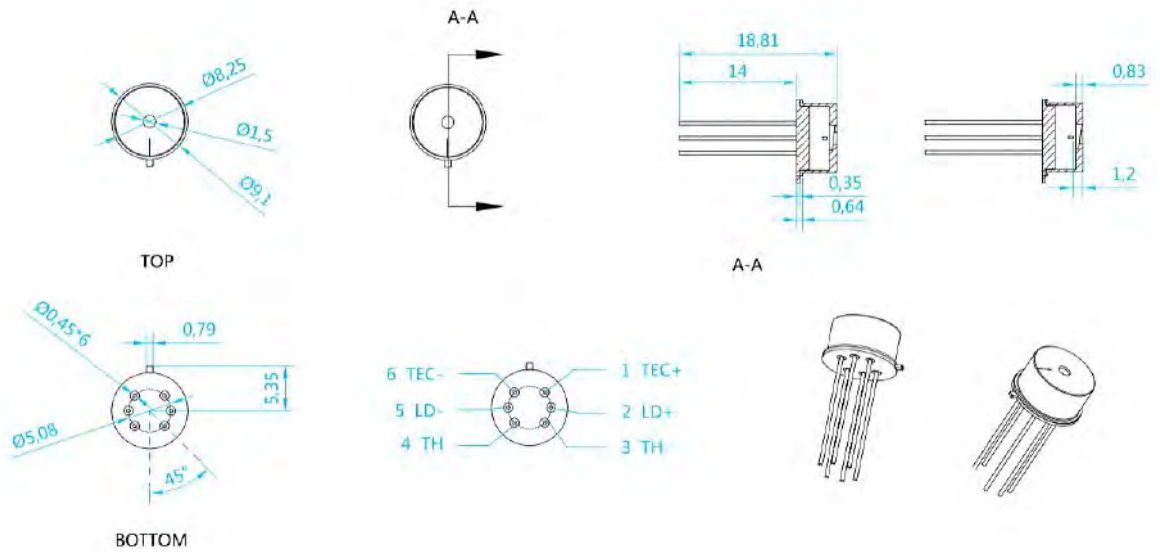
Camera Analysis





Dimensions and Pin definitions

Uinte (mm)



Absolute Maximum Ratings

Item	Unit	Min	Typ	Max
Case Temperature	℃	-5	25	70
Chip Temperature	℃	+10	25	40
Operating Current	mA	0	100	120
Forward Voltage	V	0.8	1.2	1.8
TEC Current	A	-	-	1.2
Reverse Voltage (LD)	V	-	-	2.0
Reverse Voltage (PD)	V	-	-	20

Ordering Info

PL-DFB-□□□□-☆-A8▽-TO39
□□□□:Wavelength
1530: 1530nm
1653.7: 1653.7nm
*****
1653.7: 1653.7nm
☆ :Output Power
A:5mW
B:10mW
▽:Wavelength Tolerance
1:±1nm
2:±2nm