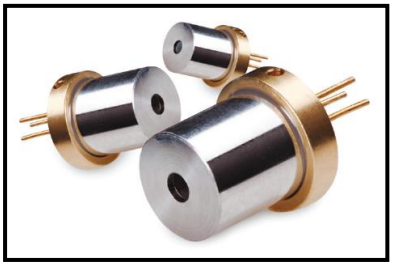


LASER DIODE FOLD-830-500-VBG

FOLD-830-500-VBG is a multimode semiconductor laser diode with 500mW CW output power at 830nm. Due to the integrated VBG the wavelength is fixed and the spectral width is very narrow. It is suitable for the use in various opto-electronic applications.

APPLICATIONS:

- Raman Spectroscopy
- Metrology
- Bio-Instrumentation
- Sensing
- Analytical Instrumentation

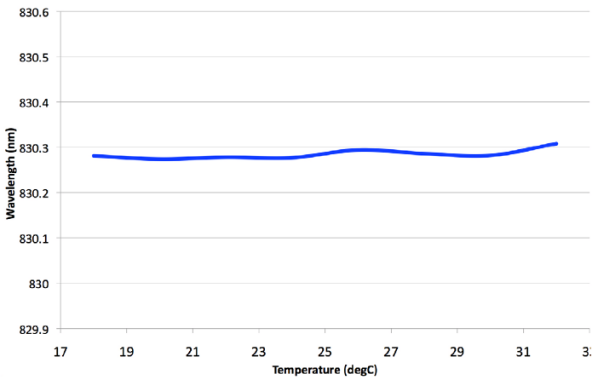
Optical and electrical characteristics (T = 25°C, P = 500mW):

Operating Parameters	Symbol	Min	Typ	Max	Unit
Optical Power	P_{out}	-	-	500	mW
Wavelength	λ	829.5	830	830.5	nm
Line Width	$\Delta\lambda$	-	0.15	-	nm
Threshold Current	I_{th}	-	280	-	mA
Forward Current	I_f	-	0.9	1.1	A
Forward Voltage	V_f	-	1.9	2.2	V
Reverse Voltage	V_r	-	-	2	V
Slope Efficiency	$\Delta P/\Delta I$	-	0.7	-	mW/mA
Beam Size at Exit (FWHM)	Ø	1.0 x 0.5			mm
Beam Divergence	Θ	0.25 x 3.5			°
Operating Temperature	T_{op}	0	-	50	°C
Central Stabilized Temperature	T_c	20	-	40	°C
Stabilized Temperature Range	T_r	14	-	-	°C
Storage Temperature	T_s	-20	-	80	°C
Emitter Size	E_s	1 x 100			µm
Polarization	100:1 (TE)				

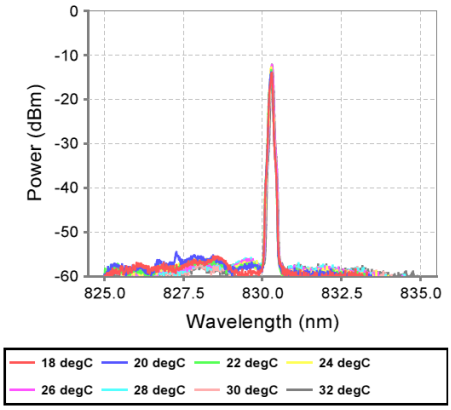
FRANKFURT LASER COMPANY
An den 30 Morgen 13, 61381 Friedrichsdorf, Germany
Tel.: +49(0)6172.27978-0 Fax: +49(0)6172.27978-10
E-mail: sales@frlaserco.com; Internet: **WWW.FRLASERCO.COM**

PERFORMANCE AND PACKAGE SPECIFICATION

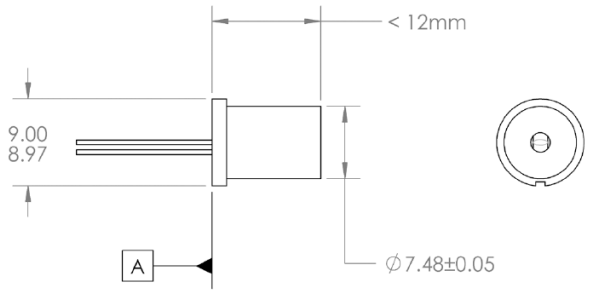
Wavelength Stability



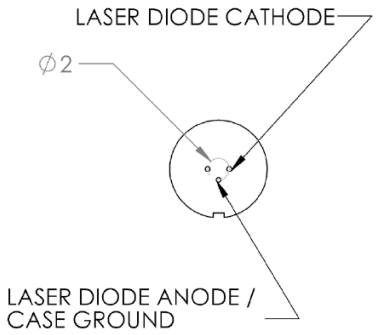
Optical Spectrum (Sample)

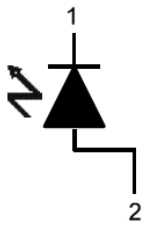


Side View



Bottom View





Pinout	
1	LD Cathode
2	Case / LD Anode
3	Not Connected

FRANKFURT LASER COMPANY
An den 30 Morgen 13, 61381 Friedrichsdorf, Germany
Tel.: +49(0)6172.27978-0 Fax: +49(0)6172.27978-10
E-mail: sales@frlaserco.com; Internet: **WWW.FRLASERCO.COM**