



LASER DIODE FOLD-785-500-VBG

FOLD-785-500-VBG is a multimode semiconductor laser diode with 500mW CW output power at 785nm. 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:

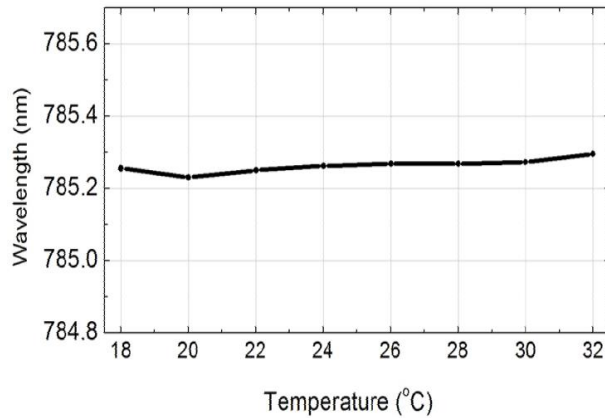
- Raman Spectroscopy
- Metrology
- Bio-Instrumentation
- Sensing
- Analytical Instrumentation

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

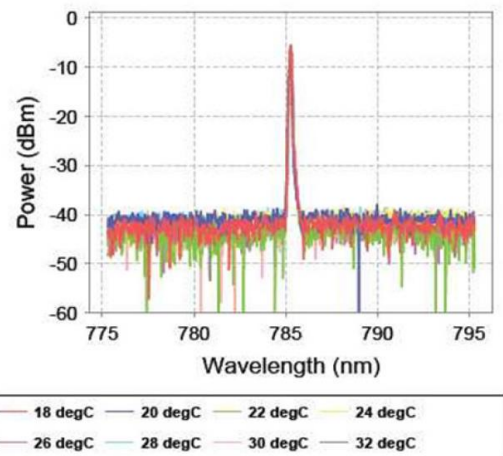
Operating Parameters	Symbol	Min	Typ	Max	Unit
Optical Power	P _{out}	-	-	500	mW
Wavelength	λ	784.5	785	785.5	nm
Line Width	Δλ	-	0.15	0.25	nm
Threshold Current	I _{th}	-	300	-	mA
Forward Current	I _f	-	1.0	1.5	A
Forward Voltage	V _f	-	1.9	2.2	V
Reverse Voltage	V _r	-	-	2	V
Slope Efficiency	ΔP/ΔI	-	0.7	-	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 Orientation	TE				

PERFORMANCE AND PACKAGE SPECIFICATION

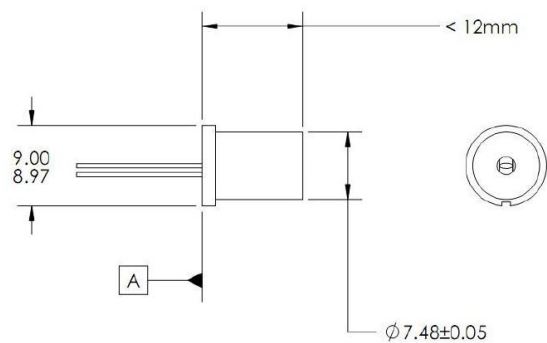
Wavelength Stability



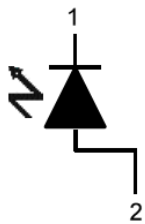
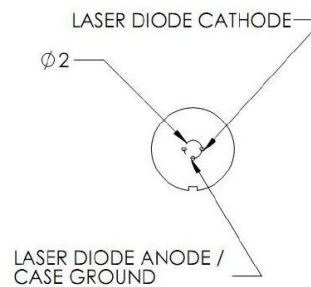
Optical Spectrum (Sample)



Side View



Bottom View



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