



LASER DIODE FOLD-405-12S-VBG

FOLD-405-12S-VBG is a single mode semiconductor laser diode with 12mW CW output power at 405nm. 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:

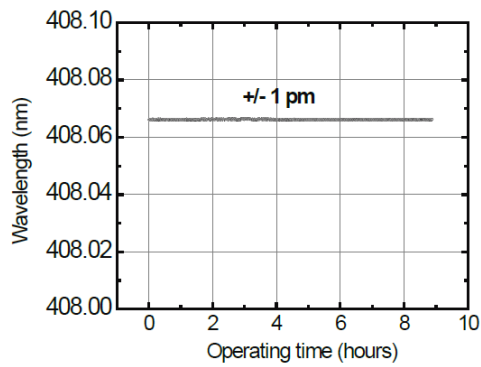
- Raman Spectroscopy
- Metrology
- Bio-Instrumentation
- Confocal Microscopy
- Data Storage
- LIDAR
- Sensing
- Analytical Instrumentation

Optical and electrical characteristics (T = 25°C, P = 12mW):

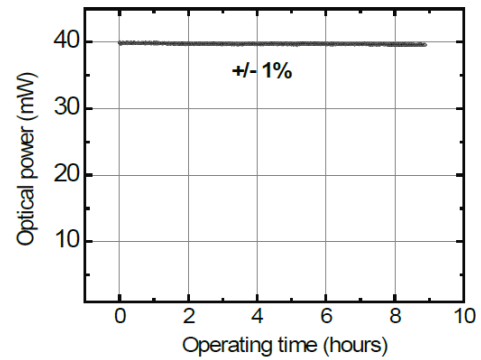
Operating Parameters	Symbol	Min	Typ	Max	Unit
Optical Power	P_{out}	-	-	12	mW
Wavelength	λ	404.5	405	405.5	nm
Line Width	$\Delta\lambda$	-	160	-	MHz
Threshold Current	I_{th}	-	30	35	mA
Forward Current	I_f	-	45	65	mA
Forward Voltage	V_f	-	5.4	6.5	V
Reverse Voltage	V_r	-	-	2	V
Slope Efficiency	$\Delta P/\Delta I$	-	1.0	-	mW/mA
Collimated Beam Size (FWHM)	$\varnothing$	0.8 x 0.4			mm
Operating Temperature	T_{op}	0	25	60	°C
Central Stabilized Temperature	T_c	15	25	35	°C
Stabilized Temperature Range	T_r	10	14	-	°C
Storage Temperature	T_s	-10	-	60	°C
Coherence Length	> 1m				
Polarization	100:1 (TE)				

PERFORMANCE AND PACKAGE SPECIFICATION

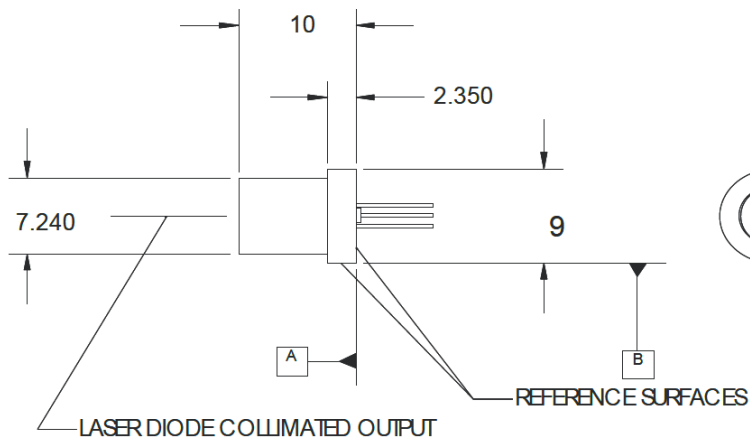
Wavelength Stability



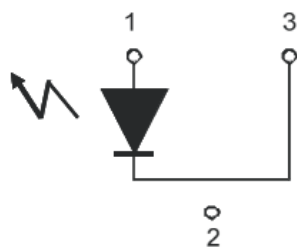
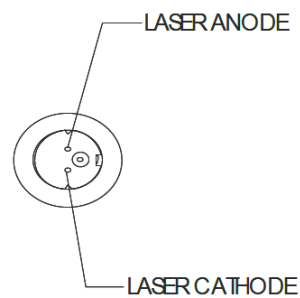
Optical Power Stability



Side View



Bottom View



Pinout	
1	LD Anode
2	Case
3	LD Cathode