

LASER DIODE FOLD-785-600-VBG-BTF

FOLD-785-600-VBG-BTF is a fiber-coupled multimode semiconductor laser diode with 600mW CW output power at 785nm. Due to the integrated VBG the wavelength is fixed and the spectral width is very narrow. It comes with internal thermistor, TEC and photodiode and is suitable for the use in various opto-electronic applications.

APPLICATIONS:

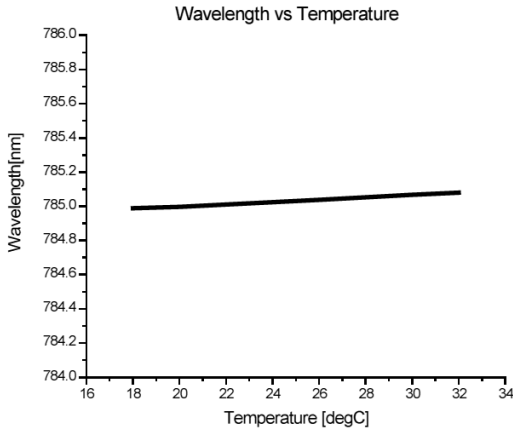
- Raman Spectroscopy
- Metrology
- Bio-Instrumentation
- Sensing
- Analytical Instrumentation

Optical and electrical characteristics (T = 25°C, P = 600mW):

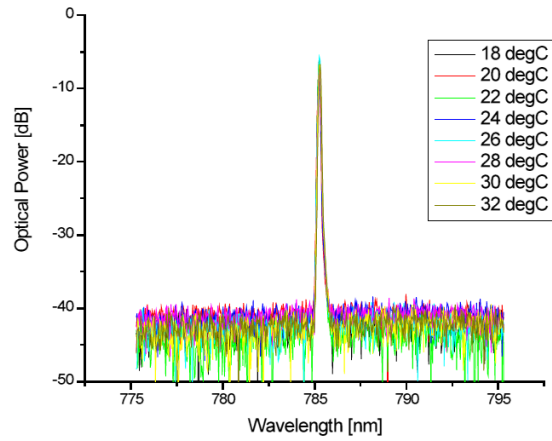
Operating Parameters	Symbol	Min	Typ	Max	Unit
Optical Power	P_{out}	-	-	600	mW
Wavelength	λ	784.5	785	785.5	nm
Line Width	$\Delta\lambda$	-	0.15	0.25	nm
Threshold Current	I_{th}	-	325	-	mA
Forward Current	I_f	-	1.1	1.5	A
Forward Voltage	V_f	-	1.9	2.2	V
TEC Current	I_{tec}	-	-	2	A
TEC Voltage	V_{tec}	-	-	4	V
Slope Efficiency	$\Delta P/\Delta I$	-	0.7	-	mW/mA
Fiber Core Diameter	F_{ϕ}	105			μm
Numerical Aperture	NA	0.22			
Fiber Connector	F_c	FC/PC or FC/APC			$^{\circ}$
Operating Temperature	T_{op}	0	25	50	$^{\circ}C$
Central Stabilized Temperature	T_c	20	-	40	$^{\circ}C$
Stabilized Temperature Range	T_r	14	-	-	$^{\circ}C$
Storage Temperature	T_s	-20	-	80	$^{\circ}C$

PERFORMANCE AND PACKAGE SPECIFICATION

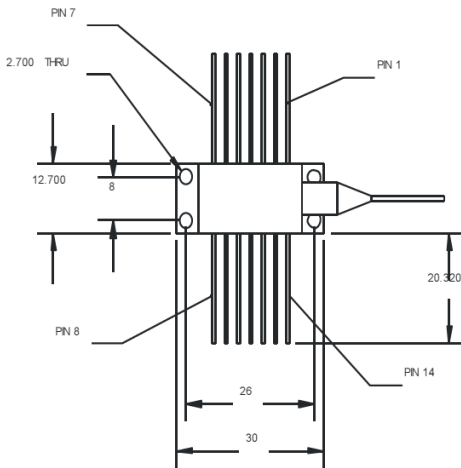
Wavelength Stability



Optical Spectrum (Sample)



Top View



Side View

Pin	Function	Pin	Function
1	TEC (+)	8	Not Connected
2	Thermistor	9	Not Connected
3	PD Anode	10	Laser Anode (+)
4	PD Cathode	11	Laser Cathode (-)
5	Thermistor	12	Not Connected
6	Not Connected	13	Case
7	Not Connected	14	TEC (-)