

LASER DIODE FAXD-785-0.5W-FC100-VBG

FAXD-785-0.5W-FC100-VBG is a fiber-coupled multimode semiconductor laser diode with 0.5W 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:

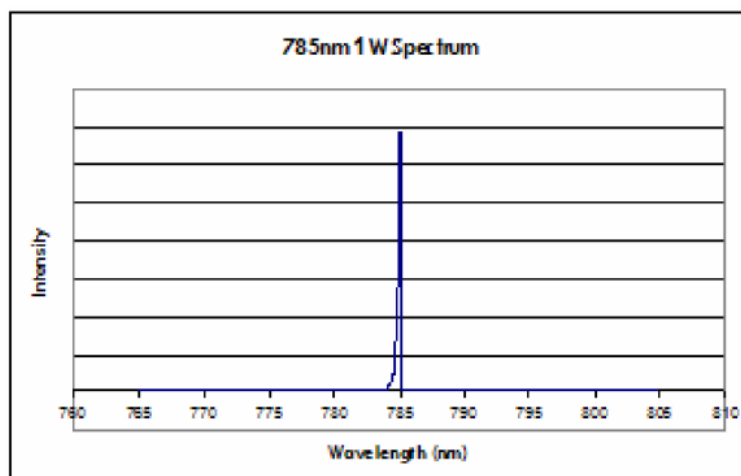
- Raman Spectroscopy
- Laser Pumping
- Laser Therapy

Optical and electrical characteristics (T = 25°C, P = 0.5W):

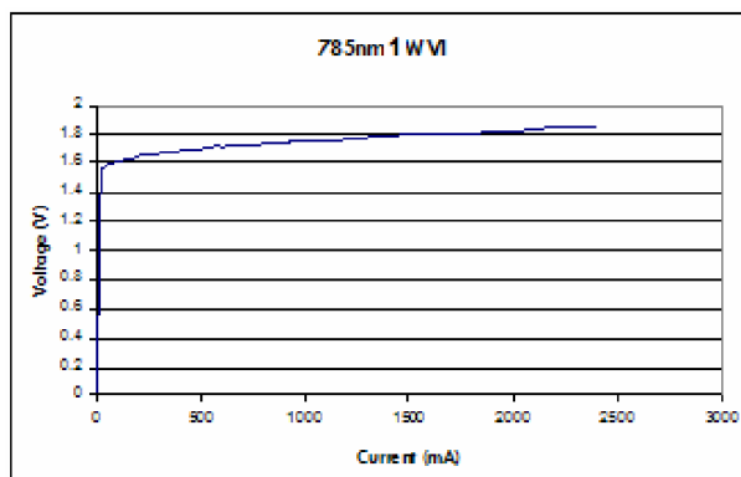
Operating Parameters	Symbol	Min	Typ	Max	Unit
Optical Power	P_{out}	-	0.5	-	W
Wavelength	λ	784.5	785	785.5	nm
Spectrum FWHM	$\Delta\lambda$	-	0.2	0.5	nm
Threshold Current	I_{th}	-	400	700	mA
Forward Current	I_f	-	1.2	1.8	A
Forward Voltage	V_f	-	2.1	2.5	V
Slope Efficiency	$\Delta P/\Delta I$	0.5	0.64	-	W/A
TEC Current	I_{TEC}	-	-	2.0	A
TEC Voltage	V_{TEC}	-	-	3.2	V
Fiber Core Diameter	$F\phi$	-	100	-	μm
Fiber Connector	F_C	FC/PC (others on request)			
Operating Temperature		-20	25	70	°C
Storage Temperature		-40	-	80	°C
Lifetime	10000 hours				
Lead Solder Temperature	250°C for 5 seconds				

Available Packages: 14-pin Butterfly

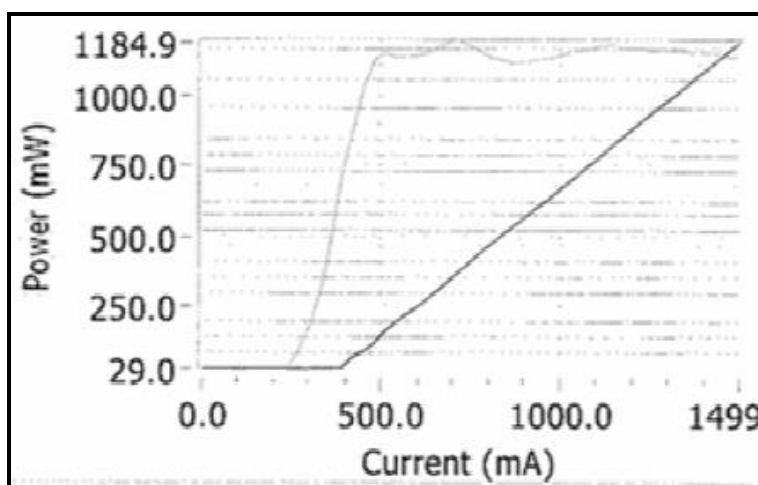
TYPICAL PERFORMANCE



Spectrum



Current vs. Voltage



Current vs. Power