

LASER DIODE FAXD-785-1W-100-VBG

FAXD-785-1W-100-VBG is a multimode semiconductor laser diode with 1 W 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:

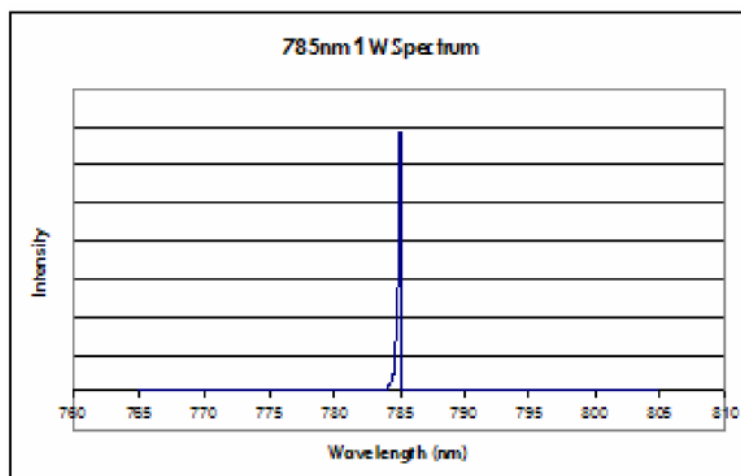
- Raman Spectroscopy
- Laser Pumping
- Laser Therapy

Optical and electrical characteristics (T = 25°C, P = 1W):

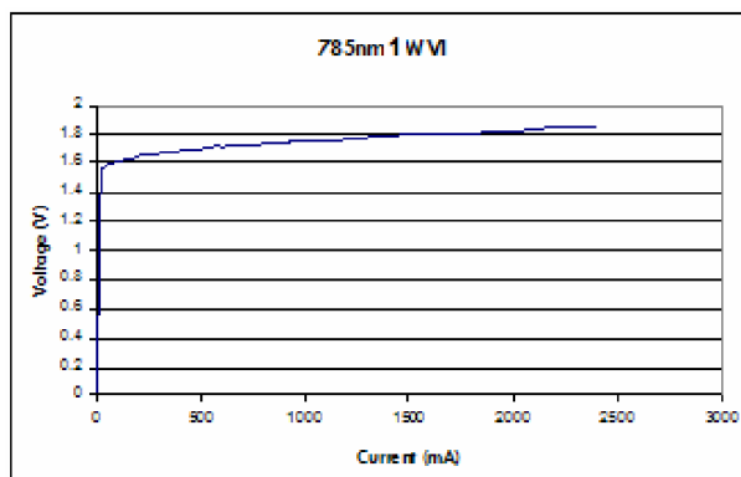
Operating Parameters	Symbol	Min	Typ	Max	Unit
Optical Power	P_{out}	-	1	-	W
Wavelength	λ	784.5	785	785.5	nm
Spectrum FWHM	$\Delta\lambda$	-	0.2	0.5	nm
Threshold Current	I_{th}	-	400	700	mA
Forward Current	I_f	-	1.5	1.9	A
Forward Voltage	V_f	-	1.9	2.2	V
Slope Efficiency	$\Delta P / \Delta I$	1.0	1.2	-	W/A
Vertical Far Field (FWHM)	$\Theta_{\perp}$	-	0.8	1.2	°
Parallel Far Field (FWHM)	$\Theta_{\parallel}$	-	8	11	°
Emitter Size		-	100	-	μm
Operating Temperature		-20	25	50	°C
Storage Temperature		-40	-	80	°C
Lifetime	10000 hours				
Lead Solder Temperature	250°C for 5 seconds				

Available Packages: C-Mount

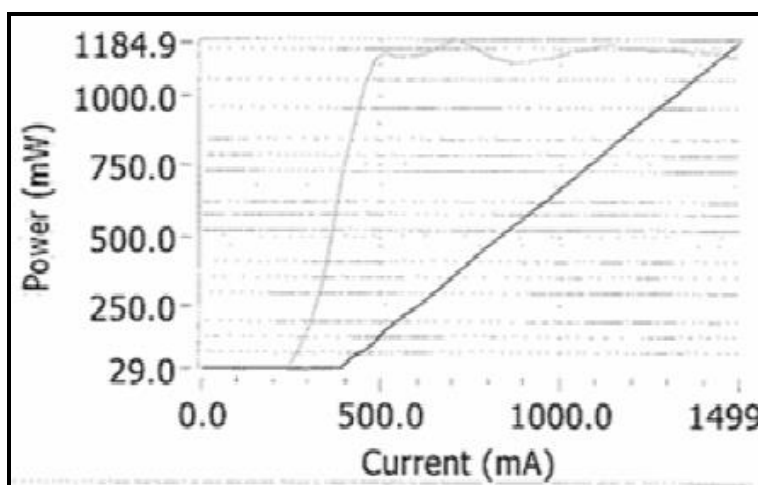
TYPICAL PERFORMANCE



Spectrum



Current vs. Voltage



Current vs. Power