Product Data Sheet

Volume-Holographic-Grating (VHG) Wavelength-Stabilized Single-Frequency Fiber-Pigtailed Laser, SMF

LP785-SAV50

S/N: 190214-42
Wavelength: 784.6nm
Fiber Type: 780HP
Test Date: 2/19/2019

Diode Package: TO 9 mm
Connector: FC/APC
Tested By: Leila

QA: Pass

Summary of Test Data (CW)

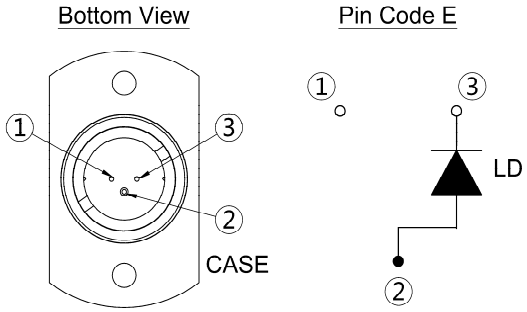
Parameter	*Symbol*	*Value*	*Unit*
Operating Current	I_{op}	400.0	mA
Operating Temperature	T_{op}	25.0	°C
Fiber Output Power @ I_{op},T_{op}	P_{out}	40.9	mW
Voltage @ I_{op},T_{op}	V_F	2.14	V
Monitor Current @ I_{op},T_{op}	I_{mon}	0.000	mA
SMSR @ I_{op},T_{op}	SMSR	40.2	dB
Threshold Current @ T_{op}	I_{th}	87.7	mA
Slope Efficiency @ T_{op}	ΔP/ΔI	0.13	W/A
Current Tuning	Δλ/ΔI	0.0020	nm/mA
Temperature Tuning	Δλ/ΔT	0.000	nm/°C

Absolute Maximum Ratings

Parameter	*Ratings*	*Unit*
Laser Diode Current*	500	mA
Optical Output Power*	55	mW
LD Reverse Voltage*	2	V
Storage Temperature	-10~+65	°C
Case Temperature	0~+50	°C

* CW

CAUTION- use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. There are no user serviceable parts in this product. When proper power is applied to this product, Laser radiation will be emitted from the optical fiber.



Important Notes:

1. The maximum ratings mean the limitation over which the laser should not be operated even instant time.
2. Do not clean the fiber connector when the diode is in operation. The laser should be off when plugging or un-plugging the connector.
3. To protect the laser diode from damage due to static electricity (ESD), please follow proper ESD handling precautions.
4. Do not pull or fold the fiber. The fiber is very fragile and easily broken. Avoid handling the fiber by the rubber "boots" of the black housing and connector ends of the pigtail.
5. To ensure safe operation use only with a suitable power source that complies with the pertinent requirements for laser systems as specified in IEC-60825-1 "Safety of Laser Products."

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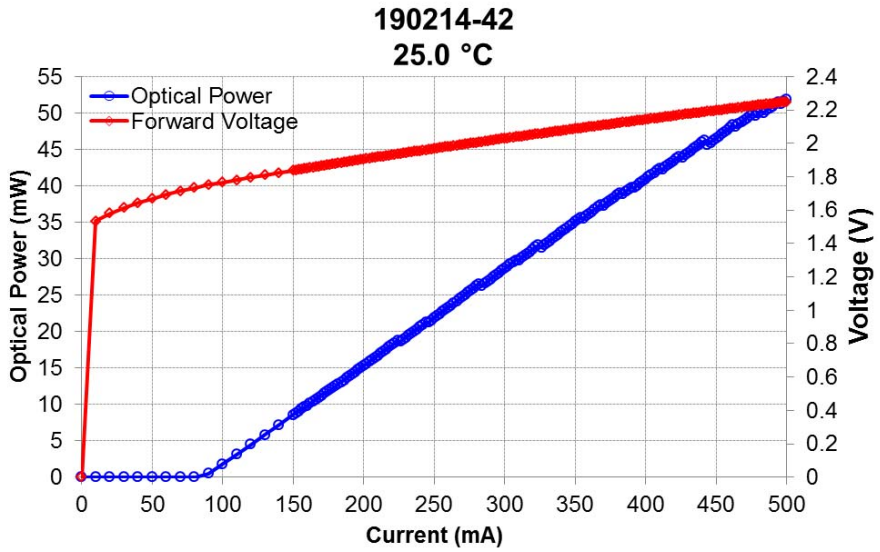

Figure 1: LIV Curve

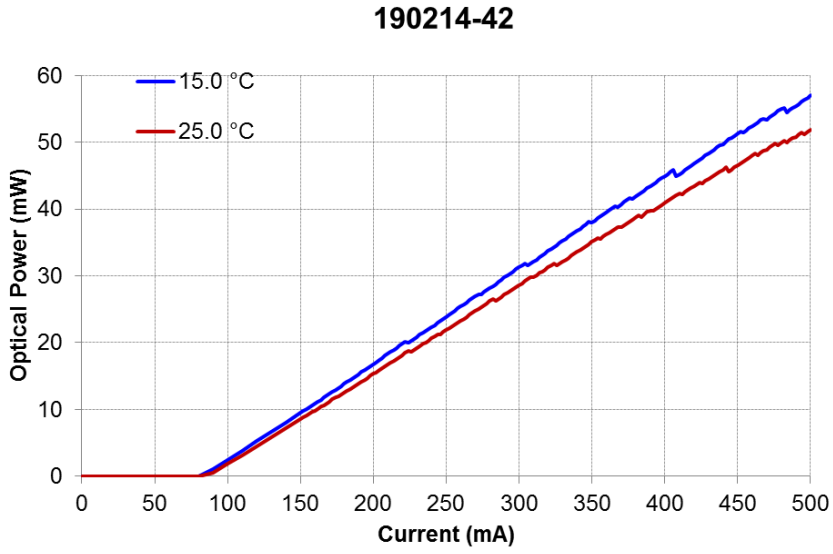

Figure 2: Output Power vs. Current over wavelength stabilized temperature

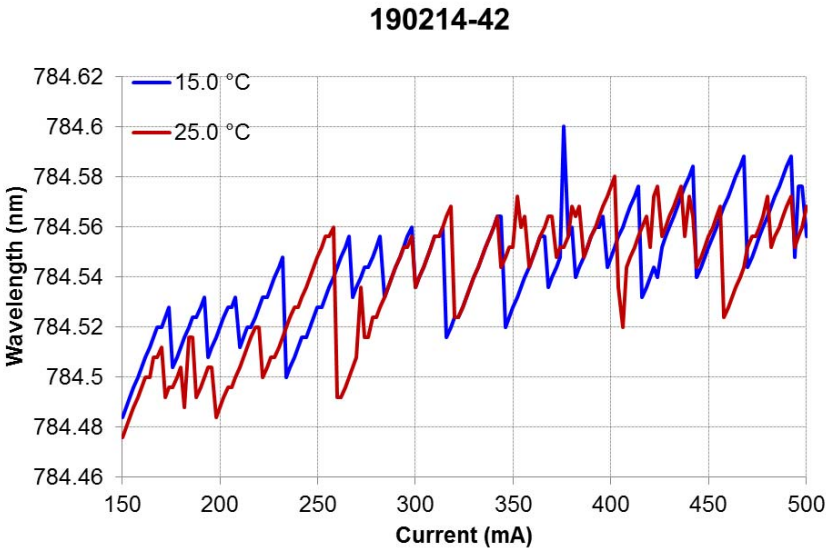

Figure 3: Wavelength vs. Current over wavelength stabilized temperature range. Measured with Yokogawa AQ6370C, Resolution Bandwidth = 0.02nm.

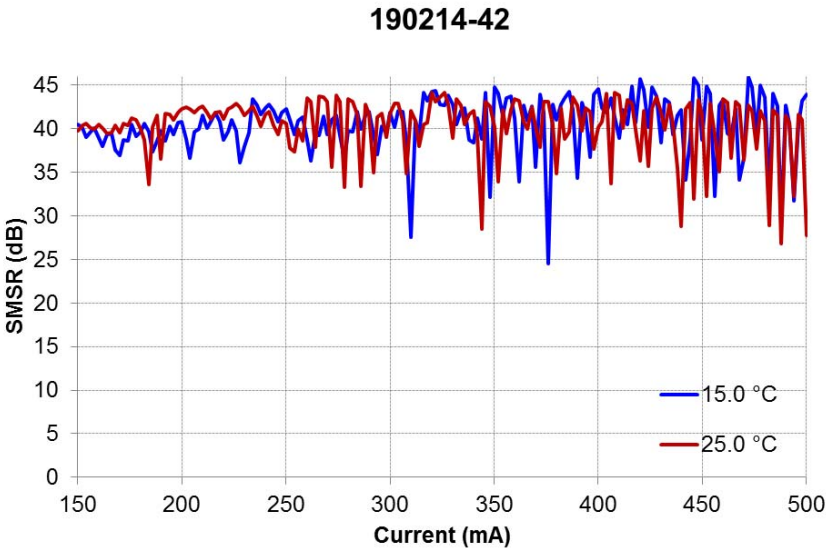

Figure 4: Side-Mode Suppression Ratio vs. Current over wavelength stabilized temperature range. Measured with Yokogawa AQ6370C, Resolution Bandwidth = 0.02nm.

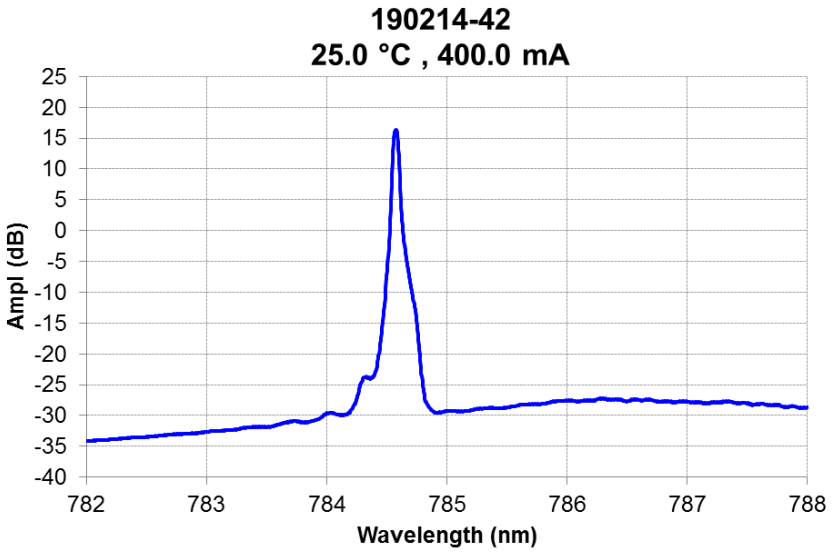

Figure 5: Optical Spectrum.
Measured with Yokogawa AQ6370C, Resolution Bandwidth = 0.02nm.