Butterfly Packaged Laser with Isolator Diode Data sheet

Summary of Test Data (CW)

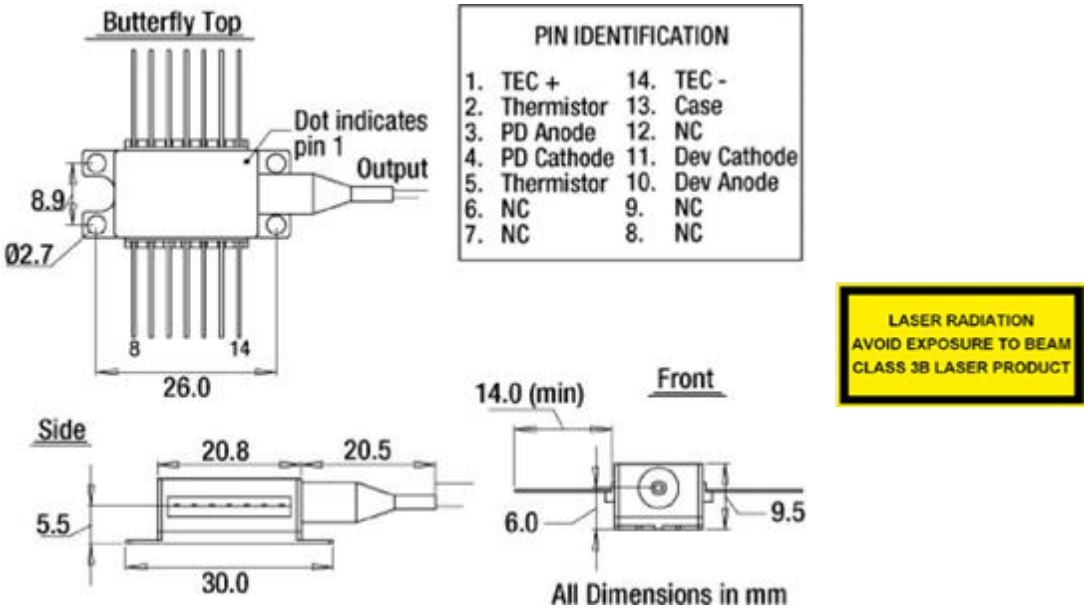
Parameter	*Symbol*	*Value*	*Unit*
Operating Current	I_{op}	250.0	mA
Operating Temperature	T_{op}	25.0	°C
Fiber Output Power @ I_{op},T_{op}	P_{out}	38.0	mW
Voltage @ I_{op},T_{op}	V_F	1.92	V
Monitor Current @ I_{op},T_{op}	I_{mon}	0.533	mA
SMSR @ I_{op},T_{op}	SMSR	59.7	dB
Threshold Current @ T_{op}	I_{th}	63.0	mA
Slope Efficiency @ T_{op}	ΔP/ΔI	0.20	W/A
Current Tuning	Δλ/ΔI	0.0014	nm/mA
Temperature Tuning	Δλ/ΔT	0.063	nm/°C

Absolute Maximum Ratings

Parameter	*Ratings*	*Unit*
Laser Diode Current*	250	mA
Optical Output Power*	50	mW
LD Reverse Voltage*	2	V
Storage Temperature	-10~+65	°C
Case Temperature	0~+50	°C

* CW, T_{case}=25°C

Fiber Type: PM780-HP



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."**

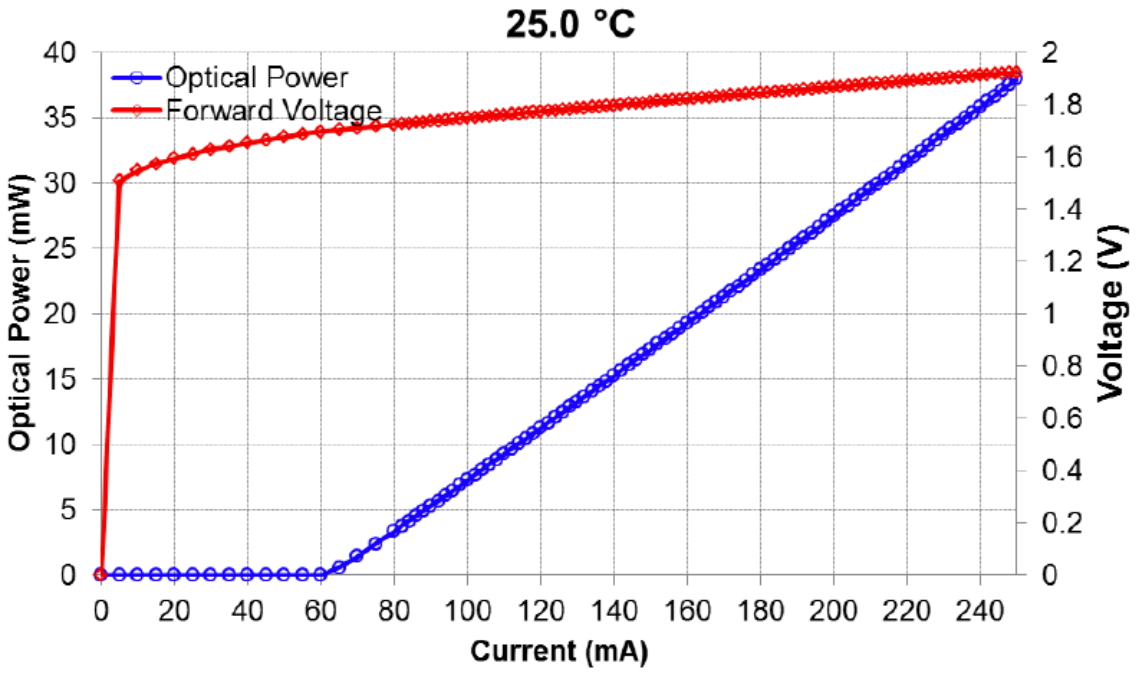


Figure 1: Output Power and Operating Voltage versus Bias Current

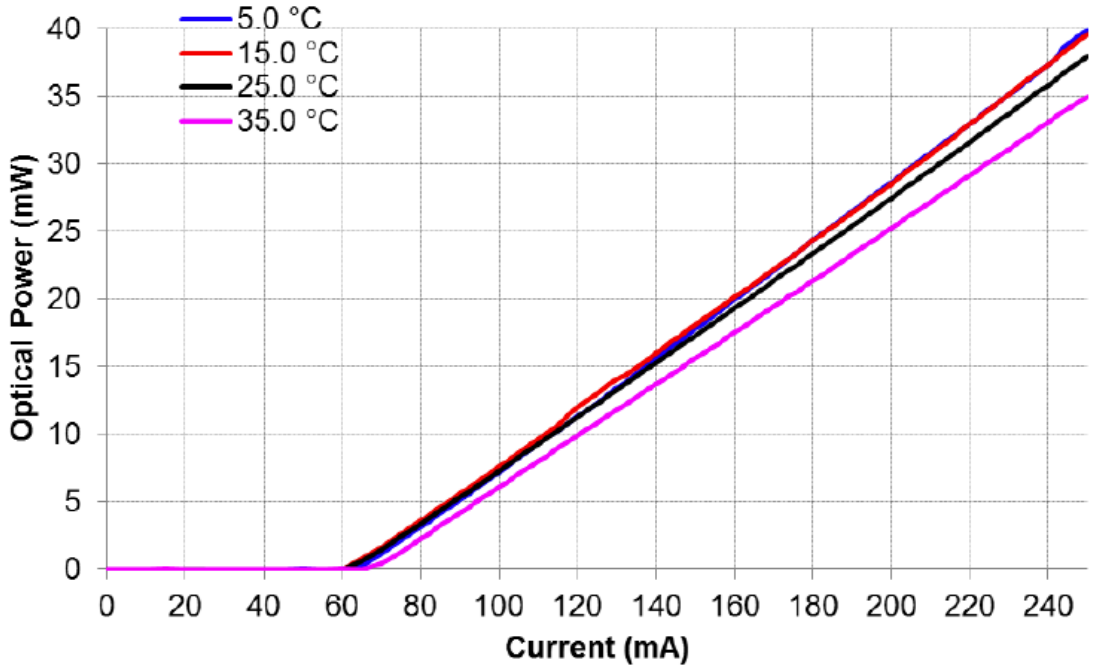


Figure 2: Output Power versus Bias Current

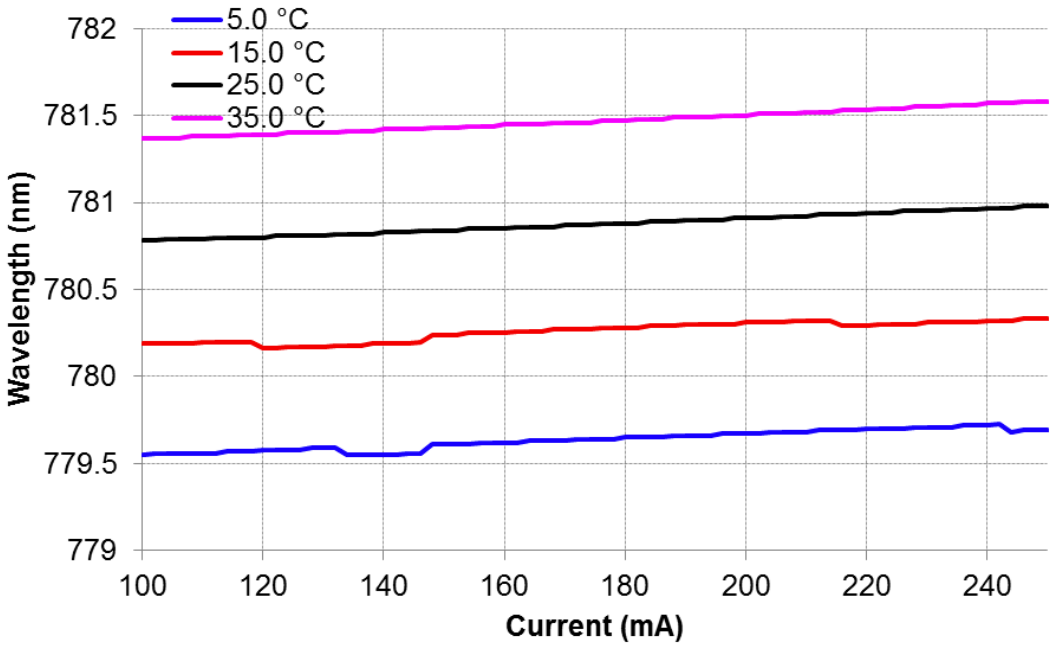


Figure 3: Wavelength versus Bias Current

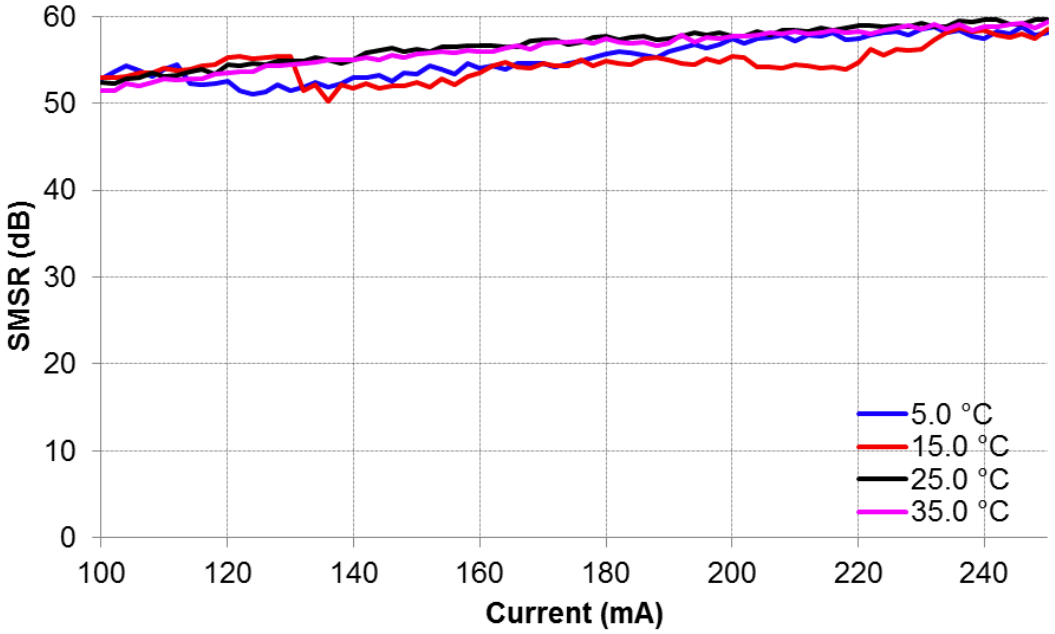


Figure 4: Side Mode Suppression Ratio (SMSR) versus Bias Current

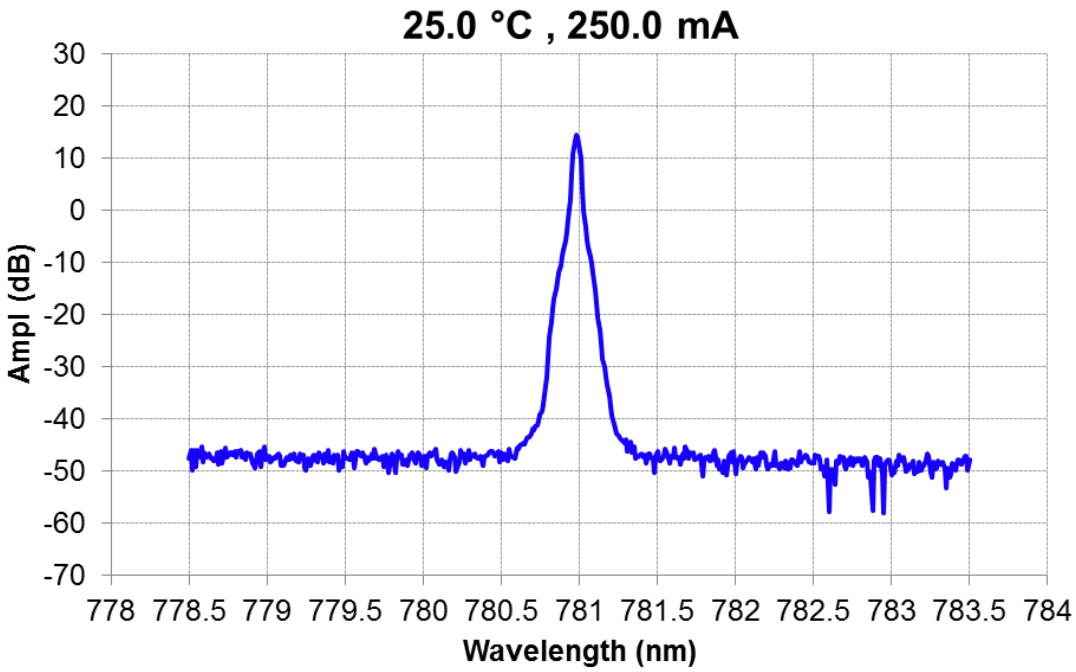


Figure 5: Optical Spectrum (RBW=0.02nm)

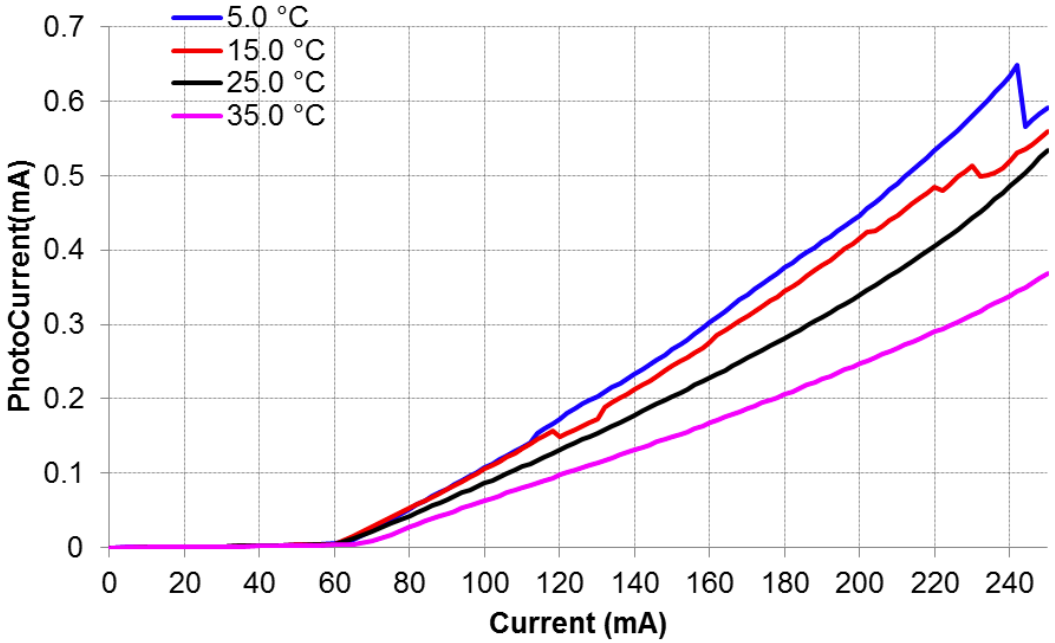


Figure 6: Monitor Photodiode Current versus Bias Current