Product Data Sheet

DBR Fiber-Pigtailed Laser with built in isolator

DBR785P

S/N: DBR-32885
Wavelength: 784.9nm
Fiber Type: PM780-HP
Test Date: 10/8/2018

Package:785-2-2-D-P-A
Connector: FC/APC
Tested By: Paya

QA: Pass

Summary of Test Data (CW)

Parameter	*Symbol*	*Value*	*Unit*
Operating Current	I_{op}	230.0	mA
Operating Temperature	T_{op}	25.0	°C
Fiber Output Power @ I_{op},T_{op}	P_{out}	38.4	mW
Voltage @ I_{op},T_{op}	V_F	1.89	V
Monitor Current @ I_{op},T_{op}	I_{mon}	0.645	mA
SMSR @ I_{op},T_{op}	SMSR	51.7	dB
Threshold Current @ T_{op}	I_{th}	68.5	mA
Slope Efficiency @ T_{op}	ΔP/ΔI	0.24	W/A
Current Tuning	Δλ/ΔI	0.0015	nm/mA
Temperature Tuning	Δλ/ΔT	0.062	nm/°C

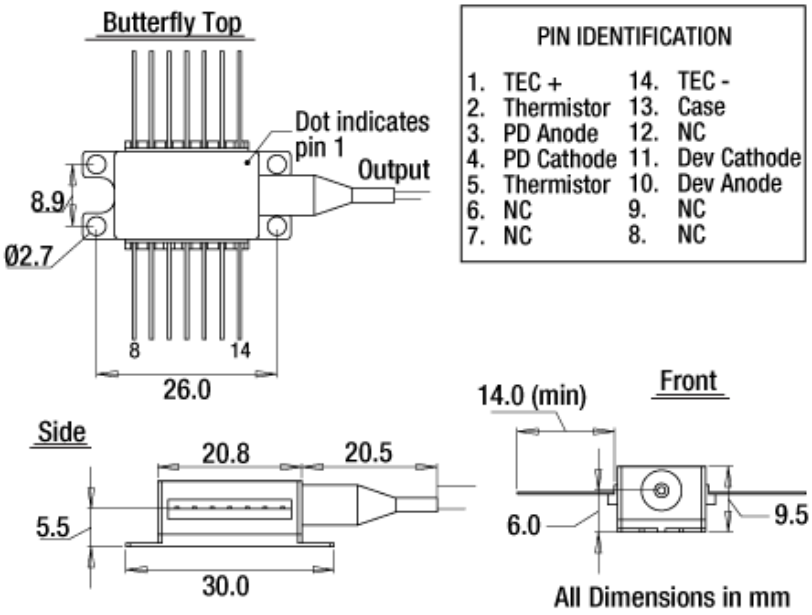
Absolute Maximum Ratings

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

LASER RADIATION
AVOID EXPOSURE TO BEAM
CLASS 3B LASER PRODUCT

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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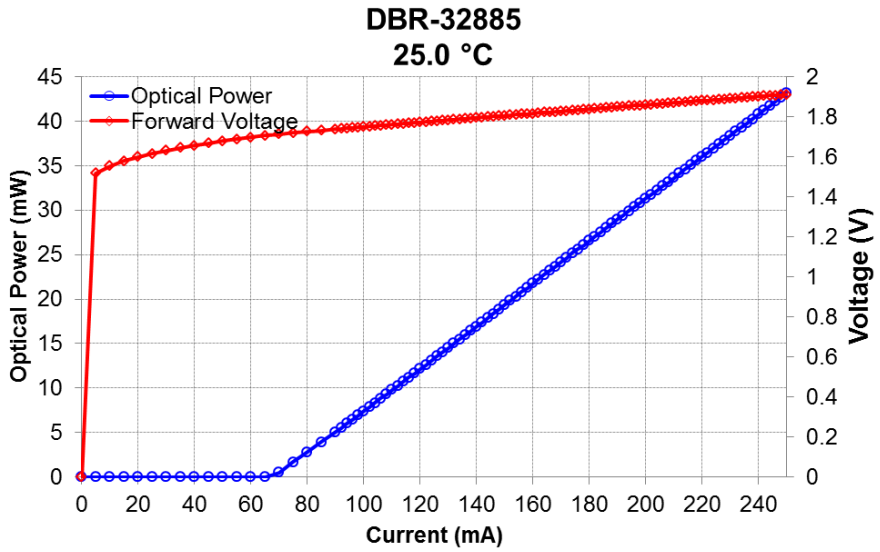

Figure 1: Output Power and Operating Voltage versus Bias Current

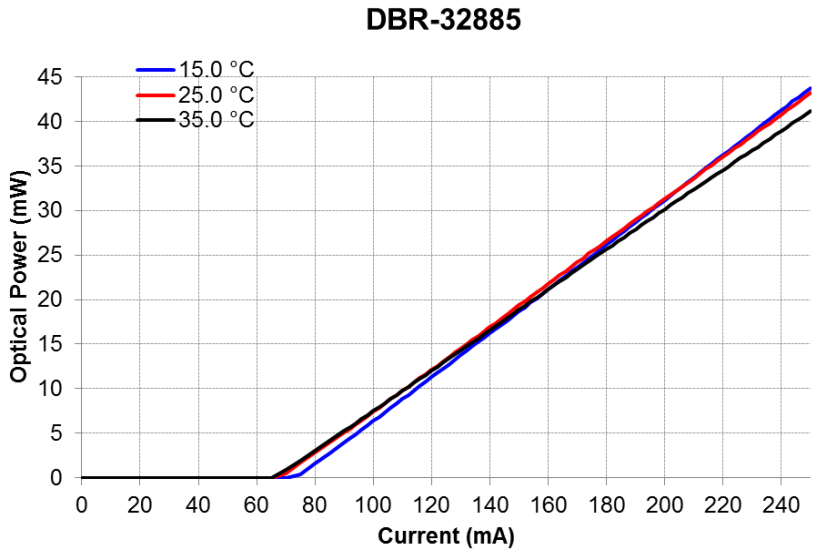

Figure 2: Output Power versus Bias Current

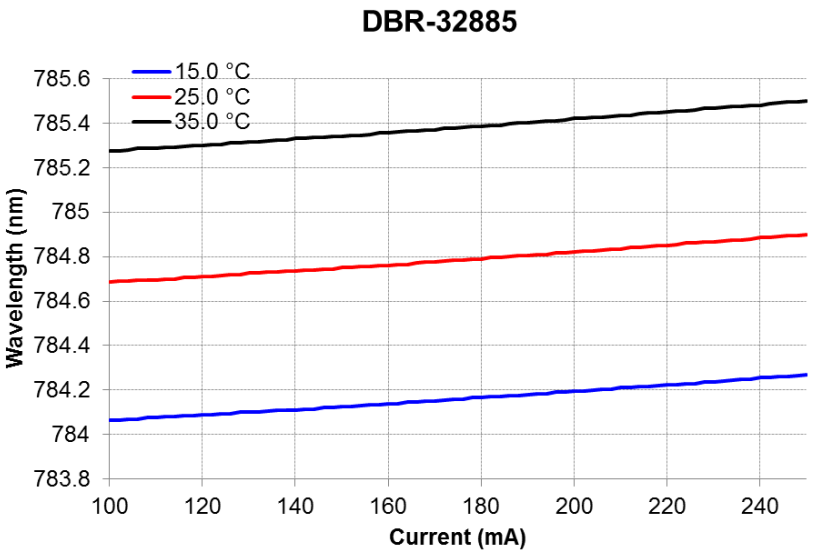

Figure 3: Wavelength versus Bias Current

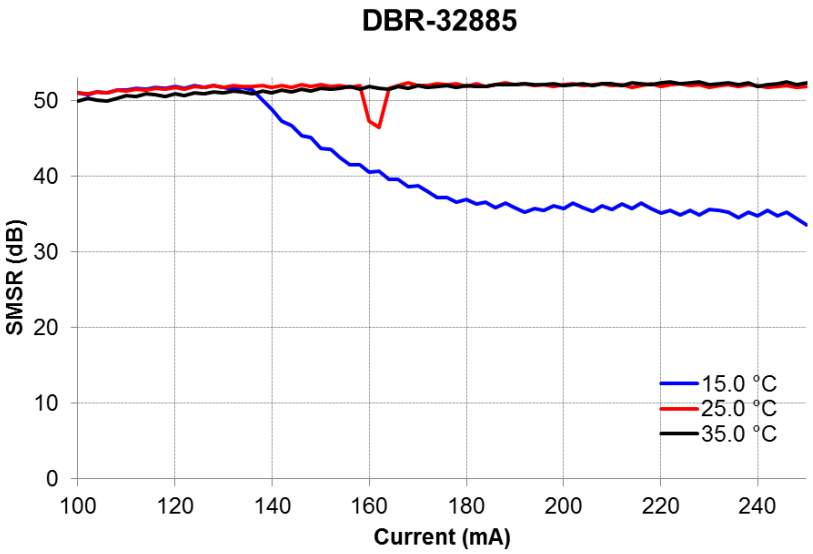

Figure 4: Side Mode Suppression Ratio (SMSR) versus Bias Current

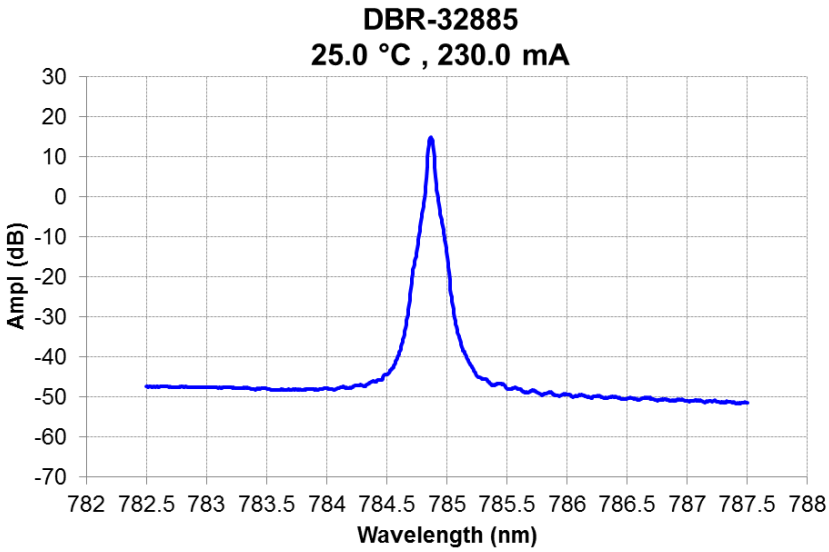

Figure 5: Optical Spectrum (RBW=0.02nm)

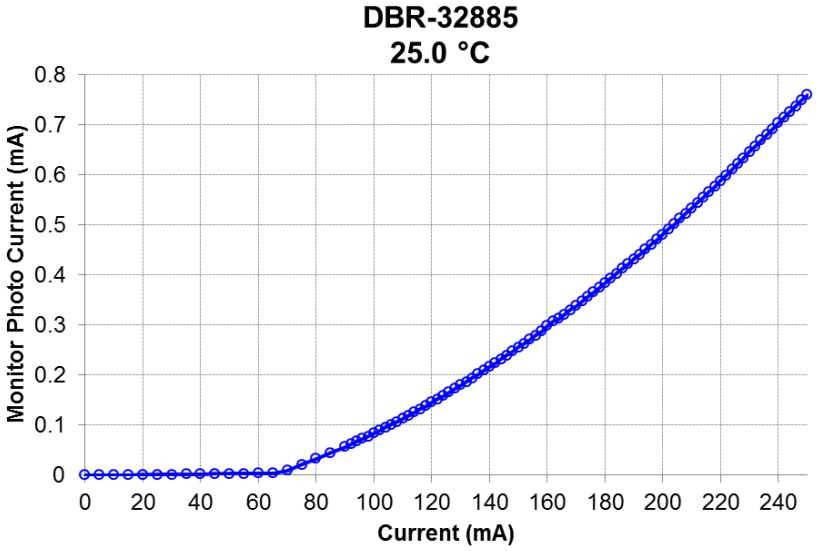

Figure 6: Monitor Photodiode Current versus Bias Current