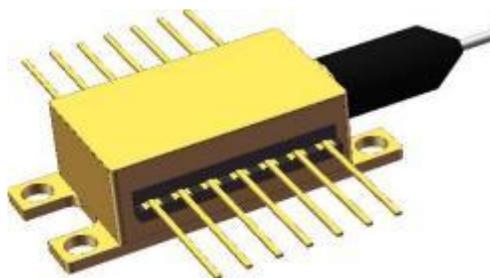


# DW 1266-1345nm DFB 14pin Butterfly datasheet

## Features

- High output power > 10mW ex-fiber
- AlGaInAs Multiple Quantum Well diode laser
- Integrated free-space optical isolator
- Mode-hop free continuous tuning
- Proprietary mirror coating technology enabling high reliability
- Built-in monitor photodiode
- 900um loose tube on fiber



## Applications

- Fiber optic communication systems
- Sensing and Measurement
- Medical and Biotechnology
- Consumer Electronics and Emerging Areas

## ABSOLUTE MAXIMUM RATING(TSU=25°C TA=25±5°C)

Parameter	Symbol	Min	Max	Units
Reverse Voltage (LD)	VRLD		2	V
Forward Current ( LD )	IFLD		100	mA
Reverse Voltage(MPD)	VRMPD		10	V
Forward Current ( MPD )	IFMPD		2	mA
TEC Current	ITEC		1.0	A
TEC Voltage	VTEC		3.5	V
Case Operating Temperature	TCase	-5	75	°C
Pin Soldering Temperature	TSoldering		260	°C
Pin Soldering Time	tSoldering		10	S
Storage Temperature	TStorage	-40	85	°C
Storage humidity	RH	0	95	%

## Electrical/Optical Characteristics (TSU=25°C TA=25±5°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Output Power	Po	CW, IFLD=70mA	10			mW
Forward Voltage	Vf	CW, IFLD=70mA			3.0	V
Threshold Current	Ith	CW		10	30	mA
Monitor Photodiode Current	Im	CW,IFLD=70mA VRMPD=5V	20		2000	uA
Monitoring photodiode dark current	Id	VRMPD=5V			100	nA
Peak Wavelength	$\lambda_p$	CW, IFLD=70mA	$\lambda_p -1.5$		$\lambda_p +1.5$	nm
Wavelength Temperature Tunability	$\Delta\lambda_p / \Delta T_{Submount}$			0.1		nm/°C
Side-Mode Suppression Ratio	SMSR	CW, IFLD=70mA	35	45		dB
spectral width (@ -20dB)	$\Delta\lambda$	CW, IFLD=70mA		0.3		nm
isolation	ISO		30			dB
NTC thermistor resistance	RT	@25°C	9.5	10	10.5	kΩ
NTC thermistor B constant	B	@25°C/50°C	3800	3930	4000	K

## Ordering Information :

P/N	Channel	Wavelength	P/N	Channel	Wavelength
WD26-FA0	$\lambda_1$	1266.5	WD31-FA2	$\lambda_9$	1310.5
WD27-FA1	$\lambda_2$	1271.5	WD31-FA3	$\lambda_{10}$	1315.5
WD27-FA2	$\lambda_3$	1276.5	WD32-FA0	$\lambda_{11}$	1320.5
WD28-FA0	$\lambda_4$	1281.5	WD32-FA1	$\lambda_{12}$	1325.5
WD28-FA1	$\lambda_5$	1286.5	WD33-FA1	$\lambda_{13}$	1330.5
WD29-FA1	$\lambda_6$	1291.5	WD33-FA2	$\lambda_{14}$	1335.5
WD29-FA2	$\lambda_7$	1296.5	WD34-FA0	$\lambda_{15}$	1340.5
WD30-FA0	$\lambda_8$	1301.5	WD34-FA1	$\lambda_{16}$	1345.5

## Pin Connection Type & Outline Drawings :

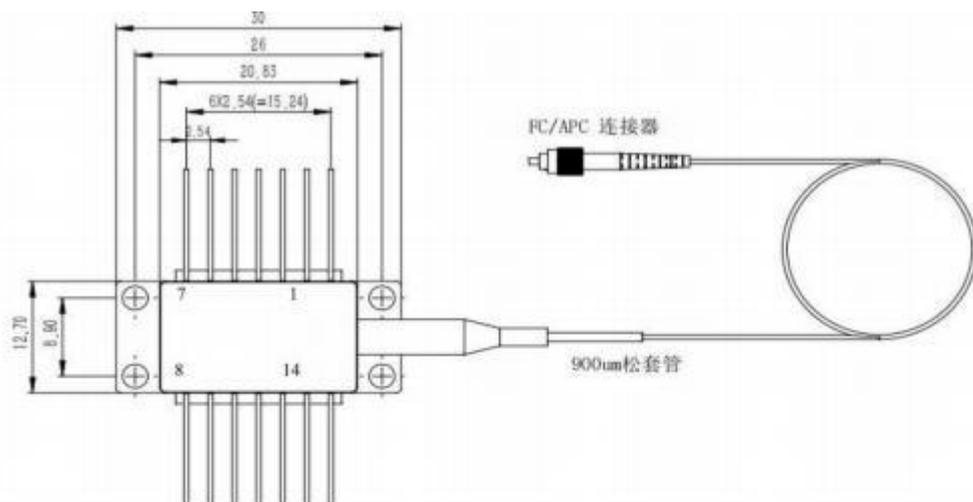
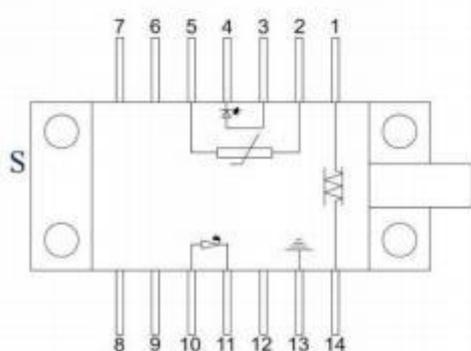


Fig. 2: Connections



PIN	Description	PIN	Description
1	TEC(+)	8	NC
2	Thermistor	9	NC
3	Monitor anode (-)	10	Laser anode (+)
4	Monitor cathode (+)	11	Laser cathode (-)
5	Thermistor	12	NC
6	NC	13	Package ground
7	NC	14	TEC(-)

## Safety and Operating Instructions :

1. This product works with laser emission, laser irradiation of any part of the human body is strictly prohibited;
2. This product is a static sensitive device, please operate in the electrostatic protection area, and ensure that the use of direct contact with the device has been standardised tools grounding; improper operation and use of the product will cause permanent, irreversible damage;
3. This product has an optical connector, after testing and inspection should wear a dust cap in a timely manner to avoid prolonged exp
4. Absolute maximum ratings should only be applied to equipment for short periods of time. Prolonged exposure to the maximum ratings or exposure to more than one maximum rating may cause damage or affect the reliability of the equipment.
5. It is recommended to use indium foil or thermally conductive soft material at the bottom of the device as a thermal interface to ensure a good heat dissipation environment for the device.
6. Do not overstretch or bend the fiber.