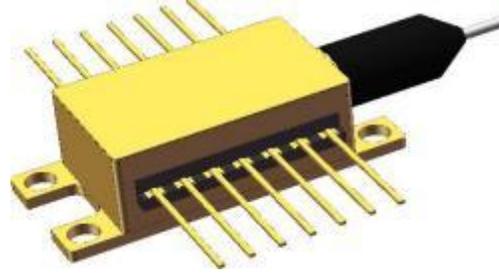


1310nm DFB 14pin Butterfly datasheet

P/N : WD31-FA1

Features

High output power > 200mW 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		1300	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	60	°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=900mA	200			mW
Forward Voltage	Vf	CW,IFLD=900mA		2	3	V
Threshold Current	Ith	CW		35	50	mA
Monitor Photodiode Current	Im	CW,IFLD=900mA VRMPD=5V	20		2000	uA
Monitoring photodiode dark current	Id	VRMPD=5V			100	nA
Peak Wavelength	λ_p	CW,IFLD=900mA	1307	1310	1313	nm
Wavelength Temperature Tunability	$\frac{\Delta\lambda_P}{\Delta T_{Submount}}$			0.1		nm/°C
Side-Mode Suppression Ratio	SMSR	CW,IFLD=900mA	40	50		dB
spectral width(@-20dB)	$\Delta\lambda$	CW,IFLD=900mA		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

