

DBR Laser

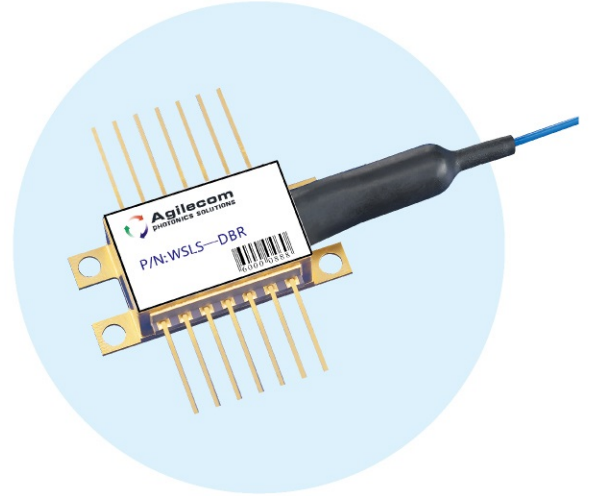
Agilecom's Distributed Bragg Reflector Laser (DBR Laser) is fabricated in a hermetically sealed 14-pin butterfly package that contains a laser diode, a thermoelectric cooler (TEC), a thermistor and a monitor photodiode. 9-Pin, TO package and customized packages of the laser sources with the same performance and qualification can also be manufactured.

Key Features

- Up to 20mW
- High-Reliability
- Customized Package (Optional)

Applications

- MOPA Main Oscillator
- DPSS Laser Seed Source
- Bounce Freely Adjustable



Specifications

1064nm DBR Laser

Parameters	Symbol	Test Conditions	Min	Typ	Max	Unit
Peak Optical Output Power	P_P	—	10	—	—	mW
Threshold Current	I_{TH}	CW	—	30	40	mA
Driving Current	—	$P_o=10mW$	—	90	100	mA
Laser Forward Voltage	V_{LF}	$P_o=10mW$	—	1.8	2	V
Thermistor Resistance	R_{TH}	$T_L=25^{\circ}C$	9.5	—	10.5	k Ω
Center Wavelength	λ_c	$T_{LD}=15\sim 35^{\circ}C, CW$	1062	1064	1066	nm
Side-mode Suppression Ratio	SMSR	CW	30	—	—	dB
Linewidth	LW	CW	—	1	—	MHz
Monitor Current	I_{RMON}	$P_o=10mW$	0.1	—	—	mA
TEC Current	I_{TEC}	—	—	—	1.9	A
Operating Temperature Range	T_o	TEC is Operating	-20	—	70	$^{\circ}C$
Storage Temperature Range	T_{stg}	—	-40	—	85	$^{\circ}C$

Pin No.	Pin Function
1	Thermistor
2	Thermistor
3	Laser DC Bias Cathode (-)
4	PD Monitor Anode
5	PD Monitor Cathode
6	Thermoelectric Cooler (+)
7	Thermoelectric Cooler (-)
8	NC
9	NC
10	NC
11	Laser Anode (+),Case
12	Laser RF Cathode(-)
13	Laser Anode (+),Case
14	NC

Order Information

WLSL	Code	Center Wavelength(nm)	Code	Output Power(dBm)	Code	Modulation	Code	Fiber Type	Code	Pigtail Type	Code	Fiber Length(m)	Code	Connector	
	1270	CWDM wavelength 1270~1610	03	03	A	Simulation	1	G657A	0	250um Bare Fiber	1	0.5	0	None	
	1290		07	07	C	CW	3	1310nm PM fiber	1	0.9mm Loose Tube	2	1.0	1	SC/UPC	
		10	10	2	2.5GHz	4	1550nm PM fiber	4	0.9mm Tight Tube	3	1.5	2	SC/APC	
	1610		XX	Customized	X	Customized	X	Customized	X	Customized	4	2.0	3	FC/UPC	
	8620	DWDM wavelength ITU									5	2.5	4	FC/APC	
											6	3.0	5	LC/UPC
	9625											A	1.25	6	LC/APC
												B	1.75	7	ST/UPC
												C	2.25	8	MU
											X	Customized	9	MPO/UPC	
													A	MPO/APC	
													B	MTP/UPC	
													C	MTP/APC	
													X	Customized	