

## Wavelength Specific Laser Sources (WSLS)

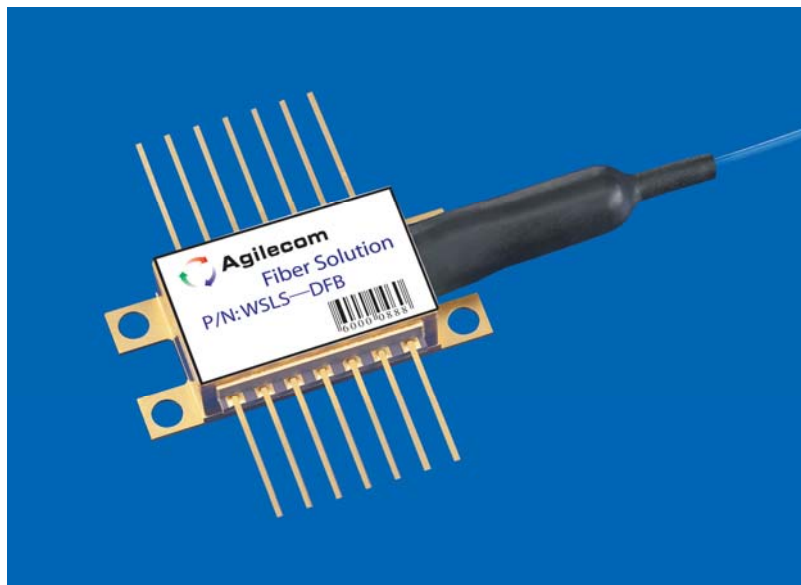
Agilecom's WSLs series laser is fabricated in a hermetically sealed 14-pin butterfly package that contains thermoelectric cooler (TEC), thermistor, monitor photodiode, optical isolator. Customized packages of the laser sources with the same performance and qualification can also be manufactured.

### Key Features

- ITU wavelengths available
- High output power
- Low wavelength temperature coefficient
- Accurate wavelength selections
- High-reliability in 14-pin butterfly package
- Built-in optical isolator
- Customized package
- Polarization Maintaining Fiber (optional)

### Applications

- Long haul DWDM System
- LAN, WAN and Metro Networks
- CATV System
- Instrumentation



### Absolute Maximum Ratings

Parameter	Symbol	Max	Unit
Laser forward current	I <sub>f</sub>	150	mA
Laser reverse voltage	V <sub>f</sub>	2.5	V
TEC current	I <sub>c</sub>	2.0	A
TEC voltage	V <sub>c</sub>	3.3	V
Photo reverse voltage	V <sub>r</sub>	5	V
Lead Soldering Temp	—	260	°C
Fiber Bend Radius	—	30	mm

### Pin Information

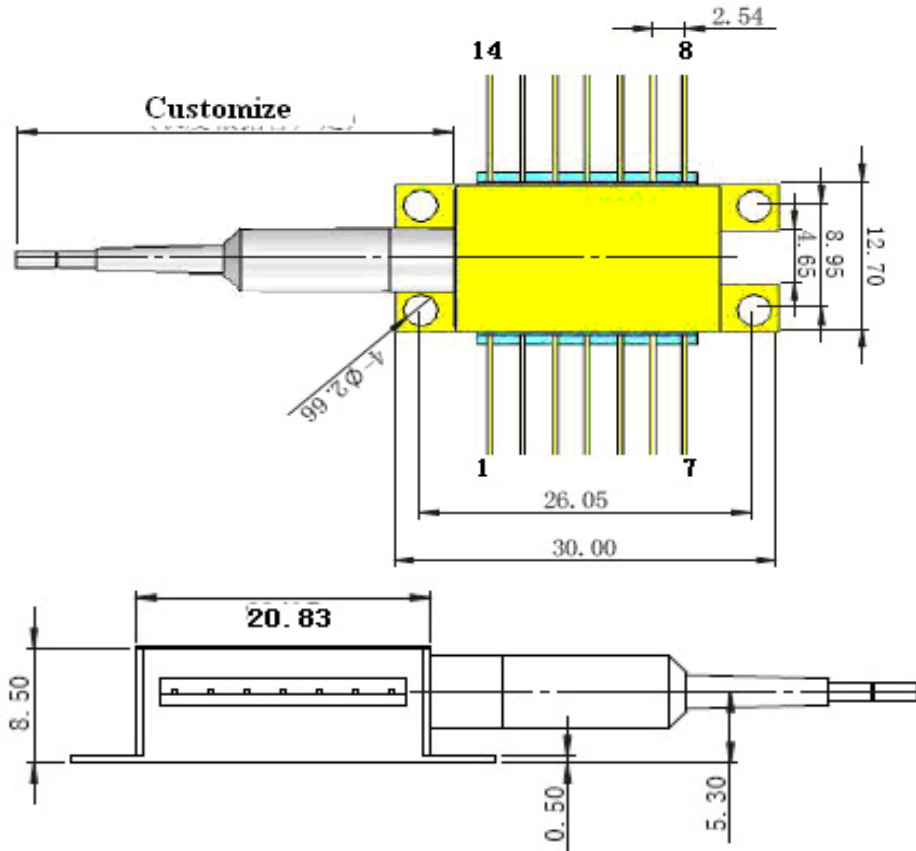
Pin	Function
1	Thermistor
2	Thermistor
3	Laser dc Bias (Cathode) (-)
4	Monitor Anode (-)
5	Monitor Cathode (+)
6	Thermoelectric Cooler (+)
7	Thermoelectric Cooler (-)
8	Case Ground
9	Case Ground
10	NC
11	Laser Anode (+)
12	RF Laser Input Cathode (-)
13	Laser Anode (+)
14	NC

### Specifications

Parameter	Symbol	Min	Typical	Max	Unit
CW output power (at 25°C)	P <sub>f</sub>	7	10	—	dBm
Threshold current	I <sub>th</sub>	—	15	—	mA
Operating drive current	I <sub>f</sub>	—	100	150	mA
Forward voltage	V <sub>f</sub>	—	—	2.5	V
Wavelength	λ <sub>c</sub>	ITU grid ± 0.15		—	nm
Bandwidth	L	—	3	—	MHz
Monitor current	I <sub>m</sub>	100	—	—	mA
Monitor dark current (V <sub>r</sub> =-5V)	I <sub>d</sub>	—	—	100	nA
Isolation	I <sub>so</sub>	-30	—	—	dB
Thermistor resistance( at 25°C)	R <sub>th</sub>	9.5	10	10.5	kΩ
TEC current	I <sub>c</sub>	—	1.2	—	A
TEC voltage	I <sub>v</sub>	—	3.0	—	V
Operating temperature range	T <sub>o</sub>	-20	—	65	°C
Storage temperature	T <sub>stg</sub>	-40	--	85	°C

Notes: Specifications without fiber connectors

## Diagram



## Ordering Information

For more information on these or other products and their availability, please contact our sales department at 408-943-0815 in North America and 86-760-86781889 in China or via e-mail at [info@agilecom.net](mailto:info@agilecom.net).

**Sample:** WSL5-15501024124-01

Code Wavelength	Code Output Power	Code Modulation	Code Pigtail	Code Fiber Length	Code Connector
980 980nm	03 03dBm	C CW	0 250µm Bare Fiber	1 0.5m	0 None
1310 1310nm	06 06dBm	2 2.5G	1 0.9 mm Loose Tube	2 1.0m	1 SC/UPC
1550 1550nm	10 10dBm	3 3.125G	4 0.9 mm Tight Tube	3 1.5m	2 SC/APC
xxxx ITU Code	20 20dBm	4 10G	X Customize	4 2.0m	3 FC/UPC
	X Customize			5 2.5m	4 FC/APC
				6 3.0m	5 LC/UPC
				A 1.25m	6 LC/APC
				B 1.75m	7 ST/UPC
				C 2.25m	8 MU
				X Customize	X Customize

Code Fiber Type
1 SMF-28e
2 G.657A
3 1310PM Fiber
5 1550PM Fiber
X Customize

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