



ROF-DFB series distributed feedback DFB laser

The ROF-DFB series distributed feedback DFB laser light source adopts high-performance DFB laser chips, uniquely designed ATC and APC circuits, and isolation control, ensuring extremely high power and wavelength stability. This type of light source is mainly applied in multiple fields such as cold atoms, optical fiber sensing, optical fiber communication, and fiber lasers. It can provide power tuning and wavelength fine-tuning function solutions according to customer requirements.

Feature

- Narrow line width: <2MHz
- Built-in monitoring PD
- Modules and desktop packages are available for selection

Application

- Cold atom
- Optical fiber communication
- Optical fiber sensing system
- Fiber laser

Parameter



Parameter	Sym	DFB-850	DFB-1064	DFB-1310	DFB-1550	DFB-2000	Unit
operating wavelength*	λ	850±2	1064±1	1310±1	1550±1	2000±1	nm
Output optical power	P _o	>20	>40	10~40	10~80	>2	mW
line width	$\Delta\lambda^*$	<2	<2	<2	<2	<2	MHz
side-mode suppression ratio	SMSR	>35	>35	>40	>40	>30	dB
Power stability	P _{ss}	±0.01					dB/5min
	P _{LS}	±0.05					dB/8h
Output isolation degree	ISO	-	>30	>30	>30	-	dB
Specifications***		Desktop		M1 Module7016		M2 Module8230	
Overall dimensions		320×220×90 mm		90×70×16 mm		100×82×30 mm	
power supply		AC 220V ± 10% 30W		DC +5V adapter		DC +5V adapter	
Output fiber optic		SMF/PMF					
working mode		CW					
Optical connector head		FC/PC、FC/APC					
Optional - Program Control Adjustment Function (Desktop or Module 7016)							
communication method		RS232 serial port					
Current regulation step		1mA					
TEC adjustment step		0.1℃					

*Working wavelength: Other wavelengths not listed can be ordered.

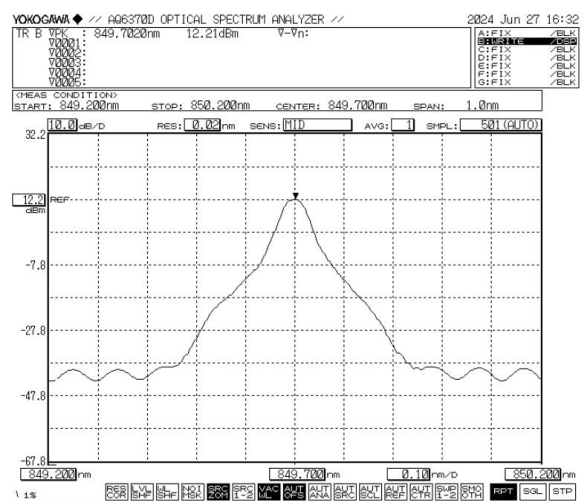
**Test conditions: CW, Top=25 °C

***The desktop package comes with power and wavelength adjustment functions by default. Module 8230 package supports power and wavelength adjustment functions, while module 7016 has fixed power and wavelength output

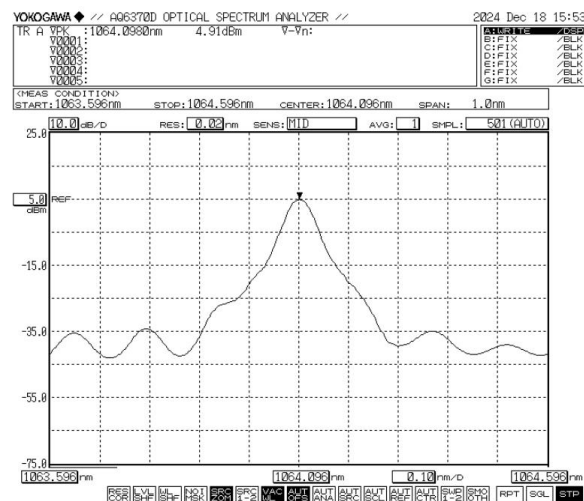
Working conditions

Parameter	Sym	Unit	Min	Typ	Max
Operating Temperature	Top	°C	-5		55
Storage temperature	Tst	°C	-40		85
humidity	RH	%	5		90

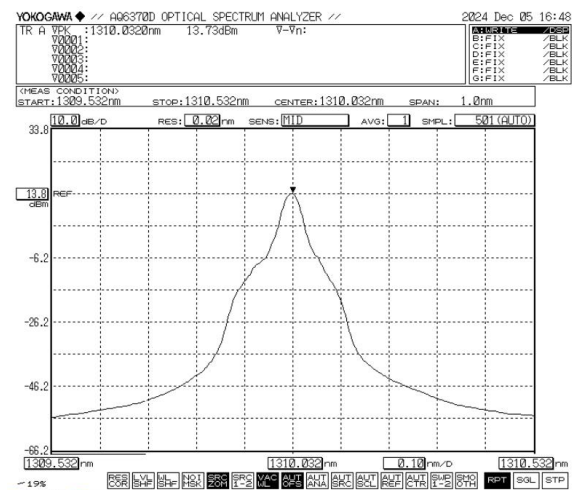
Typical spectra



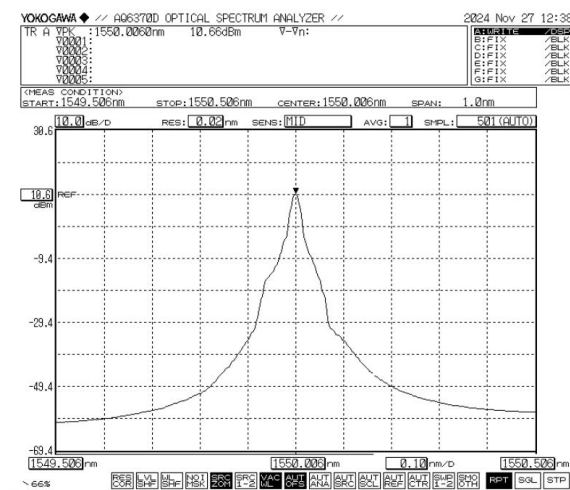
R-DFB-850



R-DFB-1064

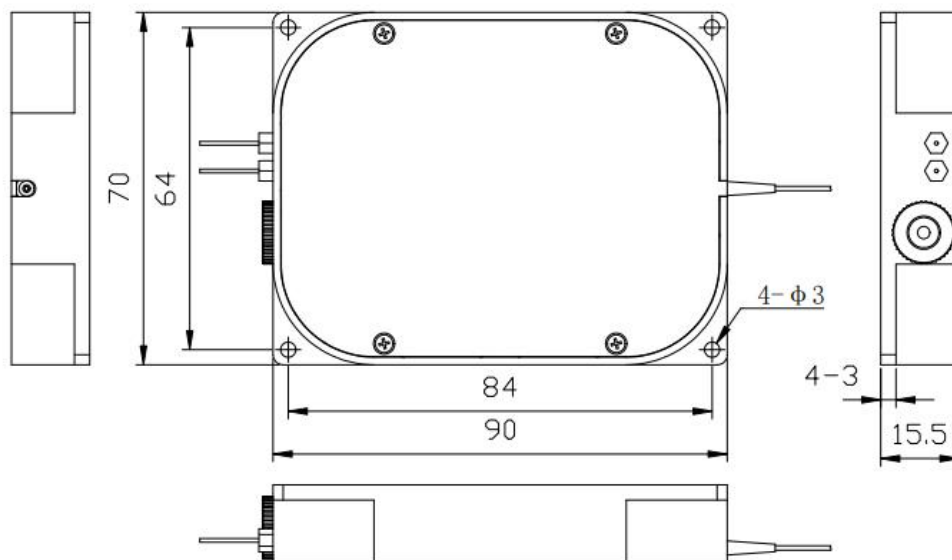


R-DFB-1310

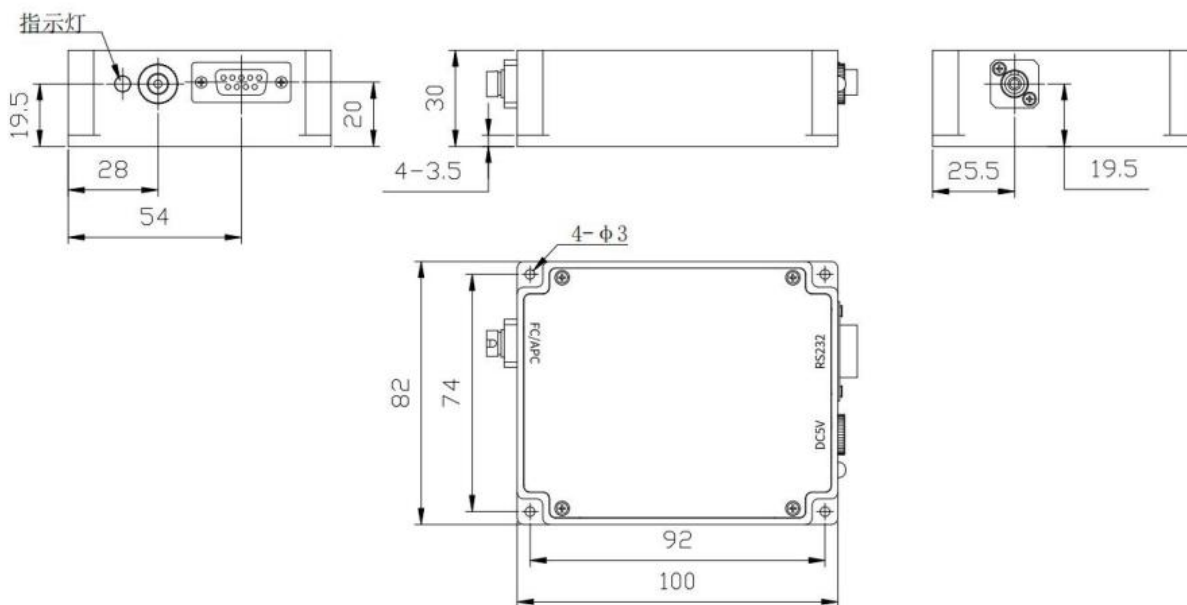


R-DFB-1550

External structure



M1: Module7016 (Unit: mm)



M2: Module 8230 (Unit: mm)



Order information

R	DFB	XXXX	X	XX	X	XX
	DFB	operating wavelength: 850—850nm 1064—1064nm 1310—1310nm 1550—1550nm 2000—2000nm	Encapsulation: M1--Module70 16 M2--Module82 30 D---Desktop	Power: 02---2mW 10---10mW 20---20Mw 40---40mW 80---80mW	Pigtail fiber: P---PMF S---SMF	Optical fiber connector: FP---FC/PC FA---FC/APC SP---User specification

*If you have any other wavelength requirements, please contact our sales personnel.