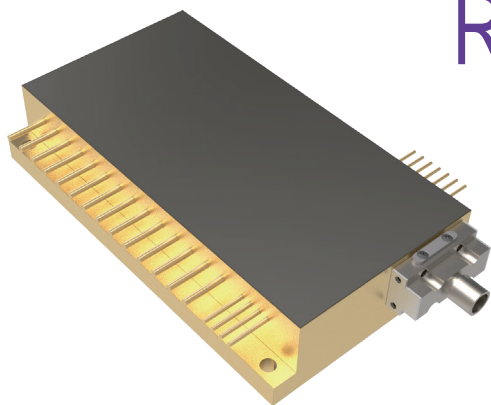




R13D-1470nm High Power Diode Laser Components

R13D-1470nm diode laser components are RealLight's AW series multi-function laser modules, providing single-wavelength output. These fiber detachable lasers are equipped with aiming beam, fiber detector, photodiode and thermistor.

Key Features

- ◆ Superior power stability
- ◆ Excellent beam quality
- ◆ Efficient heat dissipation
- ◆ High reliability
- ◆ Different-wavelength combinations available

Applications

Spectroscopic Detection
Biomedicine
Material Analysis
Display&Lighting
Laser Manufacturing

Technical Specifications (25°C)

Package Type		R13D	
		Single-wavelength	
Center Wavelength (nm)		1470	1470
Optical	CW Output Power / P _{op} (W)	30	50
	Wavelength Tolerance (nm)	±15	
	Spectral Width / Δλ (nm)	<15	
	Temperature Drift of Wavelength / Δλ/ΔT (nm/°C)	0.7	
Aiming Beam	Output Power / P _a (mW)	5	
	Wavelength / λ _a (nm)	650±10	
	Threshold Current / I _{th} (A)	0.02	
	Operating Current / I _{op} (A)	0.045	
	Voltage / V _a (V)	5	
Electrical	Threshold Current / I _{th} (A)	0.8	1.5
	Operating Current / I _{op} (A)	12	13
	Operating Voltage / V _{op} (V)	16.9	16.9
	Slope Efficiency / η _{es} (W/A)	2.7	4.3
	PD Parameter / I _{pd} (μA)	<8000	
	Thermistor / Rt (kΩ/β (25°C))	10±1%/3930	
Fiber	Fiber Core Diameter / D _{core} (μm)	200	400
	Fiber Cladding Diameter / D _{clad} (μm)	220	440
	Fiber Coating Diameter / D _{buffer} (μm)	400	720
	Numerical Aperture / NA	0.22	
	Connector	SMA905	

1. All the data in the above table are the typical values obtained from the tests at room temperature of 25°C, and the final data is subject to the final test report.

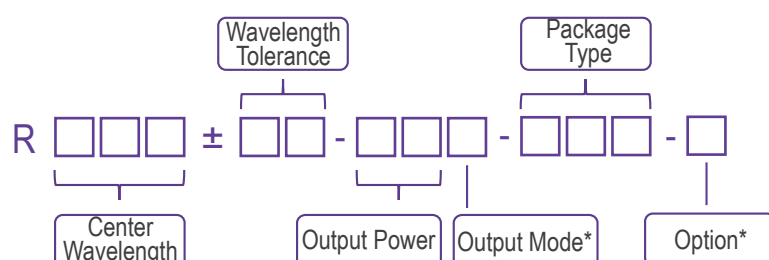
Other Parameters

Parameter	Operating Temperature /°C	Operating Relative Humidity /%	Storage Temperature /°C	Storage Relative Humidity /%	Lead Soldering Temperature (max/°C)
Min	10	-	-20	-	-
Max	30	75	70	90	250(10Sec.)

Order Information

Package	Wavelength (nm)	Output Power (W)	Part Number
R13D	1470	30	R1470±15-30WD-R13D-PFS
	1470	50	R1470±15-50WD-R13D-PFS

Part Numbering Schema

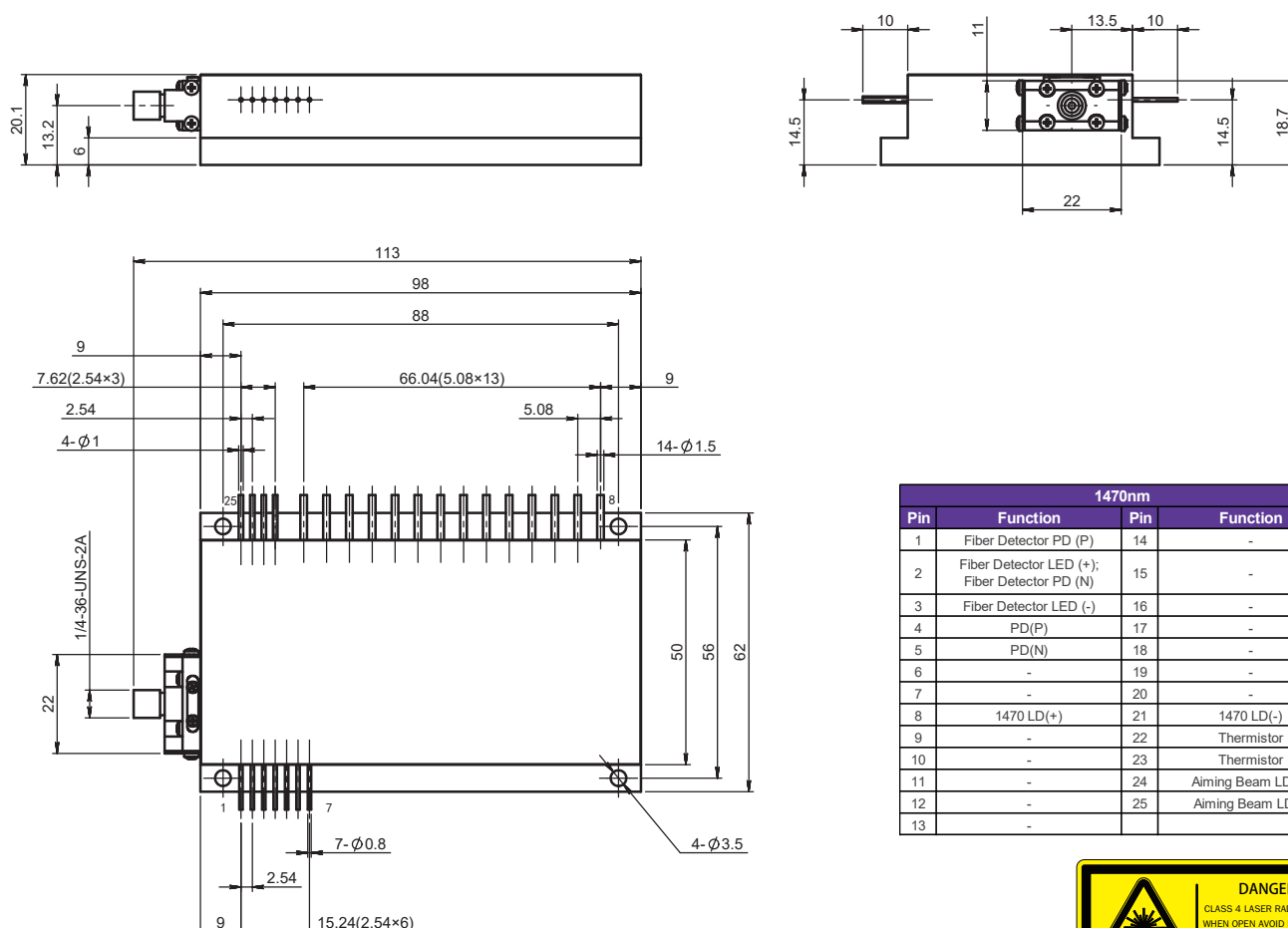


*Output Mode: D - Fiber Detachable

*Option: P - Pilot Light

FS - Fiber Detector

Mechanical Drawings (in mm)



1470nm			
Pin	Function	Pin	Function
1	Fiber Detector PD (P)	14	-
2	Fiber Detector LED (+); Fiber Detector PD (N)	15	-
3	Fiber Detector LED (-)	16	-
4	PD(P)	17	-
5	PD(N)	18	-
6	-	19	-
7	-	20	-
8	1470 LD(+)	21	1470 LD(-)
9	-	22	Thermistor
10	-	23	Thermistor
11	-	24	Aiming Beam LD(+)
12	-	25	Aiming Beam LD(-)
13	-		

