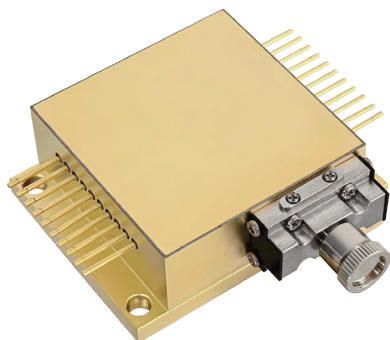




High Power R5M Diode Laser Components

High power R5M diode laser components are RealLight's AW series multi-function laser modules, providing multi-wavelength output with 3 different wavelength emitters integrated. These fiber detachable lasers are equipped with fiber detector, photodiode, thermistor and replaceable window.

Key Features

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

Applications

Aesthetic medicine
Laser surgery
Laser therapy

Technical Specifications (25°C)

Package Type		R5M					
		3-wavelength			3-wavelength		
Center Wavelength (nm)		650	808	980	650	980	1470
Optical	CW Output Power / P _{op} (W)	0.5	20	20	0.5	15	15
	Wavelength Tolerance (nm)	±10					
	Spectral Width / Δλ (nm)	<6					
	Temperature Drift of Wavelength / Δλ/ΔT (nm/°C)	0.3					
Electrical	Threshold Current / I _{th} (A)	0.5	1.7	1.1	0.5	1	1.4
	Operating Current / I _{op} (A)	1.2	13	13	1.2	18	15
	Operating Voltage / V _{op} (V)	2.2	4	3.6	2.2	1.8	4.2
	Slope Efficiency / η _{es} (W/A)	0.7	1.8	1.7	0.7	0.9	1.1
	PD Parameter / I _{pd} (μA)	<3000					
	Thermistor / Rt (kΩ/β (25°C))	10±1%/3930					
Fiber	Fiber Core Diameter / D _{core} (μm)	400					
	Fiber Cladding Diameter / D _{clad} (μm)	440					
	Fiber Coating Diameter / D _{buffer} (μm)	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.

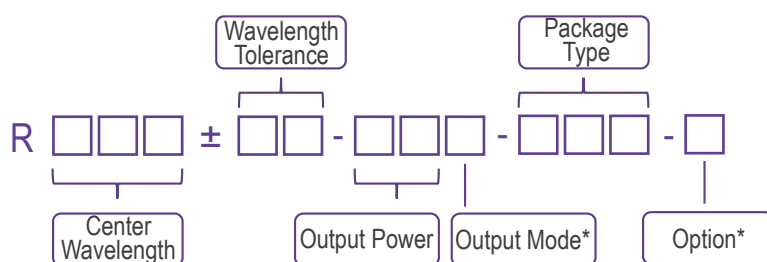
Other Parameters

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
R5M	650/808/980	0.5/20/20	R650/808/980±10-0.5/20/20WD-R5M-PFS
	650/980/1470	0.5/15/15	R650/980/1470±10-0.5/15/15WD-R5M-PFS

Part Numbering Schema

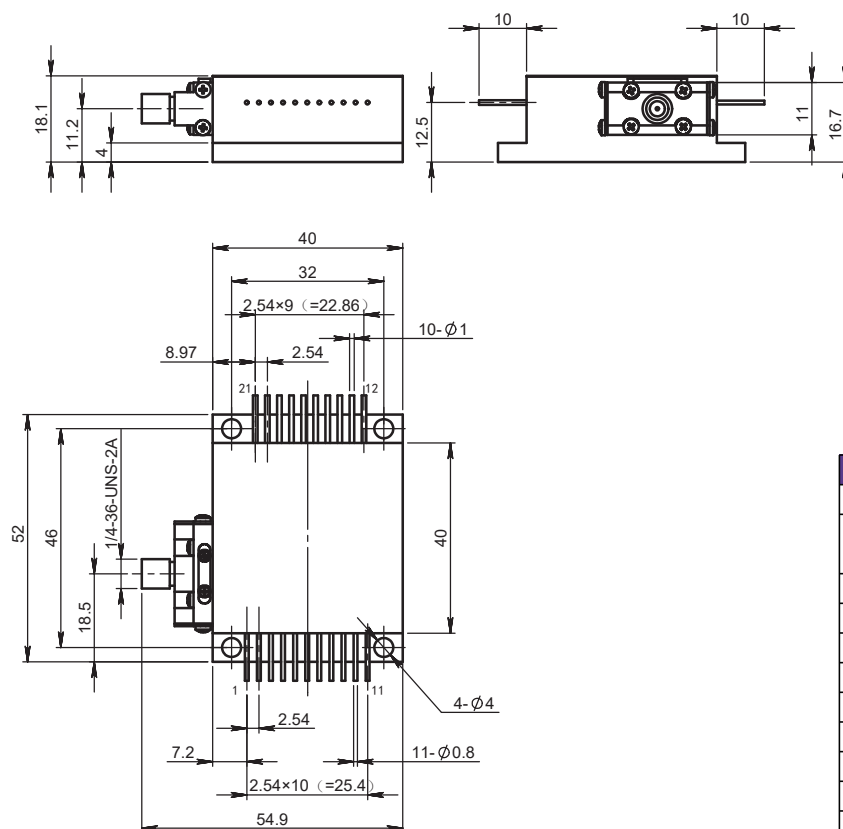


*Output Mode: D - Fiber Detachable

*Option: P - Pilot Light

FS - Fiber Detector

Mechanical Drawings (in mm)



Pin	Function	Pin	Function
1	Fiber Detector PD (P)	12	LD1(+)
2	Fiber Detector LED (+); Fiber Detector PD (N)	13	LD1(+)
3	Fiber Detector LED (-)	14	LD1(-)
4	PD(P)	15	LD1(-)
5	PD(N)	16	LD2(+)
6	-	17	LD2(+)
7	-	18	LD2(-)
8	-	19	LD2(-)
9	-	20	Red laser LD(+)
10	Thermistor	21	Red laser LD(-)
11	Thermistor		

