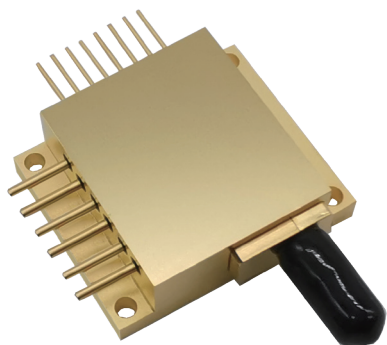




R3M Diode Laser Components

R3M diode laser components are ReallLight's AW series multi-function laser modules, providing multi-wavelength output with 3 emitters integrated. These fiber detachable lasers are equipped with fiber detector, photodiode and thermistor.

Key Features

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

Applications

Aesthetic medicine
Veterinary therapy
Material processing

Technical Specifications (25°C)

Package Type		R3M		
		3-wavelength		
Center Wavelength (nm)		650	808	980/1064
Optical	CW Output Power / P_{op} (W)	0.5	9	15/10
	Wavelength Tolerance (nm)	± 10		
	Spectral Width / $\Delta\lambda$ (nm)	<6		
	Temperature Drift of Wavelength / $\Delta\lambda/\Delta T$ (nm/°C)	0.3		
Electrical	Threshold Current / I_{th} (A)	0.5	1.2	1.2/1.2
	Operating Current / I_{op} (A)	1.2	12	18/13
	Operating Voltage / V_{op} (V)	2.3	2	2/2
	Slope Efficiency / η_{es} (W/A)	0.8	0.8	0.9/0.85
	PD Parameter / I_{pd} (μA)	<3000		
	Thermistor / R_t ($k\Omega/\beta$ (25°C))	10 $\pm$ 5%/3930		
Fiber	Fiber Core Diameter / d_{core} (μm)	200		
	Fiber Cladding Diameter / D_{clad} (μm)	220		
	Fiber Coating Diameter / D_{buffer} (μm)	400		
	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.

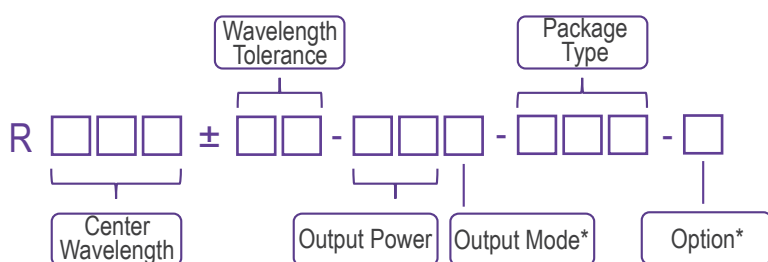
Other Parameters

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
R3M	650/808/980	0.5/9/15	R650/808/980±10-0.5/9/15WD-R3M-PFS
	650/808/1064	0.5/9/10	R650/808/1064±10-0.5/9/10WD-R3M-PFS

Part Numbering Schema

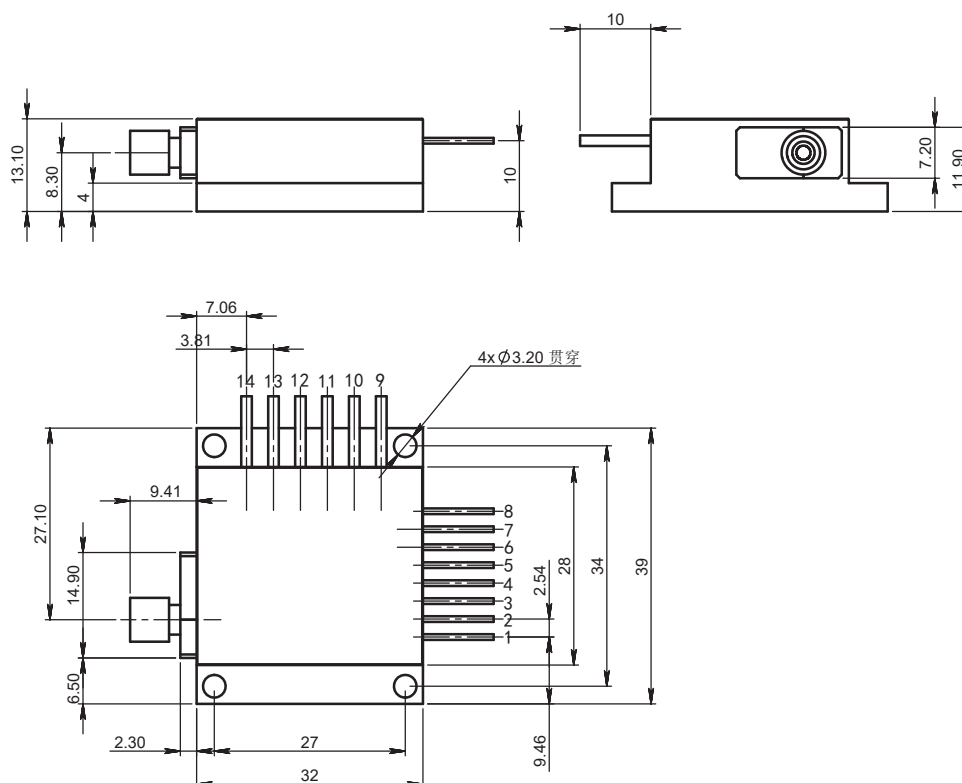


*Output Mode: D - Fiber Detachable

*Option: P - Pilot Light

FS - Fiber Detector

Mechanical Drawings (in mm)



Pin	Function	Pin	Function
1	Fiber Detector PD (P)	8	-
2	Fiber Detector LED (+); Fiber Detector PD (N)	9	LD2(+)
3	Fiber Detector LED (-)	10	LD2(-)
4	PD(P)	11	LD1(+)
5	PD(N)	12	LD1(-)
6	RT	13	Red laser LD(+)
7	RT	14	Red laser LD(-)

