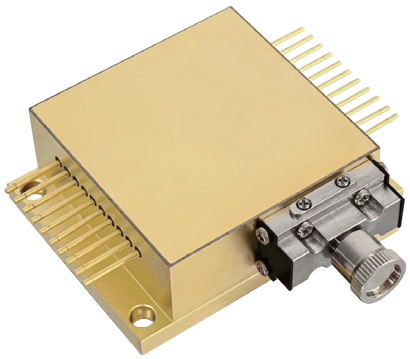


R4MH High Power Diode Laser Components

R4MH diode laser components are RealLight's AW series multi-function laser modules, providing multi-wavelength output with 4 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

Spectroscopic Detection

Biomedicine

Material Analysis

Display&Lighting

Laser Manufacturing

Technical Specifications（25℃）

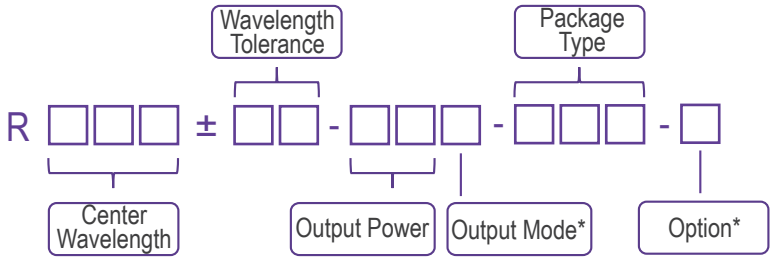
Package Type		R4MH			
		4-wavelength			
Center Wavelength（nm）		450	650	808	9XX / 1064
Optical	CW Output Power / P_{op}（W）	4	0.5	10	10
	Wavelength Tolerance（nm）	±10			
	Spectral Width / △λ（nm）	<6			
	Temperature Drift of Wavelength / △λ/△T（nm/℃）	0.3			
Electrical	Threshold Current / I_{th}（A）	0.35	0.5	1.8	1.2 / 1.2
	Operating Current / I_{op}（A）	3.5	1.2	13	13 / 14
	Operating Voltage / V_{op}（V）	4.7	2.2	2	1.8 / 1.8
	Slope Efficiency / η_{es}（W/A）	1.3	0.7	0.9	0.8 / 0.8
	PD Parameter / I_{pd}（μA）	<8000			
	Thermistor / Rt（kΩ/β（25℃））	10±1%/3930			
Fiber	Fiber Core Diameter / dcore（μm）	400			
	Fiber Cladding Diameter / Dclad（μm）	440			
	Fiber Coating Diameter / Dbuffer（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℃, and the final data is subject to the final test report.

Other Parameters

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

Part Numbering Schema

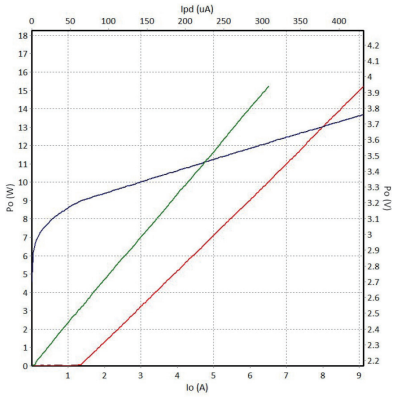


*Output Mode: D - Fiber Detachable

*Option: P - Pilot Light

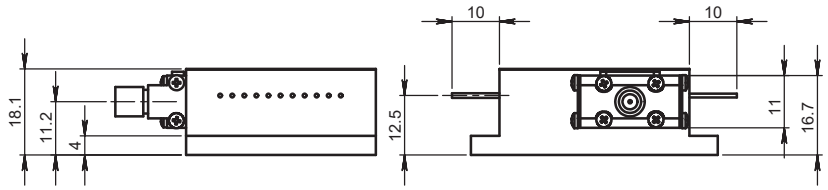
FS - Fiber Detector

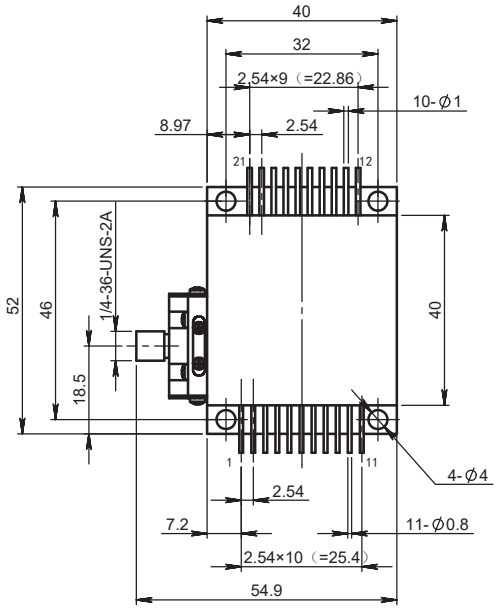
Product Characteristics Diagrams



PIV curve of 808nm Diode Laser Components

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	LD2(+)
4	PD(P)	15	LD2(-)
5	PD(N)	16	LD3(+)
6	-	17	LD3(-)
7	-	18	-
8	-	19	-
9	-	20	450nm(-)
10	Thermistor	21	450nm(+)
11	Thermistor		

