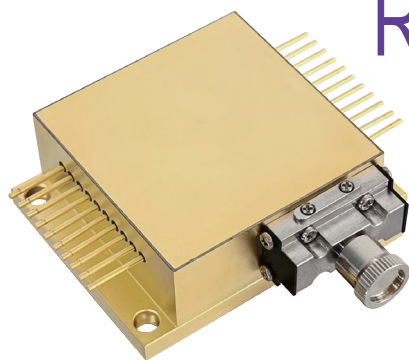




R3MH Diode Laser Components

R3MH diode laser components are RealLight'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
Dental treatment
Material processing

Technical Specifications (25°C)

Package Type		R3MH		
		3-wavelength		
Center Wavelength (nm)		450	650	808/980/1064
Optical	CW Output Power / P_{op} (W)	4	0.5	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)	0.35	0.5	1.5/1.2/1.2
	Operating Current / I_{op} (A)	3.5	1.2	13/12/13
	Operating Voltage / V_{op} (V)	4.7	2.2	2.1/2/2
	Slope Efficiency / η_{es} (W/A)	1.1	0.7	0.8/0.9/0.85
	PD Parameter / I_{pd} (μA)	<3000		
	Thermistor / R_t ($k\Omega/\beta$ (25°C))	10 $\pm$ 1%/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		

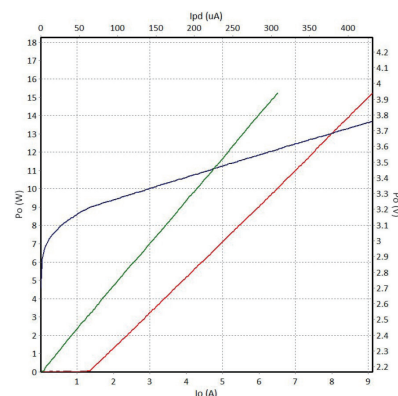
1. All the data in the above table are the typical values obtained from the tests at room temperature of 25°C, and the final data is subject to the final test report.

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.)

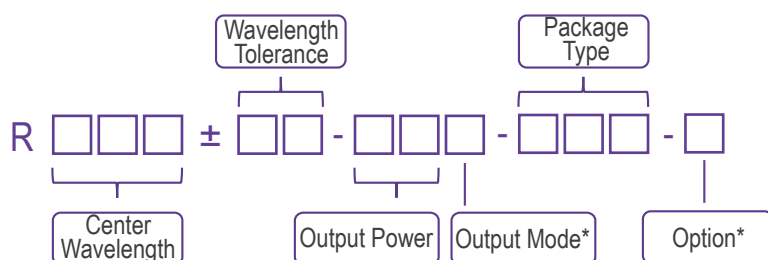
Order Information

Package	Wavelength (nm)	Output Power(W)	Part Number
R3MH	450/650/808	4/0.5/10	R450/650/808±10-4/0.5/10WD-R3MH-PFS
	450/650/980	4/0.5/10	R450/650/980±10-4/0.5/10WD-R3MH-PFS
	450/650/1064	4/0.5/10	R450/650/1064±10-4/0.5/10WD-R3MH-PFS



PIV curve of
808nm Diode Laser Components

Part Numbering Schema

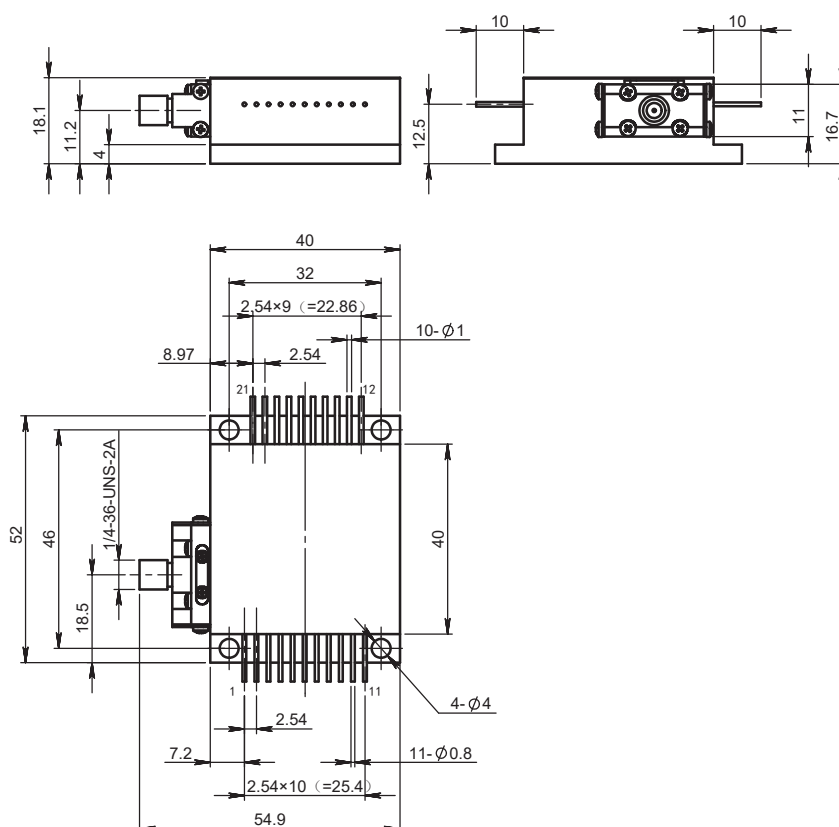


*Output Mode: D - Fiber Detachable

*Option: P - Pilot Light

FS - Fiber Detector

Mechanical Drawings (in mm)



Pin	Function	Pin	Function
1	Fiber Detector PD (P)	12	-
2	Fiber Detector LED (+); Fiber Detector PD (N)	13	-
3	Fiber Detector LED (-)	14	LD1(+)
4	PD(P)	15	LD1(-)
5	PD(N)	16	LD2(+)
6	-	17	LD2(-)
7	-	18	-
8	-	19	-
9	-	20	450nm(+)
10	Thermistor	21	450nm(-)
11	Thermistor		

