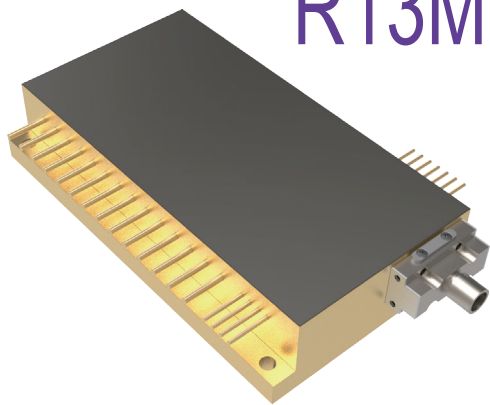




R13M 4-Wavelength High Power Diode Laser Components

R13M diode laser components are RealLight's AW series multi-function laser modules, providing multi-wavelength output with 4 different wavelength emitters integrated. These fiber detachable lasers are equipped with aiming beam, 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

Spectroscopic Detection
Biomedicine
Material Analysis
Display&Lighting
Laser Manufacturing

Technical Specifications (25°C)

Package Type		R13M			
		4-wavelength			
Center Wavelength (nm)		808	905	980	1064
Optical	CW Output Power / P _{op} (W)	25	40	40	50
	Wavelength Tolerance (nm)	±10			
	Spectral Width / Δλ (nm)	<6			
	Temperature Drift of Wavelength / Δλ/ΔT (nm/°C)	0.3			
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)	1.8	1	1	1
	Operating Current / I _{op} (A)	17	18	18	15
	Operating Voltage / V _{op} (V)	4.2	5.4	5.4	9
	Slope Efficiency / η _{es} (W/A)	1.6	2.4	2.4	3.6
	PD Parameter / I _{pd} (μA)	<8000			
	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.

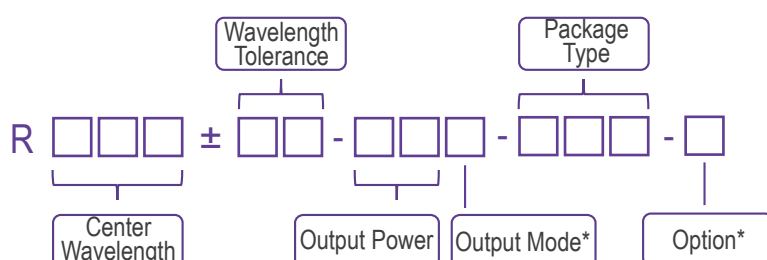
Other Parameters

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
R13M	808/905/980/1064	25/40/40/50	R808/905/980/1064±10-25/40/40/50WD-R13M-PFS

Part Numbering Schema



*Output Mode: D - Fiber Detachable

*Option: P - Pilot Light

FS - Fiber Detector

Mechanical Drawings (in mm)

