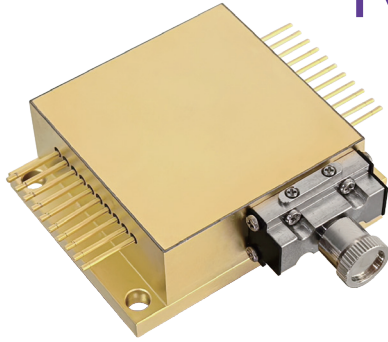




R5M 3-Wavelength High Power Diode Laser Components

R5M 3-Wavelength High Power 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

Spectroscopic Detection
Biomedicine
Material Analysis
Display&Lighting
Laser Manufacturing

Technical Specifications (25°C)

Package Type		R5M					
		3-wavelength			3-wavelength		
Center Wavelength (nm)		650	808	980 / 1064	650	980	1470
Optical	CW Output Power / P _{op} (W)	0.5	20	20	0.5	15	10
	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	1.8	1.2 / 1.2	0.5	1	1.4
	Operating Current / I _{op} (A)	1.2	13	13 / 14	1.2	18	13
	Operating Voltage / V _{op} (V)	2.2	4	3.6 / 3.6	2.2	1.8	4.2
	Slope Efficiency / η _{es} (W/A)	0.7	1.8	1.7 / 1.6	0.7	0.9	0.9
	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.)

