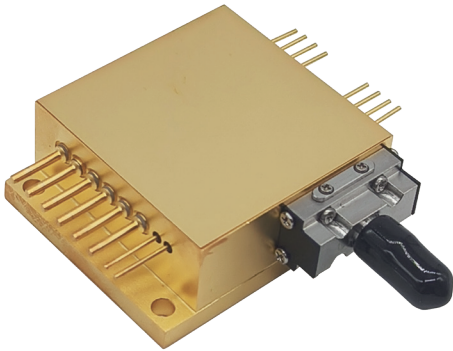


R4M Diode Laser Components



R4M diode laser components are Reallight's AW series multi-function laser modules, providing multi-wavelength output with 2-4 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

- Aesthetic medicine
- Material processing

Technical Specifications (25°C)

Package Type		R4M																			
		4-wavelength																			
Center Wavelength (nm)		660/808/980/1064				660/808/980/1064				638/808/980/1064				638/808/980/1064				638/808/915/980			
Optical	CW Output Power / P _{op} (W)	1.2	8.5	10	10	1.2	15	15	15	0.2	8.5	10	10	0.5	8.5	10	10	0.2	8.5	10	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	1.2	0.4	1.2	0.5	2.8	1.2	1.2	0.2	1.2	0.4	1.2	0.5	1.2	0.4	1.2	0.2	1.2	0.4	1.2
	Operating Current / I _{op} (A)	2	13	13	14	2	20	18	20	0.5	13	13	14	1.2	13	13	14	0.5	13	13	14
	Operating Voltage / V _{op} (V)	2.2	2.2	1.8	1.8	2.2	2.2	1.8	1.8	2.2	2.2	1.8	1.8	2.4	2.2	1.8	1.8	2.2	2.2	1.8	1.8
	Slope Efficiency / η _{es} (W/A)	0.8	1	0.9	0.8	0.8	0.9	0.9	0.8	0.8	1	0.9	0.8	0.8	1	0.9	0.8	0.8	1	0.9	0.8
	PD Parameter / I _{pd} (μA)	<3000																			
	Thermistor / Rt (kΩ/β (25°C))	10±5%/3450																			
Fiber	Fiber Core Diameter / D _{core} (μm)	200				400															
	Fiber Cladding Diameter / D _{clad} (μm)	220				440															
	Fiber Coating Diameter / D _{buffer} (μm)	400				720															
	Numerical Aperture / NA	0.22																			
	Connector	SMA905																			

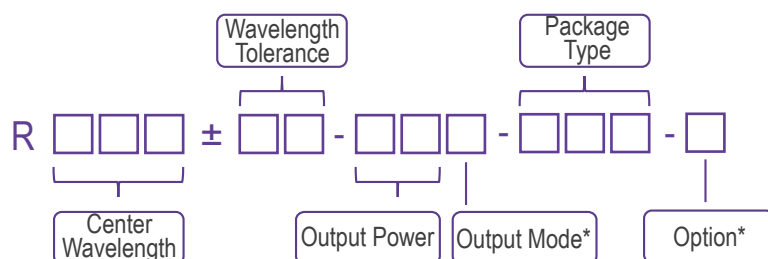
Other Parameters

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
R4M	660/808/980/1064	1.2/8.5/10/10	R660/808/980/1064±10-1.2/8.5/10/10WD-R4M-PFS
	660/808/980/1064	1.2/15/15/15	R660/808/980/1064±10-1.2/15/15/15WD-R4M-PFS
	638/808/980/1064	0.2/8.5/10/10	R638/808/980/1064±10-0.2/8.5/10/10WD-R4M-PFS
	638/808/980/1064	0.5/8.5/10/10	R638/808/980/1064±10-0.5/8.5/10/10WD-R4M-PFS
	638/808/915/980	0.2/8.5/10/10	R638/808/915/980±10-0.2/8.5/10/10WD-R4M-PFS

Part Numbering Schema

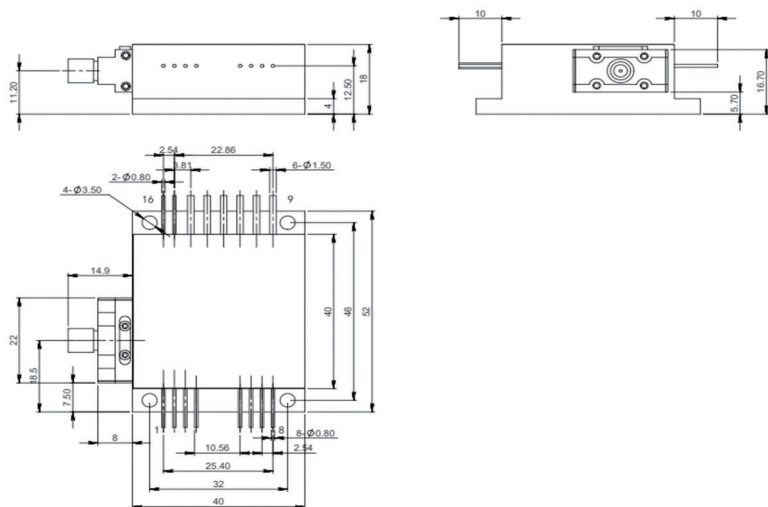


*Output Mode: D - Fiber Detachable

*Option: P - Pilot Light

FS - Fiber Detector

Mechanical Drawings (in mm)



引脚	功能	引脚	功能
1	Fiber Detector PD (P)	9	LD1 (+)
2	Fiber Detector LED (+) Fiber Detector PD (N)	10	LD1 (-)
3	Fiber Detector LED (-)	11	LD2 (+)
4	—	12	LD2 (-)
5	Thermistor	13	LD3 (+)
6	Thermistor	14	LD3 (-)
7	PD (P)	15	Red laser LD (+)
8	PD (N)	16	Red laser LD (-)

