

# 11RTR Diode Laser Components

11RTR diode laser components are RealLight's AW series multi-function laser modules, available in fiber detachable configuration with single emitter. Equipped with aiming beam, fiber detector, photodiode and thermistor, these lasers feature easy maintenance and high power stability.

## Key Features

- ◆ Efficient heat dissipation
- ◆ High reliability
- ◆ Superior power stability
- ◆ Excellent beam quality
- ◆ Various wavelengths

## Applications

- Aesthetic medicine
- Laser processing
- Scientific research

## Technical Specifications (25°C)

Package Type		11RTR			
Center Wavelength (nm)		808	940/976/980		1064
Optical	CW Output Power / P <sub>op</sub> (W)	9	10	20	10
	Wavelength Tolerance (nm)	±3,±10			
	Spectral Width / Δλ (nm)	<4			
	Temperature Drift of Wavelength / Δλ/ΔT (nm/°C)	0.3			
Aiming Beam	Output Power / P <sub>a</sub> (mW)	2			
	Wavelength / λ <sub>a</sub> (nm)	650±10			
	Voltage / V <sub>a</sub> (V)	2.2, 5.0			
Electrical	Threshold Current / I <sub>th</sub> (A)	1.2	0.55	1	1.1
	Operating Current / I <sub>op</sub> (A)	10	11	23.5	10.5
	Operating Voltage / V <sub>op</sub> (V)	2	1.8	2	1.7
	Slope Efficiency / η <sub>es</sub> (W/A)	0.9	0.9	0.9	0.9
	PD Parameter / I <sub>pd</sub> (μA)	<3000			
	Thermistor / Rt (kΩ/β (25°C))	10±1%/3450			
Fiber	Fiber Core/Cladding Diameter D <sub>core</sub> (μm)	105/125, 200/220			
	Fiber Length / L (cm)	100±10 (customizable)			
	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.

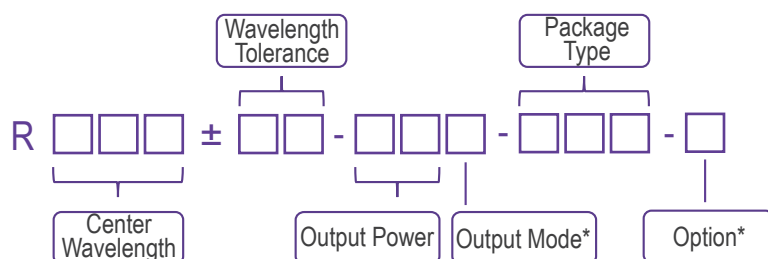
## Other Parameters

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
11RTR	808	9	R808±10-9WD-11RTR-PFS
	9xx (940/976/980)	10	R9xx±10-10WD-11RTR-PFS
		20	R9xx±10-20WD-11RTR-PFS
	1064	10	R1064±10-10WD-11RTR-PFS

## Part Numbering Schema

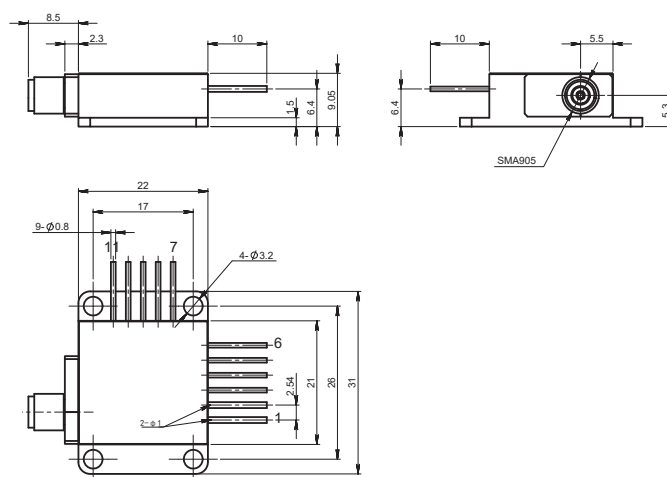


\*Output Mode: D - Fiber Detachable

\*Option: P - Pilot Light

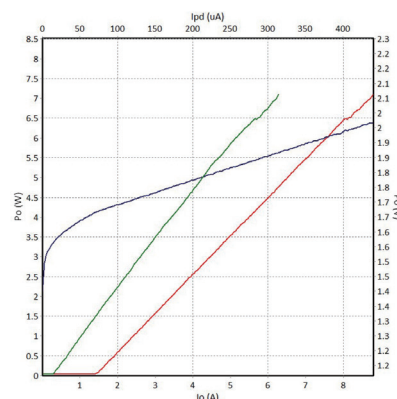
FS - Fiber Detector

## Mechanical Drawings (in mm)

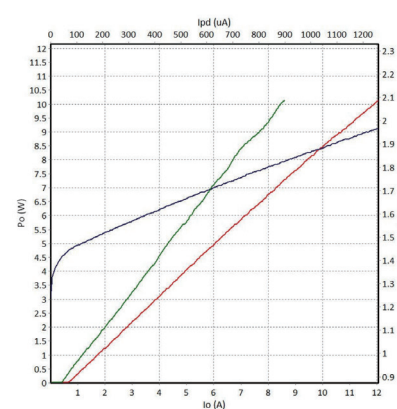


11RTR

11RTR			
Pin	Function	Pin	Function
1	Laser (+)	7	Thermistor
2	Laser (-)	8	Thermistor
3	PD(N)	9	FCD PD(P)
4	PD(P)	10	FCD LED(-)
5	Aiming Beam(-)	11	FCD LED(+)
6	Aiming Beam(+)		FCD PD(N)



808nm P-I-V Graph



980nm P-I-V Graph

