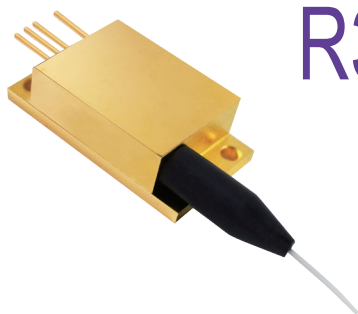




R3F Diode Laser Components

R3F diode laser components are RealLight's AW series multi-function laser modules, providing single-wavelength output with 3 emitters integrated. These fiber-coupled lasers feature superior power stability, excellent beam quality, high reliability and more.

Key Features

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

Applications

Medical application
Pumping source
Scientific research
Laser processing

Technical Specifications (25°C)

Package Type		R3F		
Center Wavelength (nm)		808	980	1064
Optical	CW Output Power / P_{op} (W)	20	30	30
	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)	1.3	1	1.2
	Operating Current / I_{op} (A)	11	13	13
	Operating Voltage / V_{op} (V)	6.2	6	6
	Slope Efficiency / η_{es} (W/A)	2.1	2.5	2.5
Fiber	Fiber Core Diameter / d_{core} (μm)	200		
	Fiber Cladding Diameter / D_{clad} (μm)	220		
	Fiber Coating Diameter / D_{buffer} (μm)	400		
	Fiber Length / L (cm)	100 $\pm$ 10		
	Numerical Aperture	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.

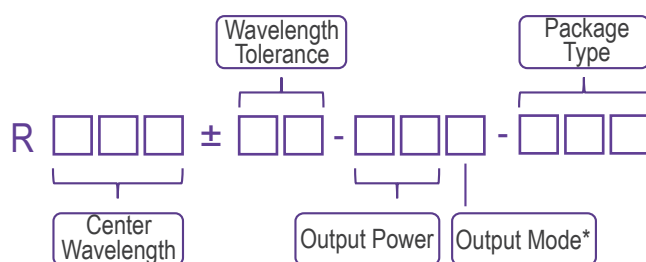
Other Parameters

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.)

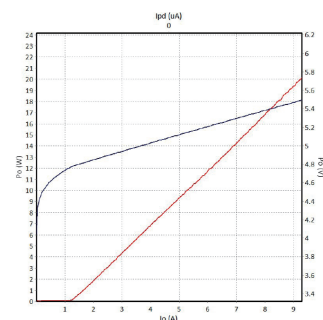
Order Information

Package	Wavelength (nm)	Output Power (W)	Part Number
R3F	808	20	R808±10-20WF-R3F
	980	30	R980±10-30WF-R3F
	1064	30	R1064±10-30WF-R3F

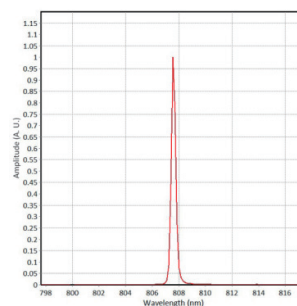
Part Numbering Schema



*Output Mode: F - Fiber Pigtailed

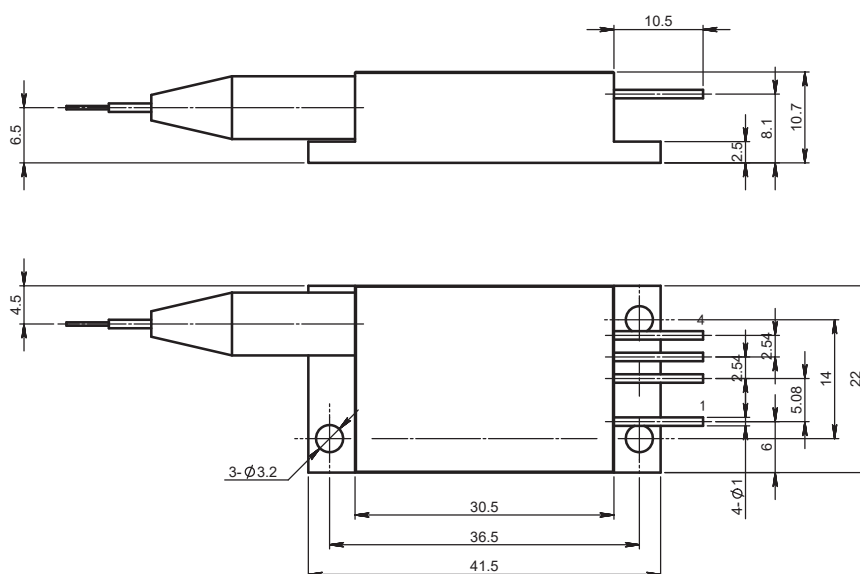


808nm P-I-V Graph



808nm Spectrum

Mechanical Drawings (in mm)



Pin	Function
1	Laser(+)
2	Laser(-)
3	RT
4	RT

