

08BULT Diode Laser Components



08BULT 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

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

Applications

Medical application
Dental treatment
Material processing

Technical Specifications (25°C)

Package Type		08BULT					
Center Wavelength (nm)		638	808	940	980	1064	1470
Optical	CW Output Power / P_{op} (W)	0.9	2	3	3	2	1
	Wavelength Tolerance (nm)	± 10					
	Spectral Width / $\Delta\lambda$ (nm)	<4					
	Temperature Drift of Wavelength / $\Delta\lambda/\Delta T$ (nm/°C)	0.3					
Aiming Beam	Output Power / P_a (mW)	2					
	Wavelength / λ_a (nm)	650 $\pm$ 10					
	Voltage / V_a (V)	2.2					
Electrical	Threshold Current / I_{th} (A)	0.5	0.4	0.6	0.6	0.8	1.8
	Operating Current / I_{op} (A)	1.6	2.4	4	4	3.5	5
	Operating Voltage / V_{op} (V)	2.3	2.1	2.2	2.0	2.0	1.5
	Slope Efficiency / η_{es} (W/A)	0.8	1	0.9	0.9	0.8	0.3
	Thermistor / R_t (k Ω/β (25°C))	10 $\pm$ 1%/3930					
Fiber	Fiber Core Diameter / d_{core} (μ m)	200					
	Fiber Cladding Diameter / D_{clad} (μ m)	220					
	Fiber Coating Diameter / D_{buffer} (μ m)	400					
	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.

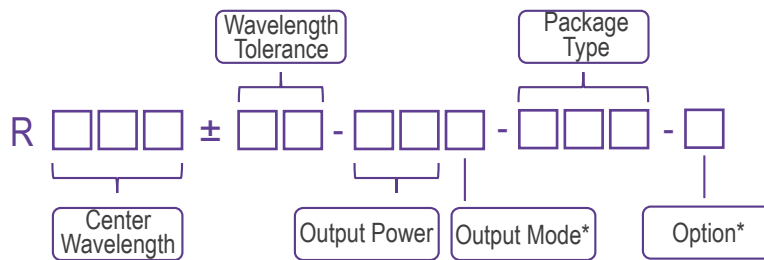
Other Parameters

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
08BULT	638	0.9	R638±10-0.9WD-08BULT-PFS
	808	2	R808±10-2WD-08BULT-PFS
	940	3	R940±10-3WD-08BULT-PFS
	980	3	R980±10-3WD-08BULT-PFS
	1064	2	R1064±10-2WD-08BULT-PFS
	1470	1	R1470±10-1WD-08BULT-PFS

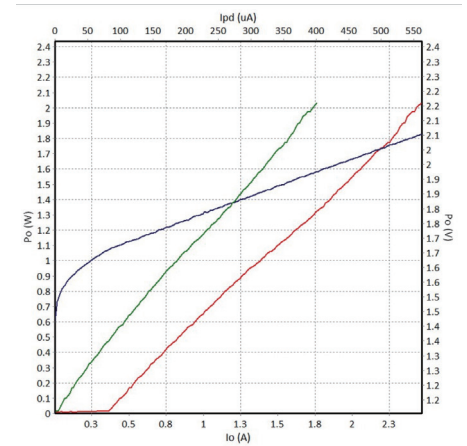
Part Numbering Schema



*Output Mode: D - Fiber Detachable

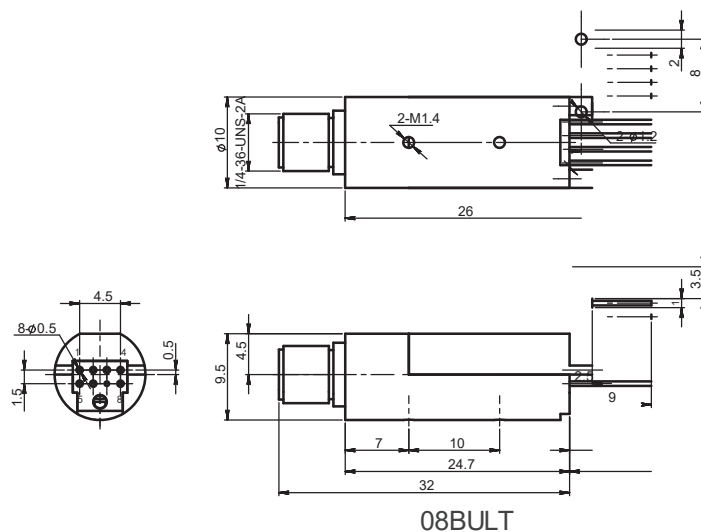
*Option: P - Pilot Light

FS - Fiber Detector

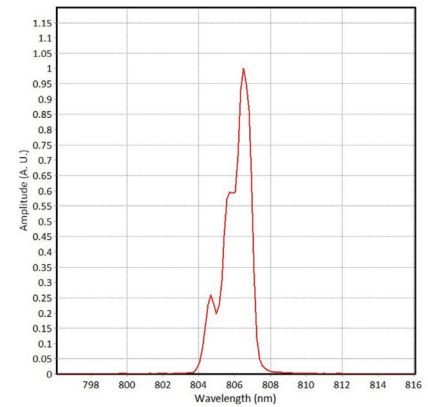


808nm P-I-V Graph

Mechanical Drawings (in mm)



08BULT



808nm Spectrum

Pin	Function	Pin	Function
1	FCD PD(P)	5	Thermistor
2	Thermistor	6	Laser (+)
3	Aiming Beam(-)	7	FCD PD(N), Case
4	Aiming Beam(+)	8	Laser (-)

