

# 03BCK Diode Laser Components



03BCK diode laser components are RealLight's AW series multi-function laser modules, providing fiber-coupled output in TO package, featuring compact size, excellent beam quality, excellent power stability, high reliability and more. Single mode optical fiber accepts customization.

## Key Features

- ◆ Compact size
- ◆ Excellent beam quality
- ◆ Single mode available
- ◆ Various wavelengths

## Applications

- Aesthetic medicine
- Pilot light
- Chemical analysis
- Laser processing

## Technical Specifications (25°C)

Package Type		03BCK				
Center Wavelength (nm)		520	638	650		
Optical	CW Output Power / Pop (mW) <sup>(1)</sup>	2~10	60	150	130	2~10
	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 <sub>th</sub> (mA)	~50	170	75	80	~43
	Operating Current / I <sub>op</sub> (mA)	~75	300	280	260	~55
	Operating Voltage / V <sub>op</sub> (V)	6	6.2	3	2.4	2.2
	Slope Efficiency / $\eta_{sp}$ (W/A)	0.4	0.4	0.81	0.72	0.8
Fiber	Fiber Core Diameter / Cladding Diameter (μm)	4/125、6/125、9/125				105/125
	Numerical Aperture / NA	0.14				0.22
	Fiber Length / L (cm)	100±10 (customizable)				
	Connector	FC/PC,ST,SMA905				

1. (1)Other output power can be customized.
2. Feedback Protection Function is available for this series of products upon request.
3. 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.

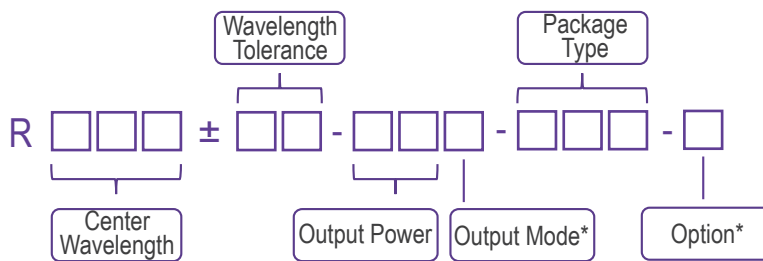
## Other Parameters

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 (mW)	Part Number
03BCK	520	2~10	R520±10-10mWF-03BCK
	520	60	R520±10-60mWF-03BCK
	638	150	R638±10-150mWF-03BCK
	650	2~10	R650±10-10mWF-03BCK
	650	130	R650±10-130mWF-03BCK

## 产品型号命名规则

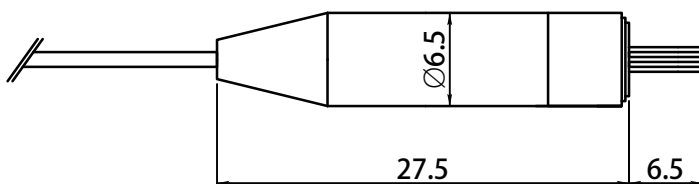


\*Output Mode: F - Fiber Pigtailed

\*Option: S - Single Mode

R - Back reflection wavelength: 800-1100nm

## Mechanical Drawings (in mm)



Pin	Function
1	Laser (-)
2	Case
3	Laser (+)



Note: Pin description is subject to test report.

Ø2.0±0.2

