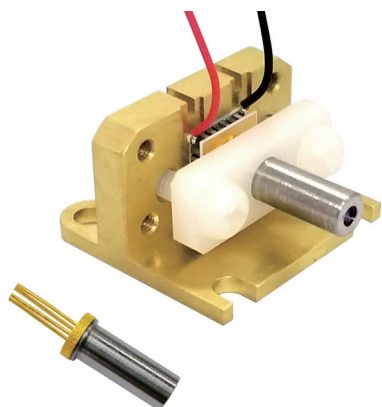




04BCK Diode Laser Components

04BCK Diode Laser Components, are featured products of RealLight's NL product line. With single mode output, these lasers provide low temperature dependence of the lasing wavelength. The extremely small form factor makes them ideal for wearable Raman devices.

Key Features

- ◆ Compact design
- ◆ High stability
- ◆ Excellent reliability

Applications

Spectrum analysis
Biological detection

Technical Specifications (25°C)

Package Type		04BCK	04BCK-TEC
Center Wavelength (nm)		785	785
Optical	CW Output Power / P _{op} (mW)	100	
	Wavelength Tolerance (nm)	±0.5	
	Spectral Width / Δλ (nm)	<0.1	
	Temperature Drift of Wavelength / Δλ/ΔT (nm/°C)	≤0.01	
Electrical	Threshold Current / I _{th} (mA)	40	
	Operating Current / I _{op} (mA)	150	
	Operating Voltage / V _{op} (V)	2	
	Slope Efficiency / η _{es} (W/A)	0.9	
	Thermistor Rt (kΩ/β(25°C))	10±5%/3450	
	TEC Max Current I _{max} (A)	-	1
	TEC Max Voltage V _{max} (V)	-	2.5

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.

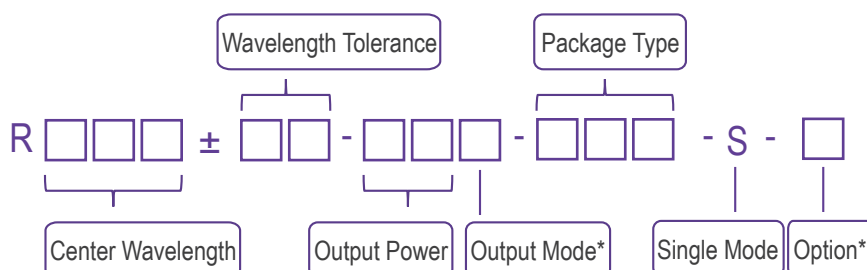
Other Parameters

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
04BCK	785	100	R785±0.5-100mWW-04BCK-S-G
04BCK-TEC	785	100	R785±0.5-100mWW-04BCK-S-TG

Part Numbering Schema

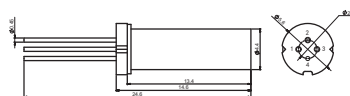


*Output Mode: W - Free Space

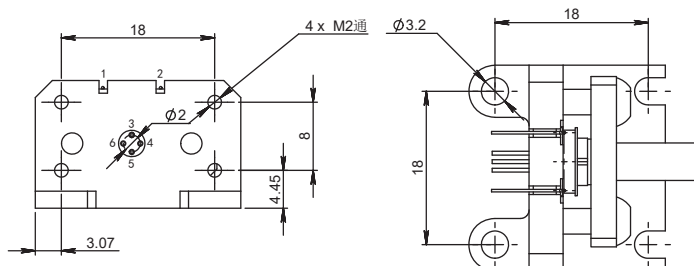
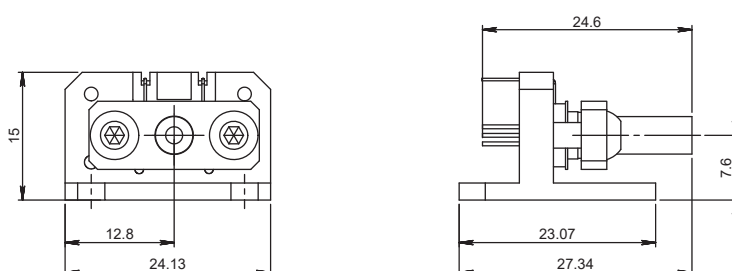
*Option: G - Narrow Linewidth

T - TEC

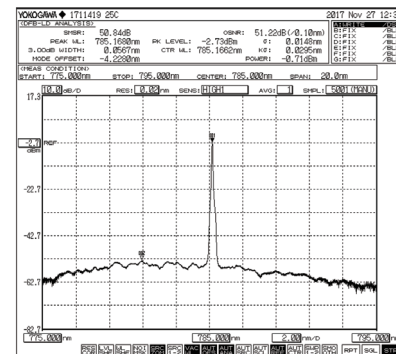
Mechanical Drawings (in mm)



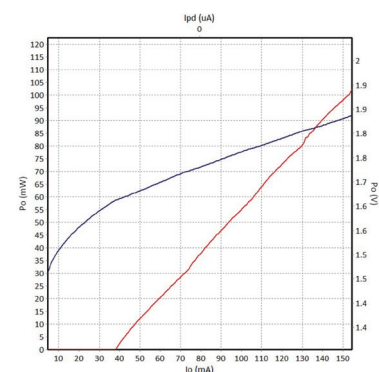
04BCK



04BCK-TEC



785nm Spectrum



785nm P-I-V Graph

04BCK	
Pin	Function
1	Laser (-)
2	Thermistor
3	Laser (+)
4	Thermistor

04BCK-TEC	
Pin	Function
1	TEC (-)
2	TEC (+)
3	Thermistor
4	Thermistor
5	Laser (-)
6	Laser (+), Case

