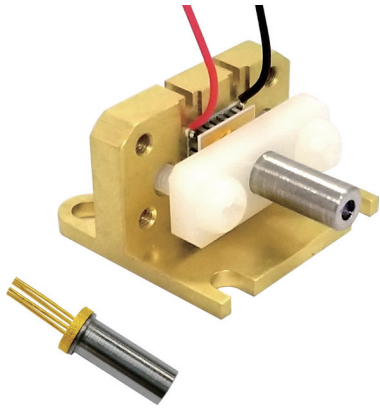


## Diode Laser Components



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

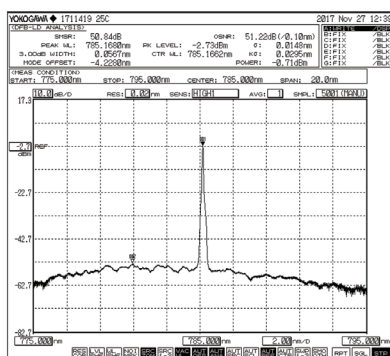
- Spectrum analysis
- Biological detection

### Technical Specifications (25°C)

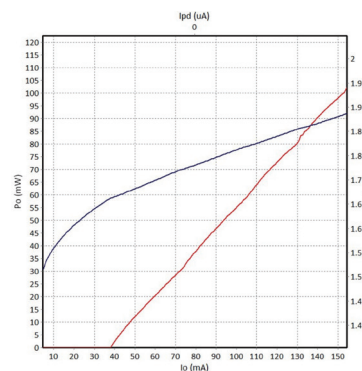
Package Type		04BCK	04BCK-TEC
Center Wavelength ( nm)		785	785
Optical	CW Output Power / P <sub>op</sub> (mW)	100	
	Wavelength Tolerance (nm)	±0.5	
	Spectral Width / Δλ (nm)	<0.1	
	Temperature Drift of Wavelength / Δλ/ΔT (nm/°C)	≤0.01	
Electrical	Threshold Current / I <sub>th</sub> (mA)	40	
	Operating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

### 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.)



785nm Spectrum

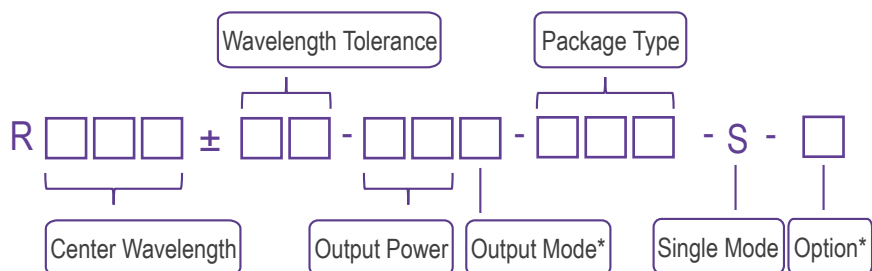


785nm P-I-V Graph

## 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

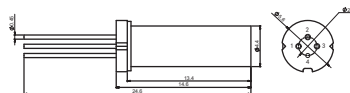


\*Output Mode: W - Free Space

\*Option: G - Narrow Linewidth

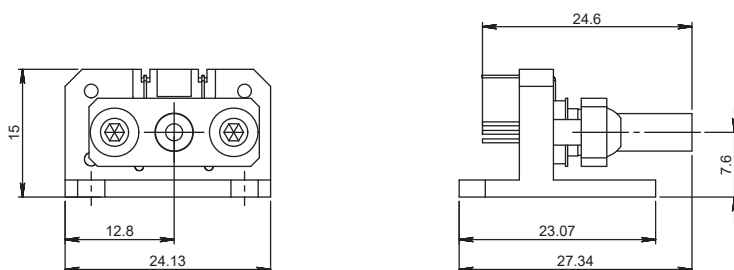
T - TEC

## Mechanical Drawings (in mm)

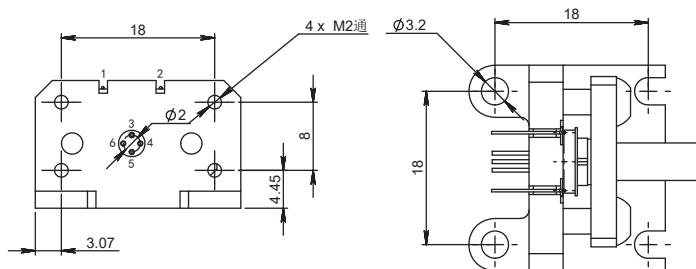


04BCK

04BCK	
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



04BCK-TEC

