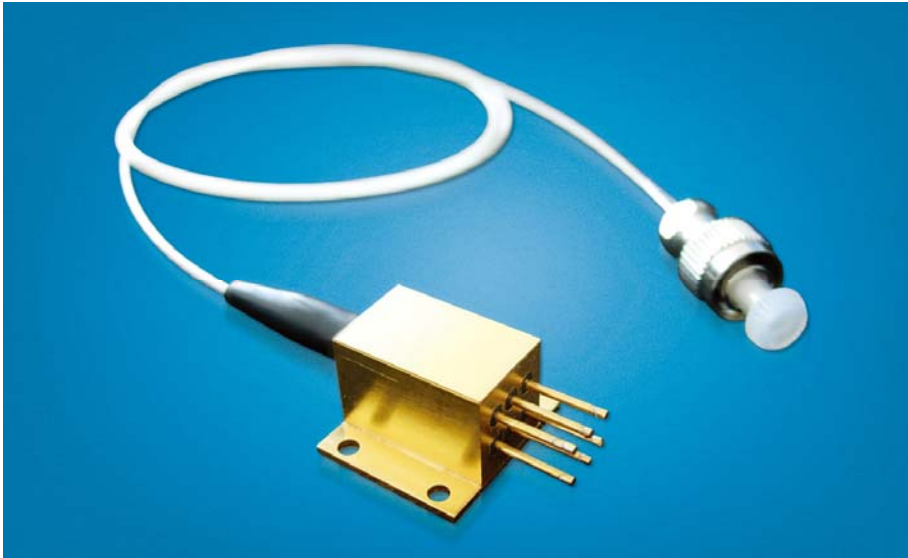


## Visible-Singlemode-Cooled LD Module with SMF Output

K66S06F-0.04W K66S06F-0.06W K66S06F-0.08W



### Key Features:

- ◆ 635nm-808nm wavelength
- ◆ 40mW- 80mW output power
- ◆ 4 $\mu$ m fiber core diameter
- ◆ 0.11NA
- ◆ Singlemode Fiber

### Applications:

- ◆ Printing
- ◆ Aiming Beam
- ◆ Biological application
- ◆ Analyse
- ◆ High precision

BWT Beijing's High Power Diode Laser Modules are manufactured by adopting specialized fiber-coupling techniques, resulting in volume products with a high efficiency, stability and superior beam quality. The products are achieved by transforming the asymmetric radiation from the laser diode chip into an output fiber with small core diameter by using special micro optics. Inspecting and burn-in procedures in every aspect come to a result to guarantee each product with the reliability, stability and long lifetime.

Our research staffs are constantly improving and innovating the processing technology in the producing process, based on the professional knowledge and experience accumulated in long-terms. We are also continuously developing new products to meet customers' specific needs.

At BWT Beijing, to provide high quality products with reasonable price is our always goal.

## Visible-Singlemode-Cooled LD Module with SMF Output

**K66S06F-0.04W K66S06F-0.06W K66S06F-0.08W**

Specifications (25°C)		Symbol	Unit	K66S06F-0.04W	K66S06F-0.06W	K66S06F-0.08W
Optical data	CW-output power	$P_o$	mW	40	60	80
	Center wavelength	$\lambda_c$	nm	660		
	Tolerance of $\lambda$	-	nm	$\pm 5$		
	Spectral width (FWHM)	$\Delta\lambda$	nm	<3		
	Temperature drift of $\lambda$	-	nm/°C	~0.2		
Fiber data <sup>1</sup>	Fiber core diameter	$W_c$	$\mu\text{m}$	4		
	Numerical aperture	NA	-	0.11		
	Fiber connector	-	-	FC, ST,SMA-905		
Electrical data	Operation current	$I_{op}$	mA	125	151	215
	Threshold current	$I_{th}$	mA	55	55	80
	Slope efficiency <sup>2</sup>	$\eta_D$	mW/mA	0.55	0.6	0.6
	Operation voltage	$V_{op}$	V	2.2		
	Reverse voltage	$V_{re}$	V	2		
TEC data	Max. current	$I_t$	A	1.8		
	Max. voltage	$V_t$	V	3.2		
Thermistor data <sup>3</sup>	Thermistor	$R_0$	(K $\Omega$ )/ $\beta$ (25°C)	10 $\pm$ 0.5/3477		
Other specifications	Operation temperature	$T_{op}$	°C	5~50		
	Storage temperature	$T_{st}$	°C	-20~80		
	Expected lifetime	MTBF	h	>5,000		
	Dimensions (fiber and connector not included)	-	mm	24 $\times$ 19 $\times$ 11		
	Lead soldering temperature	$T_{is}$	°C	260(10 sec.)		

1. Other fibers available for OEM applications. Contact BWT Beijing.

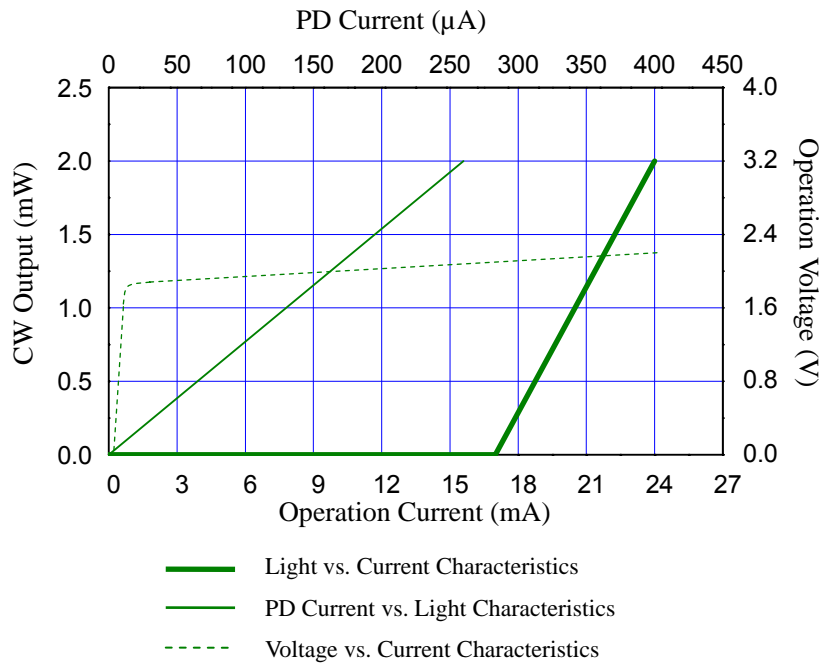
2.  $\eta_D = P_o / (I_{op} - I_{th})$ .

3.  $R_T = R_0 \cdot \exp(\beta(1/T - 1/T_0))$ , ( $T_0 = 25^\circ\text{C} = 298\text{K}$ ).

## Visible-Singlemode-Cooled LD Module with SMF Output

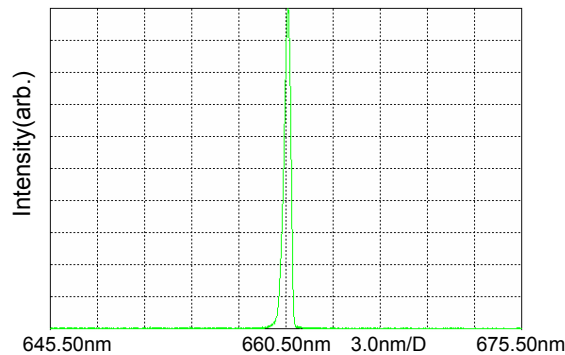
K66S06F-0.04W K66S06F-0.06W K66S06F-0.08W

### LD Characteristics



### Typ. spectrum (T=25°C)

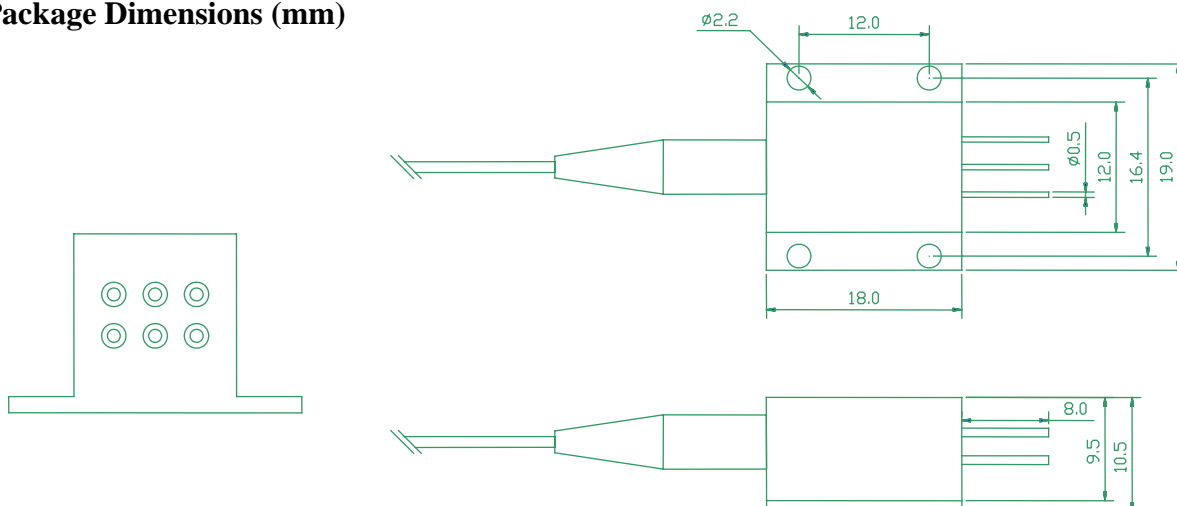
Typ. spectrum of 660nm diode laser modules



## Visible-Singlemode-Cooled LD Module with SMF Output

K66S06F-0.04W K66S06F-0.06W K66S06F-0.08W

### Package Dimensions (mm)



Pin	Function	Pin	Function
1	Thermistor	4	TEC( - )
2	Laser Anode(+)	5	Laser Cathode( - )
3	TEC(+)	6	Thermistor

### OPERATING NOTES

- Avoid eye exposure to direct or scattered radiation when the device is in operation.
- ESD precautions must be taken when handling unit.
- Using constant power supplies to guarantee the component works under the limits of its maximum peak optical power.
- The laser diode must be used under the specifications.
- Unit requires a condition to spread the heat as well as possible.
- Keep the fiber end clean before use. Fiber is not allowed to be curved so much. The diameter of curvature should be 300 times greater than fiber diameter.
- Environment temperature is 10°C--30°C.
- Storage temperature is -20°C--80°C, short circuit store.



Information and specifications contained herein are deemed to be reliable and accurate. BWT Beijing reserves the right to change, alter or modify the design and specifications of these products at any time with out notice.