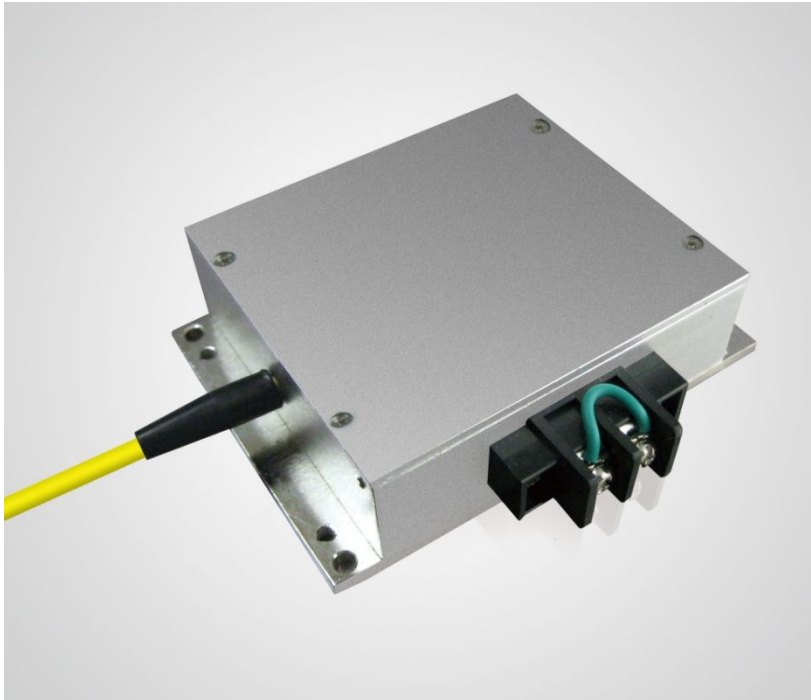


940nm 18W High Power Fiber Bundled Diode Lasers

K940FMFN-18.00W



Features:

- ♦ 940nm wavelength
- ♦ 18W output power
- ♦ 275 μ m fiber core diameter
- ♦ 0.22 N.A.

Applications:

- ♦ Illumination
- ♦ Medical use
- ♦ Material processing

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.

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Specifications (25°C)		Symbol	Unit	K940FMFN-18.00W
Optical Data ⁽¹⁾	CW-Output Power	P_o	W	18
	Center Wavelength	λ_c	nm	940
	Tolerance of λ	-	nm	± 10
	Spectral Width (FWHM)	$\Delta\lambda$	nm	<3
	Temperature Drift of λ	-	nm/°C	~0.3
Fiber Data ⁽²⁾	Fiber Core Diameter	W_c	μm	275
	Fiber Numerical Aperture	N.A.	-	0.22
	Fiber Connector	-	-	SMA905
Electrical Data	Operating Current	I_{op}	A	7.3
	Threshold Current	I_{th}	A	0.7
	Conversion Efficiency	η	%	40
	Operating Voltage	V_{op}	V	5
	Reverse Voltage	V_{re}	V	7.5
Others	Operating Temperature ⁽³⁾	T_{op}	°C	10~40
	Storage Temperature	T_{st}	°C	-20~70
	Expected Lifetime	MTTF	h	>10,000
	Dimensions	-	mm	9.0 x 6.5 x 2.5
	Lead Soldering Temperature	T_{is}	°C	260(10 sec.)

(1) Data measured under operation output at 18W.

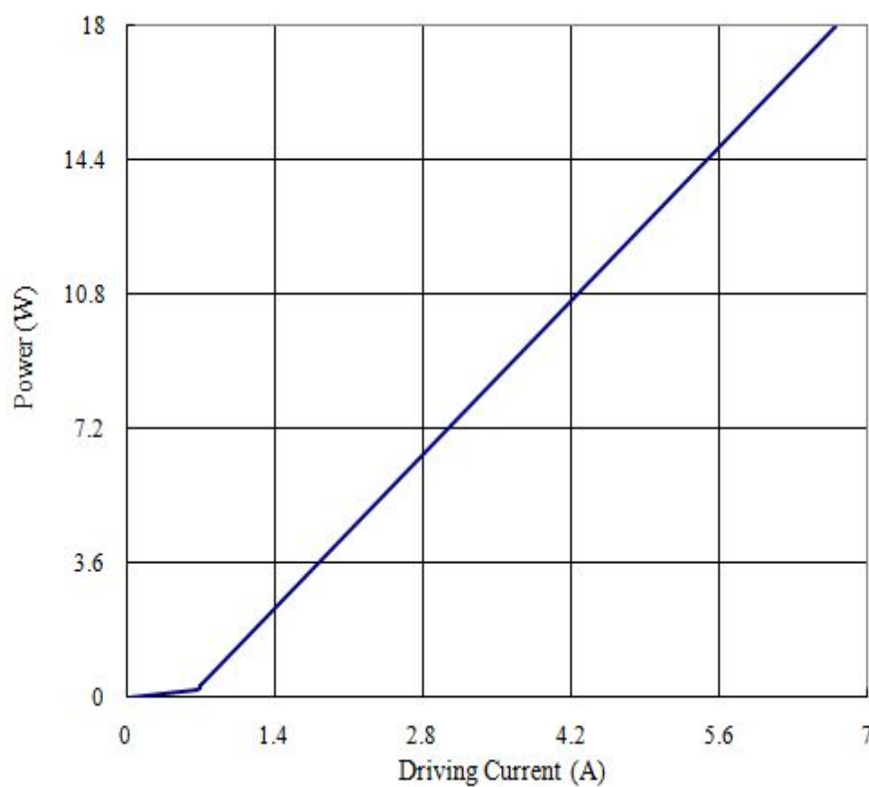
(2) Other fibers available upon request.

(3) Custom operating temperature and operating power upon request.

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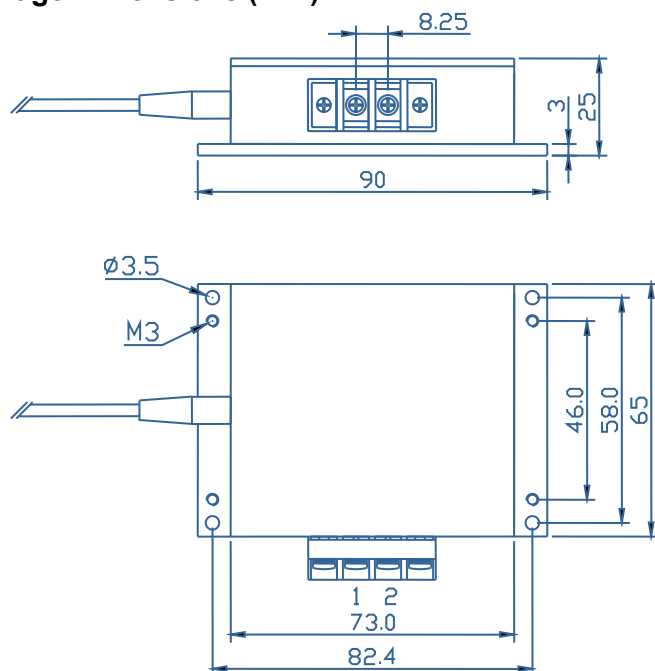
Characteristics



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Package Dimensions (mm)



Pins	Function
1	LD (+)
2	LD (-)

*:Typical function, can be customizable

OPERATING NOTES

- ◆ Avoid eye exposure to direct or scattered radiation.
- ◆ ESD precautions must be taken.
- ◆ Please connect pins to wires by solder instead of using socket when operation current is higher than 6A.
- ◆ Soldering point should be close to the root of the pins. Soldering temperature should be lower than 260°C and time shorter than 10 second.
- ◆ Use constant current power supply. Avoid surge current.
- ◆ Laser diode must be used according to the specifications.
- ◆ Laser diode must work with good cooling.
- ◆ Operation temperature is 10°C~ 40°C.
- ◆ Storage: -20°C~ +70°C, all pins short-circuit.



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 without notice.