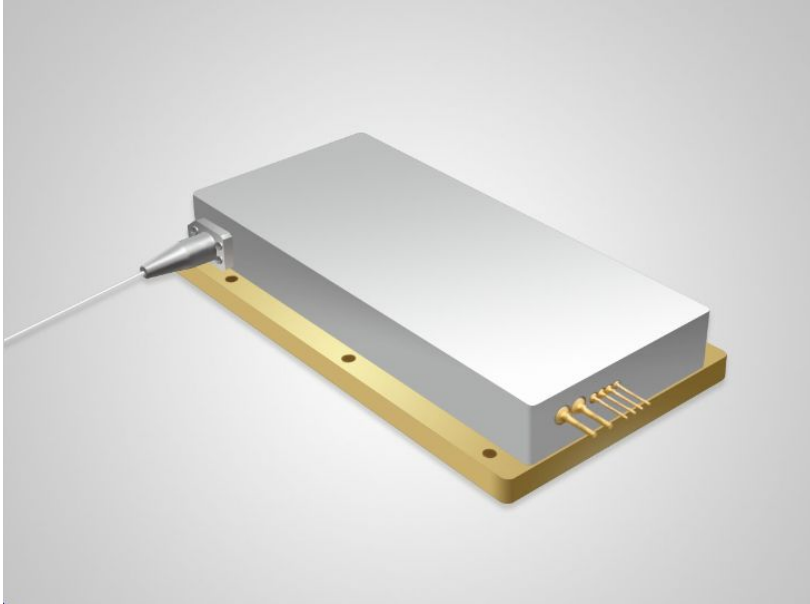


915nm 200W High Power Fiber Coupled Diode Laser

K915FA9RN-200.0W



Features :

- ◆ 915nm center wavelength
- ◆ 200 watts of output power
- ◆ 200 μ m fiber core diameter
- ◆ 0.22N.A.
- ◆ 1040nm-1200nm feedback protection

Applications :

- ◆ Fiber laser pumping
- ◆ Material Processing

These 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. These high brightness laser diodes are developed by transforming the asymmetric radiation from the laser diode chip into an output fiber with a small core diameter using special micro-optics. Thorough inspection and burn-in procedures on every device ensure reliability, stability and long lifetime.



915nm 200W High Power Fiber Coupled Diode Laser

Specifications(25°C)		Symbol	Unit	K915FA9RN-200.0W		
				Minimum	Typical	Maximum
Parameter⁽¹⁾	CW Output Power	P_O	W	200	-	-
	Threshold current	I_{th}	A	-	1	-
	Operating current	I_{op}	A	-	-	14
	Operating voltage	V_{op}	V	-	-	33
	Reverse Voltage	V_{re}	V	-	50	-
	Slope Efficiency	η	W/A	-	17.5	-
	Electrical-to-Optical Efficiency	PE	%	-	48	-
	Center wavelength	λ_c	nm	905	-	925
	Spectral width(FWHM)	$\Delta\lambda$	nm	-	6	-
	Back reflection wavelength Range	λ	nm	1040	-	1200
	Back reflection isolation	-	dB	-	30	-
	Wavelength Shift with Temperature	-	nm/°C	-	0.3	-
	Light within 0.22NA	-	NA	-	95	-
	Life Time	MTTF	H	-	10000	-
Fiber Date	Buffer diameter	D_{buf}	μm	-	320	-
	Cladding diameter	D_{clad}	μm	-	220	-
	Core diameter	D_{core}	μm	-	200	-
	Numeric aperture	NA	NA	-	0.22	-
	Fiber length ⁽²⁾	l_c	m	0.9	1	1.1
	Fiber Bend Radius	-	-	-	35	-
Others	ESD	-	V	-	-	500
	Storage temperature	-	°C	-20	-	70
	Lead Soldering Temp	T_{is}	°C	-	-	260
	Lead Soldering Time	T_{is}	sec	-	-	10
	Operating case temperature	T_{op}	°C	15	-	35
	Relative Humidity	-	%	15	-	75

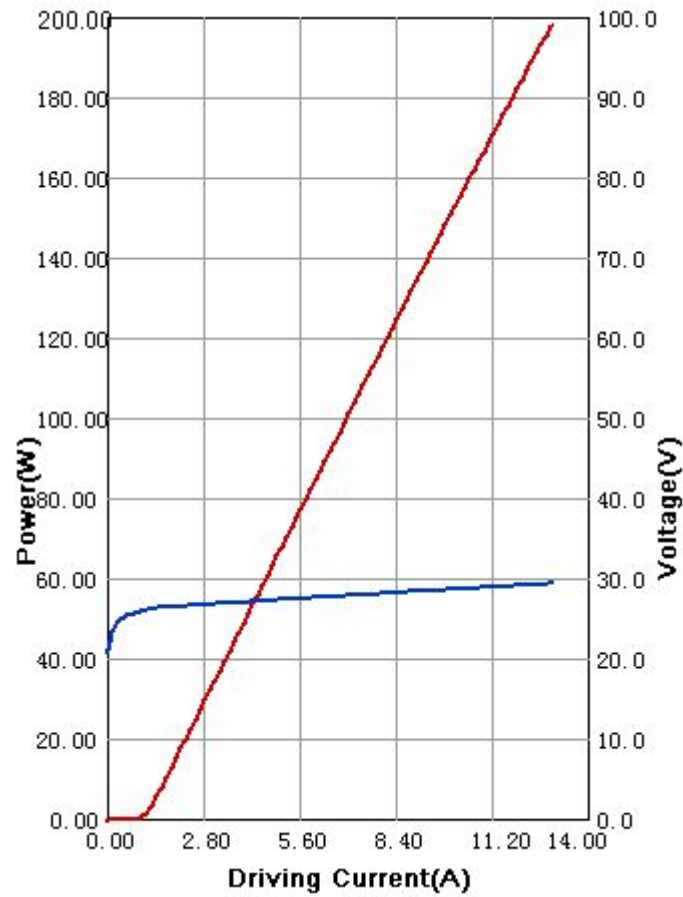
(1) Data measured under operation output at 200W.

(2) Other fibers available upon request.

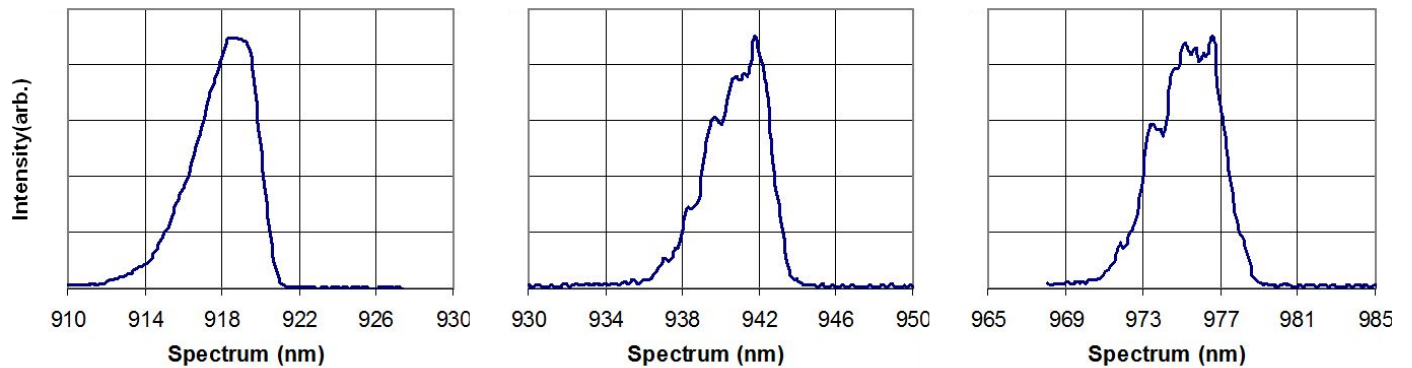


915nm 200W High Power Fiber Coupled Diode Laser

Characteristics

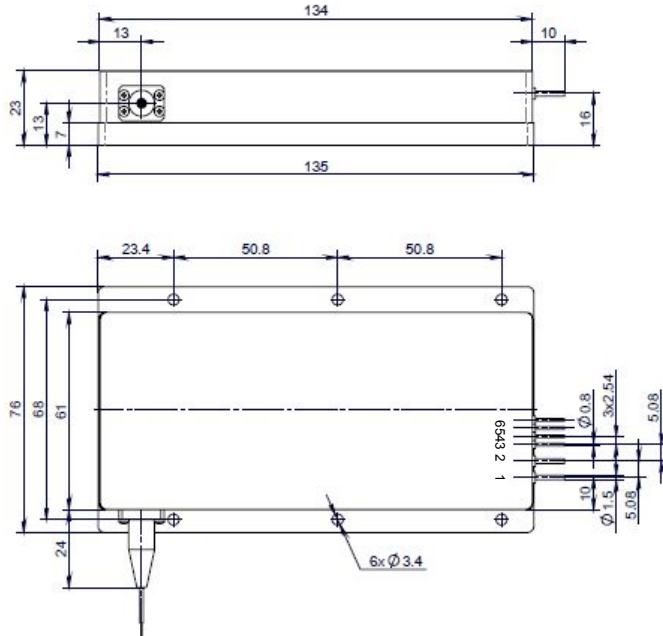


Typ. Spectrum (T=25°C)



915nm 200W High Power Fiber Coupled Diode Laser

Package Dimensions (mm)



Pins	Function
1	LD (+)
2	LD (-)
3	Thermistor*
4	Thermistor*
5	PD (N) *
6	PD (P) *

*: Optional functions.

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 15°C~ 35°C.
- ◆ Storage: -20°C~ +70°C, all pins short-circuit.



Declaration: 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.