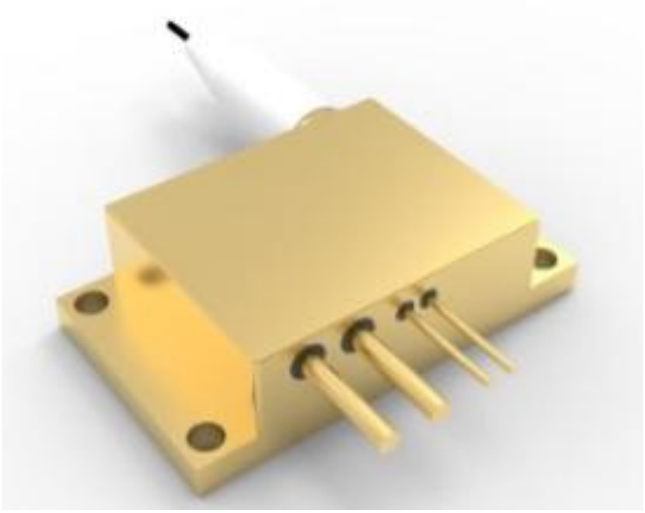
915 nm 40 W Fiber Coupled Laser Diode

K915FAHRN-40.00WN0N-10522F10ENA (Standard Product)



Features:

- 915±10 nm wavelength
- 40 W output power
- 105 μm fiber core diameter
- 0.22 NA
- 1020nm~1200 nm feedback protection

Applications:

- Fiber Laser Pumping
- Scientific Research
- kW-klass laser pumping

Specifications（25℃）		Symbol	Unit	K915FAHRN-40.00W		
				Minimum	Typical	Maximum
Optical Data(1)	CW Output Power	P_O	W	40.0	-	-
	Center Wavelength	λ_c	nm	915±10		
	Spectral Width (FWHM)	Δλ	nm	-	3.0	7.0
	Wavelength Shift with Temperature	Δλ/ΔT	nm/℃	-	0.3	-
	Wavelength Shift with Current	△λ/△I	nm/A	-	0.6	-
Electrical Data	Electrical-to-Optical Efficiency	PE	%	-	50	-
	Threshold Current	I_{th}	A	-	1.3	-
	Operating Current	I_{op}	A	-	16.0	18.0
	Operating Voltage	V_{op}	V	-	5.2	6.0
	Slope Efficiency	η	W/A	-	3.0	-
Fiber Data	Core Diameter	D_{core}	μm	-	105	-
	Cladding Diameter	D_{clad}	μm	-	125	-
	Numeric Aperture	NA	-	-	0.22	-
	Fiber Length	L_f	m	-	1.0	-
	Fiber Loose Tubing Diameter	-	mm	0.9		
	Minimum Bending Radius	-	mm	50	-	-
	Fiber Termination	-	-	-		
Feedback Isolation	Wavelength Range	-	nm	1020~1200		
	Isolation	-	dB	-	30	-
Others	ESD	V_{esd}	V	-	-	500
	Storage Temperature(2)	T_{st}	℃	-20	-	70
	Lead Soldering Temp	T_{ls}	℃	-	-	260
	Lead Soldering Time	t	sec	-	-	10
	Operating Case Temperature(3)	T_{op}	℃	20	25	30
	Relative Humidity	RH	%	15	-	75

(1) Data measured under operation output at nominal output power@25℃.
(2) A non-condensing environment is required for operation and storage.
(3) Operating temperature defined by the package case. Acceptable operating range is 20℃~30℃, but performance may vary.

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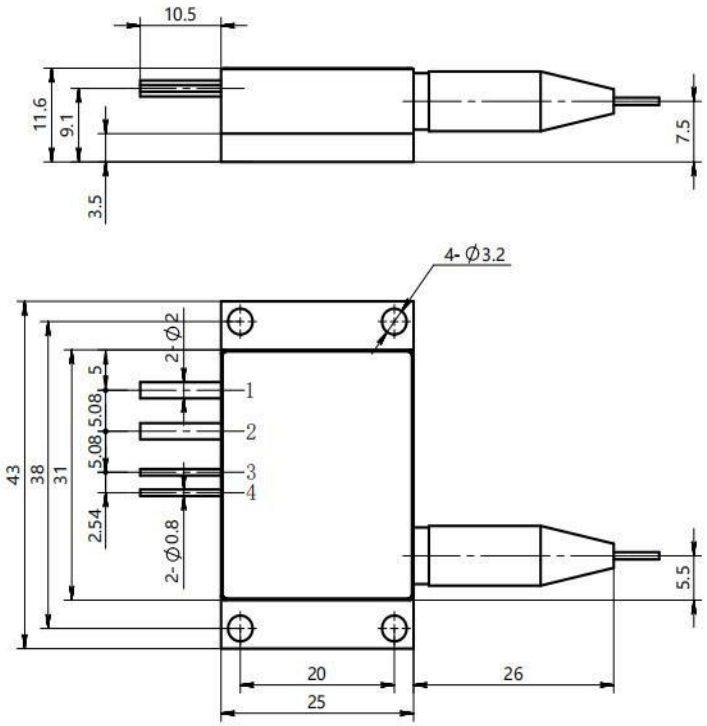
Package Dimensions (mm)



Pin	Function
1	LD (+)
2	LD (-)
3	/
4	/

OPERATING NOTES

- Avoid eye and skin exposure to direct radiation during operation.
- ESD precautions must be taken during transportation, storage, and operation. A short-circuit connection is required between pins during transportation and storage.
- For lasers with operating currents above 6A, connect leads by soldering. The soldering point should be as close to the middle of the pins as possible, with a temperature below 260℃ and a soldering time of less than 10 seconds.
- Before operating the laser, ensure that the fiber output end is properly cleaned. Follow safety protocols when handling and cutting fiber to avoid injury.
- Use a constant current power supply and avoid surges during operation.
- Operate within the rated current and power levels.
- Ensure proper cooling during operation.
- The operating temperature range is 20℃ to 30℃.
- The storage temperature range is -20℃ to +70℃.