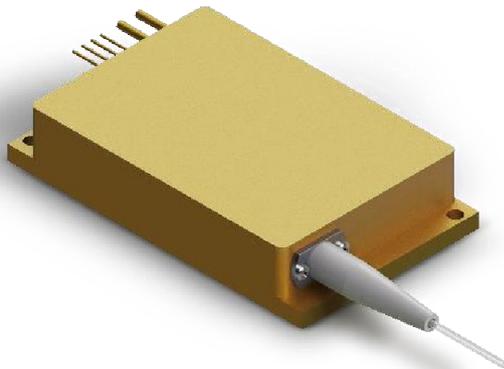


## 976nm 50W Wavelength-Stabilized High Brightness Fiber Coupled Laser Diode

K976AA5RN-50.00W



### Features:

- 976nm wavelength
- 50W output power
- 105µm fiber core diameter
- 0.15N.A.
- Narrow bandwidth  
 $\Delta\lambda \leq 0.7\text{nm}$
- 1040nm-1200nm feedback protection

### Applications:

- Fiber laser pumping

Specifications (25°C)		Symbol	Unit	K976AA5RN-50.0W		
				Minimum	Typical	Maximum
<b>Parameter<sup>(1)</sup></b>	CW Output Power	P <sub>o</sub>	W	50	-	-
	Threshold current	I <sub>th</sub>	A	-	0.5	-
	Operating current	I <sub>op</sub>	A	-	-	11
	Operating voltage	V <sub>op</sub>	V	-	-	14
	Reverse Voltage	V <sub>re</sub>	V	-	17.5	-
	Slope Efficiency	η	W/A	-	5	-
	Electrical-to-Optical Efficiency	PE	%	-	45	-
	Center wavelength	λ <sub>c</sub>	nm	975.5	-	976.5
	Spectral width (FWHM)	δλ	nm	-	0.7	-
	Back reflection wavelength Range	λ	nm	1040	-	1200
	Back reflection isolation	-	dB	-	30	-
	Wavelength Shift with Temperature	-	nm/°C	-	0.02	-
	Light within 0.13NA	-	%	-	95	-
	Life Time	MTTF	hrs	-	100000	-
	<b>Fiber Data</b>	Buffer diameter	D <sub>buf</sub>	µm	-	250
Cladding diameter		D <sub>clad</sub>	µm	-	125	-
Core diameter		D <sub>core</sub>	µm	-	105	-
Numeric aperture		NA	-	-	0.15	-
Fiber length <sup>(2)</sup>		l <sub>f</sub>	m	-	1	-
Fiber Bend Radius		-	mm	37.5	-	-
<b>Others</b>	ESD	V <sub>esd</sub>	V	-	-	500
	Storage temperature	T <sub>stg</sub>	°C	-20	-	70
	Lead Soldering Temp	T <sub>ls</sub>	°C	-	-	260
	Lead Soldering Time	t	sec	-	-	10
	Operating case temperature	T <sub>op</sub>	°C	25	-	30
	Relative Humidity	RH	%	15	-	75

(1) Data measured under operation output at 50W.

(2) Other fibers available upon request.

