

Applications:

Solid-state laser pumping

• 200/400µm fiber core diameter

• 1020nm~1200nm feedback protection

- Medical application
- Material processing

• 0.22 NA

Features:

 808nm wavelength • 50W output power

808nm 50W Fiber Coupled Diode Laser RPK808-NL-50.00W-40022-SM

Specifications(25℃)		Symbol	Unit	RPK808-NL-50.00W-40022-SM		
				Minimum	Typical	Maximum
Optical Data ⁽¹⁾	CW Output Power	Po	W	50	-	-
	Center Wavelength	λς	nm	808±3		
	Spectral Width(FWHM)	Δλ	nm	-	6	-
	Wavelength Shift with Temperature	Δλ/ΔΤ	nm/℃	-	0.3	-
Electrical Data	Electrical-to-Optical Efficiency	PE	%	-	40	-
	Threshold Current	I _{th}	Α	-	1.5	-
	Operating Current	I _{op}	А	-	-	14
	Operating Voltage	V _{op}	V	-	-	10
	Slope Efficiency	η	W/A	-	4.5	-
Fiber Data	Core Diameter	D _{core}	μm	-	200/400	-
	Cladding Diameter	D _{clad}	μm	-	220/440	-
	Numeric Aperture	NA	-	-	0.22	-
	Fiber Length	L _f	m	-	1.0	-
	Fiber Loose Tubing Diameter	-	mm	-	3.0	-
	Minimum Bending Radius	-	mm	88/176	-	-
	Fiber Termination	-	-	SMA905		
Feedback	Wavelength Range	-	nm	1020~1200		
Isolation	Isolation	-	dB	-	30	-
Others	ESD	V _{esd}	V	-	-	500
	Storage Temperature ⁽²⁾	T _{st}	°C	-20	-	70
	Lead Soldering Temp	T _{Is}	°C	-	-	260
	Lead Soldering Time	t	sec	-	-	10
	Operating Case Temperature ⁽³⁾	T _{op}	°C	15	-	35
	Relative Humidity	RH	%	15	-	75

⁽¹⁾ Data measured under operation output at 50W@25°C.

⁽²⁾ A non-condensing environment is required for operation and storage.

⁽³⁾ Operating temperature defined by the package case. Acceptable operating range is 15°C~35°C, but performance may vary.



808nm 50W Fiber Coupled Diode Laser

RPK808-NL-50.00W-40022-SM

Package Dimensions (mm) Pin Function 1 LD (+) 2 LD (-) *: Optional function

OPERATING NOTES

- Avoid eye and skin exposure to direct radiation during operation.
- ♦ ESD precautions must be taken during storage, transportation and operation.
- ♦ Short-circuit is required between pins during storage and transportation.
- to the middle of the pins. Soldering temperature should be lower than 260°C and time shorter than 10 second.
- cutting the fiber.
- ◆ Laser diode must work with good cooling.
- ♦ Operation temperature ranges from 15°C to 35°C .
- ◆ Storage temperature ranges from -20°C to +70°C.
- **♦**



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.23-12