

808nm 20W High Power Fiber Laser Diode

K808F02MN-20.00W (Optional Product)



Features:

- 808nm wavelength
- 20W output power
- 400μm fiber core diameter
- 0.22 NA

Applications:

- Illumination
- Medical use
- Laser pumping
- Material processing

Specifications (25°C)		Symbol	Unit	K808F02MN-20.00W		
				Minimum	Typical	Maximum
Optical Data ⁽¹⁾	CW-Output Power	P_o	W	20	-	-
	Center Wavelength	λ_c	nm	808±10		
	Spectral Width (FWHM)	$\Delta\lambda$	nm		6	
	Wavelength Shift with Temperature	$\Delta\lambda/\Delta T$	nm/°C	-	0.3	-
	Wavelength Shift with Current	$\Delta\lambda/\Delta A$	nm/A	-	1	-
Electrical Data	Electrical-to-Optical Efficiency	PE	%	-	40	-
	Operating Current	I_{op}	A	-	-	5
	Threshold Current	I_{th}	A	-	0.8	-
	Operating Voltage	V_{op}	V	-	-	12
	Slope Efficiency	η	W/A	-	4.0	-
Fiber Data ⁽²⁾	Core Diameter	D_{core}	μm	-	400	-
	Cladding Diameter	D_{clad}	μm	-	440	-
	Numerical Aperture	NA	-	-	0.22	-
	Total Fiber Length	L_f	m	-	1.0	-
	Fiber Loose Tubing Diameter	-	mm	3mm Stainless steel		
	Minimum Bending Radius	-	mm	180	-	-
	Fiber termination	-	-	-	SMA905	-
Others	ESD	V_{esd}	V	-	-	500
	Storage Temperature ⁽²⁾	T_{st}	°C	-20	-	70
	Lead Soldering Temp	T_{ls}	°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 20W@25°C.

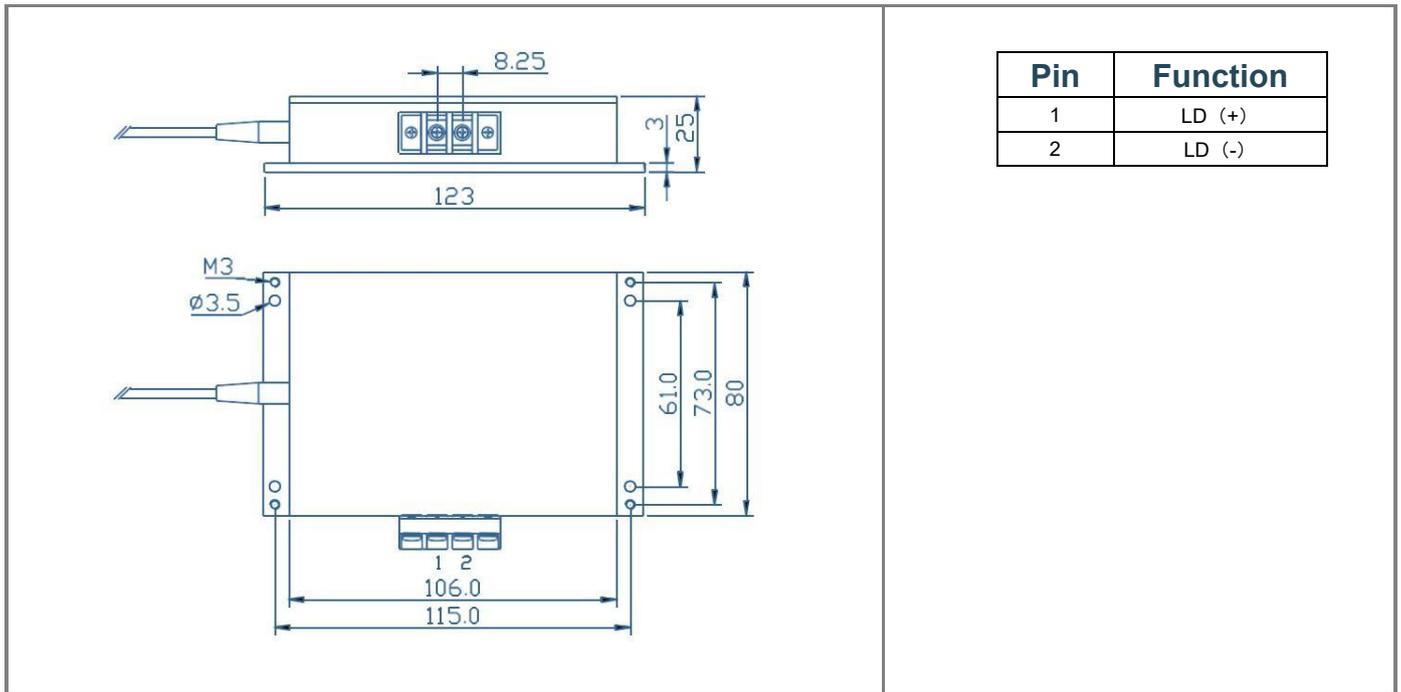
(2) A non-condensing environment is required for operation and storage.

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

Package Dimensions (mm)

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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.
- 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 middle of the pins. Soldering temperature should be lower than 260°C and time shorter than 10 second.
- Make sure the fiber output end is properly cleaned before operation of laser. Follow safety protocols to avoid injury when handling and cutting the fiber.
- Use constant current power supply to avoid surge current during operation.
- Laser diode must be used according to the specifications.
- 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.