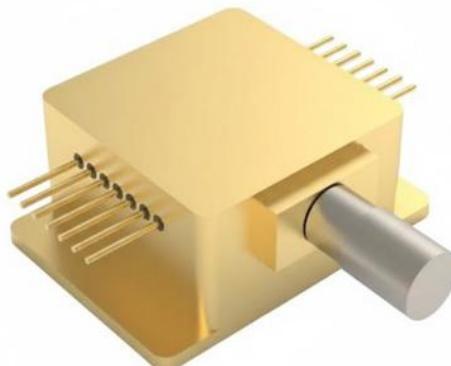


980 nm 10 W Multi-Function Detachable Laser Diode

K980F11CA-10.00W (Standard Product)



Features:

- 980 nm wavelength
- 10 W output power
- 200 μm fiber core diameter
- 0.22 NA

Applications:

- Medical use
- Fiber laser pumping
- Research and development

Specifications (25°C)		Symbol	Unit	K980F11CA-10.00W		
				Minimum	Typical	Maximum
Optical Data ⁽¹⁾	CW Output Power	P_o	W	10	-	-
	Center Wavelength	λ_c	nm	980±10		
	Wavelength Shift with Temperature	$\Delta\lambda/\Delta T$	nm/°C	-	0.3	-
Electrical Data	Electrical-to-Optical Efficiency	PE	%	-	48	-
	Threshold Current	I_{th}	A	-	0.7	-
	Operating Current	I_{op}	A	-	-	12.5
	Operating Voltage	V_{op}	V	-	-	2.0
	Slope Efficiency	η	W/A	-	0.9	-
Fiber Data	Core Diameter	D_{core}	μm	-	200	-
	Numeric Aperture	NA	-	-	0.22	-
	Fiber Connector	-	-	SMA905		
Thermistor	-	R_t	(K Ω)/(25°C)		10±3%	
PD	-	PD	μA	100	-	2000
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
Aiming Beam	Output Power	P_a	mW	2	-	-
	Wavelength	λ_a	nm	635±10		
	Voltage	V_a	V		2.3	2.6
	Current	I_a	mA		45	65

(1) Data measured under operation output at 10W@25°C.

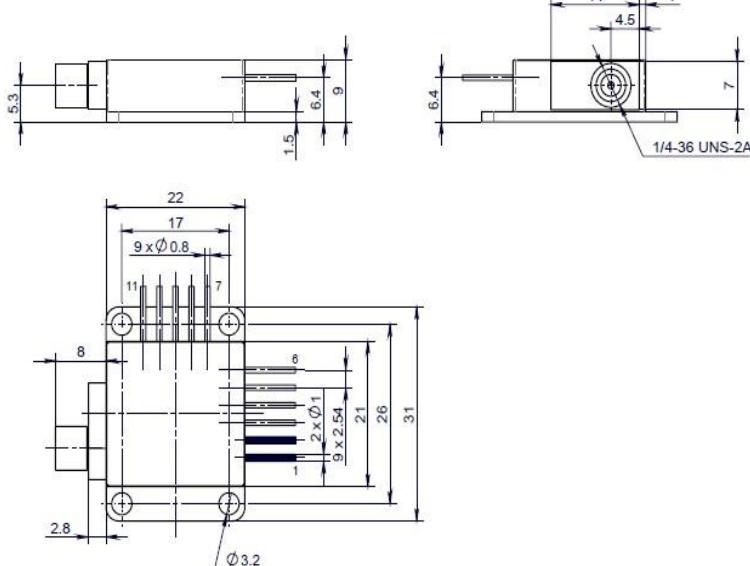
(2) A non-condensing environment is required for operation and storage.

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

980 nm 10 W Multi-Function Detachable Laser Diode

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Package Dimensions (mm)



Pin	Function
1	LD (+)
2	LD (-)
3	PD(N)
4	PD(P)
5	Aiming Beam(-)
6	Aiming Beam(+)
7	LD3+
8	Thermistor
9	Thermistor
10	FCD PD(P)
11	FCD LED(-)

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.