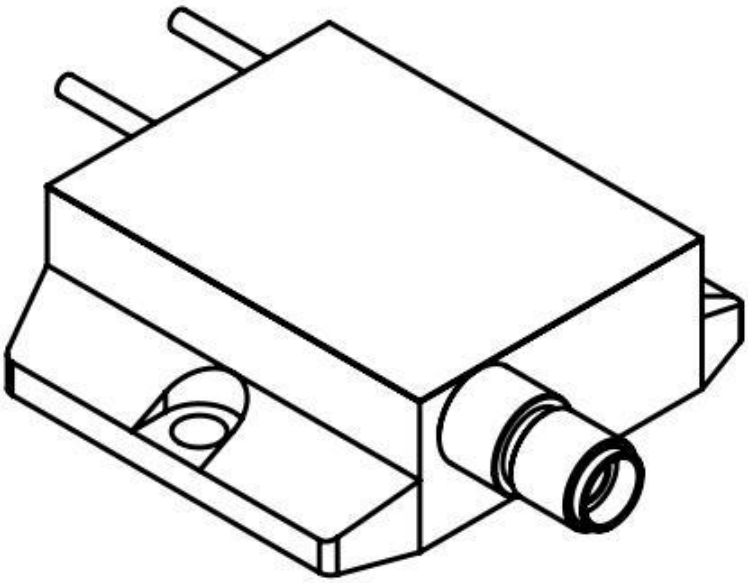
808 nm / 20 W
Fiber-Coupled Semiconductor Laser

PRODUCT DATASHEET

808 nm typical wavelength | 20 W typical optical output | SMA905



Product overview

A fiber-coupled semiconductor laser module with a typical center wavelength of 808 nm and a typical optical output power of 20 W. The fixed output fiber has a 200 micrometer core and a numerical aperture of 0.22.

Key specifications

Typical operating current: 12 A; maximum: 14 A.
Typical operating voltage: 3.4 V.
SMA905 connector output with a yellow 3 mm PVC jacket, without armor.
Thermal conduction cooling; operating temperature: 15 to 35 °C.

Specification notice

Data are provided for reference. The agreed technical specification in the sales contract governs supplied products. Specifications may change with product revisions. Contact FULLSUNS to confirm requirements before ordering.

Technical specifications

Optical / electrical parameters

Parameter	Unit	Minimum	Typical	Maximum
Center wavelength	nm	803	808	813
Optical output power	W	-	20	-
Threshold current	A	-	1.3	-
Operating voltage	V	-	3.4	-
Operating current	A	-	12	14
Slope efficiency	W/A	-	-	-
Energy conversion efficiency	%	-	-	-

Fiber / auxiliary parameters

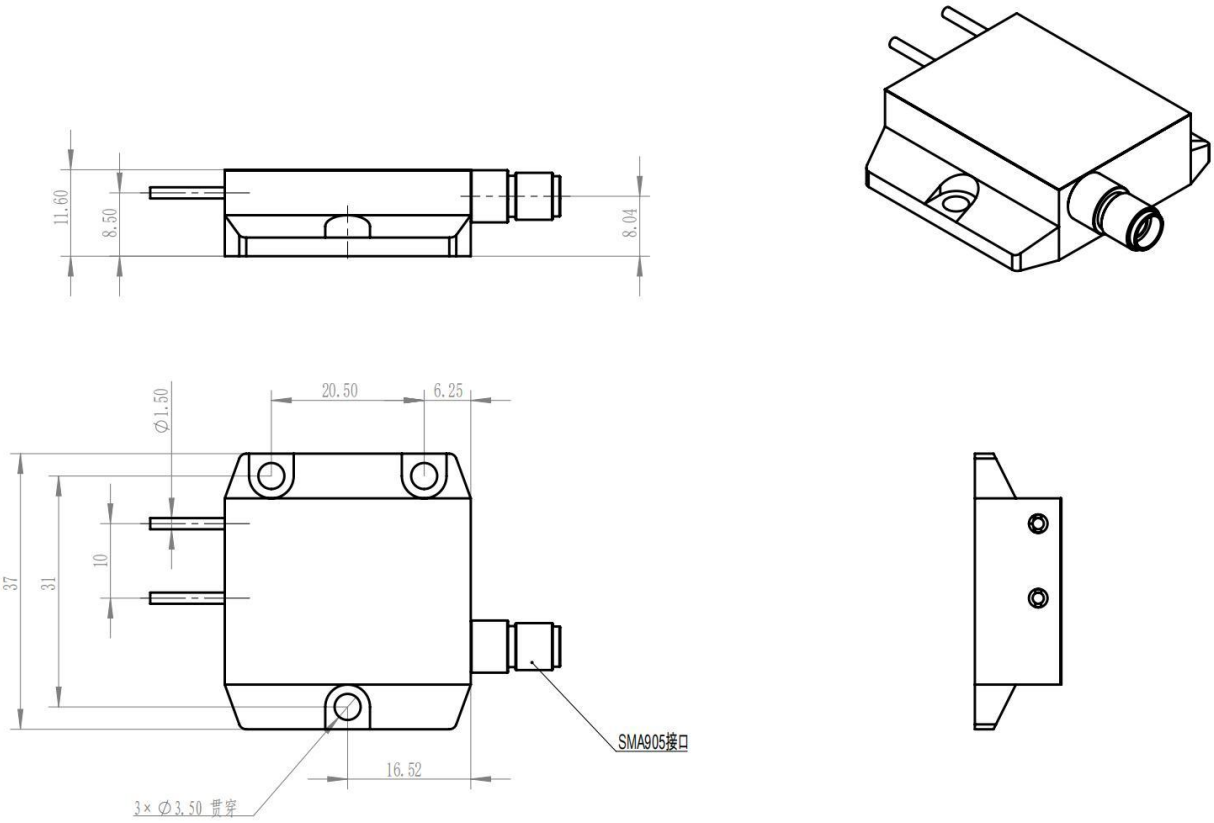
Parameter	Unit	Minimum	Typical	Maximum
Fiber core diameter	micrometers	-	200	-
Fiber numerical aperture	-	-	0.22	-
Fiber length	m	-	-	-
NA (95% energy)	-	-	0.15	0.17
Indicator wavelength	nm	-	-	-
Indicator optical power	mW	-	-	-
Indicator current	mA	-	-	-
Indicator voltage	V	-	-	-

Operating conditions

Parameter	Specification
Operating temperature	15 / 25 / 35 deg C (minimum / typical / maximum)
Storage temperature	-20 to +50 deg C
Humidity	Less than 70% at 25 deg C
Cooling method	Thermal conduction
Pipe specification / flow rate	Not specified / not specified
Fiber interface	Fixed fiber; SMA905 output; yellow 3 mm PVC jacket, without armor

Test condition: water temperature 25 °C. A dash indicates a value not specified in the supplied specification.

Mechanical dimensions



Dimensions in mm. Drawing callouts: SMA905 interface; 3 x diameter 3.50 mm through-holes.

Electrical interface

Pin	Function
1	LD- (laser diode negative)
2	LD+ (laser diode positive)

In the front view showing the two leads on the left, pin 1 is the upper lead and pin 2 is the lower lead.

Contact FULLSUNS

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