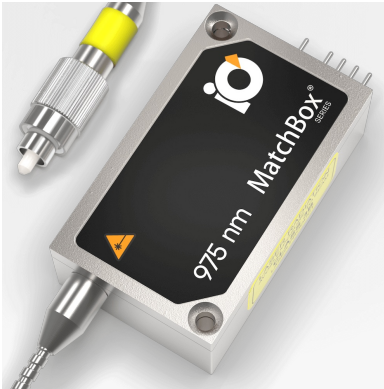




PART NUMBER 0975L-13A
ITEM NAME 975 NM LASER

PRODUCT DATASHEET



DESCRIPTION

975 nm laser module is fiber-coupled into a single-mode (SM) fiber and, as a standard, provided with FC/PC connector. Up to 60 mW output power could be reached with such a module.

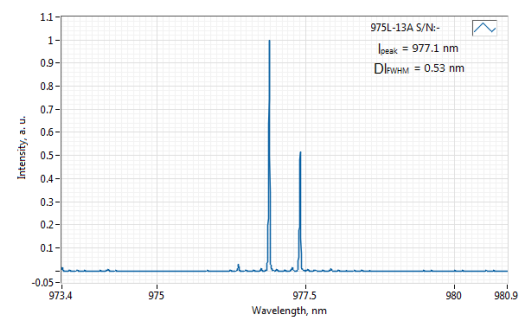
By default, this type of laser is built with FC/PC connector, but other fiber terminations are available upon request. Details about non-standard connector and the fiber used with it should be discussed with the Integrated Optics sales team.

SPECIFICATIONS

Specifications updated: 27 December 2022

Parameter	Minimum Value	Typical Value	Maximum Value
Central wavelength, nm	967	972	977
Longitudinal modes	-	Multiple	-
Spectral line width FWHM, nm	0.02	0.5	1.5
Output power, mW	-	100 ¹	-
Power stability, % (RMS, 8 hrs)	0.01	0.05 ²	0.25
Power stability, % (peak-to-peak, 8 hrs)	0.05	0.2 ³	1
Intensity noise, % (RMS, 20 Hz to 20 MHz)	0.05	0.25	0.6
Transversal modes	-	TEM00	-
M ² effective	-	1.05	1.1
Control interface type	-	UART ⁴	-
Operation mode	-	APC (CW)	-
Modulation bandwidth, MHz	-	10 ⁵	-
Input voltage, VDC	4.8	5	5.3
External power supply requirement	-	+5 V DC, 1.5 A	-
Dimensions (WxDxH), mm	-	50 x 30 x 18 ⁶	-
Fiber length, m	0.95	1	1.1
Heat-sinking requirement, °C/W	-	1	-
Optimum heatsink temperature, °C	15	20	30
Warm up time, mins (cold start)	0.1	0.5	1
Temperature stabilization	-	Internal TEC	-
External fan control	-	No ⁷	-
Overheat protection	-	Yes	-
Storage temperature, °C (non-condensing)	-10	-	50

TYPICAL SPECTRUM



Typical spectrum of 0975 nm diode laser. Measured with 20 pm resolution.

TYPICAL NEAR FIELD

