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PART NUMBER 52A-78A-XXY-XXY-16
ITEM NAME MULTI-WAVELENGTH LASER; SMA PORT (520 NM, 785 NM)

PRODUCT DATASHEET

DESCRIPTION

Multi-wavelength laser featuring two laser diodes integrated within an ultra-compact 'Matchbox' housing with an SMA port (for MM fiber). A classical dichroic mirror combining technique is used in combination with our proprietary micro-optics assembly to make this system both economical and compact. All optics and electronics are fitted into the 'Matchbox' housing. Combined wavelengths are standard for use in Life Sciences, Food sorting, Metrology, and Medical applications. An easy-to-use PC interface and separate TTL inputs allow full control over the individual wavelengths.

Features:

- Two wavelengths
- Plug-and-play
- Single user interface for both wavelengths

Advantages:

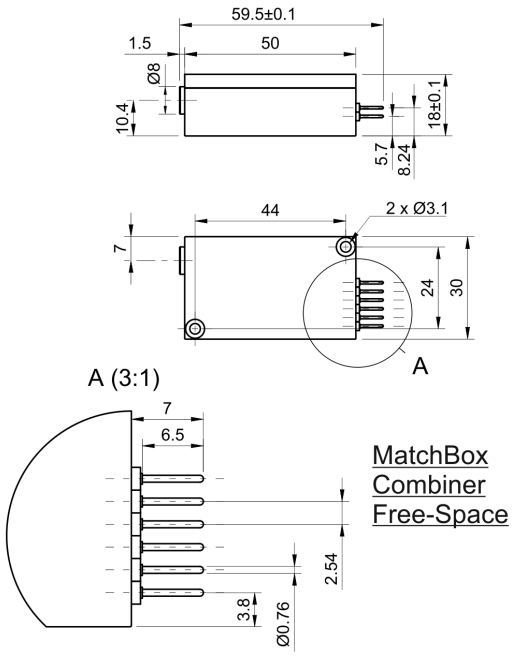
- Space-saving design
- No optics realignment
- Remote PC control

SPECIFICATIONS

Specifications updated: *25 April 2022*

Parameter	Minimum Value	Typical Value	Maximum Value
Output power, mW	-	520 nm - 70 785 nm - 100	-
Wavelength Tolerance	-	+/-3 nm	-
Longitudinal Modes	-	Multiple	-
Spectral line width FWHM, nm	-	1	2
Fiber Core Diameter	-	105 µm, 200 µm, 400 µm (+/- 2 %)	-
Power stability, % (RMS, 8 hrs) at 20°C	-	0.2	1
Intensity noise, % (RMS, 20 Hz to 20 MHz)	-	0.2 [1]	1
Transversal Mode	-	multimode (top-hat-like)	-
Control Interface	-	UART [2]	-
Operation Mode	-	ACC (CW)	-
Input voltage, VDC	8	9	12
External Power Supply Requirement	-	+9 V DC, 1.5 A [3]	+12 V DC, 1.5 A
Dimensions, mm	-	50 x 30 x 18	-
Beam height from the base, mm	-	10.4	-
Heat-sinking requirement, °C/W	-	<0.5	-
Optimum heatsink temperature, °C	-	20	25
Warm-up Time (Cold Start)	-	< 1	2
Temperature Stabilization	-	Internal TEC	-

DRAWING



Overheat Protection	-	Yes	-
Storage temperature, °C (non-condensing)	-	-	-
Net weight, kg	-	0.3	-
Max. power consumption, W	-	2 [4]	18
Warranty, months (op. hrs)	-	14 (10000) [5]	-
RoHS	-	Yes	-
CE Compliance	-	- General Product Safety Directive (GPSD) 2001/95/EC - (EMC) Directive 2004/108/EC	-
OEM Lasers Are Not Compliant With	-	IEC60825-1:2014 (compliant using additional accessories)	-

[1] Noise level is measured with a fast photodiode connected to an oscilloscope. The overall system bandwidth is from 2 kHz to 20 MHz.

[2] The break-out-box AM-C9 can be used for conversion of UART communication to USB.

[3] If the break-out-box AM-C9 is used, a PD (Power Delivery) type of power supply can be used.

[4] For single enabled wavelength.

[5] Whichever occurs first.

Note: Product specifications are subject to change without prior notice to improve reliability, function or design or otherwise.