### 13MM-M125-4+55CM-639-9-H18-T15-CS-7

Laser Macro Focus Generator with approx. circular beam profile



#### FEATURES

Laser spot with approx. circular beam profile and extended depth of focus.

- Spot diameter: 0.038 x 0.033 mm
- Wavelength: 639 nm
- Working distance: 111 mm
- Depth of focus: 2.78 mm
- Macro Focus Generator for extended depth of focus
- With RS232 interface



## DESCRIPTION

The laser diode beam source type 13MM-M125-4+55CM-639-9-H18-T15-CS-7 produces a circular laser spot with extended depth of focus. The beam profile is approx. Gaussian. More precisely it has an elliptical intensity distribution clipped by a circular aperture.

The laser has integrated electronics <u>type CS</u> for control of the laser output power and serial interface (RS232). The output power can be controlled using the <u>modulation input</u> <u>ports (TTL and analog)</u> or manually using the potentiometer.

The working distance can be adjusted by adjusting the focus setting. Please note that the spot diameter increases proportionally to the working distance. A fine-adjustment of the distance between laser and target is recommended for fine-focusing.



## **TECHNICAL DATA**

#### 13MM-M125-4+55CM-639-9-H18-T15-CS-7

| Series                    | 13MM                                |            |
|---------------------------|-------------------------------------|------------|
| Order Code                | 13MM-M125-4+55CM-639-9-H18-T15-CS-7 |            |
| Line profile              | Gaussian Intensity Distribution     |            |
| Wavelength                | 639 +10/-10 nm                      |            |
| Laser output power        | 9 mW                                |            |
| Laser safety class        | 3В                                  |            |
| Focussing range           | 110-205 mm                          |            |
| Working distance          | 111 mm                              |            |
| Spot height               | 0.033 mm                            |            |
| Spot width                | 0.038 mm                            |            |
| Depth of focus            | 2.78 mm                             |            |
| Diameter laser module     | 25/28 mm                            |            |
| Module length             | 84.3 mm                             |            |
| Installation length       | 225.3 mm                            |            |
| Cable length              | 1.5 m                               |            |
| Connector type            | Lumberg SV70 IEC 61076-2-106        |            |
| Supply voltage            | 5 ± 0.2 V                           |            |
| Max. current consumption  | 0.25 A                              |            |
| Working temperature       | 0 - 40 °C                           |            |
| Modulation inputs         | Analog                              | TTL        |
| Input resistance          | 9 kOhm                              | 9 kOhm     |
| Max. modulation frequency | 0.001 kHz                           | 250 kHz    |
| Modulation delay ON/OFF   | 3000/3000 µs                        | 0.5/0.2 μs |
| Rise / Fall time          | 200000/200000 µs                    | 0.8/0.4 μs |
| nterface RS23             |                                     | RS232      |

## ACCESSORIES

- **50HD-15** Hex key WS 1.5
- 9D-12 Screwdriver WS 1.2

13MK-25-36-10-F

Mounting Console with flat base plate



| 13MK-25-36-10-M | Mounting Console with base plate with dovetail |
|-----------------|--|
|                 | profile  |
|                 |  |

PS051007E Power Supply 5 V for laser modules with RS232 interface

## **RELATED PRODUCTS**

LASER MODULES SERIES 13M

- Micro Focus Generator
- Elliptical Gaussian beam profile

LASER MODULES SERIES LNC-13MM

- Macro Focus Generator
- Circular beam profile
- Extended depth of focus
- Low noise

LASER MODULES SERIES 13MMC

- Laser Macro Focus Generator
- Rotationally symmetric beam profile
- Extended depth of focus

LASER MODULES SERIES 5MM

- Compact Laser Macro Focus Generator
- Circular beam profile and
- Extended depth of focus

This is a printout of the page <u>https://sukhamburg.com/products/details/13MM-M125-4\_55CM-639-9-H18-T15-CS-7</u> from 5/8/2024

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