

13MM-M100-4+55CM-685-27-H13-T12-C-6

Laser Macro Focus Generator with approx. circular beam profile



FEATURES

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

- Spot diameter: 0.033 x 0.029 mm
- Wavelength: 685 nm
- Working distance: 84 mm
- Depth of focus: 1.91 mm

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- Macro Focus Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 13MM-M100-4+55CM-685-27-H13-T12-C-6 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 [type C](#) for control of the laser output power. The output power can be controlled using the [modulation input ports \(TTL and analog\)](#), 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-M100-4+55CM-685-27-H13-T12-C-6

| | | |
|---------------------------|-------------------------------------|---------|
| Series | 13MM | |
| Order Code | 13MM-M100-4+55CM-685-27-H13-T12-C-6 | |
| Line profile | Gaussian Intensity Distribution | |
| Wavelength | 685 +10/-10 nm | |
| Laser output power | 27 mW | |
| Laser safety class | 3B | |
| Focussing range | 80-110 mm | |
| Working distance | 84 mm | |
| Spot height | 0.029 mm | |
| Spot width | 0.033 mm | |
| Depth of focus | 1.91 mm | |
| Diameter laser module | 25/28 mm | |
| Module length | 84.3 mm | |
| Installation length | 198.3 mm | |
| Cable length | 1.5 m | |
| Connector type | Lumberg SV50 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 | 22 kOhm | 22 kOhm |
| Max. modulation frequency | 100 kHz | 100 kHz |
| Modulation delay ON/OFF | 1/0.5 µs | 2/1 µs |
| Rise / Fall time | 3/2 µs | 3/2 µs |

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 |
| PS051003E | Power Supply 5 V |

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

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