

13MM-M125-4+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: 0.041 x 0.036 mm
- Wavelength: 685 nm
- Working distance: 111 mm
- Depth of focus: 2.98 mm

- Macro Focus Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 13MM-M125-4+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-M125-4+55CM-685-27-H13-T12-C-6

Series	13MM	
Order Code	13MM-M125-4+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	110-205 mm	
Working distance	111 mm	
Spot height	0.036 mm	
Spot width	0.041 mm	
Depth of focus	2.98 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 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

This is a printout of the page https://sukhamburg.com/products/details/13MM-M125-4_55CM-685-27-H13-T12-C-6 from 4/25/2024

CONTACT

For more information please contact:

Schäfter + Kirchhoff GmbH

Kieler Str. 212

22525 Hamburg

Germany

Tel: +49 40 85 39 97-0

Fax: +49 40 85 39 97-79

info@sukhamburg.de

www.sukhamburg.com

LEGAL NOTICE

Copyright 2020 Schäfter+Kirchhoff GmbH. All rights reserved.

Text, image, graphic, sound, video and animation files and their arrangement on Schäfter+Kirchhoff GmbH webpages are protected by copyright and other protective laws. The content may not be copied for commercial use or reproduced, modified or used on other websites. [\[more\]](#)