

13MM-M125-4+55CM-685-27-H13-T12-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: 0.041 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
- With RS232 interface



DESCRIPTION

The laser diode beam source type 13MM-M125-4+55CM-685-27-H13-T12-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 [type CS](#) for control of the laser output power and serial interface (RS232). 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-CS-7

Series	13MM	
Order Code	13MM-M125-4+55CM-685-27-H13-T12-CS-7	
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 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
Interface	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	<ul style="list-style-type: none">▪ Micro Focus Generator▪ Elliptical Gaussian beam profile
LASER MODULES SERIES LNC-13MM	<ul style="list-style-type: none">▪ Macro Focus Generator▪ Circular beam profile▪ Extended depth of focus▪ Low noise
LASER MODULES SERIES 13MMC	<ul style="list-style-type: none">▪ Laser Macro Focus Generator▪ Rotationally symmetric beam profile▪ Extended depth of focus
LASER MODULES SERIES 5MM	<ul style="list-style-type: none">▪ Compact Laser Macro Focus Generator▪ Circular beam profile and▪ Extended depth of focus

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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

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