

13MM-S250-4+55CM-450-33-O06-T15-PS-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: 0.054 x 0.046 mm
- Wavelength: 450 nm
- Working distance: 233 mm
- Depth of focus: 7.83 mm

- Macro Focus Generator for extended depth of focus
- With RS232 interface



DESCRIPTION

The laser diode beam source type 13MM-S250-4+55CM-450-33-O06-T15-PS-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 PS](#) with micro-controller 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-S250-4+55CM-450-33-O06-T15-PS-7

Series	13MM	
Order Code	13MM-S250-4+55CM-450-33-O06-T15-PS-7	
Line profile	Gaussian Intensity Distribution	
Wavelength	450 +10/-10 nm	
Laser output power	33 mW	
Laser safety class	3B	
Focussing range	205-410 mm	
Working distance	233 mm	
Spot height	0.046 mm	
Spot width	0.054 mm	
Depth of focus	7.83 mm	
Diameter laser module	25/28 mm	
Module length	84.3 mm	
Installation length	347.3 mm	
Cable length	1.5 m	
Connector type	Lumberg SV70 IEC 61076-2-106	
Supply voltage	5 ± 0.2 V	
Max. current consumption	0.5 A	
Working temperature	15 - 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	0.6/0.2 µs
Rise / Fall time	200000/200000 µs	0.2/0.2 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

- 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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