

13LNM40-M100-7+90CM-685-12-H13-M60-CS-7

Macro Line Generator with a fan angle



FEATURES

Laser line with a fan angle, approx. uniform intensity distribution and extended depth of focus.

- Line length: 30 mm
- Line width: 14 μm
- Wavelength: 685 nm
- Working distance: 83.5 mm
- Depth of focus: 0.623 mm

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



DESCRIPTION

The laser diode beam source type 13LNM40-M100-7+90CM-685-12-H13-M60-CS-7 has a fan angle of 10°, approx. uniform intensity distribution along the laser line and extended depth of focus.

More precisely, it is Gaussian clipped by an aperture with an edge intensity of 75 %. Across the laser line the intensity distribution is Gaussian.

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.

For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.

TECHNICAL DATA

13LNM40-M100-7+90CM-685-12-H13-M60-CS-7

| | | |
|---------------------------|---|-----------------|
| Series | 13LNM40 | |
| Order Code | 13LNM40-M100-7+90CM-685-12-H13-M60-CS-7 | |
| Line profile | Constant Intensity Distribution | |
| Line type | Laser Macro Line | |
| Wavelength | 685 +10/-10 nm | |
| Laser output power | 12 mW | |
| Laser safety class | 3B | |
| Fan angle α | 10 deg | |
| Focussing range | 83.5-83.5 mm | |
| Working distance | 83.5 mm | |
| Line length | 30 mm | |
| Line width | 0.014 mm | |
| Depth of focus | 0.623 mm | |
| Edge intensity | 75 % | |
| Diameter laser module | 25/28 mm | |
| Module length | 134.4 mm | |
| Installation length | 247.9 mm | |
| Cable length | 1.5 m | |
| Connector type | Lumberg SV70 IEC 61076-2-106 | |
| Supply voltage | 5 \pm 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 μ s | 0.5/0.2 μ s |
| Rise / Fall time | 200000/200000 μ s | 0.8/0.4 μ s |
| Interface | RS232 | |

DOWNLOADS



[951210000051.pdf](#)

ACCESSORIES

9D-12

Screwdriver WS 1.2

PS051007E

Power Supply 5 V for laser modules with RS232 interface

RELATED PRODUCTS

LASER MODULES SERIES 13LN

- Micro Line, **small** fan angle
- Uniform intensity distribution
- Thin lines

LASER MODULES SERIES LNC-13LNM

- Macro Line Generator, **small** fan angle
- Uniform intensity distribution
- Extended depth of focus
- Low noise

LASER MODULES SERIES 13LRM

- Macro Line Generator, fan angle
- Uniform intensity distribution
- Extended depth of focus

LASER MODULES SERIES 5LMM+25CM

- **Compact** Micro Line, **small** fan angle
- Gaussian intensity distribution
- Extended depth of focus

LASER MODULES SERIES 5LPM+25CM

- **Compact** Macro Line, **large** fan angle
- Gaussian intensity distribution
- Extended depth of focus

LASER MODULES SERIES 5LMM

- Macro Line, **small** fan angle
- Gaussian intensity distribution
- Extended depth of focus

LASER MODULES SERIES 5LPM

- Macro Line, **large** fan angle
- Gaussian intensity distribution
- Extended depth of focus

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