

5LT-250-2+55CM-685-39-H13-A8-CS-7

Semi-telecentric Micro Line Generator



FEATURES

Semi-telecentric laser line with constant line length of 2.4 mm.

Line length: 2.4 mm
Line width: 45 μm
Wavelength: 685 nm
Working distance: 250 mm

- Micro Line Generator for small laser line widths and high power density in the focal plane
- With RS232 interface





DESCRIPTION

The laser diode beam source type 5LT-250-2+55CM-685-39-H13-A8-CS-7 produces a semi-telecentric laser line with 2.4 mm line length. In this case the line length is given on the 13.5%-level. The intensity profile is Gaussian in line direction and the line is truncated at 4.8 mm. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics <u>type CS</u> for control of the laser output power and serial interface (RS232). The output power can be controlled using the <u>modulation input ports (TTL and analog)</u> 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

5LT-250-2+55CM-685-39-H13-A8-CS-7

Line profile Gaussian Intensity Distribution Line type Laser Micro Line Wavelength 685 +10/-10 nm Laser output power 39 mW Laser safety class 3B Focussing range 250-250 mm Working distance 250 mm Line length 2.4 mm Line width 0.045 mm Rayleigh range 4.73 mm Edge intensity 15 % Diameter laser module 25/28 mm Module length 73.1 mm Installation length 353.1 mm Cable length 1.5 m Connector type Lumberg SV70 IEC 61076-2-106 Supply voltage 5 ± 0.2 V Max. current consumption 0.25A 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.	Series		5LT	
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Module length 73.1 mm Installation length 353.1 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	Edge intensity	15 %		
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Connector typeLumberg SV70 IEC 61076-2-106Supply voltage5 ± 0.2 VMax. current consumption0.25 AWorking temperature0 - 40 °CModulation inputsAnalogTTLInput resistance9 kOhm9 kOhmMax. modulation frequency0.001 kHz250 kHzModulation delay ON/OFF3000/3000 μs0.5/0.2 μsRise / Fall time200000/2000000 μs0.8/0.4 μs	Installation length	353.1 mm		
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	Cable length	1.5 m		
Max. current consumption0.25 AWorking temperature0 - 40 °CModulation inputsAnalogTTLInput resistance9 kOhm9 kOhmMax. modulation frequency0.001 kHz250 kHzModulation delay ON/OFF3000/3000 μs0.5/0.2 μsRise / Fall time200000/2000000 μs0.8/0.4 μs	Connector type	Lumberg SV70 II	Lumberg SV70 IEC 61076-2-106	
Working temperature0 - 40 °CModulation inputsAnalogTTLInput resistance9 kOhm9 kOhmMax. modulation frequency0.001 kHz250 kHzModulation delay ON/OFF3000/3000 μs0.5/0.2 μsRise / Fall time200000/200000 μs0.8/0.4 μs	Supply voltage	5 ± 0.2 V		
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	Max. current consumption		0.25 A	
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	Working temperature		0 - 40 °C	
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Modulation delay ON/OFF 3000/3000 μs 0.5/0.2 μs Rise / Fall time 200000/200000 μs 0.8/0.4 μs	Input resistance	9 kOhm	9 kOhm	
Rise / Fall time 200000/200000 μs 0.8/0.4 μs	Max. modulation frequency	0.001 kHz	250 kHz	
	Modulation delay ON/OFF	3000/3000 μs	0.5/0.2 μs	
Interface	Rise / Fall time	200000/200000 μs	0.8/0.4 μs	
RS232	Interface	RS232		



DOWNLOADS



ACCESSORIES

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

Power Supply 5 V for laser modules with RS232 PS051007E

interface

RELATED PRODUCTS

SERIES 13LT

LASER MODULES Semi-telecentric Macro Line **SERIES 5LTM-2**

Gaussian intensity distribution

Constant line length ca. 2 mm

Extended depth of focus

LASER MODULES Semi-telecentric Macro Line **SERIES LNC-5LTM-2**

Gaussian intensity distribution

Constant line length ca. 2 mm

Extended depth of focus

Low noise

LASER MODULES Semi-telecentric Micro Line

Uniform intensity distribution

Constant line length 15 mm

LASER MODULES ■ Compact semi-telecentric Micro Line

SERIES 5LT-1+25CM Gaussian intensity distribution

Constant line length ca. 4.8 mm

LASER MODULES Semi-telecentric Micro Line

SERIES 5LT-1 Gaussian intensity distribution

Constant line length ca. 4.8 mm



LASER MODULES SERIES 5LT-2+25CM

- Compact semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. 2 mm

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