

5LT-250-1+55CM-685-39-H13-A8-CS-7

Semi-telecentric Micro Line Generator



FEATURES

Semi-telecentric laser line with constant line length of 4.8 mm.

Line length: 4.8 mm
Line width: 97 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-250-1+55CM-685-39-H13-A8-CS-7 produces a semi-telecentric laser line with 4.8 mm line length. The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 15 %. 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-250-1+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 3 Focussing range 250-250 mm Working distance 250 mm Line length 4.8 mm Line width 0.097 mm Rayleigh range 21.6 mm Edge intensity 15 g Diameter laser module 25/28 mm Module length 73.1 mm Installation length 353.1 mm Cable length 1.5 mm Connector type Lumberg SV70 IEC 61076-2-10 Supply voltage 5 ± 0.2 Max. current consumption 0.25 Working temperature 0 - 40 ° Modulation inputs Analog TT Input resistance 9 kOhm 9 kOhm Max. modulation frequency 0.001 kHz 250 kHz	Series		5LT	
Line type Laser Micro Line Wavelength 685 +10/-10 nr Laser output power 39 m/v Laser safety class 3 Focussing range 250-250 mr Working distance 250 mr Line length 4.8 mr Line width 0.097 mr Rayleigh range 21.6 mr Edge intensity 159 Diameter laser module 25/28 mr Module length 73.1 mr Installation length 353.1 mr Cable length 1.5 r Connector type Lumberg SV70 IEC 61076-2-10 Supply voltage 5 ± 0.2 mr Max. current consumption 0.25 mr Modulation inputs Analog TT Input resistance 9 kOhm 9 kOhr Max. modulation frequency 0.001 kHz 250 kH	Order Code	5LT-250-1+55CM-685-39-H13-A8-CS-7		
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Line width 0.097 mm Rayleigh range 21.6 mm Edge intensity 15 g Diameter laser module 25/28 mm Module length 73.1 mm Installation length 353.1 mm Cable length 1.5 mm Connector type Lumberg SV70 IEC 61076-2-10 Supply voltage 5 ± 0.2 mm Max. current consumption 0.25 mm Working temperature 0 - 40 mm Modulation inputs Analog TT Input resistance 9 kOhm 9 kOhm Max. modulation frequency 0.001 kHz 250 kHz	Working distance	250 mm		
Rayleigh range 21.6 mm Edge intensity 15.9 Diameter laser module 25/28 mm Module length 73.1 mm Installation length 353.1 mm Cable length 1.5 mm Connector type Lumberg SV70 IEC 61076-2-10 Supply voltage 5 ± 0.2 Max. current consumption 0.25 Working temperature 0 - 40 °c Modulation inputs Analog TT Input resistance 9 kOhm 9 kOhm Max. modulation frequency 0.001 kHz 250 kHz	Line length	4.8 mm		
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Diameter laser module25/28 mmModule length73.1 mmInstallation length353.1 mmCable length1.5 mmConnector typeLumberg SV70 IEC 61076-2-10Supply voltage5 ± 0.2 mmMax. current consumption0.25 mmWorking temperature0 - 40 mmModulation inputsAnalogTTInput resistance9 kOhm9 kOhmMax. modulation frequency0.001 kHz250 kHz	Rayleigh range	21.6 mm		
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Cable length1.5 mConnector typeLumberg SV70 IEC 61076-2-10Supply voltage5 ± 0.2 mMax. current consumption0.25 mWorking temperature0 - 40 mModulation inputsAnalogTTInput resistance9 kOhm9 kOhmMax. modulation frequency0.001 kHz250 kH	Module length	73.1 mm		
Connector typeLumberg SV70 IEC 61076-2-10Supply voltage5 ± 0.2Max. current consumption0.25 /rWorking temperature0 - 40 °cModulation inputsAnalogTTInput resistance9 kOhm9 kOhrMax. modulation frequency0.001 kHz250 kH	Installation length	353.1 mm		
Supply voltage $5 \pm 0.2\%$ Max. current consumption 0.25% Working temperature $0 - 40\%$ Modulation inputsAnalogTTInput resistance 9kOhm 9kOhm Max. modulation frequency 0.001kHz 250kHz	Cable length	1.5 m		
Max. current consumption0.25 /rWorking temperature0 - 40 °cModulation inputsAnalogTTInput resistance9 kOhm9 kOhrMax. modulation frequency0.001 kHz250 kHz	Connector type	Lumberg SV70 IEC 61076-2-106		
Working temperature0 - 40 °CModulation inputsAnalogTTInput resistance9 kOhm9 kOhrMax. modulation frequency0.001 kHz250 kH	Supply voltage	5 ± 0.2 V		
Modulation inputs Analog TT Input resistance 9 kOhm 9 kOhr Max. modulation frequency 0.001 kHz 250 kH	Max. current consumption	0.25 A		
Input resistance 9 kOhm 9 kOhr Max. modulation frequency 0.001 kHz 250 kH	Working temperature	0 - 40 °C		
Max. modulation frequency 0.001 kHz 250 kH	Modulation inputs	Analog	TTL	
	Input resistance	9 kOhm	9 kOhm	
Modulation delay ON/OFF 3000/3000 μs 0.5/0.2 μ	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 μ	Rise / Fall time	200000/200000 μs	0.8/0.4 μs	
Interface RS23				



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

PS051007E Power Supply 5 V for laser modules with RS232

interface

RELATED PRODUCTS

LASER MODULES SERIES 5LTM-1

- Semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. 4.8 mm
- Extended depth of focus

LASER MODULES
SERIES LNC-5LTM-1

- Semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. 4.8 mm
- Extended depth of focus
- Low noise

LASER MODULES SERIES 13LT

- Semi-telecentric Micro Line
- Uniform intensity distribution
- Constant line length 15 mm

LASER MODULES SERIES 5LT-2+25CM

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

LASER MODULES SERIES 5LT-1

- Semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. 4.8 mm



LASER MODULES SERIES 5LT-2

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

This is a printout of the page https://sukhamburg.com/products/details/5LT-250-1 55CM-685-39-H13-A8-CS-7 from 4/26/2024

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