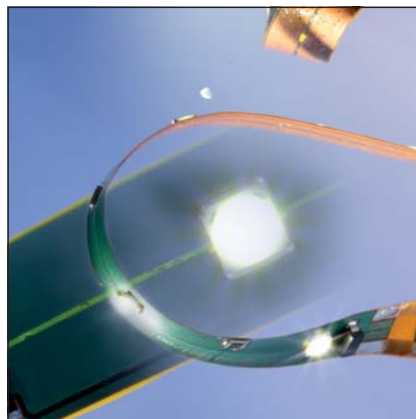




A New Lighting Experience



- extremely flexible line module with SMD LED
- low mounting height
- self-adhesive rear side
- lead-free soldered
- integrated ESD-protection-diode

LEDLine Flex SMD High Brightness

WU-M-359

Typical Applications

- Illumination of complex structures
- Marking paths, stairs, etc.
- Furniture lighting
- Light advertising
- Entertainment, shop design
- Architectural illumination

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LEDLine Flex SMD High Brightness

Technical Notes

- Dimensions of the entire LED Line Flex SMD: L x W = 4959 x 10 mm
- With 174 SMDs divisible in 29 single-steps (171 mm à 6 SMDs)
- Wide radiation angle (120°)
- Voltage supply: 24 V DC

Electrical Characteristics

at ambient temperature $t_a = 25\text{ °C}$

Type	Ref. No.	Colour	Number of SMDs	Current*	Voltage DC*	Power*
				A	V	W
WU-M-359-W	538111	White	174	3.8	24	92
WU-M-359-WW	535948	Warm white	174	3.8	24	92

Maximum Ratings

Exceeding the maximum ratings can lead to reduction of lifetime or destruction of the module.

Type	Voltage DC*		Operation temperature range at t_c point		Storage temperature range		Reverse voltage/LED V
	V min.	V max.	°C min.	°C max.	°C min.	°C max.	
All types	23	25	0	+85	-20	+85	5

Optical Characteristics

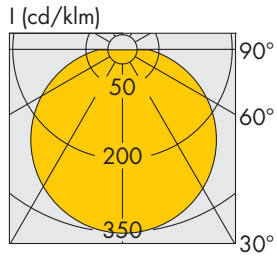
at ambient temperature $t_a = 25\text{ °C}$

Type	Ref. No.	Colour	Dom. wavelength* (nm) Colour temperature* (K)	Luminous flux* lm	Radiation angle* °
WU-M-359-W	538111	White	5000K	3250	120
WU-M-359-WW	535948	Warm white	2800K	2600	120

* On account of the complex manufacturing process of the modules the above values only represent statistical variables.
The values do not necessarily correspond exactly to the actual parameters of every single product which can vary from the typical specification.

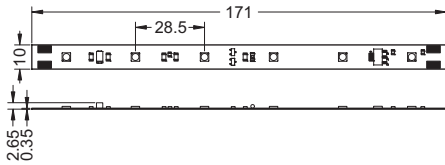
LEDLine Flex SMD High Brightness

Light Distribution Curve



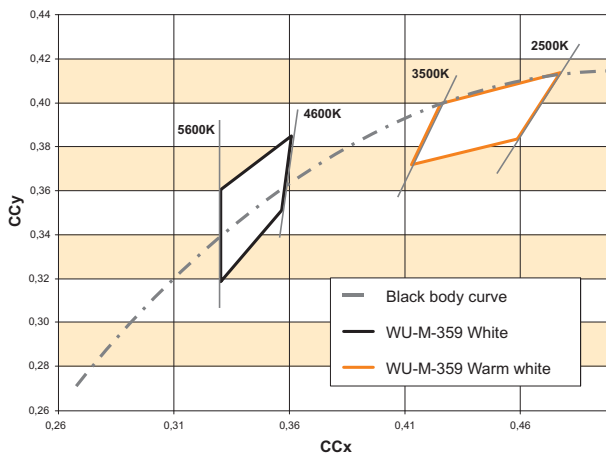
WU-M-359-W/-WW

Mechanical Dimensions



WU-M-359-W/-WW

Bins



Permissible measuring instrument error regarding colour values: ± 0.01

LEDLine Flex SMD High Brightness

Assembly and Safety Information

- LED modules and all PCB components must not be subjected to undue mechanical stress.
- The LEDLine Flex SMD High Brightness must not be operated in rolled-up condition.
- The circuit path must not be damaged or interrupted.
- Power supply units must be used for operation, in which the following protective measures are ensured:
 - Short-circuit protection
 - Overload protection
 - Overheating protection
 - SELV equiv. (Safety Extra Low Voltage)
- Please ensure the correct polarity of the leads prior to commissioning. Reversed polarity can destroy the modules.
- The maximum output of the power supply must be observed.
- An insulation layer has to be applied for prevention of short circuits when mounting on electrically conducting surfaces.
- Please ensure standard ESD (electrostatic discharge) protection measures are employed when handling and installing LED modules. Electrostatic discharge can damage LEDs.
- The modules are not protected against dust or moisture. When LED modules are operated in unduly moist or dusty environments, care must be taken to ensure each module is built into a protective casing in compliance with the correct IP classification or provided with corrosion protection. Damage caused by moisture and/or corrosion will not be recognised as a material or manufacturing defect.
- The separation of the LEDLine Flex SMD High Brightness is always possible if carefully done by means of scissors after 171 mm (white).
- Each LEDLine Flex SMD is backed by adhesive transfer tape (3M Adhesive Transfer Tape 9485) for easy assembly. Please observe the manufacturer's technical data provided at www.3M.com/converter. Products equipped with adhesive transfer tape must only be applied to dry and clean surfaces that are free from grease, oil, silicone or other soiling. It is therefore recommended to clean the substrate with isopropyl alcohol (IPA). Please ensure a full-surface bond over the entire contact area when sticking the module to the substrate. The following substances are regarded as critical for creating an adhesive bond:
 - Polyefins (polyethylene, polypropylene)
 - Rubber
 - Powder-coated materials
 - Silicone rubber
 - Teflon
 Owing to the varying application options and different types of surface as well as ambient conditions, VS accepts no liability for the quality of the adhesive bond achieved when mounting these products. Prior to sticking a VS product care must be taken to check whether the material in question is actually suitable for the intended purpose under consideration of all possible application-relevant influences. Supplementary holders must be used if necessary.
- The product must be stored no longer than 12 months (in packed condition) at approx. 20 °C and up to 50 % relative humidity in order to ensure optimal bonding of the back side.
- The contacting is effected through the soldering of leads on the provided soldering pads (labeled with 24 V ±). The soldering temperature must not exceed 260 °C. The maximum soldering time is 10 seconds.
- During installation a bending radius must not fall below 25 mm. On sharp edges the LEDLine Flex SMD High Brightness may only be bent at a position where no electronic components are mounted bending lengthwise only.
- Max. length of operation at $t_a = -20$ to 0°C and $U_{in} \leq 23.5\text{V}$: 4.104 m

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification. Please find further detailed information at www.vs-optoelectronic.com.