

LINEAR Rigid Slim Diffuse --- G1

Preliminary Technical Datasheet



Benefits

- Elegant appearance, soft lighting, super slim design.
- Seamless connection for structure and light
- Surface mount by screw/magnet for easy installation
- Available in warm white and cool white
- 120° viewing angle per module
- Dimmable

Applications

- Interior decoration.
- Show case & stock shelves.
- Retail & Supermarket.
- Corridor & ladder.

Technical Operating Data

Product	Color	No. of LEDs	Voltage [V DC]*	Power [W]*	Current [A]*	Color Temp [K]*	Lum. Flux [lm] *
LR700SD-G1-824-01	Warm White					2400 K	60
LR700SD-G1-827-01	Warm White					2700 K	62
LR700SD-G1-830-01	Warm White					3000 K	65
LR700SD-G1-835-01	Neutral White	14	24	0.9	0.038	3500 K	65
LR700SD-G1-840-01	Neutral White					4000 K	70
LR700SD-G1-850-01	Cool White					5000 K	70
LR700SD-G1-824-03	Warm White					2400 K	180
LR700SD-G1-827-03	Warm White					2700 K	186
LR700SD-G1-830-03	Warm White					3000 K	195
LR700SD-G1-835-03	Neutral White	42	24	2.7	0.114	3500 K	195
LR700SD-G1-840-03	Neutral White					4000 K	210
LR700SD-G1-850-03	Cool White					5000 K	210
LR700SD-G1-824-06	Warm White					2400 K	360
LR700SD-G1-827-06	Warm White					2700 K	372
LR700SD-G1-830-06	Warm White					3000 K	390
LR700SD-G1-835-06	Neutral White	91	24	5.9	0.248	3500 K	390
LR700SD-G1-840-06	Neutral White					4000 K	420
LR700SD-G1-850-06	Cool White					5000 K	420
LR700SD-G1-824-09	Warm White					2400 K	540
LR700SD-G1-827-09	Warm White					2700 K	558
LR700SD-G1-830-09	Warm White					3000 K	585
LR700SD-G1-835-09	Neutral White	133	24	8.6	0.360	3500 K	585
LR700SD-G1-840-09	Neutral White					4000 K	630
LR700SD-G1-850-09	Cool White					5000 K	630
LR700SD-G1-824-12	Warm White					2400 K	720
LR700SD-G1-827-12	Warm White					2700 K	745
LR700SD-G1-830-12	Warm White					3000 K	780
LR700SD-G1-835-12	Neutral White	182	24	11.7	0.495	3500 K	780
LR700SD-G1-840-12	Neutral White					4000 K	840
LR700SD-G1-850-12	Cool White					5000 K	840

*) All Data are related to the entire module.

Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

Technical Features

- Size (L x W x H):
102/284/603/876/1194 mm x 6.5 mm x 9 mm
- Max. available length to be connected in series:
3,000mm
- Pre-mounted connectors on both terminals for easy connection
- 24V Constant Voltage LED modules
- Colour consistency <4 SCDM
- CRI >80
- Up to 36,000 hrs lifetime

Minimum / Maximum Ratings

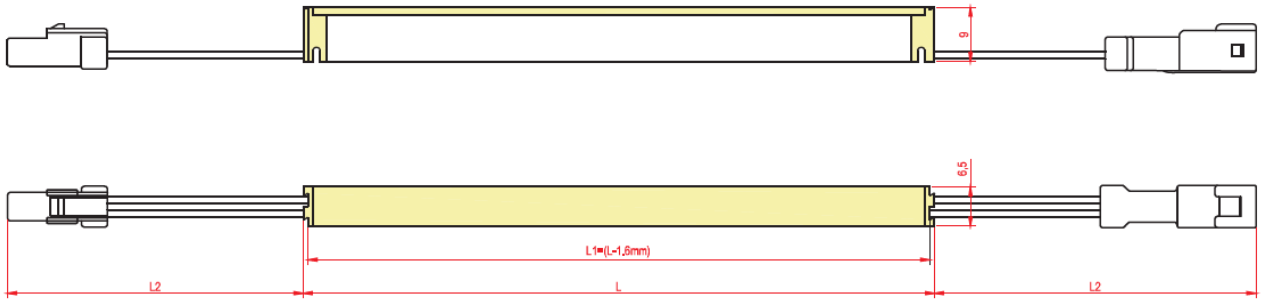
Product	Operating Temperature at Tc-Point [°C]*	Storage Temperature [°C]*	Voltage Range [V dc]*	Reverse Voltage [V dc]*
LR700SD-G1-824-01	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-827-01	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-830-01	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-835-01	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-840-01	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-850-01	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-824-03	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-827-03	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-830-03	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-835-03	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-840-03	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-850-03	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-824-06	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-827-06	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-830-06	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-835-06	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-840-06	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-850-06	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-824-09	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-827-09	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-830-09	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-835-09	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-840-09	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-850-09	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-824-12	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-827-12	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-830-12	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-835-12	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-840-12	-20 ... 70	-20 ... 75	23 ... 25	25
LR700SD-G1-850-12	-20 ... 70	-20 ... 75	23 ... 25	25

*) Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the LED Modules.

Exceeding maximum ratings for operating voltage will cause hazardous overload and will likely destroy the LED Modules.

The temperature of the LED modules must be measured at the Tc-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.

Dimension



Product	Length [mm]*	Width [mm]	Height[mm]
LR700SD-G1-824-01			
LR700SD-G1-827-01			
LR700SD-G1-830-01	102	6.5	9
LR700SD-G1-835-01			
LR700SD-G1-840-01			
LR700SD-G1-850-01			
LR700SD-G1-824-03			
LR700SD-G1-827-03			
LR700SD-G1-830-03	284	6.5	9
LR700SD-G1-835-03			
LR700SD-G1-840-03			
LR700SD-G1-850-03			
LR700SD-G1-824-06			
LR700SD-G1-827-06			
LR700SD-G1-830-06	603	6.5	9
LR700SD-G1-835-06			
LR700SD-G1-840-06			
LR700SD-G1-850-06			
LR700SD-G1-824-09			
LR700SD-G1-827-09			
LR700SD-G1-830-09	876	6.5	9
LR700SD-G1-835-09			
LR700SD-G1-840-09			
LR700SD-G1-850-09			
LR700SD-G1-824-12			
LR700SD-G1-827-12			
LR700SD-G1-830-12	1194	6.5	9
LR700SD-G1-835-12			
LR700SD-G1-840-12			
LR700SD-G1-850-12			

*) Tolerance TBD

Safety Information

- The LED module itself and all its components must not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.
- To avoid mechanical damage, the LED modules should be attached securely to the intended substrate. Heavy vibration should be avoided.

The LED module incorporates no protection against short circuits, overload or overheating.

In order to drive OSRAM LED-Modules safely, it is absolutely necessary to operate them with an electronically stabilized power supply protecting against short circuits, overload and overheating.

For dimming applications attention should be paid to specific references in "OPTOTRONIC® Technical Guide". To also ease the luminaire/installation approval, electronic control gear for LED or LED modules must carry the CE mark.

In Europe the declarations of conformity must include the following standards:

CE: EN 61347-2-13, EN 55015, EN 61547 and EN 61000-3-2.

Also check for the mark of an independent authorized certification institute.

Please see the relevant application guides for more detailed information.

When using power supplies other than OPTOTRONIC® the following basic safety features are required, in addition to any other application specific concerns and local safety codes.

OSRAM OPTOTRONIC® electronic control gear complies to all relevant standards and guarantees safe operation.

- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Observe correct polarity! Incorrect polarity will lead to no light emission and may cause damage of the LED module.
- Parallel connection is highly recommended as safe electrical operation mode. Serial connection is not recommended. Unbalanced voltage drop can cause hazardous overload and damage the LED module.
- The maximum length of LR700SD is 3M with power feed at one end.
- Pay attention to ESD steps when mounting the module.
- Please ensure that the power supply is of adequate power to operate the total load.
- LED modules are dimmable by means of PWM (pulse width modulation). It is recommended using the following OSRAM control gears: OPTOTRONIC® OT DIM, OT DALI DIM.
- Damage by corrosion will not be honored as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.
- For applications involving exposure to humidity and dust the module must be protected by a fixture or housing with a suitable protection class.

Assembly Information

- Pay attention to avoid highly corrosive atmospheres, e.g. permanent high humidity or Hydrogen Sulfide (H₂S). With current LED technology, H₂S is causing accelerated corrosion which will lead to shortened time life or premature failure. Sources for H₂S may be rubber, foamed rubber, soft-foam-tapes, sealing on rubber basis, natural sources (e.g. sulfur springs), etc. To avoid H₂S from sulfur-vulcanized rubber it is necessary to switch to silicon based materials or rubber that is Peroxid-crosslinked.
- Indication may be found in the material datasheet of the rubber supplier.

Ordering Guide

Product code	Product name	EAN 10*	S-Unit*
LR700SD-G1-824-01	LINEAR Rigid Slim Diffuse 102mm 2400K	4052899557291	
LR700SD-G1-827-01	LINEAR Rigid Slim Diffuse 102mm 2700K	4052899557314	
LR700SD-G1-830-01	LINEAR Rigid Slim Diffuse 102mm 3000K	4052899557338	
LR700SD-G1-835-01	LINEAR Rigid Slim Diffuse 102mm 3500K	MTO	200
LR700SD-G1-840-01	LINEAR Rigid Slim Diffuse 102mm 4000K	4052899557352	
LR700SD-G1-850-01	LINEAR Rigid Slim Diffuse 102mm 5000K	MTO	
LR700SD-G1-824-03	LINEAR Rigid Slim Diffuse 284mm 2400K	4052899557437	
LR700SD-G1-827-03	LINEAR Rigid Slim Diffuse 284mm 2700K	4052899557451	
LR700SD-G1-830-03	LINEAR Rigid Slim Diffuse 284mm 3000K	4052899557475	
LR700SD-G1-835-03	LINEAR Rigid Slim Diffuse 284mm 3500K	MTO	100
LR700SD-G1-840-03	LINEAR Rigid Slim Diffuse 284mm 4000K	4052899557499	
LR700SD-G1-850-03	LINEAR Rigid Slim Diffuse 284mm 5000K	MTO	
LR700SD-G1-824-06	LINEAR Rigid Slim Diffuse 603mm 2400K	4052899557512	
LR700SD-G1-827-06	LINEAR Rigid Slim Diffuse 603mm 2700K	4052899557536	
LR700SD-G1-830-06	LINEAR Rigid Slim Diffuse 603mm 3000K	4052899557550	
LR700SD-G1-835-06	LINEAR Rigid Slim Diffuse 603mm 3500K	MTO	100
LR700SD-G1-840-06	LINEAR Rigid Slim Diffuse 603mm 4000K	4052899557574	
LR700SD-G1-850-06	LINEAR Rigid Slim Diffuse 603mm 5000K	MTO	
LR700SD-G1-824-09	LINEAR Rigid Slim Diffuse 876mm 2400K	4052899557598	
LR700SD-G1-827-09	LINEAR Rigid Slim Diffuse 876mm 2700K	4052899557611	
LR700SD-G1-830-09	LINEAR Rigid Slim Diffuse 876mm 3000K	4052899557635	
LR700SD-G1-835-09	LINEAR Rigid Slim Diffuse 876mm 3500K	MTO	100
LR700SD-G1-840-09	LINEAR Rigid Slim Diffuse 876mm 4000K	4052899557659	
LR700SD-G1-850-09	LINEAR Rigid Slim Diffuse 876mm 5000K	MTO	
LR700SD-G1-824-12	LINEAR Rigid Slim Diffuse 1,194mm 2400K	4052899557673	
LR700SD-G1-827-12	LINEAR Rigid Slim Diffuse 1,194mm 2700K	4052899557697	
LR700SD-G1-830-12	LINEAR Rigid Slim Diffuse 1,194mm 3000K	4052899557710	
LR700SD-G1-835-12	LINEAR Rigid Slim Diffuse 1,194mm 3500K	MTO	100
LR700SD-G1-840-12	LINEAR Rigid Slim Diffuse 1,194mm 4000K	4052899557734	
LR700SD-G1-850-12	LINEAR Rigid Slim Diffuse 1,194mm 5000K	MTO	

* EAN 10: Ordering number per single sale unit

* S-Unit: Modules / accessory number per shipping unit

Note: Typical performance data are subject to change without any further notice, particularly as LED technology evolves.

Sales and Technical Support

OSRAM Asia Pacific

5/F, Hantang Building, OCT
Shennan Ave, Nan Shan District,
518053, Shenzhen, Guangdong, P.R.
China

www.osram.asia

Sales and technical support is given by the
local OSRAM subsidiaries.
On our world wide homepage all OSRAM
subsidiaries are listed with complete address
and phone numbers.