

Basic Flex G3 Shortpitch Anti-Sulur

Technical Datasheet

Product description

Basic Flex G3 shortpitch is design for high uniformity, and cost-effective solution, widely used for embedded lighting. Use it with our slimmest 24V OPTOTRONIC driver to get the most out of our flexible and easy system.

Key Features & Benefits

- Energy saving Low-power LED flexible strip
- Easy installation with Track
- Multi cut-able with CONNECT system
- Available in warm white and neutral white
- 3 SDCM, CRI80
- 120LED per meter for all series
- IP00 and IP66 version available*
- 120°viewing angle per module
- Dimmable
- Up to 30,000 hrs lifetime @ $t_{c\ max}$
- Switch capability: > 250,000 cycles.

*IP66 version if cut and re-connected by using OSRAM Connect system accessories, IP protect will be IP54.

Applications

- Hospitality lighting
- Cabinet lighting
- Signage
- Architecture lighting
- Wall integration

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1. Product Features

Product name	LED type	CCT(K)	Typ. Voltage(V)	Typ. current(mA)/m	Typical Flux(lm)/m	Typical Flux(lm)/Reel
BFP1500S-G3-830AS-01	2835(0.2W)	3000	24V	625	1550	1550
BFP1500S-G3-830AS-02	2835(0.2W)	3000	24V	625	1550	3000
BFP1500S-G3-830AS-05	2835(0.2W)	3000	24V	625	1550	7000

Remark: Testing @ Tp=45°C

2. Environmental and Application Conditions

Operating temperature range (Tc max)	Operating temperature range (TC max)	<u>85°C</u>
Ambient temperature(ta)	Ambient temperature(ta)	-25...55°C
Storage temperature range	Storage temperature range	-25...85°C
IP Rating of LED strip	IP Rating of LED strip	IP66
Lifetime @tc: <u>Tc=85°C</u> (L70/B50)	Lifetime @tc: <u>Tc=85°C</u> (L70/B50)	50000H
Minimum bending radius	Minimum bending radius	30mm
Maximum using length (50M is just the packaging length)	Maximum using length	<u>5m</u>
Anti-Sulfuring	The luminous flux is maintained at 96.25% @672H	H2S 50PPm

3. Standards / Normative Requirements

Approbation Requirements	CE BIS
Eye security	EN62471/EN62778
IP Grade	IP66 for uncut BFP X
LEDmodulesforgenerallighting-Safetyspecifications	IEC/EN62031
UV Proof	Only for BFP1500S-G3-830-AS, ASTM G154 cycle 1
Salt Mist Proof	Only for BFP1500S-G3-830-AS,ASTM B117
RoHS/Reach	Yes

4. Electrical parameters

	BFP1500S-G3-830-AS-05
Driving mode	Constant Voltage
Supply voltage range	23-25V
Supply current range	BFP1500:625mA \pm 10%1M 2.792A\pm10%5M
Power Range	1m 15W \pm 10% 5m:67W \pm 10%
Lumen Efficacy	3000K:95lm/W \pm 10%
Reverse Protection	Yes
Reverse Connection voltage range	<25
Working voltage for insulation	DC25.5V
Ra	\geq 80
Hot-plug protection	NO
ESD protection	Contact:+/-4KV Air:+/-8KV
LED current Per LEDs	31.25mA \pm 10%
Connection wire gauge	0.3m 20AWG(0.519mm ²) mm ²
Matching Driver	OT FIT 150/220-240/24 OSRAM

5. Optical parameters

5.1 CCT / Color and Color rendering parameters

Product	Tpy. CCT(K)	Min. CCT (K)	Max. CCT (K)	CIE x	CIE y	Bin in 3 step MacAdam Ellipse	Ra
BFP1500S-G3- 830-AS-05	3000	2820	3120	0.437	0.409	SDCM ≤ 3	≥80

Remarks:

Ranking at @ Tp=45°C,

1. Tolerance of measurements for the color rendering Ra is ≥80 ;
2. Tolerance of measurements for the Chromaticity Coordinate is SDCM setp 3 (x,y)±0.005, the tolerance of CCT should be calculated accordingly.

5.2 Brightness parameters

Product	CCT	Current(mA)	LED Brightness bin	lumen flux/m	
				Min.	Max.
BFP1500S-G3-830- R AS-05	3000K	625	2835 SDCM≤3	1395	1705

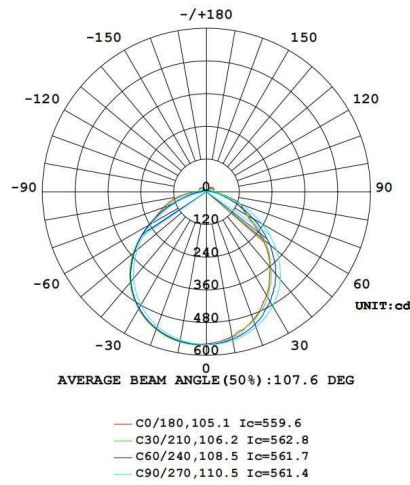
Testing DC 24V @ Tp=45°C

Notes:

- Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the LED Module.
- The temperature of the LED module must be measured at the tc-point according to EN60598-1 in thermal stable status. Exact location of tc point please see item 6.
- Due to the special conditions of the manufacturing processes of LED, the typical data or calculated correlations of technical parameters can only reflect statistical figures. These do not necessarily correspond to the actual parameters of each single product, which could differ from the typical data and calculated correlations or the typical characteristic line. If requested, e.g. because of technical improvements, these typ. data will be changed without any further notice.
- Tolerance of measurement of the luminous flux is 10 %.

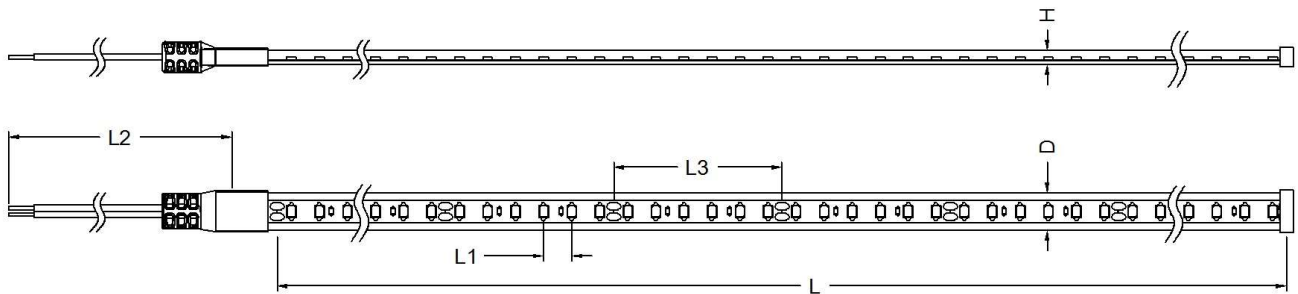
5.3 Light distribution()

AVERAGE BEAM ANGLE (50%): 110 °±10°



6. Product Drawing (1) Soft light bar drawing

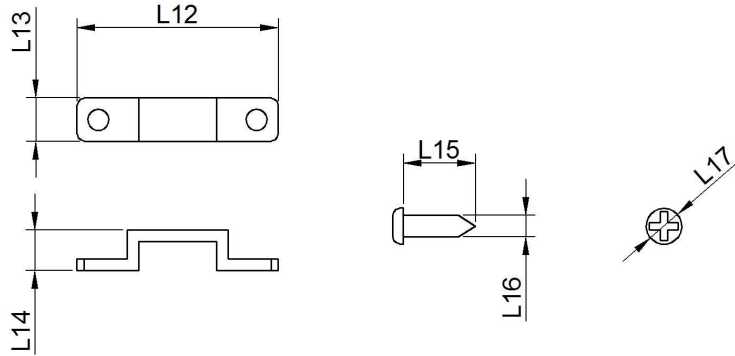
BFP1500S-G3-830-AS-05



Dimension/mm	BFP1500S-G3-830-AS-05						
	L1	L2	L3	D	H	L	Reel/mm
Min	7.33	285	49.00	10.0	3.7	4980.00	4980.00
Typ	8.33	300	50.00	10.3	4.0	5000.00	5000.00
Max	9.33	315	51.00	10.8	4.3	5020.00	5020.00

Remark:1. 3M 5604 Double sided tape Thickness 0.2mm, Width 10.5mm
 2. Recommended glue SC-1501

BFPS-G3-AS-Bracket



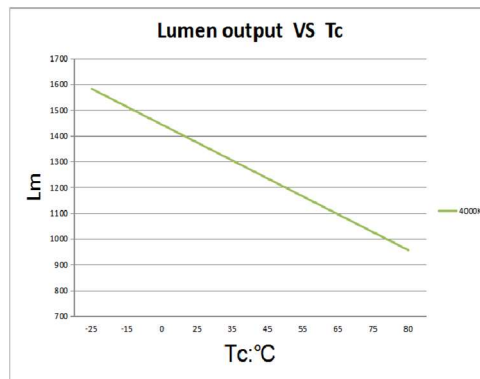
Dimension/mm	BFPS-G3-AS-Bracket						
	L12	L13	L14	L15	L16	L17	/
Min	27.5	5.7	5.1	9.0	2.5	4.0	/
Typ	28.0	6.0	5.6	10.0	3.0	5.0	/
Max	28.5	6.3	6.1	11.0	3.5	6.0	/

(2) Max. Cable length

Max. Cable Length – from driver to module											
Input: DC24V											
Item Code	Light Length (m)	Max. Cable Length									
		0.32mm ²		0.52mm ²		0.81mm ²		1.32mm ²		2.07mm ²	
		22AWG		20AWG		18AWG		16AWG		14AWG	
		m	ft	m	ft	m	ft	m	ft	m	ft
BFP1500S-G3830-AS-05	1	19	65	40	120	50	155	75	245	130	415
	2	15	40	20	70	25	85	45	150	75	240
	3	11	30	16	50	20	65	30	100	50	165
	4	6	20	10	30	12	40	20	65	30	100
	5	5	18	9	25	11	35	18	55	25	90
	6										
	7										
	8										

Standard:
 1. Ta=25°C; 2. Basing on the light loss no more than 10% when input voltage 24VDC.

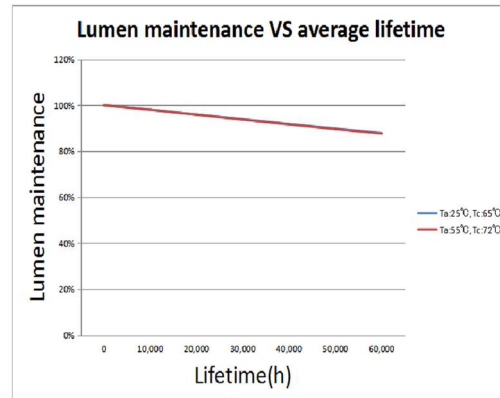
7. Performance diagram (1) power VS temperature diagram



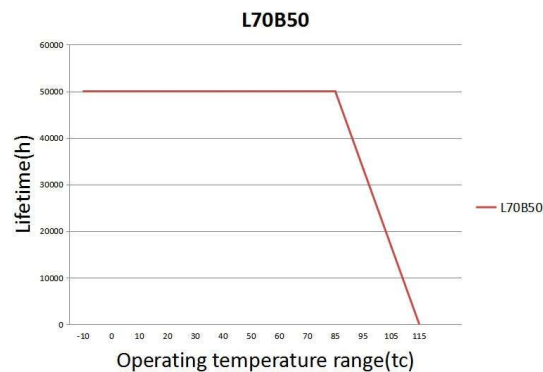
BFP1500S

(2) lifetime VS tc diagram-lumen output





BFP1500S

(3) lumen output VS tc / etc.(CCT= 4000K)

BFP1500S

8. Safety information

- ★ The LED module itself and all its components may not be mechanical stressed.
- ★ Assembly must not damage or destroy conducting paths on the circuit board.
- ★ To avoid mechanical damage to the connecting cables, the module should be attached securely to the fixture. Heavy vibration should be avoided.
- ★ 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 installation.
- ★ Please ensure that the power supply is of adequate power to operate the total load.
- ★ BFP1500S-G3-830-AS-05 needs to connect with constant voltage DC driver which must has stable constant current (+/-5%)tolerance suggested) output.
- ★ Electrical contact is achieved with the contact cables.
- ★ The design of the housing should be according to the IP standards in the application.

- ★ Pay attention to standard ESD precautions when installing the module.
- ★ If surge protection structure not within power supplier, a lightning protector should be needed additionally for outdoor application.
- ★ Tc value is 85°C; Higher tc application is not recommended. tp in remark are the same point with tc.

9. Packaging

Model	Specification	Packaging Size	Net Weight	Quantity
BFP1500S-G3-830-AS-05	10.3mm*4.0mm*5M	Carton: 420*420*170mm	64g/M	40PCS/Carton
BFPS-G3-AS-Bracket	28*6*5.6mm (Bracket)	Carton: 200*200*200mm	0.5g/PCS (Bracket)	4000PCS/Carton
	Φ 3.0*10mm (Screw)		0.5g/PCS (Screw)	8000PCS/Carton

Ordering Information

NO.	EAN10	Product Name
1	4062172366557	BFP1500S-G3-830-AS-01
2	4062172366670	BFP1500S-G3-830-AS-02
3	4062172353748	BFP1500S-G3-830-AS-05