

FLEXSTRIP LIGHT**BVM-SFPC5 SERIES****■ DESCRIPTION**

- Flexstrip light is made of high brightness SMD LEDs mounted on flexible printed circuit (FPC). Totally six different colors (red, orange red, yellow, green, blue, and white) are available for various applications.
- Bright View also provides controller for dimmer and programmable color change.

**■ FEATURES**

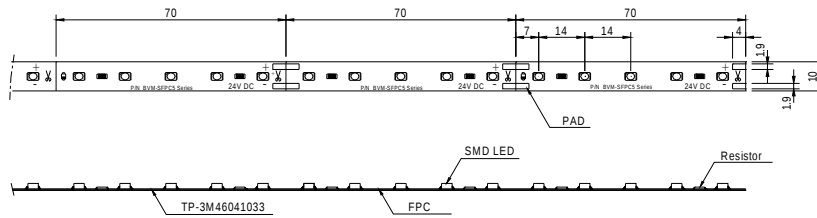
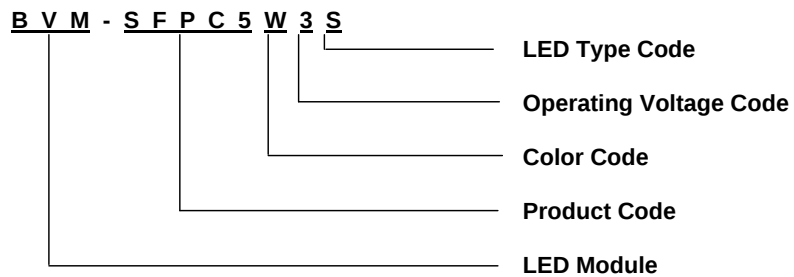
- Number of SMD LEDs : 300 pcs of ultra bright SMD LEDs
- Product size (LxWXH) : 4200mm x 10mm x 2.6mm
- Easy installation with the back adhesive-tape
- Products are packed into reel and can be cut at mark place into shorter units
- Shortest unit is 70mm with 5 LEDs; 60 shortest units per reel.
- Drive: 24VDC
- Low power consumption and high optical intensity
- Lead (Pb) free, and RoHS compliant

■ APPLICATIONS

- Amusement park & theater mood lighting
- Architectural decorative lighting
- Backlighting for signage letters
- Auditorium walkway lighting
- Stairway accent lighting
- Hallway lighting

■ PRODUCT DIMENSION

Unit : mm
Tolerance : $\pm 0.5\text{mm}$

**■ PART NUMBERING SYSTEM**

**■ ABSOLUTE MAXIMUM RATINGS AT Ta = 25 °C**

PARAMETER	BVM-SFPC5					
	R3S	O3S	Y3S	B3S	G3S	W3S
Operating Voltage (max.)	25V	25V	25V	25V	25V	25V
Electrostatic Discharge (Contact Mode)	±2000V					
Power Dissipation / Unit	0.63W					
Power Dissipation / Reel / 60Units	37.5W					
Operating Temperature Range	-30 °C to +50 °C					
Storage Temperature Range	-30 °C to +85 °C					

■ TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS AT 24VDC Ta = 25°C

SYMBOL	PARAMETER	R3S	O3S	Y3S	B3S	G3S	W3S	Unit
	Color	Red	Orange	Yellow	Blue	Green	White	*
λ_p	Peak Emission Wavelength	632	611	591	465	520	*	nm
λ_d	Dominant Wavelength	624	605	589	470	525	*	nm
$2\theta_{1/2}$	LED Viewing Angle	110	110	110	110	110	110	deg
I_U	Operating Current / Unit	20	20	20	20	20	20	mA
I_R	Operating Current / Reel	1.2	1.2	1.2	1.2	1.2	1.2	A
Φ_U	Luminous Flux / Unit	5.5	3.5	7.0	2.5	7.0	16.5	lm
Φ_R	Luminous Flux / Reel	330	210	420	150	420	990	lm

* White products are provided with different color temperature bins. (see following paragraph)

Note

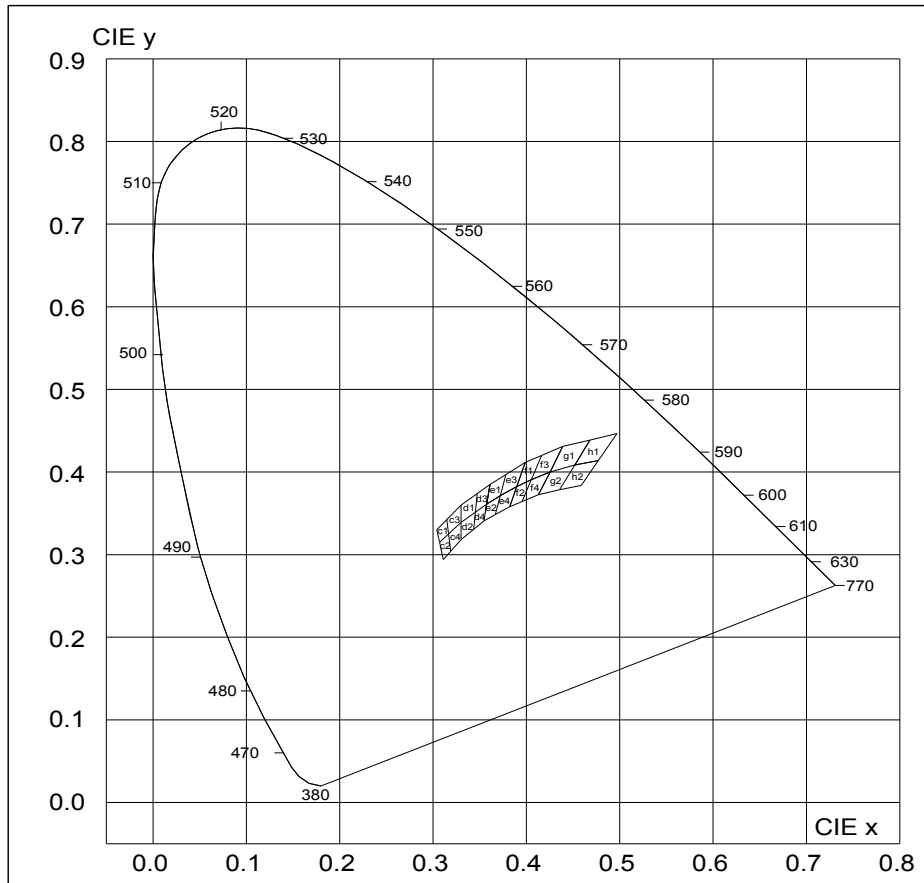
1. Luminous flux measurement tolerance : +/- 10%
2. View angle of the LED is the off-axis angle from the optical center line to the 1/2 luminous intensity of the peak value.

■ SMD LED DOMINANT WAVELENGTH FOR BIN CODE / nm

Orange		Yellow		Green	
Bin Code	Range	Bin Code	Range	Bin Code	Range
AC	602~606	YC	582~585	PG	518~521
AD	606~610	YD	585~588	PH	521~524
AE	610~614	YE	588~591	PI	524~527
AF	614~618	YF	591~594	PJ	527~530
AG	618~622	YG	594~597	PK	530~533

**■ BIN GRADE LIMITS CHROMATICITY COORDINATES**

Bin Code	Color Temperature Rank (Kelvin)	Chromaticity Coordinates				
c1	6300~7000	x	0.307	0.304	0.3147	0.3165
		y	0.315	0.33	0.3423	0.325
c2		x	0.311	0.307	0.3165	0.3188
		y	0.294	0.315	0.325	0.3038
c3	5500~6300	x	0.3165	0.3147	0.33	0.33
		y	0.325	0.3423	0.36	0.339
c4		x	0.3188	0.3165	0.33	0.33
		y	0.3038	0.325	0.339	0.318
d1	5000~5500	x	0.33	0.33	0.3473	0.3453
		y	0.339	0.36	0.3739	0.3514
d2		x	0.33	0.33	0.3453	0.3436
		y	0.318	0.339	0.3514	0.3307
d3	4500~5000	x	0.3453	0.3473	0.361	0.3575
		y	0.3514	0.3739	0.385	0.3612
d4		x	0.3436	0.3453	0.3575	0.3545
		y	0.3307	0.3514	0.3612	0.3408
f1	3800~3500	x	0.3897	0.3988	0.4162	0.4053
		y	0.3823	0.4116	0.42	0.3907
f2		x	0.3822	0.3897	0.4053	0.3954
		y	0.358	0.3823	0.3907	0.3642
f3	3200~3500	x	0.4053	0.4162	0.439	0.4255
		y	0.3907	0.42	0.431	0.4
f4		x	0.3954	0.4053	0.4255	0.4129
		y	0.3642	0.3907	0.4	0.3725
g1	2800~3200	x	0.4255	0.439	0.468	0.4519
		y	0.4	0.431	0.4385	0.4086
g2		x	0.4129	0.4255	0.4519	0.4355
		y	0.3725	0.4	0.4086	0.3785
h1	2500~2800	x	0.4519	0.468	0.497	0.477
		y	0.4086	0.4385	0.4466	0.4137
h2		x	0.4355	0.4519	0.477	0.4588
		y	0.3785	0.4086	0.4137	0.3838

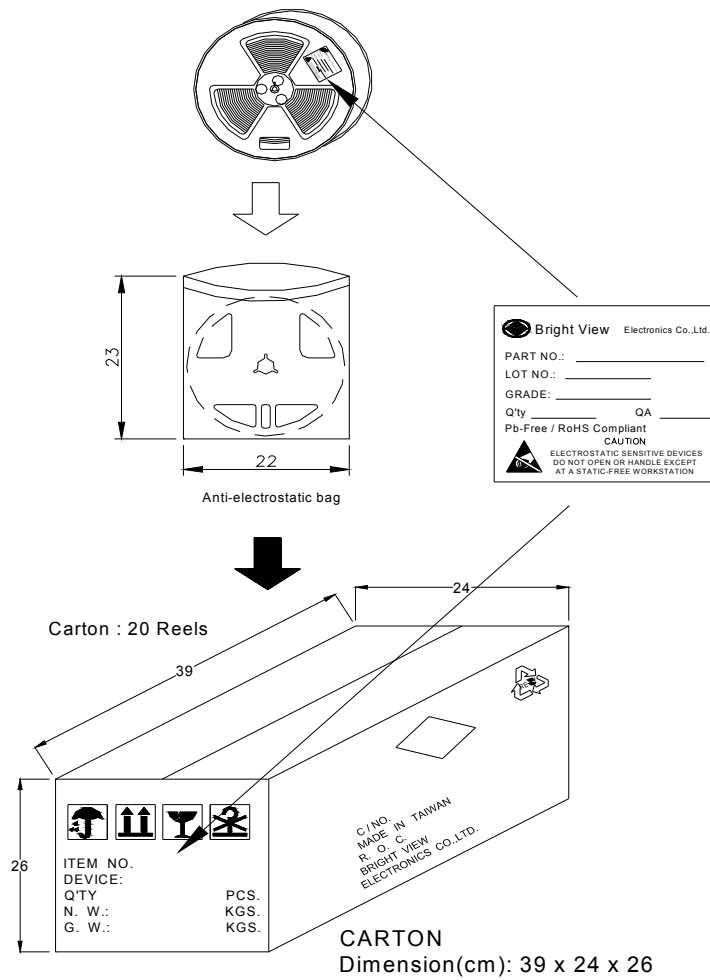
**■ CHROMATICITY DIAGRAM CIE 1931**

*The chromaticity coordinates (x,y) of the SMD LEDs are in accordance with CIE 1931 chromaticity diagram.

*The color temperature values used are based on the traditional incandescence lighting standard which cannot be exact applicable to LED lighting. It must be used only for reference purpose.

*Measurement uncertainty of color coordinates: ± 0.02

Note: Products of different CIE bins may not use the same materials and thus may have minor differences in characteristic and business terms

■ PACKING



■ **CAUTIONS**

1. Over voltage

- A. Drive the product over the specified voltage rating (25VDC) per unit or per reel will damage the product.
- B. The product should not be used in reverse polarity.
- C. It is recommended to use a power supply with overload (over-voltage, short circuit and overheat) protection.

2. Hand soldering

- A. It is recommended to use a tip temperature of 280 °C for less than 3 seconds (one times) with a soldering iron capacity of 30W, if hand soldering of the connecting wire is required.
- B. Be careful of the contaminations of hand soldering.

3. Storage & Handling

- A. Open the anti-electrostatic bag only a short time before use.
- B. LED is encapsulated with elastic resin and will be damaged with a external force applied on the top surface of the LED.
- C. The product should be storage in an environment with the relative humidity less than 90% RH (@30 degree C or less).
- D. During installation, excess mechanical stress will damage the product. The minimum bending radius of curvature is 5000mm. The maximum twist angle is 1 degree.
- E. The product is not waterproof. Excess moisture may also damage the product.