



Bright View Electronics

LED STRIP LIGHT

BVM-S450 Series

■ DESCRIPTION

- Strip light is made of high brightness SMD LEDs mounted on rigid printed circuit (PCB). Totally six different colors (red, orange red, yellow, green, blue, and white) are available for various applications.
- Bright View also provides connectors



■ FEATURES

- Number of SMD LEDs : 30 pcs of ultra bright SMD LEDs
- Product size (LxWXH) : 450mm x 10.5mm x 6mm (with connector)
- Easy installation with connector
- Drive: 24V DC
- Low power consumption and high optical intensity
- Lead (Pb) free, and RoHS compliant

■ APPLICATIONS

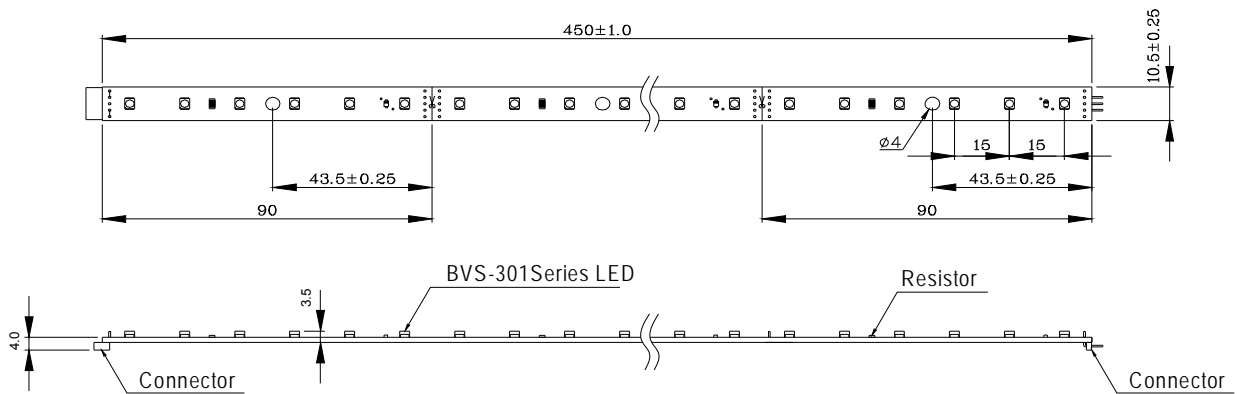
- Decorative & Entertainment Lighting
- Tube Light Source & LED Strip Light
- Architectural Lighting
- General Lighting
- Backlighting



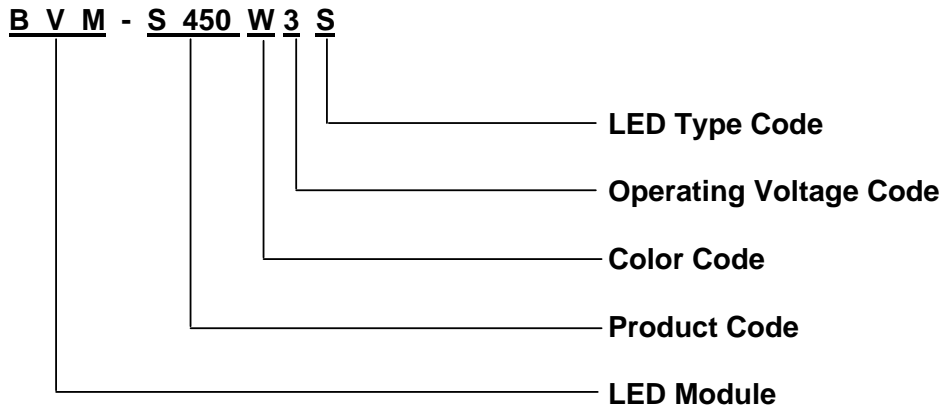
■ PRODUCT DIMENSION

Unit : mm

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



■ PART NUMBERING SYSTEM





■ ABSOLUTE MAXIMUM RATINGS AT Ta = 25°C

PARAMETER	BVM-S450					
	R3S	O3S	Y3S	B3S	G3S	W3S
Operating Voltage(max.)	25V	25V	25V	25V	25V	25V
Electrostatic Discharge (Contact Mode)	±2000V					
Power dissipation	3.2W					
Power dissipation/Unit	0.63W					
Operating Temperature Range	-30 °C to +65 °C					
Storage Temperature Range	-30 °C to +85 °C					

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

SYMBOL	PARAMETER	BVM-S450						Unit
		R3S	O3S	Y3S	B3S	G3S	W3S	
	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(Typ.)	100	100	100	100	100	100	mA
I_R	Operating current/Unit(Typ.)	20	20	20	20	20	20	mA
Φ_U	Luminous flux (Typ.)	33	21	42	15	42	99	lm
Φ_R	Luminous flux/unit (Typ.)	6.6	4.2	8.4	3.0	8.4	19.8	lm

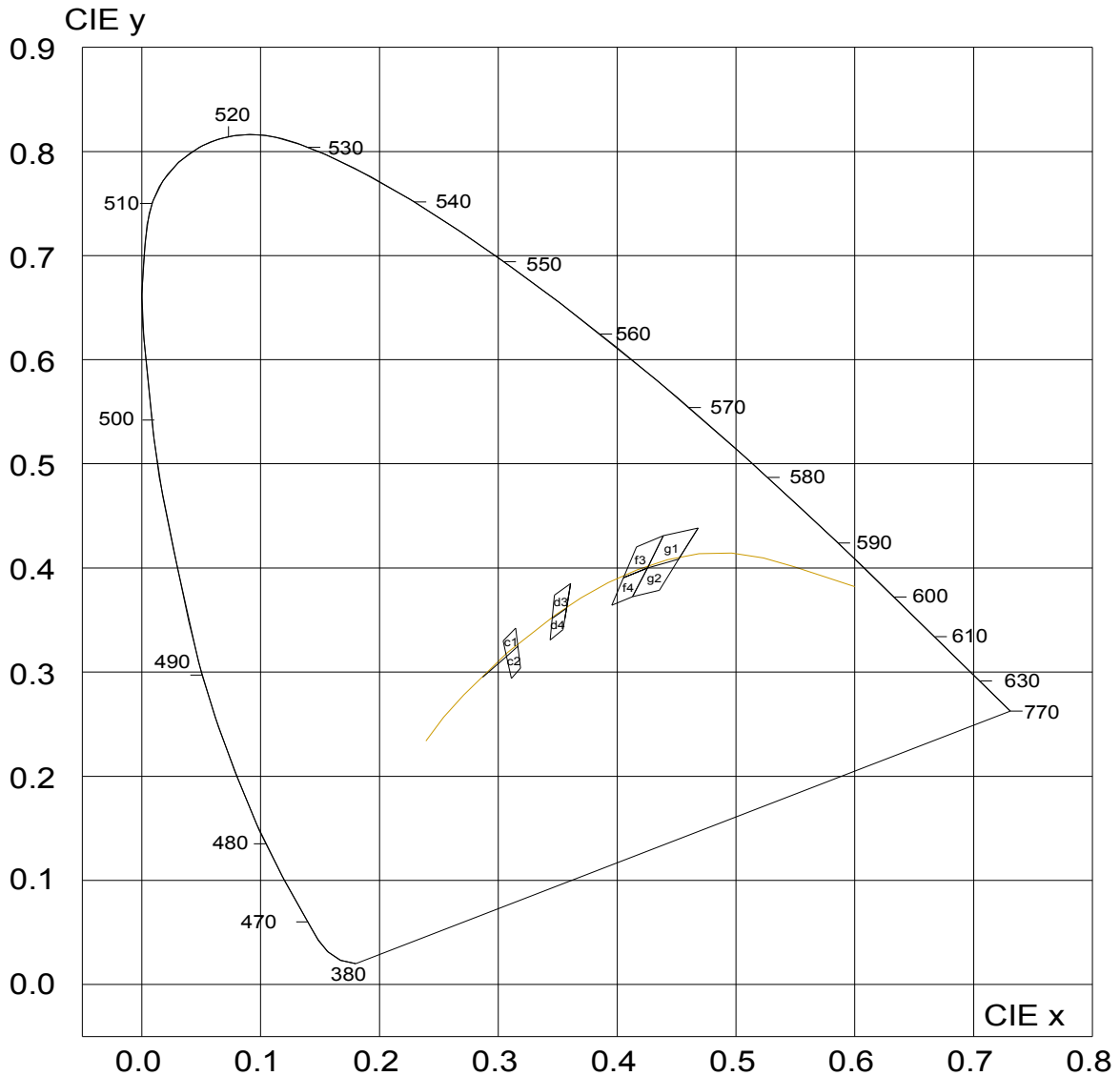
* White products are provided with different color temperature bins. (see following paragraph)

■ 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				
		x	y	z	u	v
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
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
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

■ 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

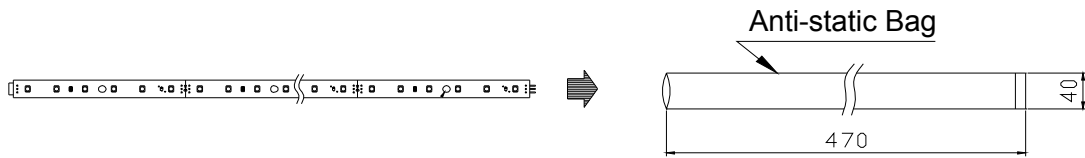


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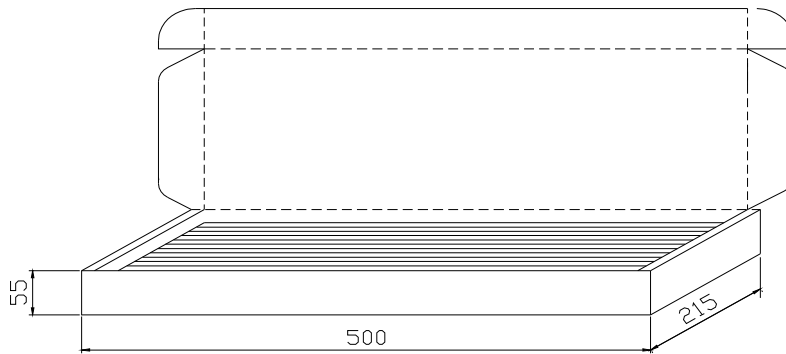
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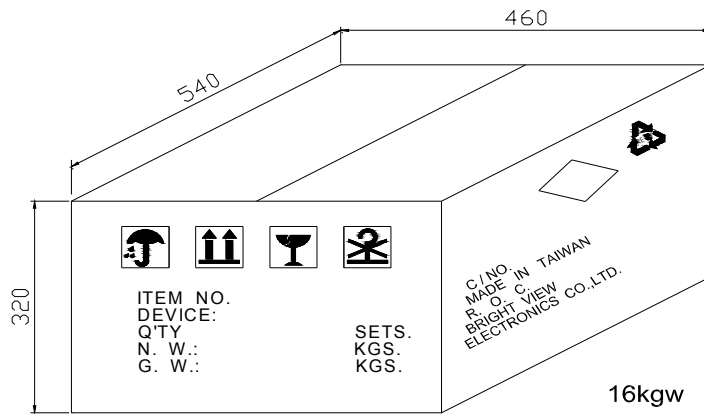
PACKING



21g x 60pcs



1.47kg x 10boxes



CARTON
Dimension(cm): 54x46x32



■ CAUTIONS

1. Over voltage

- A. Drive the product over the specified voltage rating (25VDC) per unit or per strip 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. The product should be storage in an environment with the relative humidity less than 90% RH (@30 degree C or less).
- C. During installation, excess mechanical stress will damage the product. The minimum bending radius of curvature is 5000mm. The maximum twist angle is 1 degree.
- D. The product is not waterproof. Excess moisture may also damage the product.