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- 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

# **BVM-S450 Series**



### 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

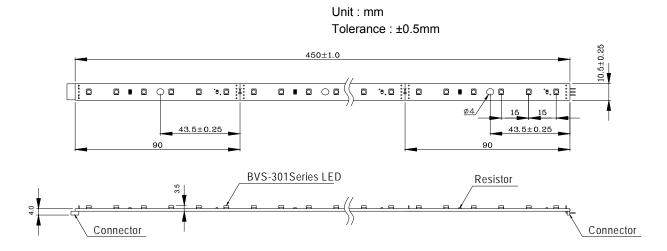
### APPLICATIONS

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

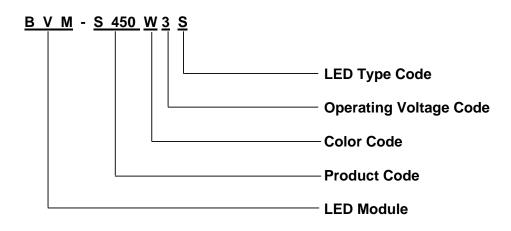
# Bright View Electronics LED STRIP LIGHT

# **BVM-S450 Series**

# PRODUCT DIMENSION



PART NUMBERING SYSTEM





# **Bright View Electronics**

LED STRIP LIGHT

# **BVM-S450 Series**

# **ABSOLUTE MAXIMUM RATINGS AT** Ta = $25 ^{\circ}C$

PARAMETER		BVM-S450						
FARAWETER	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 $^\circ \!\! \mathrm{C}$ to $+$ 65 $^\circ \!\! \mathrm{C}$							
Storage Temperature Range	$-$ 30 $^\circ \! \mathbb{C}$ to $+$ 85 $^\circ \! \mathbb{C}$							

### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS AT 24VDC Ta = $25^{\circ}$

SYMBOL	PARAMETER	BVM-S450						
		R3S	O3S	Y3S	B3S	G3S	W3S	Unit
	Color	Red	Orange	Yellow	Blue	Green	White	*
λр	Peak Emission Wavelength	632	611	591	465	520	*	nm
λd	Dominant Wavelength	624	605	589	470	525	*	nm
2θ <sub>1/2</sub>	LED Viewing Angle	110	110	110	110	110	110	deg
Ι <sub>υ</sub>	Operating current(Typ.)	100	100	100	100	100	100	mA
I <sub>R</sub>	Operating current/Unit(Typ.)	20	20	20	20	20	20	mA
Φυ	Luminous flux (Typ.)	33	21	42	15	42	99	lm
Φ <sub>R</sub>	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 Wavelengh for BIN Code / nm

Orange		Ye	llow	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		

# **Bright View Electronics**

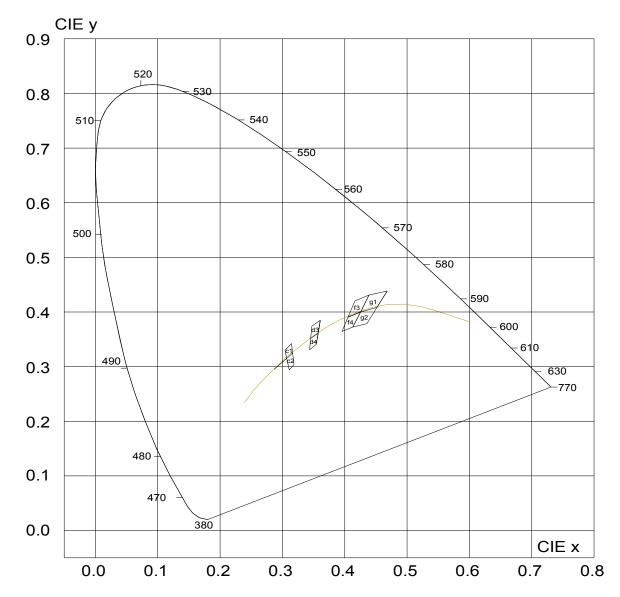
LED STRIP LIGHT

# **BVM-S450 Series**

# ■ BIN GRADE LIMITS CHROMATICITY COORDINATES

Bin Code	Color Temperature Rank (Kelvin)	Chromaticity Coordinates						
c1	6300-7000	Х	0.307	0.304	0.3147	0.3165		
		у	0.315	0.33	0.3423	0.325		
c2		Х	0.311	0.307	0.3165	0.3188		
		у	0.294	0.315	0.325	0.3038		
d3	4500-5000	Х	0.3453	0.3473	0.361	0.3575		
		у	0.3514	0.3739	0.385	0.3612		
d4		Х	0.3436	0.3453	0.3575	0.3545		
ů.		у	0.3307	0.3514	0.3612	0.3408		
f3	3200-3500	Х	0.4053	0.4162	0.439	0.4255		
		у	0.3907	0.42	0.431	0.4		
f4		Х	0.3954	0.4053	0.4255	0.4129		
		у	0.3642	0.3907	0.4	0.3725		
g1	- 2800-3200	Х	0.4255	0.439	0.468	0.4519		
		у	0.4	0.431	0.4385	0.4086		
g2		Х	0.4129	0.4255	0.4519	0.4355		
		у	0.3725	0.4	0.4086	0.3785		

# Service Strip Light View Electronics



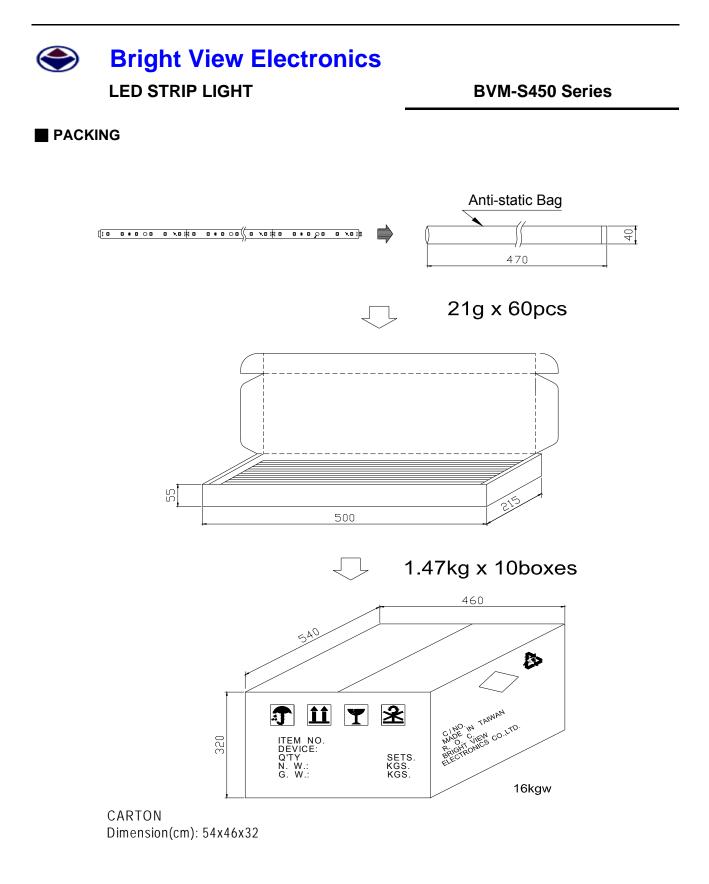
# CHROMATICITY DIAGRAM CIE 1931

\*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



# Bright View Electronics LED STRIP LIGHT

# **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 <sup>o</sup>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.