



ULTRA THIN BAR-TYPE LED MODULES

IP63

CONSTANT CURRENT  
DRIVING SYSTEM

REVERSE VOLTAGE  
PROTECTION

80~200mm

DC12V

42,500H  
LIFETIME

UL US

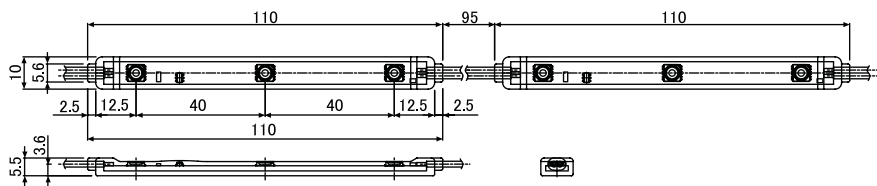
CE

RoHS

- Guaranteed lifetime up to 42,500 hours with 70% lighting output  
\*24 hour constant load may result less operating hours with lower lighting output. Estimated lifetime is based on normal usage of 10 hours per day.
- Uniform color temperature by strictly controlled system of bin rank
- Transparent PVC body for tough environment
- Reverse voltage protection to minimize hassles during installation
- Extremely small and light solution for low-profile channel letters, indoor
- 70% more energy efficiency compared to conventional sign lighting source
- Quality and reliability assured

PHYSICAL

Length : 110mm  
 Width : 10mm  
 Thickness : 5.5mm  
 Weight : 10g  
 Lamp Pitch : 40 mm (3 LED Lamps)  
 Module Pitch : 205mm



OPTICAL  
CHARACTERISTICS

Available Color	Luminous Flux(lm)			CCT (Kelvin) & Dominant Wave Length			Viewing Angle
	Min	Typical	Max	Min	Typical	Max	2Θ <sub>1/2</sub>
Cool White	45		60	9,000K	10,000K	11,000K	120
Daylight White	45		60	5,000K	6,500K	7,000K	120
Neutral White	42		56	4,000K	4,200K	4,400K	120
Warm White	42		56	2,700K	3,000K	3,200K	120
Red	14		19	623nm		628nm	120
Green	28		38	525nm		530nm	120
Blue	6		7	455nm		465nm	120

\*CRI (Color Rendering Index) for white product types is 70 / \*Luminous Flux measuring equipment is CAS140B  
 \*Viewing angle is the off axis angle from lamp centerline where the luminous intensity is half of the peak value / \*CCT 5% tester tolerance  
 \*Dominant wavelength is derived from the CIE 1931 Chromaticity diagram and represents the perceived color  
 \*Color temperature for white is strictly controlled by bin rank system and it consists of three ranks which should not be used simultaneously.

### ELECTRICAL CHARACTERISTICS

Current dissipation : 50mA(white, and warm white), 38mA(red, green, and blue)  
 Power Consumption : 0.60W(white, and warm white), 0.46W(red, green, and blue)  
 Operating power : DC 12V  
 Quantity for maximum connection in serial : 50 modules  
 Electronic dimming control supported  
 IC Chip-on-board current regulation

### THERMAL

Cooling : Ambient air  
 Operating temperature : -20~50°C  
 Storage temperature : -20~60°C

### SAFETY FEATURES

Reverse voltage protection

### CONSTRUCTION

LED Lamp : 5050 Package  
 Body : PVC(Polyvinyl Chloride) transparent resin, 96% transparency  
 PCB : FR-4 fiber glass epoxy resin, quad layered  
 Lead wire : 20AWG

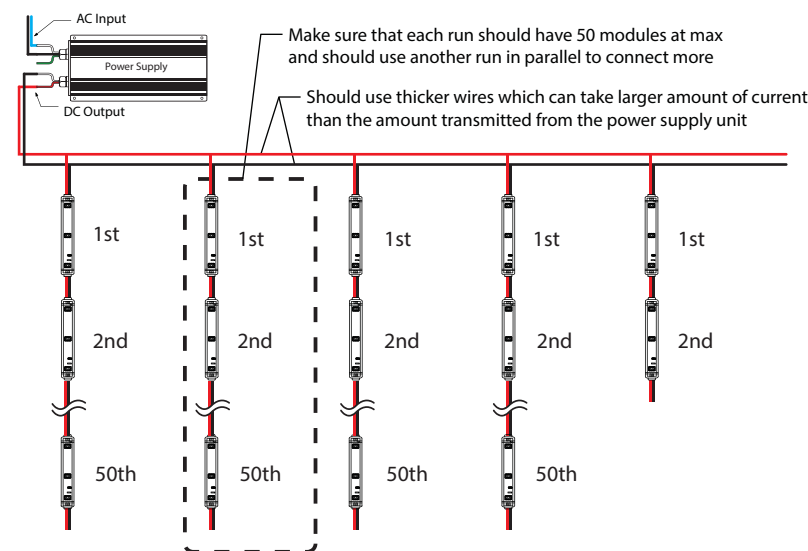
### APPLICATIONS

Channel letters - closed cover  
 Reverse halo lighting  
 Border lighting  
 Point-Of-Purchasing signage  
 Art & sculpture and cove lighting  
 Facade lighting

### APPROVAL

EN 55015/A2 : 2009  
 EN 61547/2009  
 EN 62031/2008  
 EN 62471/2006  
 UL879 -U.S Standard for Electric Sign Components  
 C22.2 No. 207-M89-Canadian Standard for Portable and Stationary Electric Signs and Displays

### WIRING GUIDE



### LOADING

PSCV03012(30W, IP65) : 43modules(8.82meter, 28.94feet)  
 PSCV06012(60W, IP65) : 85modules(17.43meter, 57.19feet)  
 PSCV12012(120W, IP65) : 170modules(34.85meter, 114.34feet)  
 PSCV30012(300W, IP22) : 425modules(87.13meter, 285.86feet)  
 PSCV60012(600W, IP22) : 850modules(174.25meter, 571.69feet)  
 All footage based on 85% of rated capacity

### PACKAGING

Anti-static gray-colored vinyl bag : 50modules(10.25meter, 33.63feet)  
 Master carton box : 800modules(16 vinyl bags, 164.00meter, 538.06feet)

Specifications subject to change without notice