12VDC Linear LED Modules



Electrical Characteristics					
Input	12VDC				
Maximum Power per foot	16.8W				
Maximum operating temperature	85°C				

Features

- Aluminum-based Board with High-power LEDs
- Work with Class 2 or Non-class 2 Power Supplies
- UL 8750 and UL 879 Recognized
- Over-current and Over-temperature protection

Application

- General Lighting
- Signage
- Linear

Part Number							
Part	Board size (LxW)	LED Current	Power	Lumen per board	Lumen per foot	Lumen per watt	
8L1S	5.9" x 0.8"	350 mA	4.2W	473 lm	987 lm/ft	113 lm/W	
8L1H		700 mA	8.4W	851 lm	1776 lm/ft	101 lm/W	
8L2S	11.5" x 0.8"	350 mA	8.4W	946 lm	987 lm/ft	113 lm/W	
8L2H		700 mA	16.8W	1702 lm	1776 lm/ft	101 lm/W	
8L3S	17.25" x 0.8"	350 mA	12.6W	1419 lm	987 lm/ft	113 lm/W	
8L3H		700 mA	25.2W	2553 lm	1776 lm/ft	101 lm/W	

Note 1: Data is collected based on the temperature of 25°C

Note 2: lm/board, lm/ft, and lm/W are based on using SPHWH2L3D30CD4QTN3 from Samsung LH351B

Compatible Lenses (from Ledil)

Billie, Emily, Heidi, Julia, Laura, Leila, Lisa, Rose, and Tina Families

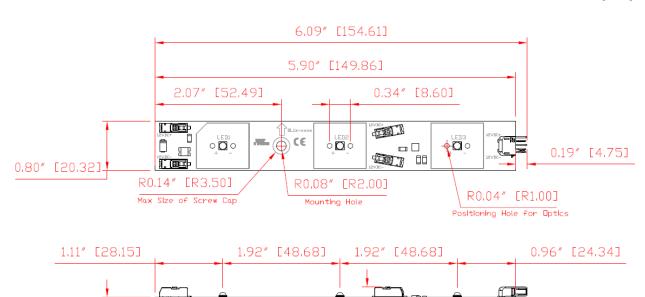
Conditions of Use

- 1. This product may require an enclosure (to be determined in the end use).
- 2. Input Ratings Voltage: 12Vdc; Max Watts: 8.4W for 8L1x, 16.8W for 8L2x, and 25.2W for 8L3x
- 3. These LED Arrays have been evaluated for connection to 12Vdc Class 2 or LPS Power Supply, or a power supplier of 12Vdc 12.520A max. Connected with other kinds of power source shall be determined in the end use application.
- 4. The suitability of the mounting shall be determined in end use application.
- 5. The LED Arrays have been evaluated for use in dry and, damp and wet locations when they are used with class 2 or LPS power supplier; when the LED arrays are used with non-class 2 power supplier, they have been evaluated only for use in dry and damp locations. For use in wet locations when LED arrays are used with non-class 2 power supplier shall be determined in end use application.
- 6. Suitability of supply connections shall be determined in the end used application.
- 7. These products are intended for building in and not provided with an Enclosure, the suitability of the LED Array with respect to mounting, spacing, casualty, enclosure and segregation is to be determined as part of the end application evaluation.
- 8. LED Optics might be provided. When units are powered by non-class 2 power supplier, their suitability shall be determined in the end used application.
- 9. A Temperature Test was conducted in a 40°C oven without heat sink. A temperature test shall be conducted in the end use application:
- 10. These LED arrays could be interconnected in parallel via mating connectors or leads terminals. When they are powered by non-class 2 power suppliers rated at 12V, 12.5A max, one interconnected group of LED array must include one 8L1x min; 8L2x and 8L3x must not be interconnected with each other without 8L1x; the maximum quantities of a group of interconnected LED arrays shall ensure the maximum total input current of each group of interconnected LED arrays not to exceed 6A or 72W.

8L1 Dimension

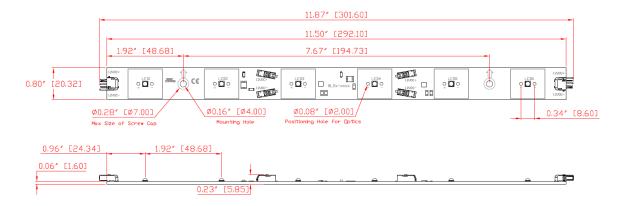
0.06" [1.60]

Unit: inch [mm]

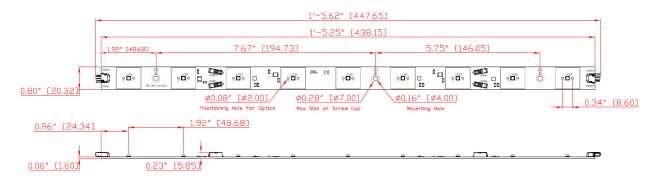


0.23" [5.85]

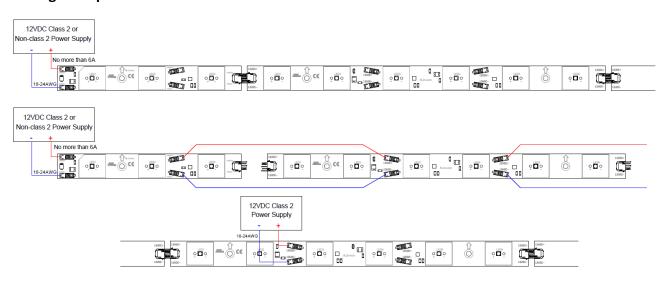
8L2 Dimension



8L3 Dimension



Wiring Examples:



Note:

- 1. If the power supply is non-class 2, the boards have to be enclosed and the wires have to be 18AWG.
- 2. If the power supply is non-class 2, 8L1x must be firstly connected to the output of the power supply because it has a 6A fuse. If the power supply is class 2, the output of the power supply can be connected to 8L1x, 8L2x or 8L3x.