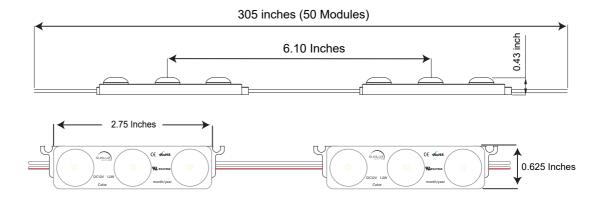
#### Characteristic



### Recommended for channel letter. 3" to 8" from LED to face

- · High Luminous Efficacy LED Module Solution for Signage and Cabinets
- · Electrical and material safety certified (UL, CE and RoHS Certificates)
- · Industry-leading, single-bin SMD2835 LED chips
- · Ultra Sonic Welding Technology provides extreme weather protection (IP68)
- · Secure and easy fastening with genuine double coated tissue 3M adhesive
- · Guaranteed lifetime of more than 50,000 hours.
- · High strength polycarbonate lens + ABS plastic body for harsh environments
- · Fully integrated 170° optical lens for wide and evenly distributed light

### **Physical**



## Optical Characteristic

Color	Current Dissipation (mA)	Power Consumption (Watt)	Viewing Angle	
RED	83	1.0	170 (20½)	
BLUE	83	1.0	170 (29½)	
GREEN	83	1.0	170 (20½)	
AMBER	83	1.0	170 (20½)	



## **Electrical Characteristics**

Current dissipation: 83mA Operating power: DC 12V

Maximum quantity for serial connection: 50 modules.

\*\*Connecting more than 50 modules in series will result in unstable brightness

Supports 12V dimming

**Thermal** 

Heat dissipation: Ambient air

Operating ambient temperature: -4° F to 140° F Storage ambient temperature: -4° F to 140°F

Waterproof Rating

IP68: Complete protection against dust and moisture. Immersion up to 1 meter under -

defined condition of pressure and time.

Construction

LED type: SMD 2835

Body, Lens, PCB: ABS, PC and FR-4

Cable: UL, AWM2468 20AWG 300V E493542

Pre-mounted 3M adhesive tape and screwing hole for mechanics fastening

**Approval** 

EN 55015/A2: 2009

UL879 -U.S Standard for Electric Sign Components

C22.2 No. 207-M89-Canadian Standard for Portable and Stationary Electric Signs

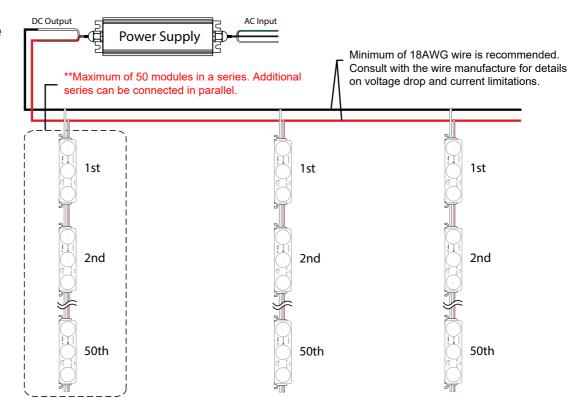
& Displays RoHS Directive 2011/65/EU

**Packaging** 

Anti-static vinyl bag: 100 modules (50 feet)

Master carton box: 1500 modules (15 vinyl bags, 750 feet)

### Wiring Guide



# Power Supply Load Table\*\*

Power	Power Supply* (watt) / Qty (pcs)						
Consumption	Safety Factor	60W	120W	150W	200W	320W	
1.0 Watt	80%	48	96	120	160	211	
1.0 Wall	90%	54	108	135	180	238	

<sup>\*</sup>Check power supply specification/data sheet for the temperature and line derating curve.

<sup>\*\*</sup>This table is generated with a Safety Factor (SF) of 1.15 (80% and 90% load).

