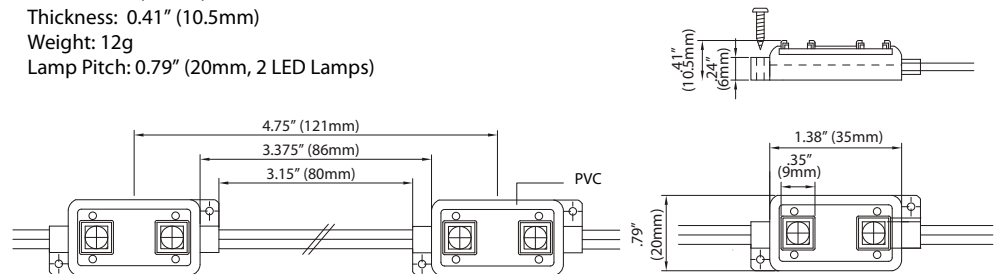


LOW-PROFILE & VERSATILE LED MODULE FOR SIGNS

The SUPER NOVA 2 is very versatile and is perfect for low-profile channel letters. Its compact size makes it suitable for many types of lighting applications and is the best solution for replacement of conventional lighting sources like neon tubes and fluorescent bulbs. The transparent PVC body allows this module to protect itself against tough weather like rain, snow, direct sun light, and dust, which makes it suitable for both indoor and outdoor used. It also features reverse voltage protection to prevent damage during installation and a constant current system to stabilize the current thoroughly, for an extended lifetime.

- Life time 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.
- IP65 weatherproof / waterproof system (Non-submersible)
- Uniform color temperature by strictly controlled system of bin rank
- Transparent PVC body for tough environment protection
- Reverse voltage protection to minimize hassles during installation
- Extremely small and light solution for low-profile channel letters, cove lighting and backlighting applications
- 70% more energy efficiency compared to conventional sign lighting sources
- 3M™ VHB™ Grey Mounting tape for the best long term mounting solution

PHYSICAL
 Length: 1.38" (35mm)
 Width: 0.79" (20mm)
 Thickness: 0.41" (10.5mm)
 Weight: 12g
 Lamp Pitch: 0.79" (20mm, 2 LED Lamps)



OPTICAL CHARACTERISTICS

Available Color	Luminous Flux (lm)		Dominant Wave Length & Color Temperature		Viewing Angle
	Typical	Max	Min	Typical	2θ _{1/2}
White	25lm	27lm	9,100K	10,000K	120
Daylight White	25lm	27lm	6,500K	7,000K	120
Warm White	24lm	26lm	3,200K	3,600K	120
Red	5lm	6lm	623nm	625nm	120
Green	13lm	14lm	525nm	527nm	120
Blue	3lm	4lm	455nm	460nm	120

* 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% test 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: 50 mA
 Power Consumption: 0.60W White, 0.42W Colors
 Operating power: 12VDC Constant Voltage
 Quantity for maximum connection in serial: 50 modules
 Electronic dimming control supported
 Constant current drive
 Reverse voltage protection

THERMAL

Cooling: Ambient air
 Maximum operating temperature: 140°F (60°C)
 Minimum operating temperature: -13°F (-25°C)
 Maximum storage temperature: 140°F (60°C)
 Minimum storage temperature: -22°F (-30°C)

SAFETY FEATURES

ESD Protection: Industry standard electro-static discharge protection
 IP65 : weatherproof / waterproof, prevents water & dust penetration, (Non-submersible)
 Reverse voltage protection : Device will prevent incoming power source on improper input connection

CONSTRUCTION

White LED Lamp: 3 chips white phosphor LED lamp, chip & packaging by Samsung
 Color LED Lamp: 2 chips LED lamp, chip & packaging by Samsung
 Protective cap for LED lamp: PVC
 Body: PVC (Polyvinyl Chloride) transparent resin, 96% transparency
 PCB: FR-4 fiber glass epoxy resin, quad layered
 Lead wire: Copper wire, semi-rigid PVC, UL VW-1, CSA 80 celsius 300V

APPLICATIONS

Channel letters - open & closed cover
 Reverse halo lighting
 Border lighting
 Point-Of-Purchasing signage
 Art & Sculpture and cove lighting
 Cove lighting
 Replacement for conventional lighting systems

APPROVAL

EN 55015:2000+A1:2001+A2:2002 Class B
 EN 61547:1995+A1:2000



FEATURES

IP65

WEATHER PROOF

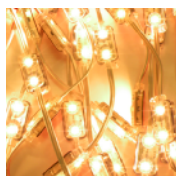
CONSTANT CURRENT DRIVING SYSTEM

Technology by



Specifications subject to change without notice

3 White Temperatures and 3 Colors to chose from



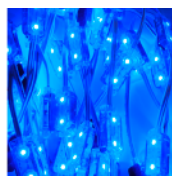
Warm White



Daylight White



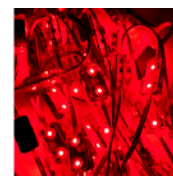
Bright White



Blue



Green



Red