



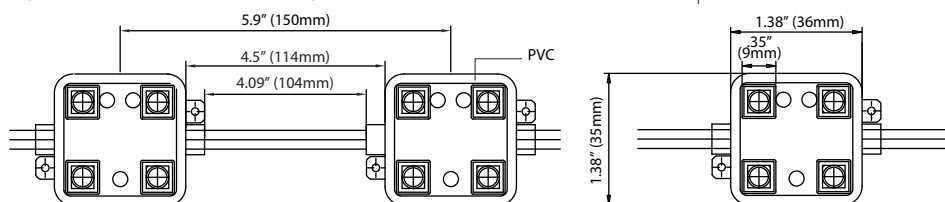
LOW-PROFILE & VERSATILE LED MODULE FOR SIGNS

The SUPER NOVA 4 is a premiere low-profile channel letter module. 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 indirect weather contact from rain, snow, sun light, and dust, which makes it suitable for both indoor and outdoor use. It also features reverse voltage protection to prevent damage during installation and a constant current system that stabilizes the current thoroughly, for an extended lifetime.

- Life time up to 42,500 hours with 70% lighting output
*24 Hour constant load may result in 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 & 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: 1.42" (36mm)
Width: 1.42" (36mm)
Thickness: 0.35" (9mm)
Weight: 20g
Lamp Pitch: 0.79" (20mm, 4 LED Lamps)



OPTICAL CHARACTERISTICS

| Available Color | Luminous Flux (lm) | | Dominant Wave Length & Color Temperature | | Viewing Angle |
|-----------------|--------------------|------|--|---------|-----------------|
| | Typical | Max | Min | Typical | $2\Theta_{1/2}$ |
| White | 48lm | 68lm | 9,100K | 10,000K | 120 |
| Daylight White | 48lm | 68lm | 5,000K | 6,500K | 120 |
| Warm White | 43lm | 62lm | 2,700K | 3,000K | 120 |
| Red | 19lm | 25lm | 623nm | 625nm | 120 |
| Green | 38lm | 50lm | 525nm | 527nm | 120 |
| Blue | 8lm | 9lm | 455nm | 460nm | 120 |

* Luminous Flux measuring equipment is CA5140B

* Viewing angle is the off axis angle from lamp center line 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: 95 mA
Power Consumption: 1.15W
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
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

IP63

**WEATHER
PROOF**



Technology by
SAMSUNG



DC12V

Specifications subject to change without notice

3 White Temperatures and 3 Colors to chose from



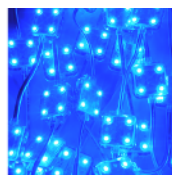
Warm White



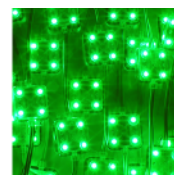
Daylight White



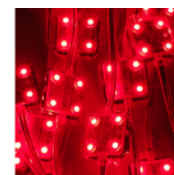
Bright White



Blue



Green



Red