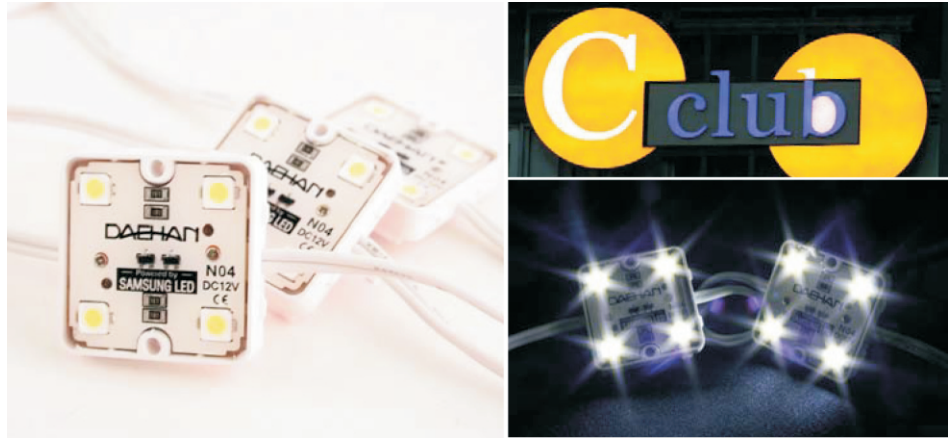


| Specifications |

STAR N04

**SUPER BRIGHT
S-LED MODULE**



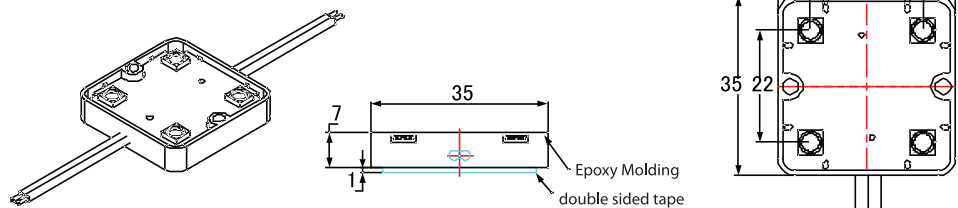
MAXIMUM COST-EFFECTIVE LIGHTING SOLUTION

The STAR N04 is transparent LED module lighting system perfect for those of who need maximum lighting output at lowest cost. With output of 67 LPW, lumen per watt, the STAR N04 is clearly visible from far distance and even in daylight, making it is highly suitable for large-scale application. While maintaining its extreme energy efficiency, it also provides reliable assurance with Samsung LED technology that lighting output remains 70% level out of initial output after using 42.500 hours. Please, let us welcome you to our hassle free lighting system.

- Guaranteed 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.
- Uniform color temperature by strictly controlled of bin rank
- Extremely small and light solution for low-profile channel letters, hidden recessed lighting
- 70% more energy efficiency compared to conventional sign lighting source
- Quality and reliability assured

PHYSICAL

Length: 35 mm
 Width: 35 mm
 Thickness: 7 mm
 Weight: 14 g
 Lamp Pitch: 22 mm (4 LED)
 Module Pitch: 135 mm



**OPTICAL
CHARACTERISTICS**

Available Color	Luminous Flux (lm)			CCT (Kelvin) & Dominant Wave Length			Viewing Angle 2Θ _{1/2}
	Min	Typical	Max	Min	Typical	Max	
Cool White	62		88	9.000 K	10.000 K	11.000 K	120
Daylight White	62		88	5.000 K	6.500 K	7.000 K	120
Neutral White	56		82	4.000 K	4.200 K	4.400 K	120
Warm White	56		82	2.700 K	3.000 K	3.200 K	120
Red	19		25	620 nm		625 nm	120
Green	38		50	525 nm		530 nm	120
Blue	8		9	455 nm		460 nm	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.

Specifications

STAR N04

2

ELECTRICAL CHARACTERISTICS

Current dissipation: 110 mA (Colored: 70 mA)
 Power Consumption: 1,32W (Colored: 0,84 W)
 Operating power: DC 12V
 Quantity for maximum connection in serial: 50 modules
 Electronic dimming control supported

THERMAL

Cooling: Ambient air
 Maximum operating temperature: 40°C
 Minimum operating temperature: -20°C
 Maximum storage temperature: 60°C
 Minimum storage temperature: -30 C

SAFETY FEATURES

IP65 : Prevents water & dust penetration
 Nonpolar Voltage Protection: STAR N04 is nonpolar DC powered device

CONSTRUCTION

White LED Lamp: Single-Die chip, 5252
 Color LED Lamp: Double-Die chip, 5252
 Body: ABS case filled with transparent Epoxy resin
 Lead wire: 18 AWG

APPLICATIONS

Channel letters - open & 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



FEATURES



42,500H
LIFETIME

IP65

DC12V



Specifications subject to change without notice

WIRING GUIDE

