



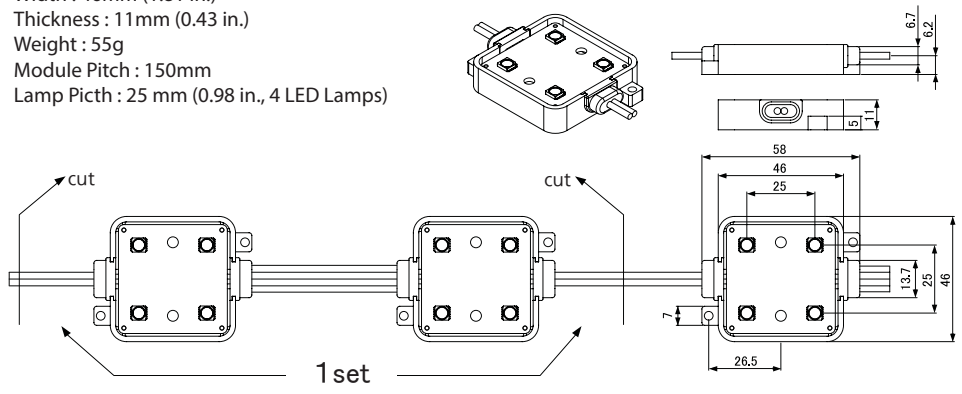
ULTRA BRIGHT LED MODULE OPERATED WITH AC POWER

STAR AC04 is AC operated LED module which do not require extra DC power converter and it can be directly connected to AC power source. Using the identical technology as the STAR C04, the DC model, it is perfect for those of who need maximum lighting output at lowest cost. It is clearly visible from far distance and even in daylight, making it is highly suitable for large-scale application and outdoor productions. 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.

- Use direct AC power source and DC power supply is not required
- 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 system of bin rank
- ABS body filled with transparent Epoxy resin for tough environment
- 70% more energy efficiency compared to conventional sign lighting source
- Quality and reliability assured

PHYSICAL

Length : 58mm
 Width : 46mm (1.81 in.)
 Thickness : 11mm (0.43 in.)
 Weight : 55g
 Module Pitch : 150mm
 Lamp Pitch : 25 mm (0.98 in., 4 LED Lamps)



OPTICAL CHARACTERISTICS

Available Color	Luminous Flux (lm)			Dominant Wave Length & Color Temperature			2θ _{1/2}
	Min	Typical	Max	Min	Typical	Max	
White	60	64	80	9,000K	10,000K	11,000K	120
Daylight White	60	64	80	5,000K	6,500K	7,000K	120
Warm White	58	62	78	2,700K	3,000K	3,200K	120
Red	4			623nm	625nm	628nm	120
Green	12			525nm	527nm	530nm	120
Blue	2			455nm	460nm	465nm	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 / *CRT 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.

ELECTRICAL CHARACTERISTICS

Current dissipation : 17.5/1Module
 Power Consumption : 1.75W/1Module
 Operating power : AC 100V
 Quantity for maximum connection in serial : 200 modules
 Constant current drive
 Reverse voltage protection

THERMAL

Cooling : Ambient air
 Maximum operating temperature : 50 °C
 Minimum operating temperature : -10 °C
 Maximum storage temperature : 60 °C
 Minimum storage temperature : -20 °C

CONSTRUCTION

White LED Lamp : Single-Die chip, 5252
 Body : ABS case filled with transparent Epoxy resin
 PCB : FR-4 fiber glass epoxy resin, quad layered
 Lead wire : 18 AWG

APPLICATIONS

Channel letters - closed cover
 Reverse halo lighting
 Border lighting
 Point-Of-Purchasing signage
 Art & sculpture and cove lighting
 Replacement for conventional lighting system
 Maximum output white

APPROVAL

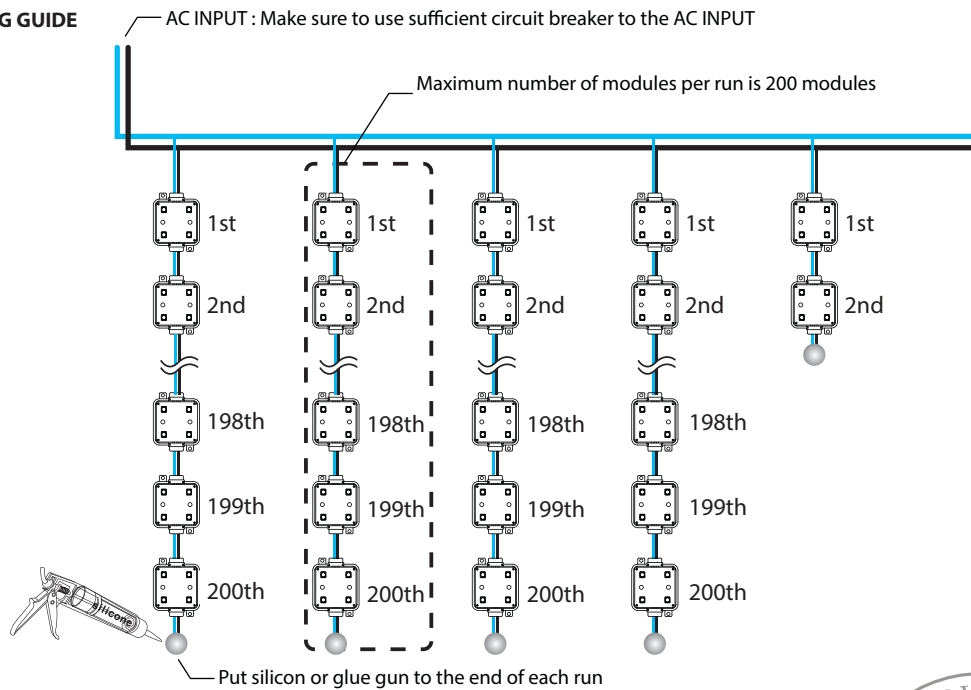
EN 55015/A2 : 2009
 EN 61547/2009
 EN 62031/2008
 EN 62471/2006



FEATURES



WIRING GUIDE



Specifications subject to change without notice