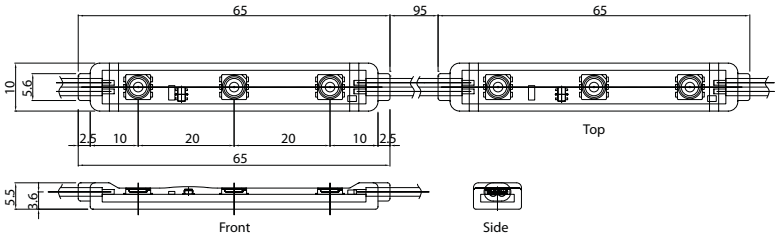
ULTRA THIN BAR-TYPE LED MODULES

The STAR C0320, transparent LED module lighting system perfect for those of who need maximum lighting output at lowest cost. It is made for low-profile channel letters with large channel width since its thickness is only 5.5mm at width of 10mm. C0320 is for small letters which depth is from 60mm to 150mm. For large letters with depth more than 120mm up to 250mm, each module of C0340 and C0640 which is another range of ULTRA THIN BAR-TYPE LED MODULES will cover up much more spaces than any other models available and will bring you the most competitive solution for your application including retrofit lighting source for neon signs and general illuminations.

- Guaranteed lifetime 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
- Transparent polyurethane body for tough environment
- Reverse voltage protection to minimize hassles during installation
- Extremely small and light solution for low-profile channel letters, indoor
- 70% more energy efficiency compared to conventional sign lighting source
- Quality and reliability assured

PHYSICAL

Length : 65mm
Width : 10mm
Thickness : 5.5mm
Weight : 7g
Lamp Picth : 20 mm (1 LED Lamp)
Module Pitch : 160mm



OPTICAL CHARACTERISTICS

Available Color	Luminous Flux (lm)			CCT (Kelvin) & Dominant Wave Length			Viewing Angle
	Min	Typical	Max	Min	Typical	Max	$2\Theta_{1/2}$
White	45	48	60		9,000K		120
Daylight White	45	48	60	5,000K	6,500K	7,000K	120
Warm White	42	45	57		3,000K		120
Red	6			623nm	625nm	628nm	120
Green	18			525nm	527mm	530nm	120
Blue	3			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 / *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.

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ELECTRICAL CHARACTERISTICS

Current dissipation : 55mA (white, and warm white), 45mA (red, green, and blue)
Power Consumption : 0.65 W (white, and warmwhite), 0.46 W (red, green, and blue)
Operating power : DC 12V
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 : 60˚C (140˚F)
Minimum operating temperature : -25˚C (-13˚F)
Maximum storage temperature : 60˚C (140˚F)
Minimum storage temperature : -30 C (-22 F)

SAFETY FEATURES

Reverse voltage protection : Device will prevent incoming power source on improper input connection

CONSTRUCTION

White LED Lamp : Single-die chip & packaging by Samsung
Color LED Lamp : Double-die chip & packaging by Samsung
Body : PVC(Polyvinyl Chloride) transparent resin, 96% transparency
PCB : FR-4 fiber glass epoxy resin, quad layered
Lead wire : 20AWG

APPLICATIONS

Channel letters - closed cover
Reverse halo lighting
Border lighting
Point-Of-Purchasing signage
Art & sculpture and cove lightin
Facade lighting

APPROVAL

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

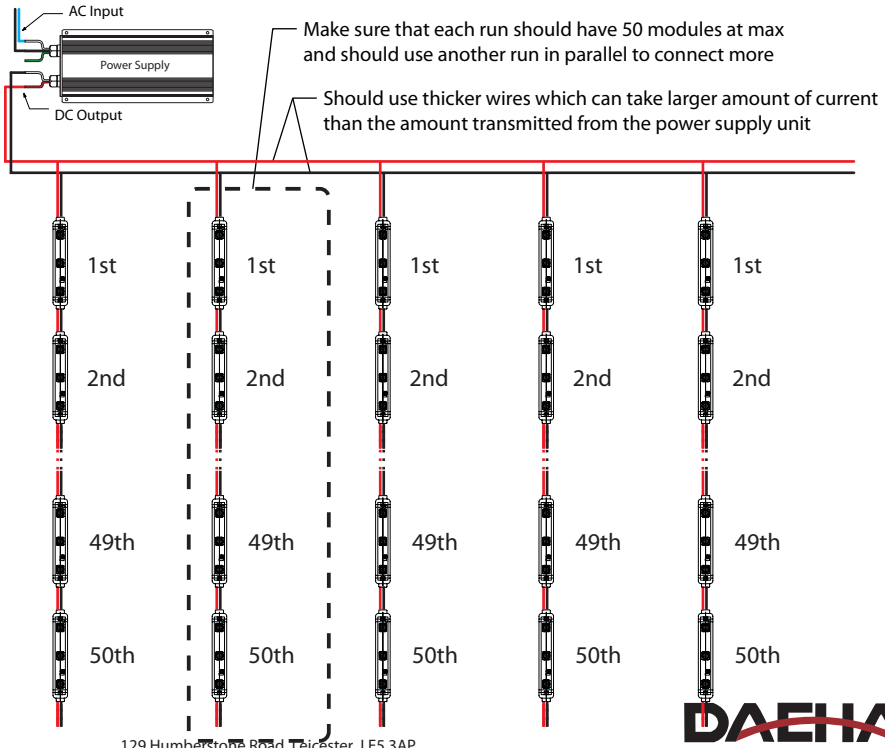
CE

FEATURES

42,500H LIFETIME | IP63 | CONSTANT CURRENT DRIVING SYSTEM | REVERSE VOLTAGE PROTECTION | DC12V

Specifications subject to change without notice

CONNECTION GUIDE WITH SMPS



SUPER BRIGHT
S-LED MODULE

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