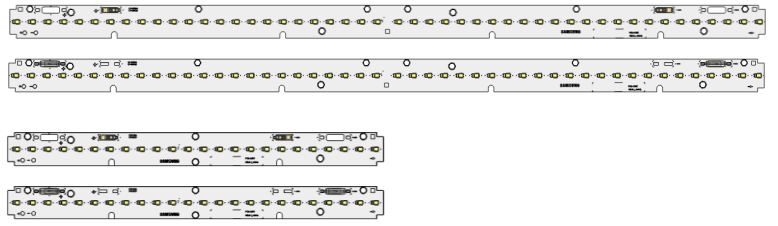


## LED Module

# LT-H562C LT-H282C



### Features & Benefits

- Deliver the highest efficacy up to 187 lm/W @ 4000K
- Easy connection with re-workable poke-in connector
- Fit better to replace conventional T5, T8 tubes



### Applications

Indoor Lighting:

- Office / Retail / Living space
- Troffer / Linear / Pendant

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## 1. Product Code Information

### a) H562C

Nominal CCT (K)		Product Code
3000		SI-B8V11156HEU
4000	Front CNT	SI-B8T11156HEU
6500		SI-B8P11156HEU

Nominal CCT (K)		Product Code
3000		SI-B8V11256HEU
4000	Rear CNT	SI-B8T11256HEU
6500		SI-B8P11256HEU

### b) H282C

Nominal CCT (K)		Product Code
3000		SI-B8V05128HEU
4000	Front CNT	SI-B8T05128HEU
6500		SI-B8P05128HEU

Nominal CCT (K)		Product Code
3000		SI-B8V05228HEU
4000	Rear CNT	SI-B8T05228HEU
6500		SI-B8P05228HEU

## 2. Characteristics

Item	Rating	Unit	Remark
Rated Lifetime	>50,000	hour	L70B50
Ingress Protection (IP)	no rating	-	
Ambient / Operating Temperature ( $t_{amb}$ )	-20 ~ +50	°C	
Storage Temperature	-30 ~ +80	°C	

### a) H562C

Item	Nom. CCT (K)	Rating			If(mA)	Remark
		Min	Typ.	Max		
Luminous Flux ( $\Phi_v$ )	3000	1740	1935	2130	lm	I <sub>f</sub> = 240 mA t <sub>p</sub> = 40 °C
	4000	1870	2075	2285		
	6500	1820	2020	2220		
Luminous Efficacy	3000	161	179	197	lm/W	
	4000	173	192	212		
	6500	169	187	206		
CCT	3000		3000		K	
	4000		4000			
	6500		6500			
Color Consistency (initial)	3000		3		Mac Adam step	
	4000	-	3	-		
	6500		3			
Color Rendering Index (Ra)		80	83	-	-	
Operating Current (I <sub>f</sub> )		-	240	600	mA	
Operating Voltage (V <sub>f</sub> )		41.6	45.0	48.4	Vdc	
Power Consumption		10.0	10.8	11.6	W	

#### Notes:

- 1)  $t_p$ : temperature at which performance is specified; measured at “Tc point”.
- 2) Samsung maintains a measurement tolerance of: Luminous flux:  $\pm 7\%$ , CRI:  $\pm 3.0$ , Voltage:  $\pm 0.3$  V, Power Consumption:  $\pm 0.3$  W
- 3) Max 4 kV for ESD(Direct contact)

## b) H282C

Item	Nom. CCT (K)	Rating			Unit	Remark
		Min	Typ.	Max		
Luminous Flux ( $\Phi_v$ )	3000	870	970	1065	lm	I <sub>f</sub> = 240 mA t <sub>p</sub> = 40 °C
	4000	935	1040	1145		
	6500	909	1010	1111		
Luminous Efficacy	3000	161	180	197	lm/W	
	4000	173	193	212		
	6500	168	187	206		
CCT	3000		3000		K	
	4000		4000			
	6500		6500			
Color Consistency (initial)	3000		3		Mac Adam step	
	4000	-	3	-		
	6500		3			
Color Rendering Index (Ra)		80	83	-	-	
Operating Current (I <sub>r</sub> )		-	240	600	mA	
Operating Voltage (V <sub>i</sub> )		20.8	22.5	24.2	Vdc	
Power Consumption		5.0	5.4	5.8	W	

**Notes:**

- 1) t<sub>p</sub>: temperature at which performance is specified; measured at “Tc point”.
- 2) Samsung maintains a measurement tolerance of: Luminous flux: ±7 %, CRI: ±3.0, Voltage: ±0.3 V, Power Consumption: ±0.3W
- 3) Max 4 kV for ESD(Direct contact)

Item	Nominal*	Life**	Max***	Unit
Temperature	40 (t <sub>p</sub> )	85(t <sub>p,40</sub> )	90(t <sub>c</sub> )	°C

**Notes:**

- \* Temperature used to specify performance of the module (t<sub>p</sub>).
- \*\* Rated maximum performance temperature at which lifetime is specified (t<sub>p,50</sub>).
- \*\*\* Rated maximum temperature, highest permissible temperature to avoid safety risk (t<sub>c</sub>).

All temperatures are measured at the designated “Tc point” as indicated on the module.

### 3. Structure and Assembly

#### a) Appearance

##### H562C

(Front)



(Rear)



##### H282C

(Front)



(Rear)

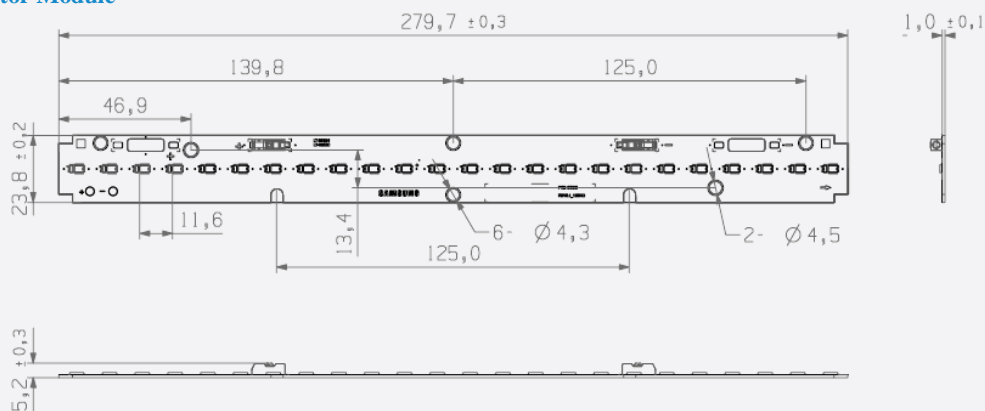




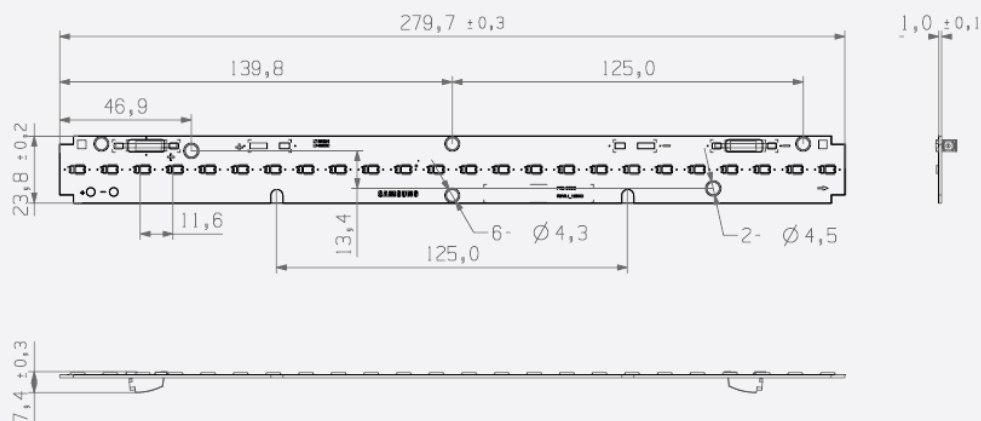
## H282C

Dimension	Specification	Tolerance	Unit
Module Length	279.7	±0.3	mm
Module Width	23.8	±0.2	mm
Module Height	Front : 5.2 Rear : 7.4	±0.3	mm
PCB Thickness	1.0	±0.1	mm
Module Weight	35	±1.8	g

## - Front Connector Module



## - Rear Connector Module



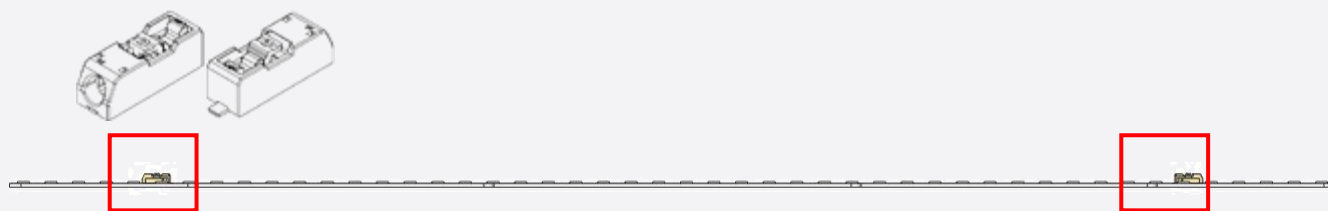
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### c) Assembly

Connectors on the board are provided for easy wiring with the LED driver and between modules

[Front connector]



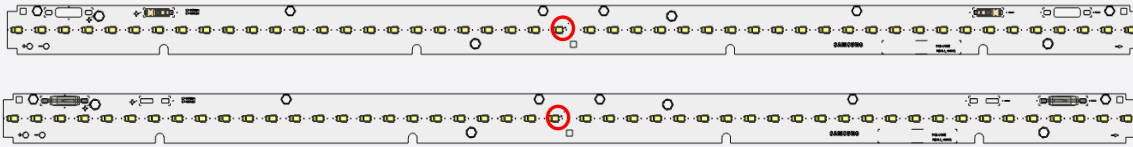
[Rear connector]



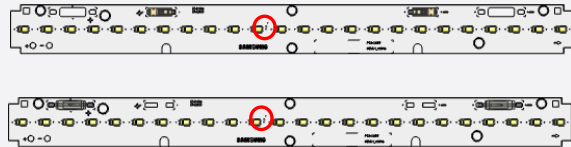
#### d) Thermal Management

Performance temperatures are measured on “Tc point” as indicated on the module.

##### H562C

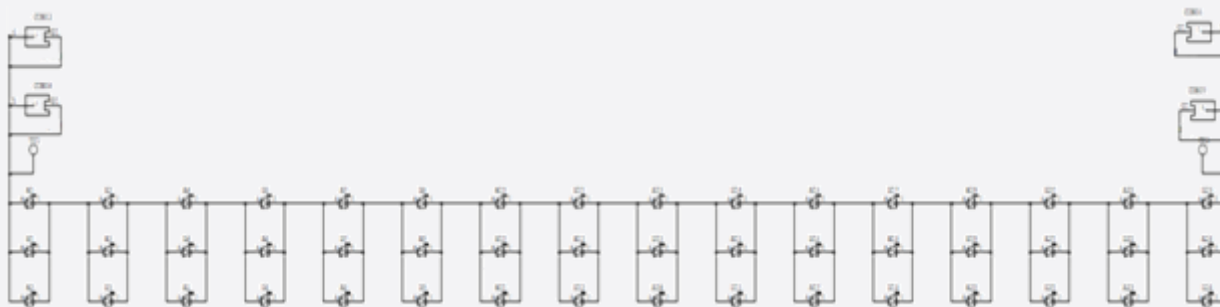


##### H282C

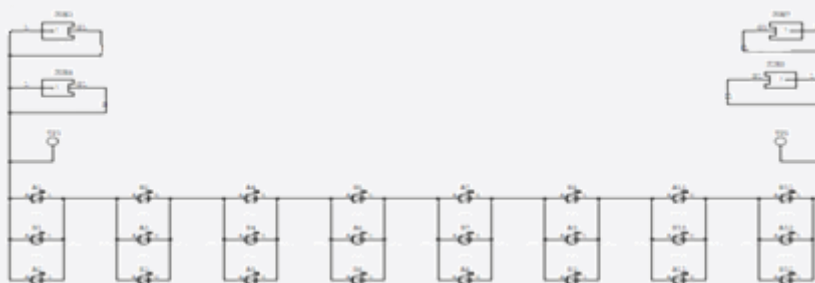


## e) Schematic Circuit

H562C : 16s x 3p



H282C : 8s x 3p

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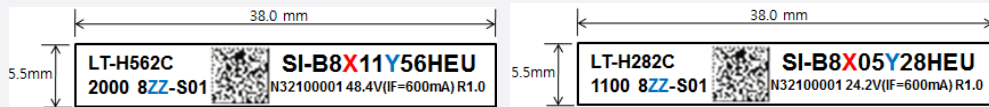
#### 4. Certification and Declaration

Item	Compliant to	Remark
Test & Certification	CE	IEC / EN 62031, IEC / EN 62471
	ENEC	IEC / EN 62031, IEC / EN 62471
	VDE	N/A
	UL	N/A
	cUL	N/A
	Photo biological Safety(LM561B+ LED)	IEC / EN 62471
Declaration	RoHS	Hazardous Substance & Material
	REACH	Hazardous Substance & Material

## 5. Label Structure

### a) Module Label

[Printing Label]



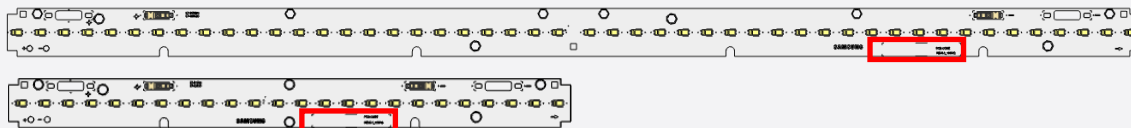
[Information of Barcode]

- ① Model code: SI-B8X11Y56HEU  
SI-B8X05Y28HEU  
(X : V(3000K), T(4000K), P(6500K) Y : 1(Front CNT), 2(Rear CNT))
- ② Product name: LT-H562C  
LT-H282C
- ③ CRI & Color temperature: 8ZZ  
ZZ: 30, 40, 65
- ④ LED maker: -S (Samsung)  
Group No.: 01 (Binning group)
- ⑤ SMT date: N321 (2013-March-21)  
A (2000), B (2001) ······ K (2010), L (2011), M (2012), N (2013) ······ (year)  
1 (January), ······ 9(September), A (October), B (November), C (December) (month)  
01, 02, 03, ······ 31th (date)
- ⑥ Serial No.: 00001~99999; Setting "00001" every working day
- ⑦ Voltage (IF)
- ⑧ Product Revision: R1.0

[QR CODE Information]

- ① Example: SI-B8X11Y56HEU\_ N321100001ZZ00K-S01
- ② 34 digits: Model code (14) + Space (1) + SMT date (4) + SMT line No. (1) + Serial No. (5)  
+ Color temperature (5) + Dash(1) + LED maker (1) + GROUP No. (2)

Model CODE	SI-B8X11Y56HEU
QR CODE Information	SI-B8X11Y56HEU_ N321100001ZZ00K-S01



## b) Tray & MBB Label

- 100mm x 50mm



① Model code: SI-B8X11Y56HEU

SI-B8X05Y28HEU

② LOT: 20150101-D0001

Packing Date(8 digit) → 20150101

Production Site(1 digit) → PyeongTaek SUHIL(E), TianJin SUHIL(D), SLED(B)

Serial no(4 digit) → 0001~9999, A111~A999

③ QTY: Quantity of Packaged Bar (5 Digit)

④ W/W: Production Year(2 digit) + Production Week(2 digit)

⑤ Issue date of Label: 12:year/01:month/30:day

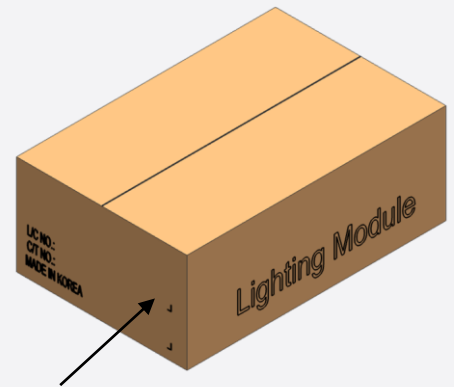
**c) Box Label**

- 100mm x 50mm



The lot number is composed of the following characters:

- ① Product code
- ② Lot ID
- ③ Place of origin
- ④ Quantity
- ⑤ Describe production week
- ⑥ Date of Issue



**6. Packing Structure**

ARTICLE	TRAY	BOX	PALLET	REMARK	
Quantity	30 ea	240 ea	3840 ea	H562C	Front Connector
			5760 ea	H282C	
	17 ea	136 ea	2176 ea	H562C	Rear Connector
			3264 ea	H282C	

## 7. Precautions in Handling & Use

A. The LED Lighting Modules for white light are devices which are materialized by combining white LEDs.

The color of white light can differ a little unusually to diffuser plate(sign-board panel).

Also when the LEDs are illuminating, operating current should be decided after considering the ambient maximum temperature.

### B. Handling

To prevent the LED Lighting Modules from making any defectives, please handle the LED Lighting Modules with care as follows.

- (1) Don't drop the unit and don't give the unit any shocks.
- (2) Don't bend the PCB and don't touch the LED Resin.
- (3) Don't storage the Module in a dusty place or room.
- (4) Don't take the product apart.
- (5) Don't touch the LED and also PCB and other circuit parts of Module with your naked fingers or sharpness things.
- (6) Take care so that do not pull wire with hand in case of carries or moves LED Lighting Modules.

### C. Cleaning

The LED Lighting Modules should not be used in any type of fluid such as water, oil, organic solvent, etc.

It is recommended that IPA (Isopropyl Alcohol) be used as a solvent for cleaning the LED Lighting Modules.

When using other solvents, it should be confirmed beforehand whether the solvents will dissolve the package and the resin or not. Freon solvents should not be used to clean the LEDs because of worldwide regulations. Do not clean the LED Lighting Modules by the ultrasonic.

Before cleaning, a pre-test should be done to confirm whether any damage to the LED Lighting Modules will occur.

### D. Static Electricity

Static electricity or surge voltage damages the LED Lighting Modules. Please keep the working process anti-static electricity condition to prevent the Lighting from destroying, as following.

- (1) Anyone who handles the unit should be well grounded.(earth ring or anti-static glove)
- (2) Anyone who handles the unit should wear anti-electrostatic working clothes.
- (3) All kinds of device and instruments, such as working table, measuring instruments and assembly jigs in your production lines should be well grounded.

### E. Storage

The LED Lighting Modules must be stored to insert a package of a moisture absorbent material(silica gel) in a box.

### F. Others

If over voltage which exceeds the absolute maximum rating is applied to LED Lighting Modules.

It will cause damage Circuits(that LED is included) and result in destruction.

Do not directly look into lighted LED with naked eyes.

Please use this product within 5 months, which is kept in its original packaging unopened when stocked.

Please be careful when taking a product out from packaging.



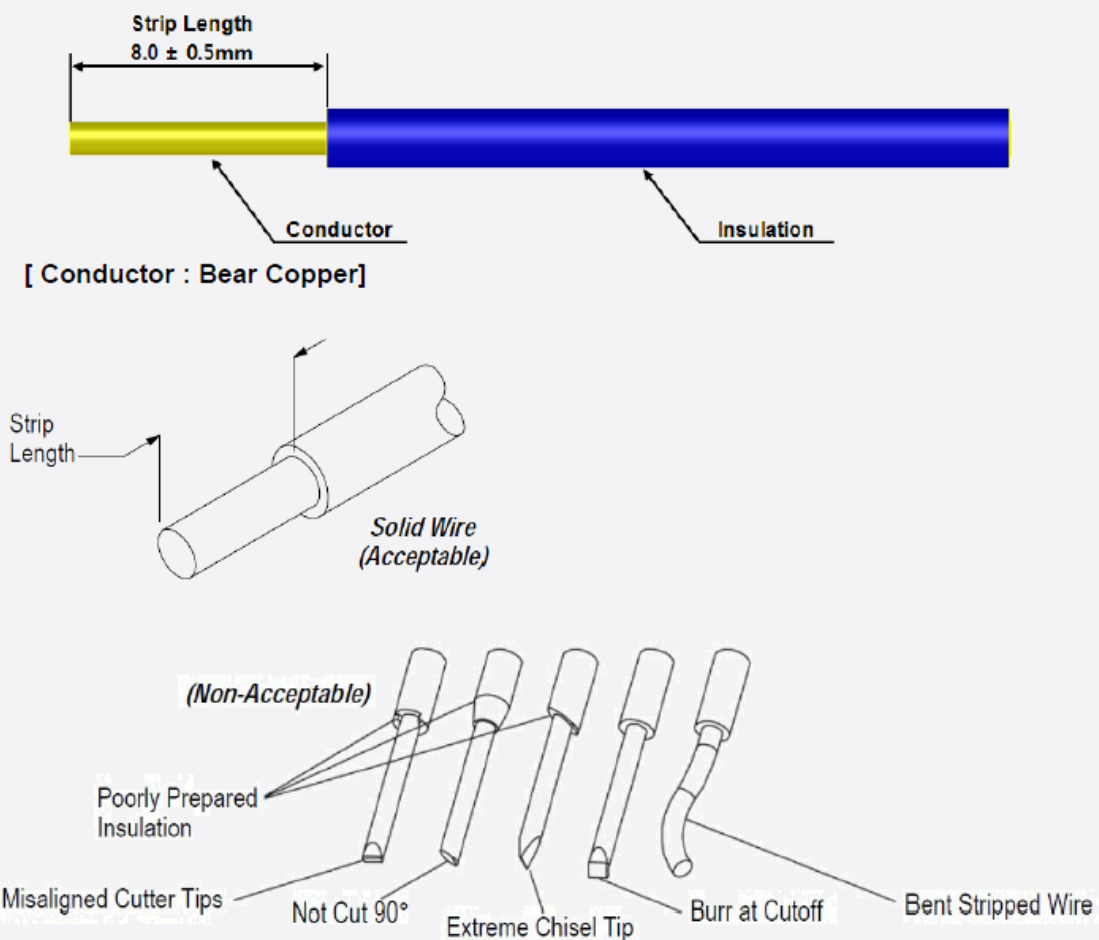
## APPENDIX 1. Applicable Solid Wires

### A. Applicable solid wires

Wire Range AWG NO.	Number of Conductors / Diameter of a conductors (NO. / mm)	Insulation Diameter (mm)	Conductor Type
24	1 / 0.51	1.35	Solid
22	1 / 0.64	1.48	
20	1 / 0.81	1.65	
18	1 / 1.02	1.86	

※ outside insulation diameter  $\Phi 2.1\text{mm}$  Max.

### B. Wire strip length



# Legal and additional information.

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