Datasheet



MODEL NAME	ССТ	SEC CODE
LT-M562C GEN3	3000K	SI-B8V17256001
	3500K	SI-B8U17256001
	4000K	SI-B8T17256001
	5000K	SI-B8R17256001

	SAMSUNG				
DEVELOP.	PRODUCT PLANNING	QA(DQA)	SALES	CUSTOMER	

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Rev	Remark	Page	Date	Traced
0.0	The First Specification established.	ALL	17.05.11	DAEUN.R
0.1	The CCT, Color Consistency Specification revised.	4	17.05.17	DAEUN.R

LED Module

LT-M562C GEN3





Features & Benefits

- Easy connection with re-workable poke-in connector
- Fit better to replace conventional T5, T8 fixture with narrow width
- Full Certifications

Applications

Indoor Lighting:

- Office / Retail / Living space
- Area Panels, Troffer and Linear Pendants
- Channel and Cove lighting



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1. Product Code Information

Nominal CCT (K)	Product Code
3000K	SI-B8V17256001
3500K	SI-B8U17256001
4000K	SI-B8T17256001
5000K	SI-B8R17256001

2. Characteristics (lf=700mA, $t_p {=} 50\,^\circ {\rm C}$)

a) Basic Information

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	

b) Electro-Optical Characteristics

Item	Nom. CCT	Rating		Remark		
ion.	(K)	Min	Тур.	Max	Unit	
	3000	2400	2665	2960		
Luminous Flux (Φ _v)	3500	2430	2700	3000		
Eurimous Flux (Ψ_v)	4000	2500	2775	3085	lm	
	5000	2500	2775	3085		$I_{\rm f}=700{\rm mA}$
	3000	143	159	176		$t_{\rm p} = 50^{\rm o}{\rm C}$
Luminous Efficacy	3500	145	161	179		
Lumnous Emcacy	4000	149	165	184		
	5000	149	165	184		
	3000	2944	3032	3127		
CCT	3500	3331	3443	3566	K	-
001	4000	3815	3959	4114	ĸ	
	5000	4825	5010	5209		
Color Consistency (initial)		-	3	-		Mac Adam step
Color Rendering Index (Ra)	-	80	83	-	-	Integrating Sphere
Operating Current (I _f)	-	-	700	1080	mA	-
Operating Voltage (V _f)	-	22.6	24.0	26.4	Vdc	$I_f = 700 \text{mA}$
Power Consumption	-	15.8	16.8	18.5	W	$t_{\rm p}=50^{\rm o}{\rm C}$

Notes:

1) t_p : 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) Measurement tolerance of the color coordinates is ± 0.005

Item	Nom. CCT		Ra	ting		Remark
	(K)	Min	Тур.	Max	Unit	Komaik
	3000	2280	2535	2815		
Luminous Flux (Φ _v)	3500	2320	2575	2860		
Luminous Flux (Ψ_v)	4000	2390	2655	2950	lm	
	5000	2390	2655	2950	l _f = 665n	$I_{\rm f} = 665 {\rm mA}$
	3000	143	159	177	t _p = 50°C	$t_{\rm p}=50^{\rm o}{\rm C}$
Luminous Efficient	3500	146	162	180		
Luminous Efficacy	4000	150	167	186		
	5000	150	167	186		
Operating Current (I_f)	-	-	665	-	mA	-
Operating Voltage (V _f)	-	22.5	23.9	26.3	Vdc	$I_{\rm f} = 665 {\rm mA}$
Power Consumption	-	15.0	15.9	17.5	W $t_{\rm p} = 50^{\circ}{\rm C}$	$t_{\rm p}=50^{\rm o}{\rm C}$

Notes:

1) t_p : 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) Measurement tolerance of the color coordinates is ± 0.005

c) Temperature Characteristics

Item	Nominal(t _p)*	Life**	Max(t _c)***	Unit
Temperature	50	80	90	°C

Notes:

* Temperature used to specify performance of the module (t_p) .

** Rated maximum performance temperature at which lifetime is specified.

*** Rated maximum temperature, highest permissible temperature to avoid safety risk (t_c).

All temperatures are measured at the designated "Tc point" as indicated on the module. (See page 5)

d) Thermal Measurement

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



3. Structure and Assembly

a) Appearance & Dimension



Dimension	Specification	Tolerance	Unit
Module Length	560.0	±0.4	mm
Module Width	18.0	±0.3	mm
Module Height	5.8	±0.3	mm
PCB Thickness	1.6	±0.16	mm
Module Weight	28.5	±1.5	g

b) Structure

Item	Specification		
LED	LM561B+ Middle Power LED		
РСВ	Material : copper, solder mask, epoxy		
Connector	Reworkable poke-in connector type		
Wire	24~18 AWG ; terminal strip length of 7.5~8.5 mm (Appendix 1)		

c) Schematic Circuit

- 8S x 6P

4. Certification and Declaration

Item	Compliant to	Remark
	CE	IEC / EN 62031, IEC / EN 62471
Test & Certification	UL/cUL	E344519
	Photo biological Safety (LM561B+ LED)	IEC / EN 62471
Declaration	RoHS	Hazardous Substance & Material
Declaration	REACH	Hazardous Substance & Material

5. Label Structure

a) Module Label



Number	ltem	Remark	
Ð	Model code	Refer to page 3 <mark>X</mark> = V, U, T, R	
2	Product name		
3	Color temperature	ZZ = 30, 35, 40, 50	
٩	LED maker & Bin rank	-S (Samsung) 00~ZZ	
5	SMT date	N321 (2013-March-21th)	
6	Serial No.	00001~99999; Setting "00001" every working day	
$\overline{\mathbb{O}}$	Operating Current Max. & VoltageTyp.		
(8)	Product Revision		
9	QR Code	SI-B8X17256001_N321100001ZZ00K-S01	



b) TRAY & MBB bag LABEL



Number	Item	Remark
1	Model Code	Refer to page 3
2	LOT ID	
3	Quantity	Refer to page 10
(4)	Date of production	
(5)	Date of Issue	

C) Box Label



Number	Item	Remark
1	Model Code	Refer to page 3
2	LOT ID	
3	Place of origin	
(4)	Quantity Refer to page 10	
(5)	Describe production week	
6	Date of Issue	

6. Packing Structure

Product	Dealing		Dimension (mm)		
	Packing	Quantity (modules) -	Length	Width	Height
	Tray	40 ea	600	444	25
LT-M562C GEN3	Outer Box	280 ea	605	449	155
	Pallet	5600 ea	1100	1100	130

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

-Appendix

1. Applicable Solid Wires

a) Applicable solid wires only

Wire Range AWG NO.	Number of Conductors / Diameter of a conductors (NO. / mm)	Insulation Diameter (mm)	Conductor Type
24	1 / 0.51	1.35	
22	2 1/0.64 1.48		Solid
20	1 / 0.81	1.65	Solid
18	1 / 1.02	1.86	

* outside insulation diameter Φ2.1mm Max.



Legal and additional information.

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