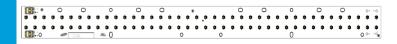
# **LED Module**

# LT-F564A



#### **Features & Benefits**

- Excellent for High Bay, Low Bay, and High Mount Fixtures
- Metal Core PCB for maximum heat dissipation
- Simple mounting Screw mounted on module edges
- Continuous LED spacing for even lumen distribution
- Input and Output Poke-In connectors for easy wiring
- End to End mounting for long linear applications

# **Applications**

Industrial Lighting:

• Warehouse / Retail / Industrial spaces









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# 1. Product Code Information

Nominal CCT (K)	Product Code
3500	SL-B8U7NK0L2WW
4000	SL-B8T7NK0L2WW
5000	SL-B8R7NK0L2WW

# 2. Characteristics

Item	Rating	Unit	Remark
Rated Lifetime	70,000	hour	L70
Ingress Protection (IP)	no rating	-	
Ambient / Operating Temperature $(t_{amb})$	-20 ~ +50	°C	
Storage Temperature	-30 ~ +80	°C	

Item	Nom. CCT		Rat	ing		Remark
iciii	(K)	Min	Тур.	Max	Unit	Kemark
	3500	8280	8810	9350		
Luminous Flux $(\Phi_v)$	4000	8470	8850	9370	lm	
	5000	8670	9050	9570	_	
	3500	-	118	-		
Luminous Efficacy	4000	-	119	-	Im/W $I_{\rm f} = 1500 \text{ mA}$ $t_{\rm p} = 25 ^{\circ}\text{C}$	Y 1500 A
	5000	-	122	-		
	3500	3339	3449	3575	К	
CCT	4000	3853	3986	4137		
	5000	4799	5021	5271	_	
Color Consistency (initial)		-	4	-	MacAdam step	
Color Rendering Index (Ra)		80	-	-	-	
Operating Current (I <sub>f</sub> )		-	1500	-	mA	-
Operating Voltage (V <sub>f</sub> )		47.3	49.6	51.9	Vdc	If = 1500 mA
Power Consumption		-	74.4	-	W	tp = 25 °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: ±0.3 W



Item	Nominal*	Life**	Max***	Unit
Temperature	25 (t <sub>p</sub> )	85(t <sub>p, 50</sub> )	85(t <sub>c</sub> )	°C

#### **Notes:**

- \* Temperature used to specify performance of the module  $(t_p)$ .
- \*\* Rated maximum performance temperature at which lifetime is specified  $(t_{p,50})$ .
- \*\*\* 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.



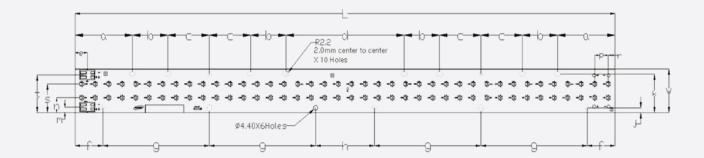
# 3. Structure and Assembly

# a) Appearance



# b) Dimension

Dimension	Specification	Tolerance	Unit
Module Length	558.8	±0.3	mm
Module Width	40.0	±0.2	mm
Module Height	5.9	±0.2	mm
PCB Thickness	1.65	±0.115	mm
Module Weight	99.5	±5.0	g



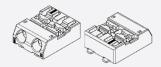
Unit [mm]

ITEM	SPECIFICATION	ITEM	SPECIFICATION	ITEM	SPECIFICATION
а	59.53	g	110	n	13.65
b	36.51	h	61	р	13.97
С	42.86	j	4.5	r	7.05
d	122.25	k	35.5	S	26.35
e	12.7	L	558.8	t	34.66
f	28.9	m	5.34	W	40



# c) Assembly

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



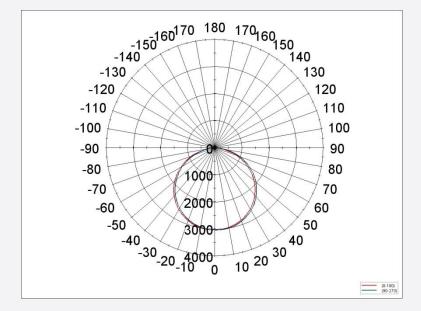


# d) Structure

Item	Specification
LED LM302A Middle Power LED	
PCB	MCPCB; Material: Copper, Solder mask, Epoxy
Connector	Reworkable poke-in connector type
Wire	24~18 AWG; terminal strip length of 7.5~8.5 mm

# e) Light Distribution

Polar Intensity Diagram: Beam Angle 115  $\pm$  5°





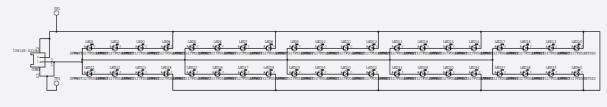
# f) Thermal Management

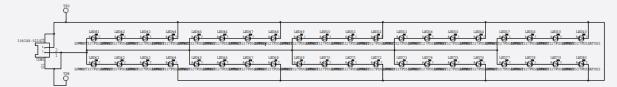
Performance temperatures are measured on "Tc point" as indicated on the module.



# g) Schematic Circuit

# 8s x 10p







# 4. Certification and Declaration

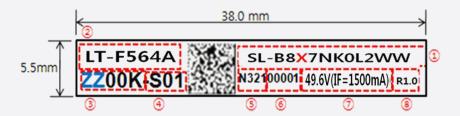
Item	Compliant to	Remark
	CE	TBD
	ENEC	TBD
The A O of Control	VDE	-
Test & Certification	UL	- E344519 -
	cUL f	-
	Photo biological Safety(LM302A LED)	IEC / EN 62471
Dedenting	RoHS	Hazardous Substance & Material
Declaration	REACH	Hazardous Substance & Material



#### 5. Label Structure

# a) Module Label

A. Printing Label



#### B. Information of Barcode

① Model code: SI-B8X7NK0L2WW

X: U(3500K), T(4000K), R(5000K)

② Product name : LT-F564A ③ Color temperature: **ZZ**00K

**ZZ**: 35, 40, 50

4 LED Maker: -S (Samsung)

Group No.: 01 (Binning group)

⑤ SMT date: N321 (2012-March-21th)

 $A(2000), B(2001) \cdot \cdot \cdot \cdot J(2009), K(2010), L(2011), \cdot \cdot \cdot \cdot \cdot (year)$ 

1(January), · · · · · 9(September), A(October), B(November), C(December)(month)

01, 02, · · · · · 31th (date)

⑥ Serial No: 00001~99999, (Setting "00001" every working day)

7 46.9V (IF=1500mA)

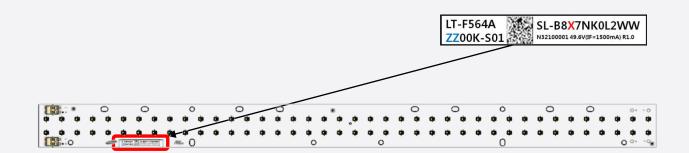
**8** Module Revision: R1.0



# C. QR CODE Information

# [LT-564A]

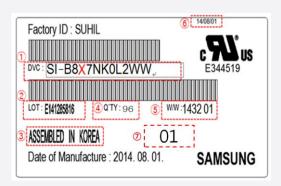
Model CODE	SI-B8 <mark>X</mark> 7NK0L2WW
QR CODE	SI-B8 <b>X</b> 7NK0L2WW
Information	N321100001 <b>ZZ</b> 00K-S01
Printed CODE	SI-B8 <b>X</b> 7NK0L2WW
Information	N321100001 <b>ZZ</b> 00K-S01





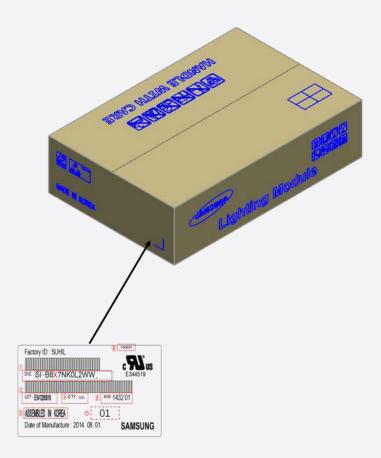
#### B) Box Label

- 100mm x 50mm



The lot number is composed of the following characters:

- 1 Product code
- 2 Lot ID
- 3 Place of origin
- 4 Quantity
  - NN: LT-F564A 96
- ⑤ Describe production week
- 6 Date of Issue





# **6. Packing Structure**

ARTICLE	TRAY	BOX	PALLET	REMARK
Quantity	32 ea	96 ea	1920 ea	-



#### 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



# Legal and additional information.

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