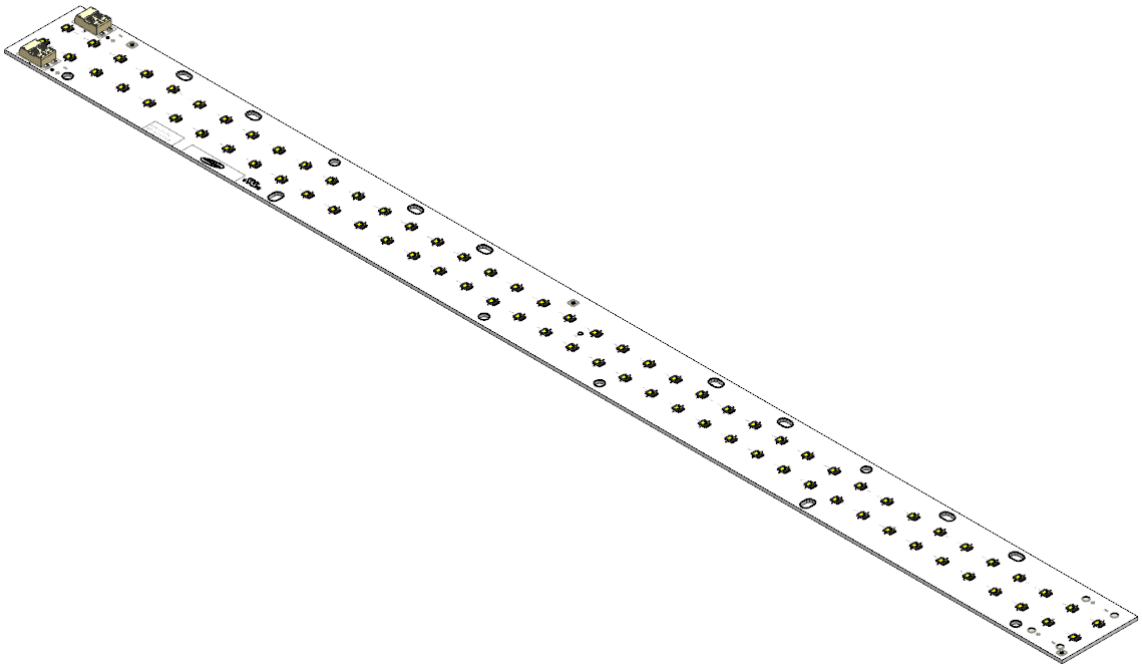
THE DATASHEET OF

SL-B8R7NK0L2WW

Datasheet



MODEL NAME		CCT	CODE
Highbay CRI80+	LT-F564A	4000K	SL-B8T7NK0L2WW
		5000K	SL-B8R7NK0L2WW

SAMSUNG				CUSTOMER
DEVELOP.	PRODUCT PLANNING	QA(DQA)	SALES	

REVISION OF SPECIFICATION

Rev.	REMARK	PAGE	DATE	TRACED	CHECKED
0.0	The First Specification established.	ALL	15.06.09	M.S. Han	H.C. Cho

TABLE OF CONTENTS

1. FUNDAMENTAL SPECIFICATION

No.	ARTICLE	SPECIFICATION
1	PCB	Dimension : 558.80 ±0.3(L) × 40.0 ±0.2(W) × 1.65 ±0.115(H1) [mm] ・Material : MCPCB, White PSR, Cu 1oz Single layer
2	LED	Model: LM302A Quantity: 80
3	Dimension	・558.80 ±0.3(L) × 40.0 ±0.2(W) × 5.9 ±0.2(H2) [mm]
4	Weight	・99.5[g] ±5.0[g]
5	Operating Temperature	・-20[℃] ~ +50[℃], ta(℃)
6	Storage Temperature	・-30[℃] ~ +80[℃], ta(℃)
7	Operating DC current or Operating Voltage	・ DC module : Typ 1500mA (48V configuration)
8	Circuit configuration	・ 10P X 8S (48V configuration)
9	Rated life(tc)	・ 70,000Hr @ L70 (*tc 85℃) * : Case Temperature
10	Certifications	・ UL, (CE , ENEC. : TBD)
11	Etc.	

2. PERFORMANCE SPECIFICATION OF MODULE

2.1 ELECTRICAL PERFORMANCE

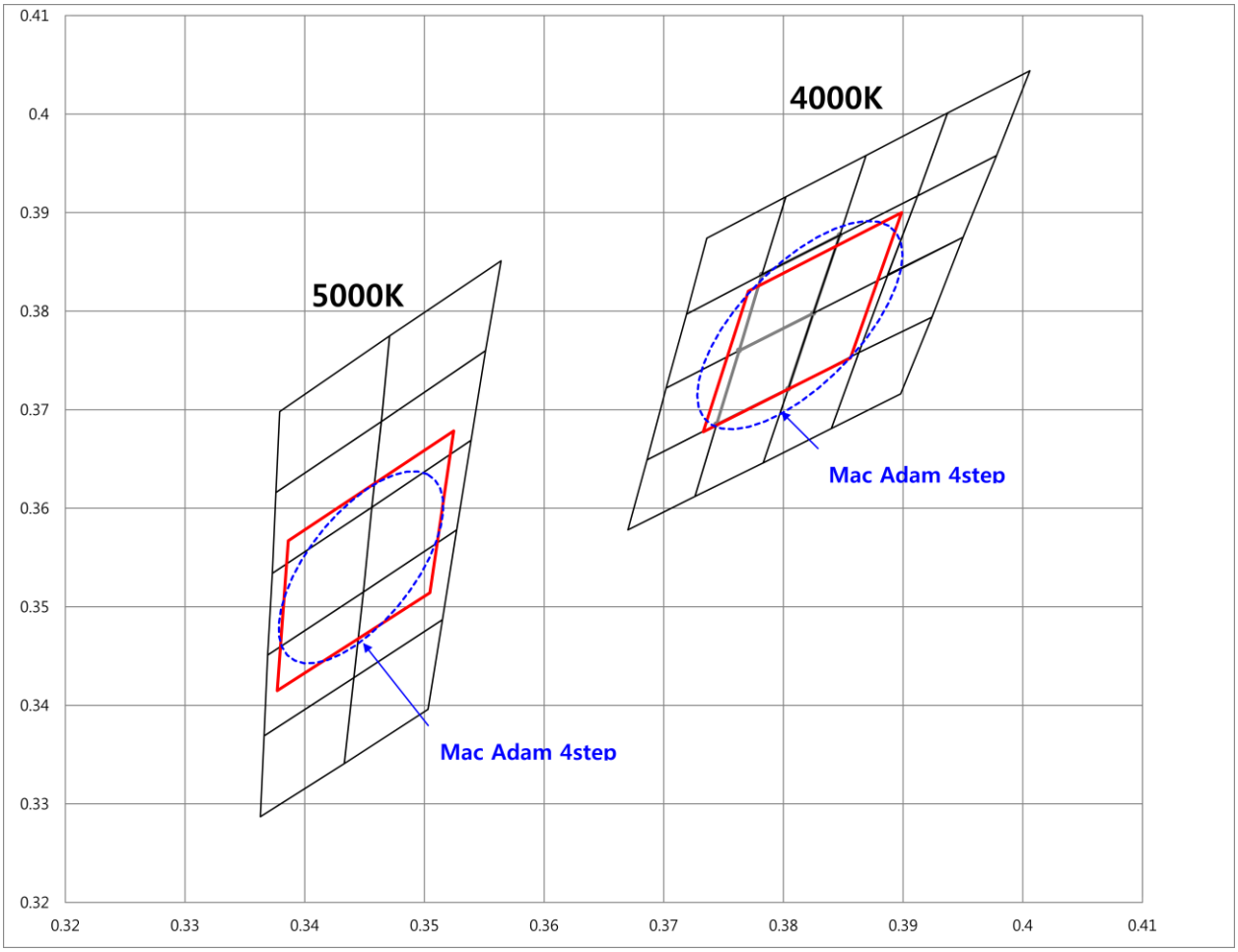
ARTICLE	SYMBOL	UNIT	MIN	TYP.	MAX	REMARKS
Operating Voltage	Vf	V	47.3	49.6	51.9	48V configuration
Operating Wattage	P	W	-	74.4	-	48V configuration
Operating Current	If	mA	-	1500	-	48V configuration

2.2 OPTICAL PERFORMANCE

ARTICLE	SYMBOL	UNIT	CCT	MIN	TYP.	MAX	REMARKS
Luminous Flux	Φv	lm	4,000K	8470	8850	9370	48V configuration @ 1500mA , tp 25℃
			5,000K	8670	9050	9570	
Luminous Efficacy	η	lm/W	4,000K	-	119	-	
			5,000K	-	122	-	
CCT	-	K	4,000K	3853	3986	4137	
			5,000K	4799	5021	5271	
CRI	Ra	-		80	-	-	

※ Measurement tolerance of Vf becomes ± 0.3V in the value
Measurement tolerance of luminous flux becomes ± 7% in the value

※ Color Coordinate Spec.



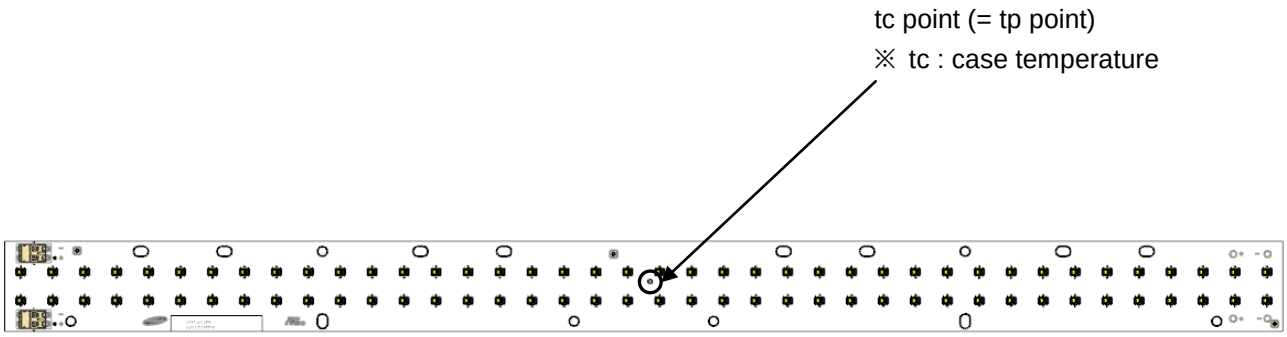
	4,000K		5,000K	
	x	y	x	y
1	0.3733	0.3678	0.3377	0.3415
2	0.3856	0.3752	0.3505	0.3514
3	0.3899	0.3900	0.3524	0.3678
4	0.3771	0.3820	0.3386	0.3567
Center	0.3815	0.3788	0.3448	0.3544
REMARKS	@ 1500mA , tp 25℃			

※ Measurement tolerance of the color coordinates is ± 0.005

2.3 THERMAL PERFORMANCE

ARTICLE	UNIT	LIFE	MAX	REMARKS
tc	℃	-	85	tc : Critical Temperature at tc-point
tp	℃	70,000Hr	85	tp : Performance Temperature at tc-point (L70)

All temperatures are measured at the designated “ tc(Case Temperature) point” as indicated on the module.



tc

rated maximum temperature

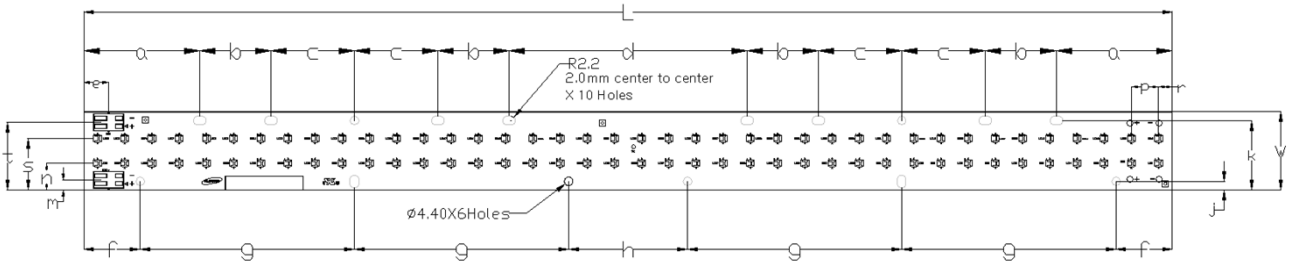
highest permissible temperature which may occur on the outer surface of the LED module (at the indicated position, if marked) under normal operating conditions and at the rated voltage/current/power or the maximum of the rated voltage/current/power range

tp

temperature at the tp-point, related to the performance of the LED module

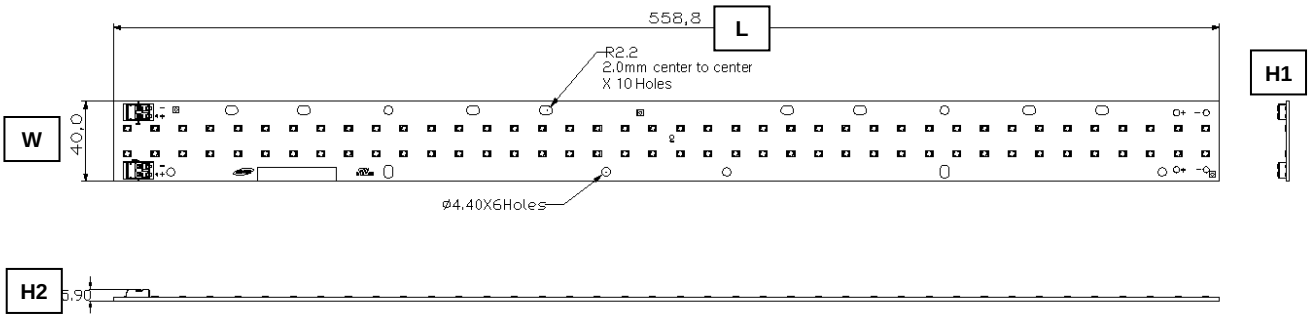
3. PRODUCT STRUCTURE

3.1 DIMENSION

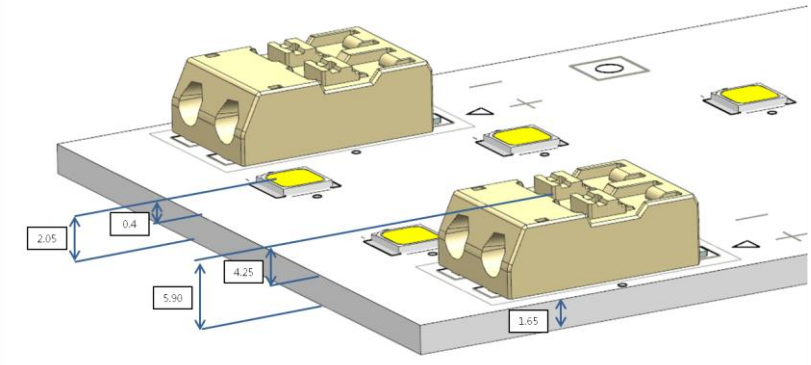


Unit [mm]

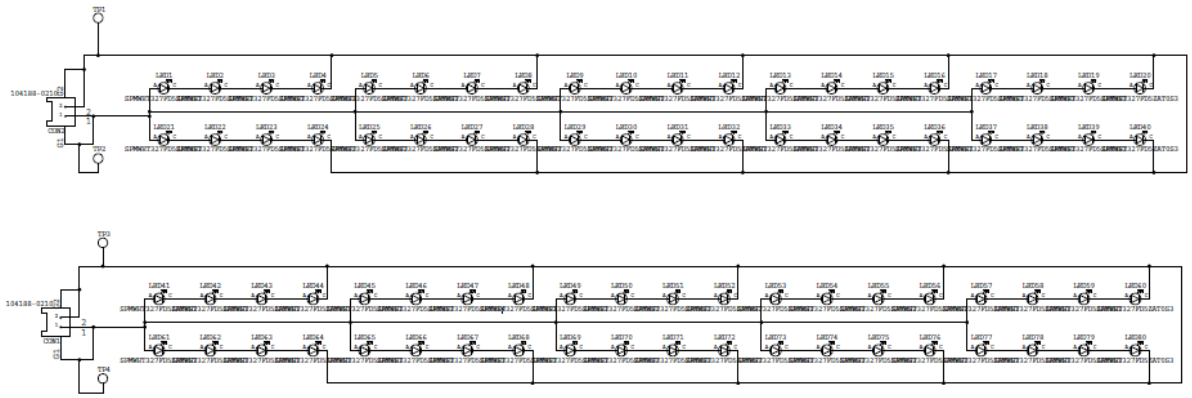
ITEM	SPECIFICATION	ITEM	SPECIFICATION	ITEM	SPECIFICATION
a	59.53	g	110	n	13.65
b	36.51	h	61	p	13.97
c	42.86	j	4.5	r	7.05
d	122.25	k	35.5	s	26.35
e	12.7	L	558.8	t	34.66
f	28.9	m	5.34	W	40



ITEM		SPECIFICATION
L	Length of PCB	558.8 ± 0.3mm
W	Width of PCB	40.0 ± 0.2mm
H1	Thickness of PCB	1.65 ± 0.115mm
H2	Height of Module	5.9 ± 0.2mm



3.2 CIRCUIT



4. SAFETY & CERTIFICATIONS

4.1 SAFETY

No.	Item	RESULT / REMARKS
1	General	RoHS
2	Hazardous Substance & Materials	N/A

4.2 CERTIFICATIONS

No.	ARTICLE	RESULT / REMARKS
1	UL	E344519
2	CE	TBD
3	ENEC	TBD
4	VDE	N/A
5	KC	N/A
6	KS	N/A
7	PSE	N/A

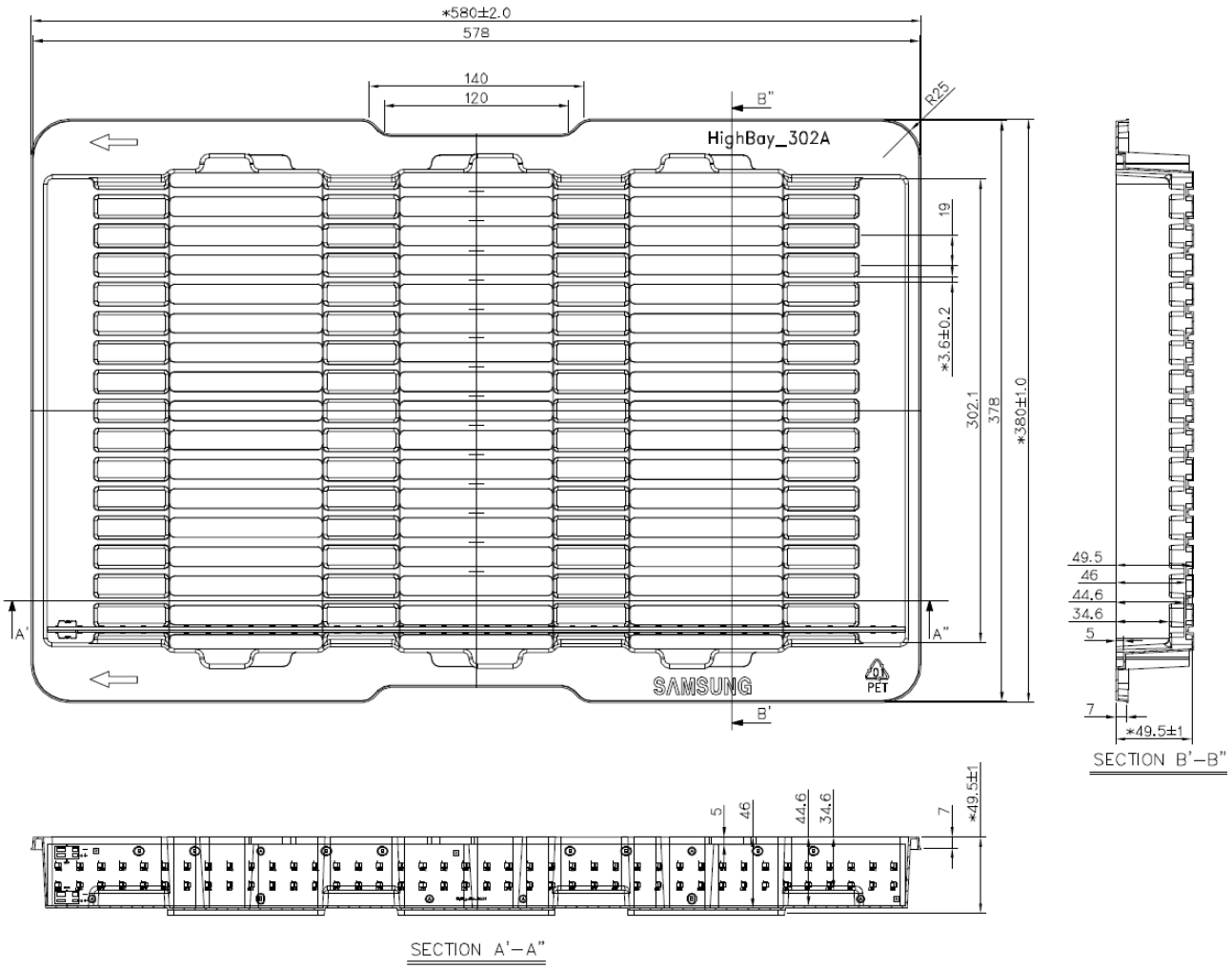
5. PACKING SPECIFICATIONS

5.1 PACKING

포장사양서_Highbay_302A_ver01.ppt

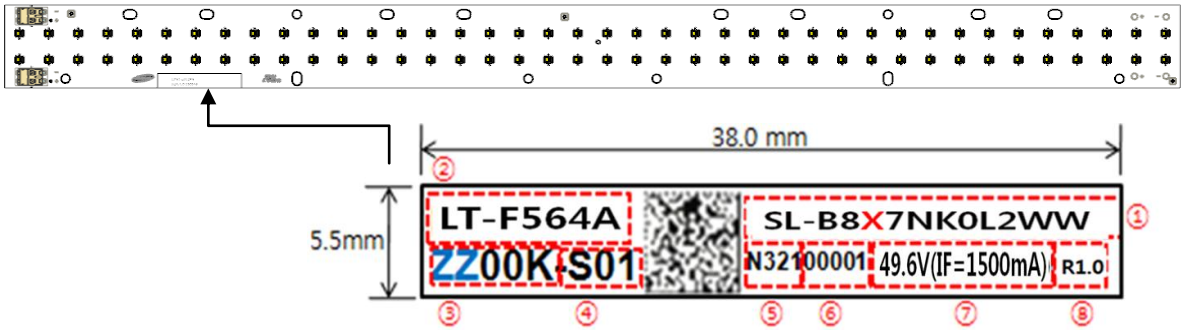
ARTICLE	TRAY	BOX	PALLET	REMARKS
Quantity	32 ea	96 ea	1920 ea	

5.1.1 TRAY INFORMATION



5.2 PACKING LABEL

5.2.1 PRODUCT LABEL



A. Information of Printed Label

① Model code : SL-B8X7NK0L2WW

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

② Product code : LT-F564A

③ Color temperature : ZZ00K

ZZ : 40 , 50

④ LED Maker : -S (Samsung)

Group No. : 01 (Binning group)

⑤ SMT date : N321 (2012-March-21th)

A(2000), B(2001) ····· J(2009), K(2010), L(2011), ····· (year)

1(January), 2(February), ····· 9(September), A(October), B(November), C(December) (month)

01, 02, ····· 31th (date)

⑥ Serial No. : 00001

00001~99999 : Setting "00001" every working day

⑦ Rated voltage : 49.6V

Rated Current : (IF=1500mA)

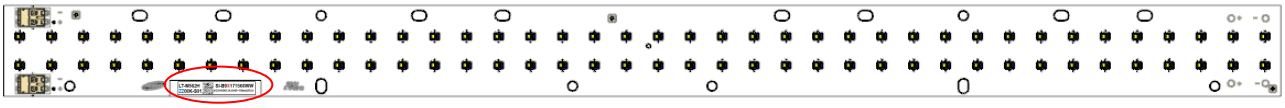
⑧ Model Revision : R1.0

B. QR CODE information

① Example : SL-B8X7NK0L2WW _N321100001ZZ00K-S01

② 34 digit : Model code(14) + Space(1) + SMT date(4) + SMT line No.(1) + Serial No.(5) + Color temperature(5) + LED maker(2) + GROUP No.(2)

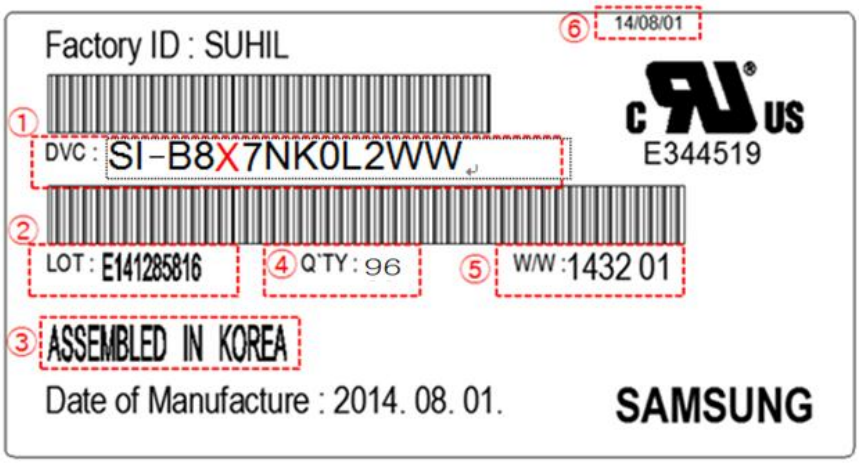
Model CODE	SL-B8X7NK0L2WW
QR CODE Information	SL-B8X7NK0L2WW N321100001ZZ00K-S01



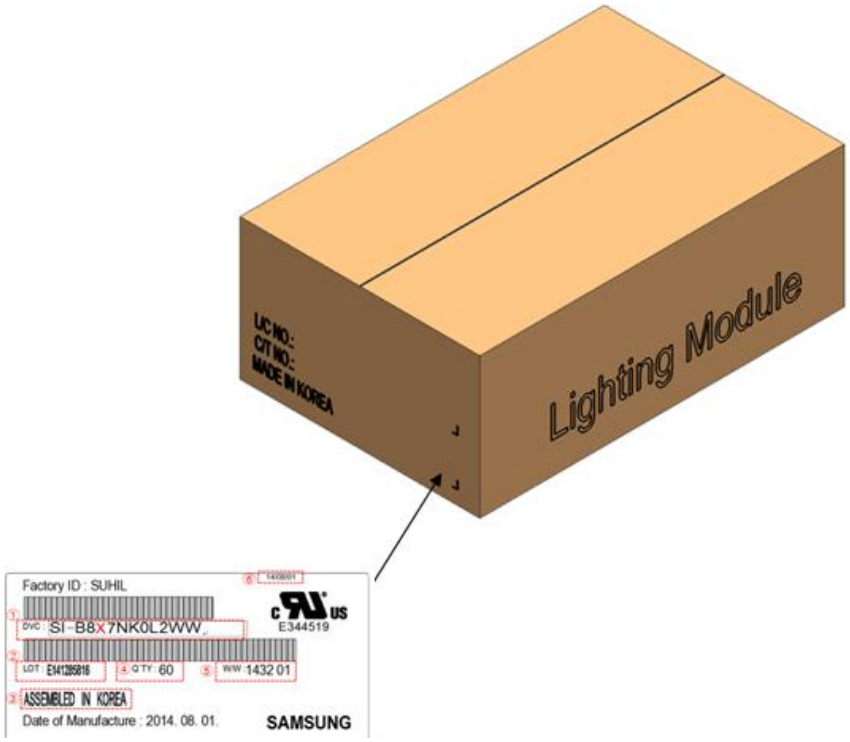
5.2.2 TRAY & MBB LABEL

① Model code : : SL-B8X7NK0L2WW
② LOT : 20140105-E0001
packing date(8digit) → 20140105
Factory (1digit) → SUHIL(E), TS SUHIL(D), SLED(B)
Serial no(4digit) → 0001~9999, A111~A999
③ QTY : bar no.(5digit)
④ W/W : manufacturing year (2digit) + manufacturing week (2digit)
⑤ label printing date : 12:year/01:month/30:day

5.2.3 BOX LABEL



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



6. PRECAUTIONS IN HANDLING

6.1. 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.

6.2. 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.

(7) *VOCs can be generated from adhesives, flux, hardener or organic additives used in luminaires. This phenomenon can cause a significant loss of light emitted from the luminaires. In order to prevent these problems, we recommend users to know the physical properties of the materials used in luminaires, and they must be selected carefully.

(*VOCs: Volatile Organic Compounds)

6.3. 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.

6.4. 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.

6.5. Storage

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

6.6. Others

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

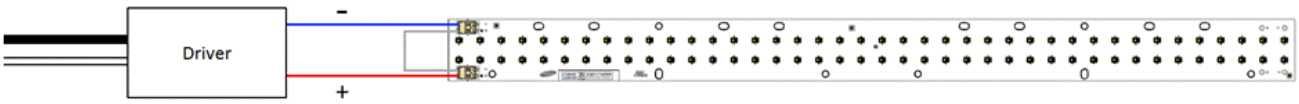
It will cause damage Circuits(that LED is included) and result in destruction.

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 WIRING

48V configuration

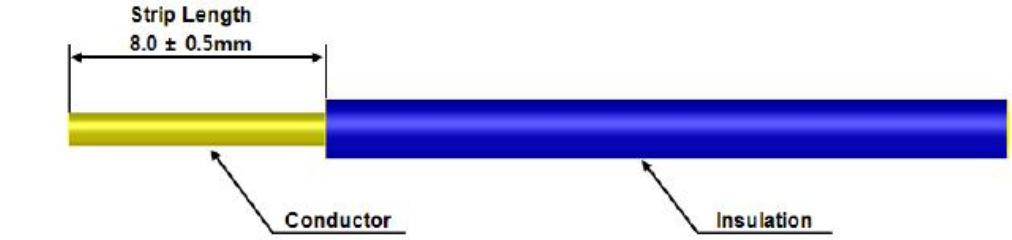


APPENDIX 2. APPLICABLE SOLID WIRES

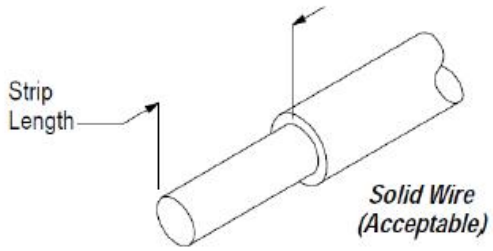
A. Applicable solid wires

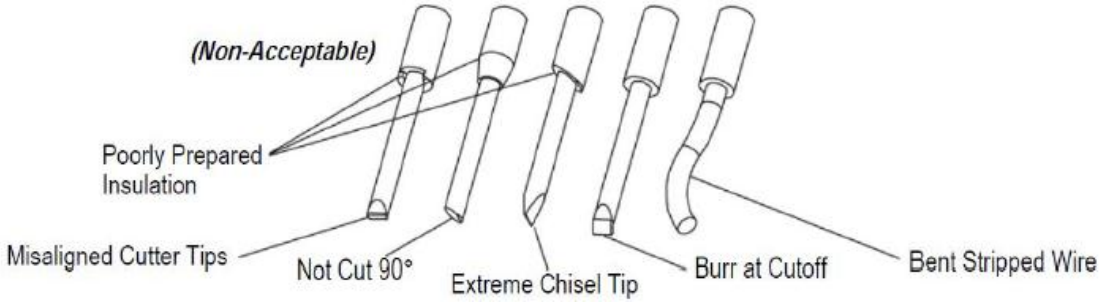
Wire Range AWG NO.	Number of Conductors / Diameter of a conductors (NO. / mm)	Insulation Diameter (mm)	Conductor Type
24	1 / 0.51	1.35	Solid
22	1 / 0.64	1.48	
20	1 / 0.81	1.65	
18	1 / 1.02	1.86	

B. Wire strip length



[Conductor : Bear Copper]





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