SPECIFICATION

MODEL : STIFP218735N024KOR

CUSTOMER :	
CHECKED	APPROVED
20 . . .	20 . . .

SAMSUNG			
DRAWN	CHECKED		APPROVED
	SALES	QA	
20 . . .	20 . . .	20 . . .	20 . . .

SAMSUNG ELECTRONICS CO,. LTD.

SAMSUNG #2, NONGSEO-DONG, GIHEUNG-GU,

YONGIN-CITY, GYEONGGI-DO, KOREA, 446-711

SAMSUNG	LED Driver	REV.NO.	PAGE
		00	2 /14

REVISION OF SPECIFICATION

	00	The First Specification established.		2013.07.22	SC.Kwon	CH,Baek
SYMBOL	REV	REVISION	PAGE	DATE	TRACED	APPRO.

TABLE OF CONTENTS

SPECIFICATION No.	
DATE OF ISSUE	2013. 07. 22

SAMSUNG

LED Driver

REV.NO.	PAGE
00	4 /14

1. APPLICATION

This specification defines the general specification and performance of the Non Dimming driver.

2. FUNDAMENTAL SPECIFICATION

No.	ARTICLE	SPECIFICATION
2-1	PSU (Power Supply Unit)	· Dimensions : 212 × 41 × 30.5mm(length / Width / Height) (Tol: ±2.0mm) · Input Power Maximum Consumption (50W) · Input Voltage (220Vac ~ 240Vac) · Output Current (35W : 630mA ± 5%) · Output Voltage (24Vdc)
2-2	Weight	· 220 ± 30g
2-3	Ambient Temperature (Ta)	· −20[℃] ~ +50[℃], Surrounding Temp. of LED Driver within Fixture
2-4	Storage Temperature	· -40[℃] ~ 85[℃]
2-5	Listings	· CE / ENEC / VDE / KC
2-6	EMI	· EN55015
2-7	Surge	· IEC 61547
2-8	Hi-Pot	· IEC 61347-1 , IEC 61347-2-13
2-9	Hazardous Substances in Products	· RoHS compliant, REACH , WEEE
2-10	Lifetime	· 50,000hr(MTBF)

3. APPEARANCE AND STRUCTURE

No.	ARTICLE	SPECIFICATION
3-1	Appearance	See the Appendix 1
3-2	Structure	See the Appendix 1

4. PERFORMANCE

- Electric Specification

No.	ARTICLE	SPECIFICATION					
		Symbol	Min.	Typ.	Max.	Unit	Remarks
4-1	Power Consumption	P	30	35	40	W	Vac=240V/50Hz @24.0V, measured with electronic load
4-2	Input Current	I	0.13	–	0.25	A	Each channel Vac=240V/50Hz @24.0V
4-3	Output Current	Io	599	630	662	mA	Each channel Vac=240V/50Hz @24.0V
4-4	Output Voltage	Vo	20	24	26	Vdc	Each channel
4-5	Efficiency	-	84	87	-	%	Vac=240V/50Hz @24.0V
4-6	Power Factor	PF	0.9	-	-	-	Vac=240V/50Hz @24.0V
4-7	THD	%	-	10	15	%	Vac=240V/50Hz @24.0V
4-8	Turn On Time				0.5	sec	Vac=240V/50Hz @24.0V, measured with electronic load
4-9	Ripple Current				30	%	Output current ± 30%
4-10	Inrush current	Ipeak			20	A	
		Tduration			300	μs	@50% of Ipeak
4-11	No load Power consumption	-	-	-	1	W	@no load
4-12	O.V.P	-	-	-	43	V	Auto Recovery
4-13	O.T.P	-	-	-	150	℃	Auto Recovery
4-14	Ambient Temperature	-	-20	-	50	℃	
4-15	Case Temperature	-			85	℃	Case of LED Driver
4-16	Lifetime(E-cap)		50,000			hour	MTBF

※ Keep the same Tc with fixture or without fixture

※ E-Load Condition : LED & CR Mode

- **Final Test Items**

No.	ARTICLE	SPECIFICATION					
		Symbol	Min.	Typ.	Max.	Unit	Remarks
4-1	Power Consumption	P	30	35	40	W	Vac=240V/60Hz @24V
4-2	Output Current	Io	599	630	662	mA	2 channel
4-3	Output Voltage	Vo	20	24	26	Vdc	2 channel
4-4	Efficiency	-	84	87	-	%	Vac=240V/60Hz @24V
4-5	Power Factor	PF	0.9	-	-	-	Vac=240V/60Hz @24V
4-6	THD	%	-	10	15	%	Vac=240V/60Hz @24V

※ All Test Results are recorded with 100% Products

※ E−Load Condition : LED & CR Mode

5. STANDARD TESTING CONDITION

5-1 Standard testing environment

Generally all tests are performed in normal room temperature and humidity. If the problem occurs, re-tests are performed at 25±3℃ and 60±5% relative humidity.

5-2 Standard testing method

1) Testing equipment

Type	Company	Model (Reference)
AC Input Driver	Chroma	AC Source 61504
Power Consumption measuring equipment	YOKOGAWA	PRECISION POWER ANALYZER WT3000
Electrical Load	Chroma	DC Electronic Load 63110A

2) Testing equipment Condition

Measuring Equipment	Condition
AC Source	AC 220V / 60Hz
DC Electronic Load	DC Electronic load, @ 24.5V, LED & CR Mode

3) Measurement Method
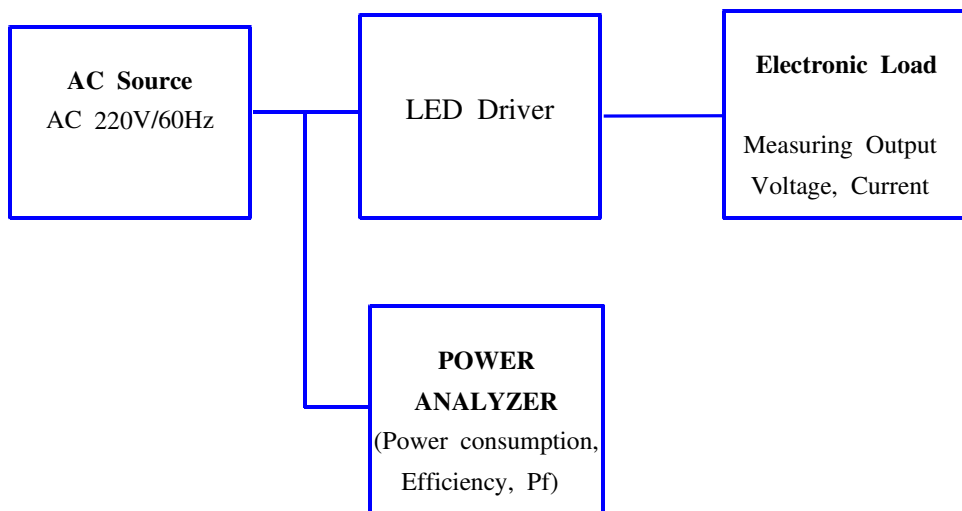
6. PRECAUTIONS IN HANDLING

1) This LED Driver is only for 45W Non Dimming driver.

2) Handling
   To prevent the LED Driver from any defect, please handle it with care as follows.

   a. Don't drop the unit and don't give the unit any shocks.

   b. Don't store the product in a dusty place or room.

   c. Don't take the product apart.

   d. Don't pull wire with hand in case of carry or move the product.

3) Static Electricity
   Static electricity or surge voltage damages the LED Driver. Please keep the working
   process anti−static electricity condition to prevent the luminaire from damage.

   a. Anyone who handles the unit should be well grounded. (earth ring or anti−static glove)

   b. Anyone who handles the unit should wear anti-electrostatic working clothes.

   c. All kinds of device and instruments, such as working table, measuring instruments
      and assembly jigs in production line should be well grounded.

4) Others
   a. If over voltage which exceeds the absolute maximum rating is applied to LED Driver,
      it will cause damaging circuits and result in malfunction.

   b. Do not use the mixed polarity of Ch1 and Ch2.

Module Interface			
Module1		Module2	
Ch1 +	Ch1 -	Ch2+	Ch2-

7. TERMINAL INFORMATION

1) Input Interface

PIN	SYMBOL	COLOR	DESCRIPTION
1	Live	Gray	AC Input
2	Neutral	Gray	AC Input
3	NC	Gray	No Connect
4	P.E	Gray	Protective Earth
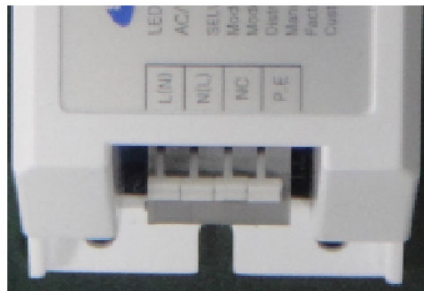
2) Output Interface

PIN	SYMBOL	COLOR	DESCRIPTION
2	CH2 +	Gray	Positive(Anode) LED output(CH2+)
1	CH2 –	Gray	Negative(Cathode) LED output(CH2-)
3	CH1 +	Gray	Positive(Anode) LED output(CH1+)
4	CH1 –	Gray	Negative(Cathode) LED output(CH1-)
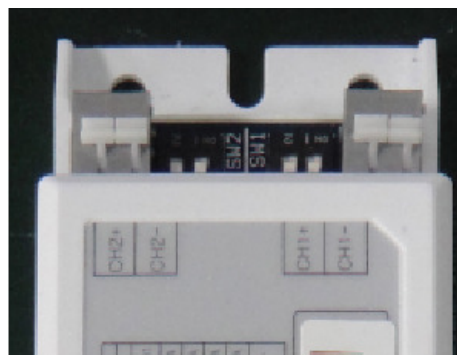
8. WIRE SELECTION AND PREPARATION

1) Acceptable
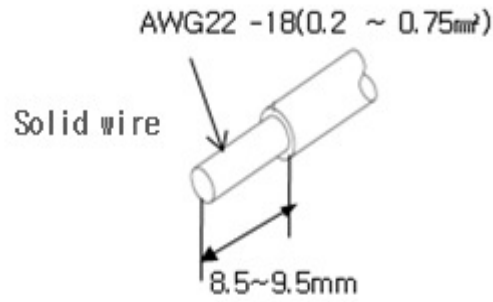
AWG22 -18(0.2 ~ 0.75㎟)

Solid wire

8.5~9.5mm

2) Non-Acceptable

Poorly Prepared Insulation

Mis-Aligned Cutter Tips   Not Cut 90°   Extreme Chisel Tip   Burr at Cutoff   Bent Stripped Wire

9. PACKING SPECIFICATION

1) Out Box

2) Nil−Pad

3) Stock Pattern

* 4PCB/Tray , 5Tray/Box , 20PCB/Box

NIL-PAD

PET - TRAY

OUT BOX
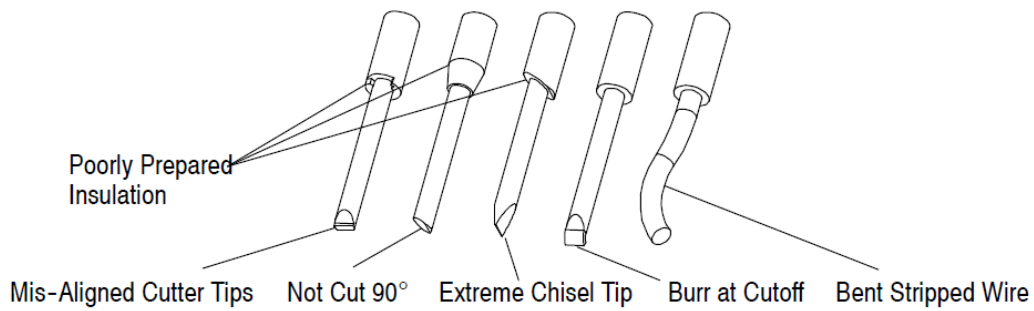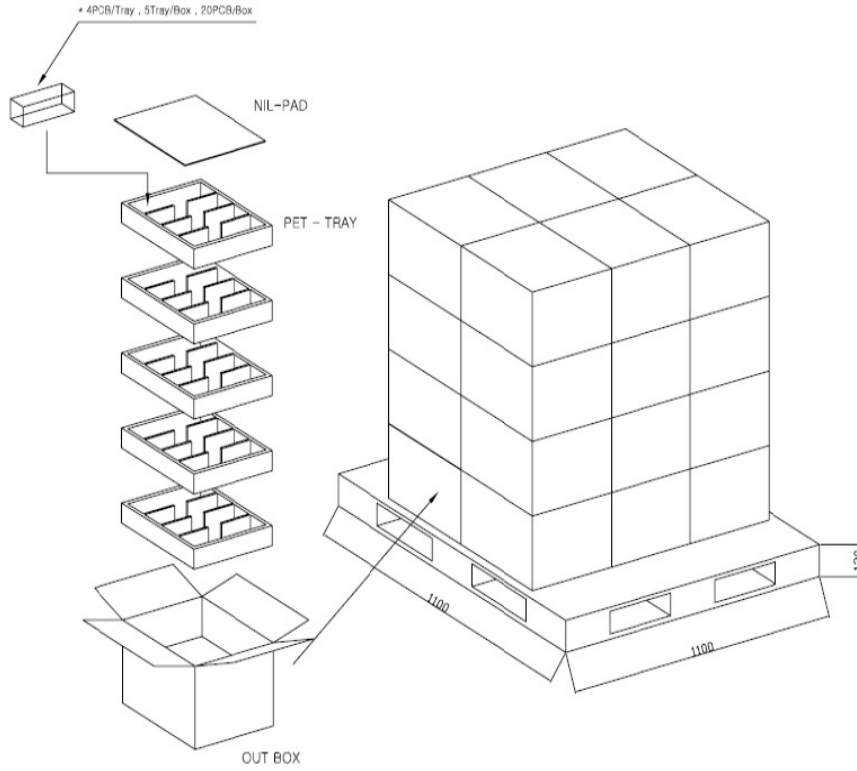
4) Tray
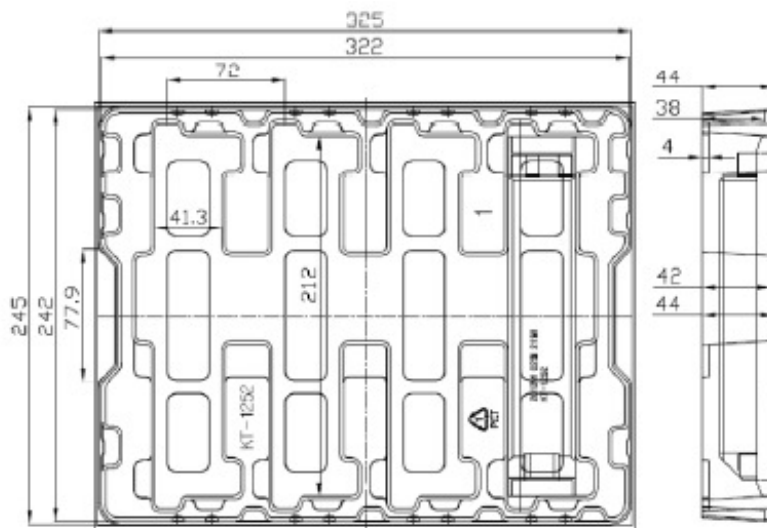
APPENDIX 1. Appearance Drawing (in mm)

1) Housing
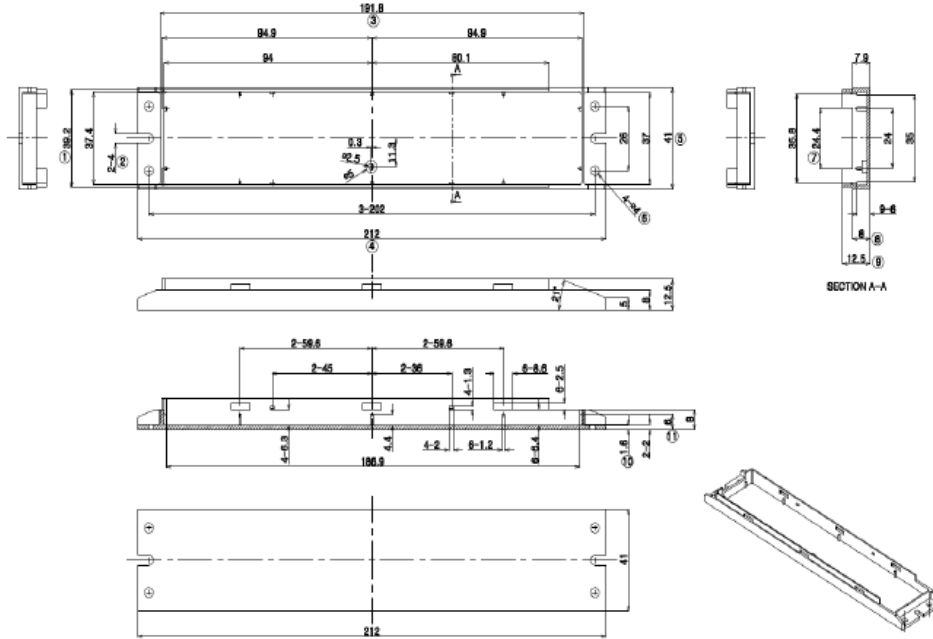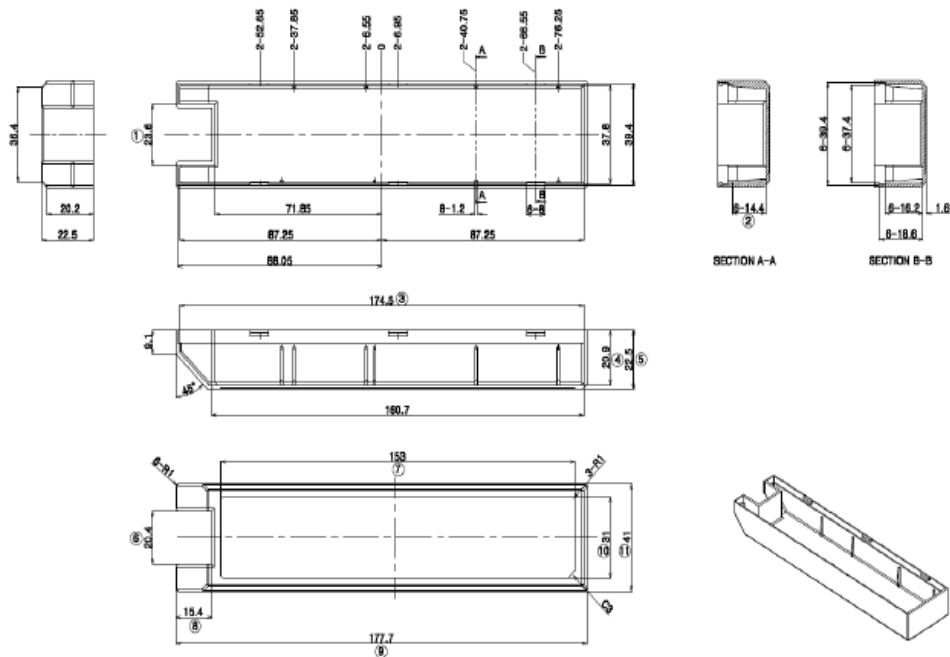
2) Cover

APPENDIX 2. Label Drawing

1) Main Label

2) Barcode Label

→ Serial Number : 0000~9999
→ Revision : PCB Revision(1=>REV1.0)
→ ITEM Name : 4digit
→ Manufactured Factory(M:Korea Taiyo Yuden, E:Chiness EMS)
→ Manufactured Maker(T:Taiyo Yuden)
→ Manufactured Year/Month/Day