



SPECIFICATIONS FOR APPROVAL

CUSTOMER : Sincere Trading CO., LTD.

NOMENCLATURE : AC ADAPTOR FOR LCD MONITOR

CUSTOMER MODEL NAME :

MODEL NAME : AD-4512L

Signature of Approval

AMSUNG ELECTRO-MECHANICS CO.,LTD.
MOBILE & POWER PRODUCT DIV.
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1.ELECTRICAL SPECIFICATION

A.SPECIFICATION

B.CIRCUIT DIAGRAM

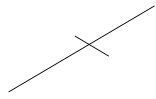
C.PART LIST

D.PCB SILK DRAWING

SPECIFICATION

(ELECTRICAL SPECIFICATION)

Customer	
Record no.	
Div.& Part	SMPS Lab.
Part no.	AD-4512L
Model name	AD-4512L
Pub.date	2003.01.30

APPROVALS	DATE
DRAWN : B.O.JUNG	03' 09.05
CHECKED : 	
ISSUED : S.C.KIM	03' 09.05

SAMSUNG	SPECIFICATION	RECORD NO.	
ELECTRO-MECHANICS	(ELECTRICAL SPECIFICATION)	PUB.DATE	2003.01.30
		REV.DATE	2005.06.23

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1.Introduction

1-1. Product Description

This Specification defines the input, output, performance characteristics, environment, noise and safety requirements for a **45watts** Power Supply.

1-2. Parameter Specification

Unless specification otherwise, all parameters must be met over the limit of temperature load, and input voltage.

1-2. PB Free

Solder of this Procut is **PB Free** Type

2.Electrical Requirements

2-1. Input Requirements

2-1-1. Input Voltages

Normal voltage : 100 to 240Vrms

Voltage range : 90 to 264Vrms

2-1-2. Frequency

100Vac 60Hz / 240Vac 50Hz

2-1-3. Input Current

1.0 Arms at 100Vac input

0.5 Arms at 240Vac input

2-1-4. Configuration

3 Conductors (Live, Neutral, F.G)

2-1-5. Input Fuse

The live line side of the input shall has a fuse.

2-1-6. Primary Over Current Protection

An adequate internal fuse on the AC input line shall be provided.

2-1-7. Inrush Current

No damage shall occur and the input fuse shall not blow up.

2-1-8. Earth Leakage Current.

3.75mA Max (264V, 50Hz)

2-1-9. Hi-Pot tests (Dielectric withstand voltage)

: leakage(cutoff) current 10mA

* Primary to Secondary : 4.3KVdc for 3 sec

2-1-10. Insulation Resistance

Insulation resistance shall be more than **100M** at 500Vdc between primary Live, Neutral line and secondary.

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2-2. Output Requirements

2-2-1. Output Voltage and Current

Output Voltage	Minimum Voltage(V)	Maximum Voltage(V)	Output current
			Continuous
+12.0Vdc	+11.4Vdc	+12.6Vdc	0 3.75A (42Watts)

2-2-2. Output Voltage Regulation

The total output voltage regulation shall be $\pm 5\%$, including the effects of line voltage variations, load current, ripple and noise, and the AC component of the load current. The effect of dynamic load changes is not included in this limit.

2-2-3. Dynamic Load Regulation

$\pm 5\%$ for 50% 100% or 100% 50% load change for 12Vdc at any frequency up to 250Hz (duty 50%).

2-2-4. Ripple and Noise

The power supply shall not exceed the following limits on the indicated voltages for 60Hz or 50Hz ripple, switching frequency ripple and noise and dynamic load variations, measured with a 20MHz bandwidth.

A	B
11.4Vdc 12.6Vdc	0.3Vp-p(300mV)

Column A : Output Voltage.

Column B : AC Ripple + Switching Ripple and Noise

Ripple and noise are measured at the end of output cables which are added a **0.1uF(104)** ceramic capacitor and a **47uF** electrolytic capacitor. (connect parallel)

2-2-5. Efficiency

When line input voltage(110Vac or 230Vac), the efficiency shall be **80%** or better under maximum load.

2-2-6. Over Current Protection (Auto recovery)

The power supply shall not be damaged by a over current from the output to return line. Protection shall be invoked if current exceed maximum rating about 15% or more.

Rating Current	Lower	Upper
3.75A	3.7A	7.0A

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2-2-7. Short Circuit Protection (Auto recovery)

The power supply shall not be damaged by short between DC output and DC ground.

2-2-8. Open Circuit Protection

When primary power is applied with no load on any output level, no damage or hazardous conditions should occur.

2-2-9. Over Voltage Protection (Internal Test Only)

The voltage will not exceed the upper trip limit.

Output Voltage		Upper
11.4Vdc	12.6Vdc	25.0Vdc

2-2-10. Overshoot

The output overshoot at turn-on shall not exceed 10% of normal voltage value with or without the load connected.

2-2-11. Drop-Out

With a half cycle input voltage drop-out, the unit shall operate within the prescribed voltages with a drop-out pulse repetition rate of 500mS.

Conditions	Limits
Full load, normal input AC voltage	Meet all requirements

2-2-12. GND Continuity Test

Primary Inlet F.G to Secondary GND
: 25A for 3seconds, 100m (MAX)

3. Cooling

Cooling shall be with natural convection cooling.

4. Environmental Requirements

4-1. Temperature

Operating : 0 to + 40
Storage : -10 to + 70

4-2. Humidity

Operating : 20% to 85% non-condensing
Storage : 5% to 95% non-condensing

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5. Reliability

5-1. Mean Time Between Failure(MTBF)

The power supply shall be designed and produced to have a mean time between failures (MTBF) of 12,000 operating hours at 90% confidence-level while operating under the following condition.

1. AC Input Voltage : 110Vac and 230Vac
2. Duty Cycle : 6hours ON, 2hours OFF
3. Ambient Temp. : 25 ± 2
4. Humidity : Prevailing Conditions

5-2. Life / Power ON Hours

The Power Supply must be designed to operate for 12,000 power-on-hours, about 5 years at an ambient temperature of 25 .

6. Regulatory Agency Certification

6-1. RFI/EMI Standards

The adapter shall comply with a following RFI / EMI standards when tested in an (CUSTOMER.) system configuration.

1. F.C.C. Federal Rules and Regulations Part 15, sub parts B computing devices.
2. VFG 243, class B. computers and high frequency equipment "GERMANY"
3. CISPR22, class B "NORDIC / EUROPE"
4. VCCI, class B. "JAPAN"

These limits shall be met with a margin of at least 6dB at all applicable frequencies.

6-2. Safety Standards

The adapter shall be certified with the following safety standards.

[AD-4512L]

1. CSA
2. NRTL/C
3. CB
4. NEMKO
6. CE
7. TUV
9. SEMKO
10. KONCAR
11. PSB
12. QAS

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		REV.DATE	2003.09.05

7. Labeling

In accordance with regulatory agency requirements, the power supply shall be supplied with the following markings.

7-1. AC Power Specification

The adapter shall be marked as to the input voltage and current requirements and with the frequency range of AC power input.

7-2. Marking

Date code indicating month and year of manufacture.

7-3. Vendor Identification / Certifications

The Power Supply shall be clearly marked with the following information.

1. Vendor name.
2. Place of manufacture or code.
3. Vendor model number and revision.
4. Regulatory agency approval insignias, and their associated reference file numbers.
5. Serial number.

8. Burn-In

4hours at 40 (±10), Nominal input voltage, 80% of maximum load.

9. Mounting Connectors

9-1. AC Input Connector

[AD-4512L]
 SPEC : 3pin(ST-01K-BCKL:250V 10A)
 Vendor : SOLTEAM or equivalent

9-2. DC Output Cable

Wire : UL1185#18,1800mm

Plug : [HUANG JI] P/N : 5525TV210 - 1T00 - 06

[TAI JI] P/N : 2252 - CC - 23

10. Mechanical Features

10-1. Dimensions (Case size)

[AD-4512L]
 Length : 115.0 mm
 Width : 53.0 mm
 Height : 31.0 mm

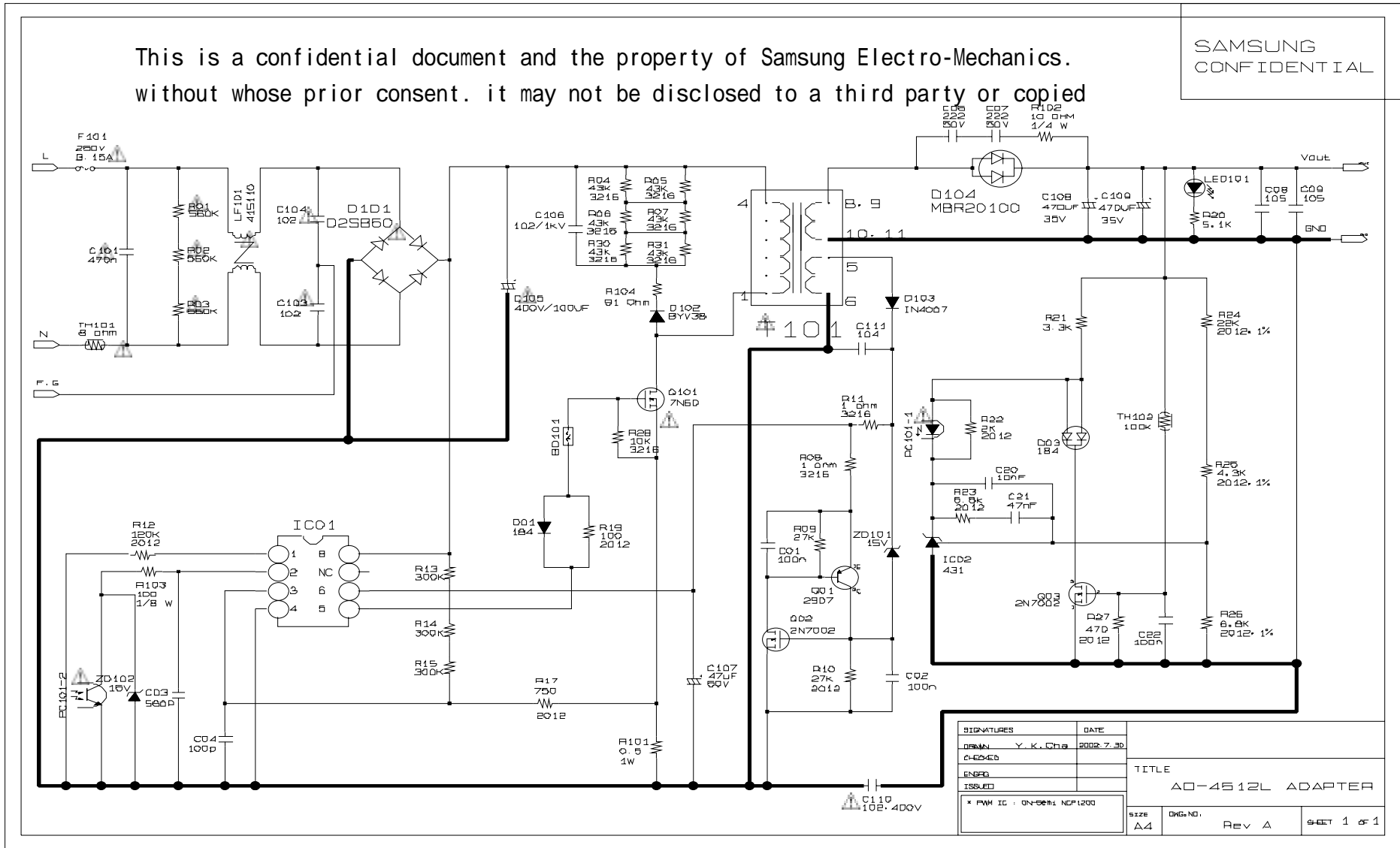
10-2. Weight.

[AD-4512L]
 Power Supply Ass'y : 275gram max

AD-4512L

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CONFIDENTIAL



SIGNATURES		DATE	
DESIGN	Y. K. Cho	2002.7.30	
CHECKED			
ENGINEER			
ISSUED			
TITLE			
AD-4512L ADAPTER			
SIZE	DATE	REV	SHEET
A4		Rev A	1 of 1

SAMSUNG ELECTRO-MECHANICS	PART LIST (ELECTRICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 2005.06.23
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L-NO	DESCRIPTION	REF	SPECIFICATION	UNIT	QTY	VENDOR	VENDOR-PARTNAME	BOM-CODE
DIP COMPONENT(Component Side Component)								
	HEATSINK 1(H/S 1)	Q101	HEAT SINK1(H/S 1)	EA	1	MIKYOUNG SCREEN ZHENGCHENG	AD-4214L	ML62-00213C
	HEATSINK 2(H/S 2)	D104	HEAT SINK2(H/S 2)	EA	1	MIKYOUNG SCREEN ZHENGCHENG	AD-4214L	ML62-00213B
	METAL SHIELD ASS'Y		METAL SHIELD ASS'Y	EA	1	YUIL KUKIL SHIU FUNG	AD-4214L	ML63-00014A
	INSULATOR - LF101		PET, T=0.25*18*14*18*18	EA	1	YEONGDONG SHIU FUNG		ML72-00442A
	SCREW-M (Q101,D104)		FH+ M3 * 8 PLAIN ZPC1(Y) SWRCH10R	EA	2	SAMPUNG PU GANG		6001-000365
			SCREW-MACH FH+ M2.6xL8 HH=1 HA=120 NI-PLT					6001-001807
	NUT-HEXAGON		2C,M3,ZPC(YEL),SM20C	EA	2	SAMPUNG PU GANG		6021-000154
			NUT ; HEX, 2C, M2.6, ZPC-YEL SM20C					6021-000141
	INSULATOR-RING	D104, Q101	RING R6,13,T2	EA	2	YUIL SHIU FUNG YUNG CHAMPION		ML72-00082A
	INSULATOR		SIL-PAD-1000,ES830,T0-220	EA	2	APEX BERGQUIST SHIU FUNG	SO-130P(T0-220)	ML72-00240K
	INDICATOR-RATING		PET-SILVER 38 * 90 * 0.125T	EA	1	DONG WON SHIU FUNG	AD-4512L	ML68-00578C
	CASE - COVER		PC+ABS VO BLACK	EA	1	KYOUNGIN ENG PU CHENG, V.S SHUN XING CHINYUAN	AD-4214L	ML61-00144A
			PC VO BLACK					
	CASE - BOTTOM		PC+ABS VO BLACK	EA	1	KYOUNGIN ENG PU CHENG, V.S SHUN XING, CHINYUAN	AD-4214L	ML61-00143A
			PC VO BLACK					
	MIL LED-WINDOW		MIL LED-WINDOW AD-20	EA	1	KYOUNGIN ENG PU CHENG		ML74-00146A
	PCB-MAIN		AD-4214L, CEM-1, 1.6T	EA	1	信達電子(HSINTA) OR UL APPROVED	AD-4214L	ML41-00370F
	EYELET		Bs53-1/2 t=0.25	EA	2	PU GANG	EYELET-SMALL	6042-001003

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L-NO	DESCRIPTION	REF	SPECIFICATION	UNIT	QTY	VENDOR	VENDOR-PARTNAME	BOM-CODE
OUT-CABLE	ASS'Y PLUG		L1800,UL1185#18,BLACK	EA	1	SHI NAHN SHIN HEUNG KYUNGSUNG XINYA, PANGGANG	AD-4212L(TS)	ML39-00596A
INLET	ASS'Y INLET	R0 R1	250V 10A, AC-INLET Ass'y	EA	1	SOLTEAM ELECTRONICS I-SHENG PLASTIC	ST-01K-BCKL 7003 (HBS2.00)-L	ML39-00590K
BD101	BD101		FERRITE-BEAD CORE	EA	1	NETRONTTECH BOAM,ACE	BIT-5857	ML27-00096A
C101	CAP-F MPET	R0	CAP-F 474nF 275Vac 10% 18X11X18	EA	1	CARLI ISKRA	474 MPX474K32D6 474 KNB1560	2301-001489 2301-001414
C103, C104, C110	CAP-C	R0 R1 R3	Y-CAP.CAP-C, AD 1000pF/400V	EA	3	NETRONTTECH SAMWHA SUCCESS	HCYE2G102MAD SDE2G102M09 5SE102MT402	2201-000896
C105	CAP-E AD	R0 R1 R2 R3 R4	CAP-E 400V / 100uF	EA	1	SAMSUNG CAPXON RUBYCON SAMYOUNG SAMHWA	CESST2G101M187BB GL101M400K360 400MXW100MSSD1835 KMF400VB100M RX2DHB107M	2401-003851
C106	CAP-C DS	R0 R1 R2	CAP-C, 1000pF 1KV	EA	1	NETRONTTECH SAMHAW JYH CHUNG/SUCCESS	HCYB3A102KDT EKB3A102K08FK5 102K 1KV B	2201-000286
C107	CAP-E AD	R0 R1 R2	CAP-E AD 47uF 50V 20% 105 6.3 *11	EA	1	SAMSUNG SAMYOUNG CAPXON RUBYCON	TRF 50V 47uF LXV 50V 47uF GL 50V 47uF 50V 47uF	2401-003395
C108, C109,	CAP-E AD	R0 R1 R2 R3	470uF 35V 20% 10.0 *20mm TMQ 470uF 35V 20% 10.0 *20mm 470uF 35V 20% 10.0 *20mm ZL 470uF 35V 20% 10.0 *20mm	EA	2	SAMSUNG CAPXON SAMYOUNG RUBYCON	TMQ 35V 470uF GL471M LXZ35V 471M 35ZL470M T8 10*20	2401-003454
C111	CAP-C DS	R0 R1	CPA-C 104M/50V CAP-C 104M/50V MLC-RADIAL	EA	1	BC COMPONENT AVX	K104M15X7RF5TH5 SR215C104MAATR	2202-000315
D101	DIODE-BRIDGE	R0 R1 R3	600V,1.5A,SIP-4 600V,1.5A,SIP-4 600V SIP-4	EA	1	SHINDENGEN G/S G/S TSC	D2SB60 G2SB60 GBL06 KBPO6G	0402-001407 0402-001407 0402-001496 0402-001407
D102	DIODE-FR	R0 R1	1000V 2A 1000V 1A	EA	1	VISHAY(TEMIC) G/S	BYV38 UF4007	0402-000495 0402-000012

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L-NO	DESCRIPTION	REF	SPECIFICATION	UNIT	QTY	VENDOR	VENDOR-PARTNAME	BOM-CODE
D103	DIODE-RECTIFIER	R0 R1 R2 R3	1N4007, 1000V, 1A 1N4007, 1000V, 1A 1N4007GP, 1000V, 1A 1N4007RL	EA	1	ONSEMI DII G/S TSC	1N4007 1N4007 1N4007GP 1N4007RL	0402-000137 0402-000137 0402-000006 0402-000137
D104	DIODE-SCH	R0 R1	100V 20A TO-220	EA	1	IR, G/S, ON-SEMI, DII, TSC SGS-THOMSON SGS-THOMSON FUJI ELECTRIC	MBR20100CT STPS20100 STPS20H100 YG805C10R	0402-000570 0402-001290 0402-001431 0402-001483
F101	FUSE	R0 R1	Fuse 250V 3.15A	EA	1	TRIAD(LITTLE FUSE) SAVE FUSETECH SCHURTER	663-3.15 SR-5 3.15 MST/MXT3.15	3601-001226 3601-001127 3601-001127
J101, J102	JUMPER WIRE	R0	JUMPER WIRE, 0.6	EA	2	FONG YA SAMEUN, MATEFORD	0.6	3811-000545
LF101	LINE-FILTER	R0	LINE FILTER, 11uH MIN 13	EA	1	TNC, ACE	415110	ML27-00283A
LED	LED	R0	LED 5 STOPPER TYPE	EA	1	AUK, KING BRIGHT	SM5411(B)/BL-B2134-S	0601-000555
PC101	PHOTO-COUPLER	R0 R1	CTR : 130-260, 200mW, DIP-4 DIP-4 CTR: 100-300%	EA	1	LITE-ON/DII TOSHIBA TOSHIBA	LTV-817B, LTV817 TLP421-GR TLP721-GR	0604-001218 0604-001232 0604-001028
Q101	FET-SILICON	R0 R1 R2 R3	SPP07N60C3, P, 600V, 7.3A, 0.60HM, 83W, TO-220 N, 600V, 9.2A, 0.75ohm, 170W, TO-220AB N, 600V, 9.0A, 0.80ohm, 154W, TP-220AB N, 600V, 9.0A, 0.75ohm, 154W, TO-220AB	EA	1	INFINEON IR F/C FUJI ELECTRIC	SPP07N60C3 IRFB9N60A SSP10N60B 2SK3501-1, 2SK3502-MR	0505-001658 0505-001502
R101	R-METAL OXIDE(S)		0.5 ohm 1W 5% 3.3*9mm MOR-SMALL	EA	1	ABCO, FONG YA MATEFORD, PILKOR	MOR 1W 0.5	2003-000398
R102	R-METAL OXIDE	R0 R1	10ohm, 5%, 1W, AA, TP, 4.3*12mm 10ohm, 5%, 1W, AA, TP, 3.5*12mm	EA	1	ABCO, FONG YA MATEFORD, PILKOR	MOR 1W 10	2003-000156 2003-000871
R103	R-METAL R-CARBON	R0 R1	1000HM, 5%, 1/8W, 1.8*3.2MM	EA	1	ABCO, FONG YA MATEFORD, PILKOR	METAL 1/8W 100 CARBON 1/8W 100 5%	2004-000202 2001-000281
R104	R-FUSIBLE		910HM, 5%, 1W, 3.3*9MM, SMALL	EA	1	ABCO, FONG YA MATEFORD, PILKOR	FUSIBLE 1W 91	2008-001153
T101	TRANS-S/W	R0 R1 R2	Transformer, AD-4212L, Lp=460uH	EA	1	ACE NAM YANG CLOVER	AD-4212L	ML26-00369A ML26-00369A ML26-00369A
TH101	THERMISTOR-NTC	R0	8ohm 11.5*5 PITCH:7.5	EA	1	THINKING	SCK-083	1404-001020
TH102	THERMISTOR-NTC	R0	100kohm	EA	1	THERMOMETRICS	TH410J40GBPS-T5	1404-001210
ZD101, ZD102	DIODE-ZENER	R0 R1	Zener Diode 15V MTZ15, 15V, 500mW	EA	2	ROHM\ PCT	MTZ T-72 15C UZ15BSC	0403-000656

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L-NO	DESCRIPTION	REF	SPECIFICATION	UNIT	QTY	VENDOR	VENDOR-PARTNAME	BOM-CODE
SMD COMPONENT(Solder Side Component)								
C01,C02 C22	C-CERAMIC,CHIP		CAP-Chip 100nF 10%,50V X7R,2012	EA	3	SAMSUNG,PAN-OVEN TDK	CL21 B 104 K BNC	2203-000206
C03	C-CERAMIC,CHIP		CAP-Chip 560pF 10%,50V,X7R,2012	EA	1	SAMSUNG,PAN-OVEN TDK	CL21 B 561 K BNC	2203-001665
C04	C-CERAMIC,CHIP		CAP-Chip 100pF 10%,50V,X7R,2012	EA	1	SAMSUNG,PAN-OVEN TDK	CL21 B 101 K BNC	2203-001795
C06,C07	C-CERAMIC,CHIP		CAP-Chip 2.2nF 10%,50V,X7R,2012	EA	2	SAMSUNG,PAN-OVEN TDK	CL21 B 222 K BNC	2203-000495
C08,C09	C-CERAMIC,CHIP		CAP-Chip 1000nF +80 -20%,25V,Y5V 2012	EA	2	SAMSUNG,PAN-OVEN TDK	CL21 B 105 Z ANC	2203-002793
C20	C-CERAMIC,CHIP		CAP-Chip 10nF 2012	EA	1	SAMSUNG,PAN-OVEN TDK	CL21 B	2203-00XXXX
C21	C-CERAMIC,CHIP		CAP-Chip 47nF +80 -20%,50V,Y5V 2012	EA	1	SAMSUNG,PAN-OVEN TDK	CL21 B 473 Z ANC	2203-000966
D01,D03	DIODE-ARRAY	R0 R1	80V 100mA SOT-23, KDS184 70V,200mA,SOT-23 BAV70,70V,200mA,SOT-23 DAN202K SOT-23 80V,100mA	EA	2	KEC INFINEON DII ROHM	KDS184 BAV70 BAV70 DAN202K	0407-001009 0407-000112 0407-000112 0407-000114
IC01	IC-PWM		NCP1200D100R2,SOT-23,TP	EA	1	ONSEMI	NCP1200 D 100 R2	1203-002663
IC02	IC-VOLTAGE REGULATOR	R1 R2 R3	SOT-23,3P SPT-23 3P 431,SOT-23,3P	EA	1	SIPEX PROMAX-J SEMTECH	SPX2431AM PJ421CX SC431CSK-1	1203-001722 1203-001502 1203-001502

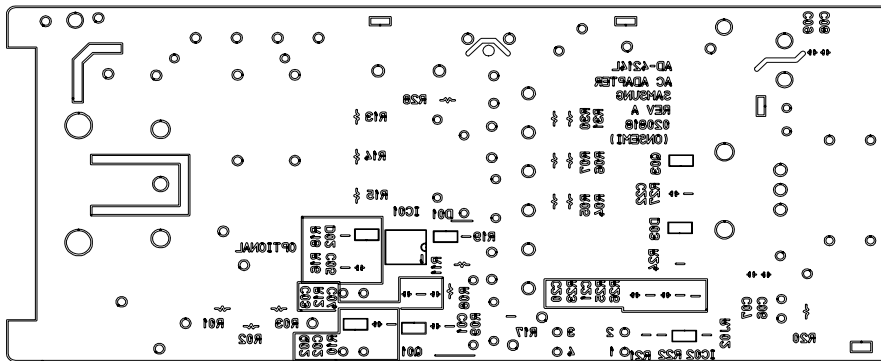
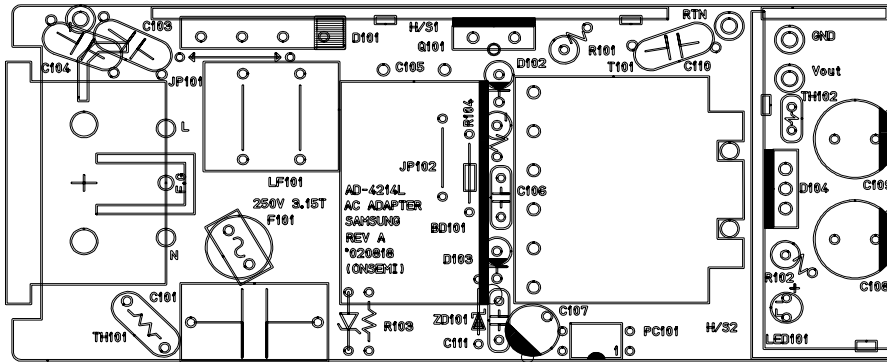
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L-NO	DESCRIPTION	REF	SPECIFICATION	UNIT	QTY	VENDOR	VENDOR-PARTNAME	BOM-CODE
RJ02	RES-Chip		0 ohm, 5%, 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC2012 J 000 CS	2007-000029
R01,02,03	RES-Chip		560K, 3216	EA	3	SAMSUNG/TA-I/FONGYA	RC3216 J 564 CS	2007-001027
R04,R05, R06,R07, R30,R31	RES-Chip		43Kohm,3216	EA	6	SAMSUNG/TA-I/FONGYA	RC3216 J433 CS RC3216 F433 CS	2007-000911
R08,R11	RES-Chip		1 ohm 5% 3216	EA	2	SAMSUNG/TA-I/FONGYA	RC3216 J 1R0 CS	2007-000034
R09,R10	RES-Chip		27Kohm 5% 2012	EA	2	SAMSUNG/TA-I/FONGYA	RC3216 J 273 CS	2007-000653
R12	RES-Chip		120Kohm 5% 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC2012 J 124 CS	2007-000338
R13,R14, R15	RES-Chip		300Kohm 5% 3216	EA	3	SAMSUNG/TA-I/FONGYA	RC3216 J 304 CS	2007-000725
R19	RES-Chip		100 ohm 5% 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC2012 J 101 CS	2007-000290
R17	RES-Chip		750 ohm 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC2012 J 751 CS RC2012 F 751 CS	2007-001152
R20	RES-Chip		5.1Kohm 5% 3216	EA	1	SAMSUNG/TA-I/FONGYA	RC3216 J 512 CS	2007-000967
R21	RES-Chip		3.3Kohm 5% 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC2012 J 332 CS	2007-000686
R22	RES-Chip		2 Kohm 5% 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC2012 J 202 CS	2007-000671
R23	RES-Chip		6.8 Kohm 5% 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC2012 J 682 CS	2007-XXXXXX
R24	RES-Chip		22 Kohm 1% 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC2012 F 223 CS	2007-000582
R25	RES-Chip		4.3 Kohm 1% 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC2012 F 432 CS	2007-000856
R26	RES-Chip		6.8 Kohm 1% 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC2012 F 682 CS	2007-001067
R27	RES-Chip		470 ohm 5% 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC2012 J 471 CS	2007-000931
R28	RES-Chip		10 Kohm 5% 2012	EA	1	SAMSUNG/TA-I/FONGYA	RC3216 J 103 CS	2007-000303

SAMSUNG ELECTRO-MECHANICS	PART LIST (ELECTRICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 -----
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L-NO	DESCRIPTION	REF	SPECIFICATION	UNIT	QTY	VENDOR	VENDOR - PARTNAME	BOM-CODE
Q01	TR-SMALL SIGNSL	R0 R1 R2 R3	PNP , 350W , SOT-23 , TP , 50-300	EA	1	F/C INFINEON DII ONSEMI , PROMAX - J	KST-2907ATF SMBT2907A MMBT2907A MMBT2907A	0501-000462 0501-000462 0501-000462 0501-000462
Q02, Q03	FET-SILICON	R0 R1 R2 R3	2N7002 , N , 60V , 115mA , 5ohm , 200mW	EA	2	G/S ZETEX UTC F/C	2N7002 2N7002 2N7002 2N7002	0505-000110 0505-000110 0505-000110 0505-000110
C05, C20	C-CERAMIC, CHIP		N.A					
D02	DIOD-ARRAY		N.A					
R16, R18	RES-Chip		N.A					

SAMSUNG ELECTRO-MECHANICS	PCB SILK DRAWING (ELECTRICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 -----
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2.MECHANICAL SPECIFICATION

A.LABEL DRAWING

B. INLET DRAWING

C.CABLE DRAWING

D.HEAT SINK DRAWING

E. INSULATOR DRAWING


F.CASE TOP/BOTTOM DRAWING

G.OUT DRAWING

H.PACKING DRAWING

SAMSUNG ELECTRO-MECHANICS	LABEL DRAWING (MECHANICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 2005.05.14
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MODEL NAME	AD-4512L
MANUFACTURER MODEL	PSCV450117A
USER NAME	
CUSTOMER MODEL NAME	AD-4512L
MANAGEMENT	() C 02 01 xxxxx REV. #1 #2 #3 #4 #6 #1: Blank => Made in Korea C => Made in China #2: Year #3: Month #4: Serial Number #5: Product Revision
Rev.	REV.B
(EXAMPLE)	Made in Korea) 030100001 REV.B Made in China) C030100001 REV.B





AC ADAPTER


交流 适配器

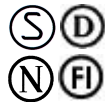
Model No./型号 : AD-4512L


INPUT/ 输入 100V - 240V~ 1.0A-0.5A 50Hz/60Hz
OUTPUT/ 输出 12V  3.75A



 LR56612
LEVEL 3



 QAS TE4956



 03/BA3
03/CA3





 030331-11

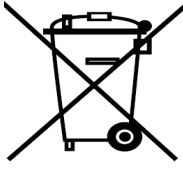


 KTL SU 10054-2005





CAUTION
 RISK OF ELECTRIC SHOCK-DO NOT OPEN



AVIS
 RISQUE DE CHOC ELECTRIQUE-NE PAS OUVRIR

WARNING
Indoor use only!
Do not use near water!

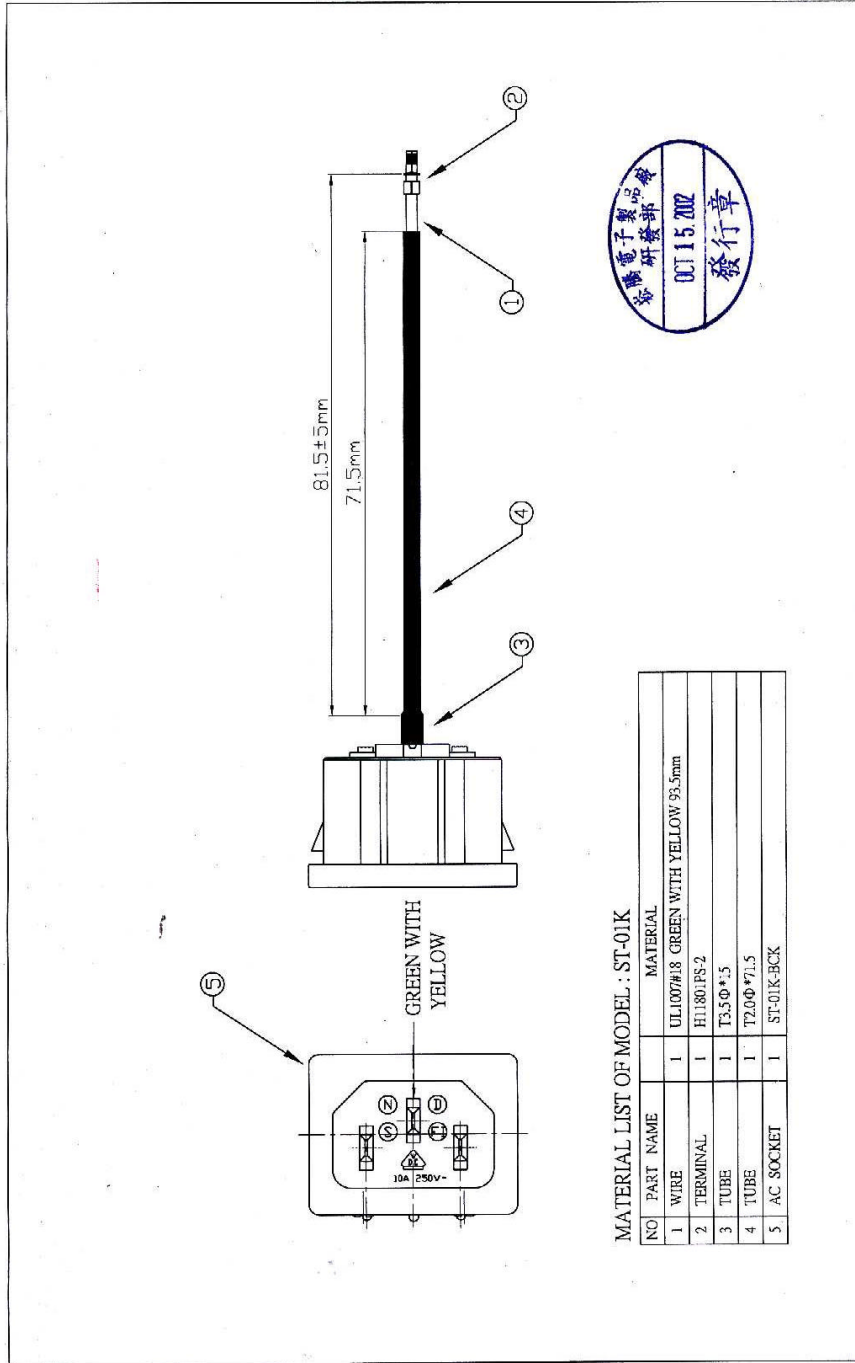





Made in China /
中国制造 东莞三星电机有限公司

CM - 1
Serial No. 序列? 

SAMSUNG ELECTRO-MECHANICS	INLET DRAWING (MECHANICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 -----
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MATERIAL LIST OF MODEL : ST-01K

NO	PART NAME	MATERIAL
1	WIRE	UL1007#18 GREEN WITH YELLOW 95.5mm
2	TERMINAL	H1180.PS-2
3	TUBE	T3.5Φ*7.5
4	TUBE	T2.0Φ*71.5
5	AC SOCKET	ST-01K-BCK

崧騰企業股份有限公司 SOLTEAM ELECTRONICS CO.,LTD	單位	DIMENSION	UNIT	mm
核准 PROPOSED	日期 DATE	投影片 PROJECT	機型 MODEL	系列 SERIES
校對 CHECKED	日期 DATE	比例 SCALE	1.5:1	ST-01A SERIES
繪圖 DRAWN	日期 DATE	圖號 DWG. NO.	圖號 PART NO.	ST-01K-BCKL
ISSUE	REVISE	APPROVED		
NO.	DATE	MODIFY DESCRIPTION	REVISION	DESCRIPTION
△	021014		A1	ISSUE

SAMSUNG ELECTRO-MECHANICS	INLET DRAWING (MECHANICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 -----
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NO	PART NAME	MATERIAL
1.	Body	Nylon 66 Type
2.	Insert Pin	Nickel Plated Brass
3.	Terminal	Tin Plated Brass

崧騰企業股份有限公司 SOLITEAM ELECTRONICS CO.,LTD		單位	DIMENSION UNIT
標準	日期	比例	圖名
ISO 9001	2003.01.30	1:1	ST-01 SERIES
製圖	日期	繪圖	零件
陳志強	2003.01.30	陳志強	ST-01K-BCK
審核	日期	日期	
陳志強	2003.01.30		
批准	日期	日期	
REVISION DESCRIPTION	ISSUE	REVISE	APPROVED
DATE			

SAMSUNG ELECTRO-MECHANICS	INLET DRAWING (MECHANICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 -----
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SPECIFICATION
CONTACT RATING: 15A 250VAC (C.S.A. ILL.)
10A 250VAC (S.S.) (E) (VDE)

APPROVAL: UL CERTIFICATE NO: E200241
CSA CERTIFICATE NO: 77849-23
DEMKO CERTIFICATE NO: 508050
SIBKO CERTIFICATE NO: 5933192
NEMKO CERTIFICATE NO: P9610223
FIMKO CERTIFICATE NO: FI 11665
VDE CERTIFICATE NO: 115586

INITIAL CONTACT RESISTANCE: 30mΩ (MAX)
INSULATION RESISTANCE: 100MΩ (MIN) 500 VDC
TERMINAL TO TERMINAL DIELECTRIC
WITHSTAND VOLTAGE: 2000VAC-1 MINUTE
LIFE EXPECTANCY: 5,000 CYCLES

TOLERANCES UNLESS OTHERWISE SPECIFIED
基本尺寸之公差 (2.3.2.3.2)
BASE DIMENSIONS TOLERANCES
UP TO 30.00 (H7)

Ø	H7
UP TO 30.00 (H7)	H7
Ø	H7
UP TO 30.00 (H7)	H7
Ø	H7
UP TO 30.00 (H7)	H7
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UP TO 30.00 (H7)	H7
Ø	H7
UP TO 30.00 (H7)	H7

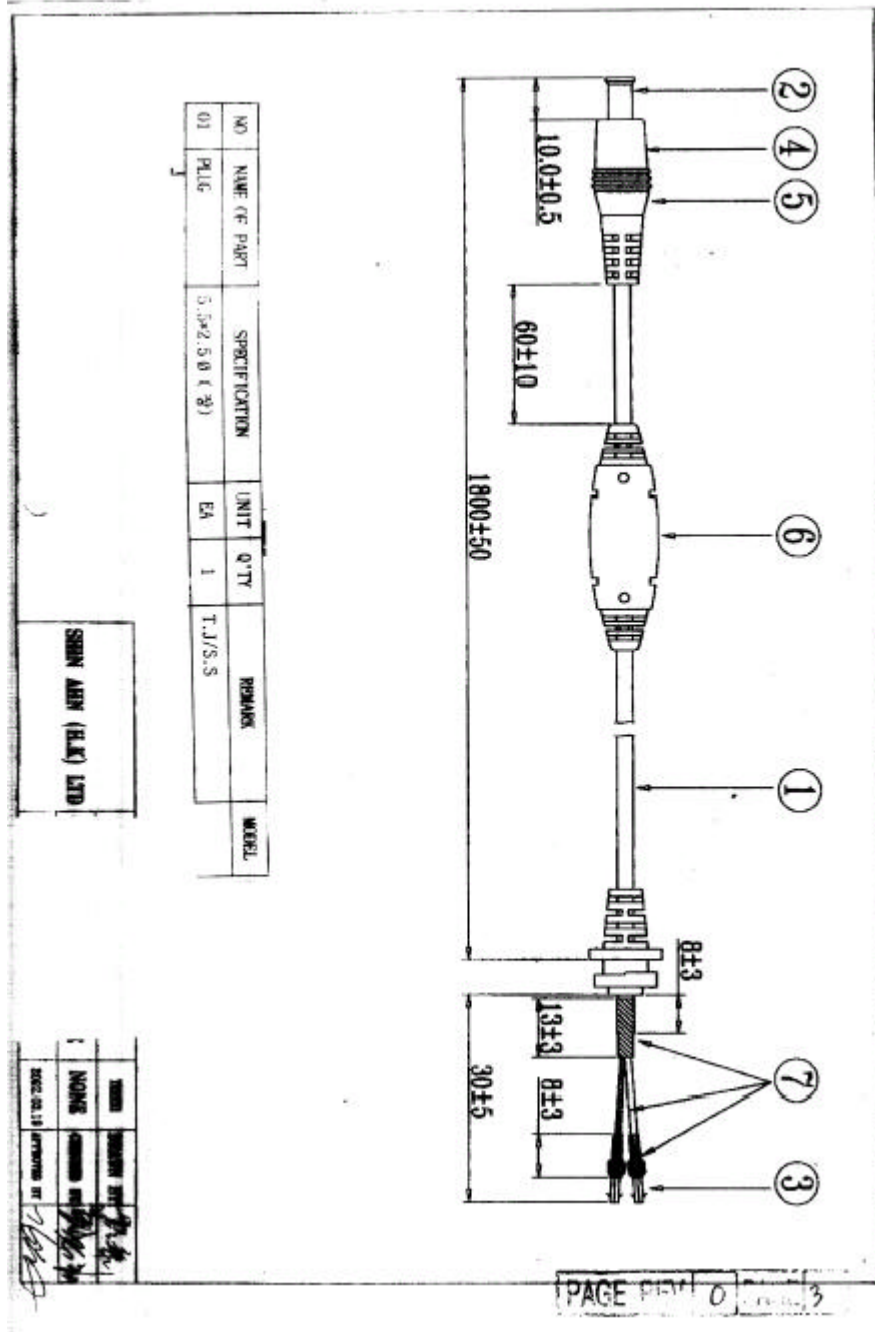
PCB LAYOUT

松茂企業股份有限公司 SOLTEAM ELECTRONICS CO., LTD

核准	日期	核准	日期	單位	DIMENSION UNIT
核准	02/05/03	核准	02/05/03	研發部	mm
核准	02/05/03	核准	02/05/03	研發部	mm
核准	02/05/03	核准	02/05/03	研發部	mm

比例 1:2.1
圖號 020516
系列 ST-01 SERIES
零件號 ST-01K-BCK

SAMSUNG ELECTRO-MECHANICS	CABLE DRAWING (MECHANICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 -----
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SAMSUNG ELECTRO-MECHANICS	HEAT SINK DRAWING (MECHANICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 -----
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A4

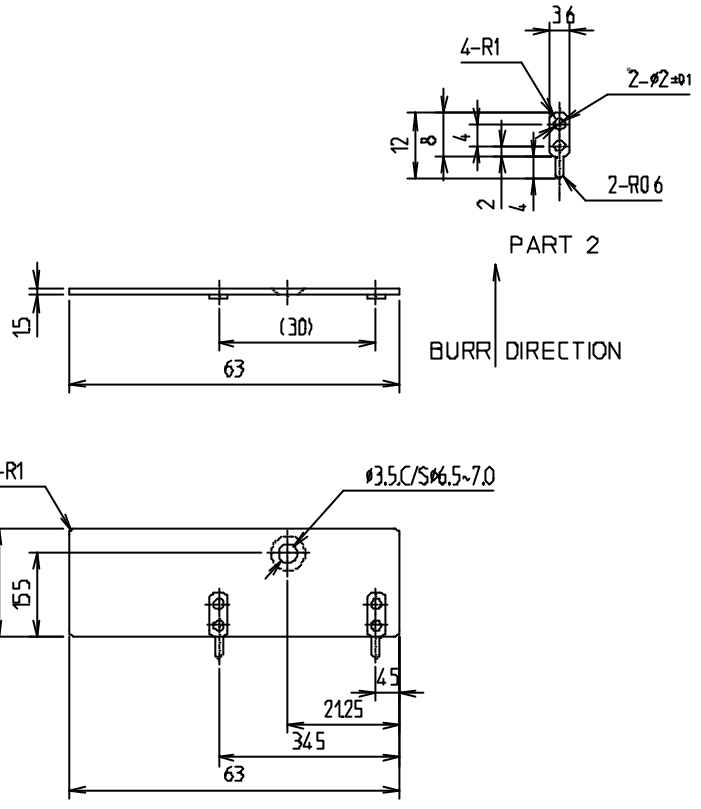
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A4

HEATSINK1 Rev 00

CONFIDENTIAL

NO.	PART NAME	Q'TY	MATERIAL	FINISH	REMARK
1	HEAT SINK	1	A1050P H14 t=15	DEGREASED	
2	SOLDER PIN	2	SECP t=0.5		



3													
2													
1													
Rev	DATE	WRITTEN BY	CHECKED BY	REVISION RECORD				REMARK					
				UNIT	m	m	DRAW	DESIGNED	CHECKED	APPROVED	N	PART NAME	HEATSINK-1
				SCALE	1	1	CAD	KN DEUK HOON	S.C.KIM	BK.LEE	A	MODEL NAME	AD-4214L
				TOLERANCE	±	0,3					M	SENCO P/N	PSCV420108A
SAMSUNG ELECTRO-MECHANICS				File name	4214L/HS1			NO.		A - ML62-00213C - 0			
				3RD ANGLE PROJECTION				Page REV				Page 1/1	
S-10-012 (93.05)				A4(210X297)									

SAMSUNG ELECTRO-MECHANICS	INSULATOR DRAWING (MECHANICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2002.11.11 -----
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A4

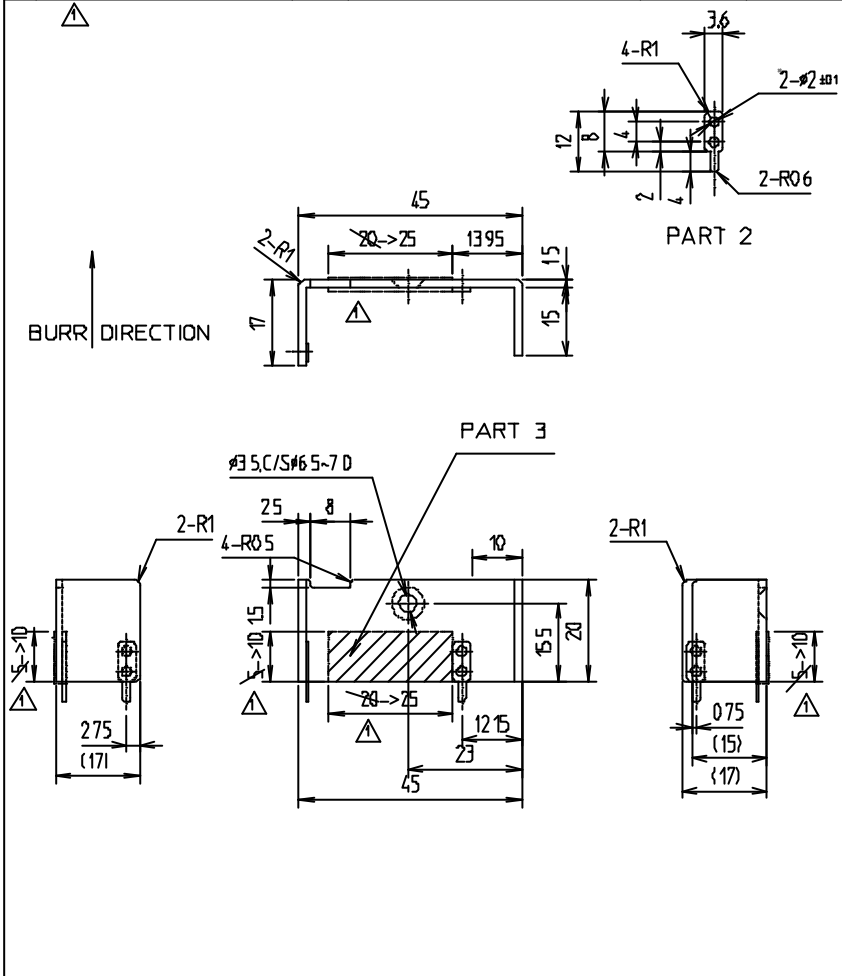
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A4

HEATSINK2 Rev 00

CONFIDENTIAL

NO	PART NAME	QTY	MATERIAL	FINISH	REMARK
1	HEAT SINK	1	A1050P H14 t=1.5	DEGREASED	
2	SOLDER PIN	1	SECP t=0.5		
3	INSULATION TAPE	1	PET T=0.025*2LAYERS		



REV.	DATE	WRITTEN BY	CHECKED BY	REVISION RECORD	REMARK		
02.08.16	KDH	KHS		INSULATION TAPE EXTEND			
UNIT	mm	DRAW	DESIGNED	CHECKED	APPROVED	PART NAME HEATSINK-2	
SCALE	1/1	CAD	KM DEUK HOON	SCKIM	BKLEE		MODEL NAME AD-4214L
TOLERANCE	± 0.3		2002-01-16	2002-01-16	2002-01-16		SEMCO P/N PSCV420108A
SAMSUNG ELECTRO-MECHANICS				File name	4214L/HS1	ND	A - ML62-00213B - 0
S-10-012 (93.05)				A4(210X297)		Page REV	Page 1/1

SAMSUNG ELECTRO-MECHANICS	INSULATOR DRAWING (MECHANICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 -----
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A4
INSULATOR1 Rev.00
CONFIDENTIAL

NO	PART NAME	QTY	MATERIAL	FINISH	REMARK
1	INSULATOR-1	1	PC SHEET T=0,125		

NOTE
1 BURRR는 02 이하일것

①						
②						
③						

Rev.	DATE	WRITTEN BY	CHECKED BY	REVISION RECORD			REMARK		
				DRAW	DESIGNED	CHECKED	APPROVED	PART NAME	INSULATOR1
				CAD	KN DEUK HOON	S.C. KIM	BK LEE	MODEL NAME	AD-4212L
				TOLERANCE	± 0,3	2002-04-10	2002-04-10	SENCD P/N	PSCV420109A
				File name	4214L/INSUL1			NO	A - ML63-00014A - Q
				3RD ANGLE PROJECTION					

S-10-012 (93.05)
A4(210X297)

Page	REV		Page						
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A4

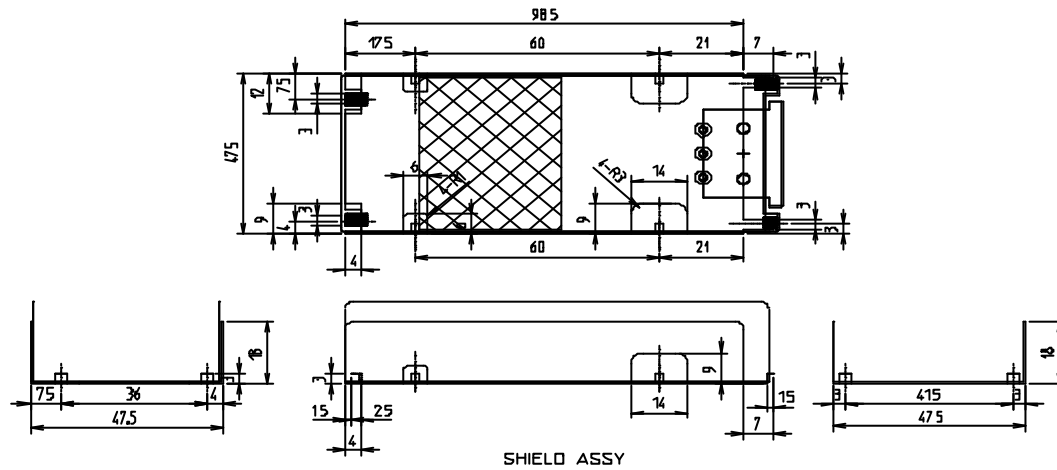
A3

SHIELD-ASSY Rev00

CONFIDENTIAL

NO	PART NAME	Q'TY	MATERIAL	FINISH	REMARK
1	SHIELD	1	ET, T=0.3 (석판)	DEGREASED	
2	INSULATOR1	1	PET,SR55orSR53 T=0.25		
3	INSULATOR2	1	PC SHEET T=0.125		

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SHIELD ASSY

A3

REVISION RECORD		REVISION RECORD		REMARK	
REV	DATE	WRITTEN BY	CHECKED BY	DESIGNED BY	APPROVED BY
UNIT	1/1	DRAW	CHKD	DESIGNED	APPROVED
SCALE	1/1	CAD	HWK-HUN	JHUNG	IKLEE
TOLERANCE	±0.3				
ELECTRO-MECHANICS		FILE NAME		DRAWING NO.	
		004214L-SHIELD.MB		A3(210X297)	
S-10-012 (93 D5)		3RD ANGLE PROJECTION		PART NAME SHIELD-ASSY	
				MODEL NAME AD-4212L	
				SENCD P/N PSCV420109A	
				NO B-ML63-00014A-0	
				Page REV. 0 Page	

SAMSUNG ELECTRO-MECHANICS	CASE COVER (ELECTRICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 -----
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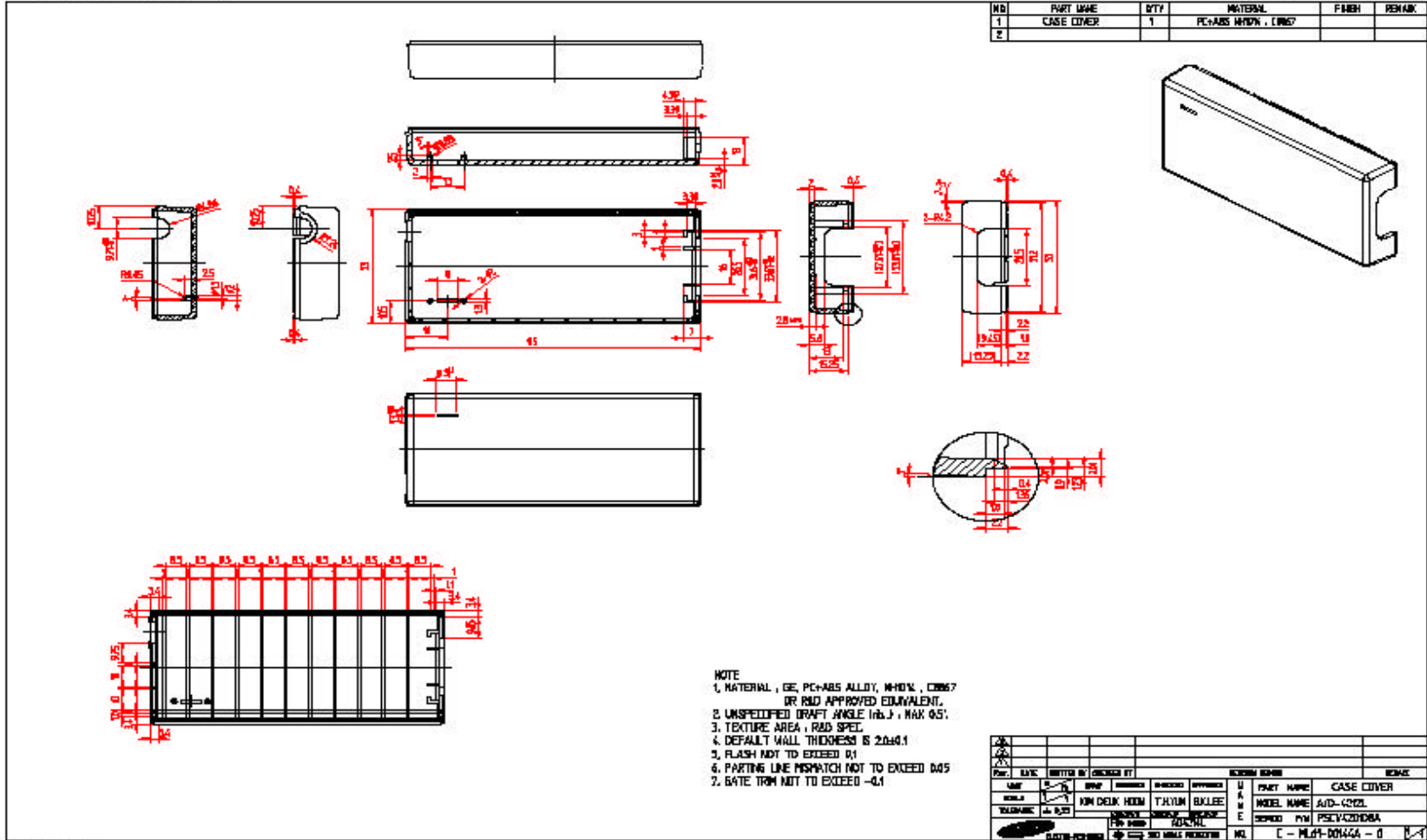
A2

CASE COVER Rev.00

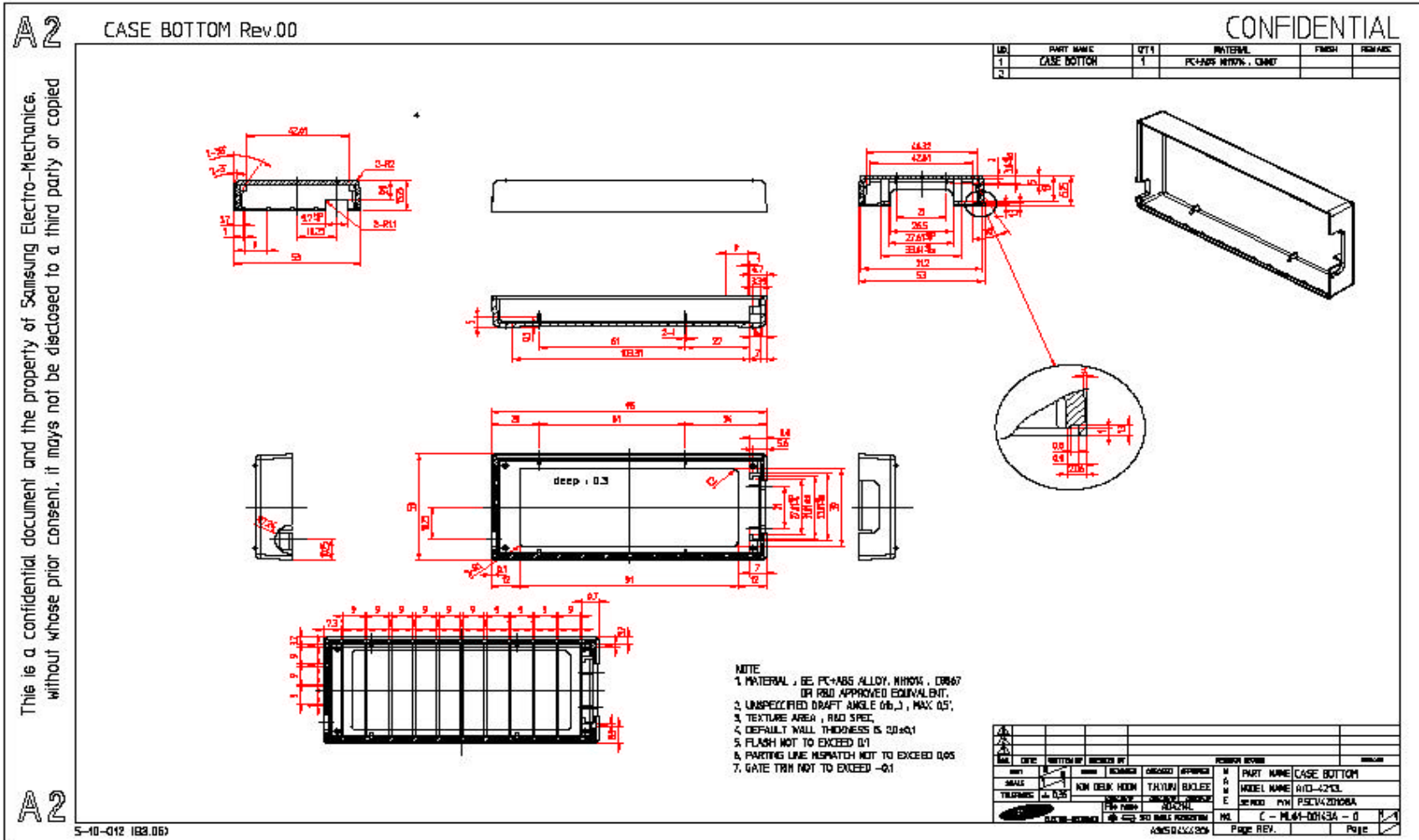
CONFIDENTIAL

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A2



SAMSUNG ELECTRO-MECHANICS	CASE BOTTOM (ELECTRICAL SPECIFICATION)	RECORD NO. PUB. DATE REV. DATE	2003.01.30 -----
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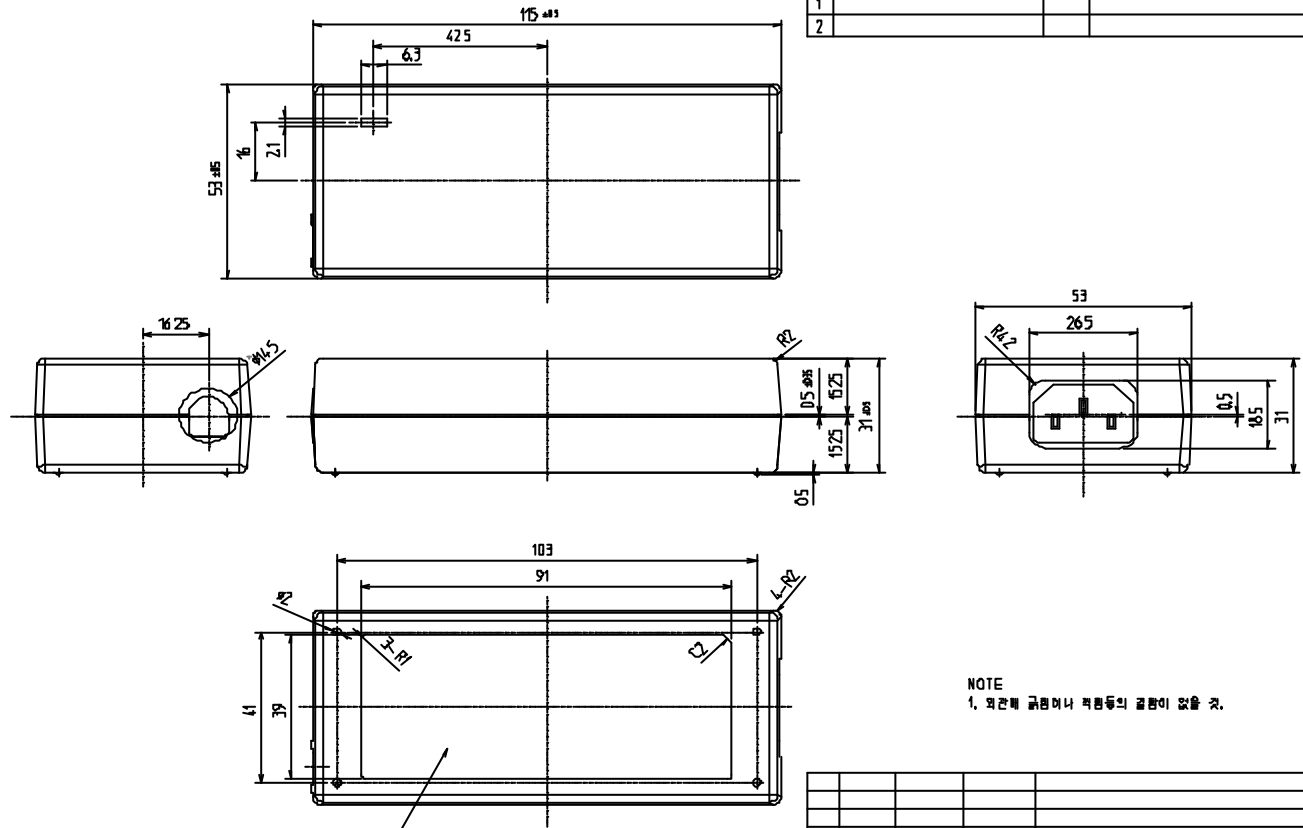
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A3 AD-4214L OUT-DRAWING

CONFIDENTIAL

NO.	PART NAME	QTY	MATERIAL	FINISH	REMARK
1					
2					

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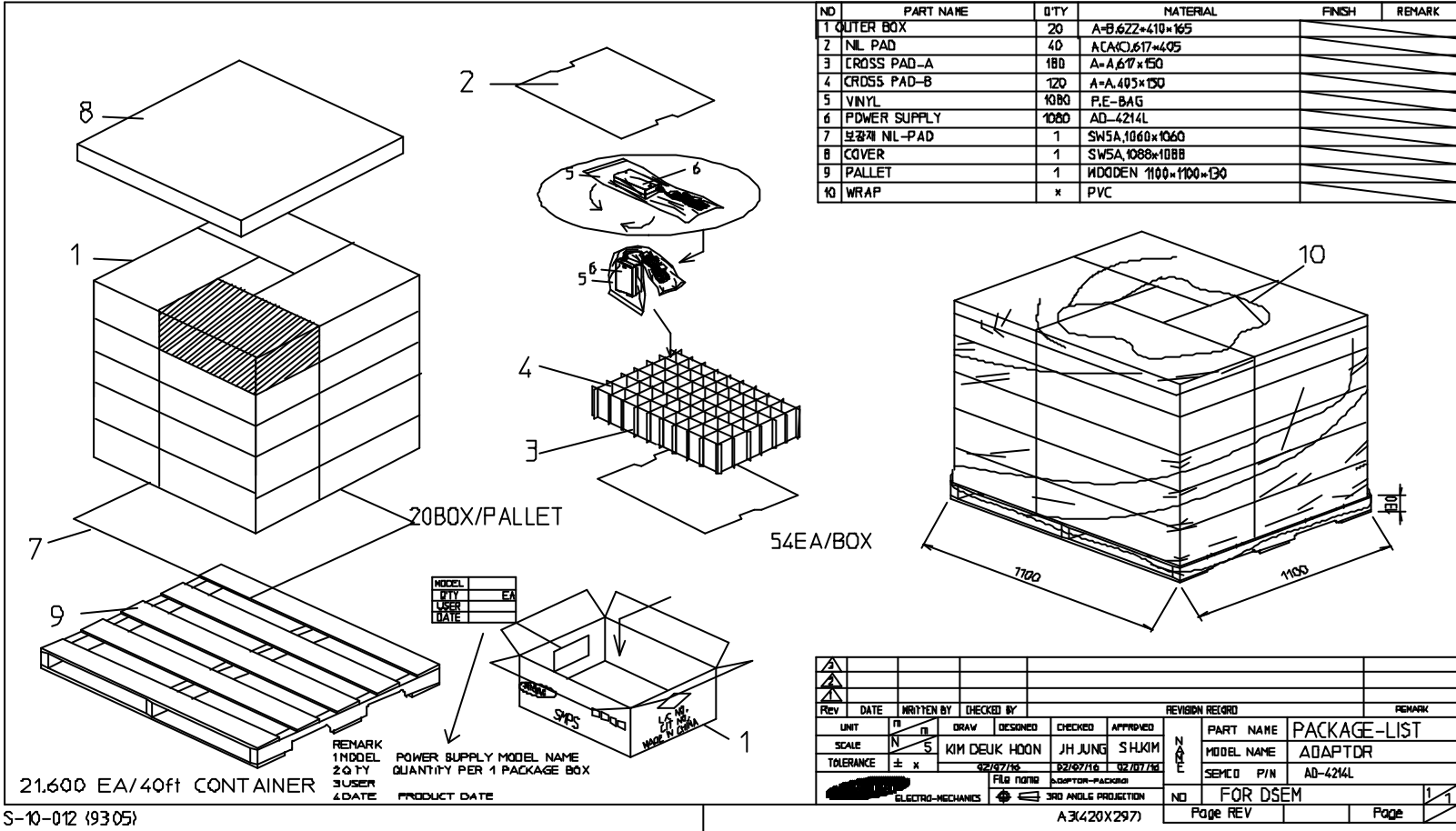


NOTE
1. 외관에 흠집이나 크랙등의 결함이 없을 것.

Rev	DATE	WRITTEN BY	CHECKED BY	REVISION RECORD			REMARK
1				NO	PART NAME	OUT DRAWING	
				NA	MODEL NAME	AD-4214L	
				NE	SENCD P/N	PSCV42D108A	
				NO			
				Page	REV	0	Page

A3 S-10-012 (93 05)

A3



NO	PART NAME	Q'TY	MATERIAL	FINISH	REMARK
1	OUTER BOX	20	A-B.622*410*165		
2	NIL PAD	40	A-C(A) 617*405		
3	CROSS PAD-A	180	A-A 617*150		
4	CROSS PAD-B	120	A-A 405*150		
5	VINYL	1080	P.E-BAG		
6	PDWER SUPPLY	1080	AD-4214L		
7	보장제 NIL-PAD	1	SW5A.1060*1060		
8	COVER	1	SW5A.1088*1088		
9	PALLET	1	WOODEN 1100*1100*130		
10	WRAP	x	PVC		

A3

21,600 EA/40ft CONTAINER

REMARK
1 MODEL POWER SUPPLY MODEL NAME
2 Q'TY QUANTITY PER 1 PACKAGE BOX
3 USER
4 DATE PRODUCT DATE

MODEL	
Q'TY	EA
USER	
DATE	

REV	DATE	WRITTEN BY	CHECKED BY	DESIGNED	CHECKED	APPROVED	REVISION REGRD	REMARK
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