

REV	REVISIONS DESCRIPTION	DATE	APPROVED
A	PRODUCTION RELEASE	3-9-89	<i>[Signature]</i>

45~65Hz 2A

POWER SUPPLY 52W 220-240V

PART NO.	APPROVED VENDOR	VENDOR PART NO.
C103250-001	MITSUMI ELECTRIC	SR128

Output: DC 5V 2A
DC 12V 3.5A

		DRAWN BY <i>N. Tanaka</i> 4-7-88	DATE	 ATARI CORPORATION
		CHECKED <i>K. Kitegawa</i> 4-7-88	DATE	
		ENGINEER <i>A. Shinagawa</i> 4-8-88	DATE	TITLE POWER SUPPLY 52W 220-240V
		APPROVED	DATE	SIZE A
CA200396-XXX MEGAFILE 60				DRAWING NO. C103250-XXX
NEXT ASSY	USED ON ORIGINAL MODEL	APPROVED <i>S. OKADA</i> 4/1/89	DATE	REV A
APPLICATION		SCALE NONE		SHEET 1 OF 11

1) ELECTRICAL CHARACTERISTICS

1-1 INPUT CONDITION

1-1-1	Input Voltage	AC 220-240	V
1-1-2	Input Voltage Range	± 10	%
1-1-3	Frequency	45~65	Hz
1-1-4	Rated Current (*1)	2A	MAX.
1-1-5	Inrush Current	45 A	MAX.

1-2 OUTPUT CHARACTERISTICS

1-2-1	Output Voltage	A--	DC+5	V
		B--	DC+12	V
1-2-2	Output Current (*1)	A--	1.0~2.0	A
		B--	0.5~2.7A (PEAK3.5A)	
1-2-3	Output Effect (*2)	A--	$\pm 5\%$	
		B--	$\pm 5\%$	
1-2-4	Ripple and Noise (*1)	A--	100mV _{r-r}	
		B (2.5A) --	100mV _{r-r}	
		B (3.5A) --	120mV _{r-r}	
1-2-5	Over Current Protection		Short Protection	
1-2-6	Start-Up Time (*1)	A--	150msec	max.
		B--	150msec	max.
1-2-7	Hold-Up Time (*1)	A--	10msec	min.
		B--	10msec	min.
1-2-8	Efficiency (*1)		65%	min.

1-3 Special Specifications

1-3-1	Withstand Voltage (*3)	AC1.5KV 1MIN. (CUTOFF CURRENT 10mA)
1-3-2	Insulation Resistance (*3)	10M Ω min. DC500 V
1-3-3	Leakage Current	0.75 mA _{max.} AT 254V AC, 50Hz
1-3-4	Leakage Flux	
Set shall be free from any effect caused by Leakage Flux of this power supply, when installed.		

1-4 Radiation Noise

Meet to VDE 0871



ATARI CORPORATION

SIZE
A

DRAWING NO.

C103250-xxx

REV
A

SCALE NONE

SHEET 2 OF 11

2) MECHANICAL CHARACTERISTICS

2-1 Vibration-proof Characteristic

The specifications and electrical characteristics of the product can be maintained after subjected to the vibration with a frequency vibration range of 10Hz to 55Hz, an amplitude of 1mm, and a cycle time of 2 hours in each of X, Y, and Z directions.

2-2 Drop Test

When packed for shipment, the product must drops on the concrete floor on each flat faces of it from 100cm height, and this should work normally.

3) ENVIRONMENTAL

3-1 Operating Temperature

0 ~ 50 °C
(5V 2A, 12V 2.7A)

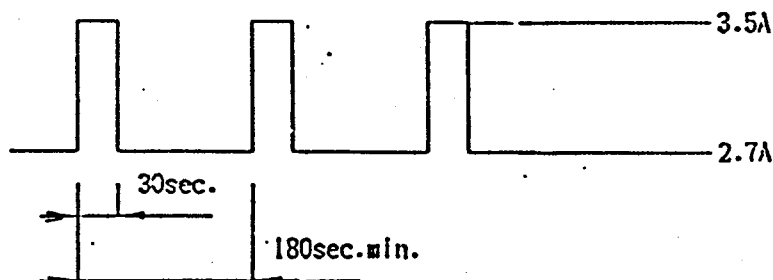
3-2 Storage Temperature

-30 ~ 80 °C

3-3 Humidity

After kept in box whose temperature is 50 ±2°C and relative humidity 0 ~ 90% for 48 hours, this kept a normal condition for 12 hours, and this should work normally...

- (#1) Input Voltage AC 220V. At Rated Conditions
- (#2) Line Regulation, Load Regulation, Crose Regulation
- (#3) Primary - Secondary, Primary - Earth
- (#4) As provided in figure (1) for 12V output peak current.



Figure(1)



ATARI CORPORATION

SIZE
A

DRAWING NO.

C103250-xxx

REV
A

SCALE NONE

SHEET 3 OF 11

4) MAXIMUM SURFACE TEMPERATURES
(#5)

Parts name	Symbol	Temperature
Resistor	R104 -----	100°C
	R102, R103 --	80°C
	R205, R107 --	60°C
Diode	R102 -----	80°C
Bridgediode	D101 -----	50°C
Heatsink	PRI. -----	70°C
	SEC. -----	80°C
Transformer	T101 -----	70°C
Other Parts	-----	50°C

(#5) : input voltage 220 V
 : output voltage 5 V , 4.0 A
 12 V , 1.6 A
 : ambient temperature 25 °C
 : measurment-value at 2 hours after switching on power supply.



ATARI CORPORATION

SIZE
A

DRAWING NO.

C103250-xxx

REV
A

SCALE NONE

SHEET 4 OF 11

PARTS LIST

MODEL NAME SR128

	SYMBOL	PART NAME	DESCRIPTION	QTY
	IC201 or or	IC	HA17431 L5431 TL431CLP	1
Δ	PC101 or	PHOTO COUPLERS	PC101	1
	Q101 or or	TRANSISTOR	2SC3459L 2SC3459M 2SC3551	1
	Q102 or or	TRANSISTOR	2SC2060Q 2SC2655Y 2SD400F	1
Δ	D101	DIODE	RC205	Silicon Stacks 1
	D102 or	DIODE	FR106 ERB44-08	Fast Recovery 1 " "
	D103 or	DIODE	1S9144 1S981	Silicon 1 " "
	D104 or or	DIODE	DS442 1S2076 1S2473	Silicon 1 " " " "
	D105 or or	DIODE	DS442 1S2076 1S2473	Silicon 1 " " " "
	D201 or or	DIODE	F10P04Q C10P04Q ESAC82-004	Schottky Barrier 1 " " " "
	D202	DIODE	5KF20B	Fast Recovery 1
	D203 or	DIODE	RD15F D2 1N4744	Silicon 1 " "
Δ	T101	TRANS FORMERS	EEC35 Switching Transformer	1
Δ	L101	LINE FILTER	UF2327S	1
	L201	CHOKE COIL	10uH	1
	L202	"	"	1



ATARI CORPORATION

SIZE
A

DRAWING NO.

C103250-xxx

REV

A

SCALE NONE

SHEET 5 OF 11

THIRD ANGLE SYSTEM DIMENSIONING

PARTS LIST

MODEL NAME SR128

	SYMBOL	PART NAME	DESCRIPTION	QTY
△	C101	CAPACITOR	0.47uF/250V (VE) Metalised	1
△	C102	"	0.1uF/250V (VE) "	1
△	C103	"	2200pF/400V (KC) Ceramic	1
△	or	"	" (CS) "	1
△	C104	"	2200pF/400V (KC) "	1
	or	"	" (CS) "	1
	C105	"	100uF/400V (SMG) Alm. Elect.	1
	or	"	" (LP) "	1
	C106	"	0.047uF/630V (MMH) Metalized	1
	or	"	" (C3NE2J) "	1
	C107	"	680pF/1KV (R) Ceramic	1
	or	"	" (CK) "	1
	C108 C109 C110	"	0.047uF/50V (LDS) Polyester	3
	or or or	"	" (AMZ) "	1
	C111	CAPACITOR	0.1uF/50V (LDS) "	1
	or	"	" (AMZ) "	1
	C201 C202 C205	"	3300uF/10V (SME) Alm. Elect.	3
	or or or	"	" (SH) "	1
	C203	CAPACITOR	4700uF/16V (SME) "	1
	or	"	" (SH) "	1
	C204	"	1uF/50V (SME) "	1
	or	"	" (SH) "	1
	C206	"	3300uF/16V (SME) "	1
	or	"	" (SH) "	1
△	R101	RESISTOR	2.2Ω/5W Metal Plate	1
	R102 R103	"	100KΩ/2W Metal Oxide Film	2
	R104	"	100Ω/2W "	1
	R105 R110	"	150KΩ/1W Carbon	2
	R106	"	0.1Ω/2W Metal Plate	1
	R107	"	47Ω/2W Metal Oxide Film	1
	R108	"	470Ω/1W Carbon	1
	R109	"	430Ω/1W "	1
	R201	"	1.2KΩ/1W "	1
	R202	"	18KΩ/1W "	1
	R204	"	3.3KΩ/1W "	1
	R205	"	330Ω/2W Metal Oxide Film	1
	VR201	"	1KΩ Variable	1



ATARI CORPORATION

SIZE
A

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C103250-xxx

REV
A

SCALE NONE

SHEET 6 OF 11

THIRD ANGLE SYSTEM DIMENSION

PARTS LIST

MODEL NAME SR128

SYMBOL	PARTNAME	DESCRIPTION	QTY
	HOLDER-FUSE		2
△	FUSE	250V/T2A	1
△	Insulation Plate		1
	WIRE-JUMP	L=5mm	1
	"	L=7.5mm	1
	"	L=15mm	2
	CONNECTOR-6P-ASSY	68-3741A AWG22 UL1007	1
△	P.C.Board		1
	HEAT-SINK(PRI.)	A1, t=2mm	1
	" (SEC.)	"	1
	SUPPORT-TR		3
△	SWITCH-PWR.	ZLK01-61	1
△	FILTER-NOISE	O3DEEWV	1
	TUDE	L=12mm	4
	CHASSIS		1
	WIRE-ASSY	AWG22 UL1015	2
	DAND		4
	SCREW	M3x6 Pan Somo	6
	"	M3x6 Flat Head	2
	"	M3x6 With Star Washer	2
	"	M4x6 Pan Somo	1
	WASHER	M4 Star Washer	1
	SARCON-TUDE	L=25, t=0.45 m/m	2
	SARCON-SHEET	t=0.45 m/m	1

CAUTION: COMPONENTS IDENTIFIED BY THE △ SYMBOL IN THE PART LIST HAVE SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY.
DO NOT DEGRADE THE SAFETY OF THE SET THROUGH IMPROPER SERVICING.



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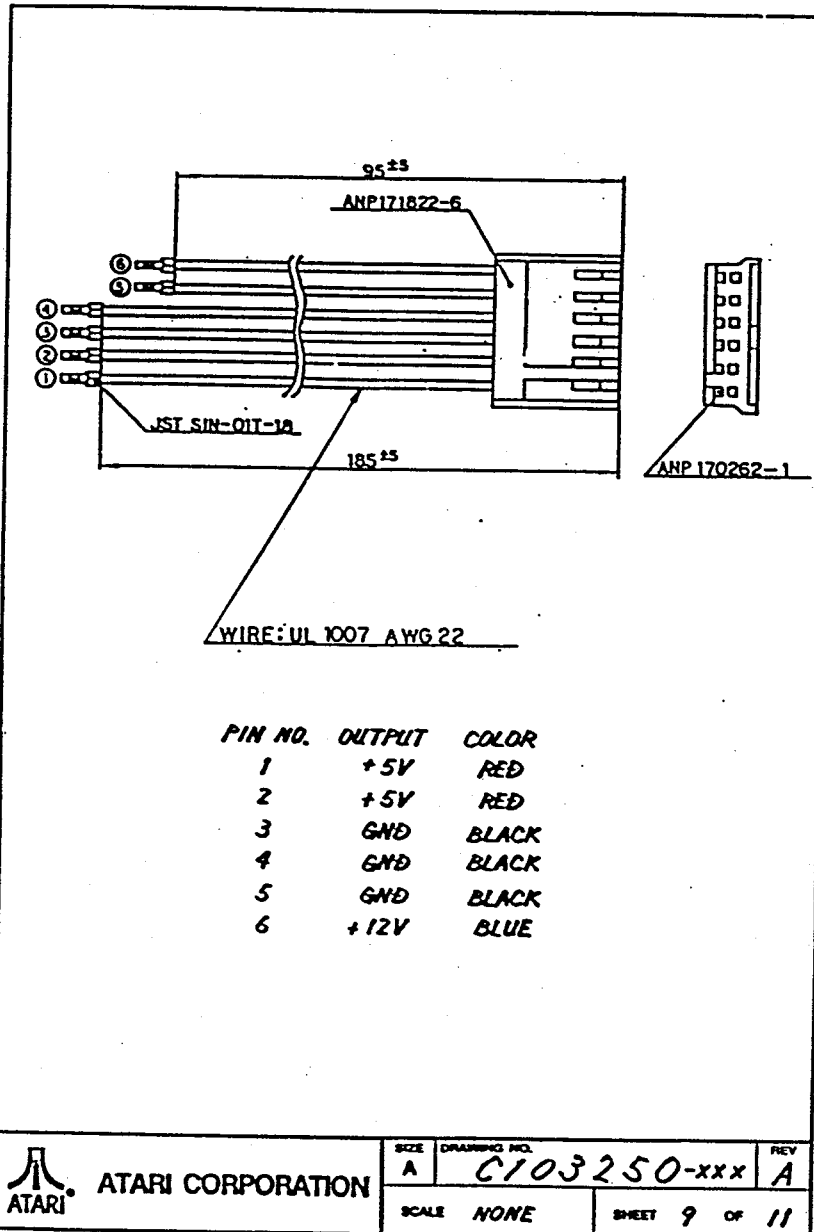
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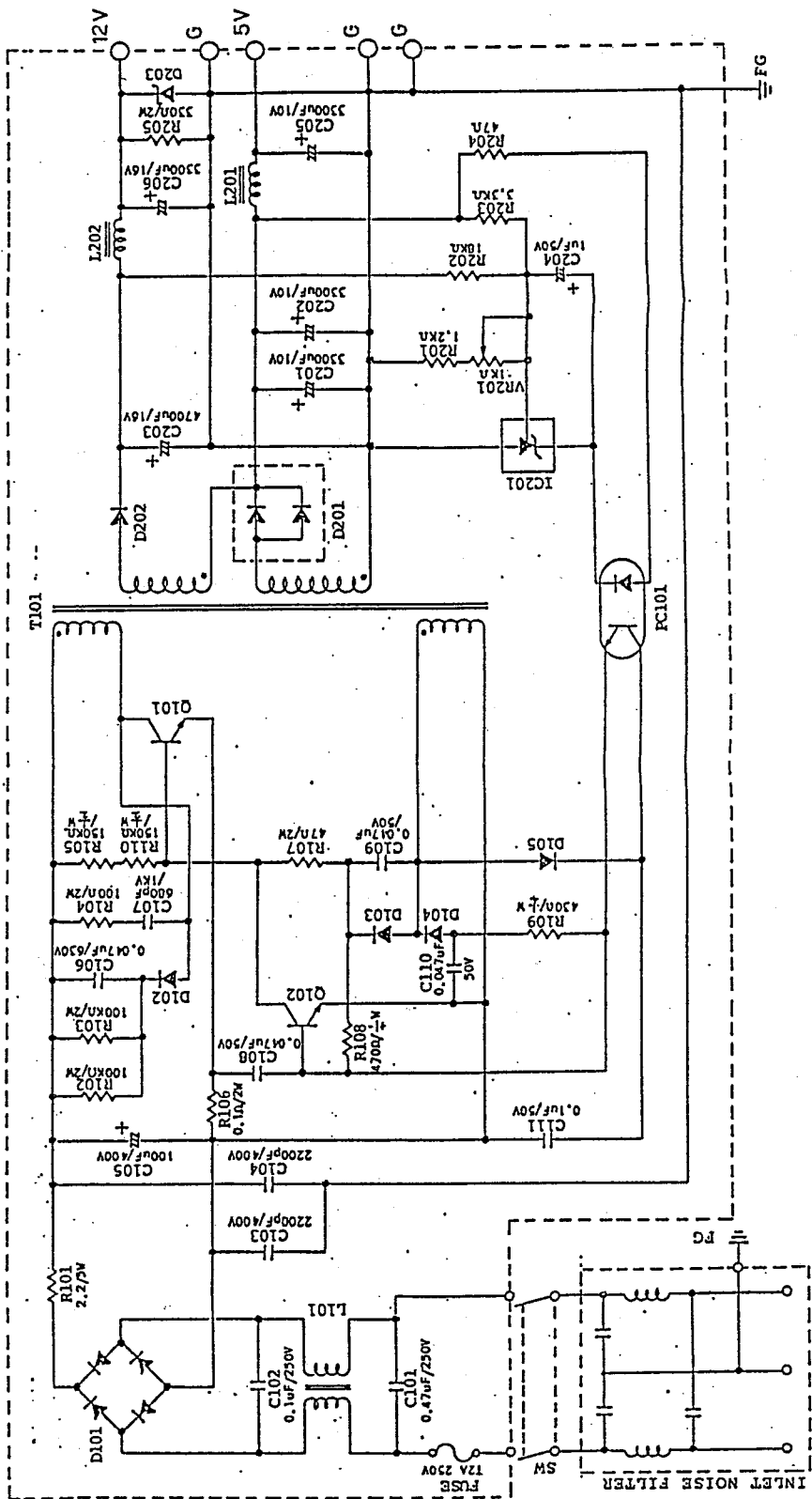
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SHEET 7 OF 11

UNIT: MM (SYSTEM DIMENSION)



REV	REVISIONS DESCRIPTION	DATE	APPROVED
	SEE SHEET 1.		



ATARI CORPORATION		TITLE	
POWER SUPPLY 52W 220 - 240V		REV	
DRAWING NO. C103250-xxx		A	
SIZE B		SCALE NONE	
DATE 10/19/88		SHEET 10 OF 11	

UNLESS OTHERWISE SPECIFIED	DATE 10/19/88	DATE 10/19/88	DATE 10/19/88
TOLERANCES	±	±	±
ON LINEAR DIMENSIONS	±	±	±
ON ANGULAR DIMENSIONS	±	±	±
UNDER 30	±	±	±
30 THRU 300	±	±	±
OVER 300	±	±	±
MATERIAL			
FINISH			

USED ON ORIGINAL MODEL	APPLICATION
NEXT ASSY	

NOTES—UNLESS OTHERWISE SPECIFIED:

THIRD ANGLE SYSTEM DIMENSIONS

