

REV	REVISIONS DESCRIPTION	DATE	APPROVED
A	PRODUCTION RELEASE PER ECO NO. 01085	4/18/89	S. Ohtsuki


50Hz 0.4A

POWER SUPPLY 27W 220V SWEDEN

PART NO.	APPROVED VENDOR	VENDOR PART NO.
C103594-001	MITSUMI	SR98S

Output: DC 5V 3A
DC 12V 0.2A

P.N° CA070086-002

		DRAWN BY <i>H. Harba</i>	DATE <i>4-14-89</i>	 ATARI CORPORATION
		CHECKED <i>K. Kitagawa</i>	DATE <i>4/18/89</i>	
		ENGINEER <i>O. Shingawa</i>	DATE <i>4-17-89</i>	TITLE POWER SUPPLY 27W 220V SWEDEN
CA200255-xxx	1040STF	APPROVED	DATE	SIZE A
NEXT ASSY	USED ON ORIGINAL MODEL	APPROVED	DATE	DRAWING NO. C103594-xxx
APPLICATION		<i>S. Ohtsuki 4/18/89</i>		REV A
				SCALE <i>NONE</i>
				SHEET <i>1</i> OF <i>8</i>

10

8910

FILE No.

SPECIFICATION

SR 98

APPROVED

CHECKED

DRAWN

ISSUED

MAY. 6 .1987

1) ELECTRICAL CHARACTERISTICS

1-1 INPUT CONDITION

1-1-1 Input Voltage	AC220/240 V
1-1-2 Input Voltage Range	± 10 %
1-1-3 Frequency	50/60 Hz
1-1-4 Rated Current (x1)	2 A max
1-1-5 Inrush Current	35A max

1-2 OUTPUT CHARACTERISTICS

1-2-1 Output Voltage	A--	DC+5.1V
	B--	DC+12V
1-2-2 Output Current	A--	1.5 ~ 3.0 A
	B--	0 ~ 0.9 A
1-2-3 Output Effect (x2)	A--	± 0.255 V
	B--	± 1.2 V
1-2-4 Ripple and Noise (x1)	A--	100mV P-P
	B--	150mV P-P
1-2-5 Over Curr. Protection		Short Protection
1-2-6 Start-up Time (x1)	A--	150msec max
	B--	150msec max
1-2-7 Hold-up Time (x1)	A--	10msec min
	B--	10msec min
1-2-8 Efficiency (x1)		55% min

1-3 Special Specifications

1-3-1 Withstand Voltage (x3)	AC1.5KV 1min (cutoff current 10mA)
1-3-2 Insulation Resistance (x3)	10MΩ min DC500V

1-4 Radiation noise Meet to VDE 0871

REVISION 21.JUL.'87

C111 addition

CODE IDENT. No.

R-68

FILE No.

0168

01

1) ELECTRICAL CHARACTERISTICS

1-1 INPUT CONDITION

1-1-1 Input Voltage	AC220 V
1-1-2 Input Voltage Range	± 10 %
1-1-3 Frequency	50 Hz
1-1-4 Rated Current (*1)	2A max.
1-1-5 Inrush Current	35A max.

1-2 OUTPUT CHARACTERISTICS

1-2-1 Output Voltage	A	DC+5.1V
	B	DC+12V
1-2-2 Output Current	A	1.5 to 3.0 A
	B	0 to 0.9 A
1-2-3 Output Effect (*2)	A	± 0.255 V
	B	± 1.2 V
1-2-4 Ripple and Noise (*1)	A	100mV P-P
	B	150mV P-P
1-2-5 Over Curr. Protection		Short Protection
1-2-6 Start-up Time (*1)	A	150m sec max.
	B	150m sec max.
1-2-7 Hold-up Time (*1)	A	10m sec min.
	B	10m sec min.
1-2-8 Efficiency (*1)		55% min.

1-3 SPECIAL SPECIFICATIONS

1-3-1 Withstand Voltage (*3)	AC1.25KV 1min. (Cutoff current 10mA)
1-3-2 Insulation Resistance (*3)	10MΩ min. DC500V

1-4 RADIATION NOISE

Meet to VDE 0871

1-5 SAFETY STANDARD

LIMITED APPROVED BY SEMKO



ATARI CORPORATION

SIZE	DRAWING NO.	REV
A	C103594-xxx	A
SCALE	NONE	SHEET 2 OF 8

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 variation range of 10Hz to 55Hz, an amplitude of 1mm, and a cycle time of 1 minute for 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 80cm hight, and this should work normally.

3) ENVIRONMENTAL

3-1 OPERATING TEMPERATURE

0 to +50°C.
(full load)

3-2 STORAGE TEMPERATURE

-20 to +75°C.

3-3 HUMIDITY

After kept in box whose temperature is $40 \pm 2^\circ\text{C}$ and relative humidity 90 to 95 % 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



ATARI CORPORATION

SIZE	DRAWING NO.	REV
A	C103594-xxx	A
SCALE	NONE	SHEET 3 OF 8

PARTS LIST

LOCATION	PART NEME	DESCRIPTION	QTY
IC201 or or △ PC101	IC PHOTO COUPLERS	HA17431P L5431 TL431CLP PC101	1 1
Q101	TRANSISTOR	2SC2979	1
Q102 or △ D101	TRANSISTOR DIODE	2SC2655 2SC2060 RB155	1 1
D102 or D103 or D104 or D105 or D201 or D202 or △ T101	DIODE DIODE DIODE DIODE DIODE DIODE TRANS FORMERS	FR106 ERB44-08 FR103 ERB44-02 1S2076 1S2473 1S2076 1S2473 FR303 30DF2 HRW34-01 ESAC82-004 EI33 SWITCHING TRANSFORMER	1 1 1 1 1 1 1 1 1 1 1
△ L101	LINE FILTER	UF2327S-403YOR3	1
L201 L202	CHOKE COIL CHOKE COIL	10uH 10uH	2
△ C101 or △ C102 or △ C103 or △ C207 or C105	CAPACITOR CAPACITOR CAPACITOR CAPACITOR CAPACITOR	0.47uF/250V(CFX) METALLIZED 0.47uF/250V(VE) METALLIZED 0.0022uF/400V(KC) CERAMIC 0.0022uF/400V(CS) CERAMIC 0.0022uF/400V(KC) CERAMIC 0.0022uF/400V(CS) CERAMIC 0.0022uF/400V(KC) CERAMIC 0.0022uF/400V(CS) CERAMIC 0.01uF/630V METALLIZED	1 1 1 1 1
C106 or C107 or C104	CAPACITOR CAPACITOR CAPACITOR	0.00022uF/2KV(R) CERAMIC 0.00022uF/2KV(CK) CERAMIC 0.1uF/50V POLYESTER 0.1uF/50V(AMZ) POLYESTER 47uF/400V(NM)	1 1 1 1
△ C111 or	CAPACITOR	0.001uF/400V(KC) 0.001uF/400V(CS)	1



ATARI CORPORATION

SIZE	DRAWING NO.	REV
A	C103594-xxx	A
SCALE	NONE	SHEET 4 OF 8

PARTS LIST

LOCATION	PART NAME	DESCRIPTION	QTY
C108 or C109 or C110 or C201	CAPACITOR	0.1uF/50V POLYESTER 0.1uF/50V (AMZ) POLYESTER	1
C109 or C110 or C201	CAPACITOR	0.068uF/50V POLYESTER 0.068uF/50V (AMZ) POLYESTER	1
C110 or C201	CAPACITOR	0.022uF/50V POLYESTER 0.022uF/50V (AMZ) POLYESTER	1
C201	CAPACITOR	2200uF/10V ALUM ELECT	2
C203	CAPACITOR	2200uF/10V ALUM ELECT	
C202	CAPACITOR	2200uF/16V ALUM ELECT	1
C204	CAPACITOR	1000uF/16V ALUM ELECT	1
C205	CAPACITOR	1000uF/10V ALUM ELECT	1
C206	CAPACITOR	1uF/50V ALUM ELECT	1
R101	RESISTOR	8.2Ω /3W WIRE WOUND CEMENT	1
R103	RESISTOR	100KΩ /2W METAL OXIDE FILM	1
R104	RESISTOR	1KΩ /2W METAL OXIDE FILM	2
R105	RESISTOR	1KΩ /2W METAL OXIDE FILM	
R205	RESISTOR	100Ω /3W METAL OXIDE FILM	1
R106	RESISTOR	3.3Ω /1W METAL OXIDE FILM	1
R109	RESISTOR	75Ω /2W METAL OXIDE FILM	1
R102	RESISTOR	390KΩ / ½ W CARBON	1
R204	RESISTOR	100Ω / ½ W CARBON	1
R107	RESISTOR	2KΩ / ¼ W CARBON	1
R108	RESISTOR	470Ω / ¼ W CARBON	2
R111	RESISTOR	470Ω / ¼ W CARBON	
R110	RESISTOR	47Ω / ¼ W CARBON	1
R114	RESISTOR	22Ω / ¼ W CARBON	1
R112	RESISTOR	10Ω / ¼ W CARBON	2
R113	RESISTOR	10Ω / ¼ W CARBON	



ATARI CORPORATION

SIZE A	DRAWING NO. C103594-xxx	REV A
SCALE NONE	SHEET 5 OF 8	

PARTS LIST

LOCATION	PART NAME	DESCRIPTION	QTY
R201	RESISTOR	2.7K Ω / $\frac{1}{4}$ W CARBON	1
R202	RESISTOR	2.4K Ω / $\frac{1}{4}$ W CARBON	1
R203	RESISTOR	24 Ω / $\frac{1}{4}$ W CARBON	1
VR201	RESISTOR	1K Ω VARIABLE	1
	HOLDER-FUSE		2
△	FUSE	250V/T1A	1
△	INSULATION PLATE		1
	CHASSIS		1
D203	DIODE	1N4746	1
or	DIODE	RD18F	
	HEAT SINK	AL, t=2m/m	2
△	SWITCH	T-824 COLOR : BLACK	1
△	AC INLET	AC-P01	1
△	SARCON-TUBE		1
	SUPPORT-TR		2
	CONNECTOR-ASSY	171822-6 AWG22 UL1007	1
△	P.C. BOARD		1
	TUBE	ϕ 24	1
	TUBE	ϕ 5	2
	SCREW	M3 X 6 WIAT STAR WASHER	2
	SCREW	M3 X 6 FLAT HEAD	2
	SCREW	M3 X 6 DOUBLE SEMS	4
	SCREW	M4 X 6 PAN SEMS	1
	SCREW	M3 X 6 PAN SEMS	2
	WASHER	STAR WASHER	1
	WIRE-JUMP		5
	WIRE	AWG 22 UL1617	1
	WIRE	AWG 22 UL1617	1
	WIRE-ASSY	AWG 22 UL1617	1
	WIRE-ASSY	AWG 22 UL1617	1
	WIRE-ASSY(EARTH)	1.25-M4 AWG18 UL1015 CSA TEW	1
	BAND		3
	LABEL-RATING		1
	LABEL-CAUTION		1
	LABEL-CAPACITOR		1



ATARI CORPORATION

SIZE
A

DRAWING NO.

C 1 0 3 5 9 4 - x x x

REV

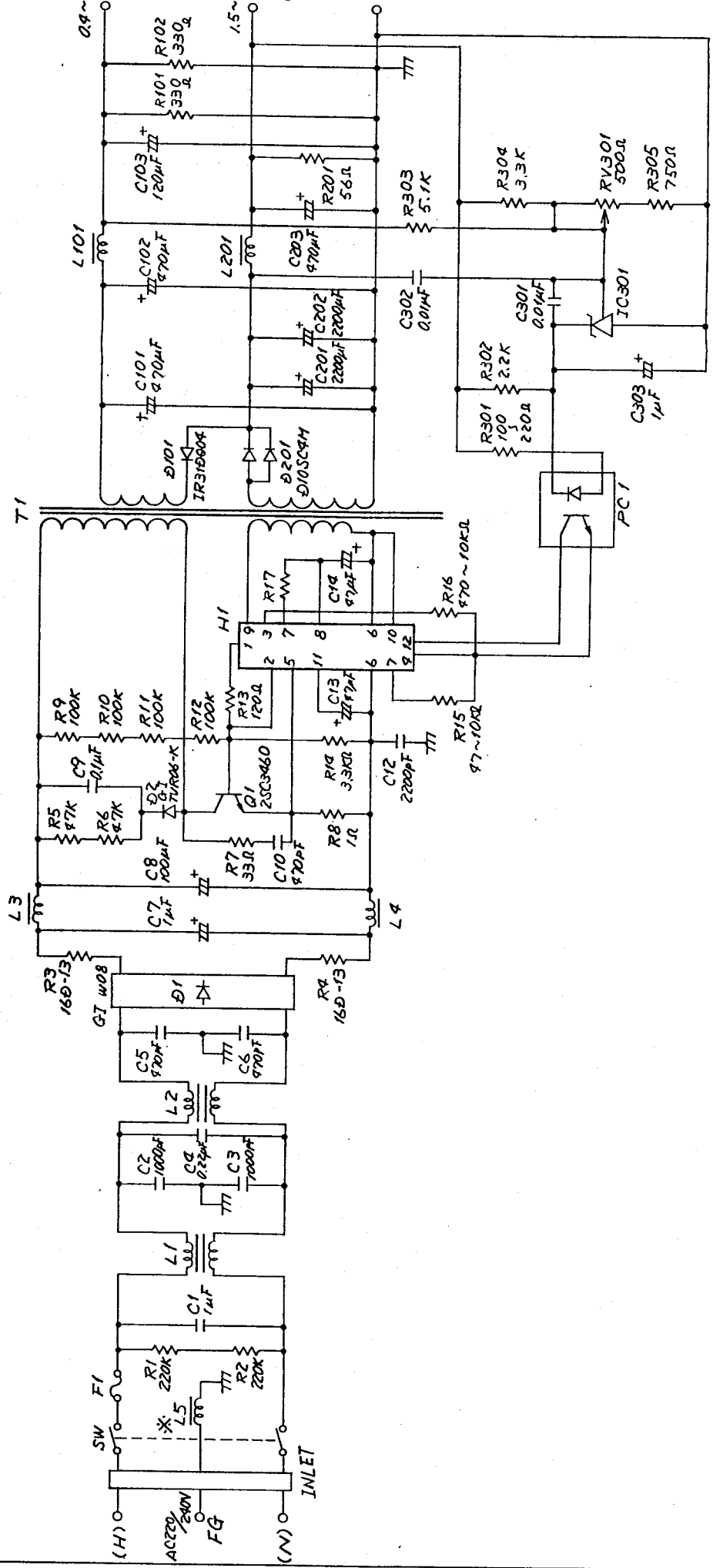
A

SCALE

NONE

SHEET

6 OF 8



ATARI (JAPAN) CORPORATION
 Toranomon Kiyoshi Building 3F
 4-3-10, Toranomon Minato-ku, Tokyo 105

ATARI

TITLE: **POWER SUPPLY ASSY**
 (220 ~ 240 V)

SIZE: DRAWING NO. **B** CA070086-XXX
 REVISION: **A**

SCALE: **NONE** SHEET: **5** OF **5**

USED ON	DATE
V20STFM	5/1/88
NEXT ASSY	DATE
MATERIAL	DATE
FINISH	DATE

DRAWN BY: *I. Yamada* S/P/AB
 CHECKED: _____
 ENGINEER: *A. Shinagawa* 6-26-88
 APPROVED: _____
 APPROVED: *[Signature]* 7/1/81

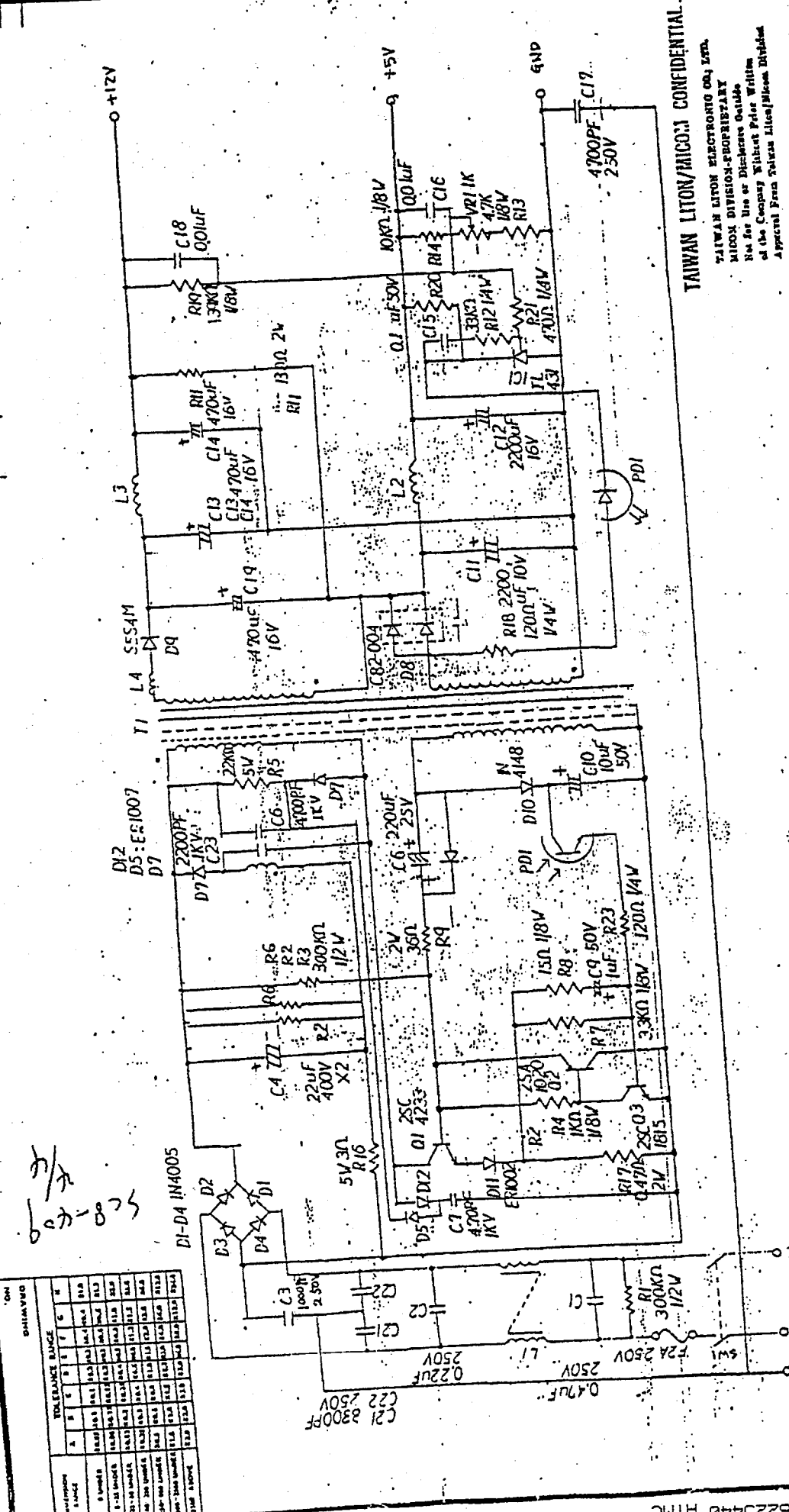
TOLERANCES	
UNDER 30	±0.1
30 THRU 300	±0.2
OVER 300	±0.4

1. * : L5 ; CA070086-002 ONLY.

NOTES-UNLESS OTHERWISE SPECIFIED ;

REVISION	DESCRIPTION	APVD	DATE
01			

TOLERANCE RANGE		DIMINVED	
A	B	C	D
±0.5%	±0.1%	±0.5%	±1.0%
±1.0%	±0.2%	±1.0%	±2.0%
±2.0%	±0.5%	±2.0%	±5.0%
±5.0%	±1.0%	±5.0%	±10.0%
±10.0%	±2.0%	±10.0%	±20.0%
±20.0%	±5.0%	±20.0%	±50.0%
±50.0%	±10.0%	±50.0%	±100.0%
±100.0%	±20.0%	±100.0%	±200.0%



588-400
K/C

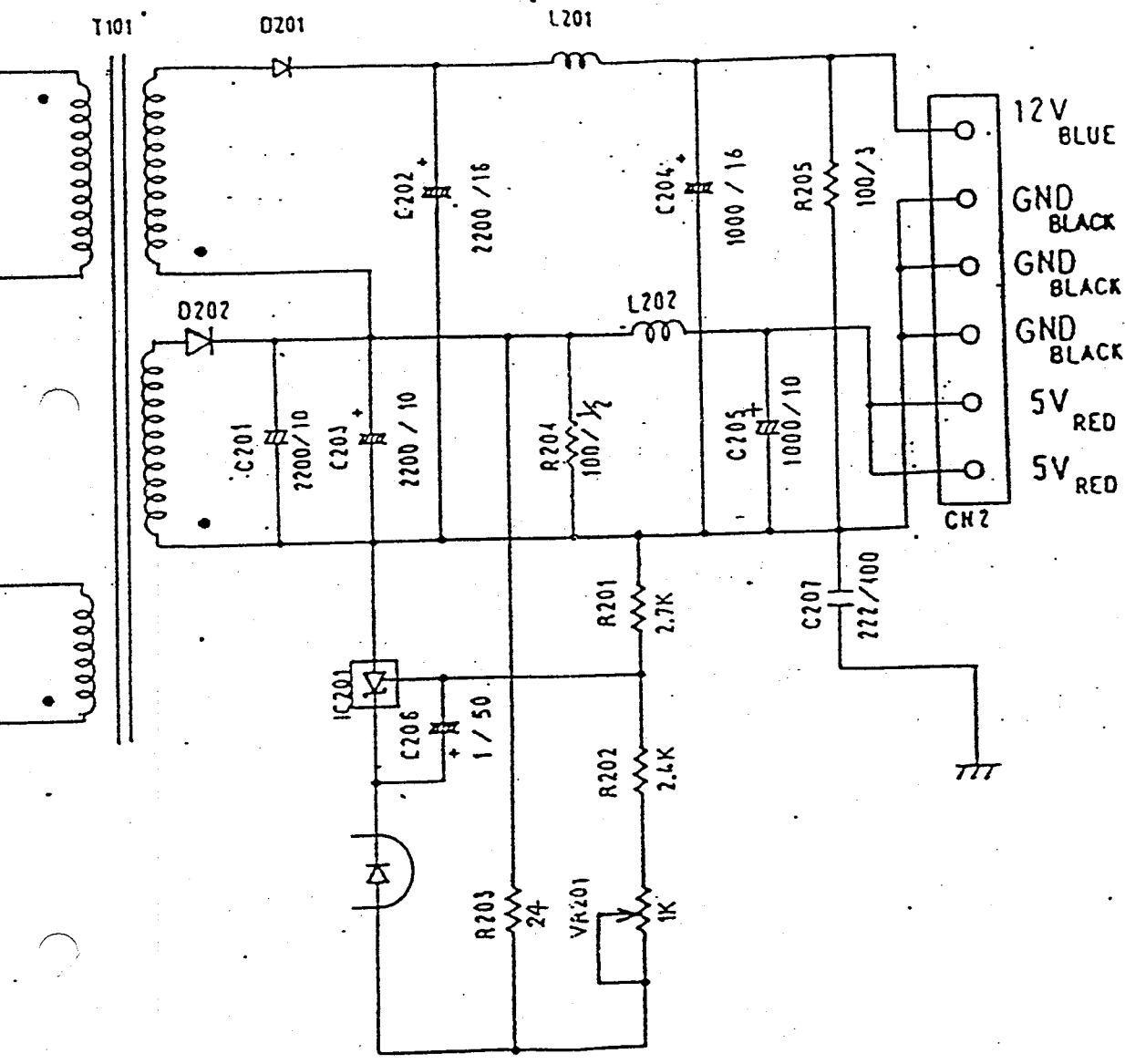
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RELEASE
 DEC 13 1988

PC NO	NAME	MAT	QUAN	NOTES

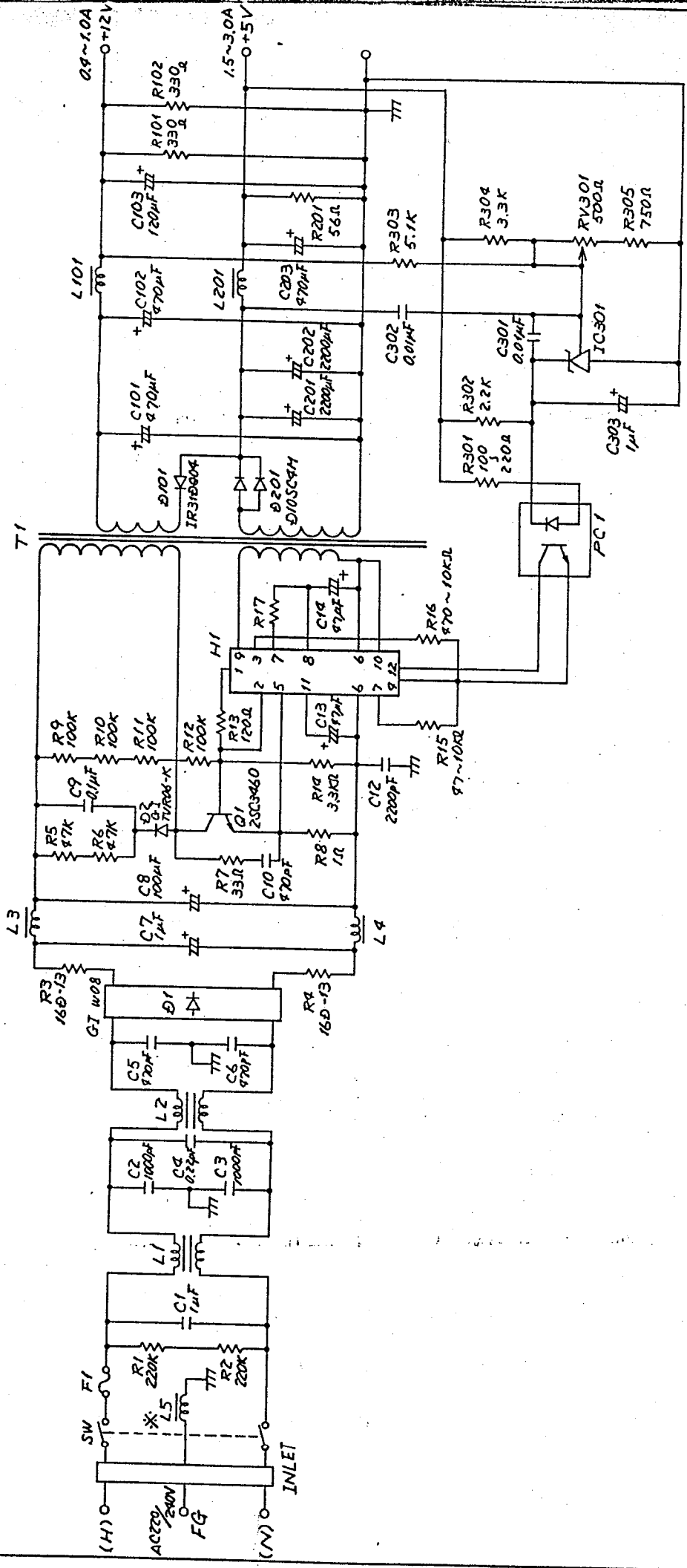
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REVISION	21 JUL 67	ASSEMBLY



THIRD ANGLE PROJECTION	SCALE	TOLERANCE	ASSEMBLY DWG No.	SR 98 SCHEMATIC DIAGRAM
DRAWN	CHECKED	CHECKED	APPROVED	CODE IDENT No.
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	R-68
				FILE No.
				0168
				01

REV	REVISIONS DESCRIPTION	DATE	APPROVED
	SEE SHEET 1.		



 ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105	
POWER SUPPLY ASSY (220 ~ 240 V)	
TITLE B	SIZE (DRAWING NO.) CA070086-XXX
ENGINEER <i>A. Shimazaki</i>	DATE 6-28-88
APPROVED <i>[Signature]</i>	DATE 7/11
SCALE NONE	SHEET 5 OF 5

USED ON S205TFM	DRAWN BY <i>L. Yoshida</i>	DATE 5/8/88
NEXT ASSY 110405TFM	CHECKED <i>[Signature]</i>	DATE 5/8/88
MATERIAL [Blank]	ENGINEER <i>A. Shimazaki</i>	DATE 6-28-88
FINISH [Blank]	APPROVED <i>[Signature]</i>	DATE 7/11

TOLERANCES	
UNDER 30	±0.1
30 THRU 300	±0.2
OVER 300	±0.4

1. * : L5 ; CA070086-002 ONLY.

NOTES-UNLESS OTHERWISE SPECIFIED ;