

**SHARP****SERVICE MANUAL**

SEJB70DS01FP0

**CA-10 CHASSIS**

70DS-01FP

PAL SYSTEM COLOUR TELEVISION

**MODEL 70DS-01FP**

In the interests of user safety (required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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**SHARP CORPORATION**

## ELECTRICAL SPECIFICATIONS

Power Input .....220V-240 Volts AC 50Hz  
 Power Consumption .....99W

Audio Power Output Rating.....4.5 (M.P.O.)x2  
 Speaker.....6cm X 13cm  
 Voice Coil Impedance.....7ohms x 2 units

Convergence.....Self Converging System  
 Focus.....Bi-Potencial Electrostatic  
 Sweep Deflection.....Magnetic

### Intermediate Frequencies

#### •Intermediate Frequencies

L'(VHF-L).....33.9MHz  
 L(VHF-H, UHF)B/G.....38.9MHz

#### •Sound IF Carrier Frequencies

L'(VHF-L).....40.4MHz  
 L(VHF-H, UHF).....33.5/32.4MHz  
 B/G.....33.05/33.158/34.47MHz

#### •Colour Sub-Carrier Frequencies

SECAM L'.....38.15/38.30625MHz  
 SECAM L, B/G.....34.65/34.49375MHz  
 PAL B/G.....34.47MHz

### Aerial Input Impedance

VHF/UHF.....75 ohm Unbalanced

### Tuning Ranges

L/L'.....55.75MHz thru 855.25 MHz  
 B/G.....48.25MHz thru 855.25 MHz  
 CATV Special Channels

Specifications are subject to change without  
 prior notice.

## WARNING

The chassis in this receiver is partially hot. Use an isolation transformer between the line cord plug and power receptable, when servicing this chassis.

To prevent electric shock, do not remove cover. No user-serviceable parts inside. Refer servicing to qualified service personnel.

## IMPORTANT SERVICE NOTES

Maintenance and repair of this receiver should be done by qualified service personnel only.

### SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove static charge from it by connecting a 10 k ohm resistor in series with an insulated wire (such as test probe) between picture tube ground tag and high voltage lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage completely.

### X-RAY

This receiver is designed so that any X-Ray radiation is kept to an absolute minimum. Since certain malfunctions or servicing may produce potentially hazardous radiation with prolonged exposure at close range, the following precautions should be observed:

1. When repairing the circuit, be sure not to increase the high voltage to more than 30.0 kV, (at beam 1000  $\mu$ A) for the set.
2. To keep the set in a normal operation, be sure to make it function on 25.7kV $\pm$  1.5kV (at beam 1300  $\mu$ A) in the case of the set. The set has been factory—adjusted to the above mentioned high voltage. If there is a possibility that high voltage fluctuates as a result of the repairs, never forget to check for such high voltage after the work.
3. Do not substitute a picture tube with unauthorized types and/or brands which may cause excess X-Ray radiation.

### BEFORE RETURNING THE RECEIVER

In addition to the checks necessary as a result of a repair having been carried out, the following additional safety checks should also be made before returning the units to the user.

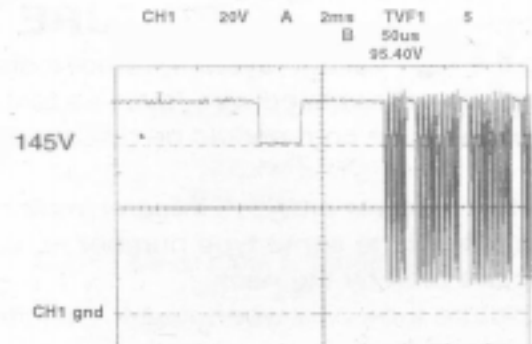
1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, insulation resistor-capacity networks, mechanical insulators etc.

## REGLAGES DANS MODE DE SERVICE

Tous les réglages nécessaires dans ce châssis sont réalisés dans le «Service Mode» avec l'exception du réglage des G2.

### REGLAGE G2

- 1) Syntoniser une mire «cross hatch».
- 2) Connecter l'oscilloscope au cathode rouge et après régler le GII pour lire 145V entre les deux niveaux A et B représentés au dessin.



### NOTE

L'oscilloscope doit être réglé pour le trigger "vertical TV field" et synchronisé avec la signal de video.

### FONCTIONS DE "SERVICE MODE"

Pour entrer dans le "SERVICE MODE"

Appuyer simultanément sur  $\nabla/\wedge$  et CH<sup>^</sup> puis mettré l'interrupteur general sur marche. Il apparaîtra l'indication "SERVICE MODE" à l'image.

Pour sortir de "SERVICE MODE", arrêtez la television avec l'interrupteur général. Vous pouvez faire tous les réglages avec votre télécommande.

Les seules touches suivantes seront nécessaires:

$\nabla$ CH<sup>^</sup> Pour vous déplacer entre le menu d'options d réglage

$\nabla/\wedge$  Sont utilisés pour réaliser l'réglage, et la touche de mise en marche "POWER" pour memoriser.

Les options de réglage sont les suivants:

SERVICE SOFTWARE  
 AGC TAKE OVER POINT  
 EAST-WEST WIDTH  
 HORIZONTAL SHIFT  
 VERTICAL SLOPE  
 VERTICAL AMPLITUDE  
 VERTICAL SHIFT  
 S CORRECTION  
 EAST-WEST PARABOLA  
 EAST-WEST CORNER  
 EAST-WEST TRAPEZOID  
 RED GAIN  
 GREEN GAIN  
 BLUE GAIN  
 ALTER NVM PAG  
 ALTER NVM POS  
 ALTER NVM VAL  
 AUTOINSTALLATION ON/OFF

**AGC TAKE OVERT POINT**

1. Syntoniser une signal de lignes de couleur (puissance du signal: 57dB/uV+/-1dB).  
La fréquence doit être sélectionnée au centre de la bande du tuner.
2. Appuyer sur la touche de mise en marche de la telecommande. L'appareil cherchera automatiquement son réglage de «AGC».
3. Pour sortir arrêtez la tv avec l'interrupteur général.

**MANIÈRE DE FAIRE LES CORRECTIONS DE GÉOMÉTRIES:**



Procédure pour réglage des corrections de Vertical:

- Régler VERT. SLOPE.
- Régler S CORRECTION.
- Régler VERT. SHIFT.
- Régler VERT. AMPLITUDE.

Procédure pour réglage des corrections d'Horizontal:

- Mette le réglage E-W WIDTH au minimum.
- Régler HORIZONTAL SHIFT.
- Régler E-W PARABOLA.
- Régler E-W WIDTH.
- Régler E-W TRAPEZOID.
- Régler E-W CORNER.

**E-W WIDTH**

- a) Syntoniser une mire façon Philips.
- b) Appuyer sur  le balayage horizontal augmentera.
- c) Appuyer sur  le balayage horizontal diminuera.
- d) Régler l'amplitude horizontal pour obtenir un 9% de balayage (fig. 1)

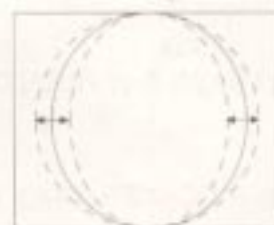


Fig. 1

**HORIZONTAL SHIFT**



- a) Syntoniser une mire façon Philips.
- b) Appuyer sur  l'image se déplacera à gauche.
- c) Appuyer sur  l'image se déplacera à droite.
- d) Régler la position horizontal pour une image située dans le centre (fig. 2).



Fig. 2

**VERTICAL SLOPE**

- a) Syntoniser une mire façon "center cross".
- b) Régler la ligne central horizontal de manière à coïncider avec la ligne supérieur de la surface noire (fig. 3).



Fig. 3

**VERTICAL AMPLITUDE**

- Syntoniser une mire façon Philips.
- Appuyer sur  $\triangle^{\wedge}$ , la largeur vertical de l'écran augmentera.
- Appuyer sur  $\nabla^{\wedge}$ , la largeur vertical de l'écran diminuera.
- Régler la longueur vertical pour obtenir un balayage plus grand (fig. 4).



Fig. 4

**VERTICAL SHIFT**

- Syntoniser une mire façon Philips.
- Appuyer sur  $\triangle^{\wedge}$ , l'image descendra.
- Appuyer sur  $\nabla^{\wedge}$ , l'image montera.
- Régler la position vertical pour une image située dans le centre (fig. 5).

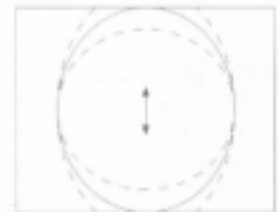


Fig. 5

**S CORRECTION**

- Syntoniser une mire façon Philips.
- Appuyer sur  $\triangle^{\wedge}$ , le balayage superieur et inferieur diminuera et le balayage central augmentera.
- Appuyer sur  $\nabla^{\wedge}$ , le balayage superieur et inferieur augmentera et le balayage central diminuera.
- Régler S CORRECTION pour obtenir une image symetrique référencée au centre de l'écran (fig. 6).

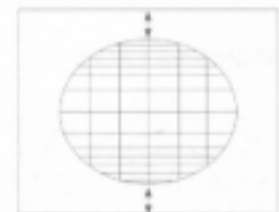


Fig. 6

**E-W PARABOLA**

- Syntoniser une mire façon Philips.
- Appuyer sur  $\triangle^{\wedge}$ , les côtes de l'écran changeront d'efecte cousan à efecte tonneau.
- Appuyer sur  $\nabla^{\wedge}$ , les côtes de l'écran changeront d'efecte tonneau à efecte cousan.
- Régler E-W PARABOLA pour obtenir le même resultat que la (fig. 7).



Fig. 7

**E-W CORNER**

- Syntoniser une mire façon Philips.
- Appuyer sur  $\triangle^{\wedge}$ , les côtes de l'écran changeront d'efecte cousan à efecte tonneau.
- Appuyer sur  $\nabla^{\wedge}$ , les côtes de l'écran changeront d'efecte tonneau à efecte cousan.
- Régler E-W CORNER pour obtenir le même resultat que la (fig. 8).



Fig. 8

**E-W TRAPEZOID**

- Syntoniser une mire façon Philips.
- Appuyer sur  $\triangle^{\wedge}$ , les côtes de l'écran changeront.
- Appuyer sur  $\nabla^{\wedge}$ , les côtes de l'écran changeront.
- Régler E-W TRAPEZOID pour obtenir le même resultat que la (fig. 9).



Fig. 9

**REGLAGE DE LA COULEUR**

Les réglages suivant sont necessaires uniquement quant les tube a été changé.

**•RED GAIN / GREEN GAIN / BLUE GAIN**

- a) Utiliser les boutons de lumière et de contraste pour avoir une luminosité de 110 NITS.  
 b) Entrer en mode service et sélectionner RED GAIN / GREEN GAIN / BLUE GAIN. Ajuster de manière à obtenir les valeurs de la spécification de X et Y.

$$X = 0.290 \pm 0.015$$

$$Y = 0.284 \pm 0.015$$

**NOTE**

Il ne faut pas de modifier le Rouge.

Les positions RED GAIN modifie la coordonnée X

GREEN GAIN modifie la coordonnée Y.

BLUE GAIN modifie la coordonnée X et Y.

- c) Sortir du Mode de Service et contrôler les coordonnées de couleur X et Y de 20 et 110 NITS. Il sera peut-être nécessaire de répéter cette procédure.

**ACCES AU REGLAGE DE LA NVM**

Appuyer sur CH<sup>^</sup> pour faire apparaître la suivante séquence:

ALTER NVM PAG

CH<sup>^</sup>



ALTER NVM POS

CH<sup>^</sup>



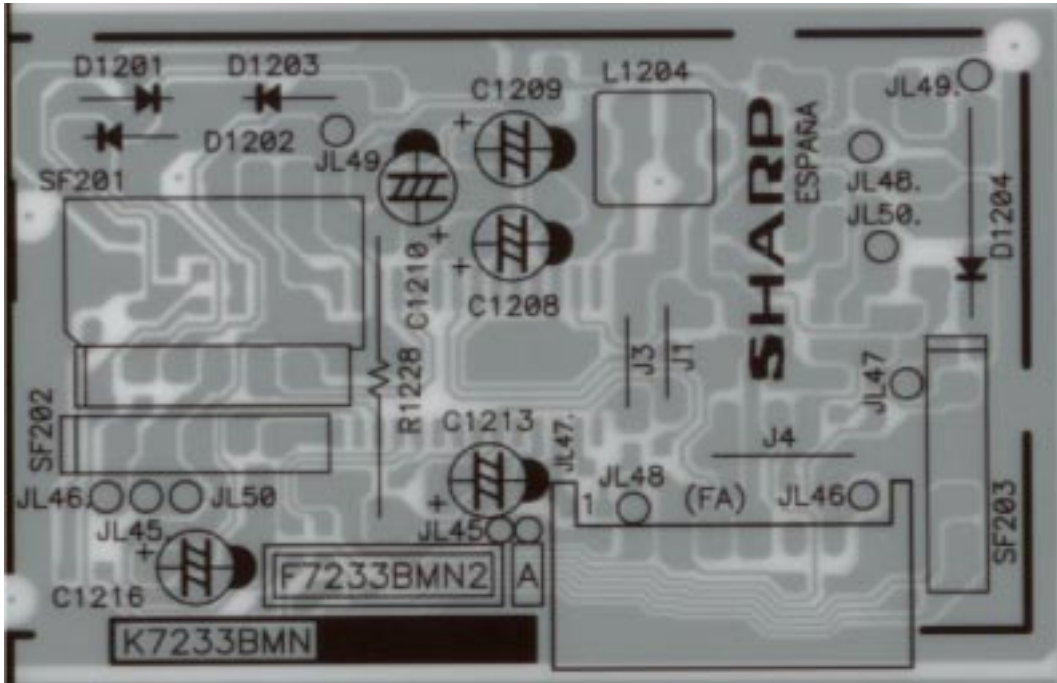
ALTER NVM VAL

Pour changer le valeur appuyer 

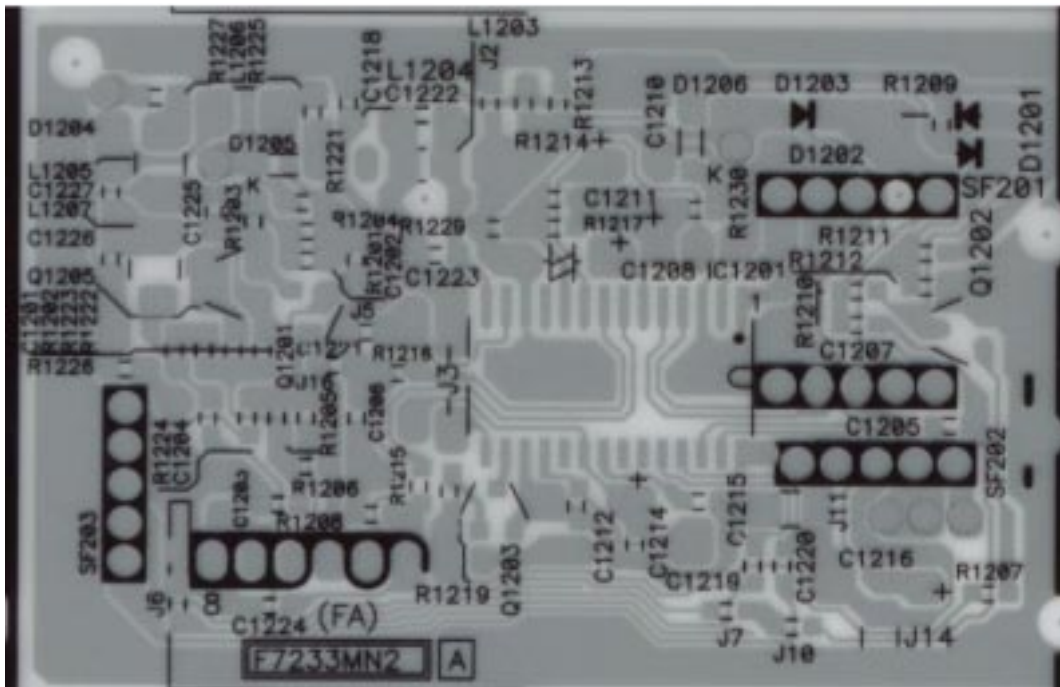
**AUTOINSTALLATION OFF/ON**

Si vous sélectionnez ON, l'appareil effectuera une séquence d'autoinstallation quand vous sortirez du SERVICE MODE.

PRINTED WIRING BOARDS



SOUND IF PWB (COMPONENT SIDE + COPPER)

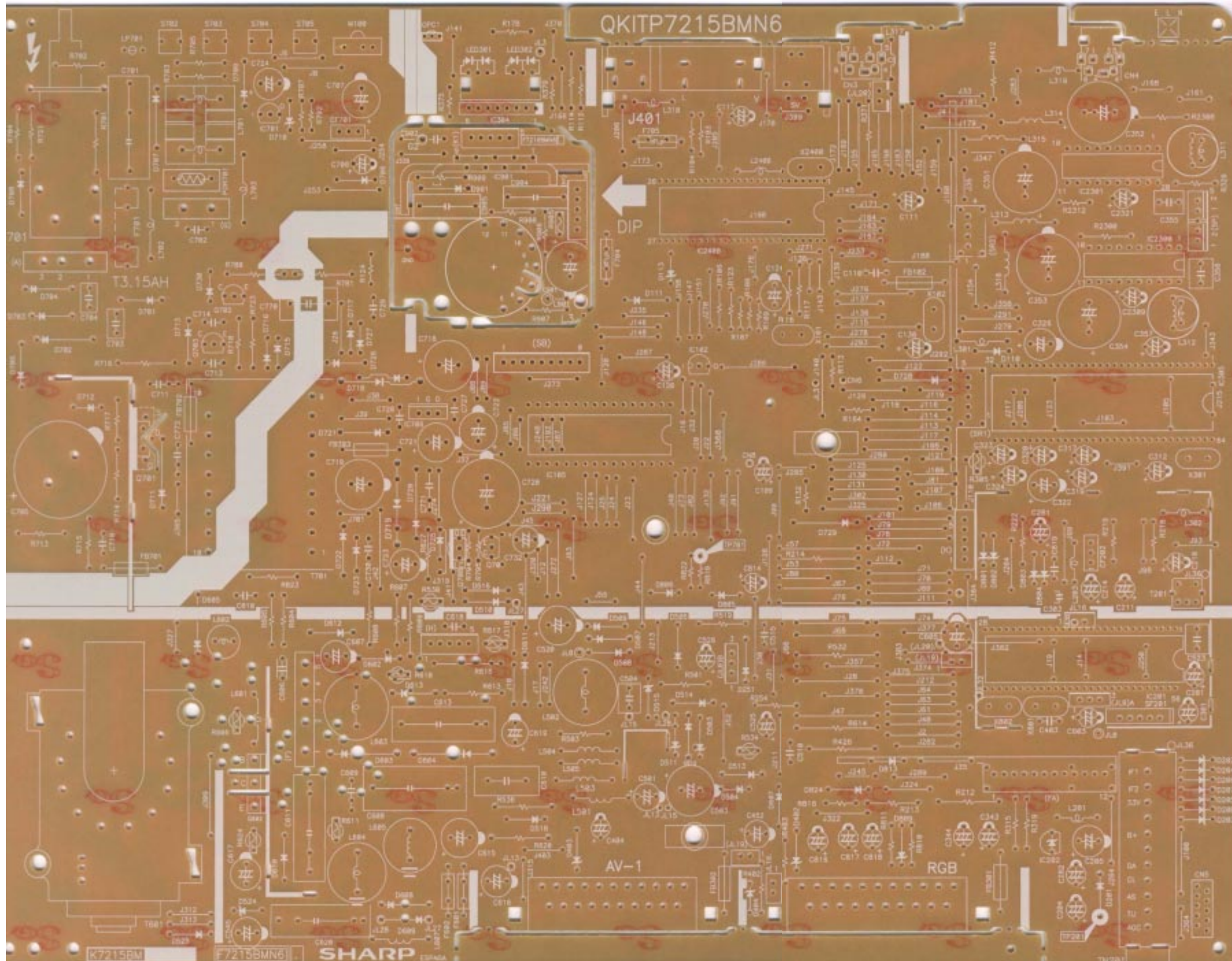


SOUND IF PWB (SMD COMP. + COPPER)



PRINTED WIRING BOARD (MOTHER UNIT) COMPONENT SIDE.

70DS-01FP



PRINTED WIRING BOARD (MOTHER UNIT) COPPER SIDE.



## DESCRIPTION OF SCHEMATIC DIAGRAM

### **SAFETY NOTE:**

1. DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2. SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

### **IMPORTANT SAFETY NOTICE:**

PARTS MARKED WITH "Δ" ( ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

### **SEVICE PRECAUTION:**

THE AREA ENCLOSED BY THIS LINE ( ■ ■ ) IS DIRECTLY CONNECTED WITH AC MAINS VOLTAGE. WHEN SERVICING THE AREA, CONNECT AN ISOLATING TRANSFORMER BETWEEN TV RECEIVER AND AC LINE TO ELIMINATE HAZARD OF ELECTRIC SHOCK.

### **NOTE:**

1. The unit of resistance "ohm" is omitted (K=1000 ohms, M=Megaohm).
2. All resistors are 1/8 watt, unless otherwise noted.
3. All capacitors are  $\mu\text{F}$ , unless otherwise noted (P= $\mu\mu\text{F}$ ).
4. The capacitor with Part No. RC-FZ9XXXBMNJ is designed to withstand 63V.

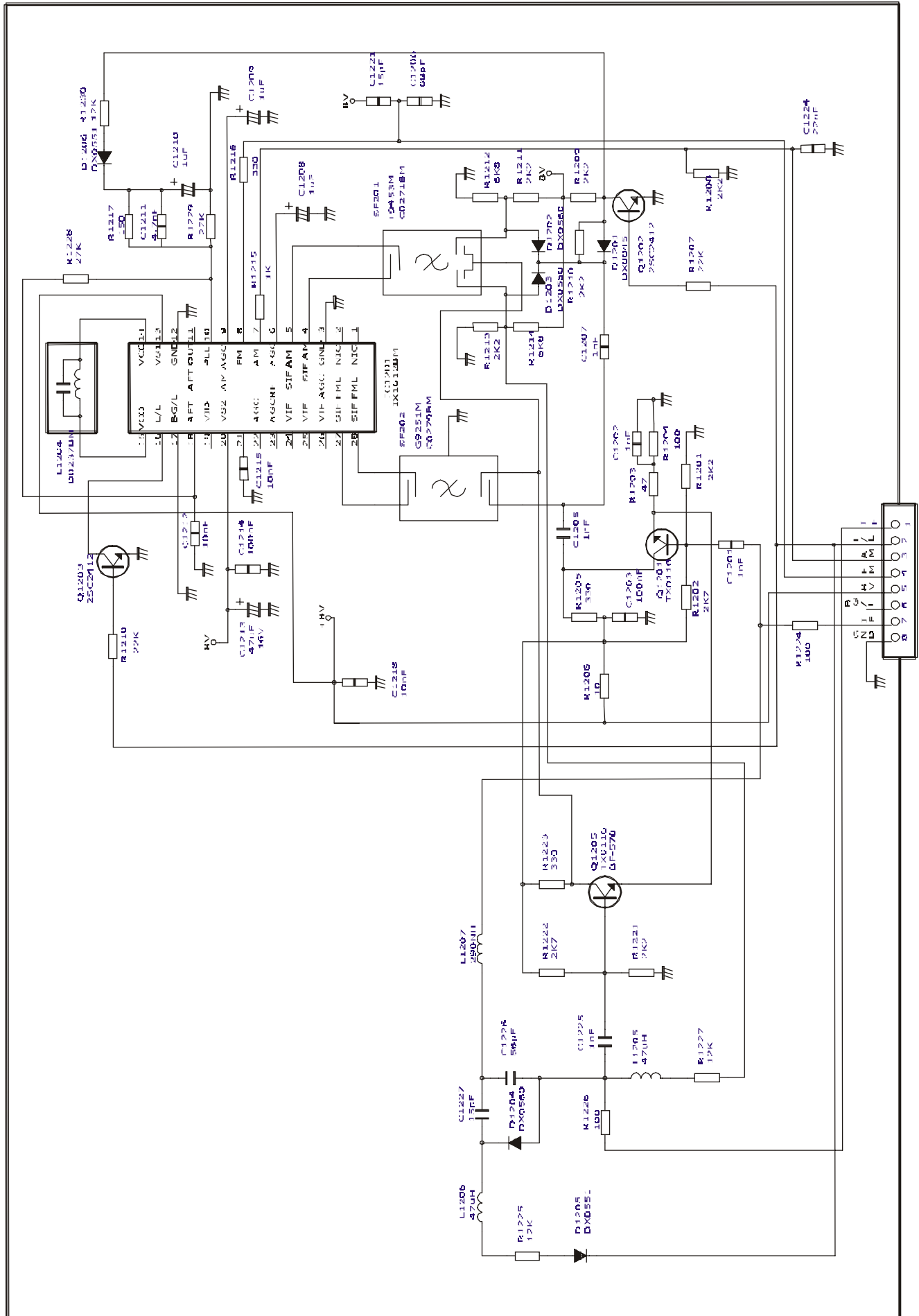
### **WAVEFORM MEASUREMENT CONDITION**

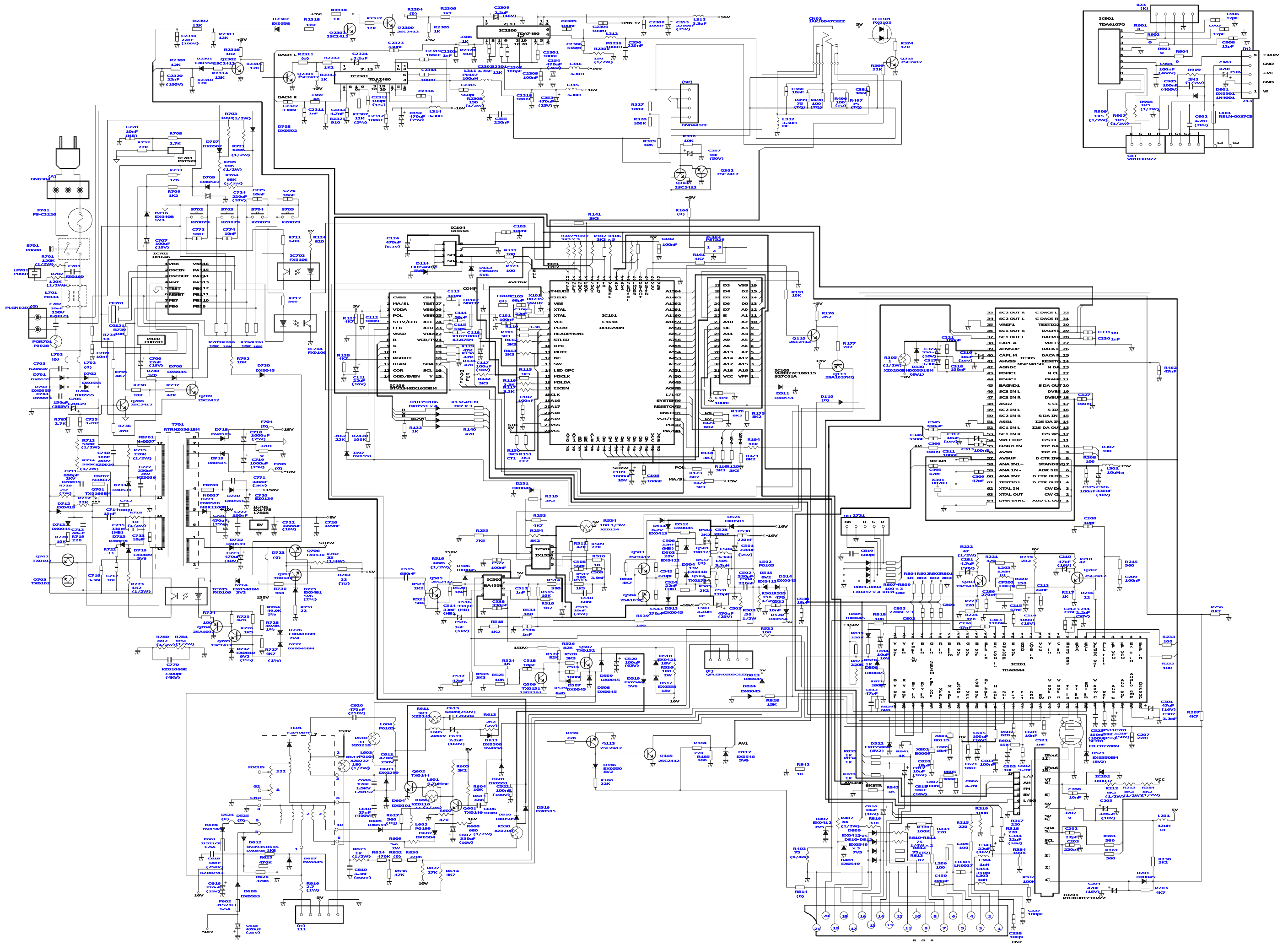
Colour bar generator signal of 70 dB from RF input.

### **CAUTION**

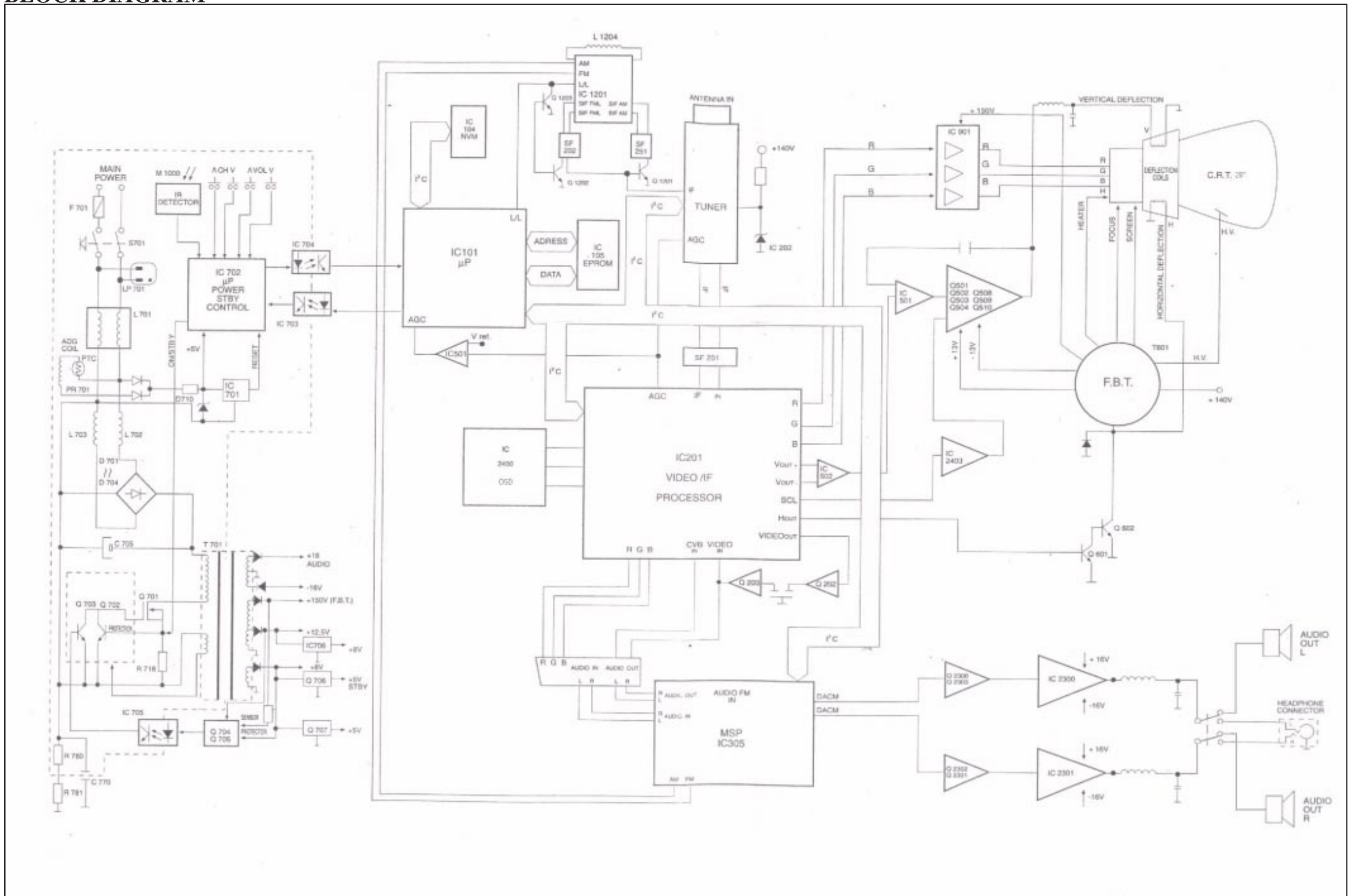
This circuit diagram is original one, therefore there may be a slight difference from yours.

SOUND IF SCHEMATIC DIAGRAM (N2 Version)





## BLOCK DIAGRAM



## PART LIST 70DS-01FP

### REPLACEMENT PARTS

Replacement parts which have special safety characteristics are identified in this manual. Electrical components having such features are identified by  $\triangle$  in the Replacements Part List. The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended is not permitted. Replacement parts not shown in this service manual may create shock fire, or other hazards.

### HOW TO ORDER REPLACEMENT PARTS

To have your order completed promptly and correctly please supply the following information.

- |                 |                |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO.    |
| 3. PART NO.     | 4. DESCRIPTION |
| 5. CODE         | 6. QUANTITY    |

\*MARK: SPARE PARTS DELIVERY SECTION

REF Nº	PARTS	*	DESCRIPTION	EX	
PICTURE TUBE					
$\triangle$	VB66EAK7111*N	S	C.R.T. 28"	CW	
$\triangle$	CCILG0404BMV0	S	DEGAUSSING COIL 28"	AV	
PRINTED WIRING BOARDS					
(NOT REPLACEMENT ITEM)					
	PWB-A	DUNTK7215BMX7	S	MOTHER UNIT	-
	PWB-B	DUNTK7216BMX7	S	SOCKET UNIT	-
	PWB-C	DUNTK7233BMV0	S	IF UNIT	-
		DSETU7215BMX7	S	COMPLETE CHASSIS	-
PWB-A MOTHER UNIT					
TUNER					
TH 0201	RTUNH0123BMZZ	S	TUNER CTT5020 THOMSONS	BA	
INTEGRATED CIRCUITS					
IC 0101	RH-IX1629BMZZ	S	SAB-C161K-L16Q SIEMENS	AY	
IC 0102	VHIPST529C2-1	S	PST529C2 MITSUMI	AD	
IC 0104	RH-IX1668BMZZ	S	NVM M24C16 SGS THOMSON	AG	
IC 0105	CH-IX1600CJF5	S	EPROM	AX	

## PART LIST 70DS-01FP

IC 0106	RH-IX1635BMZZ	S	STV5348 SMD TXT SGS-T	AY
IC 0201	VHITDA8844/-2	S	TDA8844/N2 PHILIPS	BD
IC 0202	RH-IX0037CEZZ	S	UPC574J 33V NEC	AD
IC 0305	RH-IX1784BMZZ	S	MSP3415D PSDIP64	
IC 0501	RH-IX155BMZZ	S	BA10393 S0P8 SMD ROHM	AD
IC 0502	VHIBA4558F/-1	S	BA4558F-E2 ROHM OP-AMP	
IC 0701	VHIPST529C2-1	S	PST529C2 MITSUMI	AD
IC 0702	RH-IX1646BMZZ	S	ST6203B SGS-THOMSON	AL
△ IC 0703	RH-FX0106BMZZ	S	OPTOCOUPLER	AD
△ IC 0704	RH-FX0106BMZZ	S	OPTOCOUPLER	AD
△ IC 0705	RH-FX0106BMZZ	S	OPTOCOUPLER	AD
IC 0706	RH-IX1478BMZZ	S	L7808	AE
IC 2300	VHITDA7480/-1	S	TDA7480 THOMSON	AK
IC 2301	VHITDA7480/-1	S	TDA7480 THOMSON	AK
TRANSISTORS				
Q 0110	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0111	VS2SA1037KQ-1	S	TRT PNP BC807 SMD	AA
Q 0113	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0115	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0202	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0203	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0302	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0303	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0315	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0501	RH-TX0171BMZZ	J	IRFR9020TM SAMSUNG P	AF
Q 0502	RH-TX0172BMZZ	J	IRFR010TM SAMSUNG N	AE
Q 0503	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0504	VS2SA1037KQ-1	S	TRT PNP BC807 SMD	AA
Q 0505	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0506	RH-TX0151BMZZ	S	TRT 2SD2391Q SMD ROHM	AD
Q 0507	RH-TX0152BMZZ	S	TRT BC846BLT1 SMD	AA
Q 0601	RH-TX0146BMZZ	S	TRT 2SD2153T100/W SMD ROH	AD
Q 0602	RH-TX0144BMZZ	S	TRT BUH 515 THOMSON	AK
Q 0701	RH-TX0166BMZZ	S	MOSFET 2SK2605 TOSHIBA	AK
Q 0702	RH-TX0102BMZZ	S	TRT BC338	AB
Q 0703	RH-TX0102BMZZ	S	TRT BC338	AB
Q 0704	VS2SA1037KQ-1	S	TRT PNP BC807 SMD	AA
Q 0705	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0706	RH-TX0130BMZZ	S	TRT BC338-40	AB
Q 0707	RH-TX0130BMZZ	S	TRT BC338-40	AB
Q 0708	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 0709	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 2300	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 2301	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 2302	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 2303	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA



## PART LIST 70DS-01FP

DIODES					
D 0103	RH-DX0551BMZZ	S	DIODE LL4148 TFK SMD	AA	
D 0104	RH-DX0551BMZZ	S	DIODE LL4148 TFK SMD	AA	
D 0105	RH-DX0551BMZZ	S	DIODE LL4148 TFK SMD	AA	
D 0106	RH-DX0551BMZZ	S	DIODE LL4148 TFK SMD	AA	
D 0113	RH-EX0409BMZZ	S	DIODE ZENER BZX79C5V6	AA	
D 0114	RH-EX0546BMZZ	S	ZENER TZMC5V6 TFK SMD	AA	
D 0116	RH-EX0550BMZZ	S	ZENER TZMC8V2 TFK SMD	AA	
D 0117	RH-EX0546BMZZ	S	ZENER TZMC5V6 TFK SMD	AA	
D 0119	RH-DX0551BMZZ	S	DIODE LL4148 TFK SMD	AA	
D 0201	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0251	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0330	RH-EX0551BMZZ	S	ZENER TZMC9V1 TFK SMD	AA	
D 0401	RH-EX0549BMZZ	S	ZENER TZMC7V5 TFK SMD	AA	
D 0402	RH-EX0412BMZZ	S	DIODE ZENER BZX79C7V5	AB	
D 0503	RH-EX0422BMZZ	S	DIODE ZENER BZX79C20V	AA	
D 0504	RH-EX0418BMZZ	S	DIODE ZENER BZX79C13V	AB	
D 0506	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0507	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0508	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0509	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0510	RH-DX0577BMZZ	S	DIODE 1N4935 ACPA	AE	
D 0511	RH-EX0413BMZZ	S	DIODE ZENER BZX79C8V2	AB	
D 0512	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0513	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0514	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0515	RH-EX0413BMZZ	S	DIODE ZENER BZX79C8V2	AB	
D 0516	RH-DX0577BMZZ	S	DIODE 1N4935 ACPA	AE	
D 0517	RH-EX0558BMZZ	S	ZENER TZMC18 TFK SMD	AA	
D 0518	RH-EX0421BMZZ	S	DIODE ZENER BZX79C18V	AA	
D 0519	RH-EX0546BMZZ	S	ZENER TZMC5V6 TFK SMD	AA	
D 0520	RH-DX0551BMZZ	S	DIODE LL4148 TFK SMD	AA	
D 0521	RH-EX0550BMZZ	S	ZENER TZMC8V2 TFK SMD	AA	
D 0522	RH-EX0550BMZZ	S	ZENER TZMC8V2 TFK SMD	AA	
D 0526	RH-DX0501BMZZ	S	DIODE 1N4004	AA	
D 0601	RH-DX0551BMZZ	S	DIODE LL4148 TFK SMD	AA	
D 0602	RH-DX0576BMZZ	S	DIODE 1N4934 ACPA	AA	
D 0603	RH-DX0299BMZZ	S	DIODE BY 228-20	AE	
D 0604	RH-DX0301BMZZ	S	DIODE BY 299 PREFORM C6.3	AD	
D 0605	RH-DX0591BMZZ	S	DIODE RGP10A FAGOR 50V	AB	
D 0607	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0608	RH-DX0593BMZZ	S	DIODE RGP10D FAGOR 200V	AB	
D 0609	RH-DX0593BMZZ	S	DIODE RGP10D FAGOR 200V	AB	
D 0612	RH-DX0577BMZZ	S	DIODE 1N4935 ACPA	AE	
D 0613	RH-DX0578BMZZ	S	DIODE 1N4936 ACPA	AA	
D 0701	RH-DX0555BMZZ	S	DIODE RF2005 FAGOR	AB	

## PART LIST 70DS-01FP

D 0702	RH-DX0555BMZZ	S	DIODE RF2005 FAGOR	AB	
D 0703	RH-DX0555BMZZ	S	DIODE RF2005 FAGOR	AB	
D 0704	RH-DX0555BMZZ	S	DIODE RF2005 FAGOR	AB	
D 0706	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0707	RH-DX0502BMZZ	S	DIODE 1N4005	AA	
D 0708	RH-DX0502BMZZ	S	DIODE 1N4005	AA	
D 0709	RH-DX0502BMZZ	S	DIODE 1N4005	AA	
D 0710	RH-EX0408BMZZ	S	DIODE ZENER BZX79C5V1	AB	
D 0711	RH-DX0539BMZZ	S	DIODE BYT52M TFK	AC	
D 0712	RH-EX0419BMZZ	S	ZENER BZX79C15V 0,4W	AB	
D 0713	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0715	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0716	RH-EX0409BMZZ	S	DIODE ZENER BZX79C5V6	AA	
D 0717	RH-EX0810BMZZ	S	DIODE ZENER BZX79A6V2 1%	AC	
D 0718	RH-DX0577BMZZ	S	DIODE 1N4935 ACPA	AE	
D 0719	RH-DX0577BMZZ	S	DIODE 1N4935 ACPA	AE	
D 0720	RH-DX0561BMZZ	S	DIODE RGP15J FAGOR	AD	
D 0721	RH-DX0590BMZZ	S	DIODE MBR1100RL	AE	
D 0722	RH-DX0574BMZZ	S	DIODE 1N5819 ACPA	AC	
D 0724	RH-EX0540BMZZ	S	ZENER TZMC3V3 TFK SMD	AA	
D 0725	RH-EX0481BMZZ	S	DIODE ZENER BZX79 B5V6 2%	AB	
D 0726	RH-EX0400BMZZ	S	DIODE ZENER BZX79C2V4	AB	
D 0727	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0730	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0801	RH-EX0412BMZZ	S	DIODE ZENER BZX79C7V5	AB	
D 0802	RH-EX0412BMZZ	S	DIODE ZENER BZX79C7V5	AB	
D 0803	RH-EX0412BMZZ	S	DIODE ZENER BZX79C7V5	AB	
D 0804	RH-EX0412BMZZ	S	DIODE ZENER BZX79C7V5	AB	
D 0805	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0806	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0809	RH-EX0412BMZZ	S	DIODE ZENER BZX79C7V5	AB	
D 0810	RH-EX0549BMZZ	S	ZENER TZMC7V5 TFK SMD	AA	
D 0811	RH-EX0549BMZZ	S	ZENER TZMC7V5 TFK SMD	AA	
D 0812	RH-EX0549BMZZ	S	ZENER TZMC7V5 TFK SMD	AA	
D 0813	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 0824	RH-DX0045BMZZ	S	DIODE 1N4148	AA	
D 2301	RH-EX0558BMZZ	S	ZENER TZMC18 TFK SMD	AA	
D 2302	RH-EX0558BMZZ	S	ZENER TZMC18 TFK SMD	AA	
LED030	RH-PX0105BMZZ	S	LED SPB-25MVW ROHM	AC	
J 0397	RH-DX0551BMZZ	S	DIODE LL4148 TFK SMD	AA	
PACKADGED CIRCUITS					
△	POR070	RMPTP0028CEZZ	S	PCT	AG
X	0101	RCRSB0235BMZZ	S	CRYSTAL 16MHZ ACAL	AF
X	0102	RCRSB0227BMZZ	S	CRYSTAL ACAL 13.875MHZ	AG
X	0301	RCRSB0203BMZZ	S	CRYSTAL 18,432 MHZ	AG
X	0801	RCRSB0115BMZZ	S	CRYSTAL 4,43 MHZ	AG
X	0802	RCRSB0009PEZZ	S	CRYSTAL	AL

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COILS					
L 0201	VP-DF121K0000	S	COIL 120UH 10%	AA	
L 0203	VP-DF120K0000	S	COIL 12UH 10%	AB	
L 0247	RCILP0230BMZZ	S	COIL 750NH LQN1HR75J SMD	AD	
L 0301	VP-DF100K0000	S	COIL 10UH 10%	AB	
L 0303	VP-NM1R0MR10N	S	COIL 1UH SMD	AB	
L 0304	VP-NM1R0MR10N	S	COIL 1UH SMD	AB	
L 0305	VRS-TQ2BD101J	S	RE OX 100 OHM 5% 1/8W SMD	AA	
L 0306	VRS-TQ2BD101J	S	RE OX 100 OHM 5% 1/8W SMD	AA	
L 0311	RCILP0197CEZZ	S	COIL LHL08TB101K TAIYO YUD	AC	
L 0312	RCILP0197CEZZ	S	COIL LHL08TB101K TAIYO YUD	AC	
L 0313	VP-CF3R3K0000	S	COIL 3.3UH 10%	AB	
L 0314	VP-CF3R3K0000	S	COIL 3.3UH 10%	AB	
L 0315	VP-CF3R3K0000	S	COIL 3.3UH 10%	AB	
L 0316	VP-CF3R3K0000	S	COIL 3.3UH 10%	AB	
L 0317	VP-DF3R3K0000	S	COIL 3,3UH 10%	AB	
L 0502	RCILP0105CEZZ	S	COIL FL15H102J TAIYO	AG	
L 0503	VP-CF3R3K0000	S	COIL 3.3UH 10%	AB	
L 0504	VP-CF3R3K0000	S	COIL 3.3UH 10%	AB	
L 0505	VP-CF3R3K0000	S	COIL 3.3UH 10%	AB	
L 0601	VP-DF4R7K0000	S	COIL 4,7UH 10%	AA	
L 0602	RCILP0199CEZZ	S	COIL LHL08TB151K TAIYO YUD	AC	
L 0603	RCILP0104CEZZ	S	COIL FL15H153J TAIYO	AG	
L 0604	RCILP0105CEZZ	S	COIL FL15H102J TAIYO	AG	
L 0605	RCILZ0599CEZZ	S	DELAY LINE	AG	
△ L 0701	RCILF0111BMZZ	S	FILTER HR-19043	AL	
J 0127	VP-DF3R3K0000	S	COIL 3,3UH 10%	AB	
CERAMIC FILTERS					
CF 0202	RFILC0020CEZZ	S	FILTER TPS5.5MB-TF21	AE	
CF 0701	RFILC0121GEZZ	S	FILTER CST8.00MTW MURATA	AD	
SF 0201	RFILC0278BMZZ	S	SAW FILTER K3953M SIEMENS	AM	
TRANSFORMERS					
△ T 0601	RTRNF2049BMZZ	S	FBT OREGA 105319.80	BA	
△ T 0701	RTRNZ0561BMZZ	S	SMT4 G6163-01 CA-10 25"	AR	
CAPACITORS					
C 0101	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA	
C 0102	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA	
C 0103	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA	
C 0105	VCCCTV1HH680J	S	CERAMIC 68PF 50V RESSMD	AA	
C 0106	VCCCTV1HH220J	S	CERAMIC 22PF 50V RESSMD	AA	
C 0108	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA	
C 0109	VCEAGA1AW108M	S	ELECTROLYTIC 1000UF 20%	AC	
C 0110	RC-FZ9104BMNJ	J	FILM POL 100NF 5% 63V	AB	

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C 0111	VCEAGA1CW226M	S	ELECTROLYTIC 22MF 20%	AA
C 0112	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0113	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0114	VCCCTV1HH560J	S	CERAMIC 56PF 50V RESSMD	AA
C 0115	VCCCTV1HH560J	S	CERAMIC 56PF 50V RESSMD	AA
C 0116	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0117	VCEAGA1AW107M	S	ELECTROLYTIC 100MF 20%	AA
C 0119	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0124	VCEAGA0JW477M	S	ELECTROLYTIC 470MF 20%	AB
C 0131	VCKYTV1HB103K	S	CERAMIC 10NF 50V RESSMD	AA
C 0132	VCKYTV1HB103K	S	CERAMIC 10NF 50V RESSMD	AA
C 0133	VCKYTV1HB103K	S	CERAMIC 10NF 50V RESSMD	AA
C 0201	VCEAGA1HW225M	S	ELECTROLYTIC 2,2MF 20%	AB
C 0202	VCCCTV1HH270J	S	CERAMIC 27PF 50V RESSMD	AA
C 0203	VCKYTV1HB221K	S	CERAMIC 220PF 50V RESSMD	AA
C 0204	VCEAGA1CW476M	S	ELECTROLYTIC 47MF 20%	AB
C 0205	VCEAGA1AW477M	S	ELECTROLYTIC 470MF 20%	AB
C 0207	VCKYTV1HF223Z	S	CERAMIC 22NF 50V RESSMD	AA
C 0208	VCCCTV1HH100D	S	CERAMIC 10PF 50V RESSMD	AA
C 0209	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0210	VCEAGA1CW476M	S	ELECTROLYTIC 47MF 20%	AB
C 0211	VCEAGA1HW225M	S	ELECTROLYTIC 2,2MF 20%	AB
C 0212	VCKYTV1HF223Z	S	CERAMIC 22NF 50V RESSMD	AA
C 0213	VCKYTV1HF223Z	S	CERAMIC 22NF 50V RESSMD	AA
C 0214	VCEAGA1CW107M	S	ELECTROLYTIC 100MF 20%	AB
C 0215	VCKYTV1HF473Z	S	CERAMIC 47NF 50V RESSMD	AA
C 0216	VCKYTV1HF473Z	S	CERAMIC 47NF 50V RESSMD	AA
C 0280	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 0281	VCEAGA1HW475M	S	ELECTROLYTIC 4,7MF 20%	AC
C 0286	VCCCTV1HH271J	S	CERAMIC 270PF 50V RESSMD	**
C 0301	VCEAGA1CW476M	S	ELECTROLYTIC 47MF 20%	AB
C 0302	VCKYTV1HB332K	S	CERAMIC 3,3NF 50V RESSMD	AA
C 0303	RC-FZ9224BMNJ	J	FILM POL 220NF 5% 63V	AC
C 0308	VCKYTV1HB471K	S	CERAMIC 470PF 50V RESSMD	AA
C 0309	VCCCTV1HH470J	S	CERAMIC 47PF 50V RESSMD	AA
C 0310	VCCCTV1HH470J	S	CERAMIC 47PF 50V RESSMD	AA
C 0311	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0312	VCEAGA1CW106M	S	ELECTROLYTIC 10MF 20%	AA
C 0313	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0314	VCKYTV1EF334Z	S	CERAMIC 330NF 25V RESSMD	AB
C 0315	VCKYTV1EF334Z	S	CERAMIC 330NF 25V RESSMD	AB
C 0316	VCKYTV1HB471K	S	CERAMIC 470PF 50V RESSMD	AA
C 0317	VCEAGA1HW335M	S	ELECTROLYTIC 3,3MF 20%	AA
C 0318	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0319	VCEAGA1CW106M	S	ELECTROLYTIC 10MF 20%	AA
C 0320	VCEAGA1CW106M	S	ELECTROLYTIC 10MF 20%	AA
C 0321	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0322	VCEAGA1AW337M	S	ELECTROLYTIC 330MF 20%	AB

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C 0323	VCEAGA1CW226M	S	ELECTROLYTIC 22MF 20%	AA
C 0324	VCEAGA1CW226M	S	ELECTROLYTIC 22MF 20%	AA
C 0325	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0326	VCEAGA1AW337M	S	ELECTROLYTIC 330MF 20%	AB
C 0327	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0328	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 0329	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 0330	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 0331	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 0332	VCKYTV1HB391K	S	CERAMIC 390PF 50V RESSMD	AA
C 0333	VCKYTV1HB391K	S	CERAMIC 390PF 50V RESSMD	AA
C 0337	VCCCTV1HH101J	S	CERAMIC 100PF 50V RESSMD	AA
C 0338	VCCCTV1HH101J	S	CERAMIC 100PF 50V RESSMD	AA
C 0343	VCEAGA1CW226M	S	ELECTROLYTIC 22MF 20%	AA
C 0344	VCEAGA1CW226M	S	ELECTROLYTIC 22MF 20%	AA
C 0351	VCEAGA1EW228M	S	ELECTROLYTIC 2200MF 20%	AE
C 0352	VCEAGA1EW228M	S	ELECTROLYTIC 2200MF 20%	AE
C 0353	VCEAGA1EW228M	S	ELECTROLYTIC 2200MF 20%	AE
C 0354	VCEAGA1EW228M	S	ELECTROLYTIC 2200MF 20%	AE
C 0355	RC-FZ9224BMNJ	J	FILM POL 220NF 5% 63V	AC
C 0356	RC-FZ9224BMNJ	J	FILM POL 220NF 5% 63V	AC
C 0357	VCEAGA1HW105M	S	ELECTROLYTIC 1MF 20%	AA
C 0371	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 0378	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
C 0379	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
C 0380	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 0381	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 0383	VCKYTV1EF224Z	S	CERAMIC 220NF 25V RESSMD	AA
C 0384	VCKYTV1EF224Z	S	CERAMIC 220NF 25V RESSMD	AA
C 0399	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0401	VCKYTV1HF473Z	S	CERAMIC 47NF 50V RESSMD	AA
C 0402	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
C 0403	RC-FZ9104BMNJ	J	FILM POL 100NF 5% 63V	AB
C 0450	VCKYTV1HB391K	S	CERAMIC 390PF 50V RESSMD	AA
C 0451	VCKYTV1HB391K	S	CERAMIC 390PF 50V RESSMD	AA
C 0501	VCEAGA1EW227M	S	ELECTROLYTIC 220MF 20%	AA
C 0502	VCKYTV1HB331K	S	CERAMIC 330PF 50V RESSMD	AA
C 0503	VCEAGA1EW477M	S	ELECTROLYTIC 470MF 20%	AD
C 0504	RC-FZ9224BMNJ	J	FILM POL 220NF 5% 63V	AC
C 0506	VCKYTV1HB223K	S	CERAMIC 22NF 50V RESSMD	AA
C 0508	VCCCTV1HH560J	S	CERAMIC 56PF 50V RESSMD	AA
C 0509	VCKYTV1HB392K	S	CERAMIC 3,9NF 50V RESSMD	AA
C 0510	RC-FZ9683BMNJ	J	FILM POL 68NF 5% 63V	AB
C 0512	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 0514	VCKYTV1HB333K	S	CERAMIC 33NF 50V RESSMD	AA
C 0515	VCKYPA1HB681K	S	CERAMIC 680PF 10% 50V	AA
C 0516	VCKYTV1HB331K	S	CERAMIC 330PF 50V RESSMD	AA
C 0517	VCKYTV1HB473K	S	CERAMIC 47NF 50V RESSMD	AA

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C 0518	VCCCTV1HH100D	S	CERAMIC 10PF 50V RESSMD	AA
C 0519	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0520	VCEAGA1JW107M	S	ELECTROLYTIC 100MF 20%	AB
C 0521	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 0522	RC-KZ0163BMZZ	S	CERAMIC 100NF 100V X7RSMD	AA
C 0523	RC-FZ5104BMNG	S	C MKP 100NF 100V 2% ARCO	AD
C 0524	VCKYTV1HB223K	S	CERAMIC 22NF 50V RESSMD	AA
C 0525	VCEAGA1VW106M	S	ELECTROLYTIC 10MF 20%	AA
C 0526	VCEAGA1HW105M	S	ELECTROLYTIC 1MF 20%	AA
C 0527	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0528	VCKYTV1HB221K	S	CERAMIC 220PF 50V RESSMD	AA
C 0529	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 0530	VCKYTV1EF224Z	S	CERAMIC 220NF 25V RESSMD	AA
C 0531	VCKYTV1HB221K	S	CERAMIC 220PF 50V RESSMD	AA
C 0532	VCKYTV1HB103K	S	CERAMIC 10NF 50V RESSMD	AA
C 0538	VCCCTV1HH331J	S	CERAMIC 330PF 50V RESSMD	AA
C 0540	VCKYTV1HB562K	S	CERAMIC 5,6NF 50V RESSMD	AA
C 0542	VCCCTV1HH271J	S	CERAMIC 270PF 50V RESSMD	AA
C 0543	VCCCTV1HH271J	S	CERAMIC 270PF 50V RESSMD	AA
C 0548	VCCCTV1HH180J	S	CERAMIC 18PF 50V RESSMD	AA
C 0558	RC-KZ0163BMZZ	S	CERAMIC 100NF 100V X7RSMD	AA
C 0601	VCKYTV1HB103K	S	CERAMIC 10NF 50V RESSMD	AA
C 0602	VCKYTV1HB472K	S	CERAMIC 4,7NF 50V RESSMD	AA
C 0603	VCEAGA1HW105M	S	ELECTROLYTIC 1MF 20%	AA
C 0605	VCEAGA1CW107M	S	ELECTROLYTIC 100MF 20%	AB
C 0606	RC-FZ9104BMNJ	J	FILM POL 100NF 5% 63V	AB
C 0607	VCEAGA1AW337M	S	ELECTROLYTIC 330MF 20%	AB
C 0608	RC-FZ0152BMZZ	S	POLIP C B32650 12NF 1,5KV	AD
C 0610	VCQPSC2GA273K	J	FILM PP 27NF 10% 400V	AB
C 0611	RC-FZ6474BMNJ	J	FILM PP 470NF 5% 250V	AE
C 0613	RC-FZ6684BMNJ	J	FILM POL 680NF 5% 250V	AE
C 0615	VCEAGA1EW477M	S	ELECTROLYTIC 470MF 20%	AD
C 0616	VCEAGA1EW227M	S	ELECTROLYTIC 220MF 20%	AA
C 0618	RC-KZ0029CEZZ	S	CERAMIC 10NF 80,20% 250V	AC
C 0619	VCEAGA2CW225M	S	ELECTROLYTIC 2,2UF 20%	AB
C 0620	RC-FZ6474BMNJ	J	FILM PP 470NF 5% 250V	AE
C 0621	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 0701	RC-FZ0160BMZZ	S	COND B81133-D1474-M SIEME	AF
C 0702	RC-KZ0029CEZZ	S	CERAMIC 10NF 80,20% 250V	AC
C 0705	RC-EZ0129BMZZ	S	ELECTROLYTIC 150UF 385V	AP
C 0706	VCEAGA1CW226M	S	ELECTROLYTIC 22MF 20%	AA
C 0707	VCEAGA1CW107M	S	ELECTROLYTIC 100MF 20%	AB
C 0709	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 0710	RC-KZ0029CEZZ	S	CERAMIC 10NF 80,20% 250V	AC
C 0711	RC-KZ0039CEZZ	S	CERAMIC 680PF 2KV	AB
C 0712	VCCCTV1HH101J	S	CERAMIC 100PF 50V RESSMD	AA
C 0713	RC-FZ9683BMNJ	J	FILM POL 68NF 5% 63V	AB
C 0714	RC-FZ9153BMNJ	J	FILM POL 15NF 5% 63V	AB

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C 0715	VCKYTV1HB331K	S	CERAMIC 330PF 50V RESSMD	AA
C 0716	VCKYTV1HB332K	S	CERAMIC 3,3NF 50V RESSMD	AA
C 0717	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 0718	VCEAGA1EW108M	S	ELECTROLYTIC 1000MF 20%	AD
C 0719	VCEAGA1EW108M	S	ELECTROLYTIC 1000MF 20%	AD
C 0720	RC-EZ0258CEZZ	S	ELECTROLYTIC 100MF 200V	AH
C 0721	VCEAGA1EW477M	S	ELECTROLYTIC 470MF 20%	AD
C 0722	VCEAGA1CW108M	S	ELECTROLYTIC 1000MF 20%	AE
C 0723	VCEAGA1AW477M	S	ELECTROLYTIC 470MF 20%	AB
C 0724	VCEAGA1AW227M	S	ELECTROLYTIC 220MF 20%	AB
C 0725	VCKYTV1HB472K	S	CERAMIC 4,7NF 50V RESSMD	AA
C 0726	RC-FZ9104BMNJ	J	FILM POL 100NF 5% 63V	AB
C 0727	RC-FZ9104BMNJ	J	FILM POL 100NF 5% 63V	AB
C 0728	VCKYTV1HB103K	S	CERAMIC 10NF 50V RESSMD	AA
C 0733	VCCCTV1HH180J	S	CERAMIC 18PF 50V RESSMD	AA
△ C 0770	RC-KZ0106GEZZ	S	CERAMIC 3300PF 4KV MURATA	AC
C 0771	RC-KZ0036CEZZ	S	CERAMIC 330PF 2KV	AB
C 0772	RC-KZ0036CEZZ	S	CERAMIC 330PF 2KV	AB
C 0773	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 0774	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 0775	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 0776	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 0801	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 0802	VCKYTV1EF224Z	S	CERAMIC 220NF 25V RESSMD	AA
C 0803	VCKYTV1EF224Z	S	CERAMIC 220NF 25V RESSMD	AA
C 0804	VCKYTV1EF224Z	S	CERAMIC 220NF 25V RESSMD	AA
C 0805	VCCCTV1HH180J	S	CERAMIC 18PF 50V RESSMD	AA
C 0806	VCKYTV1HB472K	S	CERAMIC 4,7NF 50V RESSMD	AA
C 0807	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 0808	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
C 0809	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
C 0810	VCKYPA2HB332K	S	CERAMIC 3,3NF 10% 500V	AB
C 0813	VCCCTV1HH470J	S	CERAMIC 47PF 50V RESSMD	AA
C 0814	VCEAGA1CW106M	S	ELECTROLYTIC 10MF 20%	AA
C 0816	VCEAGA1CW106M	S	ELECTROLYTIC 10MF 20%	AA
C 0817	VCEAGA1CW106M	S	ELECTROLYTIC 10MF 20%	AA
C 0818	VCEAGA1CW106M	S	ELECTROLYTIC 10MF 20%	AA
C 0819	VCCSPA1HL681J	S	CERAMIC 680PF 5% 50V	AB
C 0820	VCCCTV1HH180J	S	CERAMIC 18PF 50V RESSMD	AA
C 0822	VCCCTV1HH6R8D	S	CERAMIC 6,8PF 50V RESSMD	AA
C 2300	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 2301	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 2302	VCKYTV1HB472K	S	CERAMIC 4,7NF 50V RESSMD	AA
C 2303	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 2304	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 2305	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 2306	VCKYTV1HB561K	S	CERAMIC 560PF 50V RESSMD	AA
C 2307	VCCCTV1HH101J	S	CERAMIC 100PF 50V RESSMD	AA

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C 2308	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 2309	VCEAGA1HW225M	S	ELECTROLYTIC 2,2MF 20%	AB
C 2310	RC-KZ0164BMZZ	S	CERAMIC 22NF 100V X7RSMD	AA
C 2311	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 2312	VCCCTV1HH101J	S	CERAMIC 100PF 50V RESSMD	AA
C 2313	VCKYTV1HB472K	S	CERAMIC 4,7NF 50V RESSMD	AA
C 2314	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 2315	VCKYTV1HB561K	S	CERAMIC 560PF 50V RESSMD	AA
C 2316	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 2317	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 2318	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 2319	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 2320	RC-KZ0164BMZZ	S	CERAMIC 22NF 100V X7RSMD	AA
C 2321	VCEAGA1HW225M	S	ELECTROLYTIC 2,2MF 20%	AB
C 2322	VCKYTV1EF334Z	S	CERAMIC 330NF 25V RESSMD	AB
C 2323	VCKYTV1EF334Z	S	CERAMIC 330NF 25V RESSMD	AB
C 2400	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
RESISTORS				
R 0102	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0103	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0104	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0105	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0106	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0107	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0108	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0109	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0110	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0111	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0112	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0113	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0114	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0115	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0116	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0117	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0118	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0119	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0120	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0122	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0123	VRD-RA2BE101J	S	RES 100 OHM 5% 1/8W	AA
R 0124	VRD-RA2BE821J	S	RES 820 OHM 5% 1/8W	AA
R 0127	VRS-TV1JD472J	S	RES 4.7KOHM 5% 1/10W SMD	AA
R 0128	VRS-TV1JD472J	S	RES 4.7KOHM 5% 1/10W SMD	AA
R 0129	VRS-TV1JD473J	S	RES 47KOHM 5% 1/10W SMD	AA
R 0130	VRS-TV1JD473J	S	RES 47KOHM 5% 1/10W SMD	AA
R 0131	VRS-TV1JD473J	S	RES 47KOHM 5% 1/10W SMD	AA
R 0132	VRD-RA2BE332J	S	RES 3,3KOHM 5% 1/8W	AA
R 0133	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA



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R 0137	VRS-TV1JD272J	S	RES 2,7KOHM 5% 1/10W SMD	AA
R 0138	VRS-TV1JD272J	S	RES 2,7KOHM 5% 1/10W SMD	AA
R 0139	VRS-TV1JD272J	S	RES 2,7KOHM 5% 1/10W SMD	AA
R 0140	VRS-TV1JD471J	S	RES 470 OHM 5% 1/10W SMD	AA
R 0141	VRS-TQ2BD332J	S	RE OX 3,3KOHM 5% 1/8W SMD	AA
R 0161	VRS-TV1JD472J	S	RES 4.7KOHM 5% 1/10W SMD	AA
R 0164	VRD-RA2BE103J	S	RES 10KOHM 5% 1/8W	AA
R 0166	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 0170	VRS-TV1JD822J	S	RES 8,2K0HM 5% 1/10W SMD	AA
R 0171	VRS-TV1JD822J	S	RES 8,2K0HM 5% 1/10W SMD	AA
R 0172	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0173	VRS-TV1JD822J	S	RES 8,2K0HM 5% 1/10W SMD	AA
R 0174	VRS-TV1JD822J	S	RES 8,2K0HM 5% 1/10W SMD	AA
R 0175	VRS-TV1JD822J	S	RES 8,2K0HM 5% 1/10W SMD	AA
R 0176	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA
R 0177	VRS-TV1JD272J	S	RES 2,7KOHM 5% 1/10W SMD	AA
R 0184	VRS-TV1JD223J	S	RES 22KOHM 5% 1/10W SMD	AA
R 0185	VRS-TV1JD183J	S	RES 18KOHM 5% 1/10W SMD	AA
R 0186	VRS-TV1JD223J	S	RES 22KOHM 5% 1/10W SMD	AA
R 0190	VRS-TV1JD223J	S	RES 22KOHM 5% 1/10W SMD	AA
R 0191	VRS-TV1JD103J	S	R OX 10KOHM 5% 1/10W SMD	AA
R 0201	VRS-TV1JD561J	S	RES 560 OHM 5% 1/10W SMD	AA
R 0202	VRS-TV1JD561J	S	RES 560 OHM 5% 1/10W SMD	AA
R 0203	VRS-TV1JD472J	S	RES 4.7KOHM 5% 1/10W SMD	AA
R 0205	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0206	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0207	VRS-TV1JD472J	S	RES 4.7KOHM 5% 1/10W SMD	AA
R 0208	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0209	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0210	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0212	VRD-RA2HD822J	S	RES 8,2KOHM 5% 1/2W	AA
R 0213	VRD-RA2HD822J	S	RES 8,2KOHM 5% 1/2W	AA
R 0214	VRD-RA2HD822J	S	RES 8,2KOHM 5% 1/2W	AA
R 0215	VRS-TV1JD561J	S	RES 560 OHM 5% 1/10W SMD	AA
R 0216	VRS-TV1JD220J	S	RES 22 OHM 5% 1/10W SMD	AA
R 0217	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0218	VRD-RA2BE470J	S	RES 47 OHM 5% 1/8W	AA
R 0219	VRD-RA2BE2R2J	S	RES 2,2 OHM 5% 1/8W	AA
R 0220	VRS-TV1JD151J	S	RES 150 OHM 5% 1/10W SMD	AA
R 0221	VRS-TV1JD471J	S	RES 470 OHM 5% 1/10W SMD	AA
R 0222	VRD-RA2HD470J	S	RES 47 OHM 5% 1/2W	AA
R 0223	VRS-TV1JD221J	S	RES 220 OHM 5% 1/10W SMD	AA
R 0224	VRS-TV1JD221J	S	RES 220 OHM 5% 1/10W SMD	AA
R 0225	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0226	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0227	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0230	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA
R 0232	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA

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R 0233	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0253	VRS-TV1JD472J	S	RES 4.7KOHM 5% 1/10W SMD	AA
R 0254	VRD-RA2BE822J	S	RES 8,2KOHM 5% 1/8W	AA
R 0255	VRS-TV1JD752J	S	RES 7,5KOHM 5% 1/10W SMD	AA
R 0256	VRS-TV1JD822J	S	RES 8,2KOHM 5% 1/10W SMD	AA
R 0301	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0302	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0303	VRS-TV1JD104J	S	RES 100KOHM 5% 1/10W SMD	AA
R 0304	VRS-TV1JD104J	S	RES 100KOHM 5% 1/10W SMD	AA
R 0305	RR-XZ0200BMZZ	S	RES FUS 1R0 TAP 5% 1/2W	AB
R 0307	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0308	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0314	VRS-TV1JD221J	S	RES 220 OHM 5% 1/10W SMD	AA
R 0315	VRD-RA2BE221J	S	RES 220 OHM 5% 1/8W	AA
R 0316	VRS-TV1JD104J	S	RES 100KOHM 5% 1/10W SMD	AA
R 0317	VRS-TV1JD221J	S	RES 220 OHM 5% 1/10W SMD	AA
R 0318	VRS-TV1JD221J	S	RES 220 OHM 5% 1/10W SMD	AA
R 0319	VRD-RA2BE104J	S	RES 100KOHM 5% 1/8W	AA
R 0320	VRS-TV1JD104J	S	RES 100KOHM 5% 1/10W SMD	AA
R 0327	VRS-TV1JD104J	S	RES 100KOHM 5% 1/10W SMD	AA
R 0328	VRS-TV1JD104J	S	RES 100KOHM 5% 1/10W SMD	AA
R 0329	VRD-RA2BE103J	S	RES 10KOHM 5% 1/8W	AA
R 0330	VRS-TV1JD103J	S	R OX 10KOHM 5% 1/10W SMD	AA
R 0369	VRS-TV1JD223J	S	RES 22KOHM 5% 1/10W SMD	AA
R 0371	VRD-RA2BE271J	S	RES 270 OHM 5% 1/8W	AA
R 0372	VRS-TV1JD391J	S	RES 390 OHM 5% 1/10W SMD	AA
R 0373	VRS-TV1JD391J	S	RES 390 OHM 5% 1/10W SMD	AA
R 0374	VRS-TV1JD121J	S	RES 120 OHM 5% 1/10W SMD	AA
R 0380	VRS-TV1JD104J	S	RES 100KOHM 5% 1/10W SMD	AA
R 0381	VRS-TV1JD104J	S	RES 100KOHM 5% 1/10W SMD	AA
R 0384	VRS-TV1JD104J	S	RES 100KOHM 5% 1/10W SMD	AA
R 0402	VRD-RA2HD560J	S	RES 56 OHM 5% 1/2W	AA
R 0403	VRD-RA2EE750J	S	RES 75 OHM 5% 1/4W	AA
R 0406	VCCCTV1HH560J	S	CERAMIC 56PF 50V RESSMD	AA
R 0457	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 0458	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 0459	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0460	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0462	VCKYTV1HB473K	S	CERAMIC 47NF 50V RESSMD	AA
R 0501	VRD-RA2HD151J	S	RES 150 OHM 5% 1/2W	AA
R 0503	VRD-RA2HDR56J	S	RES 0.56 OHM 5% 1/2W	AA
R 0504	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA
R 0505	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA
R 0508	VRS-TV1JD472J	S	RES 4.7KOHM 5% 1/10W SMD	AA
R 0509	VRS-TV1JD223J	S	RES 22KOHM 5% 1/10W SMD	AA
R 0510	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0511	VRS-TV1JD473J	S	RES 47KOHM 5% 1/10W SMD	AA
R 0512	VRS-TV1JD561J	S	RES 560 OHM 5% 1/10W SMD	AA

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R 0513	VRS-TV1JD152J	S	RES 1.5KOHM 5% 1/10W SMD	AA
R 0514	VRS-TV1JD391J	S	RES 390 OHM 5% 1/10W SMD	AA
R 0515	VRS-TV1JD103J	S	R OX 10KOHM 5% 1/10W SMD	AA
R 0516	VRS-TV1JD122J	S	RES 1,2KOHM 5% 1/10W SMD	AA
R 0518	VRS-TV1JD122J	S	RES 1,2KOHM 5% 1/10W SMD	AA
R 0519	VRD-RA2HD104J	S	RES 100KOHM 5% 1/2W	AA
R 0520	VRS-TV1JD103J	S	R OX 10KOHM 5% 1/10W SMD	AA
R 0521	VRS-TV1JD562J	S	RES 5,6KOHM 5% 1/10W SMD	AA
R 0522	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA
R 0523	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0524	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0525	VRS-TV1JD103J	S	R OX 10KOHM 5% 1/10W SMD	AA
R 0526	VRS-TV1JD823J	S	RES 82KOHM 5% 1/10W SMD	AA
R 0527	VRS-TV1JD823J	S	RES 82KOHM 5% 1/10W SMD	AA
R 0528	VRS-TV1JD332J	S	RES 3.3KOHM 5% 1/10W SMD	AA
R 0529	VRS-TV1JD823J	S	RES 82KOHM 5% 1/10W SMD	AA
R 0530	RR-XZ0200BMZZ	S	RES FUS 1R0 TAP 5% 1/2W	AB
R 0531	VRS-TV1JD393F	S	RES 39KOHM 1% 1/10W SMD	AA
R 0532	VRD-RA2BE101J	S	RES 100 OHM 5% 1/8W	AA
R 0533	VRS-TV1JD182J	S	RES 1,8KOHM 5% 1/10W SMD	AA
R 0534	RR-XZ0124BMZZ	S	RES FUS 100 TAP 5% 1/3W	AA
R 0535	VRS-TV1JD471J	S	RES 470 OHM 5% 1/10W SMD	AA
R 0536	VRS-VV3DB182J	S	MET OX RES 1,8KOHM 5% 2W	AA
R 0537	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 0539	VRS-TV1JD181J	S	RES 180 OHM 5% 1/10W SMD	AA
R 0601	VRS-TV1JD153J	S	RES 15KOHM 5% 1/10W SMD	AA
R 0602	VRS-TV1JD821J	S	RES 820 OHM 5% 1/10W SMD	AA
R 0603	VRS-TV1JD681J	S	RES 680 OHM 5% 1/10W SMD	AA
R 0604	VRD-RA2BE103J	S	RES 10KOHM 5% 1/8W	AA
R 0605	VRD-RA2BE222J	S	RES 2,2KOHM 5% 1/8W	AA
R 0606	RR-XZ0116BMZZ	S	RES FUS 22R TAP 5% 1/3W	AB
R 0607	VRD-RA2BE471J	S	RES 470 OHM 5% 1/8W	AA
R 0608	VRD-RA2HD681J	S	RES 680 OHM 5% 1/2W	AA
R 0609	VRN-VV3DB5R6J	S	MET FILM R 5.6 OHM 5% 2W	AA
R 0610	RR-XZ0218BMZZ	S	RES FUS 33R TAP 5% 1/2W	AB
R 0611	RR-XZ0242BMZZ	S	RES FUS 3K3 TAP 5% 1/2W	AB
R 0613	VRS-VV3DB222J	S	RES OX MET 2,2KOHM 5% 2W	AA
R 0614	VRD-RA2BE472J	S	RES 4,7KOHM 5% 1/8W	AA
R 0615	VRS-TV1JD182J	S	RES 1,8KOHM 5% 1/10W SMD	AA
R 0616	VRN-VV3AB2R7J	S	MET FILM R 2.7 OHM 5% 1W	AA
R 0617	RR-XZ0227BMZZ	S	RES FUS 180R TAP 5% 1/2W	AB
R 0625	VRS-TV1JD474J	S	RES 470KOHM 5% 1/10WSMD	AA
R 0626	VRS-TV1JD474J	S	RES 470KOHM 5% 1/10WSMD	AA
R 0627	VRS-TQ2BD561J	S	RE OX 560 OHM 5% 1/8W SMD	AA
R 0701	VRD-RA2HD124J	S	RES 120KOHM 5% 1/2W	AA
R 0702	VRD-RA2HD124J	S	RES 120KOHM 5% 1/2W	AA
R 0703	VRD-RA2HD104J	S	RES 100KOHM 5% 1/2W	AA
R 0704	VRD-RA2HD683J	S	RES 68KOHM 5% 1/2W	AA

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R 0705	VRD-RA2HD683J	S	RES 68KOHM 5% 1/2W	AA
R 0708	VRS-TV1JD272J	S	RES 2,7KOHM 5% 1/10W SMD	AA
R 0709	VRS-TQ2BD122J	S	RE OX 1,2KOHM 5% 1/8W SMD	AA
R 0711	VRS-TV1JD182J	S	RES 1,8KOHM 5% 1/10W SMD	AA
R 0712	VRS-TV1JD561J	S	RES 560 OHM 5% 1/10W SMD	AA
R 0713	VRD-RA2HD564J	S	RES 560KOHM 5% 1/2W	AC
R 0714	VRD-RA2HD564J	S	RES 560KOHM 5% 1/2W	AC
R 0715	VRD-RA2HD224J	S	RES 220KOHM 5% 1/2W	AA
R 0716	VRN-VV3ABR47J	S	MET FILM R .47 OHM 5% 1W	AA
R 0717	VRD-RA2BE223J	S	RES 22KOHM 5% 1/8W	AA
R 0718	VRD-RA2HD102J	S	RES 1KOHM 5% 1/2W	AA
R 0719	VRS-TV1JD221J	S	RES 220 OHM 5% 1/10W SMD	AA
R 0720	VRS-TV1JD103J	S	R OX 10KOHM 5% 1/10W SMD	AA
R 0721	VRD-RA2HD104J	S	RES 100KOHM 5% 1/2W	AA
R 0722	VRS-TV1JD330J	S	RES 33 OHM 5% 1/10W SMD	AA
R 0723	VRD-RA2HD122J	S	RES 1,2KOHM 5% 1/2W	AA
R 0724	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0725	VRS-TV1JD473J	S	RES 47KOHM 5% 1/10W SMD	AA
R 0726	VRS-TV1JD152J	S	RES 1.5KOHM 5% 1/10W SMD	AA
R 0727	VRS-TV1JD472F	S	RES 4,7KOHM 1% 1/10W SMD	AA
R 0728	VRSTQ2BD4992F	S	RES OX 49,9K 1% 1/4W SMD	AA
R 0730	VRS-TV1JD331J	S	RES 330 OHM 5% 1/10W SMD	AA
R 0731	VRS-TV1JD220J	S	RES 22 OHM 5% 1/10W SMD	AA
R 0732	VRS-TV1JD223J	S	RES 22KOHM 5% 1/10W SMD	AA
R 0733	VRS-TV1JD473J	S	RES 47KOHM 5% 1/10W SMD	AA
R 0734	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0735	VRS-TV1JD472J	S	RES 4.7KOHM 5% 1/10W SMD	AA
R 0736	VRS-TV1JD473J	S	RES 47KOHM 5% 1/10W SMD	AA
R 0737	VRS-TV1JD473J	S	RES 47KOHM 5% 1/10W SMD	AA
R 0738	VRS-TV1JD103J	S	R OX 10KOHM 5% 1/10W SMD	AA
R 0739	VRS-TV1JD103J	S	R OX 10KOHM 5% 1/10W SMD	AA
R 0740	VRS-TV1JD473J	S	RES 47KOHM 5% 1/10W SMD	AA
△ R 0780	VRC-UA2HG825K	S	R SOLID 8,2MOHM 10% 1/2W	AA
△ R 0781	VRC-UA2HG825K	S	R SOLID 8,2MOHM 10% 1/2W	AA
R 0782	VRS-TQ2BD330J	S	RE OX 33 OHM 5% 1/8W SMD	AA
R 0783	VRS-TQ2BD330J	S	RE OX 33 OHM 5% 1/8W SMD	AA
R 0784	VRSTQ2BD4992F	S	RES OX 49,9K 1% 1/4W SMD	AA
R 0787	VRS-TV1JD272J	S	RES 2,7KOHM 5% 1/10W SMD	AA
R 0788	VRS-TV1JD183J	S	RES 18KOHM 5% 1/10W SMD	AA
R 0789	VRS-TV1JD183J	S	RES 18KOHM 5% 1/10W SMD	AA
R 0790	VRS-TV1JD183J	S	RES 18KOHM 5% 1/10W SMD	AA
R 0791	VRS-TV1JD183J	S	RES 18KOHM 5% 1/10W SMD	AA
R 0792	VRD-RA2BE103J	S	RES 10KOHM 5% 1/8W	AA
R 0801	VRS-TV1JD822J	S	RES 8,2KOHM 5% 1/10W SMD	AA
R 0802	VRS-TV1JD822J	S	RES 8,2KOHM 5% 1/10W SMD	AA
R 0803	VRS-TV1JD822J	S	RES 8,2KOHM 5% 1/10W SMD	AA
R 0804	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0805	VRS-TV1JD104J	S	RES 100KOHM 5% 1/10W SMD	AA

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R 0806	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0808	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0809	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 0810	VRD-RA2EE750J	S	RES 75 OHM 5% 1/4W	AA
R 0811	VRD-RA2EE750J	S	RES 75 OHM 5% 1/4W	AA
R 0812	VRS-TQ2BD750J	S	RE OX 75 OHM 5% 1/8W SMD	AA
R 0813	VRS-TV1JD820J	S	RES 82 OHM 5% 1/10W SMD	AA
R 0814	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 0816	VRD-RA2BE331J	S	RES 330 OHM 5% 1/8W	AA
R 0818	VRS-TV1JD103J	S	R OX 10KOHM 5% 1/10W SMD	AA
R 0819	VRD-RA2BE154J	S	RES 150KOHM 5% 1/8W	AA
R 0820	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0821	VRS-TV1JD184J	S	RES 180KOHM 5% 1/10W SMD	AA
R 0822	VRD-RA2BE224J	S	RES 220KOHM 5% 1/8W	AA
R 0823	VRD-RA2HD102J	S	RES 1KOHM 5% 1/2W	AA
R 0824	VRS-TV1JD474J	S	RES 470KOHM 5% 1/10WSMD	AA
R 0827	VRD-RA2BE273J	S	RES 27KOHM 5% 1/8W	AA
R 0828	VRS-TV1JD153J	S	RES 15KOHM 5% 1/10W SMD	AA
R 0829	VRS-TV1JD682J	S	RES 6.8KOHM 5% 1/10W SMD	AA
R 0830	VRS-TV1JD224J	S	RES 220KOHM 5% 1/10W SMD	AA
R 0831	VRS-TV1JD103J	S	R OX 10KOHM 5% 1/10W SMD	AA
R 0832	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 0833	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0834	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0835	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0836	VRS-TV1JD473J	S	RES 47KOHM 5% 1/10W SMD	AA
R 0841	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0842	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 0843	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 2300	VRD-RA2HD151J	S	RES 150 OHM 5% 1/2W	AA
R 2301	VRS-TV1JD123F	S	RES 12KOHM 1% 1/10W SMD	AA
R 2302	VRS-TV1JD123J	S	RES 12KOHM 5% 1/10W SMD	AA
R 2303	VRS-TV1JD123J	S	RES 12KOHM 5% 1/10W SMD	AA
R 2304	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 2305	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 2306	VRS-TV1JD122J	S	RES 1,2KOHM 5% 1/10W SMD	AA
R 2307	VRS-TV1JD123F	S	RES 12KOHM 1% 1/10W SMD	AA
R 2308	VRD-RA2HD151J	S	RES 150 OHM 5% 1/2W	AA
R 2309	VRS-TV1JD123J	S	RES 12KOHM 5% 1/10W SMD	AA
R 2310	VRS-TV1JD123J	S	RES 12KOHM 5% 1/10W SMD	AA
R 2311	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 2312	VRD-RA2BE102J	S	RES 1KOHM 5% 1/8W	AA
R 2313	VRS-TV1JD122J	S	RES 1,2KOHM 5% 1/10W SMD	AA
R 2314	VRS-TV1JD123J	S	RES 12KOHM 5% 1/10W SMD	AA
R 2315	VRS-TV1JD123J	S	RES 12KOHM 5% 1/10W SMD	AA
R 2316	VRS-TV1JD122J	S	RES 1,2KOHM 5% 1/10W SMD	AA
R 2317	VRS-TV1JD123J	S	RES 12KOHM 5% 1/10W SMD	AA
R 2318	VRS-TV1JD123J	S	RES 12KOHM 5% 1/10W SMD	AA

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R 2319	VRS-TV1JD122J	S	RES 1,2KOHM 5% 1/10W SMD	AA
R 2320	VRS-TV1JD152J	S	RES 1.5KOHM 5% 1/10W SMD	AA
R 2321	VRS-TV1JD152J	S	RES 1.5KOHM 5% 1/10W SMD	AA
R 2420	VRS-TV1JD104J	S	RES 100KOHM 5% 1/10W SMD	AA
J 0162	VRS-TV1JD223J	S	RES 22KOHM 5% 1/10W SMD	AA
J 0388	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
J 0389	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
MISCELLANEOUS PARTS				
△ F 0701	QFS-C3226CEZZ	S	FUSE T3.15AH 250V	AE
	QFSDH1001BMZZ	S	FUSE HOLDER EYF52BC PANA	
	QFSDH1002BMZZ	S	FUSE HOLDER EYF52BC PANA	
F 0601	QFS-J1521CEZZ	S	FUS. 1,5A/125V LITTELFUSE	AD
F 0602	QFS-J1521CEZZ	S	FUS. 1,5A/125V LITTELFUSE	AD
△ S 0701	QSW-P0600BMZZ	S	SWITCH S40 3110432713 GDE	AL
S 0702	QSW-K0079GEZZ	S	BUTTON ECQ-26305K PANAS	AB
S 0703	QSW-K0079GEZZ	S	BUTTON ECQ-26305K PANAS	AB
S 0704	QSW-K0079GEZZ	S	BUTTON ECQ-26305K PANAS	AB
S 0705	QSW-K0079GEZZ	S	BUTTON ECQ-26305K PANAS	AB
(A)	QPLGN0304CEZZ	S	CONNECTOR (3 PINS)	AB
(CN)	QSOCN1067BMZZ	S	CONNECTOR REC 8-215079-0	AE
(F)	QPLGN0505CEZZ	S	CONNECTOR	AB
(G)	QPLGN0207CEZZ	S	CONNECTOR(2 PINS)	AA
(H)	QCNW-2711BMZZ	S	CABLE (K)	AF
(IF)	QSOCN0885CEZZ	S	SOCKET	AD
(K)	QCNW-2731BMZZ	S	CABLE 5 PINS (KA)	AK
M 0100	RRMCU0203BMZZ	S	R/C RECEPTOR	AG
(SP)	QPLGN0441CEZZ	S	CONNECTOR 4PIN	AB
CN 0002	QSOCZ2107BMZZ	S	SOCKET 21 PINS	AE
CN 0003	QJAKJ0047CEZZ	S	EARPHONE JACK HSJ0998-72	AG
FB 0101	VRS-TQ2BD000J	S	RES 0 OHM 5% 1/8W SMD	AA
FB 0102	RBLN-0037CEZZ	S	FERRITE BEAD	AB
FB 0103	VRS-TQ2BD000J	S	RES 0 OHM 5% 1/8W SMD	AA
FB 0104	VRS-TQ2BD000J	S	RES 0 OHM 5% 1/8W SMD	AA
FB 0105	VRS-TQ2BD000J	S	RES 0 OHM 5% 1/8W SMD	AA
FB 0106	VRS-TQ2BD000J	S	RES 0 OHM 5% 1/8W SMD	AA
FB 0301	RBLN-0037CEZZ	S	FERRITE BEAD	AB
FB 0701	RBLN-0037CEZZ	S	FERRITE BEAD	AB
FB 0702	RBLN-0037CEZZ	S	FERRITE BEAD	AB
FB 0703	RBLN-0037CEZZ	S	FERRITE BEAD	AB
LX 0504	RBLN-0037CEZZ	S	FERRITE BEAD	AB
LX 0505	RBLN-0037CEZZ	S	FERRITE BEAD	AB
IC 0105	QSOCZ0115SC32	S	SOCKET CI 32 PIN (WIESON)	AC
LP 0701	RLAMP0001BMZZ	S	NEON 4/30HB NEOTRONIC	AC

PWB-B

SOCKET UNIT

## PART LIST 70DS-01FP

INTEGRATED CIRCUITS				
IC 0901	VHITDA6107Q-1	S	TDA6107Q PHILI	AM
DIODES				
D 0901	RH-DX0501BMZZ	S	DIODE 1N4004	AA
COILS				
L 0901	RBLN-0037CEZZ	S	FERRITE BEAD	AB
CAPACITORS				
C 0901	VCEAGA2DW476M	S	ELECTROLYTIC 47MF 20%	AE
C 0902	VCKYPB3DE472Z	S	DE1110-1E472Z2K MURATA	AC
C 0904	RC-FZ7104BMNJ	J	FILM PP 100NF 5% 400V	AD
C 0905	VHITDA6107Q-1	J	FILM PP 100NF 5% 400V	AD
C 0906	VCCCTV1HH120J	S	CERAMIC 12PF 50V RESSMD	AA
C 0907	VCCCTV1HH120J	S	CERAMIC 12PF 50V RESSMD	AA
C 0908	VCCCTV1HH120J	S	CERAMIC 12PF 50V RESSMD	AA
RESISTORS				
R 0901	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 0902	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 0903	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 0904	VRS-TV1JD000J	S	RES 0 OHM 5% 1/10W SMD	AA
R 0906	VRD-RA2HD152J	S	RES 1,5KOHM 5% 1/2W	AA
R 0907	VRD-RA2HD152J	S	RES 1,5KOHM 5% 1/2W	AA
R 0908	VRD-RA2HD152J	S	RES 1,5KOHM 5% 1/2W	AA
R 0909	VRD-RA2HD225J	S	RES 2,2MOHM 5% 1/2W	AA
MISCELLANEOUS PARTS				
△	QSOCV0103BMZZ	S	C.R.T SOCKET	AG
(L)3	QTIPM0017CEFM	S	TIP	AA
PWB-C IF UNIT				
INTEGRATED CIRCUITS				
IC 1201	RH-IX1612BMZZ	S	CI TDA6930X SMD SIEMENS	AS
TRANSISTORS				
Q 1201	RH-TX0116BMZZ	S	TRT BF-570 SMD	AC
Q 1202	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 1203	VS2SC2412KQ-1	S	TRT 2SC2412 ROHM	AA
Q 1205	RH-TX0116BMZZ	S	TRT BF-570 SMD	AC
DIODES				
D 1201	RH-DX0045BMZZ	S	DIODE 1N4148	AA

## PART LIST 70DS-01FP

D 1202	RH-DX0560BMZZ	S	DIODE BA482 PHILIPS	AB
D 1203	RH-DX0560BMZZ	S	DIODE BA482 PHILIPS	AB
D 1204	RH-DX0560BMZZ	S	DIODE BA482 PHILIPS	AB
D 1205	RH-DX0551BMZZ	S	DIODE LL4148 TFK SMD	AA
D 1206	RH-DX0551BMZZ	S	DIODE LL4148 TFK SMD	AA
COILS				
L 1204	RCILD0237BMZZ	S	COIL 7KM A768HM TOKO	AF
L 1205	VP-NM470K2R0N	S	COIL 47UH SMD	AD
L 1206	VP-NM470K2R0N	S	COIL 47UH SMD	AD
L 1207	RCILP0226BMZZ	S	COIL 290NH LQN1HR29J SMD	AE
CERAMIC FILTERS				
SF 0201	RFILC0271BMZZ	S	FILTER L9453M SIEMENS	AQ
SF 0202	RFILC0279BMZZ	S	SAW FILTER G9251M SIEMENS	AL
CAPACITORS				
C 1201	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 1202	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 1203	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 1206	VCCCTV1HH680J	S	CERAMIC 68PF 50V RESSMD	AA
C 1207	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 1208	VCEAGA1HW105M	S	ELECTROLYTIC 1MF 20%	AA
C 1209	VCEAGA1HW105M	S	ELECTROLYTIC 1MF 20%	AA
C 1210	VCEAGA1HW105M	S	ELECTROLYTIC 1MF 20%	AA
C 1211	VCKYTV1HB472K	S	CERAMIC 4,7NF 50V RESSMD	AA
C 1212	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 1213	VCEAGA1CW476M	S	ELECTROLYTIC 47MF 20%	AB
C 1214	VCKYTV1HF104Z	S	CERAMIC 100NF 50V RESSMD	AA
C 1215	VCKYTV1HF103Z	S	CERAMIC 10NF 50V RESSMD	AA
C 1218	VCKYTV1HB103K	S	CERAMIC 10NF 50V RESSMD	AA
C 1221	VCCCTV1HH150J	S	CERAMIC 15PF 50V RESSMD	AA
C 1224	VCKYTV1HB223K	S	CERAMIC 22NF 50V RESSMD	AA
C 1225	VCKYTV1HB102K	S	CERAMIC 1NF 50V RESSMD	AA
C 1226	VCCCTV1HH560J	S	CERAMIC 56PF 50V RESSMD	AA
C 1227	VCCCTV1HH150J	S	CERAMIC 15PF 50V RESSMD	AA
RESISTORS				
R 1201	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA
R 1202	VRS-TV1JD272J	S	RES 2,7KOHM 5% 1/10W SMD	AA
R 1203	VRS-TV1JD470J	S	RES 47 OHM 5% 1/10W SMD	AA
R 1204	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 1205	VRS-TV1JD331J	S	RES 330 OHM 5% 1/10W SMD	AA
R 1206	VRS-TV1JD100J	S	RES 10 OHM 5% 1/10W SMD	AA
R 1207	VRS-TV1JD223J	S	RES 22KOHM 5% 1/10W SMD	AA
R 1208	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA
R 1209	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA



## PART LIST 70DS-01FP

R 1210	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA
R 1211	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA
R 1212	VRS-TV1JD682J	S	RES 6.8KOHM 5% 1/10W SMD	AA
R 1213	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA
R 1214	VRS-TV1JD682J	S	RES 6.8KOHM 5% 1/10W SMD	AA
R 1215	VRS-TV1JD102J	S	R OX 1KOHM 5% 1/10W SMD	AA
R 1216	VRS-TV1JD331J	S	RES 330 OHM 5% 1/10W SMD	AA
R 1217	VRS-TV1JD151J	S	RES 150 OHM 5% 1/10W SMD	AA
R 1219	VRS-TV1JD223J	S	RES 22KOHM 5% 1/10W SMD	AA
R 1221	VRS-TV1JD222J	S	RES 2,2KOHM 5% 1/10W SMD	AA
R 1222	VRS-TV1JD272J	S	RES 2,7KOHM 5% 1/10W SMD	AA
R 1223	VRS-TV1JD331J	S	RES 330 OHM 5% 1/10W SMD	AA
R 1224	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 1225	VRS-TV1JD123J	S	RES 12KOHM 5% 1/10W SMD	AA
R 1226	VRS-TV1JD101J	S	R OX 100 OHM 5% 1/10W SMD	AA
R 1227	VRS-TV1JD123J	S	RES 12KOHM 5% 1/10W SMD	AA
R 1228	VRD-RA2BE273J	S	RES 27KOHM 5% 1/8W	AA
R 1229	VRS-TV1JD273J	S	RES 27KOHM 5% 1/10W SMD	AA
R 1230	VRS-TV1JD123J	S	RES 12KOHM 5% 1/10W SMD	AA
<b>MISCELLANEOUS PARTS</b>				
(IF)	QPLGN0885CEZZ	S	CONNECTOR	AC
<b>MISCELLANEOUS PARTS</b>				
*	QACCZ2100BMSA	S	A.C CORD	AR
	VSP1206PB447A	S	SPEAKER	
	RRMCG1059BMSA	S	REMOTE CONTROL UNIT	AS
	TINS-6777BMN1	S	OPERATION MANUAL	
<b>CABINET PARTS</b>				
1	CCABA1281BMS0	S	FRONT CABINET	
1-1	GDORF1045BMSC	S	DOOR	AF
1-2	GMADT1066BMSA	S	WINDOW	AF
1-3	HBDGB3013MESA	S	BADGE SHARP	AG
1-4	HDECQ0006BMSA	S	WINDOW POWER	AC
1-5	JBTN-1029BMSC	S	BUTTON POWER	AC
1-6	JBTN-1028BMSC	S	BUTTON UP/DOWN	AE
1-7	HDECQ0034BMSA	S	WINDOW LED	AD
1-8	HINDP5087BMSA	S	INDICATOR	AD
2	CCABB1062BMV1	S	REAR CABINET	BB

