

VIDEO BOX

KOS-CV100

SERVICE MANUAL

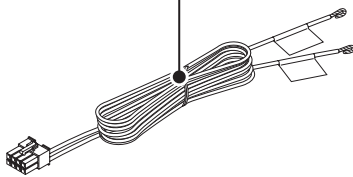
KENWOOD

Kenwood Corporation

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B53-0573-00 (N) 519

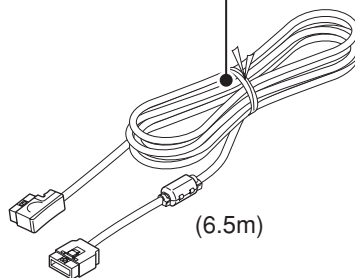


Cord with plug
(E30-6761-05)



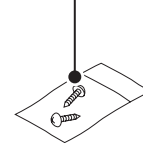
(PRK: 3m, REV: 4.5m)

Cord with plug
(E30-6643-15)



(6.5m)

Screw set
(N99-1782-05)

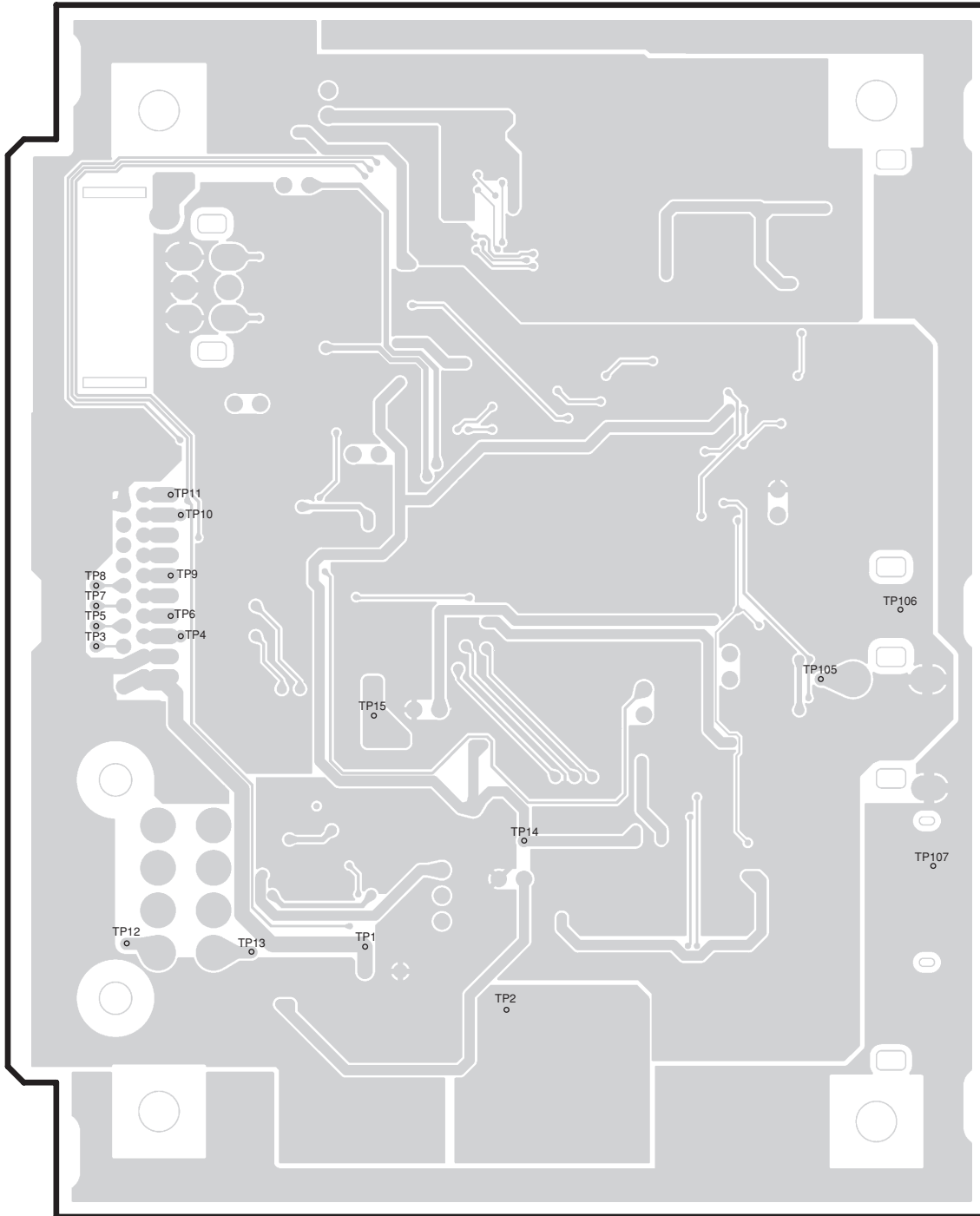


This product uses Lead Free solder.

This product complies with the **RoHS** directive for the European market.

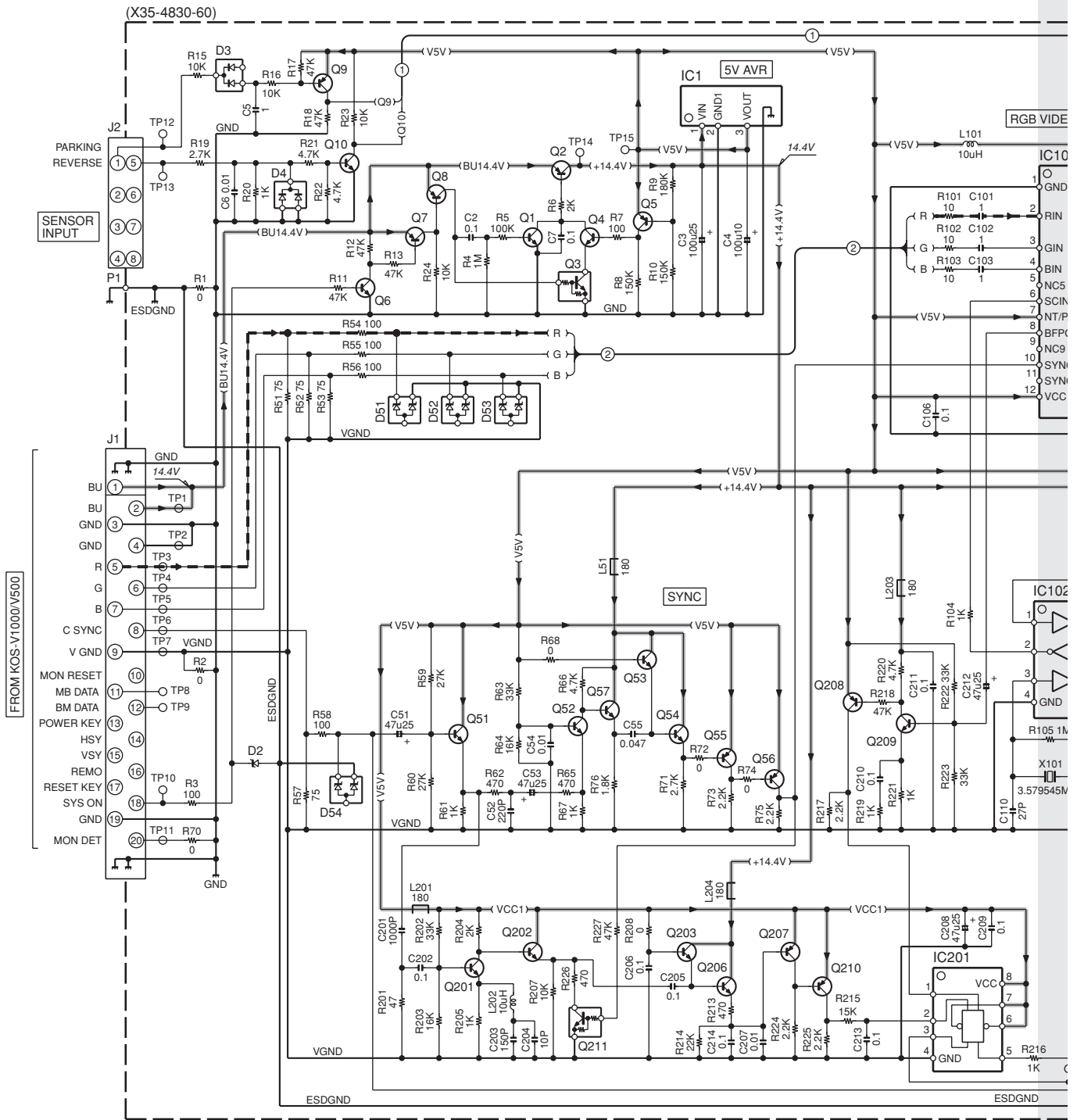
PC BOARD (FOIL SIDE VIEW)

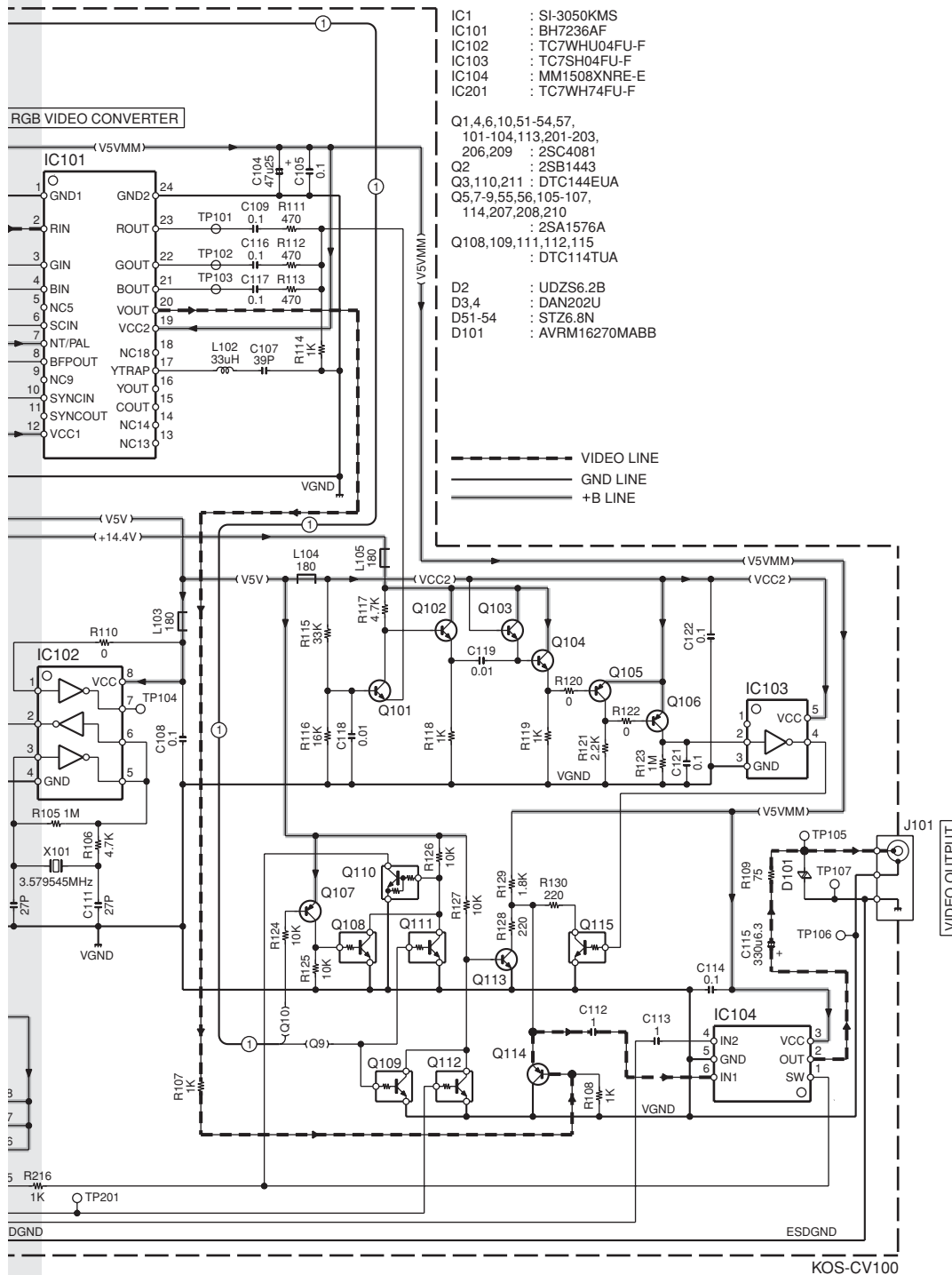
VIDEO UNIT X35-4830-60 (J76-0464-12)



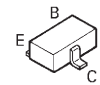
Refer to the schematic diagram for the values of resistors and capacitors.

KOS-CV100

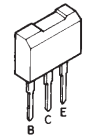




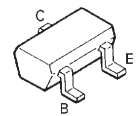
2SA1576A



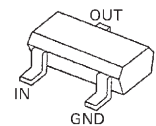
2SB1443



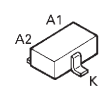
2SC4081



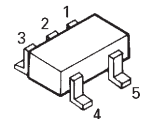
DTC144EUA



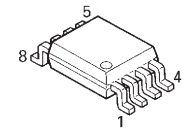
DAN202U



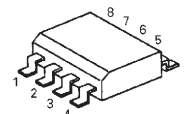
TC7SH04FU-F



TC7WHU04FU-F



TC7WH74FU-F

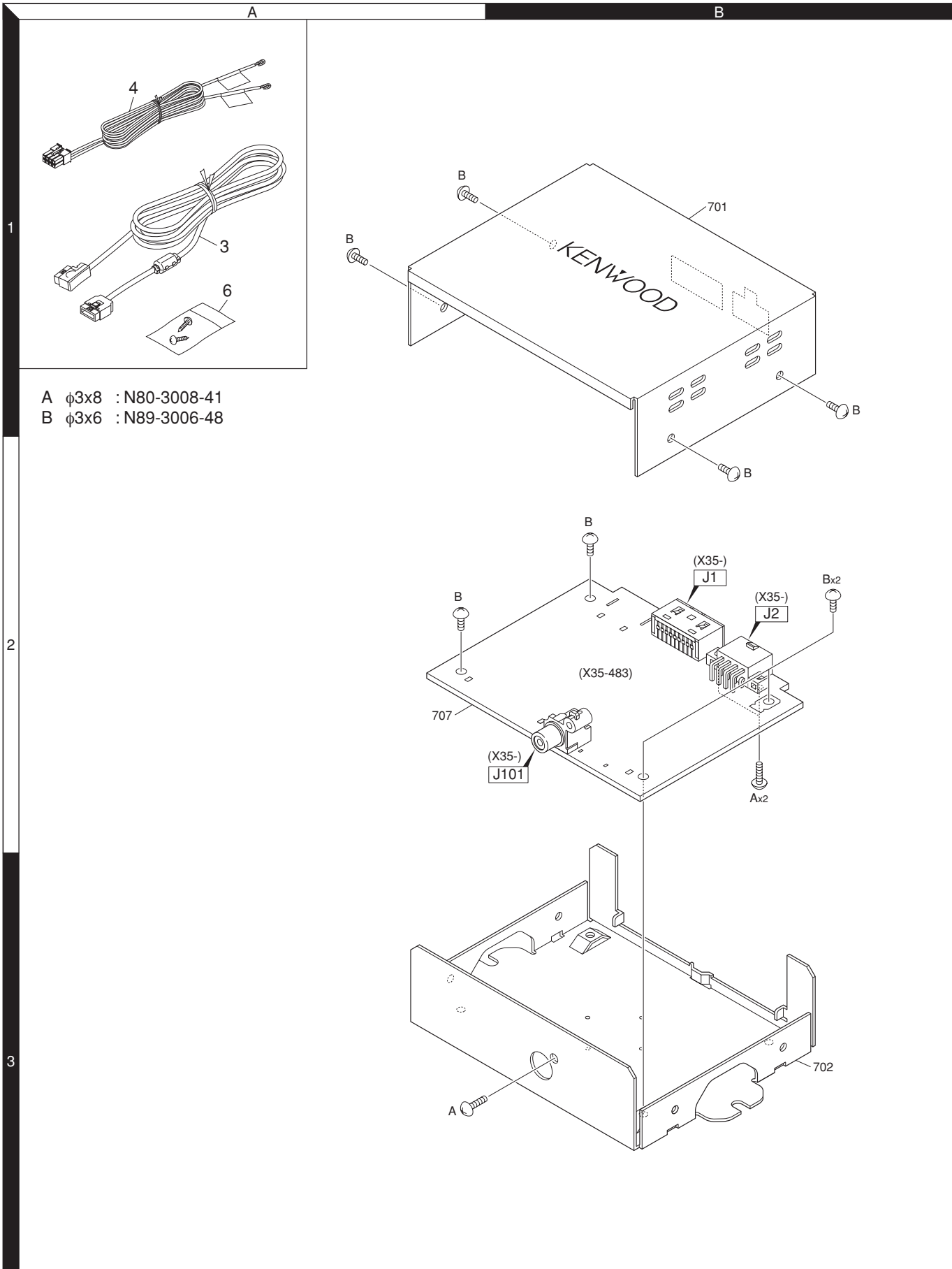


CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
 ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

KOS-CV100

EXPLODED VIEW



PARTS LIST

* New parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	Add	New	Parts No.	Description	Destination
KOS-CV100					
-		*	B64-3834-00	INSTRUCTION MANUAL	
3	1A		E30-6643-15	CORD WITH PLUG	
4	1A	*	E30-6761-05	CORD WITH PLUG	
-		*	H54-4122-03	ITEM CARTON CASE	
6	1A		N99-1782-05	SCREW SET	
A	3A		N80-3008-41	PAN HEAD TAPTITE SCREW	
B	1B		N89-3006-48	BINDING HEAD TAPTITE SCREW	
VIDEO UNIT (X35-4830-60)					
C2			CK73GB1H104K	CHIP C 0.10UF K	
C3			CD04BJ1E101M	ELECTRO 100UF 25WV	
C4			CD04BJ1A101M	ELECTRO 100UF 10WV	
C5			CK73FB1C105K	CHIP C 1.0UF K	
C6			CK73GB1H103K	CHIP C 0.010UF K	
C7			CK73GB1H104K	CHIP C 0.10UF K	
C51			CD04BJ1E470M	ELECTRO 47UF 25WV	
C52			CC73GCH1H221J	CHIP C 220PF J	
C53			CD04BJ1E470M	ELECTRO 47UF 25WV	
C54			CK73GB1H103K	CHIP C 0.010UF K	
C55			CK73GB1H473K	CHIP C 0.047UF K	
C101-103			CK73GB1A105K	CHIP C 1.0UF K	
C104			CD04BJ1E470M	ELECTRO 47UF 25WV	
C105,106			CK73GB1H104K	CHIP C 0.10UF K	
C107			CC73GCH1H390J	CHIP C 39PF J	
C108,109			CK73GB1H104K	CHIP C 0.10UF K	
C110,111			CC73GCH1H270J	CHIP C 27PF J	
C112,113			CK73GB1A105K	CHIP C 1.0UF K	
C114			CK73GB1H104K	CHIP C 0.10UF K	
C115			CD04BJ0J331M	ELECTRO 330UF 6.3WV	
C116,117			CK73GB1H104K	CHIP C 0.10UF K	
C118,119			CK73GB1H103K	CHIP C 0.010UF K	
C121,122			CK73GB1H104K	CHIP C 0.10UF K	
C201			CC73GCH1H102J	CHIP C 1000PF J	
C202			CK73GB1H104K	CHIP C 0.10UF K	
C203			CC73GCH1H151J	CHIP C 150PF J	
C204			CC73GCH1H100D	CHIP C 10PF D	
C205,206			CK73GB1H104K	CHIP C 0.10UF K	
C207			CK73GB1H103K	CHIP C 0.010UF K	
C208			CD04BJ1E470M	ELECTRO 47UF 25WV	
C209-211			CK73GB1H104K	CHIP C 0.10UF K	
C212			CD04BJ1E470M	ELECTRO 47UF 25WV	
C213,214			CK73GB1H104K	CHIP C 0.10UF K	
J1			E58-1035-05	RECTANGULAR RECEPTACLE	
J2			E58-0816-05	RECTANGULAR RECEPTACLE	
J101			E63-0946-05	PIN JACK	
L51			L92-0373-05	CHIP FERRITE	
L101			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L102			L41-3305-33	SMALL FIXED INDUCTOR (33U)	
L103-105			L92-0373-05	CHIP FERRITE	
L201			L92-0373-05	CHIP FERRITE	
L202			L41-1005-33	SMALL FIXED INDUCTOR (10U)	

Ref. No.	Add	New	Parts No.	Description	Destination
L203,204 X101		*	L92-0373-05 L77-2962-05	CHIP FERRITE CRYSTAL RESONATOR (3.579545MHZ)	
A	2B		N80-3008-41	PAN HEAD TAPTITE SCREW	
R1,2			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R3			RK73FB2B101J	CHIP R 100 J 1/8W	
R4			RK73GB2A105J	CHIP R 1.0M J 1/10W	
R5			RK73GB2A104J	CHIP R 100K J 1/10W	
R6			RK73GB2A202J	CHIP R 2.0K J 1/10W	
R7			RK73GB2A101J	CHIP R 100 J 1/10W	
R8			RK73GB2A154J	CHIP R 150K J 1/10W	
R9			RK73GB2A184J	CHIP R 180K J 1/10W	
R10			RK73GB2A154J	CHIP R 150K J 1/10W	
R11-13			RK73GB2A473J	CHIP R 47K J 1/10W	
R15			RK73FB2B103J	CHIP R 10K J 1/8W	
R16			RK73GB2A103J	CHIP R 10K J 1/10W	
R17,18			RK73GB2A473J	CHIP R 47K J 1/10W	
R19			RK73FB2B272J	CHIP R 2.7K J 1/8W	
R20			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R21,22			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R23,24			RK73GB2A103J	CHIP R 10K J 1/10W	
R51-53			RK73FB2B750J	CHIP R 75 J 1/8W	
R54-56			RK73FB2B101J	CHIP R 100 J 1/8W	
R57			RK73FB2B750J	CHIP R 75 J 1/8W	
R58			RK73FB2B101J	CHIP R 100 J 1/8W	
R59,60			RK73GB2A273J	CHIP R 27K J 1/10W	
R61			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R62			RK73GB2A471J	CHIP R 470 J 1/10W	
R63			RK73GB2A333J	CHIP R 33K J 1/10W	
R64			RK73GB2A163J	CHIP R 16K J 1/10W	
R65			RK73GB2A471J	CHIP R 470 J 1/10W	
R66			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R67			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R68			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R70			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R71			RK73GB2A272J	CHIP R 2.7K J 1/10W	
R72			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R73			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R74			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R75			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R76			RK73GB2A182J	CHIP R 1.8K J 1/10W	
R101-103			RK73GB2A100J	CHIP R 10 J 1/10W	
R104			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R105			RK73GB2A105J	CHIP R 1.0M J 1/10W	
R106			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R107,108			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R109			RK73FB2B750J	CHIP R 75 J 1/8W	
R110			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R111-113			RK73GB2A471J	CHIP R 470 J 1/10W	
R114			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R115			RK73GB2A333J	CHIP R 33K J 1/10W	
R116			RK73GB2A163J	CHIP R 16K J 1/10W	
R117			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R118,119			RK73GB2A102J	CHIP R 1.0K J 1/10W	

E : Europe K : North America M : Other Areas

△ Indicates safety critical components.

PARTS LIST

VIDEO UNIT (X35-4830-60)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation	Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R120			RK73GB2A000J	CHIP R 0.0 J 1/10W		IC101		*	BH7236AF	ANALOGUE IC	
R121			RK73GB2A222J	CHIP R 2.2K J 1/10W		IC102			TC7WHU04FU-F	MOS-IC	
R122			RK73GB2A000J	CHIP R 0.0 J 1/10W		IC103			TC7SH04FU-F	MOS-IC	
R123			RK73GB2A105J	CHIP R 1.0M J 1/10W		IC104			MM1508XNRE-E	ANALOGUE IC	
R124-127			RK73GB2A103J	CHIP R 10K J 1/10W		IC201			TC7WH74FU-F	MOS-IC	
R128			RK73GB2A221J	CHIP R 220 J 1/10W		Q1			2SC4081	TRANSISTOR	
R129			RK73GB2A182J	CHIP R 1.8K J 1/10W		Q2			2SB1443	TRANSISTOR	
R130			RK73GB2A221J	CHIP R 220 J 1/10W		Q3			DTC144EUA	DIGITAL TRANSISTOR	
R201			RK73GB2A470J	CHIP R 47 J 1/10W		Q4			2SC4081	TRANSISTOR	
R202			RK73GB2A333J	CHIP R 33K J 1/10W		Q5			2SA1576A	TRANSISTOR	
R203			RK73GB2A163J	CHIP R 16K J 1/10W		Q6			2SC4081	TRANSISTOR	
R204			RK73GB2A202J	CHIP R 2.0K J 1/10W		Q7-9			2SA1576A	TRANSISTOR	
R205			RK73GB2A102J	CHIP R 1.0K J 1/10W		Q10			2SC4081	TRANSISTOR	
R207			RK73GB2A103J	CHIP R 10K J 1/10W		Q51-54			2SC4081	TRANSISTOR	
R208			RK73GB2A000J	CHIP R 0.0 J 1/10W		Q55,56			2SA1576A	TRANSISTOR	
R213			RK73GB2A471J	CHIP R 470 J 1/10W		Q57			2SC4081	TRANSISTOR	
R214			RK73GB2A223J	CHIP R 22K J 1/10W		Q101-104			2SC4081	TRANSISTOR	
R215			RK73GB2A153J	CHIP R 15K J 1/10W		Q105-107			2SA1576A	TRANSISTOR	
R216			RK73GB2A102J	CHIP R 1.0K J 1/10W		Q108,109			DTC114TUA	DIGITAL TRANSISTOR	
R217			RK73GB2A222J	CHIP R 2.2K J 1/10W		Q110			DTC144EUA	DIGITAL TRANSISTOR	
R218			RK73GB2A473J	CHIP R 47K J 1/10W		Q111,112			DTC114TUA	DIGITAL TRANSISTOR	
R219			RK73GB2A102J	CHIP R 1.0K J 1/10W		Q113			2SC4081	TRANSISTOR	
R220			RK73GB2A472J	CHIP R 4.7K J 1/10W		Q114			2SA1576A	TRANSISTOR	
R221			RK73GB2A102J	CHIP R 1.0K J 1/10W		Q115			DTC114TUA	DIGITAL TRANSISTOR	
R222,223			RK73GB2A333J	CHIP R 33K J 1/10W		Q201-203			2SC4081	TRANSISTOR	
R224,225			RK73GB2A222J	CHIP R 2.2K J 1/10W		Q206			2SC4081	TRANSISTOR	
R226			RK73GB2A471J	CHIP R 470 J 1/10W		Q207,208			2SA1576A	TRANSISTOR	
R227			RK73GB2A473J	CHIP R 47K J 1/10W		Q209			2SC4081	TRANSISTOR	
D2			UDZS6.2B	ZENER DIODE		Q210			2SA1576A	TRANSISTOR	
D3,4			DAN202U	DIODE		Q211			DTC144EUA	DIGITAL TRANSISTOR	
D51-54			STZ6.8N	ZENER DIODE							
D101			AVRM16270MABB	VARISTOR							
IC1			SI-3050KMS	ANALOGUE IC							

E : Europe K : North America M : Other Areas

△ Indicates safety critical components.

SPECIFICATIONS

Video Section

Video output level (RCA jack)..... 1Vp-p/75Ω

General

Operational temperature range-10°C to +60°C

Storage temperature range-30°C to +85°C

Dimensions (W × H × D)..... 143 × 37 × 99 mm

..... 5-5/8 × 1-7/16 × 4-7/8 inch

Weight 310 g (0.7 lbs)

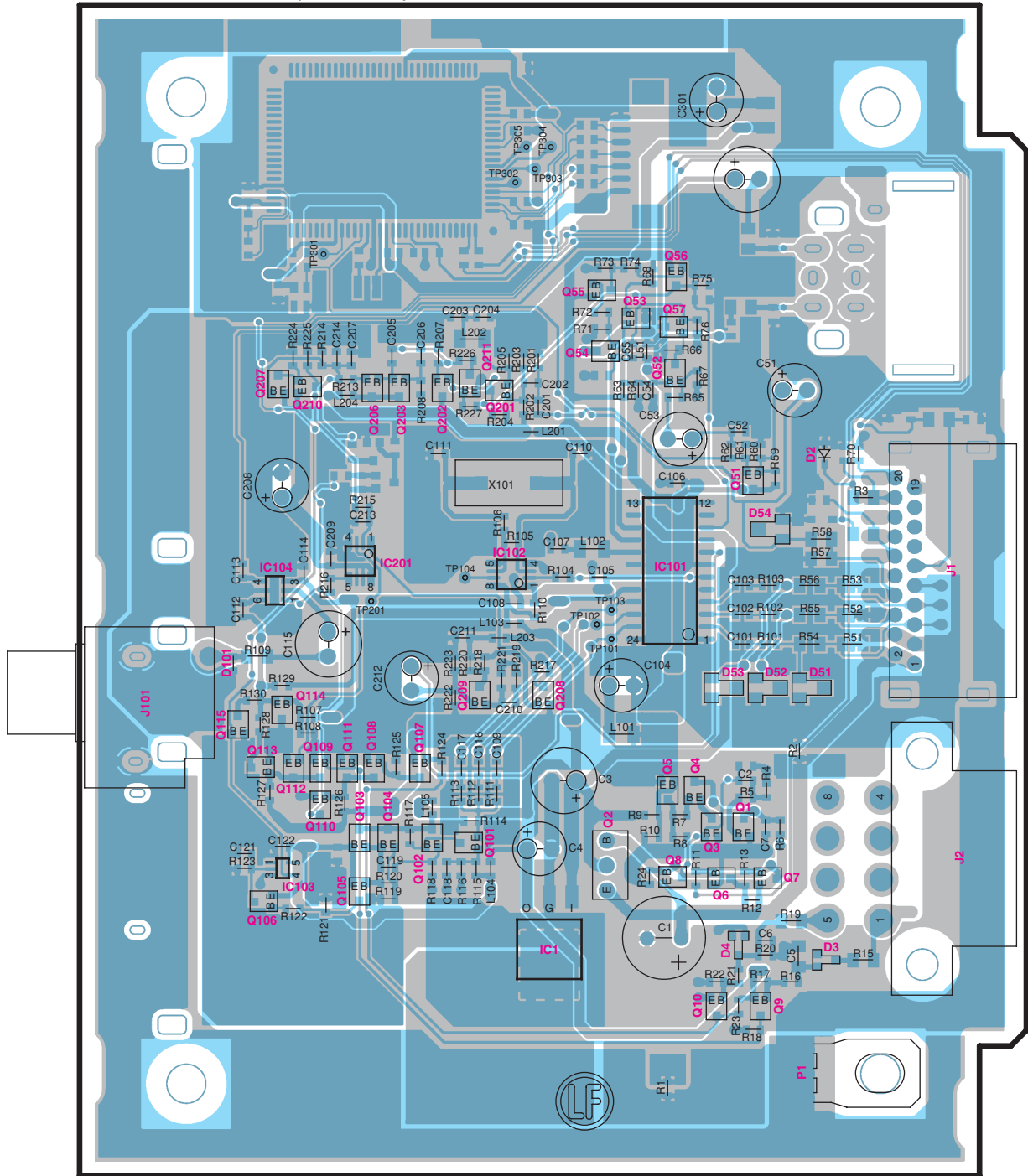
KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.



KOS-CV100

PC BOARD (COMPONENT SIDE VIEW)

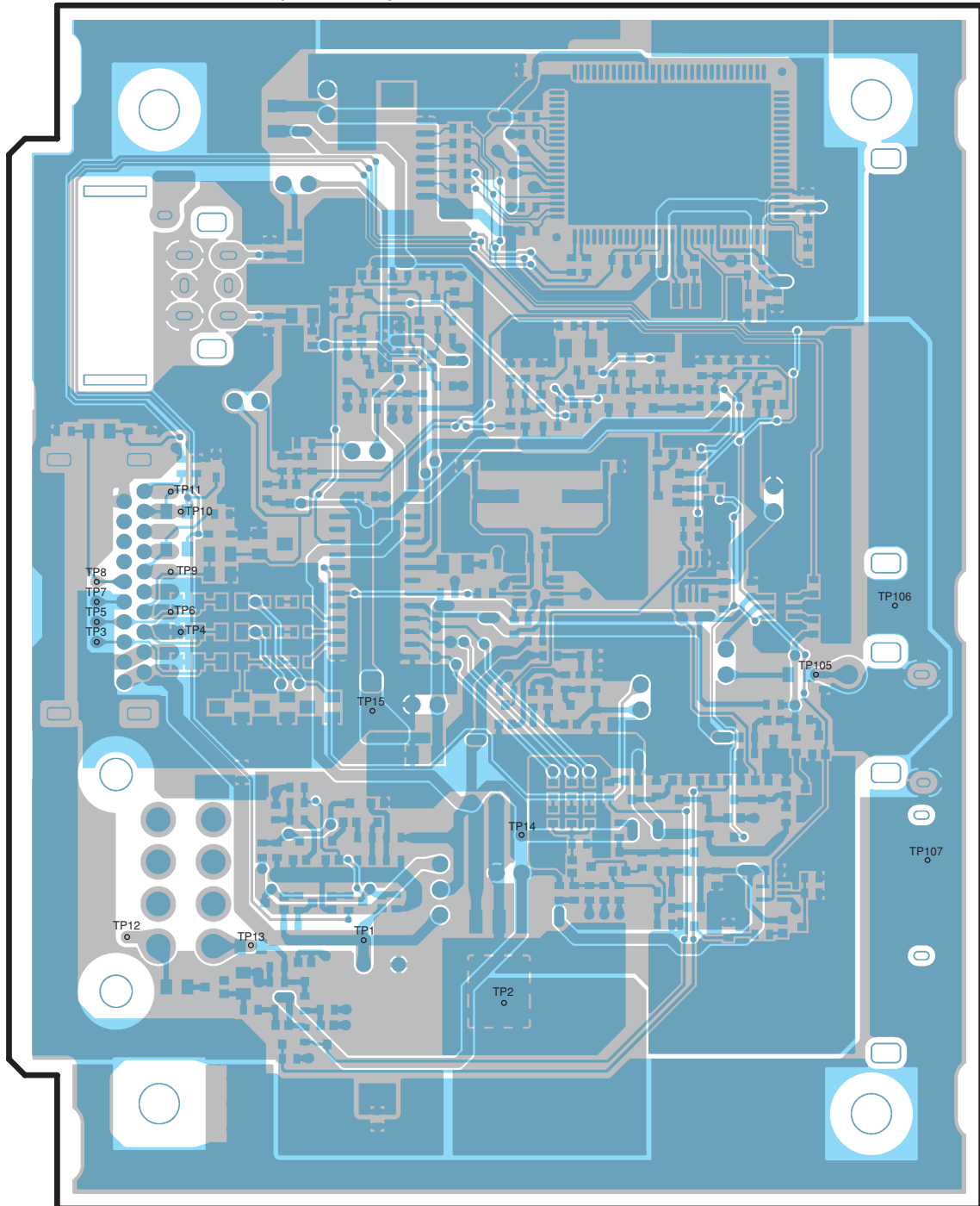
VIDEO UNIT X35-4830-60 (J76-0464-12)

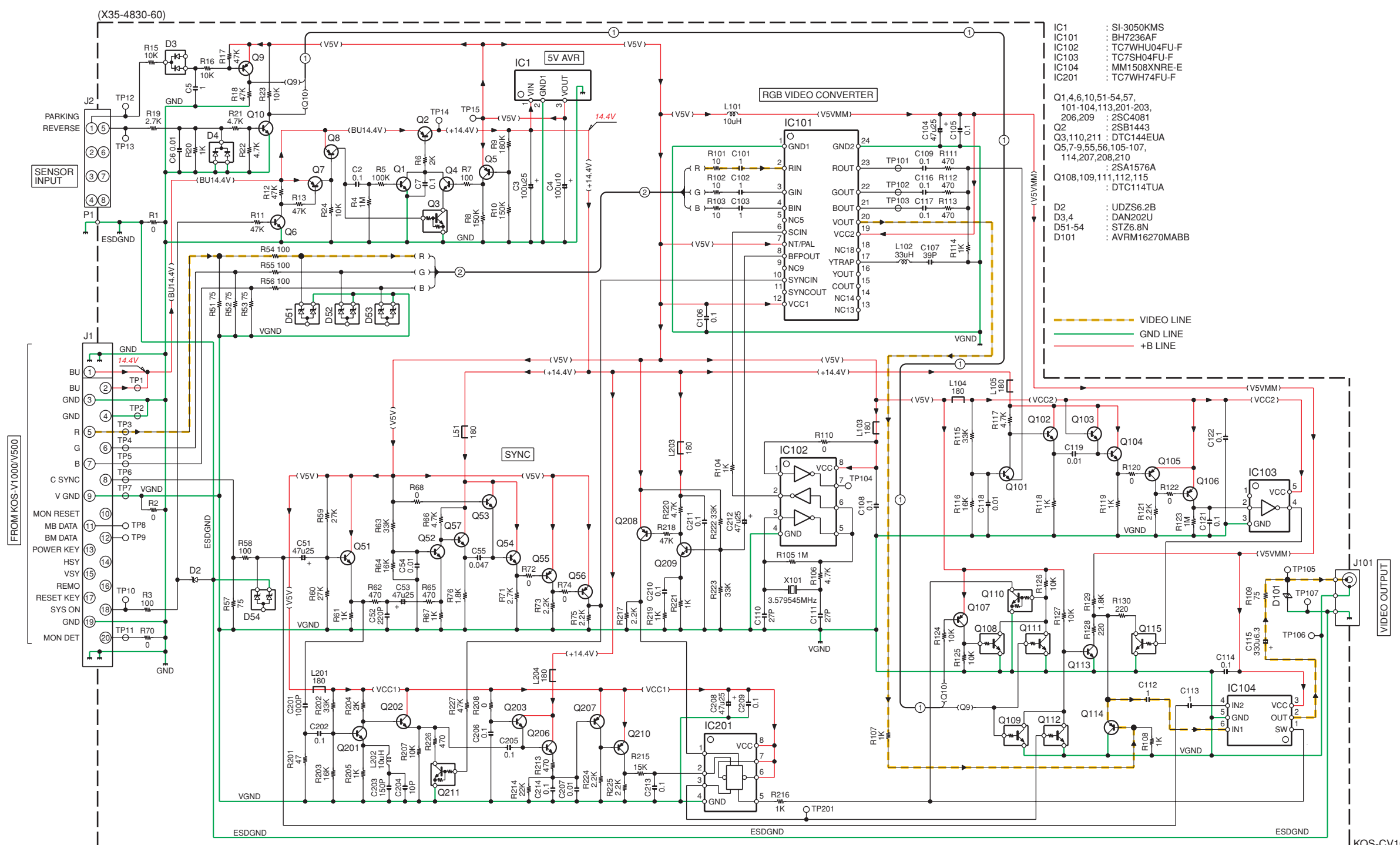


KOS-CV100

PC BOARD (FOIL SIDE VIEW)

VIDEO UNIT X35-4830-60 (J76-0464-12)





- IC1 : SI-3050KMS
- IC101 : BH7236AF
- IC102 : TC7WHU04FU-F
- IC103 : TC7SH04FU-F
- IC104 : MM1508XNRE-E
- IC201 : TC7WH74FU-F

- Q1,4,6,10,51-54,57, 101-104,113,201-203, 206,209 : 2SC4081
- Q2 : 2SB1443
- Q3,110,211 : DTC144EUA
- Q5,7-9,55,56,105-107, 114,207,208,210 : 2SA1576A
- Q108,109,111,112,115 : DTC114TUA

- D2 : UDZS6.2B
- D3,4 : DAN202U
- D51-54 : STZ6.8N
- D101 : AVR1M6270MABB

--- VIDEO LINE
--- GND LINE
--- +B LINE

FROM KOS-V1000V500