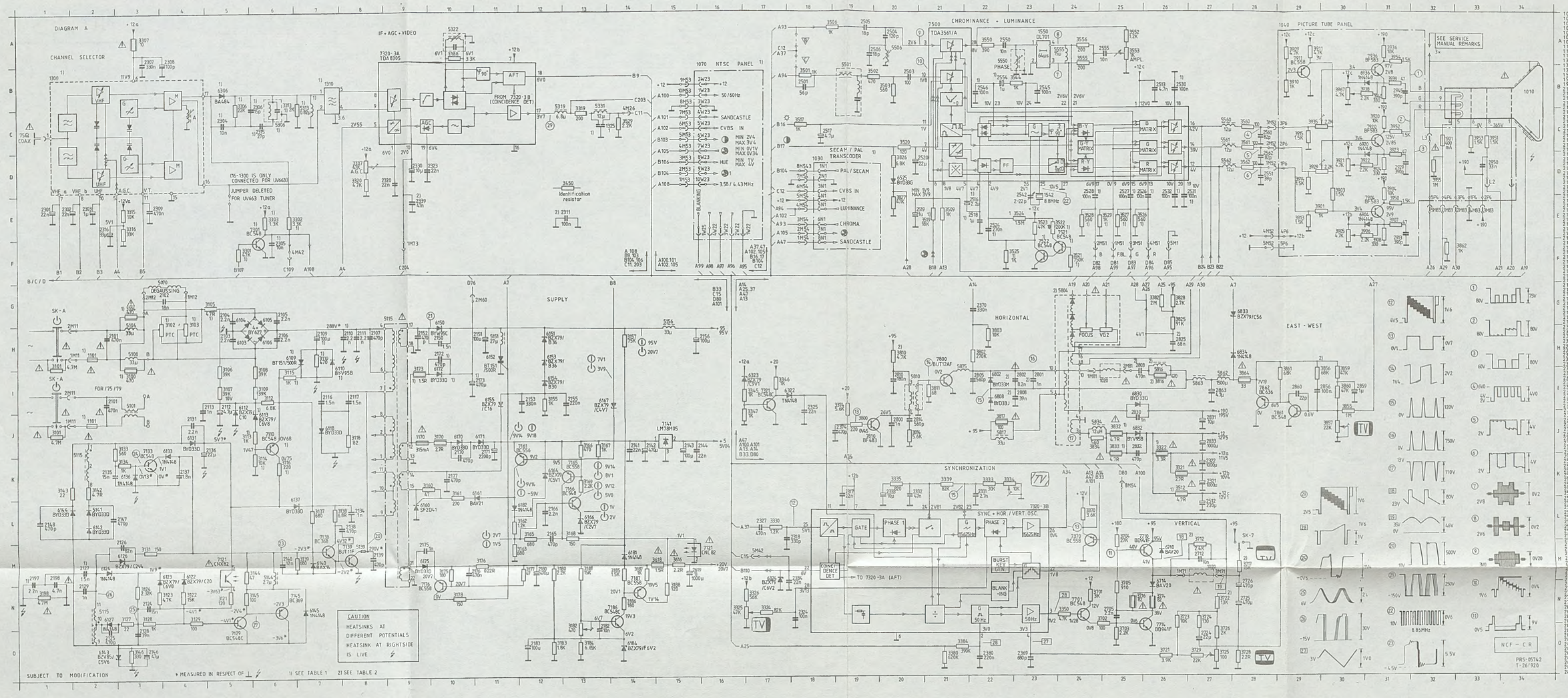
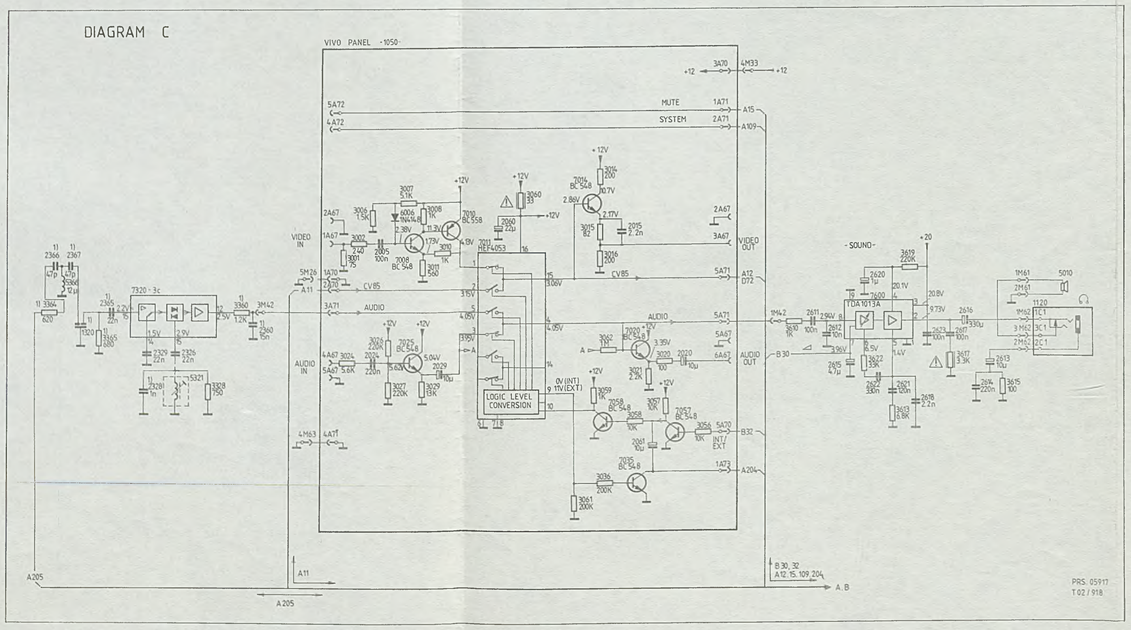
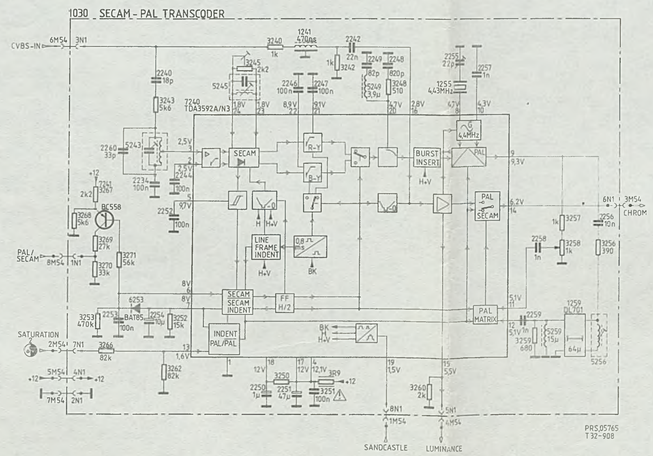
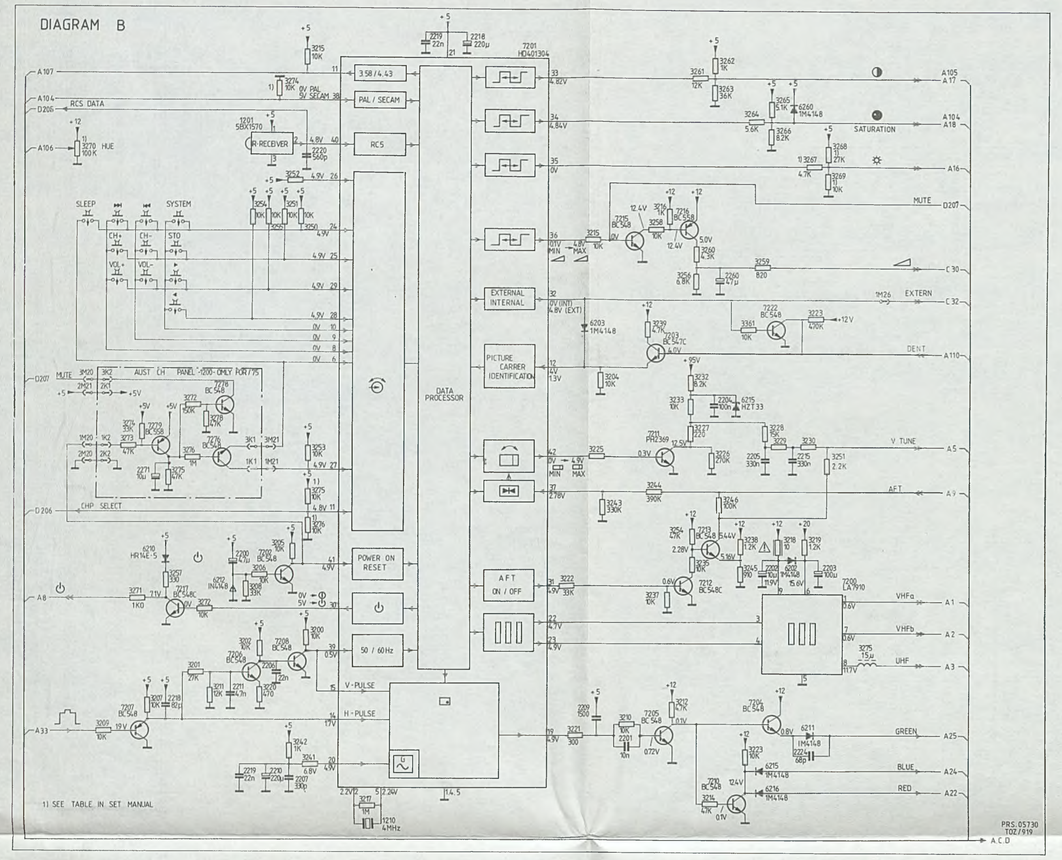


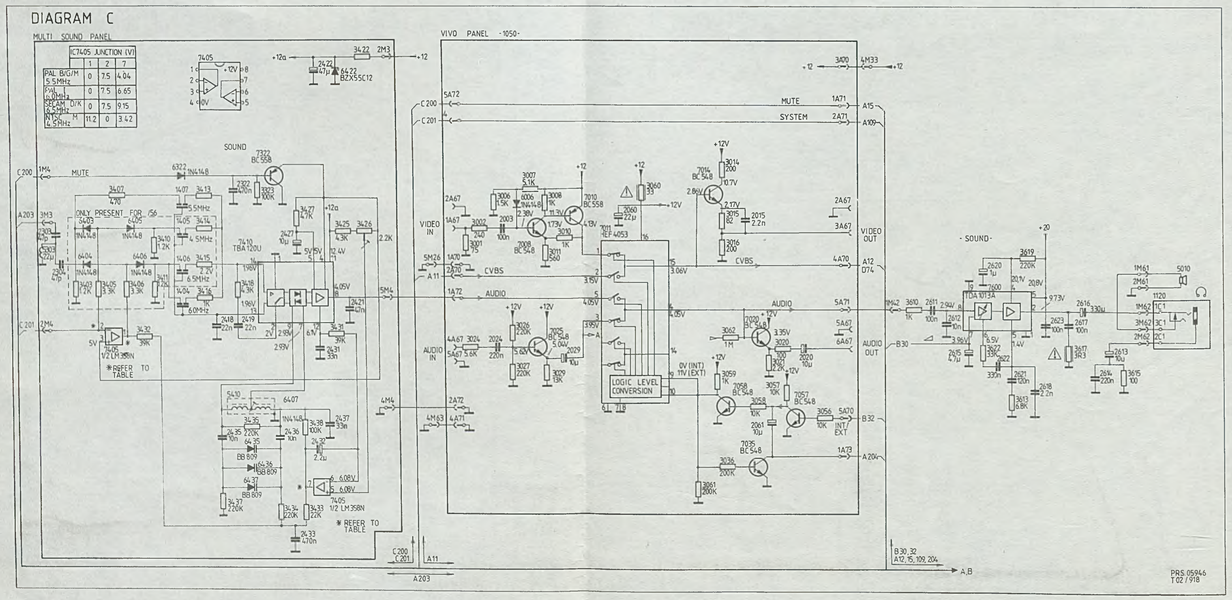




PHILIPS

TV-COLOR 21CN4462





LIST OF DIODES AND TRANSISTORS

TYPE	SHORT DESCRIPTION ; DATA	EQUIVALENTS
BA484	S_i ; S_w ; VHF ; $V_R = 35V$; $I_F = 0,1A$; $C_d = 1,6\ pF$	
1N4148	S_i ; HIGH-SPEED, GENERAL PURPOSE ; $V_R = 75V$; $I_{FRM} = 0,45A$; $t_{rr} < 4\ ns$	BAY 61
BY627	S_i ; RECTIFIER ; GENERAL PURPOSE ; $V_{RRM} = 1250V$; $V_{RWM} = 800V$; $I_F = 2A$; $I_{FRM} = 20A$	
BYD33-D -G -J -K -M	S_i ; RECTIFIER ; VERY FAST ; $I_F = 1,3A$; $V_{RRM} = 200V$ $I_{FRM} = 7A$; $t_{rr} = 250\ ns$ 400V 250 ns 600V 250 ns 800V 300 ns 1000V 300 ns	RGP30M
BAX14	S_i ; STABISTOR ; $V_R = 20V$; $I_F = 0,5A$; $t_{rr} = 50\ ns$; $C_d = 35\ pF$	(BA159)
BYV95-A -B -C	S_i ; RECTIFIER ; VERY FAST $I_F = 1,5A$; $V_{RRM} = 200V$; $I_{FRM} = 10A$; $t_{rr} = 250\ ns$ 400V 600V	
BAT85	SCHOTTKY BARRIER SWITCHING DIODE ; $V_R = 30V$; $I_F = 0,2A$; $C_d < 10\ pF$	
BB809	S_i ; VARIABLE CAPACITANCE DIODE ; $r_D = 0,8\ \Omega$; $C_d = (4,0 \div 5,0)\ pF/28V$ VHF television tuning voltage range 1÷28V	
BYW95-A -B -C	S_i ; RECTIFIER ; VERY FAST $I_F = 3A$; $V_{RRM} = 200V$; $I_{FRM} = 15A$; $t_{rr} = 250\ ns$ 400V 600V	
HZT33	VOLTAGE REGULATOR FOR ELECTRONIC TUNER $V_Z = 33V$; MIN (31V) ; MAX (35V) ; $P_{TOT} = 0,2W$ (75°C)	
BAV21	S_i ; GENERAL PURPOSE ; SWITCHING ; $V_R = 200V$; $I_F = 0,25A$ $t_{rr} < 50\ ns$	
BZX55C12	S_i ; ZENER DIODE ; $I_{F(AV)} = 0,25A$; $V_Z = 12V$ $P_{TOT} = 0,5W$; NOMINAL TOLERANCE ± 5%	
BZX79 -C2V4 -C4V7 -C6V8 -C9V1 -F6V2 -C16 -C20 -B30 -B36	SERIES OF ZENER DIODES ; $V_Z = 2,4 \div 75V$; $P_{TOT} = 0,5W$ $V_Z = 2,4V$ TOLERANCE ± 5% $V_Z = 4,7V$ 5% $V_Z = 6,8V$ 5% $V_Z = 9,1V$ 5% $V_Z = 6,2V$ $V_Z = 16V$ 5% $V_Z = 20V$ 5% $V_Z = 30V$ 2% $V_Z = 36V$ 2%	
BZV85-C5V6	ZENER DIODE ; $V_Z = 5,6V$; $P_{TOT} = 1,3W$; TOLERANCE 5%	
BZX55-C12	ZENER DIODE ; $V_Z = 12V$; $P_{TOT} = 0,5W$; TOLERANCE 5%	
	TRANSISTORS	
PH2369	S_i ; P-N-P ; H.F. and SWITCHING TRANSISTORS ; $V_{CEO} = 40V$; $V_{CEO} = 15V$ $P_{TOT} = 0,5W$; $h_{FE} = (40 \div 120)$ / (10mA) ; $f_T = 500MHz$	
BC548 BC548C	S_i ; N-P-N ; GEN. PURP. ; $V_{CEO} = 30V$; $I_C = 0,1A$; $P_{TOT} = 0,5W$; $h_{FE} = (110 \div 800)$; $f_T < 300MHz$ $h_{FE} = (420 \div 800)$	BC 546
BC558 BC556	S_i ; P-N-P ; GEN. PURP. ; $V_{CEO} = 30V$; $I_C = 0,1A$; $P_{TOT} = 0,5W$; $h_{FE} = (75 \div 800)$ $V_{CEO} = 65V$ $h_{FE} = (75 \div 475)$	
BC368 BC369	S_i ; N-P-N ; GEN. PURP. CLASS-B AUDIO OUTP. STAGE $V_{CEO} = 20V$; $I_C = 1A$; $P_{TOT} = 0,8W$; $h_{FE} = (85 \div 375)$	BC 639 BC 640
BC536	S_i ; P-N-P ; GEN. PURP. (DRIVER STAGE) ; $V_{CEO} = 45V$; $I_C = 1A$; $P_{TOT} = 1W$; $h_{FE} = (40 \div 250)$; $f_T < 50\ MHz$	BC640
BD941F	S_i ; N-P-N ; L.F. GENERAL-PURPOSE POWER ; $V_{CEO} = 120V$; $I_C = 3A$; $V_{CBO} = 140V$; $h_{FE} = (40 \div 250)$; F - kind of case	BD933
BF583	S_i ; N-P-N ; HIGH VOLTAGE ; $V_{CEO} = 250V$; $V_{CBO} = 300V$; $I_C = 0,05A$ VIDEO OUTPUT STAGE ; $P_{TOT} = 5W$; $f_T > 70MHz$	BF459
BUT11F	S_i ; N-P-N ; HIGH VOLTAGE ; $V_{CEO} = 400V$ $V_{CBO} = 850V$; $I_C = 5A$; $P_{TOT} = 100W$	
BUT12F	S_i ; N-P-N ; HORIZONTAL OUTPUT STAGE ; $V_{CEO} = 450V$; $V_{CBO} = 1000V$; $I_C = 10A$; F - kind of case ; $P_{TOT} = 100W$	
BT151/500R	GENERAL PURPOSE THYRISTORS ; $I_{T(RMS)} = 12A$, $V_{DRM} = 500V$; $I_{T(AV)} = 7,5A$ (max) ; $dI_T/dt = 50A/\mu s$	
SF2041	SILICON CONTROLLED RECTIFIERS (SCR) ; $I_T = 4A_{RMS}$; $V_{DRM} = 200V$; $I_{GT} = 200\ \mu A_{DC}$; $V_{GT} = 0,8V$; $I_{SOURCE} = 20A$; $I_T = 2,5A_{(AV)}$; ⚡ - RETURN GATE to CATHODE through 1kΩ (min)	

ABBREVIATIONS : S_i - silicon ; S_w - switching ; V_R - continous reverse voltage ; I_F - forward current ; r_D - diode series resistance ; V_Z - working voltage ; I_T - gate current ; AV - average

TABELE 2 DIFFERENCE LIST BETWEEN 15", 20" AND 21" SETS

ITEM	15"	20"	21"
2311	100n	–	100n
2339	47n	–	47n
2801	1n5	1n5	1n
2802	6n8	20n	8n2
2803	470n	560n	470n
2808	47n	56n	39n
2825	47n	68n	68n
3712	2k2	2k4	2k4
3717	15k	10k	15k
3722	12k	12k	13k
3810	5k6	4k7	4k7
3816	–	470	470
3858	150k	68k	150k
5804	Hitachi	Hitachi	CBTS LOT
5816	AT4042/51	–	AT4042/92

TABELE 1 DIFFERENCE LIST BETWEEN 15", 20" AND 21" SETS

MAIN PANEL												
Set	21CN4462									21CN4672		
ITEM	/50	/56	/57	/59P	/59R	/65,/67 /70	/75	/79	/91	/50,/68	/75	/79
1030 PAL/SECAM	–	x	–	x	x	–	–	–	–	–	–	–
1070 Multi-NTSC	–	x	–	–	–	–	–	–	–	–	–	–
1080 Multi-Sound	–	x	–	x	x	–	–	–	–	–	–	–
1200 Austr. On 2 preset	–	–	–	–	–	x	–	–	–	–	x	–
1101 2.5A	x	–	x	–	–	–	x	x	x	x	x	x
1101 3.15A	–	x	–	x	x	x	–	–	–	–	–	–
1300 UV71I/IEC-L	–	x	x	–	x	x	–	–	UV75I/ IEC-L	x	–	–
1300 UV617	–	–	x	–	–	–	–	–	–	–	–	–
1300 UV71INZ/IEC-L	–	–	–	–	–	–	–	x	–	–	–	–
1300 UV633/IEC	–	–	–	–	–	x	–	–	–	–	x	x
1310 OFWG1961	x	OFWK	–	–	–	x	–	x	OFWD	x	–	x
1310 OFWU1951	–	2590	x	–	–	–	–	–	195	–	–	–
1310 OFWK1950	–	–	–	x	x	–	–	–	–	–	–	–
1310 OFWB1950	–	–	–	–	–	x	–	–	–	–	x	–
1320 5.5MHz	5.5	x	–	–	–	–	–	x	–	–	–	–
1323 5.5/6.5MHz	5.5	5.5÷6.5	6	5.5÷6.5	5.5÷6.5	5.5	5.5	5.5	6÷6.5	5.5	5.5	5.5
2109	100µ	220µ	100µ	220µ	220µ	100µ	100µ	100µ	100µ	100µ	100µ	100µ
2172	–	–	–	–	–	–	–	–	–	470µ	470µ	470µ
2173	–	–	–	–	–	–	–	–	–	470µ	470µ	470µ
2304	–	10n	–	–	–	–	–	–	–	–	–	–
2305	–	10n	–	–	–	–	–	–	–	–	–	–
2306	–	15p	–	–	–	–	–	–	–	–	–	–
2315	–	27p	–	–	–	–	–	–	27	–	–	–
2328	1n	–	1n	–	–	1n	1n	1n	–	1n	1n	1n
2360	10n	–	10n	–	–	10n	10n	10n	–	10n	10n	10n
2365	22n	–	22n	–	–	22n	22n	22n	–	22n	22n	22n
2366	47p	–	47p	–	–	47p	47p	47p	–	47p	47p	47p
2367	47p	–	47p	–	–	47p	47p	47p	–	47p	47p	47p
2515	4µ7	–	4µ7	4µ7	–	–	4µ7	4µ7	4	–	–	–
2516	–	2u2	–	–	2u2	–	–	–	–	2u2	2u2	2u2
2518	1µ	330n	1µ	1µ	330n	1µ	1µ	1µ	1µ	330n	330n	330n
2524	–	270n	–	–	270n	–	–	–	–	270n	270n	270n
2526	–	100n	–	–	100n	–	–	–	–	100n	100n	100n
2527	–	100n	–	–	100n	–	–	–	–	100n	100n	100n
2528	–	100n	–	–	100n	–	–	–	–	100n	100n	100n
2530	–	100n	–	–	100n	–	–	–	–	100n	100n	100n
2531	–	100n	–	–	100n	–	–	–	–	100n	100n	100n
2532	–	100n	–	–	100n	–	–	–	–	100n	100n	100n
2544	1µ	2u2	1µ	1µ	2u2	1µ	1µ	1µ	–	2u2	2u2	2u2
2546	–	100n	–	100n	100n	–	–	–	–	100n	100n	100n
3100	470	470	470	–	470	–	–	–	–	470	–	–
3102	110/200	110/200	110/200	110/200	110/200	110/200	110/200	110/200	110/200	110/200	110/200	110/200
3103	–	110/200	–	110/200	110/200	–	–	–	–	–	–	–
3104	470	470	470	–	470	–	–	–	–	470	–	–
3105	4R7	1R	4R7	1R	1R	4R7	4R7	4R7	4R7	4R7	4R7	4R7
3110	–	10R	–	10R	10R	–	–	–	–	–	–	–
3113	–	1k	–	1k	1k	–	–	–	–	–	–	–
3114	–	10k	–	10k	10k	–	–	–	–	–	–	–
3115	–	1k	–	1k	1k	–	–	–	–	–	–	–
3116	–	220	–	220	220	–	–	–	–	–	–	–
3173	–	–	–	–	–	–	–	–	–	1R5	1R5	1R5
3236	–	–	–	–	–	–	–	–	10k	–	–	–
3267	4k7	10k	4k7	4k7	4k7	10k	4k7	4k7	4k7	10k	10k	10k
3263	27k	20k	27k	27k	20k	27k	27k	27k	27k	20k	20k	20k
3269	10k	12k	10k	10k	12k	10k	10k	10k	10k	12k	12k	12k
3270	–	100k	–	–	–	–	–	–	–	–	–	–
3274	10k	–	10k	–	–	10k	10k	10k	–	10k	10k	10k
3275	–	–	–	–	–	–	–	–	–	10k	10k	10k
3276	10k	10k	10k	10k	10k	10k	10k	10k	10k	–	–	–
3301	–	47k	–	–	–	–	–	–	–	–	–	–
3302	–	3k3	–	–	–	–	–	–	–	–	–	–
3303	–	1k3	–	–	–	–	–	–	–	–	–	–
3306	–	22k	–	–	–	–	–	–	–	–	–	–
3313	–	2k	–	–	–	–	–	–	–	–	–	–
3322	3R3	–	3R3	–	3R3	3R3	3R3	–	3R3	3R3	3R3	3R3
3328	1k2	–	1k2	–	1k2	1k2	1k2	–	1k2	1k2	1k2	1k2
3360	1k2	–	1k2	–	1k2	1k2	1k2	–	1k2	1k2	1k2	1k2
3364	620	–	620	–	620	620	620	–	620	620	620	620
3365	680	–	680	–	–	680	680	–	680	680	680	680
3450	150k	100k	47k	56k	56k	150k	68k	180k	30k	150k	68k	180k
3512	4R7	4R7	4R7	4R7	4R7	4R7	4R7	4R7	82	4R7	4R7	4R7
3519	18k	1k	18k	18k	18k	18k	18k	18k	18k	–	–	–
3521	–	750k	–	–	–	750k	–	–	–	750k	750k	750k
3522	–	200k	–	–	–	200k	–	–	–	200k	200k	200k
3523	–	47k	–	–	–	47k	–	–	–	47k	47k	47k
3524	–	1m5	–	–	–	1m5	–	–	–	1m2	1m2	1m2
3525	–	1k0	–	–	–	1k0	–	–	–	1k0	1k0	1k0
3526	–	560	–	–	–	240	–	–	–	75	75	75
3528	–	560	–	–	–	240	–	–	–	75	75	75
3529	–	560	–	–	–	240	–	–	–	75	75	75
3529	–	1k0	–	–	–	1k0	–	–	–	1k0	1k0	1k0
3530	750k	–	750k	750k	750k	–	750k	750k	75k	–	–	–
3545	470k	–	470k	470k	470k	–	470k	470k	47k	–	–	–
3546	1k2	–	1k2	1k2	1k2	–	1k2	1k2	k2	–	–	–
3547	8k2	–	8k2	8k2	8k2	–	8k2	8k2	8k2	–	–	–
3730	–	–	–	–	–	–	–	–	–	47k	47k	47k
3832	4R7	1R	4R7	1R0	1R0	4R7	4R7	4R7	4R7	1R	4R7	1R
3833	4R7	8R2	4R7	8R2	8R2	4R7	4R7	4R7	4R7	4R7	4R7	4R7
5100	33µ	33µ	33µ	–	33µ	33µ	–	–	–	33µ	–	–
5101 Mains filter	–	–	x	–	–	–	x	x	–	–	–	–
5104	33µ	33µ	33µ	–	33µ	33µ	–	–	–	33µ	–	–
5306	–	0,43µ	–	–	–	–	–	–	–	–	–	–
5321	coil	–	coil	–	–	coil	coil	coil	–	coil	coil	coil
5366	12µ	–	12µ	–	–	12µ	12µ	12µ	–	12µ	12µ	12µ
5550	coil	coil	coil	10µ	coil	coil	10µ	10µ	coil	coil	coil	coil
6109 BT151-500R	–	x	–	x	x	x	–	–	–	–	–	–
6110 BYV058	–	x	–	x	x	x	–	–	–	–	–	–
6113 BZX79-06V8	–	x	–	x	x	x	–	–	–	–	–	–
6172 BYD330	–	–	–	–	–	–	–	–	–	x	x	x
6306 BZX79-06V8	–	x	–	–	–	–	–	–	–	–	–	–
7110 BC548	–	x	–	x	x	x	–	–	–	–	–	–
7301 BC548	–	–	–	–	–	–	–	–	–	–	–	–
7500 TDA3565	x	–	x	x	x	x	x	x	x	–	–	–
7500 TDA3561	–	x	–	–	–	–	–	–	–	x	x	x
7521 BC548	–	x	–	–	–	x	–	–	–	x	x	x
7522 BC548	–	x	–	–	–	x	–	–	–	x	x	x

NOTES