

KTH - POCKET RECEIVER

AM-FM-SW BROADCAST DSP RECEIVER Si4835

COMPONENT LIST

SCHEMATIC NUMBER S-1012-02 V2.0 SCHEMATIC DATE 08-02-2014

PART	VALUE	DISCRIPTION	FORM
R1	180 K	RESISTOR 10 %	0805
R2	1K	RESISTOR 10 %	0805
R3	2 K	RESISTOR 10 %	0805
R4	100 K	RESISTOR 10 %	0805
R5	100 OHM	RESISTOR 10 %	0805
R6	56 K	RESISTOR 10 %	0805
R7	56 K	RESISTOR 10 %	0805
R8	1.5 K	RESISTOR 10%	0805
R9	12 K	RESISTOR 10 %	0805
R10	12 K	RESISTOR 10 %	0805
R11	1.5 K	RESISTOR 10 %	0805
R12	330 OHM	RESISTOR 10 %	0805
R13	10 K	RESISTOR 10 %	0805
R14	330 OHM	RESISTOR 10 %	0805
R-LED	470 OHM	RESISTOR 10%	0805
		BAND SELECTION RESISTORS	
R15	33 K	PRECISIE RESISTOR 1 %	0805
R16	47 K	PRECISIE RESISTOR 1 %	0805
R17	30 K	PRECISIE RESISTOR 1 %	0805
R18	20 K	PRECISIE RESISTOR 1 %	0805
R19	20 K	PRECISIE RESISTOR 1 %	0805
R20	20 K	PRECISIE RESISTOR 1 %	0805
R21	20 K	PRECISIE RESISTOR 1 %	0805
R22	20 K	PRECISIE RESISTOR 1 %	0805
R23	20 K	PRECISIE RESISTOR 1 %	0805
R24	20 K	PRECISIE RESISTOR 1 %	0805
R25	50 K	PRECISIE RESISTOR 1 %	0805
R26	20 K	PRECISIE RESISTOR 1 %	0805
R27	40 K	PRECISIE RESISTOR 1 %	0805
R28	120 K	PRECISIE RESISTOR 1 %	0805
R29	20 K	PRECISIE RESISTOR 1 %	0805

PART	VALUE	CAPACITORS	SIZE
C1	4.7u/16	CERAMIC MULTILAYER	0805
C2			
C3	33n	CERAMIC MULTILAYER	0805
C4	100n	CERAMIC MULTILAYER	0805
C5	100n	CERAMIC MULTILAYER	0805
C6	10pF	CERAMIC MULTILAYER	0805
C7	4.7u/10	CERAMIC MULTILAYER	0805
C8	10pF	CERAMIC MULTILAYER	0805
C9	470n	CERAMIC MULTILAYER	0805
C10	100n	CERAMIC MULTILAYER	0805
C11	2.2u/10	CERAMIC MULTILAYER	0805
C12	2.2u/10	CERAMIC MULTILAYER	0805
C13	2.2uF/10	CERAMIC MULTILAYER	0805
C14	2.2u/10	CERAMIC MULTILAYER	0805
C15	22pF	CERAMIC MULTILAYER	0805
C16	22pF	CERAMIC MULTILAYER	0805
C17	100n	CERAMIC MULTILAYER	0805
C18	100n	CERAMIC MULTILAYER	0805
C19	4.7u/10	CERAMIC MULTILAYER	0805
C20	22uF/10	CERAMIC MULTILAYER	0805
C21	4.7uF/10	CERAMIC MULTILAYER	0805
C22	2.2uF/10	CERAMIC MULTILAYER	0805
C23	2.2uF/10	CERAMIC MULTILAYER	0805
C24	4.7uF/10	CERAMIC MULTILAYER	0805
C25	22uF/6	CERAMIC MULTILAYER	0805
C26	22uF/6	CERAMIC MULTILAYER	0805
C27	22uF/6	CERAMIC MULTILAYER	0805
C28	22uF/6	CERAMIC MULTILAYER	0805

PART	VALEU	SEMICONDUCTORS	SIZE
IC1	RECEIVER	Si4835-B30-GU	SSOP 24PIN
IC2	TDA7050	LF AMPLIFIER	SOIC8
VR1	MCP738831	Li-ion CHARGER	SOT23-5
T1	BFR93A	NPN TRANSISTOR	SOT23
D3	BAV99	DIODE	SOT23

PART	VALEU	COMPONENT	SIZE
1 PCB	No-P-1012-02	DUAL SIDE PCB	54 x94 MM
P1	100K LIN	POT-METER 10 % VISHAY-SPECTROL PRECISION 249FGJS0XB25 104KA 1341 LIN + KNOB	SQ-13x13MM
J1	JACK	DC INPUT JACK 2 MM PIN	
J2	JACK	HEADPHONE STEREO JACK	
S1	SWITCH	MAKE PUSH BOTTOM	
S3	SWITCH	MAKE PUSH BOTTOM	
S2	SWITCH	ON-OFF SWITCH THUMBLER + KNOB	
S4	1x12	MINIATUUR ROTARY SWITCH	DIAM 18MM
L1,L2,L3	BML11HA102SG	MURATA FERRITECHOKE	0805
L4	220uH	WIRE CHOKE 10MM BODY CHOKE	1206
L5	270 nH	SMD WIRE CHOKE	1206
ACCU 1	1 CELL 3.7 V	ACCU 1400 mA Li-ion	From VOTI.nl
TR1	WBC9-1L	TRANSF COILCRAFT 9:1	COILCRAFT UK
LED 1,2 ,3	YELLOW LED	LOW CURREND LED	DIAM 3 MM
X1	32.7 KHZ	WATCH CRYSTAL	
A1,2,3	CONNETOR	BUSCH TYPE	DIAM 4 MM
BOLDS	4xM3	M3x20	
4	M3x8 MM PVC	PCB DISTANCE STUD	MAKE IT 8 MM LONG
1 KNOB		KNOB 6 MM + TUNING SCALE	
1 KNOB		KNOB 4 MM BAND SWITCH	
1	SCALE FRONT	SCALE 1:1 STIKKER	
1	DOC SET	BUILDING OCUMENTATION 1x SCHEMATIC DRW 1x COMPONENT LIST 1x ALLU HOUSING DRW 1x PCB COMP TOP 1x PCB COMP BOTTOM	
1	ALLU HOUSING	BIMBOX 5003-13	111x63x30MM

COILCRAFT

T1= WBC9-1L; URL

http://www.coilcraft.com/forms/files/en/forms/sample_cart.cfm?action=request_sample&part_number=WBC9-1LB&CFID=27058887&CFTOKEN=36800cd3a63a931-4C4E6229-1016-FC16-794A5B2BC81FF269&jsessionid=84301a5a965ee95295e71e4e79069e346422

L5 = 270nH FM resonator choke SMD; URL

http://www.coilcraft.com/forms/files/en/forms/sample_cart.cfm?action=request_sample&part_number=1008HT-R27T_LB&CFID=27058887&CFTOKEN=36800cd3a63a931-4C4E6229-1016-FC16-794A5B2BC81FF269&jsessionid=84301a5a965ee95295e71e4e79069e346422