K1450 RIAA Board Parts List

1	PCB			
1	R13	12R	BR-RD-BK-GD	All MRS25 or similar
2	R23, R24	47R	YL-VI-BK-GD	
2	R8, R10	82R	SL-RD-BK-GD	
2	R1, R26	100R	BR-BK-BK-BK	
1	R27	120R	BR-RD-BK-BK	
1	R14	150R	BR-GN-BK-BK	
1	R25	680R	BL-SL-BK-BK	
5	R3, R6, R11, R12, R15	2K2	RD-RD-BK-BR	
2	R4, R5	3K9	OR-WH-BK-BR	
2	R17, R20	5K6	GN-BL-BK-BR	
2	R7, R9	10K	BR-BK-BK-RD	
2	R18, R19	15K	BR-GN-BK-RD	
1	R2	47K	YL-VI-BK-RD	
2	R16, R22	82K	SL-RD-BK-RD	
2	R21, R28	1M0	BR-BK-BK-YL	
1	U1	78L05C		RS 714-7768
1	U2	79L05C		RS 189-1368
4	Q5, Q6, Q13, Q14	BC549 or ZTX851	NPN	RS 184-4689 or 669-7433
8	Q3, Q4, Q7, Q8, Q9, Q10, Q11, Q12	BC559 or ZTX951	PNP	RS 803-1144 or 669-7635
6	C7, C8, C13, C14, C21, C23	100nF	Polyester	RS 622-4684
1	C2	1uF	Polyester	RS 183-3094
7	C1, C5, C6, C9, C10, C20, C22	100uF 63V	Electrolytic	RS 749-7221
2	C11, C12	470uF 25V	Electrolytic	RS 703-7517
2	C4, C15	220pF	Polystyrene	RS 116-228
1	C19	680pF	Polystyrene	RS 116-256
1	C17	1nF	Polystyrene	RS 116-262

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1	C18	2.2nF	Polystyrene	RS 116-284
1	C3	10nF	Polystyrene	RS 426-3110
1	Q1	BD437 or ZTX851		RS 714-0499 or 669-7433
1	Q2	BD438 or ZTX951		RS 178-1408 or 669-7635
2	C16, C24	2.2uF	Polyester	RS 622-4741

Component notes:

All resistors should be MRS25 or similar low noise metal film types.

BC549 (NPN) can be replaced with ZTX851
BC559 (PNP) can be replaced with ZTX951

These ZTX devices have some of the lowest noise levels of any general transistors.

They fit directly in the PCB, but need to be reversed relative to the TO92 outline; the flat side of the ZTX casing to the curved side of the outline on the PCB.

They can also be used in place of the BD437 & BD438, but need the leads arranging correctly before installation in that case. See the web page images and details.

All electrolytic caps should be low ESR types. The parts specified have rather higher voltage and ripple current ratings than needed for this application, which in turn means the life expectancy of the electrolytic caps is improved by orders or magnitude.

1% polystyrene capacitors are used in critical locations. Good quality non-inductive polyester types are used elsewhere for coupling and decoupling.

Resistor colour code abbreviations:

BK	Black
BR	Brown
RD	Red
OR	Orange
YL	Yellow
GN	Green
BL	Blue
VI	Violet
SL	Grey (Slate)
WH	White
SI	Silver
GD	Gold

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