

CK704 - 1W STEREO AMPLIFIER MODULE

This stereo amplifier module uses the Samsung KA2209 8-pin IC. This is an equivalent IC to the TDA2822. It is designed for portable cassette players & radios. It has a wide operating supply voltage of 1.8V to 9V so it is suitable for battery operation. It can be connected in either a stereo or bridge pattern. The stereo connection is used in this kit. Feed the output from a preamplifier into this kit.

The kit is constructed on a single-sided printed circuit board (PCB) with a printed overlay and bottom solder mask. Protel Autotrax and Schematic were used to produce it.

ASSEMBLY INSTRUCTIONS

Check off the components in the bag against the Component listing. It is generally easiest to solder the lowest height components first - the resistors. Then solder the IC socket & capacitors.

The main thing to watch is to get the electrolytic capacitors in the correct way. The negative terminal is marked on the body of the capacitor. And the positive is marked on the overlay of the PCB. Also make sure to get the IC around the correct way. The dot or marked end of the IC corresponds to the indent shown in the overlay.

Pads are provided for the stereo signal in, out and the power supply. Hook-up wire and speakers are for the user to supply. Speakers should be a minimum of 1W, 4 or 8 ohm.

CIRCUIT DESCRIPTION

This is the text book circuit for this IC in stereo mode. It is ideal for battery powered operation. Power output

depends critically on speaker resistance & supply voltage. At 3V into 4 ohm speakers the power is 0.1W. At 6V into 4 ohm speakers it is 0.65W. At 9V it is over 1W.

COMPONENTS

Resistors 1/4W, 5%:		
4R7 yellow violet gold	R3 R4	2
10K brown black orange	R1 R2	2
Electrolytic capacitors		
10uF mini	C1	1
100uF/25V	C4 C5	2
470uF/16V	C2 C3	2
100nF box capacitor	C6 C7	2
KA2209 IC		1
8 pin IC socket		1
Kit 87 PCB		1

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