先做好准备工作,电阻电容管脚成型,并刮去氧化层,中功率管图上导热硅脂,上到相应的散热器上, 特别要注意上 MJE15030/32/34 和 MJE15031/33/35 的螺丝一定要和固定中功率管的角铝绝缘(用直 径 4mm,长 5-6mm 的热缩套管绝缘)然后按从低到高从输入到输出的顺序插上并焊接好所有元件,先 焊电阻电容,再焊小功率管,然后焊接中功率管,功率管的 B、E 极套上 2mm 直径,长 6-8mm 的热缩 套管绝缘,固定金封管的螺丝也要用直径 4mm,长 5-6mm 的热缩套管绝缘。

静态工作点要根据散热器大小调整,先调放大板,调试时先不连接功率板,从 220 伏电源墙插到变 压器的火线回路里串一只 60-100W 的白织灯泡 (可以接在功放输入保险丝的位置),通电时如果板子有 问题,就不至于烧零件了。把放大板上标注+Vc/0V/-Ve 的焊盘分别连线到+36V/0V/-36V,连好线后 仔细检查,确认无误,通电,先调 Rp2 (靠近中功率管 2SA968 的电位器)到 75 欧电阻压降为 0.8V-1V 左右,再调 Rp1 使放大板 O/P 焊盘直流漂移在 10mV 以内。工作 10 分钟,有条件可以从 O/P 处接上 300 欧耳机,放段音乐试试,如果上述步骤没问题,把功率板 L 形导热铝条固定上到相应的散热器上,L 形铝条和散热器接触面要涂上高导热的导热硅脂,通常同一声道的功率板安装到同一侧的散热器上,若散 热器为多块拼装,建议用紫铜或铝均热条均热处理,按提供的接线图连到放大板到功率板,再从功率板连 线到大水潭及输出喇叭保护电路,仔细检查,确认无误,切记!!! 通电,白炽灯会闪亮下后慢慢变暗, 如果白炽灯一直很亮,说明电路可能有故障,此时要从新检查,测量功率板射极功率电阻压降是否正常 (此时应在 0.1V 之内),如无问题,拆去白炽灯,接好连线,通电,调 Rp2 使每管 200mA (功率板的 5W 射极电阻直流电压降除以电阻值即每管的静态电流),再调节 Rp1 使 O/P 直流漂移在 10mV 内,半 小时后继续增大静态电流并调节输出直流漂移在 10mV 以内,如此反复,直到每管 0.5A 到 0.8A 视散热 器温度情况而定,散热器以 25 度室温下手能长期摸为宜 (50 摄氏度左右)!老化几小时后再测试静态电 流是否在设定值,输出直流漂移时否在 10mV 内,如有偏差,调到设定值。

下面所附图片是 KSA50MKII 机内连线图:

KSA50MKII / 100MKII kit finished product assembly and debugging instructions

First prepare for the work. The resistor and capacitor pins are formed and the oxide layer is scraped off. The medium power tube is coated with thermal grease and installed on the corresponding heat sink. Pay special attention to MJE15030 / 32/34 and MJE15031 / 33/35. The screws must be insulated from the corner aluminum that fixes the middle power tube (insulated with a 4mm diameter, 5-6mm long heat-shrinkable sleeve), and then plug in and solder all components in order from low to high from input to output First weld the resistance capacitor, then the small power tube, and then weld the middle power tube. The B and E poles of the power tube are 2mm in diameter and 6-8mm in length. The heat-shrinkable tube is insulated. 4mm, 5-6mm heat shrinkable tube insulation.

The static operating point should be adjusted according to the size of the radiator. Adjust the amplifier board first. Do not connect the power board when debugging. Plug a 60-100W white woven light bulb from the 220-volt power wall into the transformer's live wire circuit (can be connected to the power amplifier). Input the position of the fuse), if the

board has a problem when the power is on, it will not burn the parts. Connect the pads marked + Vc / 0V / -Ve on the amplifier board to + 36V / 0V / -36V respectively. After connecting the wires, carefully check to make sure that they are correct. Turn on the power and adjust Rp2 (close to the potential of the middle power tube 2SA968). The resistance voltage drop to 75 ohms is about 0.8V-1V, and then adjust Rp1 so that the DC drift of the O / P pad of the amplifier board is within 10mV. Work for 10 minutes. If possible, you can connect a 300 ohm headset from the O / P and try playing a piece of music. If the above steps are OK, fix the L-shaped thermally conductive aluminum bar of the power board to the corresponding radiator. The contact surface between the strip and the radiator should be coated with thermally conductive thermal grease. Usually, the power board of the same channel is installed on the radiator on the same side. Connect the amplifier board to the power board according to the wiring diagram provided, and then connect the power board to the large pond capacitor and the output speaker protection circuit. Check it carefully to confirm that it is correct. Remember! !! !! When the power is turned on, the incandescent lamp will gradually dim after the flash. If the incandescent lamp is always on, it means that the circuit may be faulty. At this time, you should check it again and measure whether the voltage drop of the power resistance of the emitter of the power board is normal. Within), if there is no problem, remove the incandescent lamp, connect the wires, power on, adjust Rp2 to 200mA per tube (divide the DC voltage of the 5W emitter resistor of the power board by the resistance value, which is the static current of each tube), and then Adjust Rp1 to make the O / P DC drift within 10mV. After half an hour, continue to increase the quiescent current and adjust the output DC drift to within 10mV. This is repeated until 0.5A to 0.8A per tube depends on the temperature of the radiator. It is advisable that the hand can be touched for a long time at a room temperature of 25 degrees (about 50 degrees Celsius)! After a few hours of aging, test whether the static current is at the set value and whether the output DC drift is within 10mV. If there is a deviation, adjust to the set value.

The attached picture below is the internal wiring diagram of KSA50MKII:

