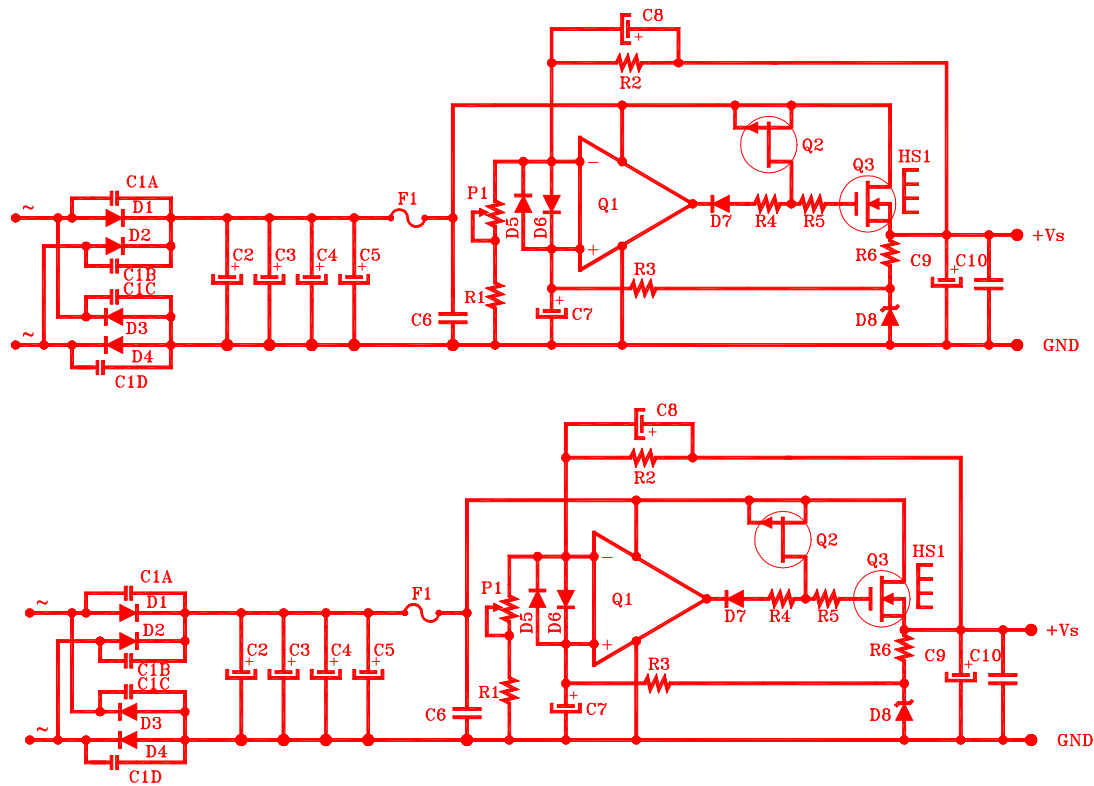


EB-806/271 DUAL POSITIVE PS/REGULATOR.



DUAL LOW-NOISE POWER SUPPLY/REGULATOR
EB-806/271

Description.

The EB-806/271 is a dual positive power supply and regulator, developed for digital systems. The rectifier diodes are soft/fast recovery diodes and the capacitors are low ESR ones. The regulators are using low-noise opamps and MOSFETs as series elements. Both regulators can be configured independently for operation between 5 and 12 Volt. The output voltage is given by the formula: $D8(R2+R1)/R1$, where D8 is 2.5V for 5V and 8V output and 5V for 12V output. For 5V output $R1=R2=1k$. For 8V $R1=1k$ and $R2=2k21$. For 12V $R1=1k$ and $R2=1k4$. The output voltage can be adjusted with the trimpot P1 if necessary (not included in the kits).

Minimum input-output voltage difference is 4V. For a 5V output the minimum input voltage is 9V, which means a transformer with 7V RMS secondary. For 12V output use a 12V RMS transformer. Maximum power dissipation in the output MOSFETs with SK75-50mm heatsink is about 1.5W. With an input-output voltage difference of 5 Volt the maximum current is approx. 300mA. With higher voltage difference the maximum current is less. Output noise over the audio frequency range is $<5\mu V$.

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