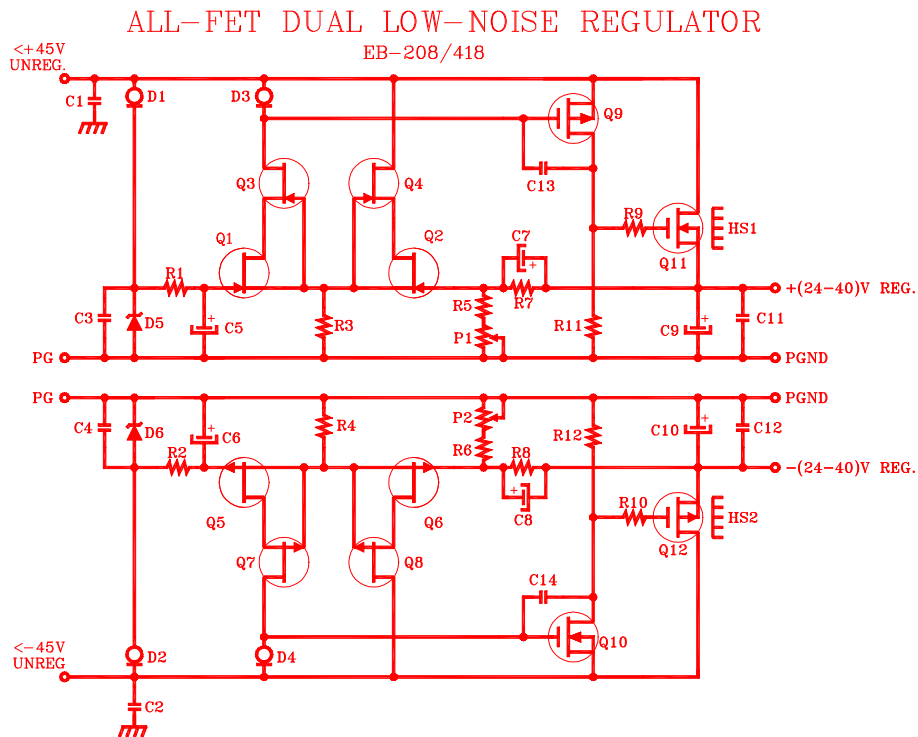


EB-208/418 ALL-FET DUAL LOW-NOISE REGULATOR



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Description.

The EB-208/418 consists of two dual wide-band, low-noise regulators, using only FETs (JFETs and MOSFETs) as active elements. The + and - phase are completely independent to avoid cross modulation. Maximum input voltage is $\pm 45V$ and maximum output voltage is $\pm 40V$. Maximum output current with 5V input/output voltage difference is $\pm 300mA$. The PCB material is FR-4 and the size is 105 x 155mm.

The set-up procedure consists of adjusting the output voltage to the desired value. Connect 2x 240-270 Ohm/5W resistors to the outputs and a DVM across one of the resistors. Connect the appropriate unregulated DC voltage to the regulator (should be approx. 5V higher than the expected output voltage) and check the output with the DVM. Adjust the output voltage to the desired value with trim pots P1/P2. The adjustment range with the supplied components is $\sim 20-32V$. For voltages down to 15V use P1=P2=5k. The EB-208/418 can also be used for digital circuits with $\pm 5V$ supply, consult BORBELY AUDIO for component values.

If you have an oscilloscope and/or an audio μV meter, connect them across the load resistors and check the residual hum/noise. The scope should not show any ripple and the μV meter should show less than 5 μV of noise over the audio bandwidth.

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