Figure 5: Amplifier with negative feedback.

$v'_{O1} - v'_{O2}$. The bridge circuit is often designed with $V^- = 0$ and a dc offset at each output of $V^+/2$ V, thus eliminating the need for a bipolar power supply.
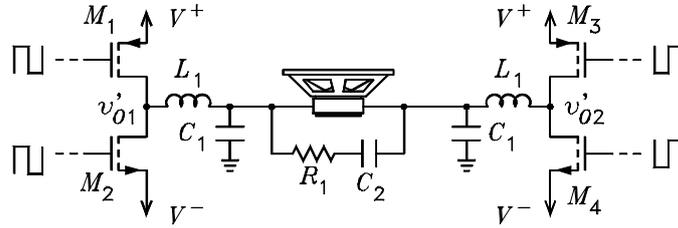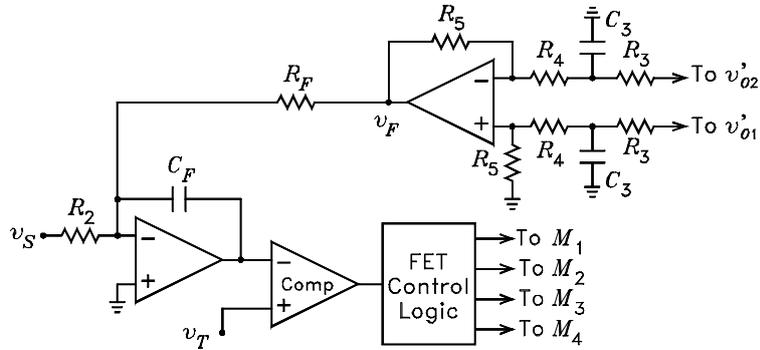

Figure 6: Bridged output stage.

Figure 7: Input stage to the bridged amplifier with feedback.

In the circuit of Fig. 7, a diff amp is used to subtract v'_{O2} from v'_{O1}. The capacitors labeled C_3 act as low-pass filters to limit the rise time of the signals applied to the op amp to prevent slewing. The transfer function for the diff amp and its pole frequency are given by

$$\frac{V_f}{V'_{o1} - V'_{o2}} = \frac{R_5}{R_3 + R_4} \frac{1}{1 + s/\omega_1} \qquad \omega_1 = 2\pi f_1 = \frac{1}{(R_3 \| R_4) C_3} \tag{5}$$

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