

The circuit diagram illustrates a Class-D audio amplifier using an LT1711 comparator. The input stage consists of two differential inputs, V1 and V2, with a series resistance of 40 ohms and a source resistance of 0.02 ohms. The comparator, U1 (LT1711), is configured with a feedback network including a resistor R20 (1 ohm) and a voltage source V3. The output of the comparator is connected to a push-pull output stage consisting of two MOSFETs, M1 and M2, driven by gates G1 and G2. The MOSFETs are IPD180N10N3. The output is filtered by an LC network (L Filter, 33μH and C Filter, 0.47μF) and connected to a speaker load (R_Load, 4 ohms). The circuit is simulated using a transient analysis (.tran 0 2000u 0 10ns uic).