

**ACTIVE LOW PASS FILTER**

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ABSTRACT

A compact, lightweight active low-pass filter (LPF) is provided which can minimize output noise and attain a high Q. The active LPF comprises: a transconductance amplifier 1 for inputting a frequency signal and amplifying a differential voltage between a feedback voltage at an output terminal of the LPF and an input voltage to output it as a current; an emitter follower 2 connected via a resistor R3 to an output end of the transconductance amplifier 1; an emitter follower 3 connected via a resistor R to an output end of the emitter follower 1; capacitors C0 and C1 provided at the output end of the transconductance amplifier 1 and the input end of the emitter follower 3, respectively; a capacitor C2 disposed between the output end of the emitter follower 3 and the input end of the emitter follower 2; and resistors R1 and R2 for dividing the output voltage of the LPF to feed it back to the transconductance amplifier 1.

20 (Fig.1 to accompany abstract)