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Audio signal-controlled supply voltage shifter for the output stage of class AB Amplifier.

ABSTRACT

Audio signal-controlled supply voltage shifter for the output stage of class AB amplifier can be applied with the general class AB amplifier by no improvement. By simulation with three example amplifiers, in case there is no input signal, the voltage buffer circuit for specific output stage can be voltage source about $\pm 0.66V$ and output voltage of amplifiers is nearly zero. In case having input signal at the first time which must be at least $0.16-0.25V_p$ depended on audio frequency to make the circuit active and start voltage source equal to $\pm 10V$. The voltage buffer circuit for specific output stage can be used with supply from $\pm 10V$ to $\pm 90V$, with no exceed the limitation of voltage character of power transistor. When amplifier gives maximum power about $856W$, the voltage buffer circuit for specific output stage has maximum power load about $913W$ or can be current source about at $10.15A$.

KEYWORDS: Audio signal-controlled supply voltage shifter for the output stage, Amplifier, Class AB, Class H