POWER AMPLIFIER CIRCUIT

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PROBLEM TO BE SOLVED: To provide a power amplifier circuit which has high power efficiency while suppressing a fluctuation of output power relatively to a fluctuation of a power supply voltage in a high-efficiency switching amplifier which operates in a radio frequency band.

SOLUTION: A duty ratio control circuit 1 inputs an input signal Pin and a control voltage (a) and controls a duty ratio of a rectangular signal (b) to be outputted by the control voltage (a). A switching power amplifier 2 inputs the rectangular signal (b) having the duty ratio adjusted by the duty ratio control circuit 1. A detector 3 detects a level of an output signal Pout of the switching power amplifier 2 and outputs a detection voltage (d) corresponding to the level of the output signal Pout. A differential amplifier 4 inputs the detection voltage (d) from the detector 3 and a reference voltage (e) and outputs a signal of a differential therebetween as the control voltage (a).