Abstracts

High Efficiency Single and Push-Pull Power Amplifiers

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In this paper, a high efficiency single and push-pull power amplifiers are described. We can construct the high efficiency power amplifier by using the higher harmonics along with the fundamental wave. By connecting the parallel resonators for the fundamental wave fo and the third harmonic 3fo to the load circuit of the amplifier, we can synthesize a square wave which is necessary for obtaining the efficiency amplifier. The single and push-pull power amplifiers were constructed and tested. The operating frequency was 0.9 GHz, and the maximum output power and the power added efficiency were 36.1 dBm and 60 %, respectively, for the single amplifier and they were 39 dBm and 81 % for the push-pull power amplifier.

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