Abstracts

Analysis and Design of Microwave Linearized Amplifiers Using Active Feedback

E. Ballesteros, F. Perez and J. Perez. "Analysis and Design of Microwave Linearized Amplifiers Using Active Feedback." 1988 Transactions on Microwave Theory and Techniques 36.3 (Mar. 1988 [T-MTT]): 499-504.

Intermodulation distortion of active feedback amplifier systems has been analyzed using a simple method. Starting from the amplitude characteristic of both amplifiers -- the main and the auxiliary -- it is possible to calculate the intermodulation distortion of the complete system. Analytical results show that third-order intermodulation products can be considerably reduced when an active feedback with correct amplitude and phase is employed. Experimental measurements have been made on a one-stage bipolar transistor amplifier that confirm the theoretical analysis.

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