Abstracts

A microwave miniaturized linearizer using a parallel diode with a bias feed resistance

K. Yamauchi, K. Mori, M. Nakayama, Y. Mitsui and T. Takagi. "A microwave miniaturized linearizer using a parallel diode with a bias feed resistance." 1997 Transactions on Microwave Theory and Techniques 45.12 (Dec. 1997, Part II [T-MTT] (1997 Symposium Issue)): 2431-2435.

A miniaturized linearizer using a parallel diode with a bias feed resistance has been proposed. The linearizer has positive gain and negative phase deviations and can be used as a linearizer for power amplifiers. These characteristics are provided by a nonlinearity of the diode and movement of bias point caused by a voltage drop at the bias feed resistance. By applying this linearizer to an S-band power amplifier, improvement of adjacent channel leakage power of 5 dB and improvement of power-added efficiency of 8.5% have been achieved for the /spl pi//4-shift QPSK modulated signal.

❑ Return to main document.