Abstracts

A Novel Series Diode Linearizer for Mobile Radio Power Amplifiers

K. Yamauchi, K. Mori, M. Nakayama, Y. Itoh, Y. Mitsui and O. Ishida. "A Novel Series Diode Linearizer for Mobile Radio Power Amplifiers." 1996 MTT-S International Microwave Symposium Digest 96.2 (1996 Vol. II [MWSYM]): 831-834.

A novel series diode linearize has been developed for mobile radio power amplifiers. It is composed of a series diode with a parallel capacitor, which provides positive amplitude and negative phase deviations with the increase of input power, and can compensate AM-AM and AM-PM distortions of power amplifiers. Applying this linearize to 1.9 GHz MMIC power amplifier for the Japanese Personal Handy-phone System (PHS), an improvement of adjacent channel leakage power (ACP) up to 5 dB has been achieved for the pi/4-shifted QPSK modulated signal.

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