Abstracts

A high efficiency feedforward amplifier with a series diode linearizer for cellular base stations

K. Horiguchi, M. Nakayama, Y. Sakai, K. Totani, H. Senda, Y. Ikeda and O. Ishida. "A high efficiency feedforward amplifier with a series diode linearizer for cellular base stations." 2001 MTT-S International Microwave Symposium Digest 01.2 (2001 Vol. II [MWSYM]): 797-800 vol.2.

A feedforward power amplifier (FFPA) with a series diode linearizer using a bias feed resistance is presented. To improve overall feedforward amplifier efficiency, a series diode linearizer is used to provide main amplifier linearization. FFPA efficiency optimization design considering FET efficiency and linearity trade-off has been demonstrated. The developed FFPA achieved the high efficiency of 10% and output power of 45.6 dBm at 10 MHz offset ACLR -50 dBc under W-CDMA 2 carriers signal.

❑ Return to main document.