Abstracts

An L-band high efficiency and low distortion power amplifier module using an HPF/LPF combined interstage matching circuit

K. Mori, S. Shinjo, F. Kitabayashi, A. Ohta, Y. Ikeda and O. Ishida. "An L-band high efficiency and low distortion power amplifier module using an HPF/LPF combined interstage matching circuit." 2000 MTT-S International Microwave Symposium Digest 00.2 (2000 Vol. II [MWSYM]): 865-868.

A three stage high power amplifier (HPA) module for wide-band CDMA handy phones using an HPF/LPF combined interstage matching circuit has been developed. An HPF/LPF combined interstage matching circuit can realize both the optimum load impedance of the second stage FET and the optimum source impedance of the third stage FET to achieve high efficiency. The developed three stage HPA module, size of which is 0.08cc (7 mm/spl times/7 mm./spl times/1.7 mm), achieves a power-added efficiency of 43.9% and an output power of 27.1 dBm with an adjacent channel leakage power (ACP) of -38 dBc at 1.95 GHz.

❑ Return to main document.