Abstracts

High-efficiency power amplifier integrated with antenna

V. Radisic, Siou Teck Chew, Yongxi Qian and T. Itoh. "High-efficiency power amplifier integrated with antenna." 1997 Microwave and Guided Wave Letters 7.2 (Feb. 1997 [MGWL]): 39-41.

Two class B GaAs field-effect transistor (FET) power amplifiers integrated with patch antennas have been designed and fabricated at 2.48 GHz. Both amplifiers are integrated with patch antennas, which serve as load and radiator. In one case, a standard patch design was used with random harmonic termination. In another case, a modified patch design was used, which allows the tuning of the second harmonic. In this case the antenna has an additional function of a filter. An increase of 7% in the power-added efficiency (PAE) and 0.5 dB in the output power was achieved through the second harmonic tuning.

❑ Return to main document.