Abstracts

High efficiency power amplifier with novel PBG ground plane for harmonic tuning

C.Y. Hang, V. Radisic, Yongxi Qian and T. Itoh. "High efficiency power amplifier with novel PBG ground plane for harmonic tuning." 1999 MTT-S International Microwave Symposium Digest 99.2 (1999 Vol. II [MWSYM]): 807-810 vol.2.

A high efficiency S-band power amplifier utilizing a novel photonic band-gap (PBG) ground plane is presented. This novel design not only allows intrinsic second and third harmonic tuning without using any filters, but also offers the potential of greatly reducing the amplifier size. An increase of 10% in power added efficiency (PAE) and 1.3 dB in output power has been achieved when compared to a reference amplifier.

❑ Return to main document.