

Abstracts

High efficiency wideband 6 to 18 GHz PHEMT power amplifier MMIC

J.J. Komiak, Wendell Kong and K. Nichols. "High efficiency wideband 6 to 18 GHz PHEMT power amplifier MMIC." 2002 MTT-S International Microwave Symposium Digest 02.2 (2002 Vol. II [MWSYM]): 905-907 vol.2.

Design and performance of a power amplifier that has established new benchmarks for 6 to 18 GHz power is reported. The amplifier achieved 7.5 Watts max, 5.4 Watts average, 4 Watts min with 36 % max, 22 % average PAE and 12 dB of power gain from 6 to 18 GHz. This output power, bandwidth, and efficiency is superior to the best previously reported results. The amplifier is implemented in a fully selective 0.15 um double recess power PHEMT process.

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