Abstracts

A power amplifier with efficiency improved using defected ground structure

Jong-Sik Lim, Ho-Sup Kim, Jun-Seok Park, Dal Ahn and Sangwook Nam. "A power amplifier with efficiency improved using defected ground structure." 2001 Microwave and Wireless Components Letters 11.4 (Apr. 2001 [MWCL]): 170-172.

The authors report the effects of defected ground structure (DGS) on the output power and efficiency of a class-A power amplifier. In order to evaluate the effects of DGS on the efficiency and output power, two class-A GaAs FET amplifiers have been measured at 4.3/spl sim/4.7 GHz. One of them has a 50 /spl Omega/ microstrip line with DGS at the output section, while the other has only 50 /spl Omega/ straight line. It is shown that DGS rejects the second harmonic at the output and yields improved output power and power added efficiency by 1/spl sim/5%.

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