Abstracts

A novel low impedance line for MMIC using air-gap stacked structure

Gi-Hyon Ryu, Dae-Hyun Kim, Jae-Hak Lee and Kwang-Seok Seo. "A novel low impedance line for MMIC using air-gap stacked structure." 2000 MTT-S International Microwave Symposium Digest 00.2 (2000 Vol. II [MWSYM]): 613-616.

A novel low impedance line for MMIC is proposed which uses air-gap stacked microstrip structure and does not require any dielectric process. The proposed transmission line has the width of about 1/3 times that of the conventional microstrip line. It shows lower transmission loss than thin film low impedance transmission line. The proposed transmission line was used to the matching stub of the balanced amplifier MMIC based on the 0.25 /spl mu/m gate GaAs P-HEMT technology, reducing the chip size by 69% compared with the conventional microstrip-based design.

❑ Return to main document.