Abstracts

Novel active differential phase splitters in RFIC for wireless applications (Dec. 1998, Part II [T-MTT])

Huainan Ma, Sher Jiun Fang, Fujiang Lin and H. Nakamura. "Novel active differential phase splitters in RFIC for wireless applications (Dec. 1998, Part II [T-MTT])." 1998 Transactions on Microwave Theory and Techniques 46.12 (Dec. 1998, Part II [T-MTT] (1998 Symposium Issue)): 2597-2603.

Two novel active differential phase splitters have been designed and fabricated in a GaAs MESFET process. The new circuits employ a concept of feedback to adjust gain and phase unbalance separately and accurately. The active phase splitters feature simplicity, low power supply, and wide-band performance. The circuits can provide /spl plusmn/1 dB and 180/spl plusmn/1/spl deg/ differential signals within 4 GHz bandwidth, well covering the frequency range currently used for dual-band commercial wireless communications. In narrow-band application, more accurate balanced differential signals can be achieved by external tuning.

❑ Return to main document.