Abstracts

Circuit Techniques for Efficient Linearised GaAs MMIC's (1992 Vol. II [MWSYM])

D.G. Haigh. "Circuit Techniques for Efficient Linearised GaAs MMIC's (1992 Vol. II [MWSYM])." 1992 MTT-S International Microwave Symposium Digest 92.2 (1992 Vol. II [MWSYM]): 1035-1038.

This paper is concerned with novel circuit designs for monolithic microwave integrated circuit technology using depletion-mode GaAs MESFET's. A synthesis method leading to high efficiency implementation of linear functions based on a square-law FET characteristic is presented and used to design a linearised isolator which is compared with a non-linearised design. A circuit equivalent to a common-gate FET, but with linearity, high efficiency, and reduced FET gate-width and power consumption, is proposed for future use in improved isolators and amplifiers.

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