

Abstracts

Silicon Bipolar Fixed and Variable Gain Amplifier MMICs for Microwave and Lightwave Applications Up to 6 GHz (1989 Vol. I [MWSYM])

I. Kipnis, J.F. Kukielka, J. Wholey and C.P. Snapp. "Silicon Bipolar Fixed and Variable Gain Amplifier MMICs for Microwave and Lightwave Applications Up to 6 GHz (1989 Vol. I [MWSYM])." 1989 MTT-S International Microwave Symposium Digest 89.1 (1989 Vol. I [MWSYM]): 109-112.

A variety of fixed and variable gain amplifier MMICS for applications up to 6 GHz are presented. The circuits are fabricated using an $f_{\text{sub T}} = 10$ GHz, $f_{\text{sub max}} = 20$ GHz, non-polysilicon-emitter silicon bipolar process. Three amplifier topologies and their performance will be reported: a fixed-gain wideband amplifier, a high-gain low-noise amplifier that can also be effectively used as a transimpedance amplifier and a variable gain amplifier.

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