

# Abstracts

## Computer-Aided Design of Hybrid and Monolithic Broad-Band Amplifiers for Optoelectronic Receivers (Short Papers)

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*A. Perennec, R. Soares, P. Jarry, P. Legaud and M. Goloubkoff. "Computer-Aided Design of Hybrid and Monolithic Broad-Band Amplifiers for Optoelectronic Receivers (Short Papers)." 1989 Transactions on Microwave Theory and Techniques 37.9 (Sep. 1989 [T-MTT] (Special Issue on FET Structures Modeling and Circuit Applications)): 1475-1478.*

In very high data rate fiber-optic systems, it is necessary to have an ultra-wide-band, high-gain, low-noise amplifier after the front end. This paper shows how powerful analytical techniques, such as the real frequency technique, may be applied to the design of a 4 MHz-7 GHz amplifier. A two-stage monolithic amplifier designed according to the theory gives 17 dB gain; a three-stage hybrid amplifier exhibits 16 dB gain across the same frequency band.

 [Return to main document.](#)