Abstracts

A 0.5-12 GHz Hybrid Matrix Distributed Amplifier Using Commercially Available FETs

S. D'Agostino, G. D'lnzeo, G. Grifoni, P. Marietti and G. Panariello. "A 0.5-12 GHz Hybrid Matrix Distributed Amplifier Using Commercially Available FETs." 1991 MTT-S International Microwave Symposium Digest 91.1 (1991 Vol. I [MWSYM]): 289-292.

In this work we present a matrix distributed amplifier for a coherent high bit-rate optical receiver front-end. A gain of 20 dB in the 0.5-12 GHz with a noise figure between 5-8 dB over the whole frequency range has been obtained together with a low VSWR as the experimental results prove. The layout is very simple in comparison to other hybrid realizations reported in literature and is fully related with the lumped elements of the circuit schematic. The computed results obtained using a small signal model for each FET fit rather well with measurements.

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