Abstracts

Novel 36 GHz GaAs Frequency Doublers Using (M)MIC Coplanar Technology

M.A. Tuko and I. Wolff. "Novel 36 GHz GaAs Frequency Doublers Using (M)MIC Coplanar Technology." 1992 MTT-S International Microwave Symposium Digest 92.3 (1992 Vol. III [MWSYM]): 1167-1170.

The design and performance of single-device and balanced versions of (M)MIC GaAs FET frequency doublers from 18 GHz to 36 GHz, fabricated in purely CPW- techniques are presented. Coplanar discontinuities which are usually neglected are taken into consideration in the analysis and design. Spiral inductors and their associated parasitic capacitances are used for impedance matching and phase shifting purposes. Simulation and measurement results are in good agreement. The investigated doublers have a minimum conversion loss of 7 dB.

❑ Return to main document.