# Abstracts

## Fabrication, RF Performance, and Yield of a Combined Limiting Amplifier and Dual-Modulus Prescaler GaAs IC Chip

*A.E. Geissberger, R.A. Sadler, H.P. Singh, G.K. Lewis, I.J. Bahl, M.L. Balzan, E.L. Griffin and M.J. Drinkwine. "Fabrication, RF Performance, and Yield of a Combined Limiting Amplifier and Dual-Modulus Prescaler GaAs IC Chip." 1988 Transactions on Microwave Theory and Techniques 36.12 (Dec. 1988 [T-MTT] (1988 Symposium Issue)): 1706-1713.*

We present production technology details, RF performance, and yield results for an ECL-compatible, L-band, limiting dual-modulus (/spl divide/10/11) prescaler. This multifunction self-aligned gate (MSAG) process for monolithic integration of analog and digital circuit functions rises refractory self-aligned gate FET technology. When tested with -22 dBm input signal power, one lot of six wafers had a total RF chip yield of 19 percent, with a best-wafer yield of 43 percent. The average operating frequency was 1.45 GHz (SD=51 MHz) with an average power dissipation of 696 mW (SD=23 mW).

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