Abstracts

GaAs Ultra High Frequency Dividers with Advanced SAINT FETs (1986 [MCS])

K. Osafune, T. Enoki, K. Yamasaki and K. Ohwada. "GaAs Ultra High Frequency Dividers with Advanced SAINT FETs (1986 [MCS])." 1986 Microwave and Millimeter-Wave Monolithic Circuits Symposium Digest 86.1 (1986 [MCS]): 81-85.

Circuit design, fabrication and performance of ultra high frequency dividers with GaAs BFL circuits are described. 10.6 GHz operation at 258 mW is achieved using a new self-aligned gate, GaAs FET process, called Advanced SAINT, which avoids excess gate metal overlap on the dielectric film and air-bridge technology, due to a reduction of gate and interconnection parasitic capacitance. Furthermore, the possibility of above 20 GHz high frequency operation for GaAs MESFET frequency dividers is predicted by circuit optimization and FET improvements including parasitic capacitance reduction and transconductance enhancement.

❑ Return to main document.