

Session GG

Millimeter-wave Integrated Circuits and Technology II



Chairman:

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This session highlights state-of-the-art results in millimeter-wave diode, HEMT and FET mixers, as well as novel passive circuits. Examples include 8 dB conversion loss at 94 GHz for a four diode MMIC mixer, 6 dB noise figure and 17.8 dB conversion gain HEMT down converter and a FET mixer that minimizes $1/f$ noise. Planar 3-way and 5-way combiners for Q and V band with 0.6 dB loss and 15 dB or more isolation have been demonstrated. A nearly dispersion free transmission line with buried silicide ground plane is proposed for picosecond pulse. This would have significance for future 100 GHz integrated circuits.

10:30 a.m.–12:00 p.m., Thursday, June 13, 1991
Ballroom A