Abstracts

Millimeter-Wave Microstrip Oscillators (Short Papers)

B.S. Glance and M.V. Schneider. "Millimeter-Wave Microstrip Oscillators (Short Papers)." 1974 Transactions on Microwave Theory and Techniques 22.12 (Dec. 1974, Part II [T-MTT] (1974 Symposium Issue)): 1281-1283.

Hybrid-integrated millimeter-wave sources at 30, 60, and 100 GHz have been built using a novel oscillator configuration. The new structure features a planar microstrip circuit in a conducting channel with an IMPATT diode which is inserted into the side wall of the channel. RF efficiencies of 5 percent at an output power of a quarter-watt CW have been measured both at 30 and 60 GHz. The output power at 100 GHz is 25 mW with an efficiency of 2 percent. The oscillators can be readily tuned over a 10-percent bandwidth.

❑ Return to main document.