Abstracts

Subharmonic Planar Doped Barrier Mixer Conversion Loss Characteristics

S. Dixon, Jr. and R.J. Malik. "Subharmonic Planar Doped Barrier Mixer Conversion Loss Characteristics." 1983 Transactions on Microwave Theory and Techniques 31.2 (Feb. 1983 [T-MTT] (Special Issue on Millimeter-Waves)): 155-158.

Planar doped barrier (PDB) diodes have been successfully used in a subharmonically pumped coplanar-stripline mixer circuit. A comparison is made in the conversion loss of the symmetric and asymmetric PDB diodes. A dramatic decrease in conversion loss is obtained when the PDB diode I-V curve is perfectly symmetric. A minimum conversion loss in the order of 5.0 dB is obtained at a signal frequency of 2.0 GHz.

❑ Return to main document.