Abstracts

Conversion Losses in Schottky-Barrier Diode Mixers in the Submillimeter Region

W.M. Kelly and G.T. Wrixon. "Conversion Losses in Schottky-Barrier Diode Mixers in the Submillimeter Region." 1979 Transactions on Microwave Theory and Techniques 27.7 (Jul. 1979 [T-MTT]): 665-672.

Conversion losses, both intrinsic and parasitic, are calculated for Schottky diode mixers in the submillimeter region, and optimum mixer performance is shown to depend strongly upon operating frequency and upon diode diameter. The implications for high-frequency diode fabrication are discussed, and a comparison is made of the expected performance of GaAs, Si, and InSb Schottky diodes at frequencies up to 5 THz.

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