Abstracts

Design and Performance Analysis of an Octave Bandwidth Waveguide Mixer

L.T. Yuan. "Design and Performance Analysis of an Octave Bandwidth Waveguide Mixer." 1977 Transactions on Microwave Theory and Techniques 25.12 (Dec. 1977 [T-MTT] (1977 Symposium Issue)): 1048-1054.

A new broad-band mixer capable of operating over two full adjacent waveguide bands (18 to 26.5 GHz and 26.5 to 40 GHz) is described. Within the octave bandwidth from 20 to 40 GHz, the maximum conversion loss is 6.5 dB with a corresponding average DSB noise figure of 5.7 dB. A theoretical analysis is given to treat quantitatively the performance of the octave bandwidth waveguide mixer.

❑ Return to main document.