Abstracts

Two-Path Cutoff Waveguide Dielectric Resonator Filters (Jul. 1989 [T-MTT])

H. Shigesawa, M. Tsuji, T. Nakao and K. Takiyama. "Two-Path Cutoff Waveguide Dielectric Resonator Filters (Jul. 1989 [T-MTT])." 1989 Transactions on Microwave Theory and Techniques 37.7 (Jul. 1989 [T-MTT]): 1105-1112.

This paper proposes a new type of evanescent-mode waveguide filter consisting of two parallel cutoff waveguide paths with dielectric resonators. We initiate here an accurate design method incorporating both the full-wave analytical method and the impedance inverter method. The specified overall characteristic is then synthesized with the help of a computer-aided design method. Measurements on several kinds of filters modeled at X-band show excellent agreement with the designed characteristics.

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