Abstracts

LTCC wide-band ridge-waveguide bandpass filters

Yu Rong, A. Zaki, J. Gipprich, M. Hageman and D. Stevens. "LTCC wide-band ridge-waveguide bandpass filters." 1999 Transactions on Microwave Theory and Techniques 47.9 (Sep. 1999, Part II [T-MTT] (Special Issue on Multilayer Microwave Circuits)): 1836-1840.

A ridge-waveguide tap-in coupling structure is applied to the design of wide-band ridge-waveguide bandpass filters using low-temperature cofired ceramic (LTCC). The design is based on rigorous mode-matching modeling, which takes the higher order mode interactions into account. A design procedure is described and design examples are given to demonstrate the features of the proposed coupling structure. A wide-band LTCC ridge-waveguide filter is simulated and successfully built. Good experimental results are obtained.

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