Abstracts

Photonic bandgap structures used as filters in microstrip circuits

I. Rumsey, M. Piket-May and P.K. Kelly. "Photonic bandgap structures used as filters in microstrip circuits." 1998 Microwave and Guided Wave Letters 8.10 (Oct. 1998 [MGWL]): 336-338.

The application of photonic bandgap structures (PBG's) as substrates in microstrip circuits has been investigated. The effects of substrate thickness, microstrip transmission line location, and length of the PBG structure were studied using a finite-difference time-domain (FDTD) simulation and experimental measurement. A low-pass filter with a very wide high-frequency rejection bandwidth was constructed from a serial connection of many different PBG structures.

❑ Return to main document.