

# Abstracts

## High isolation, planar filters using EBG substrates

---

*J. Chappell, M.P. Little and L.P.B. Katehi. "High isolation, planar filters using EBG substrates." 2001 Microwave and Wireless Components Letters 11.6 (Jun. 2001 [MWCL]): 246-248.*

The concept of electromagnetic bandgaps (EBGs) has been utilized to develop a high-quality filter that can be integrated monolithically with other components due to a reduced height, planar design. Coupling adjacent defect elements in a periodic lattice creates a filter characterized by its ease of fabrication, high-Q performance, high-port isolation, and integrability to planar or 3-D circuit architectures. The filter proof of concept has been demonstrated in a metallo-dielectric lattice. The measured and simulated results of 2-, 3-, and 6-pole filters are presented at 10.7 GHz.

 [Return to main document.](#)