

## Harmonic Suppression in Microstrip Dual-Mode Ring-Resonator Bandpass Filters

---

*U. Karacaoglu, D. Sanchez-Hernandez, I.D. Robertson and M. Guglielmi. "Harmonic Suppression in Microstrip Dual-Mode Ring-Resonator Bandpass Filters." 1996 MTT-S International Microwave Symposium Digest 96.3 (1996 Vol. III [MWSYM]): 1635-1638.*

This paper introduces two new topologies for rejecting the harmonics in microstrip ring resonator filters. First one uses 50 Ohm spur line filter structures placed at the input and output of the ring to suppress the first harmonic. Second topology incorporates low-pass structures into the ring for elimination of the harmonics.

 [Return to main document.](#)