

# Abstracts

## Consideration of Parasitic Bypass Couplings in Overmoded Cavity Filter Designs

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*U. Rosenberg and W. Hagele. "Consideration of Parasitic Bypass Couplings in Overmoded Cavity Filter Designs." 1994 Transactions on Microwave Theory and Techniques 42.7 (Jul. 1994, Part II [T-MTT] (Special Issue on Filters and Multiplexers)): 1301-1306.*

Parasitic bypass couplings-occurring especially in compact higher order mode cavity filters-cause evident deterioration of the desired ideal responses. The study of a TE<sub>301</sub> mode cavity filter design gives an explanation of the reasons of such unwanted couplings. Based on this knowledge, corrective measures are established and experimentally verified to compensate for unwanted deviations from the ideal filter response. Moreover, this kind of bypass coupling can be utilized to improve the response in advanced cavity filter designs.

[Return to main document.](#)