

# Abstracts

## Extension of Levy's Large-Aperture Design Formulas to the Design of Circular Irises in Coupled-Resonator Waveguide Filters (Short Papers)

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A. Jennings and R.L. Gray. "Extension of Levy's Large-Aperture Design Formulas to the Design of Circular Irises in Coupled-Resonator Waveguide Filters (Short Papers)." 1984 Transactions on Microwave Theory and Techniques 32.11 (Nov. 1984 [T-MTT]): 1489-1493.

This paper extends some results for waveguide irises to obtain accurate design formulas for the design of circular waveguide irises in coupled-resonator rectangular waveguide filters. Experimental results confirm the improved accuracy of the new design formulas. The new approach has been successfully applied to the design of a 12-GHz waveguide filter in WR90 waveguide for satellite transponder studies. Improved accuracy in the iris design enabled the filter to meet stringent group delay specifications.

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