# Abstracts

## Waveguide Bandstop Elliptic Function Filters

*J.D. Rhodes. "Waveguide Bandstop Elliptic Function Filters." 1972 Transactions on Microwave Theory and Techniques 20.11 (Nov. 1972 [T-MTT]): 715-718.*

Using the "natural prototype" for elliptic function filters, a design procedure is presented for a class of waveguide bandstop filters, which exhibit equiripple passband and stopband responses. Due to the availability of explicit formulas for element values in the natural prototype elliptic function filter, the design procedure is entirely analytic and does not require numerical synthesis techniques. The resulting physical structure is the familiar uniform guide with iris-coupled series stubs. Unlike the bandstop filters designed from maximally flat or Chebyshev prototypes, the elliptic function design results in stubs that are not exactly three-quarter-wave coupled.

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