Abstracts

Filter Design Using In-Line Triple-Mode Cavities and Novel Iris Couplings

U. Rosenberg and D. Wolk. "Filter Design Using In-Line Triple-Mode Cavities and Novel Iris Couplings." 1989 Transactions on Microwave Theory and Techniques 37.12 (Dec. 1989 [T-MTT] (1989 Symposium Issue)): 2011-2019.

The introduction of an in-line triple-mode cavity and two new iris coupling methods provide a significant extension in filter designs. It is shown that these principles allow optimal filter realizations with a minimum of triple- and dual-mode cavities. A conspicuous example is the possible elliptic function in-line filter design up to seventh order. Verification of these principles has been obtained through several realized new filter types. Experimental results are provided for elliptic function filters of fifth, sixth (both in in-line configuration) and seventh order using a minimum number of TE/sub 113//TM/sub 012/ degeneracies.

❑ Return to main document.