Abstracts

Realizations of a Duo-Pole Branch of an Elliptic-Function Bandstop Filter (Correspondence)

B.M. Schiffman. "Realizations of a Duo-Pole Branch of an Elliptic-Function Bandstop Filter (Correspondence)." 1967 Transactions on Microwave Theory and Techniques 15.8 (Aug. 1967 [T-MTT]): 487-487.

This correspondence illustrates six realizations of the TEM line (transformed) equivalent of the LC network A of Fig. 1. Network A is here taken to represent a shunt branch of a low-pass elliptic-function ladder filter. Richards' transformation converts a lumped element low-pass filter to a transmissionline bandstop filter. Each filter element, L or C, is then replaced by a short- or open-circuited quarter-wave stub. Thus, network A is transformed to network B, with parameters as defined in Fig, 1. The six stripline and reentrant slabline networks C-H are equivalent to network B and are well suited for microwave filters. The characteristic impedances of the lines in networks C, D, E, and H are given in Fig. 1, and the coupled-line impedances of networks F and G are given in Schiffman and Matthaei and Schiffman.

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