# Abstracts

## On Using the Q of Transmission Lines (Correspondence)

*W.T. Jones and J.R. Griffin. "On Using the Q of Transmission Lines (Correspondence)." 1968 Transactions on Microwave Theory and Techniques 16.4 (Apr. 1968 [T-MTT]): 258-260.*

The realization of bandpass filters and impedance matching networks consisting of cascaded series and shunt segments of a transmission line is facilitated by a design procedure which relates the Q of individual frequency selective sections to the total required Q (denoted by Q/sub T/) and the desired network response. The method described herein gives exact results for two- and three-section networks and yields a close approximation to the desired response for higher order networks if Q/sub T/ is not too small. A general form of the transmission-line network to be considered is shown in Fig. 1, where series elements are impedance transformers and shunt elements are shorted stubs. All characteristic impedances are assumed to be real and Theta refers to electrical length.

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