

Abstracts

Frequency Response of Strip-line Traveling-Wave Directional Filters (Correspondence)

R.D. Standley. "Frequency Response of Strip-line Traveling-Wave Directional Filters (Correspondence)." 1963 Transactions on Microwave Theory and Techniques 11.4 (Jul. 1963 [T-MTT]): 264-265.

Coale analyzed the single resonator stripline traveling-wave filter shown in Fig. 1 by a perturbation method. Design criteria were formulated relating loaded Q to pertinent circuit parameters. Experimentally it is observed that properly aligned filters exhibit a frequency response which is approximately Butterworth. The purpose of this communication is to show that the approximate frequency response of narrow bandwidth filters in the absence of dissipation and resonator discontinuities is theoretically Butterworth. Comments on the design problem are included as well as a discussion of the effects of resonator discontinuities.

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