

Abstracts

Re-Entrant Directional Coupler Using Strip Transmission Line (Correspondence)

L. Lavendol and J.J. Taub. "Re-Entrant Directional Coupler Using Strip Transmission Line (Correspondence)." 1965 Transactions on Microwave Theory and Techniques 13.5 (Sep. 1965 [T-MTT]): 700-701.

This correspondence describes a printed-circuit directional coupler design that is applicable to tight coupling (1 to 10 dB) values; it is a strip transmission line equivalent of the re-entrant coaxial coupler described by Cohn. 1 Figure 1(a) shows the cross-sectional view of Cohn's device; the printed-circuit (strip transmission line) equivalent is shown in Fig. 1 (b). The design of the coaxial version is determined by characteristic impedances Z_{01} (the impedance of a bar of width w and height $b/2$ placed within a ground plane spacing $b/1$) and Z_{02} (the impedance of the inner coaxial lines).

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