

Branch-line couplers using unequal line lengths (Comments and reply)

R.W. Vogel, C. Toker, M. Saglam, M. Ozme and N. Gunalp. "Branch-line couplers using unequal line lengths (Comments and reply)." 2001 Transactions on Microwave Theory and Techniques 49.10 (Oct. 2001, Part I [T-MTT] (Mini-Special Issue on Electrical Performance of Electronic Packaging (EPEP))): 1824-.

For original paper see Toker et al., *ibid.*, vol.49. no.4, pp.718-21, 2001. In the above paper, Toker et al. maintain that the general solution of branch-line couplers is provided. In fact, the more general coupler was published previously by the author (see *ibid.*, vol.40, pp.253-62, 1992). Simplifying the general structure in this paper by removing the lumped elements, one can get the branch-line coupler. A reply to these comments by Toker et al. is included.

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