

# Abstracts

## A Generalized Model for Coupled Lines and its Applications to Two-Layer Planar Circuits (Reply to Comments)

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C.-M. Tsai and K.C. Gupta. "A Generalized Model for Coupled Lines and its Applications to Two-Layer Planar Circuits (Reply to Comments)." 1994 *Transactions on Microwave Theory and Techniques* 42.2 (Feb. 1994 [T-MTT]): 360-361.

The authors agree that Sellberg's equation is more accurate "theoretically." However, (1) in our paper is a "necessary condition" for perfect isolation of couplers without shunting capacitors. As we discussed in the paragraph right after (1) in our paper, this condition is "practically" impossible for inhomogeneous couplers (without shunting capacitors), and therefore the average value of phase velocities has been used in the design. This is still valid.

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