

Abstracts

Significant contribution of improper-real solution to the fields excited by a practical source in printed-circuit transmission lines (Dec. 1999 [T-MTT])

M. Tsuji, N. Yahata and H. Shigesawa. "Significant contribution of improper-real solution to the fields excited by a practical source in printed-circuit transmission lines (Dec. 1999 [T-MTT])." 1999 Transactions on Microwave Theory and Techniques 47.12 (Dec. 1999 [T-MTT] (Special Issue on 1999 International Microwave Symposium)): 2487-2492.

For conductor-backed coplanar strips, we first reported that nonphysical improper solution has a significant effect on the physical total field excited by a practical source. Here, we quantitatively and experimentally investigate this unexpected effect for slot lines in more detail, and we conclude that it occurs on most, if not all, printed-circuit lines; thus, the effect is rather general.

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