Abstracts

Time-domain characterization of packaging effects via segmentation technique

M. Righi, G. Tardioli, L. Cascio and W.J.R. Hoefer. "Time-domain characterization of packaging effects via segmentation technique." 1997 Transactions on Microwave Theory and Techniques 45.10 (Oct. 1997, Part II [T-MTT] (Special Issue on Interconnects and Packaging)): 1905-1910.

The analysis of a monolithic microwave integrated circuit (MMIC) placed in a surface-mount plastic package is presented. Critical issues such as poor grounding conditions and crosstalk are addressed and discussed. The significance of a full-wave characterization of the component is shown. Results are validated with data available in the literature showing good agreement. A segmentation approach is also proposed to efficiently analyze the problem. The package effects are extracted and can be combined with MMIC parameters at the design stage to predict the performance of the packaged circuit.

❑ Return to main document.