Abstracts

Modeling of Planar Varactor Frequency Multiplier Devices with Blocking Barriers (Comments and Authors' Reply)

R.J. Hwu, U. Lieneweg, T. Tolmunen, M.A. Frerking and J. Maserjian. "Modeling of Planar Varactor Frequency Multiplier Devices with Blocking Barriers (Comments and Authors' Reply)." 1993 Transactions on Microwave Theory and Techniques 41.2 (Feb. 1993 [T-MTT]): 361-362.

I am compelled to write this comment in disagreement with some information in the paper "Modeling of Planar Varactor Frequency Multiplier Devices with Blocking Barriers" by Lieneweget et al. A precursor to that paper was published in the Proceedings of the Second International Symposium on Space Terahertz Technology. It appears to me that some conclusions drawn in this paper are the same as that which were discussed in my thesis (see UCLA thesis 1991). At that time, I raised my concern about the difference of the effective RC time constant between single and two back-to-back connected BIN (Barrier-Intrinsic-N/sup +/) diodes based on high frequency measurement results I had obtained over a period of two years. I also provided an explanation in terms of the behavior of the effective series resistance and capacitance of the back-to-back connected diodes that was not experimentally verified…

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