Abstracts

Modeling and optimization of RF reconfigurable tuners with computationally efficient time-domain techniques

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Modern RF-MEMS device design is difficult due to the lack of tools capable of simulating highly integrated structures. This paper presents methods in which the FDTD technique can be used to model a reconfigurable RF-MEMS tuner. A new method of modeling a conductor intersecting a cell is presented. In addition, code parallelization and variable gridding are used to simulate the tuner. Results are presented showing the simulation and measurement results of the tuner.

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