Calculating EMS and EMI for Volumes of Microstrip Lines by Analytical Formula

Wu Chun Te
E-mail: samuel@mail.dyu.edu.tw

ABSTRACT
Although the structure of microstrip line is simple, it is hard to calculate accurately by 3D-full wave solvers. For FDTD and FEM methods, the small size between signal and ground plane always need small size meshes to simulate it. As for MoMs, it is quite suitable for simulating thin wire structure such as microstrip lines. However, hundreds of lines will cause the computational inefficiency. This study presents formula based equations to calculate for fast and accurately calculate EMS and EMI by microstrip lines.

Keywords: FDTD, FEM, EMI, EMC

REFERENCES