

2-D envelope finite element (EVFE) technique - implementation of PML and dispersive medium

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An implementation of perfect matched layer (PML) boundary conditions for 2-D envelope finite element (EVFE) techniques is proposed. The performance of PML is tested for different excitation modes and number of layers. It shows overall 50 dB absorption with a 16 layers absorber. Furthermore, the extended EVFE formulation for structures containing dispersive medium is also presented. Numerical results generated show good agreements with analytical results.

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