

Abstracts

Electrostatic Potential Distribution through a Rectangular Aperture in a Thick Conducting Plane (Short Papers)

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A potential distribution through a rectangular aperture in a thick conducting plane is examined when the incident electric field is normal to the rectangular aperture. The Fourier-transform is used to represent the potential in the spectral domain and the boundary conditions are enforced to represent a solution in closed form. Numerical computations are performed to illustrate the behavior of the potential distribution through a thick rectangular aperture. Our solution for the electric polarizability is represented in rapidly converging series so that it is numerically efficient.

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