

Abstracts

Attenuation Due to Ohmic Losses in Periodic Dipole and Slot Arrays

*N. Amitay and H. Zucker. "Attenuation Due to Ohmic Losses in Periodic Dipole and Slot Arrays." 1972 *Transactions on Microwave Theory and Techniques* 20.2 (Feb. 1972 [T-MTT]): 148-155.*

The analysis of the attenuation due to ohmic losses in periodic linear arrays of metallic cylinders, ribbons, and slots in a metallic ground plane is presented. Calculations indicate that the loss per unit length of the ribbon and cylinder arrays is comparable to that of a standard rectangular waveguide operated in the TE₁₀ mode. With a proper choice of parameters, the loss per unit length of the slot array can be brought to within a factor of 2 of that of rectangular waveguides.

[Return to main document.](#)