

Abstracts

Parametric Equations for Surface Waves In Dielectric Slab (Short Papers)

J.C. Hantgan. "Parametric Equations for Surface Waves In Dielectric Slab (Short Papers)." 1987 *Transactions on Microwave Theory and Techniques* 35.10 (Oct. 1987 [T-MTT]): 921-922.

For the dielectric slab it is shown that 1) the dispersion curve for the nth surface wave can be found using parametric equations in which the normalized inside wavenumber $K_{sub xl}$ and the mode number are the parameters, 2) the dispersion curve for the nth surface wave mode can also be found by using parametric equations in which the mode number and a modified wavenumber x' with common domain $[0, \pi/2]$ are the parameters, and 3) an TE or all TM dispersion curves for surface waves are related to each other by a simple algebraic equation using the mode numbers and the normalized propagation constants $K_{sub 0}$ and Beta as the variables.

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