

# Abstracts

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

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*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  $n$ th surface wave can be found using parametric equations in which the normalized inside wavenumber  $K_{x1}$  and the mode number are the parameters, 2) the dispersion curve for the  $n$ th 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  $K_0$  and  $\beta$  as the variables.

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