Abstracts

Mode-coupling phenomena of the even modes on microstrip line

Jyh-Wen Sheen, Tai-Lee Chen and Yu-De Lin. "Mode-coupling phenomena of the even modes on microstrip line." 1998 MTT-S International Microwave Symposium Digest 98.2 (1998 Vol. II [MWSYM]): 651-654.

Mode-coupling phenomena of the even modes on a microstrip line are presented in this paper. These phenomena occur when the dispersion curve of the microstrip line leaky dominant mode is close to those of the conventional microstrip line dominant mode or the microstrip line higher order modes. Interesting mode-coupling and mode evolution patterns are observed. Current distributions of the modes near the mode-coupling region are also shown. The ways to control the coupling region by the geometric parameters and to avoid the excitation of the microstrip leaky dominant mode in designing a leaky-wave antenna are discussed based on these mode patterns.

❑ Return to main document.