Abstracts

Generalized quasi-TEM approximation and telegrapher equations for nonreciprocal ferrite-loaded transmission lines

This letter proposes a generalization of both the quasi-TEM approximation and the telegrapher equations suitable for the analysis of nonreciprocal ferrite-loaded transmission lines with arbitrarily oriented magnetization, including nonbidirectional structures. The nonreciprocal behavior of the propagation constant of the line is modeled by introducing a new line parameter that will be called characteristic memductance of the line.

❏ Return to main document.