

Abstracts

The Limiting Value of the Interaction Between Symmetrical Fringing Capacitances (Short Papers)

*H.J. Riblet. "The Limiting Value of the Interaction Between Symmetrical Fringing Capacitances (Short Papers)." 1973 *Transactions on Microwave Theory and Techniques* 21.10 (Oct. 1973 [T-MTT]): 644-647.*

It is well known that the fringing capacitances determined for rectangular bars between parallel plates interact with each other when $w/(b - t) \rightarrow 0$. The limit of this interaction as $s \rightarrow 0$ for fixed w , b , and t is determined for symmetrical odd-mode fringing capacitances. This limit, together with an exact value known from one rectangular section and the known asymptotic value as $s \rightarrow 0$, permits one to estimate the values for all s . The same is true for the interaction of the symmetrical even-mode fringing capacitances, except that their interaction is readily shown to tend to zero as $s \rightarrow 0$.

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