

Abstracts

Anomalous Loss at a Ferrite Boundary

L. Lewin. "Anomalous Loss at a Ferrite Boundary." 1972 Transactions on Microwave Theory and Techniques 20.9 (Sep. 1972 [T-MTT]): 604-607.

The occurrence of anomalous loss and its explanation in terms of surface waves is discussed. For this type of explanation to be possible the region of occurrence of the surface wave must at least straddle the region of anomalous loss. It is shown that this is so, particularly for the case when there is a mixed air-ferrite surface layer for which this result is not obvious: as the air content decreases, a ferrite-metal surface wave appears and takes over the function of the layer wave. The means by which these waves are generated, and the determination of their amplitudes, appear to require a new physical principle to be applied. A new type of "edge condition" is postulated.

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