

Abstracts

Effect of a Mismatched Ring in a Traveling-Wave Resonant Circuit (Correspondence)

K. Tomiyasu. "Effect of a Mismatched Ring in a Traveling-Wave Resonant Circuit (Correspondence)." 1957 Transactions on Microwave Theory and Techniques 5.4 (Oct. 1957 [T-MTT]): 267-268.

In traveling-wave resonant ring circuits wave amplitude "amplification" has been predicted and shown experimentally. In the present note, the input reflection coefficient (input vswr) and wave amplification are considered when the resonant ring circuit contains a mismatch. Qualitatively a small mismatch (low vswr) can produce under resonant conditions a greatly "magnified" input vswr and reduces the maximum attainable amplification in the ring.

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