Abstracts

A Low VSWR Matching Technique (Correspondence)

A.J. Giger. "A Low VSWR Matching Technique (Correspondence)." 1956 Transactions on Microwave Theory and Techniques 4.3 (Jul. 1956 [T-MTT]): 184-187.

A variation on the method described by Feller and Weidner for abtaining low standing wave ratios over a frequency band has proven to be very useful in the design of low vswr microwave components. If curve A in Fig. 1 represents the input admittance of the device to be matched, the method described by Feller proceeds as follows: 1) Insert a value of susceptauce which causes the curve to lie along a constant vswr circle (curve B). 2) Move toward the generator until the frequency sensitivity of the line length causes the curve to reduce to a point (point C). 3) Move to the nearest intersection with the g=1 circle (curve D). 4) Insert a value of susceptance which transforms the admittance plot to the center of the chart; i.e., a matched condition (curve E).

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