

THE DESIGN, FABRICATION AND TESTING
OF PASSIVE MICROSTRIP CIRCUITS

by

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A MASTER'S REPORT

submitted in partial fulfillment of the
requirements for the degree

MASTER OF SCIENCE

Department of Electrical Engineering

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1972

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Major Professor

LD
2668
R4
1972
R665
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PREFACE

The objective of this report is to assimilate from the published literature and place in one report the pertinent information necessary to design a microstrip transmission line. This report does not contain an analysis of the microstrip line; for such an analysis see references (1, 2).

A thick film procedure was used to fabricate microstrip lines for testing. The choice of this method of fabrication does not imply that this method is superior to other methods. Rather, this method was chosen since the necessary materials and equipment were readily available in the Department of Electrical Engineering.

A passive device, in this case a directional coupler, was selected as a design test device so as to incorporate a microstrip transmission line.

Finally, the microwave microstrip transmission lines and directional couplers that were fabricated were tested and an account of the results is given.

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