

# Contents

## Microwave Applications General

K. G. Riedel Hyperthermia in Cancer Therapy: Technical and Clinical Aspects.....	3
H. P. Groll Industrial Applications of Microwaves.....	12
B. Liesenkötter Microwave Satellite Reception Technology.....	28
M. H. Wolf Low Cost GPS-Receiver - A Satellite Navigation Receiver for the Global-Positioning-Systems.....	39

## Microwave Measuring Technology

D. Augustin Vector Network Analysis at Millimeter Frequencies.....	47
M. Rieger, W. Hieber Transistor Modeling Based on Small Signal S- and Y-Parameters.....	59
G. Kompa, M. Schlechtweg, F. van Raay Novel Redundant Calibration Procedure for Computer - Corrected S-Parameter Characterization of Microstrip Components.....	65
B. Neumeyer Comparison of Different S-Parameter Measurement Systems in the MM-Wave Range.....	71

## Microwave Semiconductors

W. Harth Semiconductor Microwave Devices.....	79
E. Pettenpaul GaAs Monolithic Microwave Integrated Circuit's (MMIC's).....	93
J. Buechler, E. Kasper, P. Russer, K. M. Strohm Planar Millimeter-Wave Circuits on Silicon Substrate.....	108
F.X. Kärtner Noise Analysis of Oscillators.....	114