



IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES

APRIL 1971

Published Monthly

VOLUME MTT-19

NUMBER 4

EDITORIAL BOARD

Editor

G. I. Haddad

D. K. Adams
D. B. Anderson
F. Arams
J. R. Ashley
K. Ayaki
A. J. Bahr
R. H. T. Bates
R. W. Beatty
H. Beneking
P. Bernardi
M. M. Brady
F. Brand
M. Brodwin
H. Bussey
C. J. Carter
K. S. Champlin
A. Clavin
S. B. Cohn
E. Cristal
J. B. Davies
L. E. Davis
B. C. DeLoach
L. B. Felsen
F. E. Gardiol
R. V. Garver
J. W. Gewartowski
P. Goodman
A. Gopinath
A. I. Grayzel
S. Hagelin
R. D. Hall
M. A. K. Hamid
W. Harth
J. Helszajn
B. Hershenov
M. C. Horton
D. D. King
W. Kotyczka
R. Levy
L. Lewin
N. Lipetz
W. E. Little
T. Makimoto
G. L. Matthaei
S. E. Miller
R. Mittra
W. W. Mumford
B. R. Nag
L. S. Napoli
E. Dragø Nielsen
H. Okean
D. Parker
J. D. Rhodes
K. R. Richter
E. Rivier
G. P. Rodrique
F. J. Rosenbaum
R. Sato
G. E. Schafer
E. Schlömann
R. F. Schwartz
R. Slevin
H. Sobol
P. I. Somlo
W. Steenaart
W. H. Steier
D. Steinbrecher
F. Sterzer
D. Stinson
D. J. R. Stock
W. Streifer
C. T. Tai
T. Tamir
J. Taub
F. J. Tischer
H. G. Unger
A. G. van Nie
C. Veronda
R. J. Wenzel
A. Wexler
E. Yamashita
L. Young

PAPERS

Generalized Theory of Waveguide Differential Phase Sections and Application to Novel Ferrite Devices.....	<i>N. B. Sultan</i>	348
A Study of a Driven Oscillator with FM Feedback by Use of a Phase-Lock-Loop Model.....	<i>L. W. Couch</i>	357
Broad-Banding and Changing Operation Frequency of Circulator.....	<i>Y. Naito and N. Tanaka</i>	367
Coaxial Bandpass Filter Design.....	<i>W. A. Davis and P. J. Khan</i>	373
Tables of Impedance Matching Networks Which Approximate Prescribed Attenuation Versus Frequency Slopes.....	<i>O. Pitzalis, Jr., and R. A. Gilson</i>	381
Modal Inversion in Circular Waveguides—Part I: Theory and Phenomenology.....	<i>G. N. Tsandoulas and W. J. Ince</i>	386
Modal Inversion in Circular Waveguides—Part II: Application to Latching Nonreciprocal Phasers.....	<i>W. J. Ince and G. N. Tsandoulas</i>	393

CORRESPONDENCE

Dispersion Relations for Guided Waves in a Simple Moving Medium.....	<i>H. Y. Yee</i>	400
Mode Propagation in a Nonuniform Cylindrical Medium.....	<i>A. W. Snyder</i>	402
A Laser Resonator with a Selector for a Higher Transverse Mode....	<i>S. Kawakami and S. Nishida</i>	403
A Technique for Measuring Phase at Millimeter Wavelengths..	<i>F. H. Cleveland and N. P. Kernweis</i>	406
Roots of Equiripple Insertion-Loss Functions for Commensurate Line Filters....	<i>O. P. Gupta</i>	410
International Intercomparison of Power Standards at 3 GHz.....	<i>G. F. Engen and P. A. Hudson</i>	411
Complex Permittivity of Conductor-Dielectric Mixtures.....	<i>W. S. Rothwell</i>	413
Tensor Character of Symmetrical Waveguide Junctions.....	<i>J. B. Knorr</i>	414
On the Design of Impedance-Transforming Directional Couplers....	<i>R. B. Ekinge</i>	415
Differences Between In-Line and Crossed-Field Three-Port Circuit Models for Interdigital Transducers.....	<i>W. R. Smith and H. M. Gerard</i>	416

COMPUTER PROGRAM DESCRIPTIONS

MSTRIP (Parameters of Microstrip).....	<i>T. G. Bryant and J. A. Weiss</i>	418
--	-------------------------------------	-----

CONTRIBUTORS.....	419
-------------------	-----

INFORMATION ON COMPUTER PROGRAM DESCRIPTIONS.....	421
---	-----