

Index to IEEE Transactions on Microwave Theory and Techniques

Volume MTT-14, 1966

Author Index

(The following author listings include title of paper, page number and month. (C) indicates Correspondence.)

A

- Alday, J. R.; G. E. Everett, D. J. White. Improved Response of Pyroelectric Millimeter Wave Detectors.....(C) 100 Feb
- Alvarez, R. (*See Weaver and Alvarez*)
- Armstrong, M. E. (*See DuHamel and Armstrong*)
- Assaly, R. N. Some Designs of X_1 -Band Diode Switches..... 553 Nov
- Audeh, N. F. (*See Uptain and Audeh*)
- Audeh, N. F. (*See Yee and Audeh*)
- Azakami, T. (*See Yamamoto, Azakami, and Itakura*)

B

- Bahar, E. Propagation in a Microwave Model Waveguide of Variable Surface Impedance—Theory and Experiment..... 572 Nov
- Bandler, J. W. Frequency Responses in the Reflection Coefficient Plane Plotted by Digital Computer.....(C) 399 Aug
- Barnes, F. S. (*See Gerdine and Barnes*)
- Betts, F.; D. H. Temme, and J. A. Weiss. A Switching Circulator: S-Band; Stripline; Remanent: 15 kW; 10 μ s; Temperature-Stable 665 Dec
- Bladel, J. Van. The Matrix Formulation of Scattering Problems 130 Mar
- Bonfeld, M. D.; D. F. Linn, M. Omori. A Novel Strip Line Circulator.....(C) 98 Feb
- Brodwin, M. E. (*See Gabriel and Brodwin*)
- Brodwin, M. E. (*See Weiner, Brodwin, and Miller*)
- Brown, J., Jr. (*See Parks, Savage, Lavedan, and Brown*)
- Burman, R. On Transverse Electromagnetic Wave Propagation in a Cylindrically Stratified Magnetoplasma..... (C) 253 May
- Burman, R. Resonances of a Cylindrical Cavity in a Lossy Compressible Plasma.....(C) 251 May

C

- Cambrell, G. K. (*See Carson and Cambrell*)
- Carlile, R. N. Quasi- TE_{11} Modes in an Anisotropic Plasma Waveguide.....(C) 350 Jul
- Carson, C. T.; G. K. Cambrell. Upper and Lower Bounds on the Characteristic Impedance of TEM Mode Transmission Lines(C) 497 Oct
- Champlin, K. S.; G. H. Glover. "Gap Effect" in Measurement of Large Permittivities.....(C) 397 Aug
- Chao, Cheng Lee. Frequency Doublers Using Varactors Exhibiting "Punch-Through" Capacitance-Voltage Behavior.....(C) 43 Jan
- Chen, D.; T. C. Lee. Propagation Characteristics of a Partially Filled Cylindrical Waveguide for Light Beam Modulation..... 482 Oct
- Chow, K. K. On the Solution and Field Pattern of Cylindrical Dielectric Resonators..... (C) 439 Sep
- Cohn, S. B.; K. C. Kelly. Microwave Measurement of High Dielectric Constant Materials..... 406 Sep
- Cohen, J.; J. Taub. Confocal Resonator Band-Pass Filters..... 698 Dec
- Coleman, P. D. (*See Likuski, Coleman, and Stafford*)
- Compton, R. T., Jr. (*See Du and Compton*)

Cowley, A. M. (*See Lepoff and Cowley*)

- Cowley, A. M.; H. O. Sorensen. Quantitative Comparison of Solid-State Microwave Detectors..... 588 Dec
- Cristal, E. G. (*See Young and Cristal*)
- Cristal, Edward G. Analysis and Exact Synthesis of Cascaded Commensurate Transmission-Line C-Section All-Pass Networks 285 Jun
- Addendum.....(C) 499 Oct
- Cristal, Edward G. Band-Pass Spurline Resonators...(C) 296 Jun
- Cristal, Edward G. Coupled-Transmission-Line Directional Couplers with Coupled Lines of Unequal Characteristic Impedances 337 Jul
- Crystal, Edward G. Re-Entrant Directional Couplers Having Direct Coupled Center Conductors.....(C) 207 Apr

D

- Davis, L. E. Permeability of Toroids in Latching Ferrite Devices(C) 95 Feb
- Du, L. J.; R. T. Compton, Jr. Cutoff Phenomena for Guided Waves in Moving Media..... 358 Aug
- DuHamel, R. H.; M. E. Armstrong. Log-Periodic Transmission Line Circuits—Part I: One-Port Circuits..... 264 Jun
- Dyson, John D. The Measurement of Phase at UHF and Microwave Frequencies..... 410 Sep

E

- Emery, F. E.; M. O'Hagan. Optimal Design of Matching Networks for Microwave Transistor Amplifiers.....(C) 696 Dec
- Epprecht, G. (*See Mahile and Epprecht*)
- Everett, G. E. (*See Alday, Everett, and White*)

F

- Felden, M. (*See Roussy and Felden*)
- Fjerstad, Roger L. A Compact, Wide-Tuning Range, Dual TE_{11} Mode Preselector..... 424 Sep
- Freyheit, P. J.; C. D. Lustig. Determination of Equivalent Network Parameters for a Lossless Two-Port Junction.....(C) 93 Feb

G

- Gabriel, G. J.; M. E. Brodwin. Distributions Between Gyroelectric and Gyromagnetic Media in Rectangular Waveguide.....(C) 292 Jun
- Gabriel, G. J.; M. E. Brodwin. Perturbation Analysis of Rectangular Waveguide Containing Transversely Magnetized Semiconductor..... 258 Jun
- Gerdine, M. A.; F. S. Barnes. A Parallel-Strip Point-Contact Diode Mount for Video Detection of Millimeter Waves.....(C) 41 Jan
- Getsinger, William J. The Packaged and Mounted Diode as a Microwave Circuit..... 58 Feb
- Glover, G. H. (*See Champlin and Glover*)
- Grandy, W. T., Jr. (*See Kerns and Grandy*)

- Grayzel, Alfred I. Computation of the Performance of the Abrupt Junction Varactor Doubler.....239 May
 Grove, Wayne M. Sampling for Oscilloscopes and Other RF Systems: Dc through X-Band.....629 Dec

H

- Haddad, George I. Characteristics of Dielectrically Loaded Ladder Lines for Traveling-Wave Masers and Other Applications.....120 Mar
 Haden, C. R.; T. D. Shockley, Jr. Nuclear Radiation Perturbation of a Semiconductor-Filled Microwave Cavity.....347 Jul
 Hagelin, Sven. A Flow Graph Analysis of 3- and 4-Port Junction Circulators.....243 May
 Hamilton, J. J. Dual Reflex Klystron Cavity-Beam Interaction.....(C) 209 Apr
 Hudson, P. A. A High Directivity, Broadband Coaxial Coupler... (C) 293 Jun

I

- Iga, K. (*See Suematsu, Iga, and Ito*)
 Ishii, T. K. (*See Steinhoff and Ishii*)
 Itakura, K. (*See Yamamoto, Azakami, and Itakura*)
 Ito, S. (*See Suematsu, Iga, and Ito*)

J

- Jakes, W. C., Jr. Analysis of Coupling Loops in Waveguide and Application to the Design of a Diode Switch.....189 Apr
 James, C. R.; G. B. Walker. An Approximate Wave Equation for an Axially Symmetric Periodic Waveguide.....428 Sep
 Johnson, Kenneth M. Microwave Varactor Tuned Transistor Oscillator Design.....564 Nov
 Jones, R. R. (*See Whicker and Jones*)
 Jones, R. R. A Slow-Wave Digital Ferrite Strip Transmission Line Phase Shifter.....684 Dec

K

- Kaufman, I.; R. F. Soohoo. Comments on Excitation of Spin Waves by Wire Arrays.....(C) 496 Oct
 Kelly, K. C. (*See Cohn and Kelly*)
 Kerns, D. M.; W. T. Grandy, Jr. Perturbation Theorems for Waveguide Junctions, with Applications.....85 Feb
 Kollberg, E. Optimum Pitch of Traveling-Wave Masers.....(C) 212 Apr
 Kumagai, Nobuaki. Microwaves at Japanese Universities.....(C) 694 Dec
 Kurpis, G.; J. Taub. X to K Band Broadband Varactor Frequency Doubler.....(C) 94 Feb
 Kurzrok, R. M. Design of Comb-Line Band-Pass Filters.....(C) 351 Jul
 Kurzrok, R. M. General Three-Resonator Filters in Waveguide... (C) 46 Jan
 Correction.....(C) 498 Oct
 Kurzrok, R. M. General Four-Resonator Filters at Microwave Frequencies.....(C) 295 Jun

L

- LaRosa, R.; C. F. Vasile. Comments on Excitation of Spin Waves by Wire Arrays.....(C) 594 Oct
 Larrabee, R. D. Characteristics of Waveguides with a Semiconductor Side Wall.....306 Jul
 Laura, P. A. Application of the Point-Matching Method in Waveguide Problems.....(C) 251 May
 Lavedan, L. J., Jr. (*See Parks, Savage, Lavedan, and Brown*)
 Lee, T. C. (*See Chen and Lee*)
 Lepoff, J. H.; A. M. Cowley. Improved Intermodulation Rejection in Mixers.....618 Dec
 Levin, B. J. The Modified Series Model for an Abrupt-Junction Varactor Frequency Doubler.....184 Apr
 Levinson, D. S.; I. Rubinstein. A Technique for Measuring Individual Modes Propagating in Overmoded Waveguide...310 Jul
 Levy, R.; I. Whiteley. Synthesis of Distributed Elliptic-Function Filters from Lumped-Constant Prototypes.....506 Nov
 Likuski, R.; P. D. Coleman, J. J. Stafford. A Resonator Technique for Studying Dispersion in Longitudinally Magnetized Plasma Guides.....(C) 40 Jan

- Lindell, Ismo V. Slope Parameter and Q of Radial Resonators.....(C) 97 Feb
 Linn, D. F. (*See Donfeld, Linn, and Omori*)
 Lonngren, K. E. On Longitudinal Waves in a Hot-Nonuniform Plasma.....(C) 494 Oct
 Lustig, C. D. (*See Freyheit and Lustig*)

M

- MacKenzie, T. E.; A. E. Sanderson. Some Fundamental Design Principles for the Development of Precision Coaxial Standards and Components.....29 Jan
 Maher, B.; D. Mitchell, A. Reeves. A 150 Mc/s Circulator.....(C) 42 Jan
 Mahle, C.; G. Epprecht. Reflection Measurements with Broadband Frequency Modulation Using Long Transmission Lines.....(C) 496 Oct
 Mallory, K. B.; R. H. Miller. On Nonresonant Perturbation Measurements.....(C) 99 Feb
 Mathis, H. F. Design of Lossless Junction, Given One Row in its Scattering Matrix.....(C) 159 Mar
 Matthaei, George L. Short-Step Chebyshev Impedance Transformers.....372 Aug
 McManus, J. W. (*See Passaro and McManus*)
 Miller, D. (*See Weiner, Brodwin, and Miller*)
 Miller, D. B. An Experimental X-Band Electron-Cyclotron-Resonance Plasma Accelerator.....(C) 162 Mar
 Miller, R. H. (*See Mallory and Miller*)
 Mink, J. W.; E. H. Scheibe. A Dual-Mode Beam Waveguide Resonator and Frequency Stabilizer at Millimeter-Wave Frequencies.....222 May
 Mitchell, D. (*See Maher, Mitchell, and Reeves*)
 Mohr, M.; S. Monaghan. Circularly-Polarized Phase Shifter for Use in Phased Array Antennas.....672 Dec
 Monaghan, S. (*See Mohr and Monaghan*)
 Mosko, J. A. (*See Shelton and Mosko*)

N

- Nagelberg, E. R.; J. Shefer. Dispersion Characteristics of an Array of Parasitic Linear Elements.....391 Aug
 National Bureau of Standards. Calibration of Coaxial Bolometer Mounts.....(C) 161 Mar
 National Bureau of Standards. Measurements of Microwave Power in WR127 Waveguide (5.85-8.20 GHz).....(C) 213 Apr
 National Bureau of Standards. Measurement of Microwave Power in WR112 Waveguide (7.05 to 10.0 GHz)...(C) 254 May
 National Bureau of Standards. Peak, Pulse Power Calibrations Initiated.....(C) 47 Jan
 National Bureau of Standards. Three Microwave Calibration Services Extended: Noise Sources, Attenuation, Reflection Coefficient... (C) 93 Feb
 Naumann, S. J. (*See Sethares and Naumann*)
 Nicholson, B. F. The Resonant Frequency of Interdigital Filter Elements.....(C) 250 May

O

- O'Hagan, M. (*See Emery and O'Hagan*)
 Okean, H. C. Synthesis of Negative Resistance Reflection Amplifiers Employing Band-Limited Circulators.....323 Jul
 Okwit, S. (*See Sard, Peyton, and Okwit*)
 Oltman, George. The Compensated Balun.....112 Mar
 Omori, M. (*See Donfeld, Linn, and Omori*)
 Ott, Edward. Multiline 2N-Port Directional Couplers.....(C) 578 Nov
 Owyang, G. H.; S. R. Seshadri. Guided Waves Propagating Along the Magnetostatic Field at a Plane Boundary of a Semi-Infinite Magnetoionic Medium.....136 Mar

P

- Parks, J. K.; B. R. Savage, L. J. Lavedan, Jr., J. Brown, Jr. A Miniaturized C-Band Digital Latching Phase Shifter...688 Dec
 Passaro, W. C.; J. W. McManus. A 35 GHz Latching Switch.....669 Dec
 Peyton, B. (*See Sard, Peyton, and Okwit*)
 Plonus, M. A. On the Impedance of a Finite Slot.....(C) 48 Jan
 Plutchok, Hy. On High-Frequency Stability of Tunnel Diode Amplifiers.....(C) 93 Feb

Pyle, J. R. The Cutoff Wavelength of the TE₁₀ Mode in Ridged Rectangular Waveguide of Any Aspect Ratio.....175 Apr

R

Reeder, T. M. An Equivalent Circuit for the "Centipede" Waveguide.....200 Apr
 Reeves, A. (*See Maher, Mitchell, and Reeves*)
 Reggia, F. Amplitude and Phase Modulators in Rectangular Waveguides for 5 to 7 Gc/s.....(C) 154 Mar
 Ren, Chung-Li. Network Representation for Lossless Symmetrical Discontinuities in a Multimode Waveguide.....81 Feb
 Ricardi, Leon J. A Diplexer Using Hybrid Junctions....364 Aug
 Robinson, S. A. (*See Vendelin and Robinson*)
 Rosenberg, D.; D. J. R. Stock. Some Results for Thin-Iris Loaded Periodic Waveguides.....145 Mar
 Ross, G. F. The Transient Analysis of Certain TEM Mode Four-Port Networks.....528 Nov
 Roussy, G.; M. Felden. A Sensitive Method for Measuring Complex Permittivity with a Microwave Resonator.....171 Apr
 Rubinstein, I. (*See Levinson and Rubinstein*)
 Rzepecka, M.; S. Stuchly. Rectangular Waveguide Short Circuit with Cylindrical Slugs.....(C) 161 Mar

S

Sanderson, A. E. (*See MacKenzie and Sanderson*)
 Sard, E.; B. Peyton, S. Okwit. A Positive Resistance Up-Converter for Ultra-Low-Noise Amplification.....608 Dec
 Savage, B. R. (*See Parks, Savage, Lavedan, and Brown*)
 Scheibe, E. H. (*See Mink and Scheibe*)
 Schiffman, B. M. Multisection Microwave Phase-Shift Network.....(C) 209 Apr
 Schiffman, B. M. Two Nomograms for Coupled-Line Sections for Band-Stop Filters.....(C) 297 Jun
 Schiffman, B. M.; L. Young. Design Tables for an Elliptic-Function Band-Stop Filter ($N=5$).....474 Oct
 Schlomann, Ernst. Theoretical Analysis of Twin-Slab Phase Shifters in Rectangular Waveguide.....15 Jan
 Schmitt, H. J.; H. Zimmer. Fast Sweep Measurements of Relaxation Times in Superconducting Cavities.....(C) 206 Apr
 Seckelmann, R. Propagation of TE Modes in Dielectric Loaded Waveguides.....518 Nov
 Seckelmann, Robert. Phase-Shift Characteristics of Helical Phase Shifters.....24 Jan
 Seshadri, S. R. (*See Ouyang and Seshadri*)
 Sethares, J. C.; S. J. Naumann. Design of Microwave Dielectric Resonators.....2 Jan
 Severin, P. J. W.; A. G. Van Nie. A Simple and Rugged Wide-Band Gas Discharge Detector for Millimeter Waves.....431 Sep
 Shefer, J. (*See Nagelberg and Shefer*)
 Shelton, Paul. Comments on "Polarization Transformation in Twisted Anisotropic Media".....(C) 579 Nov
 Shelton, J. Paul, Jr. Impedances of Offset Parallel-Coupled Strip Transmission Lines.....7 Jan
 Shelton, J. P.; J. A. Mosko. Synthesis and Design of Wide-Band Equal-Ripple TEM Directional Couplers and Fixed Phase Shifters.....462 Oct
 Shimada, S. A Method of Calculating the Attenuation Constants of the Unwanted Modes in Mode Filters Using Resistive Sheets.....(C) 159 Mar
 Shimada, Sadakuni. Resonant Cavity Type Mode Transducer.....384 Aug
 Shockley, T. D., Jr. (*See Haden and Shockley*)
 Singletary, J., Jr. Fringing Capacitance in Strip-Line Coupler Design.....(C) 398 Aug
 Soohoo, R. F. (*See Kaufman and Soohoo*)
 Sorensen, H. O. (*See Cowley and Sorensen*)
 Smythe, R. C. On Incidental Dissipation in High-Pass and Band-Stop Filters.....(C) 208 Apr
 Stafford, J. J. (*See Likuski, Coleman, and Stafford*)
 Steele, Charles W. A Nonresonant Perturbation Theory...70 Feb
 Stegen, R. J. Simplified Determination of Impedances of Cheby-

shev Transformers.....(C) 354 Jul
 Steier, W. H. Some Characteristics of Alternating Gradient Optical Transmission Lines.....228 May
 Steinhoff, R. W.; T. K. Ishii. Pickup Antennas for Waveguide Motors.....(C) 438 Sep
 Stock, D. J. R. (*See Rosenberg and Stock*)
 Stuchly, S. (*See Rzepecka and Stuchly*)
 Suematsu, Y.; K. Iga, S. Ito. A Light Beam Waveguide Using Hyperbolic-Type Gas Lenses.....657 Dec

T

Tamaru, T. A Note on Bolometer Mount Efficiency Measurement Technique by Impedance Method in Japan.....(C) 437 Sep
 Tang, C. C. H. An Exact Analysis of Varactor Frequency Multipliers.....(C) 210 Apr
 Tang, C. C. H. Mode Conversion in Tapered Waveguides at and Near Cutoff.....233 May
 Tang, C. C. H. On the Wave Propagation and Mode Conversion in a Helically Corrugated Multimode Circular Waveguide.....275 Jun
 Taub, J. (*See Cohen and Taub*)
 Taub, J. (*See Kurpis and Taub*)
 Temme, D. H. (*See Betts, Temme, and Weiss*)
 Tresselt, C. P. The Design and Construction of Broadband, High-Directivity, 90-Degree Couplers, Using Nonuniform Line Techniques.....647 Dec

U

Uptain, S. T.; N. F. Audeh. Transverse Resonance Solution of Uniform Trapezoidal Waveguides.....(C) 158 Mar

V

Van Doeren, R. E. Polarization Transformation in Twisted Anisotropic Media.....106 Mar
 Van Nie, A. G. (*See Severin and Van Nie*)
 Vasile, C. F. (*See LaRosa and Vasile*)
 Vendelin, G. D.; S. A. Robinson. A Power Reflection Technique for Characterization of High Quality Varactor Diodes.....603 Dec

W

Walker, G. B. (*See James and Walker*)
 Weaver, J.; R. Alvarez. Accurate Phase Length Measurements of Large Microwave Networks.....623 Dec
 Weiner, M. M.; M. E. Brodwin, D. Miller. Propagation of the Quasi-TEM Mode in Ferrite-Filled Coaxial Line....(C) 49 Jan
 Weiss, J. A. (*See Betts, Temme, and Weiss*)
 Wenzel, R. J. Theoretical and Practical Applications of Capacitance Matrix Transformations to TEM Network Design...635 Dec
 Whicker, L. R.; R. R. Jones. A Digital Current Controlled Latching Ferrite Phase Shifter.....(C) 45 Jan
 White, D. J. (*See Alday, Everett, and White*)
 Whiteley, I. (*See Levy and Whiteley*)

Y

Yamamoto, S.; T. Azakami, K. Itakura. Coupled Strip Transmission Line With Three Center Conductors.....446 Oct
 Yamamoto, S.; T. Azakami, K. Itakura. Slit-Coupled Strip Transmission Lines.....542 Nov
 Yee, H. Y.; N. F. Audeh. Attenuation Constants of Waveguides with General Cross Sections.....(C) 252 May
 Yee, H. Y.; N. F. Audeh. Cutoff Frequencies of Eccentric Waveguides.....487 Oct
 Young, L.; E. G. Cristal. Low-Pass and High-Pass Consisting of Multilayer Dielectric Stacks.....75 Feb
 Young, L. (*See Schiffman and Young*)

Z

Zimmer, H. (*See Schmitt and Zimmer*)
 Zimmerer, R. W. Suggested Name "Nanowave Region" for the EM Spectrum Between 10 Micrometers to 10 Millimeters Wavelength.....(C) 157 Mar

Subject Index

A

- Abrupt junction
frequency doubler, exact analysis *Tang CCH*.....(C) 210 Apr
varactor doubler, performance computation *Grayzel AI*.....
..... 239 May
- Amplifier
reflection, negative resistance *Okean HC*.....323 Jul
tunnel diode, high frequency stability *Plutchok H*.....
.....(C) 93 Feb
ultra-low-noise, using up-converter *Sard E*.....608 Dec
- Amplitude and phase modulators in rectangular waveguides *Reggia F*.....(C) 154 Mar
- Anisotropic
media, twisted, polarization transformation in
Shelton P.....(C) 579 Nov
Van Doeren RE.....106 Mar
plasma waveguide, quasi-TE₁₁ modes in *Carlisle RN*.....
.....(C) 350 Jul
- Antennas, pickup for waveguide motors *Steinhoff RW*...438 Sep
- Arrays
excitation of spin waves *Kaufman I*.....(C) 496 Oct
LaRossa R.....(C) 495 Oct
- Attenuation constants
of unwanted modes in mode filters *Shimada S*...(C) 159 Mar
of waveguides with general cross sections *Yee HY*.....
.....(C) 252 May

B

- Balun, compensated *Oltman G*.....112 Mar
- Band-pass
behavior in general four-resonator filter *Kurzrok RM*.....
.....(C) 295 Jun
filters, comb-line *Kurzrok RM*.....(C) 351 Jul
spurline resonators *Cristal EG*.....(C) 296 Jun
- Band-stop filter
elliptic function *Shiffman BM*.....474 Oct
incidental dissipation *Smythe RC*.....(C) 208 Apr
spurline and parallel-coupled nomograms *Schiffman BM*.....
.....(C) 297 Jun
- Beam waveguide resonator, dual-mode, at millimeter-wave frequen-
cies *Mink JW*.....222 May
- Bolometer mounts
coaxial, calibration services extended *NBS*.....(C) 161 Mar
efficiency measurement by impedance method *Tamaru T*.....
.....437 Sep
- Brune sections, distributed, elliptic-function filters *Levy R*.....
.....506 Nov

C

- Capacitance matrix transformation for TEM network design *Wensel RJ*.....635 Dec
- Cascaded commensurate transmission-line C-section all-pass net-
works *Cristal EG*.....285 Jun; 499 Oct
- Cavities
coupled, matrix formulation of scattering problems *Van Bladel J*.....130 Mar
cylindrical resonances in lossy compressible plasma *Burman R*.....
.....(C) 251 May
superconducting, fast sweep measurements of relaxation times
Schmitt HJ.....(C) 206 Apr
- C-band miniaturized digital latching phase shifter *Parks JK*.....
.....688 Dec
- Centipede waveguide equivalent circuit *Reeder TM*.....200 Apr
- Chebyshev
impedance transformers, short-step *Matthaei GL*.....372 Aug
transformers, impedances *Siegen RJ*.....(C) 354 Jul
- Circular waveguide
helically corrugated multimode *Tang CCH*.....275 Jun
tapers for mode conversion *Tang CCH*.....233 May
- Circularly-polarized phase shifter for phase array *Mohr M*.....
.....672 Dec
- Circulator
150 Mc/s *Maier B*.....(C) 42 Jan
band-limited in negative resistance reflection amplifiers *Okean HC*.....323 Jul

- junction, flow-graph analysis *Hagelin S*.....243 May
- strip-line *Bonfeld MD*.....(C) 98 Feb
- switching, 10-microsecond remanent type *Betts F*.....665 Dec
- Coaxial
attenuation service extended to 18 GHz *NBS*.....(C) 93 Feb
- devices, precision connectors *MacKenzie TE*.....29 Jan
- lines
ferrite-filled, propagation of quasi-TEM mode *Weiner MM*.....
.....(C) 49 Jan
precision connectors *MacKenzie TE*.....29 Jan
- Colloaction method applied to waveguide problems *Laura PA*.....
.....(C) 251 May
- Comb-line band-pass filters *Kurzrok RM*.....(C) 351 Jul
- Compensated balun *Oltman G*.....112 Mar
- Conductors, in strip transmission line *Yamamoto S*.....446 Oct
- Confocal resonator band-pass filter *Cohen J*.....(C) 698 Dec
- Converter, for ultra-low-noise amplification *Sard E*.....608 Dec
- Coupled
cavity waveguide equivalent circuit *Reeder TM*.....200 Apr
- strip transmission line with three center conductors *Yamamoto S*.....
.....446 Oct
- transmission-line directional couplers *Cristal EG*.....337 Jul
- Couplers, broad-band high-directivity, using nonuniform lines
Tresselt CP.....647 Dec
- Coupling loops in waveguide *Jakes WC*.....189 Apr
- Cutoff
frequencies of eccentric waveguide *Yee HY*.....487 Oct
- wavelength, TE₁₀ mode, in ridged rectangular waveguide *Pyle JR*.....175 Apr

D

- Detector
millimeter wave, pyroelectric *Alday JR*.....(C) 100 Feb
- solid-state, microwave, quantitative comparison *Cowley AM*.....
.....588 Dec
- wide-band gas discharge, for millimeter waves *Severin PJW*.....
.....431 Sep
- Dielectric
loaded waveguides, propagation of TE modes *Seckelmann R*.....
.....518 Nov
- resonators, microwave, design of *Sethares JC*.....2 Jan
- solution and field pattern *Chow KK*.....439 Sep
- stacks, of low-pass and high-pass filters *Young L*.....75 Feb
- Dielectrically loaded ladder lines for TW masers *Haddad GI*....
.....120 Mar
- Dielectrometers, microwave measurement of high dielectric constant
materials *Cohn SB*.....406 Sep
- Digital phase shifter
latching ferrite type *Whicker LR*.....(C) 45 Jan
- permeability of toroids *Davis LE*.....(C) 95 Feb
- Diode
detectors, parallel strip mount *Gerdine MA*.....(C) 41 Jan
- packaged and mounted as microwave circuit *Getsinger WJ*....
.....58 Feb
- switch using coupling loops in waveguide *Jakes WC*..189 Apr
- switches, X_L-band *Assaly RN*.....553 Nov
- Diplexer using hybrid junctions *Ricardi LJ*.....364 Aug
- Directional coupler
high directivity broadband *Hudson PA*.....(C) 293 Jun
- multiline 2N-port *Ott E*.....(C) 578 Nov
- nonsymmetrical *Cristal EG*.....337 Jul
- re-entrant, having direct coupled center conductors *Cristal EG*.....
.....(C) 207 Apr
- Dispersion characteristics of parasitic linear array *Nagelberg ER*.....
.....391 Aug
- Distributed elliptic-function filters *Levy R*.....506 Nov
- Directional couplers, wide-band equal ripple TEM *Shelton JP*.....
.....462 Oct
- Dual reflex klystron cavity-beam interaction *Hamilton JJ*.....
.....(C) 209 Apr

E

- Easitron circuit, dielectrically loaded ladder lines *Haddad GI*....
.....120 Mar

Eccentric waveguides, cutoff frequencies *Yee HY*.....487 Oct
 Electrooptic modulation, TM propagation mode *Chen D*.....
482 Oct
 Electromagnetic
 spectrum, nanowave region suggested *Zimmerer RW*.....
 (C) 157 Mar
 wave propagation, transverse, in a cylindrically stratified magneto-
 plasma *Burman R*.....(C) 253 May
 waves, measured by nonresonant perturbation techniques *Steele*
 CIW.....70 Feb
 Electron-cyclotron-resonance plasma accelerator X-band *Miller*
DB.....(C) 162 Mar
 Electron plasma, hot, nonuniform, longitudinal waves in *Lonngren*
KE.....(C) 494 Oct
 Elliptic-function filters, using Brune section *Levy R*.....506 Nov

F

Fast sweep measurements of relaxation times in superconducting
 cavities *Schmitt HJ*.....(C) 206 Apr
 Ferrite
 phase shifters, twin-slab *Schlomann E*.....15 Jan
 toroids in helical phase shifting *Seckelmann R*.....24 Jan
 Filter
 band-pass, using confocal resonator *Cohen J*.....(C) 698 Dec
 design, slope parameter and *Q* of radial resonators *Lindell IV*
 (C) 97 Feb
 Diplexer using hybrid junctions *Ricardi LJ*.....364 Aug
 distributed, elliptic-function *Levy R*.....506 Nov
 elliptic function band-stop *Schiffman BM*.....474 Oct
 four resonator, at microwave frequencies *Kurzrok RM*.....
 (C) 295 Jun; (C) 498 Oct
 general three-resonator *Kurzrok RM*.....(C) 46 Jan
 reflecting, using multilayer dielectric stacks *Young L*.....
 75 Feb
 Flow graph techniques applied to transient analysis of four-part net-
 works *Ross GF*.....528 Nov
 Four-port networks, TEM mode, transient analysis *Ross GF*....
528 Nov
 Frequency doubler
 abrupt-junction varactor *Levin BJ*.....184 Apr
 abrupt-junction varactor, performance *Grayzel AI*...239 May
 broadband *X* to *K* band varactor *Kurpis G*.....(C) 94 Feb
 using "punch through" behavior varactor *Chao CL*.....
 (C) 43 Jan
 Frequency
 modulation, broadband, for reflectic measurements *Mahle C*..
 (C) 496 Oct
 stabilizer, developed from dual-mode beam waveguide resonator
 Mink JW.....222 May
 Fringing capacitance
 in offset parallel-coupled strip lines *Shelton JP Jr*.....7 Jan
 in strip-line coupler design *Singletary J*.....(C) 398 Aug

G

Gap effect in permittivity measurement *Champlin KS*.....
397 Aug
 Gas lenses, hyperbolic type, in light-beam waveguide *Suematsu Y*
657 Dec
 Guided wave propagation, magnetoionic *Owyang GH*...136 Mar
 Gyromagnetic and gyroelectric media in rectangular waveguide
Gabriel GJ.....(C) 292 Jun

H

Helical phase shifters *Seckelmann R*.....24 Jan
 Helically corrugated multimode circular waveguide *Tang CCH*
275 Jun
 High-dielectric constant materials, microwave measurements *Cohn*
SB.....406 Sep
 High-frequency generators, wide-band gas discharge detector for
 millimeter waves *Severin PJW*.....431 Sep
 High-pass filters, incidental dissipation *Smythe RC*.....
(C) 208 Apr

I

Impedance
 characteristic of TEM mode transmission lines *Carson CT*
 (C) 497 Oct

of a finite slot *Plonus MA*.....(C) 48 Jan
 of Chebyshev transformers *Stegen RJ*.....(C) 354 Jul
 of offset parallel-coupled strip transmission lines *Shelton JP*
7 Jan
 transformers, short-step Chebyshev *Mathaei GL*...372 Aug
 Interdigital band-pass filters, resonant frequency *Nicholson BF*
(C) 250 May
 Intermodulation rejection in mixers *Lepoff JH*.....618 Dec
 Ionosphere, propagation in waveguide of variable surface impedance
Bahar E.....572 Nov
 Irises, used to load periodic waveguides *Rosenberg D*...145 Mar

J

Japanese universities, microwave research *Kumagai N*.....
(C) 694 Dec
 Junction
 circulators, flow-graph analysis *Hagelin S*.....243 May
 lossless
 design, given one row in its scattering matrix *Mathis HF*
 (C) 159 Mar
 two-part, network parameters *Freyheit PJ*.....(C) 93 Feb

K

Klystrons, dual reflex, cavity-beam interaction *Hamilton JJ*....
(C) 209 Apr
 Kuroda transformations in design of distributed elliptic-function
 filters *Levy R*.....506 Nov

L

Ladder lines, dielectrically loaded *Haddad GI*.....120 Mar
 Latching
 ferrite devices, permeability of toroids *Davis LE*..(C) 95 Feb
 digital phase shifter *Whicker LR*.....(C) 45 Jan
 switch for 35 GHz *Passaro WC*.....669 Dec
 Light beam
 modulation, propagation for *Chen D*.....482 Oct
 waveguide using hyperbolic-type gas lenses *Suematsu Y*.....
 657 Dec
 Light guidance, alternating gradient optical transmission lines
Steier WH.....228 May
 Linear system analysis, applied to analysis of distributed networks
Ross GF.....528 Nov
 Log-periodic transmission line circuits *DuHamel RH*....264 Jun
 Longitudinal waves in hot-nonuniform plasma *Lonngren KE*....
(C) 494 Oct
 Lossless
 junction, design, given scattering matrix with specified row
 Mathis HF.....(C) 159 Mar
 symmetrical discontinuities in multimode waveguide *Chung-li*
 Ren.....81 Feb
 two-part junction, network parameters for *Freyheit PJ*.....
 (C) 93 Feb

M

Magnetoionic guided wave propagation *Owyang GH*...136 Mar
 Magneto optic modulation, TE propagation modes *Chen D*....
482 Oct
 TW, dielectrically loaded ladder lines *Haddad GI*...120 Mar
 TW, optimum pitch *Kollberg E*.....(C) 212 Apr
 Matching network design for microwave transistor amplifiers
Emery FE.....(C) 696 Dec
 Matrix
 formulation of scattering problems *Van Bladel J*...130 Mar
 transformations, capacitance, to TEM network *Wenzel RJ*
 635 Dec
 Microwave
 calibration services extended by radio standards laboratory *NBS*
 (C) 93 Feb
 circuit, packaged and mounted diodes *Gelsinger WJ*...58 Feb
 dielectric resonator design *Sethares JC*.....2 Jan
 frequencies, four, resonator filters *Kurzrok RM*....(C) 498 Oct
 phase measurement *Dyson JD*.....410 Sep
 measurement, high dielectric constant materials *Cohn SB*....
 406 Sep
 network phase length measurement *Weaver J*.....623 Dec
 noise sources, measurement of effective noise temperature ex-
 tended *NBS*.....(C) 93 Feb

power
in WR137 waveguide calibration service available *NBS*....
.....(C) 213 Apr
measured in WR112 waveguide *NBS*.....(C) 254 May
measurement, international inter-comparison of standards
Tamaru T.....437 Sep
resonator for measuring complex permittivity *Roussy G*.....
.....171 Apr
research at Japanese universities *Kumagai N*....(C) 694 Dec
varactor tuned transistor oscillator *Johnson KM*....564 Nov
pyroelectric *Alday JR*.....(C) 100 Feb
wide-band, gas discharge *Severin PJW*.....431 Sep
Mixer intermodulation rejection *Lepoff JH*.....618 Dec
Mode
conversion in tapered waveguides near cutoff *Tang CCH*.....
.....233 May
filters, attenuation constants of unwanted modes using resistive
sheets *Shimada S*.....(C) 159 Mar
measurements in overmoded waveguide *Levinson DS*..310 Jul
transducers, resonant cavity type *Shimada S*.....384 Aug
Multiconductor transmission line *Yamamoto S*.....446 Oct
Multiline 2N-port directional couplers *Ott E*.....(C) 578 Nov
Multimode waveguide, lossless symmetrical discontinuities in
Chung-li Ren.....81 Feb
Multisection TEM directional coupler and phase shifter *Shelton*
JP.....462 Oct

N

Nanowave region, nomenclature for EM spectral region *Zimmerer*
RW.....(C) 157 Mar
Negative resistance reflection amplifiers *Okean HC*.....323 Jul
cascaded, commensurate transmission-line C-section all-pass
Crital ED.....(C) 499 Oct
microwave, phase length measurement *Weaver J*.....623 Dec
parameters for lossless two-part junction *Freyheit PJ*.....
.....(C) 93 Feb
TEM mode four-part, transient analysis of *Ross GF*.....
.....528 Nov
Nonresonant perturbation theory *Steele CW*.....70 Feb
nonuniform lines for high-directivity 90-degree couplers *Tresselt*
CP.....647 Dec
Nuclear radiation perturbation of semiconductor-filled microactivity
Haden CR.....347 Jul

O

Optical transmission lines, alternating gradient *Steier WH*.....
.....228 May
Oscillator, varactor tuned transistor *Johnson KM*.....564 Nov
Oscilloscope sampling technique, dc through X-band *Grove WM*
.....629 Dec
Overmoded waveguide, mode measurements *Levinson DS*.....
.....310 Jul

P

Peak-pulse power calibrations *NBS*.....(C) 47 Jan
Permittivity measurement
gap effect *Champlin KS*.....(C) 397 Aug
with microwave resonator *Roussy G*.....171 Apr
Perturbation theory
analysis of rectangular waveguide containing transversely mag-
netized semiconductor *Gabriel GJ*.....258 Jun
nonresonant, in electric field measurements *Steele CW*.....
.....70 Feb
nonresonant perturbation measurements *Mallory KB*.....
.....(C) 99 Feb
waveguide junctions *Kerns DM*.....85 Feb
Phase
length measurement of large microwave networks *Weaver J*
.....623 Dec
measurement, at UHF and microwave frequencies *Dyson JD*
.....410 Sep
modulators in rectangular waveguides 5 to 7 Gc/s *Reggia F*
.....(C) 154 Mar
shifter
C-band digital latching *Parks JK*.....688 Dec

circularly polarized, for phased-array antenna *Mohr M*.....
.....672 Dec
digital, latching ferrite type *Whicker LR*.....(C) 45 Jan
permeability of toroids *Davis LE*.....(C) 95 Feb
fixed *Shelton JP*.....462 Oct
helical *Seckelmann R*.....24 Jan
twin-slab in rectangular waveguide *Schlomann E*.....15 Jan
using slow-wave digital ferrite strip transmission line *Jones RR*
.....684 Dec
3-section Schiffman 90° *Cristal EG*.....285 Jun
Phase-shift network, multisection microwave *Schiffman BM*....
.....(C) 209 Apr
Phased array antenna, circularly polarized phase shifter for *Mohr*
M.....672 Dec
Planar waveguides, thin-iris loaded periodic *Rosenberg D*.....
.....145 Mar
Plasma
accelerators, X-band electron-cyclotron-resonance *Miller DB*..
.....(C) 162 Mar
guides, longitudinally magnetized *Likuski RK*.....(C) 40 Jan
hot-nonuniform, longitudinal waves in *Lonngrén KE*.....
.....(C) 494 Oct
resonator, longitudinally magnetized *Likuski RK*.....
.....(C) 40 Jan
sheath, guided wave propagation in stratified plasma layer
Ouyang GH.....136 Mar
Point contact diode, parallel strip mount *Gerdine MA*.....
.....(C) 41 Jan
Point-matching method
applied to waveguide problems *Laura PA*.....(C) 251 May
for computing cutoff frequencies of eccentric waveguides *Yee*
HV.....487 Oct
Polarization
transformation in twisted anisotropic media *Van Doeren RE*
.....106 Mar
transformation in twisted anisotropic media *Shelton P*.....
.....(C) 579 Nov
Positive-resistance up-converter as low-noise amplifier *Sard E*
.....608 Dec
Power-reflection technique, to characterize varactor diodes.....
Vendelin GD.....603 Dec
Precision coaxial standards and components *MacKenzie TE*....
.....29 Jan
Preselector, dual TE mode, with wide-range tuning *Fjerstad RL*
.....424 Sep
Propagation
for light beam modulation *Chen D*.....482 Oct
in waveguide of variable surface impedance *Bahar E*.....
.....572 Nov
of longitudinal waves in hot non-uniform plasma *Lonngrén KE*
.....(C) 494 Oct
of TE modes in dielectric loaded waveguides *Seckelmann R*
.....518 Nov

R

Radial resonators, slope parameter and Q *Lindell IV*.....
.....(C) 97 Feb
perturbation analysis of transversely magnetized plasma and semi-
conductor *Gabriel GJ*.....258 Jun
ridged, cutoff wavelength of TE₁₀ mode *Pyle JR*.....175 Apr
Reflection
coefficient, frequency responses plotted by digital computer
Bandler JW.....(C) 399 Aug
measurements with broadband frequency modulation *Mahle C*
.....(C) 497 Oct
Reflectometry, high directivity broadband coaxial coupler *Hudson*
PA.....(C) 293 Jun
Rejection of intermodulation in mixers *Lepoff JH*.....618 Dec
Resistive sheets in mode filters *Shimada S*.....(C) 159 Mar
of cylindrical cavity in lossy compressible plasma *Burman R*
.....(C) 251 May
transverse, solution of uniform trapezoidal waveguides *Uptain*
ST.....(C) 158 Mar
Resonant
cavity type mode transducer *Shimada S*.....384 Aug

- frequency of interdigital filter elements *Nicholson BF*..... (C) 250 May
- Resonator
- confocal, band-pass filter *Cohen J*..... (C) 698 Dec
 - dielectric, solution and field pattern *Chow KK*..... 439 Sep
 - technique for studying dispersion in longitudinally magnetized plasma guides *Likuski RK*.....(C) 40 Jan
- S
- Sampling techniques, oscilloscopic, dc through X-band *Grove WM*..... 629 Dec
 - Satellite tracking radar system, diode switch design *Jakes WC*..... 189 Apr
 - Scattering problems, matrix formulation of *Van Bladel J*..... 120 Mar
 - Semiconductor-filled microcavity, nuclear perturbation *Haden CR*..... 347 Jul
 - Semiconductor side wall in wave guide *Larabee RD*..... 306 Jul
 - Slit-coupled strip transmission lines *Yamamoto S*..... 542 Nov
 - Slot impedance *Plonus MA*.....(C) 48 Jan
 - Solid-state detectors, microwave, comparison *Cowley AM*..... 588 Dec
 - Spin waves in arrays *Kaufman I*.....(C) 496 Oct
 - LaRosa R*.....(C) 495 Oct
- Standards
- calibration of coaxial bolometer mounts *NBS*.....(C) 161 Mar
 - calibration of microwave power in WR137 waveguide *NBS*..... (C) 213 Apr
 - impedance determination of bolometer mount efficiency *Tamaru T*..... 437 Sep
 - microwave calibration services *NBS*.....(C) 93 Feb
 - power measured in WR112 waveguide *NBS*.....(C) 254 May
 - peak-pulse power calibrations *NBS*.....(C) 47 Jan
 - precision coaxial standards and components *MacKenzie TE*..... 29 Jan
- Stripline
- circulator *Bonfeld MD*.....(C) 98 Feb
 - 150 Mc/s *Maher B*.....(C) 42 Jan
 - coupler design, fringing capacitance *Singletary J*..... (C) 398 Aug
 - switching circulator, S-band, temperature-stable *Betts F*..... 665 Dec
- Striplines
- offset parallel-coupled *Shelton JP*..... 7 Jan
 - parallel-mount for point contact diodes *Gerdine MA*..... (C) 41 Jan
 - slit coupled *Yamamoto S*..... 542 Nov
- Strip transmission line with three center conductors *Yamamoto S*..... 446 Oct
- Surface impedance, propagation in waveguide of variable surface impedance *Bahar E*..... 572 Nov
- Switch latching, for 35 GHz *Passaro WC*..... 669 Dec
- Switches, X_L -band diode *Assaly RN*..... 553 Nov
- Switching circulator, S-band stripline, for 15 kW *Betts F*..... 665 Dec
- T
- Tapered waveguides, mode conversion near cutoff *Tang CCH*..... 233 May
- TE modes in dielectric loaded waveguides *Seckelmann R*..... 518 Nov
- TE propagation modes for magnetooptic modulation *Chen D*..... 482 Oct
- TE₁₁, quasi, modes in anisotropic plasma waveguide *Carlisle RN*.....(C) 350 Jul
- TEM
- directional couplers, wide band, equal ripple *Shelton JP*..... 462 Oct
 - fixed phase shifter *Shelton JP*..... 462 Oct
 - mode four-port networks, transient analysis *Ross GF*..... 528 Nov
 - quasi, propagation in ferrite-filled coaxial line *Weiner MM*..... (C) 49 Jan
 - transmission lines, bounds on characteristic impedance *Carson CT*.....(C) 497 Oct
- network design by capacitance matrix transformation *Wenzel RJ*..... 635 Dec
- TM propagation mode for electrooptic modulation *Chen D*..... 482 Oct
- Toroids, permeability in latching ferrite devices *Davis LE*..... (C) 95 Feb
- Transient analysis of four-part networks *Ross GF*..... 528 Nov
- Transistor
- amplifier matching network design *Emery FE*.....(C) 696 Dec
 - oscillator, varactor tuned *Johnson KM*..... 564 Nov
- Transmission lines
- compensated balun *Oltman G*..... 112 Mar
 - high directivity broadband coaxial coupler *Hudson PA*..... (C) 293 Jun
 - impedance transformers, short-step Chebyshev *Matthaei GL*..... 372 Aug
 - long, reflection measurement with broadband frequency modulation *Mahle C*..... (C) 497 Oct
 - microwave dispersion characteristics of parasitic linear array *Nagelberg ER*..... 391 Aug
 - parallel-coupled sections *Shelton JP Jr*..... Jan 7
 - slit-coupled strip *Yamamoto S*..... 542 Nov
- TEM mode, bounds on characteristic impedance *Carson CT*..... (C) 497 Oct
- Transmission-line
- C-section all-pass networks *Cristal EG*..... 285 Jun
 - circuits, one-part log-periodic *DuHamel RH*..... 264 Jun
 - phase shifter, slow-wave digital ferrite strip *Jones RR*..... 684 Dec
 - resonator *Cristal EG*..... (C) 296 Jun
- Traveling-wave
- masers, dielectrically loaded ladder lines *Haddad GI*..... 120 Mar
 - structures, propagation for light beam modulation *Chen D*..... 482 Oct
- Tuning, wide-range, preselector of dual TE mode *Fjerstad RL*..... 424 Sep
- Tunnel diode amplifiers, high frequency stability *Plutchok H*..... (C) 93 Feb
- Twisted anisotropic media, polarization transformation in *Shelton P*.....(C) 579 Nov
- V
- Varactor diodes, power-reflection technique to characterize *Vandelin GD*..... 603 Dec
- frequency doubler
- abrupt junction *Grayzel AI*..... 239 May
 - Levin BJ*..... 184 Apr
- exact analysis *Tang CCH*..... (C) 210 Apr
- "punch-through" *Chao CL*..... (C) 43 Jan
- X to K broadbands *Kurpis G*..... (C) 94 Feb
- Varactor tuned transistor oscillator *Johnson KM*..... 564 Nov
- Video detection of millimeter waves, parallel-strip point-contact diode mount for *Gerdine MA*.....(C) 41 Jan
- W
- Wave equation for periodic waveguide *James CR*..... 428 Sep
- Waveguide
- cutoff phenomena in moving media *Du LJ*..... 358 Aug
 - dielectric loaded, TE modes in *Seckelmann R*..... 518 Nov
 - eccentric, cutoff frequencies *Yee HY*..... 487 Oct
 - general three-resonance filters in *Kurzrok RM*.....(C) 46 Jan
 - junctions, perturbation theorems *Kerns DM*..... 85 Feb
 - light beam, using gas lenses *Suematsu Y*..... 657 Dec
 - microwave measurement of high dielectric constant materials *Cohn SB*..... 406 Sep
 - motors, pickup antennas for *Steinhoff RW*..... 438 Sep
 - of variable surface impedance, propagation in *Bahar E*..... 572 Nov
 - partially filled cylindrical, for light beam modulation *Chen D*..... 482 Oct
 - periodic
 - axially symmetric, wave equation *James CR*..... 428 Sep
 - thin-iris loaded *Rosenberg D*..... 145 Mar

rectangular
 amplitude and phase modulators *Reggia F*.....
(C) 154 Mar
 short circuit with cylindrical slugs *Rzepecka M*..(C) 161 Mar
 with semiconductor side wall *Larrabee RD*.....306 Aug
 reflectors calibrated in WR137 waveguides *NBS*...(C) 93 Feb
 resonant cavity type mode transducer *Shimada S*...384 Aug
 trapezoidal, transverse resonance solution *Uptain ST*.....
(C) 158 Mar
 using gyroelectric and gyromagnetic media *Gabriel GJ*.....
(C) 292 Jun

X

X_L-band diode switches *Assaly RN*.....553 Nov

Y

Yagi antennas, dispersion characteristics of parasitic array *Nagel-
 berg ER*.....391 Aug
 YIG crystal excitation of spin waves in arrays *Kaufman I*.....
(C) 496 Oct
LaRosa R.....
(C) 495 Oct