1969 IEEE G-MTT INTERNATIONAL MICROWAVE SYMPOSIUM

PROGRAM SUPPLEMENT

LATE NEWS ITEMS

SESSION MAM-I MICROWAVE INTEGRATED CIRCUITS I, Monday, May 5.

A DYNAMIC H-E MODE SOLUTION FOR MICROSTRIP, E.J. Denlinger, Lincoln Laboratory, MIT, Lexington, Mass.

RECENT TESTS OF THE MERA RADAR, E.V. Farinholt and L.J. Hardeman, Texas Instruments Inc., Dallas, Texas

SESSION MPM-I FERRITE COMPONENTS, Monday, May 5.

A PERIODICALLY LOADED, LATCHING, NON-RECIPROCAL FERRITE PHASE SHIFTER, W.A. Spaulding, U.S. Army Missile Command, Redstone Arsenal, Alabama.

SESSION MPM-II SOLID STATE CIRCUITS AND DEVICES, Monday, May 5.

COMPUTER SIMULATIONS OF LSA RELAXATION OSCILLATORS, B.I. Jeppsson and P. Jeppesen, Cayuga Associates, Inc., Ithaca, New York.

HIGH POWER L-BAND GUNN SOURCES, F.B. Fank, A. McEuen, W. Stein and A. Vane, Varian Associates, Palo Alto, California.

RF BURNOUT IN POINT-CONTACT AND SCHOTTKY-BARRIER DIODES, Y. Anand and C. Howell, Microwave Associates, Inc., Burlington, Mass.

SESSION TPM-I AVALANCHE DIODES, Tuesday, May 6.

SMALL SIGNAL PARAMETRIC EFFECTS AND THE HIGH EFFICIENCY MODE IN IMPATT DIODES, M. Grace, Sperry Rand Research Center, Sudbury, Mass.

A MULTIPLE DIODE, HIGH AVERAGE POWER, AVALANCHE DIODE OSCILLATOR, C.T. Rucker, Sperry Rand Corporation, Clearwater, Florida.

SESSION TPM-II PASSIVE COMPONENTS, Tuesday, May 6.

METHODS FOR INCREASING THE DIRECTIVITY AND IMPROVING FLATNESS OF COUPLING CURVES OF MULTISECTION STRIPLINE COUPLERS, A. Alford, Alford Manufacturing Company, Winchester, Mass.

SESSION WAM-I MICROWAVE ACOUSTICS, Wednesday, May 7.

BULK WAVE MICROWAVE ACOUSTICS AND PRACTICAL APPLICATIONS, W. A. Crofut, Andersen Laboratories, Inc., Bloomfield, Connecticut.

ELECTRON BEAM FABRICATION OF HIGH FREQUENCY SURFACE ACOUSTIC WAVE TRANSDUCERS, A.N. Broers, E.G. Lean, R.V. Pole, M. Hatzakis, D. Cullum, C.G. Powell, T.H. Watson Research Center, IBM, Yorktown Heights, New York.

SESSION WAM-II COMPUTER-ORIENTED MICROWAVE TECHNIQUES, Wednesday, May 7.

HYBRID SIMULATION OF AN ELECTRICAL TRANSMISSION LINE AT RADIO FREQUENCIES, J.P. Landauer, Electronic Associates, Inc., West Long Branch, New Jersey, and M. Kurland, Newark College of Engineering, Newark, New Jersey.

ELECTRON BEAM FABRICATION OF HIGH FREQUENCY SURFACE ACOUSTIC WAVE TRANSDUCERS

By

A. N. Broers
E. G. Lean
R. V. Pole
M. Hatzakis
D. Cullum
C. G. Powell

Surface acoustic wave interdigital transducer operating at 1.75 GHz have been fabricated on y-cut, z-oriented $LiNbO_3$ and y-cut, z-oriented quartz substrates by electron beam techniques. The transducer consists of 25 pairs of interleaved aluminum "fingers" 0.3 micron wide and 0.7 micron apart. Used as a surface acoustic wave delay line, the insertion loss has been measured to be as low as 25 db with a bandwidth of 70 MHz for 2.2 microseconds delay. The parameters of the equivalent circuit of the transducer have been measured and agree with the theoretical calculation. Fabrication techniques and experimental results will be presented.