

1987 GaAs REL WORKSHOP PROGRAM, OCTOBER 13, 1987

THE PORTLAND HILTON, PORTLAND, OREGON

SESSION I MODFET RELIABILITY K.J. Russell, JPL; Session Chairman

INVESTIGATION OF THE EFFECT OF DC OPERATING CONDITIONS ON HEMT RELIABILITY;
J. Archer, G. Bechtel, H. Cooke, and Y.C. Pao - Varian Associates, Santa Clara, CA

ACTIVATION ENERGIES FOR CONTACT RESISTANCE INCREASES IN AlGaAs/GaAs HEMTS WITH
ALLOYED OHMIC CONTACTS; Robert J. Ferro - Hughes Research Laboratories, Malibu, CA

HIGH RELIABILITY SUPER LOW NOISE HEMTS; Kazuo Hayashi, Takull Sonoda, Tetsuya, Yamaguchi,
Kohki Nagahama, Masahide Yamanouchi, Saburo Takamiya, Sigeru Mitsui - Mitsubishi Electric Corp.,
4-1 Mizuhara, Itami, Hyogo, Japan

RADIATION EFFECTS IN HIGH ELECTRON MOBILITY TRANSISTORS: FAST NEUTRON
EXPOSURE; Michael J. O'Loughlin, Richard J. Krantz and Walter L. Bloss - The Aerospace Corporation,
Electronics Research Laboratory, Los Angeles, CA

SESSION II RADIATION EFFECTS W.T. Anderson, NRL; Session Chairman

TOTAL DOSE IONIZING RADIATION MEASUREMENTS OF GaAs DEVICES;
W.T. Anderson - Naval Research Laboratory, Washington, DC; A. Meuienberg - COMSAT Laboratories,
Clarksburg, MD; and S.D. Mittleman - Rome Air Development Center, Hanscom AFB, MA

INVERTER CHARACTERISTICS OF GaAs MESFETs EXPOSED TO NEUTRON RADIATION;
W. Bloss, A. Young, W. Yamada, and B. Janousek - The-Aerospace Corporation, Los Angeles, CA

SUBSTRATE BIAS DEPENDENCE OF THE LONG TERM TRANSIENT EFFECT;
L.J. Ragonese, D.J. LaCombe and W. Brouillette - Electronics Laboratory, GE Company, Syracuse, NY;
R. Casey - Re-Entry Systems Department, GE Company, Philadelphia, PA

DEGRADATION MECHANISMS IN IRRADIATED GaAs MMICS;
A. Meulenberg and H-L.A. Hung - COMSAT Laboratories, Clarksburg, MD

SESSION III DEVICE AND IC RELIABILITY W.J. Roesch, TriQuint; Session Chairman

RELIABILITY STUDY OF X-BAND 6 WATT GaAs FIELD EFFECT TRANSISTORS;
A.L. Riley, J.K. Dhiman and K.J. Russell - JPL, Pasadena, CA

ELECTROSTATIC DISCHARGE THRESHOLDS OF GALLIUM ARSENIDE INTEGRATED CIRCUITS;
Anthony L. Rubalcava - TriQuint Semiconductor, Inc., Beaverton, OR

INVESTIGATIONS OF REDUCED RELIABILITY OF A GaAs MMIC DUE TO VOIDS IN DIE ATTACH;
Ken Decker - Texas Instruments, Inc., Dallas, TX

THE DETERMINATION OF THE CONTRIBUTIONS TO THE THERMAL RESISTANCE OF A GaAs FET
FROM AN ANALYSIS OF THE DEVICE COOLING CURVE;
R.J. Finke and W. Brouillette - Electronics Laboratory, GE Company, Syracuse, NY

SESSION IV RELIABILITY AND FAILURE ANALYSIS PANEL DISCUSSION
Don J. LaCombe, GE Company; Panel Chairman GaAs REL Workshop Committee; Panel
Members

GaAs FAILURE ANALYSIS HANDBOOK; E.L. Parks, Electronics Laboratory, GE, Syracuse, NY

A SURVEY OF RELIABILITY ISSUES IN STATE-OF-THE-ART GaAs INTEGRATED CIRCUITS;
Jack Casey - Hewlett-Packard, Colorado Springs, Co; Carlos A. Paz de Araujo - University of Colorado
at Colorado Springs, Colorado Springs, CO

RELIABILITY DATA BASE; Sandra Hodge - Sanders, Nashua, NH